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Apprehending the Visible: Logistical Histories of War and the Aerial Reconnaissance Archive

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ABSTRACT

Apprehending the Visible: Logistical Histories of War and the Aerial Reconnaissance Archive

Neil Balan, M.A.
Concordia University, 2005

Images of war have an amplified efficacy in cultural contexts that privilege the power of the image and the hegemony of vision. This project animates and explores the recent virtual re-publication and political and cultural positioning of the Aerial Reconnaissance Archive (TARA), a collection of five million WWII Allied aerial reconnaissance photographs. Explicating the ethical tension inherent of the exhibition of photographic images and the problematic hinge between the constellations of aesthetics and politics, this research interrogates the concept of the archive to consider embedded and emerging communicative and technological practices that constitute the discursive articulation and cultural transmission of bodies of political and historical knowledge regarding the Second World War. The archive enables a logistics of perception, revealing the tension inherent in the collection: its visible and intended cultural value as a safe, sanitized object for public historical commemoration in a deregulated cultural economy; and its former function as an assembly of miniature, clinical operational diagrams designed for the application of war-time force and destruction. Following this tension, the collection activates a photographic aesthetic of affect, astonishment, and awe. This aesthetic activates dominant historical and memorial versions of war-time heritage and the contribution of aerial reconnaissance photography, which obfuscates and effaces the real terms of visceral, messy war-time devastation and destruction.
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There are too many fresh American and English regiments over there. There’s too much corned beef and white wheaten bread. Too many new guns. Too many aeroplanes.

- Erich Maria Remarque, *All Quiet on the Western Front*

*Narrator:* To some who witnessed it, the massing of allied military power and the violent spectacle of its performance on the enemy can be compared to the performance of an orchestra…

*Veteran:* We’ve got artillery, heavy, medium, light, we’ve got aircraft coming in, we’ve got Typhoons, it’s a whole symphony this whole thing. If you go to a theatre and listen to the music being played and you only listen to a trumpet that doesn’t give you much because it’s everything together that makes this opera, this symphony meaningful. You can rest in your chair and you can listen to it and you can say, “That’s something!”

-*Desperate Battle: Normandy 1944*, from the National Film Board’s *The Value and the Horror*

To be brief, let us say that history, in its traditional form, undertook to memorize the monuments of the past, transform them into documents, and lend speech to those traces which, in themselves, are often not verbal, or which say in silence something other than that they actually say; in our time, history is that which transforms documents into monuments.

- Michel Foucault, *The Archaeology of Knowledge*

The first quote describes an encounter with an industrialized war machine’s ability to mobilize resources and materials, the administering power of logistics, the art of supply.

The second quote describes the implementation and activation of these materials as assembled platforms of military science with specific but integrated functions – myriad weapons of war. The use of these weapons, as assets, is premised on a knowledge of where and how to deploy them; how to apply them productively so as to make them efficient in the things they themselves are designed to induce. The totality of their effects—in what they affect—amounts to a theatricality that is orchestral and symphonic, a field where the logistics of war in question is one of finesse, that deft arrangement and steady handling of knowledge and materials. Deploying assets and resources relates especially to military practices of
surveillance, reconnaissance, and intelligence. The chaos on the ground—when studied from a distance at a time removed—is less chaotic and made more academic. Patterns emerge and methods of supply can be designed to address those patterns.

The third quote, tangential, suggests how perhaps these logistical processes of deployment are historicized and remembered. More appropriately, the quote suggests how these processes, in a historical context, are abstracted from specific and documented activities in order to become a generalized residue constituting something normal, natural, and uncontested.

* * * *

The recognition of “too many aeroplanes” in the First World War and the subsequent orchestration of these aeroplanes later in the Second World War is indeed a matter of logistics. The increased function and importance of aerial operations and, more specifically, aerial reconnaissance, enabled the development of the art and science of aerial-photographic interpretation. The new emerging body of military intelligence generated by aerial reconnaissance massively impacted the practice of war and continues to be an essential and necessary part of how contemporary war is waged, sensed, rendered, and perceived.

The role of aerial reconnaissance and the ability to maintain a perpetual surveillance presence in the air through the convergence of an airborne camera mounted on an airplane produced a shift in the relationship between war and perception. I want to link the emergence of this developing militarized perception both to current trends in visual culture and particularly in relation to the archive, its formal and conceptual standing, and the role of archival materials to evoke—through activation and arrangement—a hegemonic historical
figure 1.1 Copenhagen 1942, Evidence in Camera, TARA
imagining of the past. The crux of this project is one of logistics: how war is perceived by those waging war and how those acts of war, when encountered by a larger cultural public, are both threads that entangle in considering the conditions and imperatives of the supply of a historical perception. The aerial photograph is the sign of aerial mastery and the ability to survey and invent the dimensions of a space or territory without actually possessing, inhabiting, or occupying it. It is the negotiation of space by way of making an artificially-rendered and virtual place through photographic appearances. In these appearances, the territory is made legible – “readable”. “Seeing from above at a distance” is not only an effect of the airborne camera but is also an approach to the generation of knowledge—vertical perspective miniaturizes things and affords the ability to master the visual field. Similarly, in activating archival holdings of old aerial images, war becomes visible at a different rate and distance, one based on a significant historical remove.

A historical vision of war is explicitly expressed and alluded to in the recent online virtual publication of the Aerial Reconnaissance Archives (TARA)\(^1\). TARA, as a collection of aerial signatures exhibiting the ability to see from above, consolidates in commemoration the systematic application and refinement of aerial perspective, a fundamental paradigmatic alteration in how war is “sensed and conducted based on the visual information supplied. Narratives of logistics and supply are secondary elements with respect to dominant and popular historical versions of war, below and between the mythologized surfaces of popular commemorations of war. Compared to chronologies of battles, it is less the stuff of history. Yet, the history of military aerial reconnaissance, when pulled off the shelf for consideration, functions similarly as a mythology, a novel trajectory connecting to the legacy of war in late

\(^1\) TARA’s virtual home is located at <http://www.evidenceincamera.co.uk>. The domain name, “Evidence in Camera,” is significantly the name of the top-secret journal published for military photo interpreters by the Royal Air Force during the Second World War.
Western culture. This myth then takes the character of a monument and resource itself to be considered, managed, and subsequently supplied.

The industrial development of aerial surveillance and reconnaissance essentially re-conceptualizes the act of war, moving a model of intense visceral battle to the removed act of control and surveillance based on assessment, prediction, and the arrangement and orchestration of resources. This mode is what Paul Virilio specifically calls a *logistics of military perception* (Virilio 1989: 1). Virilio writes:

War can never break free from the magical spectacle because its very purpose is to produce that spectacle... There is no war then without representation, no sophisticated weaponry without psychological mystification. Weapons are not tools just of destruction but of perception—that is to say, stimulants that make themselves felt through chemical neurological processes in the sense organs and the central nervous system, affecting human reactions and even the perceptual identification and differentiation of objects. (Virilio 1989: 6)

For Virilio, war conceptualized as a logistics of perception is more than symphonic: it is entirely cinematic, a massive powerhouse spectacle\(^2\) where perception is at times, even in refined acts of careful monitoring and detection, overwhelming in regards to the scope and range of signatures made visible. This spectacle “underlines the fact that the history of battle is primarily the history of radically changing fields of perception.” (Virilio 1989: 5-6). Virilio interrogates the cognitive demands of war, demands that are short-circuited by affective capacities of war-time spectacle in the space of trauma “on the ground”.

Virilio argues that perception is a weapon itself and a way of stepping back to “see”, and the historical development of supplying the sensing of war as a perceptual act constitutes an advantage, one that is gained especially in the removal of perceptual—in sensing and interpretive—perspectives in proximity to a battlefield. As such, the historical emergence of the aerial-reconnaissance apparatus is an advantage in an institutional and

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\(^2\) German filmmaker Alexander Kluge alludes to this in his film about opera, (1979) *The Powerhouse of Emotions*, when he connects the power of opera in its totality of sensations to the impossible sensing of a perceptual totality of war.
historical sense: it can be re-articulated as part of a consistent set of dominant and historical imaginings of the war.

TARA is an archive; yet, further, it is an industrial and material record of the emerging attempts at mastering a highly variable visual field rendered from a vertical distance. TARA itself implicitly activates and determines a *logistics of perception* in its very rhetorical and discursive constitution: this perceptual supply is arguably the structuring device not only of war-time aerial photography but also for TARA’s recent move from the space of the traditional archive to its concurrent online home. As a collection of over five-million war-time images chronicling the surveillance of occupied Europe by Allied forces, TARA is ordinary, mundane, and un-spectacular. Its sheer size is evidence, though, of the serial and indexical register of a massive survey of Europe under the auspices of generating war-time knowledge. Further, just as Virilio’s logistics makes possible a “global vision” that is not confined to the horizontal topography of war (Virilio 1989: 2), TARA, in presenting and representing the Second World War through the display of an aerial-reconnaissance collection, supplies a global vision of war that functions as a schematic device for historical knowledge about the war.

TARA’s self-described role as “a memorial of the most living kind” (TARA homepage, ‘*Who Are We?*: 1) relies on the exhibition of visual records for perusal and public use. Foucault’s opening comments are appropriate because the virtual location and re-articulation of the archival collection suggest a similar and connected shift from documents to monuments in a historical, political and cultural context. TARA “sediments” a historical and memorial imagining about the massive aerial assembly of the Second World War, making a monument. The aerial “seeing”, in its current arrangement and display, arguably establishes and determines a dominant narrative of historical knowledge by way of an
institutional gaze based on perspectives concerning the needs and rhetorical constitution of a mass public. The new (re)constitution of TARA—as an object, an event, and a place of contemporary cultural commemorative practice—is a confluence of ontological, epistemological, and hermeneutic issues concerning the concept, form, and use of the archive.

The main thrust of this exploration and exposition emphasizes the photographic content of the archive and the accompanying rhetorical and narrative strategies it produces and establishes, strategies which structure, dictate, and induce the terms of “proper” encounter with the apparatus of the archive, with its institutionally-defined ideological and master political function. TARA activates a set of preferred and intended meanings in relation to how the Second World War can and should be recollected. The archive’s intended mode of address, and the archive-designed opportunity for visceral interaction and encounter with the photos themselves, elucidates the archive’s entanglement of hegemonic discursive, semiotic, and historical threads.

The archival apparatus is a hub for several areas of inquiry: the dissemination and circulation of dominant historical narratives and the function of hegemonic and institutionalized versions of History; the archive, its ontological status as an empirical repository of emerging “material”, and the arrangement and activation of this material that conceptually approaches Foucaultian notions of truth and power/knowledge; the problems of memory, communication technology, and contemporary visual culture; and the affective status of the photographs themselves as serial records of geographies of trauma and destruction. The collection is fascinating, a fantastic fabulation in the most literal sense: it is a set of images originally produced and designed to perform a specific operational function. The original operational function ascribed to the photographs emphasizes their value first,
then, as register of the practice of interpretation and military intelligence. Yet, the enchanting
public value of the collection arguably hinges on an encounter with the spectacle induced by
an identification with technical perceptual weapons of war. This curious encounter hinges on
practices of looking and the cultural primacy of vision in relation to perception and sense.

In its new "traveling" form, TARA is premised on the questionable ability of the
state to govern history and administer cultural heritage in both national and global contexts.
In plain terms, its archival holdings function to provide an orientation to memorializing the
war. As such, the archive rhetorically exercises an obligation to dictate events or registers
that are retroactively deemed as politically and culturally relevant. This conception of value
and relevance, in deployment, lends and multiplies both legitimacy and authority to the
construction and maintenance of both a specific war heritage and the larger tradition of the
Western historical narrative record. TARA, in injecting materials once off-limits, secretive,
and outside the arc of public knowledge into popular public discourse, frames and circulates
a newly-available body of knowledge about the events of the war and the role of aerial
reconnaissance.

TARA is relevant because it is now "in circulation"; yet, tautologically, it is in
circulation because it is deemed relevant as a still-useable set of archival materials concerning
a substantial limit-event in contemporary Western history. This dual logic is self-referential
and the direction of this sort of intermingled causality is initially unclear. It implies, though, a
reverential encounter with images of war, which TARA purports to provide. This provision
suggests a determination of what kind of residual knowledge should in fact be prioritized for
cultural transmission and inheritance across generations. Amid the massive assembly of
knowledges that constitute contemporary discourses about the Second World War, TARA
activates a specific domain.
I will demonstrate how the archive, as a repository, is retrieved and reinstated as a relevant apparatus, disarticulated from more scholarly, academic, or technical function, and subsequently re-articulated publicly. The arguable autonomy of the affective images—uncanny aerial reconnaissance photos—are incorporated to order and sustain a hegemonic memorial imagining of the events of the Second World War. The archive, then, as a kind of historical display, is premised on the semiotic economy of arresting visual images.

"Reverence" is near-automatic in a cultural context that privileges both the image itself and images of war. TARA is a virtual place of encounter for this reverential interface, extended from its physical place of holding, becoming and relying on a virtual, visual, and imagined version of memorialized wartime accounts of events and activities now arranged under the rubric of a dominant historical narrative.

All along, this project is both an interrogation and an animation of various frequencies and fields that TARA, in protracted analysis, occupies and activates. The theoretical thicket I have assembled in this project draws on threads and debates from the larger field of contemporary cultural theory; the use of these threads will assist me in arranging the insights, concerns, and problems I want to express and explore. Using the advice and insights of some of the interlocutors I arrange and deploy, I am orchestrating but I am also making connections, ruminating on the affective intensity of images in a political and historical context. The beginnings of the chapters are noticeably thick with quotes and references: this is conceptual and intentional. The quotations provide a way into the material at hand, acting as trajectories that contextualize how that chapter or section will unfold. Rather than implementing a rigid methodology, my method of inquiry is one of finding semiotic fissures, rhetorical seams, and discursive silences; revealing the sort of palimpsest-like quality the archive has in its many contexts as a series of layers written and over-written.
As such, I would be hesitant to characterize this project as an exercise in “deconstruction”. Certainly, I shy away from the word as a verb (as it frequently and perhaps inappropriately occurs) as it is not something I subscribe one is able to do or perform. Doing it runs counter to the conceptual imperative of deconstruction that Derrida theorized, a concept that I believe deserves maintenance. Instead, I contend from the outset that the complicated hub of discursive, semiotic, and historical threads articulating and constituting the logics and politics of TARA are always contingent and in close proximity to breakdown and failure, to ripping apart under the pressure of serving as History and Truth and Knowledge. Thus, the “deconstruction” is imminent and ongoing, always-already pulling apart, held together by tenuous bands of political power and cultural authority.

The structure and organization of this project, then, is informed by this logic; the following chapters build, in variation, a body of evidence so as to question the veracity, validity, legitimacy, and authority of TARA. While I have attempted to organize and divide the contents of this work into conventional self-contained chapters, I admit that there is a reasonable amount of leakage from one chapter to the next. Some of the threads I pursue and develop stretch across chapters, waning only to re-emerge elsewhere. I have attempted to be succinct and concise, often with less success that I would have liked.

I follow this introductory first chapter with a second chapter, “Arrest and Attraction” concerning the concept of TARA as an archival project. I explore its origins and map the formation of TARA on its own terms: its contents’ original value as operational components of the military war-time surveillance apparatus; its transformation, in disuse after the war, to an archive; and its subsequent emergence as a “new” heritage organ. As such, the chapter is a rough kind of genealogy: it attempts to address what kind of formation the domain of TARA constitutes and what this domain has presently become. Further on in
this section, I address TARA as a project undertaken by the British state apparatus and trace its definition, function, and initial reception by public audiences and users. I emphasize the rhetorical viewing and narrative strategies of the archive and opens some analysis of how the historical images of war-time reconnaissance and surveillance both express and survey—as images to reconciled by virtual visitors—how and what memories, traumas, and renditions of “history” are operationalized and supplied. In this particular section, I address the exchange between the original material practice of military photographic interpretation in its war-time context and the institutionalized viewing strategies structured and intended by the archive’s mode of display. This chapter offers a rudimentary map of the limits of the representational and narrative strategies of the archive, fleshing out the affective associations induced invited in an encounter with images in the collection.

The third chapter, “War and New Appearances”, is a combination and juxtaposition of theoretically-inclined material, which I suggest animates the problems inherent in TARA and its new circulation and standing. Using contemporary research and theory from Harum Farocki, Paul Virilio, Thomas Richards, Andres Huyssen, and Gregory Paschalidis, I establish that TARA’s particular draw is that it is, for all intents and purposes, a project concerning the musealization of images of war; images that, because of their abject and exclusionary quality and their former operational role, are easily and readily accepted as culturally valuable. The fourth chapter, “The State of Artifice of the Archive” consists of a consideration of the collection of TARA and its relation to contemporary virtual archival practices and technologies. Using both Scott Bukatman’s notion of the “artificial infinite” and some of the thinking of internet theorist Wendy Chun, I ruminate on the significance and various implications of both the scholarly and popular cultural context of archival use, especially emphasizing the link between archives and visual images. I suggest how the
archive is perhaps transforming according to pressures inherent in digital and new media technologies. A smaller concluding chapter extends in order to emphasize how the collection induces astonishment by way of an aesthetic encounter. Further, I suggest that the archive, in its very constitution, is a figurative kind of “pollutant” with an inexhaustible cultural life that refuses to decay and disintegrate, that is inexorably recycled and re-used in the political, cultural, and historical “ecology of sense” (Hansen 3: 2003).

TARA is a place of tension: it is an enchanting supply of windows into the past, a discursive formal system representing historical events; yet, it also modulates the intensity and efficacy of cultural perceptions about the war. The affective content of the photos promote and prescribe presentations of spurious simulations, which arguably generate feelings of fascination, repulsion, or even revulsion to the events to which they allude, conceptualize, and portray. To follow Paul Virilio further, there is something consistently artful and fearful about them; their technical, operational status is overwritten with their new positioning and presentation. The awe-inspiring, affective, and odd aura of the collection is something that—instead of simply waning in dilapidated deposit—has induced this exploration and explanation, which will perhaps both trouble and reconfirm the perspective of seeing things, in study, from above.
A Genealogy of the Aerial Reconnaissance Archive

During World War II photographic reconnaissance played a major part in the intelligence war. The advanced photographic techniques developed gave intelligence officers the ability to view the enemy’s activities in 3D, and make highly accurate assessments. Discover a new way of looking at our history and our future at evidenceinsamera.

-“Who We Are”, The Aerial Reconnaissance Archive homepage

Every war image, produced as it is in the context of a certain and however implicit or spontaneous visual ideology, always contains in the form of certain coded elements, a specific perspective on the war and its meaning.

-Gregory Paschalidis, “Images of War and the War of Images”, 18

In historical and geographical terms, [the] emphasis on the use of vision in the construction of knowledge has depended on a particular political economy of the production of knowledge.

-Anthony D. King, “The Politics of Vision”, 125

It is precisely because images are the product of a particular moment that more must be added to them then is ever present in the images themselves. This excess, which is often seen as somehow interfering with the meaning of the image, is a necessary staging ground for interpretation and analysis.

-Ron Burnett, How Images Think, 15

The collection now known as the Aerial Reconnaissance Archive anchors a narrative of transformation: the archive’s collection is the remaining set of records generated in conjunction with the development of the Allied aerial surveillance apparatus during WWII. Its emergence and subsequent re-fitting, from repository to potential heritage organ, is significant because it represents an evaluation and measure of usefulness: the once-useful operational images that provided a comprehensive aerial view of occupied Europe now serve as materials that, in re-use, prioritize a recognition of the legacy of TARA’s earlier form, its organization, and the events of the war, which the collection inherently documents.

The residual value of the collection, sixty years after the initial conditions of production, is harnessed and channeled by the larger British heritage organ. This chapter is
an account of that process, a kind of genealogy attempting to address what kind of formation the domain of TARA may, in fact, constitute and what this domain has presently become in terms of definition, function, and the terms of initial reception by public audiences and users. Further, by examining the original material conditions of the collection’s production, I suggest that the arresting and attraction-like value ascribed to the archive is translated and derived from the very activities and practices of “looking” and “seeing” devised and implemented by wartime aerial photographic interpreters.

**TARA: the Heritage Project**

The conglomeration of attempts and efforts to digitize and transform The Aerial Reconnaissance Archives emerged out of a 1998 symposium sponsored by the British Cartographic Society. In accord with expert concerns expressed by cartographers, aerial photography specialists, archivists, historians, and the various, loosely-connected bodies under the umbrella of the larger governmental heritage organ of Great Britain, the then-Air Photo Archive at Keele University gained finances from the nationally endowed University Trust Fund in 2001 (BCS Newsletter, 2004: 13) Beginning with the task of digitizing finding aids, the archive, in conjunction with the National Archives, proceeded on a trajectory toward its current incarnation as *Evidence in Camera*, the online home of TARA. The collection, rather than be allowed to deteriorate on cabinet shelves, was deemed a substantial and significant fond of historical material. Privileged as a collection with enduring value deserving of investment by the providers of an ideal and imagined British cultural heritage, the collection garnered increased protection and further preservation efforts.

The new mandate of TARA in the context of heritage occludes from its idealized “public” audience the bureaucratic web of cascading effects associated with the scheme and
strategy of digitizing the collection (i.e., displacement of workers in favour of automated technological interfaces, maintenance of powerful social hierarchies in organizational culture, the implementation of new digital strategies of preservation and restoration). The translation of exclusive materials housed in the old archive to the supposedly inclusive, virtual confines of the World Wide Web satisfied the primary stated goal of the endowment, which was to export the archive’s photographs “for discovery” and to make the collection accessible to a larger audience of viewers and users. With access, it was hoped the collection would also increase in relevance.

Though ostensibly “public” prior to January 2004, the collection inhabited an exclusively official and institutional zone. Held by the United Kingdom Ministry of Defence until 1962, the collection—“a visual record of the world at war”—was transferred to Keele University, England, an official place of deposit for the National Archives. TARA’s “Who Are We” section on the archive’s homepage cites the growing interest in aerial imagery amongst university geographers and archaeologists in the early 1960’s, many of whom were themselves hobbyist photographic interpreters. A Keele professor, Stanley Beaver, engaged in discussion with the Air Ministry in 1962. After a series of negotiations, the dialogue lead to the transfer of the photos—in 40,000 boxes done over fourteen months—to Keele.

The 1962 de-classification date is significant because it essentially marks the end of the collection’s life as valuable strategic record of reference. With the collection containing a survey of much of what was then (1962) Soviet-occupied eastern Europe, the photographs—despite the almost-twenty year passage from the end of the Second World War—remarkably maintained an operational value well into the mid-Cold War era. This suggests the breadth and spread of the territorial coverage of the collection. Only when
potential use was out-dated and operationally exhausted was the collection deemed “safe” and no longer “sensitive”.

TARA as Useful Culture

At five million photographs, TARA’s online collection is massive. Before its recent release, TARA served as a vault of material for the European bomb disposal industry to locate unexploded bombs and other war-time ordinance, a developed default application that administrators used to justify the collection’s continued utility. The use of the archival photographs geared toward the apprehension and detection of decaying and decomposing “failed” objects is indeed consonant with the original, technical use of the same surveillance images. The fall-out of total war, decaying in an unfulfilled state, can be addressed and disposed of precisely because of the coverage achieved by the reconnaissance apparatus during the war. Thus, the scale of the collection is accordingly significant because it “charts the development of photographic reconnaissance and intelligence from a position of virtual insignificance during the early part of World War II, to an integral part of Military Intelligence.” (TARA homepage, ‘Who We Are’: 1). Again, the collection comprises an entire aerial photographic survey of the territory of Europe. With close to twelve-million photographs in its collection in total (both digital and in the “hard archive” at Keele) spanning over the later half of the twentieth century, TARA aims to publish and make available all of this material for online use.

The collection as a whole becomes a kind of monument, much in the way that Foucault described the shift from the status of abstract archival documents to monuments.

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3 From “Web Archive offers new perspective on the war”, January 17, 2004, <www.ladlass.com/archives/001334.html>: “Because of its relative inaccessibility, the archive has until now been little used because it was so labour-intensive to find any particular image. The most frequent users were European bomb disposal agencies trying to locate unexploded Allied ordnance across the Continent.”
The convergence of state institutions like the National Archives and the state-owned organ, the British Broadcasting Corporation, point to a "civilizing function" of the archive, now framed as a decisive application under the mandate of official and prescribed heritage. I loosely borrow this from Tony Bennett's genealogical studies of the institutional emergence and political rationality of the public museum. Bennett argues that the museum is a technology of governance specific to the sense of place created by what he calls the exhibitionary complex, which enforces expectations about public conduct and civil comportment. Bennett writes:

"[A]n account of the birth of the museum [can] serve to illuminate its political rationality, a term I borrow from Foucault. The development of modern forms of government, Foucault argues, is traced in the emergence of new technologies which aim at regulating the conduct of individuals and populations... As such, Foucault contends these technologies are characterised by their specific rationalities: they constitute distinct and specific modalities for their exercise of power, generating their own specific fields of political problems and relations, rather than compromising instances for the exercise of a general form of power." (Bennett 1990: 36)

The museum "civilized" people, enabling an encounter with bodies of knowledge, other citizens' self-regulating their own public behaviour, and the state apparatus projecting authority and power in the arrangement of its venerated holdings. Certainly, virtual TARA prevents direct physical encounters with other subjects and citizens in a regulated public space; yet, the function of this "civilizing process", as a didactic and pedagogical mechanism, relates to the intended and presupposed role of TARA maintaining a presence vis-à-vis the cultivation and governance of a virtual public culture.

At stake, then, is the allocation of the collection of the archive as a state-held resource for both the supplementing of mass public culture and the memorializing potential afforded by new encounters with the images. The new virtual geography of the archive extends as a tactic to reassert the bodies of knowledge constituting a sense of imagined national heritage through the engineering, supply, and reorientation of the collection. This re-orientation is amplified by cultural associations and encounters with culturally revered
images of war. The photographs stand as objects forged in times of uncertainty, in
environment embedded in a state of war.

So, from a heritage perspective, TARA is "useful culture" (Bennett 1993: 69),
providing a material and symbolic anchor for retaining a residue of that same revered war-
time past. It is one resource within the state repository of materials and contents ready for
release for the production of a type of branded, state-sponsored culture. According to
Bennett:

...[M]odern culture tends increasingly to comprise a "single, intertextual field whose signifying elements are
perpetually being recombined and played off against each other" (Nowell-Smith 1987: 87)...[V]irtually all
forms of culture are now capable of being fashioned into vehicles for governmental programs of one sort or
another. (Bennett 1993: 77)

This "fashioning" is a manufacture. While the National Archives owns the collection, its
efforts to re-produce TARA and transform it into a public-oriented resource is evidence of
this kind of elastic use of "cultural material". The postmodern ring of intertext suggests a
struggle: it evacuates agency from the state but also lays clear the careful handling and
arrangement of TARA, which constitutes an aspect of a larger imagined hegemonic field of
heritage and commemoration.

New TARA is extended and projected from what was its more emplaced geography.
The collection has gained legs beyond the mere physical possibility for travel, i.e. as a
travelling exhibition to other galleries, universities, and archives. It is now continuously
available. The newly-accessible, virtual status of the archive revalorizes it, both as an
institutional meta-formal system and as a collection of war-time visual records. The virtual
home of TARA exploits the capability of web-access and technologies to connect to other
resources concerned with the topic of the Second World War and aerial reconnaissance.
"Seeing" the war as heritage and at a historical remove is contingent on couching TARA
within a pre-existing network of similar institutions. The semantic and discursive
constitution of this network serves to ensure a kind of consistency, like a genre of materials.

On the “Links” page at the TARA site, possible nodes online are available as interconnected, supporting, and consonant sites providing a similar kind of referential function as TARA.

They serve as a buttress. They are listed categorically on the TARA page as follows:

**About Aerial Reconnaissance:**
BBC Timewatch: Aerial Reconnaissance in World War II
National Air and Space Museum

**Aerial Reconnaissance and the Holocaust**
Yad Vashem
The Holocaust Revisited

**For Non-UK historical Aerial Photography**
The National Archives
US National Archives and Records Administration
Imperial War Museum
ICCD: Rome

**For UK Historical Aerial Photography**
English Heritage: National Monuments Record
Royal Commission on the Ancient and Historical Monuments of Scotland
Royal Commission on the Ancient and Historical Monuments of Wales
CUCAP: *Cambridge University Collection of Air Photos*

**Related Archive Organizations**
SEPIA (*Safeguarding European Images for Access*)

(TARA, Links, [http://www.evidenceincamera.co.uk/Links.htm](http://www.evidenceincamera.co.uk/Links.htm))

As sites on a network, referentially signposted to one another by way of the topics of “aerial photography” and “military reconnaissance”, these links constitute and articulate a circuit. In and of themselves, they are a kind of rhizomatic construct that alludes to and describes generalized content while affirming their own “civilizing” and linked importance with respect to institutional imaginings and dominant historical narratives.

In the context of showcasing images and exhibiting visual records of the war, the alternate locations connect in ways to the mythic primacy and importance of the aerial photography legacy. Within this reasonably coherent and thematically-affiliated circuit, TARA establishes and augments
...a relation to [the] publics it organizes and constitutes, its own internal organization, and its placement in relation both to kindred institutions as well as those — both ancient and modern — to which it might most usefully be juxtaposed. (Bennett 1990: 38)

In juxtaposition, the circuit animates the TARA collection specifically within a hegemonic context while also multiplying the cultural value of the photographic materials themselves by juxtaposing the collection with other war-related sites and topics. The ancillary sites buttress the historical bridges enabled by TARA: they are possible and similarly-applied tangents to the question of memory and history of the war and of aerial reconnaissance. The loosely affiliated network also normalizes the supposed prevalence of these conduits into memory about the war.

Enduring Residues

Determining the collection’s enduring value in relation to the practice of maintaining and preserving archival collections is a significant issue in TARA’s new institutional life. TARA possesses that enduring value according to an index of appraisal that fixes the collection with its value as a standing reserve, with a potential to activate and actualize for ancillary uses.

The National Archives, the parent organ of TARA, acts as an industrial advisor on the process and practices of record management, establishing and setting the bar with respect to conventions and normative procedures.4 The National Archives keys on the quality of “enduring historical value which will be preserved forever.” The emphasis is mine and in conjunction with efforts of the archive to make its “collection as accessible as possible to the community at large and to heighten our profile both nationally and

4 The National Archives website, <http://www.nationalarchives.gov.uk>, is a conduit to the archive’s holdings. Besides the newly integrated online catalogue and ‘PROCAT’ search engine surveying the joint National Archives-Public Records Office collection, the site provides institutional information about the operation of the archive, its mandate, and mission statement. The material in the following paragraph come from the “About us: Who are we?” page, <http://www.nationalarchives.gov.uk/about/who.htm>.
internationally”, the National Archives espouses its most recent and remarkable achievement: the development of a comprehensive electronic records system. The National Archive claims its role is one pioneering “the digitization of records on paper and other traditional media”, ultimately seeking to replace “paper-based systems”. TARA provides an opportunity to apply the electronic and digital impetus to “update” these systems. So, in locating a determining factor for what is maintained and monumentalized, TARA is ideal: its images translate well to scanning and to presentation online. Thus, the enduring value in question suggests also an archival endurance, a function of the collection’s ability to become something else, mutating into exhibition, to encourage encounters and co-ordinations by a group of Web “visitors” or an audience that lends justification to the maintenance and conservation of a given collection. In TARA, the enduring value of a collection made public in a widespread release taps into the energy of a relatively inert object.

Prior to TARA, Keele University maintained a more traditional, research-oriented archive, simply named the Air Photo Archive. Though much-used according to its handlers, it was not very efficient in terms of searching and locating requested material. The old archive’s website describes a range of past users: ostensibly authors, publishers, legal experts, local and military historians, as well as service and civil engineers and architects. Due to the extensive aerial coverage by war-time reconnaissance sorties to produce surveillance photographs of communications networks, the archives administrators claims it contains comprehensive aerial-photographic coverage of rural areas. The introduction on the homepage suggests the value of such a collection to agricultural historians and archaeologists studying settlements and their remains. The photographs document the details of war-time damage and, as such, document the dates and timing of the damage, essential content to

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5 An archived webpage titled “Air Photo Archive: Introduction” is available through Keele University at <http://www.keele.ac.uk/depts/is/airphoto/about.htm>.
historical studies attempting to reconstruct the development and chronology of the war, its massive logistical dimension, and the tactics and strategies used. The “old” version of the archive offered research space and print and enlargement services; yet, all the possible visual information “stored” in the massive survey alludes to problems of organizing and managing the massive collection: the archive stated abstractly that it “cannot provide a list of all the cover we hold.” Basic consultation and assistance was available (and, at Keele, still is), though users were urged to come with the awareness of what “mapped” areas they required.  

Further, in the past, the old archive suggests a three-week notice be given before arriving to do research. This procedural instruction is significant: it locates the difficulty of searching such an archive, as well as the time and labour inherent in such an endeavor. Also, the instructions with respect to specifically mapping a territory of inquiry “clearly” and precisely with respect to co-ordinates of longitude and latitude is a small but significant stipulation that indicates an impetus to transform the Air Photo Archive into something more manageable: the archive itself feeds off the searches laid out and created by potential users, using that labour to ascertain possessions and categorizations of its contents in order to perform an inventory. This inventory, measured in the process and practice of actual use, provides some grounds for administrators to argue for updating and digitizing the archive.

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6 This is worth remarking upon because it belies the original material status of the collection: as aerial reconnaissance photographs, the informatic content of the photos—dependent on the index of interpretation—was a function of a series of photographs. While I will remark further on this below, it is suffice to note that the function of the photograph as a visual map, as a coherent and comprehensive recording across a field of vision, effectively removes the photographs from their original explanatory and functional context. Allied interpreters, while surely examining individual photographs, depended on the serial comparison of photographs from minutely differential perspectives as a reconnaissance plane flew over the target zone. TARA’s antecedent organ revokes this material process and its ideological effect, all the while offering photos for consideration as maps.
Thus, the emergence of TARA allowed the archive’s administrators an opportunity to re-vamp and to take stock, to re-organize, and to essentially re-appraise and clean the proverbial house. The automated searching and instant access to any and all areas covered by the reconnaissance organ during the war is certainly more efficient that the three week notices and necessity of pre-research packages sketching an area. The Web archive, to follow the title of an article on TARA, “offers a new perspective on the war” but it seems that it is a perspective premised on the ease of access: potential users and visitors provide the labour to access materials and subsequently lend validity to the mission of the archive as a necessary place of increased efficiency and the “convenience” of eventual near-automation.

**The Operational Legacy**

What remains, though, are preserved? The industrial development of aerial-reconnaissance techniques and the subsequent process of photographic interpretation is the archive’s primary rhetorical narrative frame. It is apparent that the archive memorializes and commemorates Allied efforts to use the emerging practice of aerial reconnaissance during the war as a tool for “victory”. That victory, though, is bound up as a mythologized and celebratory narrative that both expounds certain things and elides others, trimming the contradictory fragments that otherwise compromise the integrity of the narrative, the archive, and the enduring value of preserving and re-articulating the collection itself in a contemporary context.

Most of the reconnaissance and interpretation work done using the photographs was carried out in the early part of the war by the RAF’s Photographic Reconnaissance Unit (PRU). In a British national context, the storied and mythic RAF is historically paramount in the popular cultural imaginary of Great Britain, especially for its actions during the 1940
German “blitz”. Later, with the entry of the United States into the war, the RAF and the U.S. Air Force integrated their respective reconnaissance and interpretation services to form the Allied Central Interpretation Unit (ACIU), a organ devoted specifically to the production of aerial reconnaissance images and the interpretation and assessment of those images. The unit was based at RAF Medmenham, the then-headquarters for photographic intelligence.

The ACIU organized and provided intelligence for any and all manner of Allied military operations, from the Italian Campaign to the Normandy invasions. Notorious myths about D-Day preparation, the guarding of intelligence, and the management and processing of visual photographic information connect back to TARA. Perhaps most significantly, the intelligence offerings generated from the reconnaissance collection fuelled the Allied strategic bombing campaign waged from 1943 to 1945. As a way of “getting back into the war” and opening up a second front—in the air—Allied air power was increasingly dependent and linked to the increased acumen and industrial process of photo interpretation. The protracted, intensive, and devastating two year area-bombing campaign waged on Occupied Europe and Germany hinged on the ACIU’s operation. The ACIU developed the ability to reliably generate military information and intelligence to create a body of comprehensive knowledge about threats and targets.

The necessity of photographic reconnaissance and interpretation during the war is pedagogically framed in one of the narratives on the TARA homepage. The following passage stipulates the ACIU’s prominence:

In a similar way to the Code and Cipher School at Bletchley Park, the ACIU had high priority in the recruitment of all staff. Like the code-breakers, the photographic interpreters played a key role in winning the war. No attack, whether a bombing raid, the landing of a few men on a beach, or a massive landing of an army, was possible without the preparation of target material by the ACIU...The fact that many pilots never returned from reconnaissance sorties requires that their lives should not be forgotten. The Aerial Reconnaissance Archive is a memorial of a most practical and living kind. (TARA homepage, ‘Who Are We?: 1)
Arguments for the centrality of the archive are partly premised on incorporating the very action of maintaining, preserving, and mythologizing the photographs as pertinent and important historical materials of service and contribution. The comparison to the well-known Enigma code breakers and the role of code breakers during the war serves to further validate the memorial function of TARA. Aerial reconnaissance is amalgamated into a set of overlapping historical narratives and discourses.

Further, memorializing the sacrifice of reconnaissance pilots and the skills of interpreters is another prevalent and associated narrative thread. The display of aerial bravery by reconnaissance pilots has been duly noted in some of the literature around aerial reconnaissance:

The P.R.U. planes carried no guns. They were unarmed not only to decrease their weight and thus increase their speed and range[...but also to remove the pilot's temptation to engage in combat at the expense of securing photographs. His only defence was speed, and his orders were to run away from planes attempting to intercept him... Few flyers in World War II were more courageous than photo pilots: they had no defense against attack, yet were ordered to fly in the enemy's fire. (Newhall 1969: 57)

The iconic value of heroic and glamorous pilots with “nerves of steel” offers a point of identification for users interfacing and encountering TARA's new configuration. Newhall, cites a daring mission by iconic “writer-flyer” Antoine de Saint-Exupéry, one of the most “illustrious” and “daring” reconnaissance pilots. He also recounts Frederick Sidney Cotton, another folkloric figure celebrated for his early contribution to war-time reconnaissance. As a civilian pilot, Cotton gained aerial access to much of what would become occupied Europe prior to the formal outbreak of hostilities. He managed to take a larger number of aerial photographs, some of which became the initial contents for British military intelligence (Newhall 1969: 56). The TARA site establishes the persona of pilot Adrian Warburton, a RAF pilot whose efforts positioned him as a flyer with the some of the highest numbers of sorties flown. His efforts constitute an entire alternate category in the archive, with the
figure 2.1  Adrian Warburton Collection, *Evidence in Camera*, TARA
results of his photographic sorties on display. He is credited with gathering some of the
“best” photographs in the collection; as such, he gains a degree of authorial value as well, the
one responsible for wilfully and seamlessly “taking” the photographs.

Yet, the daring of Cotton, Saint-Exupéry, and Warburton does not translate to the
mundane unglamorous act of interpretation, the place where surveillance gains were made.
All the energy and effort to mobilize resources and send out aerial “detectors” rested on the
efficacy of interpretation, the conduit where “seeing” transformed into military “knowing”.
The bravado of “airmanship” is subterfuge to the careful consideration of interpretation,
where fuzzy images become sterile and clinical conveyors of information. The labour and
principles governing how one “sees” an aerial photograph constitutes an expertise, the
specialized knowledge of knowing what to detect and what to monitor. Here, the pilots are
put under erasure at the behest of this transparent “seeing”. Their intersection with the act
of interpretation is fundamental in TARA’s rhetorical framing of interpreters’ integral role;
hence, the memorial aspect. In his 1968 instructional manual on the interpretation of aerial
photographs, T. Eugene Avery devotes his largest chapter to “Air Intelligence and Military
Target Analysis”.

Though lamp-side analysis pales in comparison to sensational highflying antics,
interpreters were indeed the conduits to the constructing visual knowledge. In what is
technically straight, serious language, Avery outlines the various acts, practices, and tasks that
constitute the reconnaissance-interpretation apparatus. He cites “early” interpreters as
occupying a step in the progressive and refined development of the “air intelligence” he

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7 The catalogue compiled by Avery is academic and instructional yet there is no shortage of mythic, fetishistic
subtext. The historical conjunctures of the text’s 1968 publication is contingent with the culmination of the Cold
War and the height of the Vietnam War. Avery’s manual in this context is symptomatically riddled with this
political imaginary, where a naturalized consensus is projected about the primacy and apparent geopolitical
catalogues, explains, and describes. He recuperates the role of interpretation versus the glamour of flight, writing of the Second World War:

In times of all-out war, a superior intelligence system may hold the balance of power and the key to ultimate victory. As an illustration, skilful photo reconnaissance work by British interpreters during the war led to the destruction of launching sites for German V-bombs on the continent; as a result a long-range attack which might have been catastrophic was averted. (Avery 1968: 283)⁸

The efficiency and skill of the British PRU and the subsequent ACIU was honed, then, through the repeated act of recognition and interpretation.

**Operational Failure? Measuring TARA’s Early Success**

With emerging techniques in photographic reconnaissance and interpretation causality is recursive; depending on the index of interpretation, something that is wholly visible may remain entirely invisible, insignificant, and unworthy of attention, only to be made “visible” later when the object or thing is coded and ascribed with value by arbitrarily becoming something necessary to detect and in that moment, becoming legible to interpreters. The “science” described above is the arbitrary allocation and establishment of an index of semiotic relays. This establishment is significant because TARA then also occupies a location on the trajectory of concerted efforts by the ACIU to exploit the new capacity of coupling film and flight for military purposes. The role of reconnaissance is obvious: further and enable the generation of strategic and tactical knowledge about enemy targets, damage done to enemy forces, and the general surveillance of the what was enemy-occupied territory.

Obviously, the significance of aerial reconnaissance in particular is amplified because of the combination between the technical capacity of the cameras and the aerial capabilities

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⁸ Avery attaches the applicable reconnaissance photos (figure 15-1: 284), saying little of the successful V-bomb attacks on England during the war. He chooses instead to valorize the eventual operational success of “skilful” interpreters combating the menace of aerial attack. The failure of interpretation is elided in the expression of celebratory rhetoric.
to put a camera into space. The ability to gain altitude and scale immense spaces, to
miniaturize the surface of a given visual field—battle, target, or otherwise—bear the marks
of powerful political, cultural, and industrial production. Vertical perspective incidentally
translates landscapes into contained segments; massive spaces, already perhaps sublime in
how they are normally perceived (i.e., horizontal perspectives), are extraordinarily
transformed into manageable pieces. The archive is as much about the history of organizing
specific and specialized industrial labour as it is about the photographs themselves. Many of
the reconnaissance sorties were in fact rather mundane, un-spectacular, and ordinary,
normalized acts in the machinic assembly of war. Yet, ordinary and mundane visual
appearances deny the consistent and powerful capacity of the reconnaissance apparatus’
ability to generate information and knowledge. Applying an interpretive scheme to even the
most basic sorties and runs, the reconnaissance apparatus supplied a constant flow of
images—a type of perception—integral to command and control bodies and their decision-
making processes that altered the course and direction of the war

Fixing the interpretive line of sight constitutes the act of reconnaissance as a weapon.
Circling aloft is useless without the careful consideration afterward. With success comes the
accompanying failure of interpreters to detect, failure of the reconnaissance organ to survey
and manufacture information and intelligence. It is this fundamental moment of failure—the
moment where a technology fails to fulfil the function and accomplish the task for which it
was designed and organized⁹—that paradoxically announces the necessity of the whole

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⁹ In this there is some larger hint of what Peter Van Wyck calls, in passing, “an analytics of the accident”. Van
Wyck 2002: 108. Detection systems and the specific reconnaissance system memorialized with TARA are
driven by the ‘accident’, the moment of failure. The concept of failure is something that Virilio’s conceptualizes
as far from accidental or random. Rather, in any system the accident as the moment of failure is built-in. It
predetermines function and pre-supposes it. Accordingly technologies function with failure as an inevitable
anchor. In a war context Virilio suggests the ‘mode of destruction’ precedes the ‘mode of construction’. See
Virilio 1993: 111-2. Also consider Octavio Paz: “Axiomatic systems have lost their consistency and revealed an
organ or apparatus. Namely, legitimacy rests in not failing, in not being unable to detect threats or assess probable risks, not being able to “read”. This organized disposition, as a mode or “way of seeing” in war-time, is the terminal point of an attempt to gather comprehensive knowledge of a space or territory, an impossible task extending to an unknowable limit where success is the arbitrary determination of light on highly sensitive fast film. Total comprehension is the impossible ideal.

The Immediate Appraisal of Operational Remains

TARA’s visual basis subtly ensures both an economy and efficiency of exhibition and display: the photographs require visual engagement and as such, they provide a kind of mnemonic and spectacular short-hand before any framing or formally-written, institutionalized accompaniment text. There is some inherent fascination: the collection, in its basic character and in how it is recognized, defies conventions of horizontally-oriented photos. The vertical vantage point is the obvious marker of an alternate perspective.

Standard aerial reconnaissance photographs (20 x 20 cm) are usually large-scale images depicting relatively small areas, providing more detailed coverage. They have a basic capacity to abstract the surface through the measure of vertical distance. This translation allows for the discernment of patterns in order to make operable a comparative syntax of recognition. Vanishing point, deep focus, and depth-of-field—traditional photographic measures of distance rendered horizontally—are displaced in favour of a more powerful merging of perceptual and technical systems that flatten the object or space covered. In this specificity, part of TARA’s draw is the possible aesthetic encounter with such images. In extolling the decisive role of aerial operations as a factor in the course of winning the war,

inherent defect. But it is not really a defect: it is a property of the system, something that belongs to the system.” See Paz (1974), “Order and the Accident,” in Conjunctions and Disjunctions (New York: Viking), 112.
the archive is an implicit testament to the sheer power of the reconnaissance apparatus to
dominate aerial space and sufficiently regulate the visual and visible field of the ground
below by way of effecting actions and producing destructive results. The archive in this way,
then, is historically implicated in the complicated events of the Second World War: it
corroborates and substantiates the familiar normative narrative of “victory over evil” and
the mythologized liberation of Europe from the alliance of the Axis plague. Exhibition—and
the collection’s legitimacy—is premised upon the trajectory of this narrative mythology; the
photographs affirm their own development as indispensable tools to win the war.

Even early in its operational life, or late in its war-time configuration, TARA’s
antecedent ACIU-form was appraised and evaluated. The ability to generate “intelligence”
and knowledge through the use of images was indirectly put under scrutiny by post-war
bombing surveys conducted by the United States Army. These studies were designed to
abstract, analyze, and assess the ergonomic efficiency and effectiveness of the strategic
bombing\(^{10}\). The ability to quantify and reduce suffering to science is, in the survey, another
kind of *optics*, another way at looking from a distance mediated by the lens of numbers and
the superlative aim of better strategy, better pictures, and better technique. Statistics trumps
suffering in a popular context, and is a way of negotiating and encountering the immensity
of damage by dividing, parsing, and colonizing with the careful permutations of data.

Noticeably absent from the bombing surveys were numbers of deaths inflicted, implying that

\(^{10}\) Two massive surveys undertaken after the war by the United States Air Force attempted to assess and
correlate the effectiveness of their war-time bombing campaign. The RAF conducted a similar survey in
Europe through Bomber Command. Both were tomes of statistical figures attempting to quantify the damage
and devastation accomplished by the aerial bombardment, especially the later aerial bombing campaign, which
drew heavily on the reconnaissance and military intelligence generated by the ACIU during the war. The
surveying is a system of feedback measuring what and how things are affected; the bombers were effective but
they also massively affected things. In a similar way, TARA is a survey in that it is monitored, offering feedback
to the heritage organ of the National Archive so as to gauge how effective and affective the commemoration
campaign enabled by TARA is proceeding and if the investment is providing intended results. It is difficult,
though, to measure and test popular historical consciousness or awareness whereas the quantification of rubble
per citizen and civilian deaths is far more statistically friendly. See the (1946) United States Strategic Bombing
Survey (European) online at <http://www.aesi.com/ussbs.html> for a veritable wall of surveyed feedback.
perhaps within the rigorous photographic indexes designed for interpretation, “people” bore little signature. In the context of signatures, other trajectories that are or have been minor fields or discourses of historical knowledge, that run counter to this narrative version of events concerning “victory”, are effaced and espoused. They bear little signature in TARA’s rhetorical approach. In relation to these trajectories, TARA is an exclusionary organ that prioritizes and accommodates a specific version of wartime events. Divergent threads are regulated, arranged, and aligned to resonate in a specific way. These threads, then, constitute domains of war-time history outside or beyond typical and normative renditions of the victory narrative.

One emerging domain in relation to TARA’s account of the war is the discourse of Germany as the site of reception, literally, of a massive aerial war culminating in two years of a pervasive and indiscriminate area-bombing campaign—masquerading under the official but sterile rubric of “strategic bombing”—undertaken by Allied forces in the second half of the war. Regarding the air war in the Second World War and the complicated and problematic politics of pain and suffering of German civilians, W.B. Sebald remarks with disdain about the discursive disabling of any extended consideration of this problem: “[Certain discourses] function [sic] to cover up and neutralize experiences beyond our ability to comprehend” (Sebald 2001: 25). Sebald suggest in his treatise, (2001) On the History of Natural Destruction, that the Allied efforts to pursue a concerted air war in Europe—dependent on the

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11 David Irving’s (1963) The Destruction of Dresden is a seminal work in this regard on the 1945 destruction of Dresden. More recently, W.B. Sebald’s (1997) On the History of Natural Destruction, specifically his chapter entitled ‘Air War and Literature’, argues that the lack of German war-time literature on the aerial war from 1943-1945 verifies many of the assumed cultural and social problems stemming from generational guilt and trauma via complicity with Nazism, the Holocaust, and the general disrepair of German national identity. Some of Sebald’s detractors claim otherwise with respect to the specifics of the air war, saying such accounts do exist while other argue the inappropriateness of guilt with respect to the harm and trauma imparted by Germany during the war. Suffice to say, these larger issues have been interrogated in German literature (Volker Schlondorff’s The Tin Drum) and in New German Cinema, with filmmakers commenting in the damaged status of the German ethos. Most recently, Susan Vecs-Gulan’s (2003) Trauma and Guilt: Literature of Wartime Bombing in Germany (New York and Berlin: Walter De Gruyter) offers a wider study of the discourses of trauma in the cultural context of German guilt and wartime bombing.
intelligence rendered by the ACIU now on display in *Evidence in Camera*—now stand as a record of the “final act of destruction of the German people.” After the war, the economic miracle of the Marshall Plan designed to revitalize Europe—and ensure the maintenance and proliferation of an export-based war-time economy—proved successful because of the reduction of territory, especially Germany, to Year Zero: the landscape put under devastating erasure, the reorientation and re-engineering of a whole territory of ruin was the result of “an operation performed with brutal efficiency by the bomber squadrons.” (Sebald 2001: 12) The mean geography of Germany approached zero as well, flattened under bombardment produced by the logistics of perception.

The archive is noticeably silent on this in its public virtual orientation. Its spectrum of historical register in relation to an ethics of war, especially in the context of complicated and sensitive mnemonic tropes of trauma and memory, also fail to address in any larger way the issue of Allied strategy and the perpetuation of the Holocaust. Along with the question of German suffering, the large assembly of discourses of the Holocaust are curiously absent. These constellations—especially the Holocaust, an assembly with an undeniable historical and cultural efficacy—intersect in any consideration of trauma, destruction, and suffering in the context of a history of the Second World War. They locate an extreme set of protracted limit-events consistent with practice of total war.

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12 Discourses of area bombing are entirely absent in TARA. In relation, the BBC’s WWII History website offers a page, “British Bombing Strategy in World War Two” written by Detlef Siebert. Despite the “change of policy” and the switch to strategies of area bombing, Siebert carefully maintains the tag of “strategic bombing campaign” while writing under the rubric of one of the main hubs in the British state heritage apparatus. See <http://www.bbc.co.uk/history/wwtwo/area_bombing_01/>. Note further the internal discursive tension: the URL contains “area bombing” in the web address. Regarding the delicate discourses of the Holocaust, TARA links directly to the Yad Vashem homepage <http://www.yadvashem.org.il>, an Israeli state-sponsored portal designed for enquiries and the acquisition of materials concerning histories of the Holocaust. The second Holocaust related site, through Global Security, addresses the reasons for the failure of photo interpreters to detect and recognize extermination complexes and other related genocidal apparatuses incidentally captured in war-time aerial reconnaissance photographs. This problem, again, is one of the index of appraisal and interpretation, and is explicitly taken up by Harum Farocki in *Images of the World and the Inscription of War.*
Yet, TARA memorializes a politically-prioritized version of events; its memorial attempts to fix the “correct” allocation of suffering and trauma vis-à-vis British heritage. Andres Huyssen, in “Present Pasts: Media Politics Amnesia”, claims somewhat convincingly that discourses of memory and commemoration are policed and regulated by the historical centrality of the Holocaust as a dominant mnemonic trope. This trope prevents other kinds of memorializing, in topic and form (Huyssen 2000: 23) and this is to say that considerations of the Holocaust should themselves close down or impair other kinds of commemorative approaches and contents. Yet, TARA’s token nod to the Holocaust amounts to a subtle discursive closure.13 The area-bombing campaign and the role of the ACIU—monumentalized in TARA and commemorated—is also made silent and suppressed. In all this, the central discursive node of the archive is firmly the role of aerial reconnaissance as a proactive and necessary technology. *Vision* is left to stand on its own: the appreciation for the efforts necessary to orchestrate both victory and history requires that the strategy of visualizing a version of history through TARA necessarily enables visual fascination while eliminating the problem of the messy aftermath below.

13 Alternate discourses suffer in comparative valuation, lacking a discursive opening in an economy of trauma that privileges one constellation at the behest of others. TARA could ostensibly further directions and kinds of inquiries for Holocaust and genocide studies. There is a whole series of exchanges within discourses around the war, aerial reconnaissance, strategic bombing, and the Holocaust in reference to what Joseph Robert White calls “the mission never flown”: the bombing and direct attack on extermination camps (White 2001: 1). Strangely, White refers to this “mission” as a singular act. Dino Brugioni, elucidating the procedures of photographic interpretation in the context of tasking and these “missions”, writes that after finally bowing to political pressures put on the military to attack extermination camps, logistical problems ensued: “When the bombing specialists were ordered to formulate plans for bombing the Auschwitz-Birkenau Extermination Complex, officials of the Air Ministry, the Royal Air Force Bomber Command and the U.S. 8th Air Force bemoaned the lack of aerial photographic coverage of the complex. In fact, such photos were readily available at the Allied Central Interpretation Unit at Royal Air Force Station Medmenham, 50 miles outside of London and at the Mediterranean Allied Photo Reconnaissance Wing in Italy. The ultimate irony was that no search for the aerial photos was ever instituted by either organization. In retrospect, it is a fact by the time the Soviet Army reached Auschwitz on January 27, 1945, the Allies had photographed the Auschwitz-Birkenau Extermination Complex at least 30 times.” (Brugioni 1983: ) Harum Farocki demonstrates this process in his film, *Images of the World and the Inscription of War*. They were literally pulled off dusty shelves. During the operational, military context of the war, the camps were not prioritized; they were not rendered visible because they were not deemed relevant targets or threats, contra Brugioni’s ironic assertion. Interpreters were not tasked with seeing them “down there”; they did not have specifically established signatures to use for evaluation and reference.
Looking at What Was “Seen” in the Public Showcase

The release of TARA was anticipated with much fanfare, a media event in and of itself heralding, in celebration, the new capability for Web-users to encounter the monumental events of the war. The release conforms to a narrative of patterned and mundane cheer for the dissemination and increased profile of the materials to an audience of curious cultural citizens. TARA’s release staged and promoted the public intersection between the demand for materials with an enduring cultural and symbolic value and the ability of the Web to provide both preservation and virtual handling without disturbing the act of conserving and maintaining.

The official Keele University press release (of January 2004), with its self-congratulatory tone, was culled and smattered across a range of different media sources, both online and in the commercial print media. Newspaper articles and Web-based wire services covered the release, effectively bringing the contents of TARA into a popular public sphere with a wider-intended audience. Hobbyists and aficionados, historians, technical web-design experts, and Second World War buffs comprised large parts of the spectrum of audiences addressed by the fanfare.14 Yet, public interest pieces permeated popular news dailies like The New York Times, London’s Times, and Canada’s The Globe and Mail. The press

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releases were advertisements—advertisements, even—public-awareness pieces designed to
generate consciousness of the archive’s new home, inviting and promising visitors a
spectacular and participatory encounter with sensitive and “top secret” contents concerning
the war. The vault had been opened.

According to journalist John Allemang of The Globe and Mail, TARA’s re-entry into
the place of public and popular culture ensures access to the “riches” of the archive. The
place of the new archive is, following the essay’s title, “Where History Meets the Eye”.
Allemang’s short essay is notably presented in paper’s Focus section. There is somewhat of a
leisurely bent to it as it is inserted into a lifestyle-oriented section for Saturday morning
contemplation over coffee. I cite Allemang not to denounce or take issue with his
representation and conceptualization of TARA but simply to offer a sample of the revealing
de-mystification of TARA’s contents and the subsequent re-mystification of the new magic
terms of access and historical narrative transport. The media coverage of the release
contributes greatly to the intended operationalization of the organ of TARA. Allemang
writes, “Today’s technology is allowing historians and the public to see these iconic images
of the Second World War in a whole new way, in pictures that were technological
developments in the their own era.” (Allemang January 31, 2004: F4) Allemang keys on the
iconic value of the aerial photograph as one significant formal marker that denotes the war
itself and connotes the war as a place of rapidly emerging technical developments, especially
technologies that impart an index and logics of how space is rendered and things are seen
based on optics and perspective. That those historical developments, likewise, are located in
relation to contemporary visual media technologies (in the incorporated circuit of the Web)
hit the ideology of heritage on the head: the organ of TARA as a place of supply, a place of
the logistical management of history, is capable of providing that historical experience, much
like the technical capabilities of the surveillance and faith in the apparatus of the ACIU provided the impetus for “victory”.

The archive is less a place of official and administrative reference and becomes both a metaphor and a practice for the sensing and seeing of memory and history. The framing of TARA as significant in that its actual mode of presentation—traveling, displaced, and extended online—is trumpeted by many of the reportage pieces primarily because of the emergent web technology employed, a kind of fetishizing tendency documenting the ease of inventing a coming-out event for the collection. In this coming-out, the prolific capability of remote Web access to the collection is arguably a primary story frame vis-à-vis the actual contents of the collection, remarkable in and of themselves. It is a weird little self-sustaining loop: it lends legitimacy to the coverage, the vent of release, the potential encounter with collection, and the efforts of the heritage organ and the British National Archives.

“Looking” Down and “Seeing” What?

Empirically, five-million aerial photographs attest in evidence to the fact that it is all “down there”. Yet, depending how one “looks” and “senses”, what one “sees” and perceives is indeed a matter of supply based on the index of interpretation applied to the field below. This logic operates in the discursive context of the photographs serving as transparent windows into the past; and at the meta-discursive level of the archive itself as a signpost fixing a version of historical and public commemoration. The issue becomes one of contingency and proximity: what are the kinds of enforced encodings and intended decodings? In TARA, a series of different coding processes occur. The re-articulation of the potential archival user and visitor—and the re-mapping of what constitutes the geography of the archive—defines the emergence of TARA as a process premised on a range of different
technologies. Some are technical, mechanical, and specifically machinic: Web technologies, Web browser interfaces, personal computer capabilities in rendering images, scanning and digital tools used to transfer the collection. Others are normative and durable cultural practices, "technologies" as systematized and habitual methods of doing things: of living through technologies of sight, of looking at images, of conceptualizing the world with the power of vision.

If, as according to Ron Burnett, the semiotic economy of images is always necessarily co-opted and articulated via some external "excess" and extra-textual body of knowledge (Burnett 2004: 14), it is precisely the coded elements of interpretation that make this attachment and affixing of semantic and epistemological filters and prompts possible. The vision and meta-visualization of war-time action collectively presented in TARA is staged with this excess in mind, which represents an effort to regulate and govern an encounter with both the apparatus of the archive as a state-heritage organ, and the immense bundle of knowledges and feelings constituting the topic of the war in a historical context.

TARA recycles these material records—already re-presentations of finite moments in space and time—and arranges them to function as opaque, monolithic monuments presenting the past as real. The images are invoked out of context; that is, outside the process of the comparison-based interpretation. As single images, the potential for evocative spectacle allows them to function as ahistorical objects that signify preferred and "legitimate" political and cultural narrative of the war. Across the millions of different photographs constituting the collection, the archive discursively packages "aerial reconnaissance" into a single and finite event so as to commensurate the ethical and political tensions of presenting images of war for spectacular visual encounters.
An encounter with TARA—by web users online, “new visitors”, or cultural citizens browsing publicity spots and articles about the archive—is an exercise in oscillation: the collection anchors a genealogy of the development of an operational, clinical method of conceptualizing the world in a military intelligence context; and, further, in moments of consideration, the images slip toward a status of pure attraction as overt aesthetic display and astonishing spectacle. There is complimentary tension between the “artful” contents of the photographs and the clinical, sterile value of the images. The sheer power inherent in the aerial perspective and the coverage of geography offered; the identification with that perspective; the panoramic-like content and the similarity to kinds of vision-based attractions and ephemera; and the effacement of the trauma ongoing “on the ground” during the moments of supposedly sterile photographic capture—all contribute to TARA’s rather bulging status as some normal, ordinary collection. The legacy of war-time success and the legacy of victory in a hegemonic, imagined cultural narrative of heritage is both a sanitized and streamlined overwritten layer. It is instituted at the behest of denying a culpability and complicity, by viewers and by the provisional state heritage organ in general, with the acts of destruction and devastation allowed for and accommodated by the operational images now serving as hallowed and venerated monuments to the past.

**Performing Interpretation**

Regarding the rhetorical constitution of a particular viewing strategy in relation to TARA, the archive cultivates an approach and mode of address that essentially invites visitors to assume the role of aerial photographic interpreters. By elucidating the original material process and practice of interpretation, a series of connections can be established that assist in both diagnosing and translating what in fact occurs when the intended political and cultural
practice of looking at these images becomes mobilized, induced, and actualized by the
precession and process of archival exhibition.

The interpretation process is framed as the a means to the ends of victory, without
any regard for the dimension of regulatory, operational, and organizational directives that
governed the conduct and application of interpretation techniques, nor the successive
actions and practices the accumulation of those techniques subsequently prioritized. The
simplification and erasure of the “art and science” of aerial photographic interpretation is
problematic within TARA’s refurbishing and revitalization. Though TARA intends to
provide an interface with the spectacle of aerial power and the ability to provide a
comprehensive survey of Europe, the actual act of encountering the photographs enables an
arresting perceptual encounter that is initially affective, continuously attraction-like, and
subsequently uncanny. The potential for fascination, intertwined with the intended and
overriding historical impetus of the archive, rests greatly on the expression of an alternate
supply of historical material, namely the celebrated role of aerial reconnaissance during the
war.

**A New Panoramic Attraction**

Rendering space and territory manageable in a simulated and conformal visual
package is a logic in and of itself to provide the grounds for an arresting and astonishing
visual attraction. This basic logic structures any interface with TARA at *Evidence in Camera.*
Consider the stereoscope: its first articulation was that of a leisurely form of mass
entertainment; it was then eventually applied by interpreters as an operational tool. TARA
itself subscribes to this logic of leisurely spectacle: available now through the Web, it is a
relevant standing-reserve of materials circulated to allow for further visual encounters,
encounters which blur the boundaries between now-public spectacle, the historicizing of cultural memory, and entertainment. As an kind of *en masse* attraction, the images in TARA offer a visual perspective of the ground in a way similar to the mass-entertainment phenomena of the panorama. The word *panorama*, in Greek, denotes “all view” (Hughes 2000: 1). Stephen Oettermann contends that the panorama, in both painted and early photographic forms, was a distinct and specific mass medium providing visual, pre-cinematic entertainment in Europe and North America the late 19th century. In (1998) *The Panorama: History of a Mass Medium*, Oettermann outlines the historical genealogy of the panorama as a popular mass medium, much like the emerging medium of cinema.

The panorama is a visual technology that scales space, rendering territory visible and manageable so as to allow its consideration from a fixed point or perspective. Panoramas intentionally emphasized the horizontal spread in the figuring of a particular space; panoramas especially composed and *fabulated* this accessible plane to produce a representation. As such, the panorama anticipates the distorting effects of extreme and alternate perspectives. The emphasis of vertical remove inscribed on aerial photographs, therefore, aligns the aerial photograph and the panorama in that both, in their respective functions, serve to make a space manageable and operable, to provide a survey or map of a larger *a priori* incomprehensible scene. Both function in relation to a similar kind of visual grammar designed to construct a totality, and thus, imagine an aspect of control of the various figurings constituting the image field. Further, both provide and amplify visual information that is and was otherwise, from other normative perspectives, *invisible* and unapparent. That panoramas indeed provide “overviews” of events and spaces in a omniscient perspective “above the fray” loosely links them as related visual practices and attractions
Toiling By Lamp Light

The potential for the unfolding of astonishing images, visual attractions, and curious contexts in TARA is forwarded on the assumption of re-articulating knowledges constituting the war. The invention of “aerial reconnaissance” as a popular topic of war-related historical consciousness and memory is incorporated into naturalized and expected recollections and commemorations of the war.\textsuperscript{15} Relating to images is natural and normal in this cultural context; further, everyday life and its habitual expectations and routes and trajectories funnel through these familiar topical pathways, which is to say that days are not spent concertedly re-constituting our knowledges. The war is an archive of consigned materials written deeply into Western (and British) cultural life, something cemented.

The *Evidence in Camera* homepage has a banner running across its top. The banner offers a visual assembly of the various entangled threads that converge in TARA: a reconnaissance pilot being either briefed or debriefed in his cockpit; two discernable aerial reconnaissance photographs; a table of maps and various instruments; a graphic, text-book-like image of some sort of mapping/geometric process; a “top secret” operation catalogue.

\textsuperscript{15} The “opening” of this topic is something that I discuss further in the next chapter.
entitled “Dick Tracy”; and finally, what is assumed to be a downward-looking interpreter, his glance cast studiously on the table below in photographic analysis. The images are superimposed across the banner from left to right, unfolding with apparent narrative coherence, from pilot to interpreter. Interestingly, the images are rendered in fuzzy black and white—presumably to simply connote their vestige of “pastness”—save for the image of the interpreter, which appears in colour. The interpreter appears posed and recently composed; unlike the other “authentic” images, the interpreter on the banner is not an “actual” interpreter. The image of the interpreter working, hermetically cloistered in a darkened space lit by a lamp, perusing and analyzing photographs, provides an instructive point of reference: it visually signifies “interpretation” and also the archival interloper searching for files in the exclusive zone of the archive. Interestingly, the low-angle light reflecting off of his face suggests lamplight rather than the new blanket of horizontal light projected by new TARA via the larger monitor screen of a desktop computer.

Cultivating new archival users, TARA invites visitors to embody and perform the role of a war-time photo interpreter. This is the method of participatory historical and commemorative awareness: pretend the role of the interpreter, that noble and contributing cog in the industrial production of integral of war-time intelligence upon which victory hinged. The virtual and modular capabilities of the Web and most Web-browser programs make it possible to “handle”, appraise, and evaluate the photographs in the context in which they are offered; that is, as incorporated commemorative devices and as available modular components of “useful culture”.

The role of interpreter to be performed and enacted by visitors prioritizes the spectacular and fantastic aspects of viewing aerial reconnaissance photographs. Yet, notably, the ancillary processes and the often mundane and ordinary actions that constitute the
assembly of intelligence are not showcased. Archival visitors do not partake in recreating the kinds of necessary interpretation reports that were systematically generated, which can also be presented as iconic reminders of the residue of war-timed memory. Visitors and users do not embellish or engage in the semantic and syntactic permutations of jargon or codified language. Arguably, providing some kind of “intelligence generated” interface would be absurd; my point is that the opening of the archive allowed for historical identifications constructed entirely upon the economy of visual spectacle and visuality. The effacement of the detailed and time-intensive processes that constitute the manufacture and fabrication of operational intelligence—as translated from aerial photographs—do not lend themselves to spectacular encounters with the representations and presentations of the war. Bureaucratic forms and internal organizational communiqués do not cut it for the recuperation of historical fantasy and enchantment.
1. ABERFORD (Admiralty Chart 3275). 1/507 19 42 44H. Oblique Photograph (P.I. I.) 15.000' "A".
   (i) SHIPING.
   (a) Only part of the southern end of the Fjord is seen on good oblique photographs and the shipping visible consists of 1 medium N.Y. alongside and 1 medium N.Y. lying off.
   (ii) SHIPING STATION.
   (a) This Shiping Station, which is seen for the first time on P.I.W. photographs, is situated at the southern end of ABERFORD at a position 60° 59' 29" N. 25° 19' E., which corresponds very closely with the position given in the official list for ABERFORD Shiping Station.
   (b) A line of 12 ships are present, three of which are afloat whilst a fourth is moored to a jetty.
      (Photo 3.0).

2. ABEROY (Admiralty Chart 3275). 1/507 19 42 44H. Oblique Photograph (P.I. I.) 15.000' "A".
   (i) GYMNASTIC PLATFORMS.
   (a) A German Naval Force consisting of the Battleship TITANIC, the Pocket Battleship ADELMAR SCHMIDT and the 3" Cruiser DORNIER with an escort of 7 destroyers is seen running westwards off the a." point of the island of ABEROY in a position approximately 60° 59' 30" N. 25° 30' E.
   (b) The whole force is seen to be leaving ABEROY, on a true course of about 3 miles a side on the south side of ABEROY under.
   (c) THE TITANIC and the ADELMAR SCHMIDT are proceeding in line ahead with the TITANIC leading and the ADELMAR SCHMIDT approximately 2,000 yards astern.
   (d) The DORNIER is about 4,000 yards E.S.E. of the TITANIC and is soon heading due westwards.
   (e) Three of the escorting destroyers are to starboard proceeding in line ahead on a. true course whilst the other 4, to port of the major units, are proceeding on a varying course to the E. leading destroyers heading almost due westwards.
   (f) The escort consists of a KREUZER class destroyer, 2 RUNKEL class destroyers and 4 EMBLEM class destroyers partly seen and not identified.
      (Photo: 1.20, 1.22, 4.19, 4.31, 2.03).

   (ii) SHIPING II CHORD KINCOE.
   (a) The 8.0 CLAS CHASSEUR is seen proceeding at speed out of CRUMBETTOB on a. true course.

      (b) She is...

figure 2.4 Interpretation Report, page one, ICCD
<table>
<thead>
<tr>
<th>Location</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Apron (with forward part open)</td>
<td>1 raft, 120' 1st Apron 120' 1st Apron 120' 1st Apron 120' 1st Apron 120'</td>
</tr>
<tr>
<td></td>
<td>2 oceasters 120'/150' 2 oceasters 120'/150' 2 oceasters 120'/150' 2 oceasters 120'/150' 2 oceasters 120'/150' 2 oceasters 120'/150'</td>
</tr>
<tr>
<td></td>
<td>Numerous small vessels and crafts. 1 probable D/A boat. 1/210' 2/210' 2/210' 2/210' 2/210' 2/210' 2/210'</td>
</tr>
<tr>
<td>On the building site</td>
<td>1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120'</td>
</tr>
<tr>
<td></td>
<td>2 small craft. 2 small craft. 2 small craft. 2 small craft. 2 small craft. 2 small craft. 2 small craft.</td>
</tr>
<tr>
<td>2nd Apron (approx. 300')</td>
<td>1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120'</td>
</tr>
<tr>
<td></td>
<td>1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120'</td>
</tr>
<tr>
<td></td>
<td>2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels.</td>
</tr>
<tr>
<td>3rd Apron (approx. 300')</td>
<td>1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120'</td>
</tr>
<tr>
<td></td>
<td>1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120'</td>
</tr>
<tr>
<td></td>
<td>2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels.</td>
</tr>
<tr>
<td>4th Apron (approx. 300')</td>
<td>1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120' 1 vessel, 120'</td>
</tr>
<tr>
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<td>1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120' 1 raft, 120'</td>
</tr>
<tr>
<td></td>
<td>2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels. 2 small vessels.</td>
</tr>
</tbody>
</table>

**Note:**
- "2/210'" likely refers to 200' vessels.
- "1/210'" likely refers to 200' vessels.
- "D/A" possibly stands for Direct/Asynchronous.
The Materiality of Interpretation

TARA users and visitors are compelled to look and consider images as if they were historical maps of the locations covered, as if they were singular things rather than vertical reconnaissance photographs that are the result of a set of photographs taken as a series, and perhaps as a set of series over an extensive time period (i.e., the "cover" of multiple sorties over the same area over the course of a few years). Not surprisingly, the original materiality of the production of aerial reconnaissance photography is disavowed and distinctively absent from the ways in which the archive frames and espouses the value of experience and encounter with images. This slippage—from the original material process that served to carefully generate military intelligence to proxy memory objects serving as maps for a historical version of the ground below—is significant because it alludes to the semiotic and discursive labour performed by TARA to subsume both the inner workings of the reconnaissance apparatus and the ultimate destructive project implicit in the generation of knowledge derived from aerial surveillance.

The original process of photographic interpretation is an activity and practice based on a series of semiotic strategies. Allan Sopko, in tracing the specific military development of bomb-damage assessment, outlines the variable collaboration in the ACIU to create suitable assessments following the application of strategic air power in bombing campaigns:

This analysis featured collaboration between photo-interpreters and industrial engineers, allowing for an appraisal of both the area and locations of the industrial system and the functional components of the system. This process was a precursor for any subsequent damage assessed against a particular target. The post-attack analysis summarized the damage from the bombing strikes in a damage interpretation report. From this report, options to re-attack, feasibility of re-attack, and the degree of production loss were assessed. The meagre beginnings of a damage assessment cell called the Allied Central Interpretation Unit created the art and science of battle damage assessment. (Sopko 1999: 2)

The conversation and collaboration mentioned differs from the privileged and private unicity of virtual visitors' experiences with single images.
figure 2.6 Renault Factory (Eastern France), Evidence in Camera, TARA
War-time interpretation was inherently procedural and was organized as such. The logic that underlies the industrial production of military intelligence through aerial photography and interpretation essentially operates according to axes of systematic limitations laid out by the interpretive organ itself—a modus operandi developed to produce the clinical gaze necessary to “read” the inscriptions of war on the surfaces below. Interpretation was codified and the act of “looking” and “seeing” subscribed to an indexical visual lexicon. The visual effect created by the vertical aerial perspective established the grounds for a process that was scientific. After transforming actual space—both the grid of aerial space negotiated by planes and the territory of co-ordinates to be surveyed on ground—the successful generation of information and knowledge rested in a consistently programmatic approach. The transformation of visual information into “evidence” motivating further military action affirms a process of conversion: specific practices of “looking” proceed toward a moment of specifically “seeing” war inscribed below.

In what is essentially a system of feedback and self-regulation, the decision determining what, in fact, interpreters were looking for, or how the optics were attuned and adjusted, was a matter of tasking, which determined priority projects for the trained and predisposed “eyes” of interpreters. Tasking established the logical causality and direction of interpretive labour. Tasking defined three standard phases of interpretation (Newhall 60: 1969): first-phase interpretation, which was a quick and preliminary scanning of negatives retrieved from plane-bound cameras to seize and acquire immediately visible and apparent tactical visual information; second-phase interpretation, which represented the more mundane aspects of interpretation, and was a rehashing of routinely-photographed, more-permanent
locations repeatedly over-flown, like bomb-damage assessments and the surveillance of industrial or built installations; and intensive *third-phase interpretation*, which was an exhaustive re-examination of areas. This last phase is essentially comparative: tracking the serial runs and juxtaposing the coverage of the same space over time in order to establish and detect recognizable threats posed by permanent places, installations, or sites.

In these phases, interpreters viewing photographic results of sorties were compelled to act critically but in complicity with the photographs, to be affected by the photographs while still maintaining the proper index of techniques at their disposal. This is the power
inherent in photography, inherent in the analog capability—in the original ACIU and currently, despite digital encryption and coding at the level of storage and retrieval in TARA—that resonates in a contemporary the viewing encounter with *Evidence in Camera*.

Roland Barthes, in *Image Music Text*, writes of the analog:

Certainly the image is not the reality but at least it is its perfect analagon, and is exactly this analogical perfection which, to common sense, defines the photographic index which, to common sense defines the photograph. This can be seen the special status of the photographic image: it is a message without a code… (Barthes 1977: 17)

Furthering this point, Ann Norton, remarking on photography's emergence and its powerful cultural and technical authority, writes:

Photography [was] then a medium that simultaneously denied and asserted its own authority. The assertion "the camera never lies" was a claim that the medium was transparent, neutral and impotent, unable to alter that which it brought before the eye. Yet this assertion of impotence was accompanied by a claim to offer access to the real: to pronounce finally, truthfully, authoritatively…Photography's claim to neutral representation enabled those who it served to pretend to objectivity…The transparency of the medium echoed the claims of coercive rationality [and] compelling agreement…Anyone could see. Everyone, therefore, could see the facts… Everyone, therefore, must concur in a common, anticipated conclusion. (Norton 2002: 34)

The supposed ability to create transparent windows, amplified by dominance of air space and the ability to survey from above, activates both the desire to invest in “evident” and apparently visible truth while also allowing for a certain arresting astonishment, an affective perception akin to awe.

Reconnaissance and interpretation were comprised of many component technologies to vision this “truth”. The appearance of automated transparency was a multiple layering of minor mediations. The optics, lenses, and technical components bear the marks of a historical visioning and imaging technique valuing and validating *quatrocentro* perspective. Historically specific and culturally normative, this perspective was conceptually absconded, its technical aspects denied (i.e., eliding the systematic marks of enunciation with claims of “truth”) but internalized nonetheless into the process. The territory below was a space to be visually divided and conquered with vision and then subsequently re-territorialized in analysis and interpretation in order to become “legible”. The early processors and serial developing
machines—like the widely used Williamson Multiprinter—could enlarge negative prints thirty-five times and rendered a specific and legible version of the photograph based on the needs of interpreters\footnote{The Williamson Multiprinter, designed by Williamson Manufacturing Co., was able to print images quickly and efficiently by minimizing contact and handling of the photographs. Williamson also designed some of the first synchronized gun cameras, which allowed pilots to fly, maneuver, and fire their guns in synchronization with the aerial photography. See both Virilio, (1989) *War and Cinema*, specifically the second photo appendix after page 70; and also Flashback Magazine, online at <http://www.raf.co.uk/flashback/williams.htm>.}. The play between realism as simply reproduced and the nominal values immanent in any visioning intervention—reconnaissance, surveillance, or otherwise—cross-pollinate one another. The pressures of what was required to, in fact, become visible aided the development of components that, to produce this, became enmeshed and invisible.

In this, the claims of the collection as a record of realism inherently imparts a rhetorical and implicit confession of the lurking threat of not getting it correct, of failing to adequately fabricate reality. Coincidentally, “objective”—referring to “value free”—is also a component in the lens-ocular assembly. It mediates, which is to say that objectivity is less about the lack of value and more about the filtering and mediating of what is rendered and seen. Much like the war-time interpreter’s gaze, TARA’s commemorative perspective passes through an objective that is designed to “see” and assuage threats to heritage and the political expediency and efficacy of visual experience, which operationalizes the experience offered cultural citizens browsing with a mobilized virtual gaze. To presuppose a lack of mediation on the part of aerial surveyors is to ignore how the selective training of a camera on any site of location alters or changes the environment by way of the assessments and interpretations: the will to “see” is also the will to frame and impart significance, to ensure that, in attending to something, arresting significance will be recognized.

The basic mathematic and geometric specificity of perspective is opposed to simple transparency. Perspective, then, is a function. In relation to the processes of mapping and
photogrammetry (the process of making measurements for maps from aerial photographs), John Wood argues a fundamental aspect of any map or image, photographic or otherwise: “Every map is good for one thing, but not another.” (Woods 1993: 57)\(^{17}\) Perspectives are designed for textualizing—fabricating images and translating visual information into “text”—and interpreting inscriptions, the aerial reconnaissance organ historically presupposes conformality rather than what Woods calls “equal area scale”. The two terms are mutually exclusive. Conformality refers to a map conforming in its form to the use that determines its generation, rather than the equal area scale, which is the impossible attempt at maintaining a perfect relation between actual geography and the textual object of the map (the Borgesian paradox of the 1:1 scale map fits here). Conformality is an exercise in nominal valuation and shorthand while equal area scale is an impossible attempt to “get it right”. TARA’s images, though significant in that they collectively refer to the attempt to cover in large scale an entire continent, were and are still subject to this concept of a meta-conformality. The collection is conformal in that it conforms to the operational role the images were intended and designed to play; an subsequently, it conforms to the historical function the images now serve. Thus, the territory and geography visible in the photographs are more than mere \(\textit{r-pre} \textit{resentations}; \) they are \textit{presentations} of exercises in visual documentation that are part of a causal and determining chain of technical and interpretive events.

\(^{17}\) The basic conundrum around perspectives in photography and further into mapping is well-known to interpreters, cartographers, and geographers. In relation to map projections, the predispositions of the Mercator projection, a projection historically developed for nautical navigation, are well-known to distort the northern portion of the map, hence enlarging the northern hemisphere. The symbolic, semiotic, and discursive effects of this function points toward the power built into the technology of the map, making durable the larger scaled European and North American land masses and minimizing the southern hemisphere. Size equals relevance and the symbolic function of this kind of map extends in ways that are arguably more than coincident with respect to the north-centric of global, cultural, and capitalist hegemony. The Peters Projection, conversely, more accurately reflects the actual size and scale of the earth’s land mass and avoids the distortions of the Mercator, itself a historically specific material effect of a ideological mode and paradigm of conceptualizing the world.
Much like the careful design and planned pathways for aerial runs and covers of areas, the division of space and the co-ordination—the making of co-ordinates on a graph of longitude and latitude—facilitating the conquering, controlling, and the benefits of subsequent interpretation all ascribe to the labour and effort plugged into a system designed to punctuate territory, to make it legible. In de-territorializing the surface and re-territorializing it both in camera and in the rooms of the interpretation section, an affirmation of orbital capability and a politics of verticality\textsuperscript{18} emerged as always-becoming components in a genealogy of aerial surveillance and sight.

**Inconsistencies and Corrective Adjustments**

The visual information contained in the aerial photographs was complimented by debriefings of pilots when they returned, especially in conjunction with the production of low-level oblique photographs, where pilots were more likely to have had close visual access to the site. Though whipping by at high speed, they could cast a glance and add some further context to the informatic content. For vertical, high-altitude images, the majority of intelligence generated depended on the labour conducted in third phase interpretation (Gavish 2004: 1). The interpretive framework privileged seriality and the juxtaposition of photographs that existed across a set or sets of photographs. Signification relied on the semiotic relay of duration across these photos, a sort of cinematic measure of time elapsed that become a unified whole, signifying a specific place at a particular juncture in time.

Extended examination and comparison often heralded greater precision:

The intelligence stored in a photographic document is not revealed on direct and immediate examination—a fact that the British photo interpreters discovered only in the midst of the war, and which gave rise to three

\textsuperscript{18} This is a term conceived by Elia Wizeman to describe the near-total if not at least comprehensive control of air space and aerial capabilities exercised by the Israeli Defense Forces in the context of the conflict between Israel and Palestine. For more, see “The Politics of Verticality”, <http://www.opendemocracy.net>.
phases of interpretation. In the third phase, the least urgent, the interpreters could afford to devote time to a deep and comparative analysis. A document issued by a photo interpretation unit near the end of the war suggested a clear-cut distinction between "photographic research interpretation" and "direct interpretation." ...The single photograph depicts a temporary situation. A series of aerial photographs taken at different times creates a chronological sequence revealing the situation "before" and "after", and allows for a comparison and measurement of the changes...The assemblage of solitary events into a historical sequence imparts to the series an independent quality, and offers invaluable accessibility to points of time in history. Nevertheless, even in a chronological sequence there are hiatuses and blank areas between one photograph and another, which must be filled in with information, if not speculation, so that the gaps can be closed. (Gavish 2004: 1)

The "hiatuses" were the gaps between photographs in moments of planes travelling at high-speed at altitude, and the temporal gaps between consecutive runs of coverage over specific locations or sites. The gaps were the points of leakage, where the operational bleed took place.¹⁹

The interpreters were tasked with filling those gaps to create a coherent and contingent image based on minor variances in perspective and major variances in time.

Within the sequence of overlapping photographs constituting one run ²⁰, interpreters were required to compensate and calibrate their results for the mechanically-induced phenomena of parallax. Parallax is "the apparent displacement of the position of a body with respect to a reference point or system, caused by a shift in the point of observation" (Avery 1969: 318). Coincidentally, it is virtual. Like the stroboscopic effect and phi phenomenon in continuous motion picture film, parallax is an effect of movement over time elapsed; it is a measure of difference. The motion of the vehicle—here, the plane—provides both the platform for intervention as well as the problem for interpretation. Formulae were designed to adequately adjust and absorb the effects of parallax. The temporary situation of the single photo essentially amounts to the documentation of not only space as seen but space as a

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¹⁹ The need for overlapping photographs to correct the operational bleed is written into the process of both the aerial photography and the subsequent interpretation. Planes could not hover and low level passes obscured the ability to accurately assess things, especially with respect to third-phase interpretation of extensive installations. Now, contemporary surveillance practices and technologies (satellite imaging, drone cameras) offer continuous live-feeds and streaming for this kind of consideration.

²⁰ Figure 4.6 refers to how a photographic sortie is plotted. Paul Virilio, in War and Cinema, includes two telling instructional images (30, 31) from (1982) Photo Intelligence (Sidgewick and Jackson) documenting the proposed lay-out of overlapping photographs during coverage runs.
figure 2.9  Arnhem 1944, post-Operation Market Garden, Evidence in Camera, TARA
chronology of intervals as time elapsed. As third-phase interpretation was tasked with
discerning more permanent structures of strategic value, assessment was topological\textsuperscript{21} and
gearied to measure the properties, heights, and distances of objects rendered in
photographs.\textsuperscript{22}

To alleviate the problem of parallax (and render the photos useful), interpreters
turned to a reliable and remarkable piece of equipment: the stereoscope. Used as a visual
enhancement to produce stereoscopic vision, the stereoscope had a prior cultural life as a
mass-produced pre-cinematic visual attraction; essentially, with a series of thematic
interchangeable plates and slides, the stereoscope was a platform for visual entertainment in
the form of a gimmicky, popular toy. Appropriating hand-held or table-top versions,
interpreters employed the scopic capability of the tool for the comparison of subsequent
images across a series of photographs or between sets of runs or covers of areas. In the
context of the interpretation process, stereoscope use is described by John Avery:

By modern standards, the photo interpretation equipment used in World War II can only be classified as
primitive. Photo interpreters used stereoscopes with lenses capable of magnification four times the original
imagery (about like that of a magnifying glass). In addition, tube magnifiers with a seven-time magnification
capability were also used in scanning the aerial photos. Photo interpreters [often] performed the interpretation
from contact paper prints rather than film duplicates. (Avery 1969: 19)

Note the antiquated tone and the implied “progression” of interpretive techniques. With the
stereoscope, interpreters sought to connect signatures to the indexical register of consensus
developed to establish what in fact was “down there”.

\textsuperscript{21}OED: The study of geometric properties and spatial relations unaffected by continuous change of shape or surface of figures.
\textsuperscript{22} It is worth noting that this notion of topology shares much in common with the clinical gaze outlined by
Foucault in (1969) The Birth of the Clinic: a topological approach is designed with intent to render symptoms
visible during sickness and disease. The symptomatic method was inherent of the then-emerging medicalized
regime of vision, which coincides with the photographic gaze of the reconnaissance apparatus. Interpreters are
symptomologists; the aerial photographic itself became the sign of this power to read symptoms.
figure 2.10  WAAF Photographic Interpretation with Stereoscope, BBC

figure 2.11  Photographic Interpretation with Stereoscope, *Evidence in Camera*, TARA
Stereoscopes essentially produce an optical illusion rendered through specifically canted lenses—a specific optic. The stereoscope allowed interpreters to see two images as one by way of the “vectograph principle” (Avery 1969: 38), which is the collapse of vanishing points as they converge in two parallel lines of sight. By implementing lenses to alter the stereoscopic perception of distance by way of vanishing point, the stereoscope rendered and “processed” a uniform image, from which interpreters could compare, surmise, and deduce—or produce and induce—what contents the photographic series had exposed. The still images appear three-dimensionally, allowing for more accurate and precise measurement of height and tone and texture as belied by the various planes and depth of field in the image.

So, for interpreters, generating information was based on the specific map coordinates and the coverage of locations and coordinates. Bound by the basic linear properties of light and the rate of change between images due to the displacement of plane and camera, mathematic manipulation and re-calculation of the basic visual record of a space or field was essential and presupposed most extensive acts of comparative interpretation. The geometry of aerial photography presented a basic problem in turning a curved surface into a flattened plane upon which things could be “written” and “read”. With a stereoscope, a stereometre, and a parallax bar, interpreters attempted to correct and illusive photographic effects. Yet, in doing so, they acknowledged the impossibility for comprehensive and total coverage and implicitly invented an artificial corrective.

**Specificity and Signatures**

With the interpreter as the pseudo-software and the images themselves as the hard material objects, interpreters were organized into sections and used “keys”, which allowed
for consideration and, ideally, eventual identification of features and elements in the photographs. The keys established a generic value, a map of signs. They were literally the syntax of aerial vision:

.... These keys were manuals, each containing photographs of a previously identified target. Annotations and text provided guidance on the unique characteristics (called "indicators" or "signatures") of targets which could be used to identify a newly photographed target. (Brugioni 1985: 3)

The indications made possible by the index established the signature as preceding the object or space surveyed and reconnoitred, constituting both a deductive process—where interpreters move from general and generic aerial perspectives toward more specific features internal to the photograph—and an inductive process, whereby specific signatures were read and compared to a predetermined and nominal index of specific indicators and essential semiotic relays. The invention and maintenance, then, of a consistent precedent of identification is based on degrees of resemblance and similarity, contingent on the fulcrum between generality and specificity. Signatures were and are models and copies under which "originals"—that is, the emergent visual qualities of the photographs—are subsumed. The inscriptions of war in the photographs “speak” in that they coincide and subscribe to the language of the predetermined signatures. The major principles of object recognition—shape, size, photographic tonal congruence, pattern, shadow, topographic location, texture (Avery 1969: 15)—are visual measurements imposed in the act of looking by interpreters and the induced result of what was apprehended in seeing. The changes in contrast, resolution, and the subsequent distortion and variation were noticeable features that relayed visual information.

While the collective programmatic import of signature keys was, from time to time, turned on its head (with "new" discoveries), the consistent and conventional adherence to the code is the most basic part of a larger exercise in creating an ergonomic efficiency in the
industrial analysis of photographs and mass production of military intelligence knowledge. The everyday functioning of the war-time photographic interpretation organ, with divided modes of labour and organized ways of tasking and operating (from pilot to interpreter to intelligence to activation and orchestration of resources) was a flourishing of Fordist and Taylorist principles of assembly-line production. The assembly, then, of meaning derived from aerial reconnaissance was coincident with efficiency perfected and galvanized on factory floors, especially war-time factory floors. Industrial ways of seeing converged with industrial modes of total war production; each supplied the other its ontological impetus and justification. The two were complimentary, an alignment of logistical domains.

In acknowledging the division of the labours of looking to facilitate military “seeing” and knowing, it is remarkable that the of the act of interpretive “looking” emerged as an act of seizure, of specifically and concertedly attending to perceive an object. Though working in a meta-discursive cultural context, Jonathon Crary, in (1995) The Suspension of Perception, argues that visuality in modernity has been historically characterized not by the paradigmatic onset of distraction but rather by the enforcement and regulation of visual experience and perception through a paradigmatic genealogy of attention. Attention requires focus, emphasis, and the application of a specific surveying mode of scopic perception attuned to concentrating on a specific point of reference or utterance. This is significant as it is a revised and alternate account of much of the assumed conceptual wisdom in threads of cultural theory and critical history, which extends from accounts and conceptualizations of the deregulated and pervasive condition of distraction rather than the demand of attention. The hinge between the circuits of normative social controls and visual perception is perhaps less determined by the flood of accumulating distractions and more by a hegemony of vision premised on the specific act of looking closely so as to close down and limit the already-
intensive, distraction-rich perceptual field. Practices honed in the ACIU privileged this close attention: seeing required bracketing and putting on the blinders.

**Techniques of Disinterest & Alternate Methods of Sensing**

So far, aerial photographs are processual images, eventually rendered so as to allow something else to occur—reports, more aerial reconnaissance, air strikes (Farocki 2003: 1). As such, they are operational because they were one part of a larger project, providing the object upon which the labour to interpret and “see” was conducted. They anchored the direction of looking, as they do in TARA’s online context, providing a portal for the transfiguration of visual information to the production of knowledge. They themselves serve as punctuation in the rhythmic flow of the larger apparatus, one delayed stop on the causal chain. They were carefully attended to as an arresting series of images, regarded with both reverence and suspicion, carefully considered by a regulatory, institutionalized optics favouring the alignment of attention in subsequent stages. The technology of careful interpretation, firmly embedded and emplaced, is the capping technology in the reconnaissance organ, the last developing solution.

Interpretation depended greatly on technique: it was and is time-intensive and also represented an investment in sets photo-runs that collectively themselves signified a concerted investment in that specific space or set of mapped co-ordinates. Yet, the potential for constant review, in terms of both a programmatic approach and methods of comparison using scopic tools like the stereoscope, permitted a relation to the image that allegedly bordered on the mystical:

The techniques of photo interpretation are simple: the careful comparison of photo coverage over days, weeks and even months; the use of stereo vision, the measurement of images to a tenth of a millimetre with a high-power magnifier fitted with a graticule; and above all, imagination. The shadows cast by objects often reveal
their profile. To a good photo interpreter, the identification of everything in a photo became a challenge; “I don’t look for things. I let them speak to me,” one of them once said. (Newhall 1969:60)

The self-awareness of looking and re-mystifying images that purported to sanitize the field of war and battle is telling: letting the images themselves utter and announce their own visual qualities suggests not a disenchantment of the power of aerial perspective but an imaginative enchantment and mystification of the images that can magically “speak” despite all the nominal and indexical attempts at creating consistent and consented methods of interpretation. It is a mix of Crary’s attention and the gaze of a seasoned professional waiting for images to utter on their own. Avery writes in his manual that:

[B]ecause photo interpretation often involves a considerable amount of subjective judgment, it is commonly referred to as an art rather than an exact science. The interpreter must know how to use the scientific tools and methodology of the photogrammetric engineer; yet these objective findings must often be supplemented with deductive reasoning to supply a logical answer to the perennial question, “What’s going on here?” (Avery 1969: 12)

Despite the scientific approach and the invention of a method to “think with function” (Zagala 2003: 21), interpretation leaks into—even for tasked interpreters whom we would expect to be fastidious and solemn, perhaps, about their heroic work during the war—the harnessing of a sensational and affective dimension. Interpreters were tasked with the prospect of maintaining habits and the pervasive conventions of their science; yet, in the artifice of the photographs, interpreters had to “think” in terms of the forceful imposition of a hunch based on visual sense and the dissipation of cultivated habits (Zagala 2003: 21). The coded procedures and preferred semiotic relays established through the legend of signatures were also open to dismantling by these experts in the field of symptoms, to un-coding so as to “see” or sense anew. Breaching the limits of the scheme sometimes garnered novel and supplemental visual information.

Parallax—the visual disorientation that is expected, calculated, and corrected—occurs at both the level of the images’ creation at the moment of light on film across a set of
photographs and also at a remove in the context of the actual interface with the sets of images in interpretation. The considerable play between sameness and difference that demanded careful analysis, observation, and interpretation in the industrial production of a logistics of perception during the war pushed the development of an industrial attention, which was buoyed by the relevance of these images in the context of their operational status and the decisive strategic action activated by the knowledge generated from interpretation. The pronounced application of attention, of attending to these visual registers in an industrial context of knowledge production and generation, further incites the compelling aesthetic character of the photographs both in their original context and in the collection’s new recycled and re-articulated application. By “aesthetic”, I refer to locating the photographs as objects possessing an abstract, artful resonance. Further, this kind of resonance activates conceptions of beauty and pleasure, which confer a different set of potential considerations in contemplating image events and encounters induced by TARA.

Attempts to decode the photographs through application of attention, though, were offset by the open and disinterested way of looking and comparing the serial sets of photographs. This aesthetic regard of the sensational quality of an image or object is, following Stephen Zagala, the affirmation of “[responding] to variations of a real experience that cannot be anticipated by conditions of possibility...Kant describes such aesthetic experiences as ‘disinterested’ because there is not theoretical or practical interest in the object.” (Zagala 2003: 23-24). Interpreters theorized versions of what may have been visible; or further, what may become inscribed in sets of photographs after a protracted amount of time spent considering a series. In this, there occurs an appreciation and perception of

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certain aesthetic cues and compositions in order to enable some sort of epistemological gain, gains which had yet to have been made in the context pre-established signatures.

Again, this is a strange moment in the apparatus. The play between cognition and precognitive affects is remarkable, as it is a distinction that distinguishes both attentiveness and a degree of affect, the kind of disinterested gaze lacking the hard and concerted effort of looking with the hope of, ironically, “seeing” without the concerted aid of focusing on patterns or marks visible to that point. This disinterest, a kind of indirect “looking”, suggests an openness to be affected. Interpreters could be momentarily open to becoming affected, to envision something yet to be seen. The openness of imagination teases out both a tendential force and tension with the mastery implied by the indexical and scientific template mediating interpretation. Imaginative interpretations suggested the play between the initial affect of not knowing a signature and slowly working through the image to eventually ascribe the feature a register of value on the index.

Entering into the exercise of interpretation is a negotiation at the level of reception; some interpreters had “an eye” for these kinds of open interventions. In writing about photographic interpretation during the war, Constance Babbington-Smith remarks on her encounter with reconnaissance photographs that she eventually identified as V-2 rocket launch sites in Peenemunde. Babington-Smith describes her encounter and inability to reconcile the signatures in the set of photographs:

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This interpretive event is the centrepiece of her 1957 biographic narrative, Evidence in Camera, a loose ethnography of the ACIU at Mendenham. V-2 rockets were long range “terror” weapons developed and used by German forces for direct attack on England after the Allies eradicated German aerial resistance and maintained fairly consistent air superiority. The rockets were not only weapons but discursive tools for both forces. Intensely framed as pervasive threat to the national British public, they rhetorically legitimized the prosecution and conduct of emerging air war waged on Occupied Europe by the Allies. In Germany, they were the anchor of similar propaganda tactics to generate support for the regime as German success waned; Germany would be saved by an arsenal of “secret weapons”.

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I was not the least interested in the dredging or the land reclamation, which anyway did not "belong" to me. There was a separate section at Mendenham whose sole job was to watch and report on developments at airfields. So I ignored the portentous reclamation scheme and pursued the straight road leading to the water's edge. Right at the end of the road was something I did not understand—unlike anything I had seen before...I pondered over the photographs and reviewed what I had found. (Babbington-Smith 1957: 221-222)

A few things in the passage warrant further comment. Clearly, Babbington-Smith communicates a sense of the procedural and categorical approach to interpretation: her field of vision is focused on specific things; drainage features were outside her parameters. Also, her position as a third phase interpreter designated her as an expert able to take time, to compare and identify things that, up to that point, had yet to be determined but could potentially become visible if added to the catalogue. The potential "buzz-bomb" had yet to emerge fully as a defined threat: it registered as a sign outside the index but was about to be recursively affixed with analysis to that object.

The interpretive scheme was pushed along exactly with these moments of failure, where the prescribed signatures failed to give reference. The breakdown pushed new considerations, new interfaces, new ways of contemplating and pondering. The effectiveness of becoming "aerial-literate" shifted based on what could not be adequately or consistently grasped in a recursive inversion—a backward diagnostic creep—of establishing registers on the index of signatures. After some debate about the appearance of what was later determined to be the rockets' launch rails, interpreters were directed to disregard features in the images, which were temporarily shelved. Babbington-Smith alleges this decision retarded the reconnaissance and interpretation of the rockets, subsequently preventing the ability of tactical and strategic air support to strike these targets: "But the plain fact that [this] almost ridiculously simple conception of how V-2s should be launched defeated Allied photographic reconnaissance." (Babbington-Smith 1957: 232) It worth remarking that the eventual interpretation of the Peenemunde photographs yielded results: on August 17, 1943, 560 RAF bombers flew a concerted and concentrated bombing mission over the
Peenemunde rocket facility. Over a kilo-tonne of explosives were dropped and 22 000 workers were killed—mostly slave labourers from occupied countries in Eastern Europe—in what was one of the last planned “precision” bombing attacks by the Allies during the war. Smith’s notion of “defeat”, then, demonstrates both the limitations of the system and the importance of a diagnostic perceptual arsenal in mobilizing the arsenal of lethal weapons.

Exhibiting the accumulation of old applications and inviting encounters that identify directly with these residues suggests TARA’s complicity with a legacy that implicitly valorizes an apparatus designed to render things as targets; its new allocation testifies to a heritage of war-time destruction, further problematized once you stop taking the explicitly uniform and naturalized narrative legacy of victory for granted. Users are supposed to identify with the process of interpretation and further with the ability to become affected by the images. As a new opening, TARA articulates the topic of the Second World War under the guise of new appearances. The collection, with a newly-engineered impetus for relevance, mediates the hegemonic cultural imaginary that loosely but powerfully controls mythologies about the war. The following two chapters address the political and cultural function of this loose thread of discursive control, both in the context of conceptualizing the encounter with images of war in contemporary visual cultural and in the context of the shifting politics of the idea of the archive itself.
Three
Theorizing War & Supplying New Appearances: TARA in Contemporary Visual Culture

Seen in [a] perspective [that] dispenses with both the determinism of textual essentialism and the arbitrariness of a purely contextual approach, war images are never just “war images” and they are never alike, even when they are the same. They are, on the contrary, heterogeneous and conflicting, reflecting a variety of ideological and interpretive perspectives.

-Gregory Paschalidis, Images of War and the War of Images, 19

Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint and it induces regular effects of power. Each society has its regime of truth, its ‘general politics’ of truth: that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements; the means by which each is sanctioned; the techniques and procedures of the acquisition of truth; the status of those who are charged with saying what counts as true.

-Michel Foucault, “Truth and Power”, 131

The symbolic “opening” of the archive—though already ostensibly public in its prior orientation—amounts to an attempt to mythologize and render the abundant fond of photographic materials that are serial in nature but perhaps “never alike even when they are the same”. The particular and residual visual character of the collection translates to an ease of inventing a new war-related monument. The momentum of this visual quality contributes to TARA’s usefulness: it is easier to accommodate the installation and exhibition of images. As such, the collection supplies new versions of the Second World War, effectively issuing a set of images to foster image events and encounters designed to produce and disseminate a “new” appearance of the dominant war-time narrative. Using some threads from contemporary cultural theory to frame TARA, I consider how the war is a conglomeration of memories to be managed and “musealized” and how TARA, in its new cultural integration, further allows this management to occur and proceed.
TARA: Old Abundance, New Energy

The collection, an abundant source, is refused its figurative death. Fritz Briethaput, answering Walter Benjamin’s materialist treatise on the philosophy of history\(^\text{25}\), claims history is “delayed disintegration” of matter, phenomenon, and event:

History is a history of fiction: or more precisely, history is a delay of the ending of fictions...It is a dialectical image since its two sides, the phenomenal appearance and the possibility of the condition of this appearance, only exists by means of each other and by projecting each other as its precondition (Briethaput, 2002: 194)

Though Briethaput intends for a progressive rendering of Benjamin’s arguments, TARA is an example of an investment in residues and the transformation of residues into a significant cultural event. The “delay of the ending of fictions” is the delay in shelving still-resonant narratives of WWII; the aerial reconnaissance material provides a differential thread. The phenomena that the images collectively regard—the aerial activities of WWII—are in a conditional standstill with the possibility for re-appearance by way of TARA’s new organization and potentially increased dissemination.

The new public availability and re-entry of the topic of aerial reconnaissance into a larger popular context is a convergence of three interconnected things: the attractive cultural currency of images of war act as provisional materials for uncanny, fascinating spectacle; the interpretive perspective of the state and its institutional gaze; and, in hatching the collection as an exhibition, a strategy to activate, fashion, and reintegrate a dormant set of visual records and their narrative discontents into the general politics of truth and knowledge circulating about war in correspondence with imaging practices, vision, and visual communication technologies. The collection, absconded and disused, now signifies an inheritance. It continues its legacy as a newly incorporated attraction.

Image events premised upon an encounter with war photography—even when cued by remarkably distant and seemingly sterile aerial perspective announced by the photographs in TARA—invite intense visual and communicative experiences. TARA’s success as a candidate for the funding it eventually received is more than coincident: one can predict strong reactions and intense responses. Before embedded reporters and hand-held digital video cameras, the traditionally exclusive zone within which war images are generated—in this case, the belly or side of WWII-era reconnaissance aircraft—confers authority upon whatever body captures, manages, and administers the images in the act of display. Thus, images of war exceed the terms of representation (*the phenomenal appearance*), the act of looking, and the authentic depiction of actual events with a degree of veracity and facticity. The subsequent handling, framing, stipulating, captioning, and general presentation (*the condition of that phenomenal appearance*) of the images, a kind of curatorial power, enforces the image in its exhibitionary context to become a semiotic relay, to become textual. The act of presentation “quickens” the image.26

Images of war are rendered as both representation and presentation, as an accumulated figuring. The implied relation between presentation and representation is neither as linear nor causal as I make it out to be above; one can presuppose the other based on who is handling the images and how that handling occurs. Images of war are uncanny objects possessing a spectrum of paradoxical emotive elements; they are as familiar as photographs and compelling in the kinds of limit-events they depict yet are simultaneously abject, difficult, and strange. War images are complicated; the explicit contents of the images, the acts they capture, and the arbitrary ways in which they are rendered and arranged in

26 John Woods on mapping and textual captions: “The text constitutes a parasitic message designed to connote the image, to ‘quicken’ it with one or more second-order signifieds. In other words, and this is an important historical reversal, the image no longer illustrates the words; it is now the words which, structurally, are parasitic on the image.” Woods 1993, 25.
exhibition and presentation implicitly suggest questions about the political legitimacy of any war itself (Paschalidis, 2002: 3). Images of war retain a singular, specialized symbolic power.

There is a passage toward the end of another famous Benjamin essay that suggests the problematic terms of intense perceptual encounters with images of war. Despite recent criticism that his work is increasingly irrelevant and anachronistic in a contemporary context, Benjamin still provides a path toward my specific concerns. In his “Work of Art…” essay (1936), Benjamin quotes a passage from Marionetti’s Futurist poetry. He indicts its rhetorical incitements, which beautify technologies of warfare 27, and he regards the fetishizing and celebratory tone describing the fascinating machinic assembly of total war as ominous and fascist. 28

Benjamin’s seminal and historically-specific arguments have been consistently debated in cultural-theory scholarship for the last seventy years: the so-called waning status of aura and the process of visual contemplation of objects of art; the political potential of shock and mass spectacle as agents of rupture and recuperation; and the continuum of exchange between aesthetics and politics. Benjamin’s coupling of politics and aesthetics in the “Work of Art…” essay ( politicized aesthetics: good; aestheticized politics: fascist, bad)—

27 “War is beautiful because it establishes man’s dominion over the subjugated machinery by means of gas masks, terrifying flamethrowers, megaphones, and small tanks. War is beautiful because it initiates the dream of metallization of the human body. War is beautiful because it enriches a flowery meadow with fiery orchids of machine guns. War is beautiful because it combines the gunfire, the cannonades, the ceasefire, the scents, and the stench of putrification into a symphony.” Benjamin 1936: 241.

28 Benjamin’s warnings are a culmination of the his thematic privileging of the problems of perception and perceptual capabilities, and the intersection with increased massification and acceleration of technologies in late modernity. Benjamin warns against fascism and the aestheticization—read, the spectacular beautification, here in Marianetti’s Futurist poetry—of politics. Aesthetics for Benjamin is less form or style or even content and more the total field of cultural experience as mediated by mass culture and the increased spread of visual imaging technologies. It is a matter of encounter. Aesthetics is rational and intellectual but also phenomenological and empirical. For Benjamin, the affective nature of contemporary cultural life in his time was replete with unconscious perceptions are sensations felt nonetheless despite their lack of register on an conscious index. Benjamin, it seems, cautions against the totalizing effects and affects of technologized culture and the threat it poses in alienating individuals and subsuming the capacity for human endeavour and imagination, especially in relation to progressive social formations. See Benjamin (1936) in Illuminations, 241-242. These statements have hatched a historical debate about technologized culture with respect to industrialization, organs of technology as durable systems, and how these technologies alter and affect perception and apperception.
a coupling I cannot judiciously explicate and interrogate— is useful here to simply tease out
the initial intersection of and exchange between both terms in the virtual version of TARA.
These threads coalesce and translate into the political and aesthetic problems of image
events, amplified in encounters with provocative images of war.

The contemporary conditions of shaping and delivering images and inducing image
events or encounters with visually-based media activate—in their very technical and
technological constituency—a potential auratic encounter. Speed, delivery, and the space-
and time-binding capacities of contemporary communication and media technologies feign
an illusionary immediacy and an ability to be everywhere at once. The increased
intensification of scopic experiences via communication technologies like the Web—
allowing a “mobilized virtual gaze” — leads Lutz Koepnick to argue for the re-tooled
relevance of Benjamin’s thought in a contemporary context. Koepnick writes:

Images and scopic experiences are now as much a material force of shaping history as social or economic
forces; they intimately contribute to the making of the world. What is important to emphasize, however, is that
postmodern culture produces not only despatialized and detemporalized viewing subjects but also a field of
visual images that appears intrinsically heterogeneous and hybrid. (Koepnick 2002: 96)

For Koepnick, aura has not been eliminated nor is it waning or in decline as Benjamin
surmised. Neither, though, is its articulation as spectacle always necessarily authoritarian,
fascistic, and “aestheticized” politics; nor has Adorno’s aura triumphed over the political
efficacy of Benjamin’s shock effect amid the increasing disjunctive purportedly distracting

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20 This refusal is based on not wanting to open or close the door on assessing and interpreting the ‘aura’ of
both the archive and its photographs, something central to historical and mnemonic processes TARA maps. In
Benjamin’s version of ‘bad’ art, the waning aura he cites as characteristic of modernity (“the age of mechanical
reproduction”) is re-cast by fascist politics to re-invent aura through mass spectacle. While dealing with art
and specifically cinema, some of Benjamin’s current interlocutors have suggested the problem of associating
any moment of aura (i.e., which has not waned) with fascist politics, especially when many of the technical
delivery systems of any kind of politics in social or culturally mediating contexts are themselves auratic. For
essays elaborating, celebrating, but also problematizing Benjamin, see: Miriam Hansen, “Benjamin and Cinema:
Not a One-Way Street”, 41-73; and Lutz Koepnick, ‘Aura Reconsidered: Benjamin and Contemporary Culture’,
University Press).
visual symbolic economy of late modern capital. Rather, aura is retained because of the very technologized methods of communication against which Benjamin cautioned. Koepnick writes again:

[A]ura not only outlived mechanical reproduction but also...no longer designates a mode of textual address and enunciation. Rather, aura becomes a matter of personal projection and appropriation that ironically cannot be realized without technological mediation and exists as one tactic beside many others that make use of cultural material. (Koepnick 2002: 99)

The technical basis of the shock experience, which Benjamin laid out in cinematic terms, is now part of the set of standard cultural communicative practices. The status of aura and its openness—the pervasive capacity for auratic experience as a kind of media literacy—is noteworthy in relation to TARA beyond the material contents of the images in the collection. The technical capacity to refigure the archive as a virtual portal is a hegemonic absorption\(^{30}\) of the potential auratic encounter with the specific histories and memories “released” by TARA. In this, the concerted effort to render intact “the integrity of the semantic object”\(^{31}\)—the war and the topic of aerial reconnaissance—so as to produce and promote an reverent mnemonic and informatic encounter with the collection is the strategy upon which TARA is premised.

The Cultural Context of Images of War

In attempting to frame TARA, I initially considered emphasizing the archive itself and the institutional function and role it assumes in a digital and virtual context. Yet, the cultural context of images of war themselves—as a culturally specific discourse with a historical dimension (i.e., the history of war images) —is another method of framing TARA. Gregory Paschaladis, writing about the cultural context and specificity of war images in

\(^{30}\) Hegemony: “It is a whole body of practices and expectations over the whole of living; our senses and assignments of energy, our shaping perceptions of ourselves and our world. It thus constitutes a sense of reality for most people in the society...It is, that is to say, in the strongest sense a ‘culture’.” (Williams 1977: 109-110)

\(^{31}\) This is Victor Burgin, as quoted in Koepnick 2002: 97.
"Images of War and the War of Images", argues that rather than subjecting war images to anti-visualist critiques or the programmatic pedantry of *neo-iconoclasm*, war images must be encountered in ways that are contingent and context-specific. Orienting the analysis of images of war in such a way so as to have instances of image encounter subsumed by the logic of the archive—as an organ for retention and preservation—subtracts from the important and complimentary relation between the phenomena represented and the terms of that presentation. In considering the nature of images and visuality in Western culture, Paschalidis writes:

Images are always closely related to the processes of articulation, legitimation and/or delegitimization, of political and cultural authority... The question of the image of war must be considered within the context of a culture that privileges and values the image itself. (Paschalidis 2002: 5)

The sedimentation of vision as the default perceptual sense is evident in the development of aerial perspective: it is safer to see from afar. In a culture oriented around a visual symbolic economy, images of war take on a transhistorical iconographic specificity. They are culturally venerated prior to whatever politics or semiotic or discursive operations an analysis may tend to enframe. According to Paschalidis, there is a valuation to which one subscribes when encountering an image of war, which connotes an imaginary transport to a *diegetic* world that is exclusionary, abject, and external to the habits of everyday life. This transport extends to the panoramic properties of sanitized surveillance photos. Images of war are exotic and enchanting: they are points of convergence for contention and deliberation. Images of war inevitably document, refer, and allude to events that are difficult to comprehend. They *matter* regardless, and in mattering demand our regard regardless.

TARA’s new parameters and virtual mandate are clearly defined: provide a momentous encounter with the Second World War through the collection of “technical images” (Paschalidis 2002: 5) industrially produced and compiled by an actual mechanism of
war. The functional mobilization of TARA’s images initiates the colonization of popular historical imagining: "The age of the technical image is, indeed, the age of a generalized war of images." (Paschaladis 2002: 15) For Paschaladis, images of war are hinges for different positions or moral arguments about war and the technical image. Some images are complicit with the conflict they depict; others, either in aesthetic composition or technique or framing in arrangement and juxtaposition, invent a critical perspective, often ironically by auto-satirizing the very action and event they depict. Paschaladis is inclined to regard images of war as specifically singular sites of discursive and semiotic deliberation, contention, and battle:

A wide variety of political and cultural agents...[participate] in the production, collection, and circulation of [war] images, seeking to articulate and promote their own definitions and interpretations of war, death, violence, and destruction, on the basis of a variety of diverging and often conflicting ideological perspectives and cultural assumptions. (Paschaladis 2002: 15)

The heritage organ, in conjoining the visuality of photography, cultural constructions of memory, and historical narrative through TARA, can modulate and legitimize the articulation and maintenance of dominant political regimes through the production of an encounter inducing “an evocative and emotive monolith of feeling.” This notion of a “feeling” arguably underwrites an epic and idealized version of the events, results, and subsequent fall-out incurred and induced by aerial reconnaissance operations in WWII.

**Vision and Seeing War From Above**

Harun Farocki’s film, *Images of the World and the Inscription of War* (1989), documents the process of surveillance in a military and historical context. The film’s didactic approach is instructive in terms of critically exploring TARA. Allan James Thomas writes:

Even in those documentaries that reflexively interrogate their own representation of reality, the issue tends to remain how and to what extent our relationship to that originary reality is mediated by that image. For Harun Farocki, however, this relationship demands to be re-read entirely....This necessity of reading the image lies at the core of *Bilder der Welt und Inschrift des Kriegs*. Here, the image is not the visible trace of an originary reality so
figure 3.1  D-Day, June 6 1944, Evidence in Camera, TARA
much as it is something legible, something which must be read as much as it is seen, or even in order that it be seen. Moreover, the legibility of this image is intimately linked to the erasure, forgetting or destruction of 'its' object: it is intimately and necessarily a form of violence upon the world, its destruction as much as its doubling. The translated title of Farocki’s film gives this to us explicitly, 'Images of the World and the Inscription of War'. (Thomas 2002: 1)

What is legible and what is put under erasure is central to TARA’s material and now-immaterial constitution. Farocki’s film traces the historical development of aerial reconnaissance and militarized ways of seeing, of making images legible. Farocki makes a simple but powerful point: Aufklärung, the German word for “enlightenment” (i.e., the Enlightenment) also doubles as reconnaissance, that act of attempting to see (or simply sense) at a distance. In this correspondence, Farocki establishes the connection between seeing and the production of knowledge. He essentially provides a familiar critique of the trajectory of Western logocentrism, linking perspectival mastery of the visual field and the ability to determine, produce, and govern legitimate bodies of knowledge. The point, though, is not merely seeing but “seeing” as also “reading” and “knowing”. Farocki emphasizes the complicated entanglement of surveillance, recognition, and misrecognition. The clinical “seeing” of things and the mastery of seeing is the very power to inscribe war—to symbolically “write”—on an image of the world. The juxtaposition and processing of that inscription—the symbolic reading—is the moment where the image becomes an object of knowledge. The collection is a bundle of this type of ideological and semiotic labour.

The History of “Seeing From Above” as New Supply

TARA refers to a historical moment where there occurred an expansion and extension of the ability to transform territory at a distance, to alter and intervene in a landscape that is not occupied or possessed but that can be contained and confined by way of surveying. This intervention is no neutral thing and marks an important shift as to how
the practice of war is organized and waged; as Paschaladis writes, quoting Marshall
McLuhan: “All wars have been fought by the latest technology available in any culture.”
(Paschaladis 2002: 7). This expansion constitutes part of the new appearance of war: literally,
we see war anew through images taken by planes aloft but we also see a new war with use of
the archive and online browsing, which aid and assist encounters with these residual images.

The problematizing of a specific “vision machine”—the technical and ideological
apparatus for “seeing” beginning with quattrocento perspective—is inherent in considerations
of images of war and especially, to aerial-reconnaissance photography. Paschaladis writes
further:

In the contemporary critique of the relation of visuality and war we find two dominate and often interlocking
themes: first, there is an eclectic affinity between vision machines and killing machines, that the historical
evolution of the technologies of visual communication is closely linked to developments of the means and
mores of war. Second that there is a complicity between images of war and the war itself, particularly with
regard to its moral neutralization, its legitimation. (Paschaladis 2002: 6)

TARA function to anchor an the legacy of an apparatus designed to impart and facilitate
destruction suggests this complicity: the holdings in TARA verify and legitimize the actions
they both represent and present.

According to Paul Virilio, aerial and visual interventions are developments
continuous with military lines of sight regarding the aiming and surveying with weapons. The
line of flight of ballistics mimics the sightline of the eye:

The act of taking aim is a geometrification of looking, a way of technically aligning an ocular perception along
an imaginary axis that used to be known as the ‘faith line’ (ligne de foi)...[F]aith, belief [denotes] the ideal
alignment of a look which, starting from the eye, passed through the peep-hole and the sights and onto the
target object. Significantly, the word ‘faith’ is no longer used in this context in contemporary French: the ideal
line appears through the objective, and the semantic loss involves a new obliviousness to the element of
subjective interpretative subjectivity that is always in play in the act of looking. (Virilio 1989: 2-3)

Again, the ability of vision to see at a distance is amplified and intensified by technical
implements. For Virilio—whose version of cultural theory locates the institutional
organization of Western society as intimately and inexorably tied to the culture and practice
of war—the logics and logistics of war are substantial moving forces in terms of a historical
narrative. Aerial-reconnaissance capabilities marked a shift in how war is perceived, considered, and waged.

Surveillance and reconnaissance are never sure things, and the actual character of the surface, of the topography, and of the environment on the ground leaks outside the detailed pictures “read” in the frame—hence the operational bleed. Reconnaissance is as much a product of an indexical hierarchy of interpretation as it is of what the camera renders in apparent “reproduction”. The historical significance, following Virilio’s remarks, rests in the emergence of an organ with panoptic power, a “sight machine” that rectifies and radically alters the “problem of knowing” in the course or action of war (Virilio 1989: 2).32 For Virilio, war is—in its waging and in how it is supplied and perceived—becoming “derealized”.

Paschaladis describes Virilio’s position:

War has become telescopic, utilizing visual technology that makes it more and more mediated and faceless, and hence, more inhumane and morally neutralized for combatants and non-combatants alike...[making] us all equally distant and belligerent.” (Paschaladis 2002: 13)

The domain of the sight machine and its enabling of a range of perceptual fields is a platform, a “way of seeing”, and is a confluence of military imaging technologies and their developmental cross-pollination with cultural visual practices (namely leisure and entertainment technologies like cinema and photography). Virilio’s essential argument is a form of technological determinism where these military “ways of seeing” slide and leak into civilian forms of life. Virilio’s comments apply at both the level of the technical image itself and in the larger context of how those images are presented as icons of war. This determinism has some merit: as a “new appearance” of the history of WWII, TARA aligns

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32 With some fire and brimstone, Virilio’s argument throughout *War and Cinema* traces a trajectory of the merging of technical “seeing” capabilities and the eventual automation of military perception through remote sensing and imaging technologies like infrared and electromagnetic detection systems. The fear of Virilio is based in the ominous surveying ability of military perception to see not only what is ‘in view’, i.e. in the frame of a photo, but to also harness in invasive ways the perceptual information “out of view”, that cannot be detected by ‘normal’ perceptual means based on human physiological capabilities. See Virilio 1989, 2-6, for a brief exploration.
an intense relationship between populations, the perpetual supply or logistics of that population’s perception, and the technologies meant to assist that perception through surveillance and control of the field of the visual image.

Air superiority and the dominance of aerial space by the allies affords the compilation of the collection a photographic character that is uncanny: they are familiar in their form and reconcilable in their basic physical status as photographs; but they have a character that is strange and unfamiliar in that they derive their generic meaning, “aerial” from their ability, in content, to “lose” a horizon, to be inherently premised on verticality as opposed to a horizontal axis:

Alongside the war machine, there has always existed an ocular (and later optical and electro-optical) ‘watching machine’ capable of providing[...] a visual perspective on the action underway[...] The same function has indefinitely repeated, the eye’s function being the function of a weapon. (Virilio 1989: 3)

The visual capabilities are together a line of force and this vector, in its ocular character, is an optic. With optics, Virilio refers more generally to the informatic domain of military perception and “seeing”.

The translation of visual information in the context of surveillance photos extends to the field of the photos themselves, to the network of interpretation, and to the application of the information and knowledge produced as technical and operational, but also subsequently as historical and cultural material in the case of imagining history in the archive. In TARA, the logistics of perception extend: the framing and shaping of a past and how that past is visualized, memorialized, and known in a historical context is based on how, and what, images are supplied and administered. Virilio builds a kind of archaeological argument based on the discernment of origins (i.e., the emergence of aerial reconnaissance as a military practice in the First World War that saw the literal disappearance of the relevance of the
horizon). His logistical mapping resonates in the context of TARA because of the current contextual contingency of TARA's new virtual status with the "wired" circuits of delivery and circulation: it is the logistical supply of history that activates the records of a perceptual logistics of war, a logistics of perception.

Archiving Images of War

In a related trajectory of inquiry, historian Thomas Richards maintains that British imperial power was based in the fantastic drive for total knowledge. Accordingly, military prowess is the subsequent vehicle. He argues that the historical logic of the British Empire is premised on the accumulation and management of extensive globally-gathered information. Accordingly, the "imperial archive" existed, "[As] the sign of war...[T]he sign of a permanent state of emergency, the sign of a state apparatus maintaining political equilibrium..." (Richards 1993: 30) Richards implicates the act of accumulating knowledge, as fastidiously gathering and arranging, as the sign of a paranoid outlook, a gazet premised on "seeing" and assessing threats everywhere. This assessment of threat is doubly applied to TARA: images tracing the signatures of known threats and the collection as a response to external threats to heritage and dominant history.

While the "imperial archive" is somewhat anathema, the structure of this kind of accumulation and presentation underwrites the logic of supply at work in TARA. Richards connects the imperial archive to Virilio's logistics of perception:

[There was] the refinement of a new logistics of perception into the archival reconnaissance of territory... [historically up until World War One] command centres have notoriously exhibited complete disregard for the various perceptual apparatuses at their disposal, particularly when these have produced information that conflicted with existing configurations of knowledge... [The characters] successfully turn an intensely...

33 Archaeology here is opposed to a more genealogical assessment (i.e., the contingent emergence of certain formations at specific conjunctural moments, tracking change over historical time). For Virilio, the matter is one of accumulation, acceleration, and speed, things he argues to be continuously increasing and developing in a linear way historically on a trajectory toward the teleological goal of automated perception.
phenomenal perception of territory into a new kind of early-warning system. [They] wage a war not of projectiles but of perceptions, a war not achieved knowledge but of approximate knowledge, a war not of strategy but of logistics. (Richards 1993: 123) 34

Further, Richards alludes to Virilio’s notion of a historical development of perception:

[D]ifferent orders of information continually interact to create new orders of information. Mathematics becomes chemistry becomes ballistics becomes cinema... These connections are anything but arbitrary; a historical logic of sense exists behind each of these fluctuations in the order of knowledge. (Richards 1993, 108,168)

For Richards and Virilio, this emergent development is more than simple coincidence. The surveying technologies and techniques arising from a logistics of perception implicitly privilege and prioritize a way of looking, a surveying gaze that establishes a semiotic relay where certain things in the act of surveillance and reconnaissance are apprehended and made visible while others remain invisible and unprocessed.

While some historical continuity may exist with respect to the concept of empire, pax Britannica, and the British war effort, the point is more one of the connection between the posture of the reconnaissance apparatus during the war—as detecting threats and functioning in a very formative way with respect to dictating military action—and the posture of a British-heritage organ seeking to enliven and activate a dominant historical imagining with respect to the collection that is TARA. TARA is an organ of logistics, a supply conduit for perceptions of history and memory, a supply that is doubly articulated in relation to the archive’s publicized content. TARA essentially becomes a grand narrative of war-time perseverance and the will to power to victory. It also signifies the will to archive, to

34 The logistics of perception developed by Virilio and extended, in application to the fantasy of the imperial archive and the comprehensive knowledge of empire, by Richards demonstrates a kind of perpetual identification of threats in a permanent state of emergency. In the context of current global security discourses, the archive’s memorializing and public articulation is a silent but affective stipulation: sensing and remote sensing have been extended beyond the simple visual parameters; visuality exhausts only a portion of the possible kinds of potential perceived objects, events, and materials that can be framed and analyzed as threats in what Virilio refers to as a state of total and pure war.
maintain an archive of threats. Richards again is helpful in this regard in relation to how the
collection, in its new virtual manifestation, is in fact arranged, orchestrated, and positioned:

[The] operational field of projected total knowledge was the archive. The archive was not a building, nor even a
collection of texts, but the collectively imagined junction of all that was known or knowable, a fantastic
representation of an epistemological master pattern, a virtual focal point for the heterogeneous local knowledge
of metropolis and empire. Though in theory, as Michel Foucault has written, "the archive cannot be described
in its totality" […] the archive [is] often figured as a fixed place, as a discrete institution, even as a single person.
The ordering of the world and its knowledges into a unified field was located explicitly at the register of
representation, where, most successfully of all, the archive often took the form of a utopian state. (Richards
1993: 11)

The archive as a utopian state, as an idealized impossibility of totality and comprehensive
knowledge, is indeed a representation: the representation of military capability and capacity
rendered by the presentation and availability of a collection of surveillance photographs.

The invention and imagining of the utopian state is determined by the prescribed use
of the archive as a memorial assembly of constituent but consistent parts standing in for a
whole memory—synecdoche—of the events and actions of the Second World War. The
material comes out of the state's own informatic potential, coming off as natural and normal.
Thus, TARA is textual. It is an instructional device, designed to provide guidance regarding
the legacy of aerial reconnaissance and the war. The memorializing tact is, then, somewhat
expected. Richards again writes:

Like power, information does not exist in a vacuum. It has to be made and used. Data has no inherent function
and can just as easily lend itself to open societies as closed ones… Though the archive threatened at times to
overwhelm the state with a mountain of documents began to imagine it could perform feats of magic with
knowledge, doing a lot more than merely acting as its curator. A variety of narratives succeeded in transforming
the uncontrolled accumulation of knowledge into a fantasy of a controlled flow of information to and from the
state. (Richards 1993: 73)

While the abstraction of generic and arbitrary kinds of information subtracts from the
specificity of TARA's contents, it connects to the idea of both text and cultural intertext.
This activating and application of especially sensational information in the case of TARA—
the narrative of a war told through images and the process of developing and rendering
images as meaningful—suggests both the regime of "seeing" at work in defining the
historical content of the collection and its applied contemporary usefulness. This flow of
information and data also comprises of two movements: the handling of aerial-
reconnaissance material and the subsequent interpretation of that material. Richard’s “variety
of narratives” elucidates how the particular narrative of war-time military intelligence, in its
commemoration, brokered success and enabled eventual victory for Britain and its allies
during the war, something in circulation with respect to public historical consciousness. The
collection, in its new functional application, demonstrates state holdings as endlessly
inexhaustible\(^{35}\), with the possibility of new affiliations and identifications forged and
articulated.

**The Auratic Resonance of the Collection**

The basic visual character of the collection translates to political expediency for
TARA in a semi-public cultural context. According to Andres Huyssen, the onset of new
digital-based technologies has effectively re-constituted the auratic and affective value of the
singular photograph. Following Koepnick, Huyssen writes:

In the move from the photograph to its digital recycling, Walter Benjamin’s art of mechanical reproduction
(photography) has regained the aura of originality. Which goes to show that Benjamin’s famous argument
about the loss or decay of aura in modernity was always only half the story: the argument omitted that
modernization itself created the auratic effect to begin with. Today, it is digitalization that makes the original
photo auratic. (Huyssen 2000: 30)

The affective quality of the photographs, as documenting wartime operational activities, are
records marking the development of aerial reconnaissance and surveillance techniques, and
these images coalesce with the emergence of industrial methods of interpretation that

\(^{35}\) See Will Straw (1993), “Inexhaustible Commodities.” Straw discusses the exhaustion of commodities with
respect to popular media, specifically in relation to music. He suggests that some media commodities, in their
re-use and recycling in alternate and ancillary markets after the temporal period of initial circulation,
demonstrate an ‘inexhaustibility’ in that they have both symbolic and cultural value in unintended contexts or
application. For Straw, inexhaustibility signifies the movement or transmission of culture. TARA demonstrates
in its handling of older culturally-produced materials an inexhaustibility, especially in respect to the
inexhaustibility of the materials themselves as used in a memorial context and the historical marks of war and
victory which they carry.
converge within the context of developments in visual culture (i.e., the photographs are internal to, and cannot be divorced from, the historical trajectory of cultural interactions with the medium of photography). While they have decomposed with respect to function, they are recomposed as vectors of fact.

The collection, for purposes of imagining history, is doubly framed as a set of original records both a waning and defunct but resonant and deserving of re-articulation. What occurs in the case of TARA is a provisioning in a logistical state enterprise where newly apparent knowledges are managed and official memory established. The outward flow of “stored” possibilities in the paradigmatic warehouse connoting all things properly national—like the organized industrial management of surveillance so central to victory—induces mutation, a meta-morphological change. The old use-value of the collection certainly does not cease in its ability to be contextualized and “read” in its symbolic totality, as symptomatic of a kind of emerging technology of military surveillance. Rather, that use-value is maintained rhetorically to ground the celebration of an institutional memory that is now affixed with contemporary cultural value, its value becoming an exchange for the promissory rhetoric of national historical identity and dominant historical narratives of the Second World War.

The re-activation of old visual records and the transformation of those records into a meta-monument suggest a measure of the delay alluded to by Briethaput. In the context of Bennett and Nowell-Smith’s intertextuality, the collection always has the “lingering capacity for connotative function”. 36 This capacity is essentially mythic, a second-order semiotic articulation vis-à-vis Roland Barthes’ theory of metalanguage as uncontested and

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36 This concise fragment was graciously culled from Peter Van Wyck in an advisory discussion, May 27, 2004.
depoliticized speech. 37 Again, recall the legendary status of heroic pilots. The depoliticized aspect of TARA is based, most basically, in the presumption that the photographs be taken at face value as records of the war; that they are able to stand as memorial objects “of the most living kind”.

As myth, all the industrial and mundane labour and practices of interpretation and operationalization, and all the extraordinary and affective images and actions in material memory and as actual events, as well as everything in-between, is coded as myth, as safe, as depoliticized and common-sense, as something to be provided and supplied to a public (i.e., broadcast on a network for constituents to use, to put to use) 38. The administration of a circuit or a collection, in being conceptualized as “useful”, obscures the administration of resources and a management of contents that constitutes the “proper” perception of events. The once-sensitive status of the collection is now agreed upon by administrators and archivists as suitable for public use, with enough proximity and distanciation from the wartime events for the ensuing image events to unfold as intended. The new “transparent” display actualizes another kind of control, a kind of censorship where display shows all, where the images, now open and available, “speak”. The dulling of the content by history

37 Barthes’ semiotic theory of mythology amounts to a form filled with a concept (Mythologies, 117). Here, the form is a collection of highly affective and sensational photographs functioning collectively to anchor the Truth-function of TARA in an historical context. TARA is, following Barthes, ‘a historical grammar of iconographic connotations’ at the level of the photograph and larger collection as sign and at the level of the archive positioned as one organ in the institutional circuit. Both are utterances that are metalinguistic, but are of differential scales.

38 On this point, Richards connects the war-time collection of information in an archive to Gilles Deleuze and Felix Guattari’s concept of the war machine, a productive machine not for war but of war, of defiance of the order of an abstract State. Richards quotes a passage from (1987) “Treatise of Nomadology”, A Thousand Plateaus, 405: “You don’t make [anything] with a secret… if you are incapable of reproducing it, and if integrating in different conditions, of transferring it to other assemblages. Propagation and diffusion are fully part of the line of diffusion.” (Richards 1993: 168) This transference is inherent of TARA online, where the act of integrating into different conditions takes on a historical dimension and trajectory. The potential propagation and diffusion of this assemblage is amplified when the cultural/perceptual value of the material in TARA was once sensitive but is now, dulled by the passage of time, consensually safe.
also sees history and historicity composed as a guided, signposted tour of historical events firmly embedded in the circuits of a state-sponsored remembering.

Recalling again Briethaupt’s remarks about the delayed disintegration of fiction, TARA is a machine of delay professing the energy of the mythic:

Any culture produces a system of delays...Cultural delay machines censor the immediacy of alien customs that are deferred through its codes... Any built environment constructs a system of delays through hierarchically organized spaces of confrontation. (Kutukcuoglu et al 1999: 70-72)

This “built environment” can refer to the built virtual environment of TARA as well as the built environment of both British national culture and larger formations and assemblies of contemporary visual culture, which users, as mobilized subjects and identities, encounter and confront, negotiating and deliberating. The “deferral through codes” speaks to the “proper” and intended memorial function of the archive within the diegetic memorial space created and invented by TARA.

The collection, in display and exhibition, constitutes “that mysterious phenomena of motion called culture...lodged in material and perceptual things.” (Urban 2001: 42) Thus, with TARA, there is a metacultural inertia specific to and inherent in the collection, a kind of inalienable mark of production that is inscribed and connotes all at once the mythic status of reconnaissance and the “too many aeroplanes” of the war while also vesting value in the “newness” of this commemoration as an implicit and internal value to conceptions of a state-sponsored historical imaginary. The residue of the past, the decomposition and entropy bleeding off the de-commissioned collection, re-commissioned after operational

39 I borrow this combination from Greg Urban, whose conceptualization of metaculture is an attempt at discerning and understanding the transmission and transformation of culture over time. For Urban, this movement is not something internal or external to culture, like texts or objects serving as metonymic receptacles and containers. Rather, culture itself is the thing that moves. For example, contemporary culture, according to Urban, is one constituted of newness. That is its logic. Essentially, Urban proposes a cultural logics with respect to movement over time. The recursive move to re-cast, celebrate, and transmit an epic wartime narrative is this kind of cultural movement, one that is molded onto contemporary conceptual notions about what a post-war memorial culture should be. See Urban 2001, 41-92.
value was deemed null and void, is subsequently re-constituted for public use in through a virtual portal.

**Musealization, or A Matter of Energy Projection**

If TARA is able to "generate" anything, it is a projection of the basic historical energy of the collection, a morphing of the older, context-specific value of the reconnaissance images that were once part of one kind of institutionalized military framework, its "energy" transformed. TARA is, then, an engine requiring historical fuel. Extending the energy metaphor into the notion of a delay mechanism, the attribution of TARA as something that should belong in a contemporary field of commemoration and memory of past events is itself further emplaced: though the photographs are dated and void of any security or intelligence value, they are made to be valuable and to belong as devices for historical imagining. With delay, "anachronism is built-in" (Kutukcuoglu et al 1999: 71).

The insertion and inclusion of the collection into a circuit for access is intended to be complimentary and harmonious, its energy not dissipating but augmenting the concerted but anachronistic institutional strategy of defending heritage.

So, TARA, despite its progressive virtual home, is arguably a conservative bulwark of heritage positioned against an accelerated and disjunctive global culture. In conjunction with the perception of threats and "ways of seeing" is the realization of a contemporary

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40 See Richards 1993, 83. Richards uses the concept of thermodynamic law as metaphor in order to characterize the imagined comprehensive capability of the Britain's imperial archive. A large part of his discussion centers on the process of entropy, and the impossibility of encapsulating and preventing the loss of energy from a system, in his context the 'system' being the ideological and political monopoly of imperial and national knowledge imagined by the archive. He introduces the theoretical thermodynamic paradox of Maxwell's Demon, an engine that can generate its own energy and does not lose any energy in the transmission of force, a characteristic in contravention of the most basic laws of thermodynamics, namely that energy cannot be created or destroyed and that energy moves from a state of order to disorder (entropy). In relation to TARA, the demon is interesting in that TARA is clearly premised on the war-time value of the collection as a sensational "energy", enough to allow for the establishment of a public-oriented organ to invite and accommodate the use of such 'energy'.
predicament: the state, in relation to its arrangement and exhibition of TARA, is responding to the threat of increased insignificance in a globally-oriented world. The state's traditional role—here, Britain, but also in abstract extension to other states governing heritage—is rhetorically in disarray. If TARA is premised as such a bulwark, it is subject to the confluence of media, politics, and the problem of memory, a convergence defined and addressed by Andres Huyssen. His concept of musealization is particular and specific to a period of high-technology and integrated circuits of cultural flows, idealized in the form of the World Wide Web. Huyssen's recourse to describing the abstract pathways of delivery and dissemination as inherently museal locates emerging mass media and communicative practices as having a museum-like capacity: exhibition using display devices with the infinite ability for turnover and de- and re-installation.

In the context of intertext, TARA is symptomatic of threat recognition; it is feedback, an expression of the same process it memorializes, namely the perception and eradication of targets. The post-industrial semiotic field in Western contemporary culture of "flexible accumulation" (Koepnick 2002: 88) in a "global cultural economy" (Appadurai 1995: 30) accommodating the "radical deregulation of the symbolic economy" suggests the potential for loosened institutional control. This destabilized control establishes a scenario where state-sponsored projects indulging in the proliferation and establishment of an allegedly secure "culture of memory":

...fail[s] to recognize that any secure sense of the past itself is being destabilized by our musealizing culture industry and by the media that function as central players in the morality play of memory. Musealization itself is sucked into that vortex of an ever faster circulation of images, spectacles, events, and thus is always in danger of losing its ability to guarantee cultural stability over time. (Huyssen 2000: 34)

The ability to guarantee then becomes the pertinent issue for TARA: how to use a stock of old objects in a new context and guarantee some kind of cultural stability in a disjunctive network of intertext and flows that privilege more than anything the memory of media
objects rather than the contents. Huyssen’s further assertion that the mass “memories we consume are ‘imagined memories’ to begin with” (Huyssen 2000: 27) complicates things: it suggests the relevancy of theoretical versions of contemporary culture drifting toward pure and total simulation as per the lament and moral-decay arguments of Jean Baudrillard; yet, further, it places emphasis on the specificity of context and contingency in relation to how meanings are generated and signified. “Authenticity” is not, then, qualified in a vacuum but in discourse. Giving priority to certain “imagined memories” requires concerted, if subtle, political effort.

In the attempt to protect memory, Huyssen argues that “memory culture fulfills an important function in the current temporal experience of new media’s temporal impact on human perception and sensibility.” (Huyssen 2000: 31) “Memory” is issued from the state, which accommodates and appeases the fear of forgetting in an accelerated and media-saturated cultural field of “intertext” by targeting a mass cultural citizenry at the global level with a publicly-oriented historical formation about the importance of reconnaissance and the Second World War.

TARA, following out of Huyssen’s remarks, induces memories. The archive is an agent of induction because it induces—in its mode of address, its rhetorical and narrative strategies, and its material content—an encounter with the assembled and sensational capacity of the photographic collection. The encounter with TARA as an organ of history, memory, and as platform for photographic identification and contemplation is intended to be affective. Brian Massumi writes:

Affect holds the key to rethinking postmodern power after ideology. For although, ideology is still very much with us, often with the most virulent of forms, is no longer encompassing. It no longer defines the global mode of functioning of power. It is now one mode of power in a larger field that is not defined, overall, by ideology. This makes it all the more pressing to connect ideology to its real conditions of emergence… One way of conceptualizing the non-ideological means by which ideology is produced might deploy the notions of induction and transduction—induction being the triggering of qualification, of a containment, an actualization; and transduction being the transmission of an impulse of virtuality from one actualization to another and
across them all (what Guattari calls transversality). Transduction is the transmission of a force of potential that cannot be but felt, simultaneously dubbing, enabling, and ultimately counteracting the limitative selections of apparatuses of actualization and implantation. This amounts to proposing an analog theory of image-based power: images as conveyors of the forces of emergence, as vehicles for existential potentialization and transfer. In this, too, there are notable precursors. In particular, Walter Benjamin, whose concept of shock and image bombardment, whose analyses of the unmediated before-after temporality of what he called the 'dialectical image', whose fascination with mime and mimicry, whose connecting of tactility to vision, all have much to offer an affective theory of late-capitalist power. (Massumi 2003: 42-43)

The affective status of the images provide a platform for the narrative and rhetorical strategies of TARA: the heroic pilot, the interpreter working by lamp-light, the memory of loss, the commemoration of war-time industrial know-how, the contact with these once-sensitive images. There is a haptic opening, connection of tactility to vision that convey the allegedly archival but more perhaps more appropriately museal emergence of TARA as containment and actualization of that contained version.

The collection is, and becomes, fiction. It proceeds with both a didactic and pedagogical function, its transformed on-line status premised on the maintenance and incorporation of a kind of imagined historical identity. Its self-declaration—"A memorial of the most living kind"—begs the basic questions of what and whose memories are being recalled, lost, commemorated, and forgotten. With affect, what is being affirmed? What responses? Interfaces? Immersions? Interactions? As a singular thing in an of itself, is TARA a matter of the becoming-singular of the specific? Or the becoming-generic of the singular (Massumi 1993: 35), where a heterogeneous but generic number of assembled sites (internet, cultural locations, or otherwise) are managed and administered by state organs which are themselves forces in a hegemonic cultural system located within a specific historical epoch of "late capitalist power"? The former is progressive, while the latter is arguably more accurate of TARA, as one mapping of a state, historical, and cultural calibration of the "perceptual arsenal."
TARA exerts a “global vision” by imagining the world at two particular moments: a particular historical time and at a moment in a particular context making the development of this conjunctural virtual archival technology a platform for display. Gilles Deleuze, in briefly expressing the shift from a disciplinary to control society, attempts to characterize the control as openness rather than the closing down of systemic options:

Confinements are moulds, different mouldings, while controls are a modulation, like a self-transmitting melding continually changing from one moment to the next, or like a sieve whose mesh varies from one point to another...In disciplinary societies you were always starting over again[...] while in control societies you never finish anything... (Deleuze 1990: 178-179)

The concept of modulation is significant in relation to the collection: the photographs, while offering a multiplicity of difference, are modulated into one whole representing an assembly, documents becoming monuments. The images in the abundant collection never seem to finish. Further, TARA is modular in that it is couched within a circuit of similar organs: offered online, seemingly open and accessible, and dependent on other hubs in the circuit for authority and legitimacy. This network of hubs functions more wholly as a “technology of truth”\(^\text{41}\) with respect to the playing out of what is and what is not the authorized version.

\(^{41}\) Toby Miller, (1998) 5: “…Technologies of Truth goes in search of moments when the popular and the civic brush up against another to see where truth appears in community, commerce, and government.” (4) Miller’s concept is the premise for his book, emphasizing Foucaultian implications of truth, power, and public-oriented bodies of discursive cultural knowledge. TARA, in its hybrid old/new form, is an apparatus that does something beyond preservation and conservation, namely manufacture Truth. Technology here has two meanings: first, technology as a map for lived cultural practices, as kinds of perceptual and discursive logics functioning to enable or constrain kinds of truths as accepted facts in a contingent cultural context. The second meaning of technology in this context is the circulation of this kind of logic as ‘embodied in communicative form.’ The former refers, then, to lived and discursive modes of perception and lived practices as dictated by dominant practices while the latter refers more generally to both the technical and discursive systems of media dissemination and delivery where the former technology is articulated, mediates, and is itself mediated and altered. The internet and on-line network technologies constitute this kind of technology. It should be noted that I am proceeding with the understanding that neither of these kinds of technology are mutually exclusive, and that they instead are dialectically connected. The archive and its discontents presuppose a certain kind of subjectivity in material culture based on what Miller’s version of cultural citizenship. This kind of cultural subjectivity—and its constituencies and capacities as a kind of ideal type—is territorialized in spaces and in protracted moments where cultural and political forces merge to produce questions of truth and knowledge and extends from the ownership and governance of historical, contemporary, and mnemonic cultural and political knowledge. The archive invites an ‘idealized’ construction and engenders a kind of transcendental faith in these knowledges, a foundational layer or field of meanings within which a kind of historical and mnemonic knowledge emerges. Figurations of a national historical identity or a publicly recognize, which verify an
of war-time history and what demands remembrance and commemoration. The circuit is a kind of meta-archive of historically consistent possibilities producing intended “knowledge effects” (Miller 1998: 10) and the political economy of power—in shaping history and the general politics of cultural knowledge. They are a larger scale of grammar, the edited and selected materials deemed relevant for a historical and cultural encounter with the baggage of subtle but powerful political implications.

The activation of a dormant historical narrative territorializes a space of commemoration. TARA is an assembly and a re-assembly by a state-organ sponsoring heritage based on the dissemination of war photography. Yet, since nothing is sent out, nothing is necessarily received. TARA is maintained, waiting. The slippage of the archive to a formation resembling the museal is concomitant with the Web technology upon which it is premised. As such, the potential power of the Web is significant: it allows for image events and the intimate, private, and selective encounters with specific images. The rescuing of TARA would not have been possible had it not been for its contents’ visual character. A massive iconic catalogue of aerial reconnaissance photographs translates easily into exhibition. The relation between the state organ offering a perspectival “view from above”—accessible through a readily available virtual visual medium (the Web)—of a series of photographs is the accumulation of a concerted attention and effort, crystallizing the opportunity to encounter new materials and new images historicizing a massive set of events past.

inclusive national imaginary, actualizes this kind of imagined cultural citizenship. See also Lauren Berlant (1995), “The Theory of Infantile Citizenship”.
Provenance is the archival principle which requires that documents created by an institution or an individual must remain together. Archivists do not reorganize archival documents so they can be filed according to subject. The original context of the records is always maintained. This ensures the greatest possible research value can be gained from the documents by preserving the context in which they were created.

- Concordia Archives Guide, 1996

The knowledge of context, provenance, and background, which is gathered by archivists during their work of arrangement, and set out by them in description, is their principal contribution to research and to public information systems, and sometimes is the substance of their personal research. All the principles and activities together amount to what Sir Hilary Jenkinson, in a powerful and illuminating phrase, termed 'the moral defence of archives'.


Before [TARA] went online, you would have to visit Keele and manually search through thousands of boxes to find the photograph you wanted. Now anyone can access the archive and see images which had until recently only been seen by wartime intelligence officers. This another great step forward in the online revolution happening in archives.

- Sarah Tackney, Chief Executive of the National Archives, Keele University Press Release

Power's precisely the nonformal element running between or beneath different forms of knowledge. That's why one talks of a microphysics of power. It's force, and the play of forces not form.

-Gilles Deleuze, (1990) Life As A Work of Art

The supposed “online revolution” in archives is a “great step forward” because it continues to legitimize the existence—and basic ontology—of the idea of the archive. The visual content of TARA accommodates this revolution readily: the archive lends itself to exhibition and exposure, providing a portal for a maximum of display. As such, TARA embodies the shifting state of artifice of the archive. With the consistent invocation of the archive as a conceptual cultural metaphor, TARA’s new virtual standing forces its own archival constitution to become something else: namely, an attraction-like object of amusement riding on the mythic plausibility of the archive itself as supplemented by the
historical relevance of the Second World War. The discursive tension between the tenets of a state project in commemoration inviting an investment in shared and co-ordinated meanings and, in connection, the entertainment aspect of experiencing pleasure in the participation and the recognition of war-time knowledge, is a hinge of TARA’s strategy for mass appeal. As an organ, it is installed as a kind of state-sponsored island amid the amplified immensity of the Web.

Virtual TARA differentiates how war-related knowledge can be interfaced, known, and experienced. Rather than quietly decaying in an emplaced geographical place at Keele University, TARA on the Web enacts a logistics of perception all its own with respect to the heritage of the war, cultural knowledge, and historical consciousness. The supply enables and enhances public participation with a sense of historical consciousness. Online, TARA becomes a reconnaissance organ itself, approaching in consonance and co-ordination the logic of surveillance, the same subject that it documents; subject and object are linked. Through the following ruminations and intersections posed in this chapter, this link is teased out.

**Archive and Metaphor: the Reconnaissance of Topics**

**virtual adj** 1 that is such for practical purposes though not in name or according to strict definition

Definitions converge in referring to the concept of the archive as a vessel, a place of acquisition and holding that provides space, a repository with the capacity to organize records that have some intrinsic value in a given context.\(^2\) The World Wide Web invites comparisons to archives and is often invoked as the ultimate archive with respect to holding

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\(^2\) From Cook 1993, 5: “Records are information media which are created in the course of business by an organization, and kept because they are of use to that business. Archives are a subset of records; they are records that have passed an appraisal test, have been selected because of their possible value in other kinds of reference, and have been placed in an archival repository, or at least allocated to a permanent retention category.”

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materials and images specific to contemporary culture. Cultural theorists consistently attempt to frame and map the discursive and semantic constituents of the archive as a formal and cultural system. The versions vary. Most efforts locate the archive itself as an object and site of inquiry, aiming to elucidate the ideological and discursive status and its capacities for various uses in a cultural or academic context. The scholarly field ranges from the poetics of archival use to the problematic politics and the tension of constructing the authority of the archive with respect to the power/knowledge coupling, following the “technology of truth” model I briefly invoked above. Another trajectory of archive-related scholarship tends toward professional/expert texts on archival organization and techniques of maintenance, preservation, and appraisal: the technical matters relating to the operation and management of archives.\(^{43}\) This is to say nothing, of course, of the number of works, projects, and generations based and founded on archival sources, ascribing archives value in use while simultaneously subsuming and overwriting them.

A cursory exploration of the way in which the concept of the archive is repeatedly invoked as a cultural metaphor furthers my own analysis in determining how the figuring of the musealized archive proceeds in creating and articulating a didactic political organ. Abstractions of the archive as a symbolic figuring of larger cultural tendencies, especially prevalent in late capital culture in the West, is telling: the archive is a location with a distinct geography and functions as a device for explaining both hegemony and the state of politics in relation to memory, history, and the encroaching speed and delivery of new media technologies. When Huyssten asks whether the “surfeit of memory in this media-saturated culture creates such overload that the memory system itself is in constant danger of imploding, thus triggering the fear for forgetting” (Huyssten 2000: 28), the question in

relation to TARA becomes one of impulse: what is driving the heritage organ and its affiliated institutions to enact a kind of historical salvaging project?

Conceptually, the archive is a strategy of explanation, a whole containing the part (metonymy) and a part standing in for a cultural whole (synecdoche). David Faulkner locates the archive as a psychoanalytic trope—a “political (un)conscious”—that is a massive and unspoken storehouse for cultural memory, which serves a paradigmatic function:

In the simplest terms, the purpose of an archive, any archive, like the unconscious itself, is to serve as an operating system for both remembering and forgetting. Forgetting, as we are often reminded, is the verso of remembering, of archiving. Forgetting is that equal and relational activity to which memory is bound—as the leaves of manuscripts, incunabula, books are tightly bound; but also bound in the sense of a direction or destination which tends—and which thus enables. What I am trying to get at is that the deposits of an archive should not be thought of as merely existing, in a passive state; they are always already meaningful by virtue of their dynamic relation with what has had to be forgotten. Remembering or saving, and forgetting or discarding, are active movements, are active movements, mental or physical, that belong to the economy of the archive, in either its ‘psychical or technoprosthetic terms’. (Faulkner 2001: 192)

The economy of the archive, in actively pulling along the deposits of the past—its material traces, the analyses and arrangements of artifacts and documents—is an economy of potentialization, a cache premised on a future-past use. Archives according to Faulkner are progressive in the sense of moving forward: the material maintained is always actively moving forward vis-à-vis what has been left behind or discarded. Further, Faulkner describes the archive as a place of both political efficacy and choice. It is a place of options, where decisions are made about selecting and use:

In that economy of hoarding and expenditure lies the ethical-political function of the archive. Of course, it can only serve that function when we act to excavate it, when we excavate its meanings. The archaeological work we do will force us to consider the uses of the past and the necessities we might want it to serve. (Faulkner 2001: 192)

The “we” in question refers how research is conducted, how an ethics of archival use shapes how and why materials are cited and orchestrated to corroborate facts and enable arguments or hypothesis. As such, there is an accompanying openness to the archive: it is whatever it is made to do in its excavation.
The archive's traditional function is to hold and subsequently allow access to primary and heretofore unpublished material. As the content demands an experience and expertise with specific topics, as in TARA's case, widespread public access certainly never occurs. Citizens certainly do not regularly flock en masse to the archive; it is not a mall, though perhaps new virtual archives may perform some aspect of mall-ness. Yet, it is supposedly always open and available to all. Faulkner refers more weight to academic users and researchers—expert users with knowledge of the operation and lay-out of archives vis-à-vis finding aids and search techniques—who possess the cultural capital and a familiarity with the traditional spaces of archives and extended archival encounters. With a high barrier of entry, who can and cannot access the rather exclusionary, abject place of the archive is ostensibly built into the system. The experts, at least in the case of TARA's arrangers, are the ones who authoritatively reveal the storehouse in the necessity of serving a public and political aim. While users lend a practical and literal use value to archives, the symbolic value of the archive as a regulated and regulating master storehouse is arguably the most prevalent and basic metaphor: it determines the limitations of possibility.

In the context of post-structuralism, postmodernism, and postcolonial studies within the academy, the last forty years has seen a increase in the creation of archives. With approaches in cultural theory privileging critique, skepticism, and doubt in relation to master narratives, the programmatic mandate of progress and modernity, and more traditional modes of scholarly methods of inquiry, archives have become a place where knowledge is reconstituted and revised with liberating potential against the dominant grain of older and entrenched discourses and formations. Archives are re-mystified and re-enchanted. They

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44 This is a significant claim and requires further work beyond the scope of this paper. Carolyn Steedman claims this quite early on in her book, *Duct*. While I cannot corroborate this with a figure, the incidence of archives is arguably increasing: an online search for 'archives' turns up pages of hits, beyond the increasing physical and electronic places of archival storage internal to everyday institutional bodies and organizations.
become a place of answers to be found based on an index of interpretation—discursive, disciplinary, intended effect and bearing of the research carried out—where the past “speaks” a set of “truths” up until now obscured and effaced.

Writing amid “the archival turn” about the “immanence of dust”, Carolyn Steedman compiles a poetics about the re-acquiring of histories occurring in the interface with the massive reserve in the archive. Drawing on Foucault, she writes:

The archive does not so much stand in for the idea of what can and cannot be said, but rather “is the system that establishes statements and events as things”…The archive [is] a way of seeing or knowing…a symbol or form of power. (Steedman 2002: 2)

Further on, Steedman describes the capacity of the archive as a technology:

[The archive] loses much of its connection to the idea of a place where official documents are stored for administrative reference and [becomes] a metaphor capacious enough to encompass the whole of modern information technology, its storage, retrieval, and communication.” (Steedman 2002: 4).

In using this technology, Steedman claims that the perusal and careful searching leads to something amounting always to a new knowing, or a “re-knowing” of what actually constituted—by what a record or document alludes to—a moment, era, or event:

There is always pleasure as a reader in finding something that the writer did not know was there (or that he has hidden, deep in its crevices and cracks…Indeed, in one view, the practice of history in its modern mode is just one long exercise of the deep satisfaction of finding things. (Steedman 2002: 10)

The pleasure aspect suggests the rewarding sense of accomplishment of discovery and the enchantment of mingling with dust, the entropic remains of the past. Dust is always immanent and never goes away. It gets clogged in nasal passages and makes eyes water. For Steedman, the dust is always circulating, always carried along, always occupying space, internal to everything.

**Addressing Foucault’s Distinctions**

Steedman’s remarks share some consonance with the very act of reconnaissance in an archival context, particularly in describing how TARA creates an opening for revised but
still-dominant narratives about the war. Briefly, I want to digress in order to elucidate a
connection that arises between the reconnaissance in the air and the reconnaissance in the
archive before returning back to Steedman.

Michel Foucault, in *The Order of Things*, distinguishes in French between two different
conceptualizations of knowledge: *connaissance* and *savoir*. Following etymological strategies
used earlier with Farocki’s simple but telling observation about the German word
*Aufklärung*—meaning both *Enlightenment* and *reconnaissance*—Foucault’s distinctions are
connected to Steedman’s descriptive conceptualization of the archive.

*Connaissance*, without the prefix “re-“, refers particularly to “a corpus of knowledge…
or episteme” (Foucault 1969: 16), a particular discipline (e.g., biology, economics).

*Connaissances* are components, fields and indexes of knowledge in and of themselves, bodies
of knowledge with which one becomes “acquainted”. *Savoir*, further, is another noun for
‘knowledge’ in French but alternately denotes “knowledge” in a general way that underlies all
things, determining a relation to the conglomeration of *connaissances*. Foucault, in mapping
the origins and function of discursive power, writes:

By *connaissance* I mean the subject’s relation to the object and the formal rules that govern it. *Savoir* refers to the
conditions that are necessary in a particular period for this or that type of object to be given a *connaissance* and
for this or that enunciation to be formulated. (Foucault 1969: 16)

*Savoir* is “knowing how” or becoming able to activate in conjunctural and contingent
conditions that induce, produce, or reduce a reference to the emergence of specific
*connaissances*. The latter is “knowledge as the direct constant between mind and object”
whereas the former is knowledge as constituted by “historical relations between words and
things”. The relations themselves are vectors of power to describe what kinds of

knowledges are legitimate, and in that determination establish “an instituted authority [competent] to produce certain utterances” (Deleuze 1990: 198). 46

The archive is implicitly tasked with the analysis and classification of sets of knowledges; with establishing the regimes and topics and domains of episteme, of bodies of knowledge in contexts—bureaucratic, organizational, industrially, culturally—as they develop and emerge. This administration of epistemes and topics—a process mapped by Thomas Richards’ ever-threatened imperial archive discussed earlier—is inherently political and ideological and it takes a historical turn in TARA, where, “[i]n the era of commercial and industrial media culture it is increasingly important to note that topoi can be consciously activated, and ideologically and commercially exploited.” (Huhtamo 1998: 301) This is an example of statements and events becoming concrete things, and becoming monuments to an imagined past. Reconnaissance becomes its denotative French meaning: recognition. In TARA, the act of recognition locates a potentially viable historical set of knowledge and the recognition of how to coordinate and apply that knowledge in a “useful” cultural and memorial context. The searching and finding is premised on the cognition that comes with interpreting value, the awareness of something being there; recognition comes with re-knowing and interpreting the bodies of connaissances, and knowing how to arrange and exhibit them for consumption.

The archive is a durable technology allowing and accommodating these varied processes of activation to occur. It is an appraisal mechanism, deciding what counts and what matter matters: Knowledge, and knowing, then, become matters of organizing, in controlling the scheme of classification and in classifying, supplying the proper perception of

46 The preceding three references all come out of a brief but incisive explanatory passage in Martin Joughin’s translation notes for Gilles Deleuze’s (1990) Negotiations. In clarifying Deleuze’s use of savoir and connaissance as used in a chapter mapping out the thought of Michel Foucault, “Life as a Work of Art”, Joughin emphasizes savoir, knowledge by description, as the definition given primacy by Deleuze and Foucault. See note 7, p. 198.
what constitutes such knowledge. The savoir aspect of the archive bespeaks and determines how one would relate to such an archive. This discursive power, transmitted from an institutional organ through public pathways sets, stipulates, and iterates what is and what is not proper historical or culturally-proper topics of memory and history.

Returning to Steedman, her valuation of an interface with the archive amounts to an action of the reconnaissance of things that are topic-specific that have yet to be re-acquired by culturally normative forms of knowledge, specifically in the writing of historical narratives as political and cultural productions. The need to perform reconnaissance results, according to Steedman, from the ontological and ideological “condition of the archive”:

[The archive’s] condition of being deflects outrage: in its quiet folders and bundles is the nearest demonstration of how state power has operated, through ledgers, lists, and indictments, and through what is missing from them. (Steedman 2002: 68)

This process determines how archival sources are incorporated, coded and inscribed to produce an “[i]nstitutional history [that] is the perpetrator and perpetrator of a master narrative” (Berlatsky 2003, 122). The burden of holding is celebrated while the politics of holding are subsequently elided. Steedman conceptualizes the archive as a place not of prevention, though, but as a place where one can return and reconnoitre from above with a kind of aerial perspective in order to prioritize the passage of as-yet excluded materials, bringing them to bear on the writing and telling of the past in a cultural context that can become a re-articulation of dominant versions of history. The archive, at its liberatory and idealized best, renders the elisions visible, allowing new ruminations and digestions.

Ultimately, Steedman avoids privileging some imagined moment of transcendence akin to punching through the ideological skin of the archive in order to facilitate an anachronistic and authentic “truth”. She instead argues for a careful and self-aware encounter with the materials in the archive. They are collectively neither wreckage nor
debris, but simply what is immanent, what is *there*. The archive is re-mystified, a place of enchantment where mutation and recombination can occur. Yet, state intervention and state-sponsorship that brings the magic—enabling the *reconnaissance* of old records for new uses—alters and transforms that material, its neutral transmission a fallacy:

The object (the event, the happening, the story from the past) has been altered by the very search for it, by its time and duration: what has actually been lost can never be found... This is not to say that nothing is found... but that the thing is always something else, a creation of the search itself and the time the search took. (Steedman 2002: 77)

The intervention of the state is an act that announces the political spinning and branding of the re-articulation of archival materials, the index of interpretation being the determination of cultural and political value in the sphere of public use and public encounter.

**Archival Violence**

If we extend the metaphor of the archive in relation to how state organs orient the archive as an apparatus, the archive becomes a machine making things visible and in that actions, perpetrating violence on the larger field of normalized and naturalized cultural knowledges. Recently, Jacques Derrida has described this violence in, *Archive Fever*: “What is at issue here starting with the exergue, is the violence of the archive itself, as archive, as archival violence.” (Derrida 1995: 12). Like Faulkner, the archive for Derrida is psychoanalytic; or rather, Derrida is willing to acknowledge that psychoanalytic models are extensions of archival processes. The archive functions like the unconscious.

Derrida’s analysis of the archive, in extrapolation, more precisely describes the labour and operation of TARA in the context of re-inventing the archive online. Derrida’s concept of an *archive fever*, following the fever of history in Nietzsche, is generated as a response to the archive’s ability to both commence and command through the “consignation” of materials: “There is no archive without a place of consignation, without a technique of
repetition, and without a certain exteriority. No archive without outside.” (Derrida, 1995: 11)

Commenting on Derrida and elucidating, Steven D. Brown, David Middleton, and Geoff Lightfoot write:

In *Archive Fever*, Derrida sets out to question the notion of the archive itself [and] he does this by tracing the etymology of *arkhe*. This, he claims, contains within it two very different meanings: that of commencement, or the positing of origins, and that of commandment, the practice of law and judgment. Discovering this duality to the meaning of archive allows Derrida to ask how it is that the act of archiving itself – consignation – is tied into both commencement and commandment. Here Derrida finds a tension. Consignation institutes the archive through its power to continually add to the archival stock, but in its course consignation also encounters threats and resistance. As commandment, archiving is a political act, and it must then be expected that there will be instances where consignation is opposed or refused... Thus the very act of archiving gives rise to an opposing force which aims at sweeping away the archive... [A]rchiving depends upon consignation, a technique for archiving. This technique is something supplementary, it is a prosthesis. We need a technology for remembering, a mnemotechnics. But the introduction of such a technology ensures that the place where archiving happens is distinct from the place where archiving is initiated. And this place of archiving is also where consignation confronts the threat which it itself creates, that the archive, as an externalized and supplementary space may be dispensed with and fully overturned. (Middleton and Lightfoot 1999: 4)

The act of consigning, of holding and protecting in order to combat the threat of loss or decomposition is governed by the value of the archive in its basic ability to command by becoming its own material image. This is the paradox of the archive: its *opticus*—its gaze—is simultaneously self-referential and self-consuming. The archive’s power rests in the capability to justify its mandate in the very act of holding and retaining. With selective capacities and policies, the conceptual mandate of an archive generally presupposes a selection process for materials retained, an editing process assembling holdings based on institutional specificity, provenance, and the general maintenance of a collection’s logical internal coherence and integrity. If archival material cannot be mobilized (militarized, operationalized) to create, invent, or maintain dominant histories and memories, or at least to justify its own existence as a body or organ, the archive threatens itself.

TARA announces the commencement—its *origin*, or at least coalescence—of the teleological development of military “ways of seeing” (historically, with the industrial

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47 On the use of Brown, Middleton, and Lightfoot, their passage is concise, clear, and evokes the project of Derrida's inquiry. See (1999) “History 2.0: Performing the Past in the Context of Electronic Archives”.
development of aerial reconnaissance), and also institutes an alternate and virtual way of
"seeing" with respect to using archives. It also "commands" in that it dictates a relation to a
historical past that is imagined and rendered as a valuable insight to what *should* be
commemorated with respect to the war. The archive, as metaphor and as an organ
premised on *recognition* and *reconnaissance*, asserts agency, arranges and invents order. It
orchestrates the authenticity of remains. It authoritatively holds sway over all that remains,
stamping and branding materials with the mark of relevancy. It is a cover over the potential
bulging contents of a history yet to be determined. In this way, any archive maintains a kind
of continuum, not necessarily of diachronic rectilinear cause and effect across history\(^5\), but
of hegemony and its incorporating generic circuits. The archive, as the default place of
collapse with respect to finding material to make topics and statements and things, is a kind

\(^{49}\) Derrida's commandment and commencement also suggests the play of delay as a logic presupposing the
archive: "Delay is a condition linked to the assumption of an origin and a telos." (Kat et al 1999: 72). The telos
imparts and structures a mandate that defines the maintenance of materials; this is the logic, defined in archival
terms as the principle of integrity and provenance. From a telos, the origin is recursively made available. This
recursive location of origins is, according to Derrida, the defining logic of the discursive and political
structuring of the archive, of all archives.

\(^{49}\) Derrida's commandment and commencement are coincident with both *savoir* / *connaissance* and what Gilles
Deleuze calls the 'object-lesson' / 'language-lesson' of archives. Deleuze, following Foucault's thinking on
archives, writes about the archive and the act of archaeology: "Archaeology, genealogy, is also geology.
Archaeology doesn't have to dig into the past, there's an archaeology of the present—in a way its always
working in the present. Archeology is to do with archives, and an archive has two aspects, its audio-visual. A
language lesson and an object lesson. It's not a matter of words and things (the title of Foucault's book is mean
ironically). We have to take things and find visibilities in them." (Deleuze 1990: 97) Foucault's 'dig' metaphor is
both diachronic—reaching back into the figurative archive—and synchronic—a kind of differential movement
concurrent to the use of the 'archive' itself, the *difference* inherent of the structure of discourse. The state organ
responsible for the new orientation of TARA inverts this irony, inventing a language lesson (about the new
topical field, or subject, of the war-time reconnaissance) and the object lesson of how to relate to new archives
online performing in an exhibitionary and display function with political and cultural ends. TARA is a thing
that has a visibility that has become exposed through an index of interpretation coding and ascribing virtual
value to the standing reserve, something used for 'practical purposes' but without 'strict definition'.

\(^{50}\) This is an allusion to Walter Benjamin's advice to politically "explode the continuum of history" in his (1939)
*Theses on the Philosophy of History*, XX I invoke it to trouble the automatic assumption that alternate archives
contra dominant authorities or dominant institutions still subscribe to the same relationship with using traces of
the past and arranging them in order-bringing histories. This connects to earlier remarks regarding Briethaput's
notion of delayed disintegration.
of standing-reserve\textsuperscript{51} of materials from which a past yet-to-be-elucidated can be recuperated, recycled, and enframed.

**The Archive and the Technology of History**

In the context of a standing reserve, the writing of history is the technology which begins to bring order to the reserve. According to Pierre Nora, the amalgamation of memory and its transformation into history—where “History” overwrites the mnemonic acts and practices of lived memory\textsuperscript{52}—is a result of the increased incidence of the act of archiving and the trend using all and any archives in order to grasp at whatever can be grasped\textsuperscript{53}. Nora writes:

The imperative of [the] archive is not only to keep everything, to preserve every indicator of memory—even when we are not sure which memory is being indicated—but also to produce archives...record as much as you can, something will remain. (Nora 1989: 14)

Nora expresses cynical dismay with this scenario: while the creation of archives may well serve to retain and protect utterances and materials and exchanges, archives are themselves spurious and innocuous attempts at consolidating the need for a cultural technology of

\textsuperscript{51} This is particular idiom culled from Heidegger, specifically from the essay, 'The Question Concerning Technology'. Heidegger cautions against the 'enframing' of technology that is problematic, destructive, and ultimately devastating. Conceptualizing that which technology brings forth as simply a 'standing reserve' is too utilitarian and irresponsible an approach to 'being in the world', to which cultural subjects are beholden. Calling the archive a "standing reserve" is a way of expressing the paradoxical and recursive legitimacy of the archive: it holds onto that which is valuable but is only valuable when identified when used or activated. Yet, that which cannot be activated is not there, therefore creating a necessity for valuing the archive itself. The archive, institutionally, triumphs either way. The point of alluding to Heidegger is to establish that the archive is a technology that enframes a standing reserve of materials in holding for future perusal and use, yet a use that is entirely unnecessary and paradoxical if only to justify the archive's own necessity and existence as a formal cataloguing system. Just the same, the archive provides a map in that is has a capacity for the provision of this standing reserve. It is the place to "start looking".

\textsuperscript{52} Nora is voicing a lament for the decay of memory. For him, history is merely an image, a residue of the lived, similar to Baudrillard's lament for moral decay in the age of the image. Nora's conceptualization of history and memory is an epochal argument: we live in a historical period where the conceptualization of these sites presupposes a shift into a new era, a technopraxis, where media delivery systems and circulatory pathways and hypermediacy and immediacy (time) contribute to an acceleration of history; a future-past.

\textsuperscript{53} Recall here Richards' argument about the historical and cultural development of the Imperial archive, with its attempts to push holding and organizing to an impossible, comprehensive, and paranoid end in order to consolidate the power of empire implicit in the arrangement and activation of knowledges.
memory. Nora adds that “[t]here are sites of memory (lieux) because there are no longer real environments of memory (milieux).” (Nora 1989: 8). TARA, with a website itself, is one of these sites. The environment of memory is now a place of contingent interfaces that are site-specific. While the archive is a kind of bulwark against the fear of forgetting—the politics of amnesia of Huyssen as feared by the British heritage organ—Nora is disturbed by the recourse to memory as simply being referential, as being constituted merely by accessing a site.

“History clutters us and occupies our memory.” (Foucault 1969: 216) This is Nora’s primary concern: under the sign of history—“What we call memory today...is not memory but already history” (Nora 1989: 9)— memory as a spontaneous thing, as that which informs the environment of lived experience, is converted into history for political purposes:

At the heart of history is a critical discourse that is antithetical to spontaneous memory. History is perpetually suspicious of memory, and its true mission is to suppress and destroy it....History’s goal and ambition is not to exalt but to annihilate what has in reality taken place. (Nora 1989: 9)

Here, history is a subsuming technology, trimming off contradictory bits to make the account of events more streamlined, more easily accesses; in a word, more convenient. Nora writes that “[w]hat we call memory is in fact the gigantic and breathtaking storehouse of a material stock of what we would be impossible for us to remember, an unlimited repertoire of what might have to be recalled.” (Nora 1989: 13) Actualizing this storehouse and coating it with a “dutiful” residue is the annihilation, part of the exergue.

TARA—in developing the topic of aerial reconnaissance for treatment in exhibition—generates another vector of historical consciousness, essentially adding and supplementing the splintering clutter of knowledges and connaissances. It is as if there are too many histories, too many archives. While determining where the sacred shrine of reverence for the past resides is indeed relative and contingent on what optics, what politics, and what
kind of cultural relations and connections are imported and invoked, the conservation of
everything and the lurking threat of traces disappearing is perhaps more significantly the
pressure fuelling the state of the archival revolution. The state uses the recovered
implements of war as the contents of choice for a new commemoration project
“signposting” memory in a logistics of perception all its own.\textsuperscript{54}

The Topic of Remembering Aerial Reconnaissance

A Web search for “aerial reconnaissance” turns up the TARA webpage first among
listings. The catalogue of the Web, or at least the Web portions ordered and contained by
the Google search engine, recognizes—in reconnaissance—the autonomy of the topic; it
surveys the Web and like any organ, organizing the results. On the Web, “aerial
reconnaissance” constitutes a searchable topic, a thing available for reconnaissance.

Within the multiple bodies of knowledge that constitute—or, can be catalogued
under—the heading of “Second World War”, the historically-oriented topic of aerial
reconnaissance occupies a slot and maintains a new categorical presence. The British
Imperial War Archives contains a multitude of material; yet while its catalogue is searchable
online, its holdings are not available. Searches through the National Archives turn up
holdings for Allied Central Interpretation Unit, as well as its historical predecessors and
related bodies. Included are reports and some photographs, as well as the associations with
the legacy I outlined earlier.

\textsuperscript{54}Nora offers further insight: “Like war, the history of lieux de mémoire (site of memory) is an art of
implementation, practiced in the fragile happiness derived from relating to rehabilitated objects and from the
involvement of the historian in his or her subject…History has become the deep reference of a period that has
been wrenched from its depths, a realistic novel in a period where there are no real novels. Memory has been
promoted to the centre of bereavement…” (Nora 1989: 24). The war metaphor again suggests the integral role
of supply and logistical management of the implementation of resources. For Nora, those “resources” are
patch-work attempts at the “memory arts” on behalf of a state suffering in attempts to harmonize a field of
imagined national collectivity and rhetorical constituency. See also van Wyck 2002: 107 for more on Nora,
Francis Yates, and the waning of memory arts.
My point is that currently there exists an open, pre-conceived slot for “aerial reconnaissance”. It is like a sub-genre of the larger generic body of the topic of war-related knowledges; echoing Massumi’s remarks, aerial reconnaissance is perhaps less a matter of a singular and specific body of knowledge and more an instance of the becoming-generic of a singular thing, of one heterogeneous and distinct thing encapsulated. It is one more sub-heading under an infinitely differentiating imperative contained by a master rubric that fixes its relevancy. Indeed, there is a multiplicity of contexts and approaches within which the war can be recollected, studied, interrogated, historicized, and commemorated. Aerial reconnaissance and the historical, military, and political issues it activates and induces—especially in a larger and intended popular and public cultural context—gains legitimacy as one aspect amid the history of the war.

While bomb-disposal agencies have been using TARA’s holdings for almost forty years, its new role as a monument to the war and to the development of war-time reconnaissance is significant because it explicitly foregrounds the industrial development of an apparatus increasingly relevant to the waging of war. Virilio’s narrative of the emergence of a logistics of military perception describes the historical moment TARA presents and represents, commemorative function for pilots’ deaths notwithstanding. TARA commemorates a conjunctural moment that saw the demands of generating war-time intelligence intersect with the continued development of air photography perfected for military purposes.

The integration of technologies—industrially, technically, culturally—is characteristic of how history is “narrativized” to be recounted, told, and measured. The narrative of the industrial march of new weapons systems—here a perceptual weapons platform—subscribes to the positivistic and teleological development of military capability.
In connection to TARA, The Michigan Institute of Technology (MIT) maintains a webpage through its own virtual archive detailing the integration and development of flash-bulb technology in response to demands for performing reliable night-time aerial reconnaissance. MIT’s current research project concerning the development and design of aerial robotics is worth remarking on, if only to point out one direction of research undertaken at the institute. As an institution privileging the current development of remote or automated detection-sensing platforms, the relevancy of the institution’s project explains the memorialization of past military collaborations: celebrate its relevant role and its specific heritage with respect to meaningful technological applications in a “progressive” historical narrative.

A problem during WWII was the proper illumination of target sites to be photographed in both reconnaissance and damage-assessment sorties. In an example of the cross-pollination of “seeing” and military technologies, one of MIT’s then-researchers, Harold E. Edgerton, was able to implement his stroboscope and high-speed Strobac flash-units, which he had developed for illumination in the analysis of scientific and industrial problems.\(^{55}\) The MIT site commemorates the combination and convergence of a pre-designed surveillance mechanism with the surveying potential of aerial flight and photography; it celebrates the technical know-how of MIT (in collaboration with the U.S. military) to anticipate “the clouds of impending war”, framing the prolific legacy of Edgerton as a “vital contribution to Allied victory”. (MIT 2002: 1)

\(^{55}\) The documentation of the coupling of aerial reconnaissance and illumination techniques and technologies at MIT is a part of the Harold Edgerton manuscript Collection, a smaller set of records in the MIT Archives. Edgerton was a prolific MIT researcher, himself monumentalized it seems. The reconnaissance-related material comes out of an online exhibit “World War II Night Reconnaissance Photographs” as part of the MIT Archives and Special Collections. See <http://www.mit.edu>.
figure 4.1  Vertical Aerial Photograph, Nighttime Aerial Photo Illumination Exhibition
Edgerton Manuscript Collection, MIT Archives and Special Collection
The technical-development narrative is accompanied by photographs. It documents the ground from an aerial perspective. The caption from the MIT site reads as follows:

The nighttimes aerial photo seen above (now declassified) shows the destruction of a bridge and disruption of rail connections somewhere near the German Gustav Line between Naples and Rome during the five-month Battle of Monte Casino in the winter of 1944. The Germans' dogged defense of the Gustav Line slowed the Allied advance up the leg of Italy and led to cancellation of plans to launch an amphibious invasion in the south of France. Note the clarity of detail, the frozen motion of the plane's rapidly spinning propeller, and the numerous craters from bombs that fell short of or sailed beyond the target. The image fades to obscurity at the corners and edges, defining the limits of the flash’s area of effective illumination.

The photograph announces its own production, clearly rendering the airplane—propeller frozen—and the primary apparatus responsible for documentation, for “seeing” prior to the interpretation process. The clinical gaze of the photograph attests to the celebration of the implementation of such a technical marriage in the commemoration of an apparatus.

**Peddling Value and Projecting Knowledge**

*virtual adj 2 Optics relating to the points at which rays would meet if produced backward*

The illumination metaphor is easy to extend: MIT recognizes the need for illuminating, in commemoration, its contribution to the development of aerial reconnaissance. Similarly, through the historical and commemorative imperatives of the National Archives, TARA represents an appraisal and an investment: the collection is worthy of maintaining. It has been deemed as having an enduring value, both as a record of military and industrial record, and as a historical and mnemonic device promoting the potential for a larger cultural and historical imagining concerning the heritage of the war. As mentioned above, the notion of an enduring value signifies both the relevancy of an inventory in relation to the conception of cultural and historical heritage; and, further, allocates the practical energy and labour required to ensure endurance vis-à-vis electronic and digital methods of preservation.
Archivists Maygene Daniels and Timothy Walch, writing about efforts to determine the intrinsic value of an archival collection, suggest the establishment of tests outside the guide of provenance as to whether or not collections demand protection and further investment. Though their publication is dated (1984), their thoughts are consistent with some of the more conventional approaches to the establishment, maintenance, and management of archives. They lay out what is essentially optics for the archive—how the sensing of appraisal occurs.

Permanent value consists of a specialized criteria, most of which can be applied to TARA not only as an archive but as an organ of display. Following the archivists, permanent and enduring value extends from: “significant examples of form” (TARA as an moment of emergent development of aerial photography); “aesthetics or artistic quality” (the uncanny style and substance of the photographs); “unique or curious physical features (TARA as scaling time and space, as miniaturizing landscapes for consideration); “age that provides a quality of uniqueness” (TARA as initially generated during the momentous event of the war); “value for use in exhibits” (TARA as anchoring and grounding a new trajectory in the production of a dominant version of historical consciousness) (Daniels and Walch 1984: 98-99). The last possible value is again amplified because of TARA’s image based contents: they are seen and supposedly, as such, easily “read” and encountered. TARA’s new virtual home at Evidence in Camera is the preferred mode of endurance.
A Brief Comparison of Virtual Archives: TARA and the Newton Project

Institutional strategies to maintain the so-called enduring value and enable the virtual archive are evident in another recent virtual archive project. A recent Globe and Mail article detailed institutional moves within the academic community to make available online the works and writings of physicist Isaac Newton. The Newton Project provides some instances of comparison for TARA. Newton’s persona in popular culture and history—the apocryphal story of the apple and the “discovery” of gravity that installs him as a popular historical icon who mythically signifies the enchanted magic of science—is transfigured into a popular discourse, a topic not only for scholars of history and physicists but for an enquiring public as well. Ostensibly, the project is somewhat revisionist: its goals are to make available the social and culturally-oriented writings of Newton so as to reveal an alternate historical character, that of philosophe rather than the standard rendition of enlightened science scholar who designed and formulated three Laws of Motion.

TARA is constituted in a similar strategic way: the revelation of heretofore unknown materials, or materials that, according to authorities, deserve a place for public display, consumption, and consideration. Newton, like the Second World War, is a topic and the label for a body of discourses that are central of cultural and historical constructions of the most basic ideas of cultural citizenship, narratives faithfully adhered to. Adherence to the axiom of postmodern skepticism and suspicion is appealed in the sense that the new archival projects are indeed revisions, recalibrations of old knowledges available for reconsideration. Newton, when subjected to intensive research and scrutiny, becomes a figure with unexplored

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56 See Dan Falk, “The unknown Newton”, The Globe and Mail, August 7, 2004, F3. The Newton Project is a result of joint efforts between the Canadian Society for the History and Philosophy of Science and U.S. and British history-of-science associations. In the words of Falk, “[I]t is the largest and most technologically sophisticated project dealing with Newton, and one of the largest-web based projects involving any single historical figure.” The Newton Project is accessible online at <http://www.newtonproject.ic.ac.uk>.
facets, a man “with demons” concerned not only with science but with the religious
discontents of the Apocalypse and the Whore of Babylon. The revision is remarkable in that,
in its historicity, it sheds the dominant and teleological veneer of “Newton” to replace it with
a more dynamic one, remaking Newton as deep and “real”, as a contemporary of other
Enlightenment philosophers.

As such, this bid to revise and re-articulate a new Newton is filled with discursive
tension. Enabling a review and a restructuring of Newton in a historical context—to take
“Newton”, the topic, and reconstituting it/his role in the standard teleological narrative of
scientific theories of physics—certainly questions the normative historical contexts,
conditions, and processes assembled under the heading of “Newton”. Yet, in attempting to
offer authenticity, veracity, and a more comprehensive understanding, a subtle prescription
about how to recast a set of micro-histories to become History is stated. A model of infinite
 parsing and segmentation emerges. The method of finding cracks and scraping out the
residue in the seams is, in fact, conventional and the standard mode of historical production
in a contemporary context. This is to say that alternate and revisionist history with both
social and cultural bents have become increasingly the status quo practice in terms of doing
history; the grand narratives are, for all intents and purposes, always in disarray. The archive
here becomes a self-justifying organ of history rooted in the act of exposure, in display. The
deployment and refurbishing of the archival materials related to Newton allows for this and
is represented as a normative process in the context of current archival and historical trends,
i.e., New Historicism, revisionist histories.

Newton’s writing will apparently be transcribed and digitized but even more
remarkable is the presentation of images of his own notes and marginalia in books from his
library, as well as images from his original documents. The images, rather than mere texts,
lend themselves more readily to display as museal objects. TARA, as a record of a “buried” process now-excavated to revise popular notions about the war is similar to The Newton Project in this specifically exhibitionist way. The texts, as objects, are for “public” display. For specialists, The Newton Project coincides with the new version of TARA in solving problems of research; the resource is malleable and is accessible from a geographical and time-intensive distance via the Web. Yet TARA differs in that there is an assumed and intended flow of the collection outward into more diverse and un-related audiences and user-groups, this being the most-celebrated new application for the refurbished collection.

TARA on the Web: “Evidence in Camera” or Evidence of Entanglement?

virtual adj 3 Metr relating to an infinitesimal displacement of a point in a system

Derrida’s proposed threat inherent in the formation of the archive is further exacerbated by the medium of the Web. The “infinitesimal displacement of a point in a system” is what the establishment of Evidence in Camera attempts to stem and prevent and yet it is the system within which TARA becomes available. If the “system” is the conglomeration of lived, technical, and political technologies and networks within which everyday cultural encounters occur, TARA’s mandate to extend from its physically and geographically fixed and emplaced location of deposit is evidence itself of an effort to stay current, to maintain a virtual bulwark amid the variable registers of contemporary cultural practices played out across the latest new media network. While TARA’s images represent a set of processes that are beyond and external to their material status as photographic objects, the archive itself plays out in a mode of presentation. This strategy of presentation occurs prior to the representative function of the collection. The presentation is the method by which
state versions of history and memory are themselves configured to contest the intertextual and symbolic flows in contemporary culture.

Following the ancillary fear of forgetting and losing not only memories of the war but memories of the state as a relevant and functional assembly, the “History-from-above” strategy focuses on the circulatory and communicative systems of the Web, which are constituted by speed, acceleration, and immediacy with respect to the delivery and diffusion of cultural materials. The problem of TARA’s presentational mode of address, though, is that the presentation through high-speed circuits of the Web installs a version of the past as real, a representation of the past as the properly authentic “past”, a monolithic and opaque sign of the complicated processes of the aerial reconnaissance organ in its many contexts. Arjun Appadurai writes that, “The past is not a land to return to in a simple politics of memory. It has become a synchronic warehouse of cultural scenarios.” (Appadurai 1995: 30).

Further, he writes that:

The central feature of global culture today is the politics of the mutual effort of sameness and difference to cannibalize each other and thereby proclaim their successful hijacking of the twin enlightenment ideas of the triumphantly universal and the resiliently particular. (Appadurai 1995: 43)

In liberating the holdings of TARA from the exclusionary space of Keele University, Evidence in Camera mimes a populist tactic of dissemination for all. Already a state-sponsored incarnation, TARA is a universal thing, one supposed stop on the circuit of public culture. Yet, it also satisfies the “resiliently particular” in that it is a specific kind of punctuation marking the need to recall and commemorate triggered by the exhibiting and extolling of important developments as constituted in war-time technologies of aerial reconnaissance.

From the perspective of the state and the purveyors of TARA, the Web is a vessel to ensure the “triumphantly universal” aspect of the global culture TARA itself is inserted and projected into. In this way, the Web and TARA together collude to create what Paul Virilio
elsewhere calls a speed. The rate of speed, according to Virilio, is a historical agent fundamentally altering the political scenarios and cultural schemes. A speed is:

not a phenomenon, but rather a relationship between phenomena. In other words, it is relativity itself... speed is a milieu. It doesn't just involve the time between two points, but a milieu that is provoked by the vehicle. This vehicle can be either metabolic... or technical... and it governs societies. (Virilio 1997: 14)

The speed of any archive with an online conduit for access is a force because it facilitates the revolution ongoing in contemporary archival practice while subscribing to the “cannibalizing” logics of global culture. It becomes the triumphant project it purports to be all along. Speed, in Virilio's assessment, governs; it is the tool of contemporary politics and the interconnected and entangled politics of culture. Evidence in Camera provides the impetus for that governing impulse as a speed.

**The Artificial Infinite: Provenance, Intertext, and the Archival Sublime**

Despite the intentionality vested in maintaining the integrity of TARA and the Evidence in Camera website as a portal for imaginary transport into the past, what occurs is the recurring de-territorialization and re-territorialization within the context and environment created virtually in, and in interface with, the Web. The Web environment—as a web, or as a rhizomatic domain—is rhetorically premised on connection and exchange. TARA is located, in association, within a circuit of other institutions I have described earlier, institutions that lend some context and further historical insight as to the role and development of aerial reconnaissance, its commemoration, and its relevance.

The provenance of TARA is not compromised in the sense of its integrity as an apparatus documenting exchanges originally generated within the original war-time reconnaissance organ. Certainly, the collection is meticulously organized at Keele in its paper, files, and folders; it has been re-organized, re-catalogued, and re-mapped after the
recent push to get TARA online. Yet, the same processes that ensure this dissemination and new projection also serve as the same processes that threaten the integrity of TARA. The Web, because of its capability for interconnectivity, threatens to swallow TARA whole.

Sustaining the archival revolution online becomes entangled with problems of archival integrity in a Web context. The new constitution of the online archive enables new capabilities with respect to the labour and energy required in the act of maintenance and preservation but also locates the collection within a web, a Web that is porous and premised on heterogeneity (the ability “to integrate and absorb all other media”), *hypermediacy* (the ability of web-based media to mediate and connect), and immediacy (as earlier, the ability to confer proximity and direct access without the appearance of an mediation) (Bolter and Grusian 2001: 207-208). Consider the “other media”, other topics, other influences. TARA’s virtual mandate threatens to overrun and overwhelm itself. As I mentioned earlier, the most resonant and calamitous fall-out of the war—memory trope or not—coalesce around discourses of genocide and the Holocaust, as well as the topics of mourning, melancholia, guilt, and trauma. These bodies of knowledge are mythologized and culturally sacred, difficult to reduce, politically and culturally sensitive, problematic to define and describe. Yet, they are alternate trajectories of inquiry that arc into historical considerations of reconnaissarce. The things the history of aerial reconnaissarce has to account for—especially on the Web, where those connections can be made with other documents and materials and spurious images—is perhaps too much for TARA to sustain. The openness of the archive is an opening of a series of conceptual problems with regard to what fiction is in fact being recollected, what knowledges it is has to supplement, and what bodies of knowledge supplement and supplant it.
If the Web even begins to approach its touting as the penultimate storage medium, the recourse to all these little narrative threads connected to TARA and the narrative compiled and culminating in *Evidence in Camera* renders them merely calculable, computational pieces of supplementary data to be processed. Both the standing reserve of the archive waiting to be potentialized and the new virtual space within which the archive is accessed becomes what Scott Bukatman, working in a cinematic context in his discussion of special effects, terms “the artificial infinite.” This infinite is a kind of sublime thing to be encountered, something that can be alluded to but that is beyond consideration; the artificiality of the infinite refers to its manufacture and fashioning, to its assembled character. It is inherently spectacular, a domain of spectacle with the infinite quality of things beyond consideration, a massive abundance which requires confrontation.

This pervasive capacity to attend to things in some else-web-where is significant: affiliations and connections can be fused and broken. This movement troubles the mandate of simply proliferating an archival and institutional circuit to re-install waning markers of an imagined nationally-oriented and consented perception of the events of the war. The perspective of a nostalgic state and waning *status quo* national narrative administered and promulgated is one utterance, one option circulating in the disparate global cultural economy.

As a vessel for this emerging “mediascape” (Appadurai 1995: 38), the Web generates the most infinite and artificial sublime aspect, coming close to the “everything” of the pure archive. Bukatman writes:

> The language of consumption and the display of spectacle grounds the spectator/visitor, and hides the awful truth: that an environment we made has moved beyond our ability to control and cognize it...The

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57 Interestingly, these little threads and how they are reconciled by the master historical narrative are a kind of inverse example of Lyotard’s *differend*, that minor narrative that cannot be reconciled.

58 Bukatman draws on Leo Marx’s “rhetoric of the technological sublime” (Bukatman 1998: 278).
simultaneous fascination with, and fear of, technologies in their beauty, majesty, and power reveals a necessary ambivalence. (280)

The point about ambivalence is equally taken on behalf of the state where an attitude of indifference seems to characterize the venture, where indifference is an awareness of having to go online, of having to cultivate a larger profile, having to fill a popular frequency to maintain legitimacy in the colonization of the Web by any and every cultural image, event, or meaning. This extends to how archives and museal displays in fact carve out some form of self-sustained preservation themselves, i.e., make waves, jump into the visually-oriented realm of web content, as intertext and, thus, hypertext.

Bukatman alludes to the spectacular potential of display in visual media and this connects to the virtual archive in the moments of an extended interface: He writes:

[A]s an abundance of physical data was fitted to the epistemological desires and requirements of public consciousness[…spectacular displays [depend] on a new mode of spectatorial address—essentially you are there (even though you're not)—linked to new technologies of visual representation. (Bukatman 1998: 263)

TARA provides not only contents, but also presents a method of interaction and interface that is premised on a mode of spectatorial address that allows for an encounter with the Web; with archival materials; with a pre-figured historical narrative; and with memories of the war. The integrity of TARA online runs the risk of becoming swallowed by the sublime.

The notion of magnitude, of a sublime abundance of artifice, emerges further in a connection to popular filmmaker Steven Spielberg and his WWII oeuvre. The Spielberg connection is instructive because it demonstrates the ways in which the sharing and multidirection of influence accommodate the notion of an artificially infinite, archival sublime. TARA officials triumphantly acknowledges the role it has recently played as the master storehouse for consultants seeking to properly portray verisimilitude and authenticity in Spielberg's popular World War Two television series, Band of Brothers. Administrators

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praised the producers for their extensive use of the archive’s collection. Spielberg’s notoriety for his war-themed films—*Empire of the Sun* (1989), *Schindler’s List* (1993), and *Saving Private Ryan* (1999)—all share in their omnibus big-budget approach and their status as cinematic vehicles driven by a director bent on rendering History “correctly”.

In *Band of Brothers*, the “correct” account, then, was a product of the references to TARA’s holdings, used to establish, corroborate, and inform the historical facticity of the events depicted. The required logistical scale of the series and all three film productions approach the same levels of both popular appeal and critical vitriol Spielberg received, particularly for his D-Day combat opus in *Saving Private Ryan* and the Holocaust film, *Schindler’s List*. The alleged transformation into mass entertainment and the subsequent “vulgarization” (Paschalidis 2003: 13) of the Holocaust in *Schindler’s List* is one remark challenging the validity and veracity of Spielberg’s attempts to conjure and depict a compelling, immersive, hyperreal diegetic field of cinematic experience. Yet, both TARA and Spielberg exchanged and shared each other’s symbolic power, increasing popular profile in reference to the other. Spielberg’s Hollywood iconicity and his brand-power as a maker of “realistic” war films allegedly lend authority to TARA.

The films and the archive are like agents of re-enchantment, essentially re-energizing historical consciousness about the events of the war. Consider images 4.2, 4.3, and 4.4 as both a connected and progressive line of derivation. The iconic Robert Capa photograph is held as a realistic recording of D-Day events at Omaha Beach. The aerial photograph from

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50 TARA’s “Who Are We” section at Evidence in Camera specifically cites the Spielberg connection. Many of the press releases cited the same passage.

60 The issue of representing the Holocaust is at the centre of debates in the academy around mourning, trauma, and the politics of memory in a popular cultural context. Most detractors question the problematic ethical dilemma mobilized in Spielberg’s filmmaking and his technique of attempting to realistically duplicate and authentically depict the events of the war, either in *Schindler’s List*, in the D-Day combat extravaganza, *Saving Private Ryan*; or in the similar *Band of Brothers*. That Spielberg was touted as “coming of age” as a director by “taking on” the Holocaust—fashioning it as an object to be worked over for his gain—is a point of contention.
figure 4.2 D-Day, June 6 1944, Evidence in Camera, TARA
figure 4.3  Omaha Beach, June 6, 1944, © Robert Capa

figure 4.4  Film Still, Saving Private Ryan
TARA is vertical, removed from the horizontal frame but still figuring a record of the same ongoing operations below. These two images anchors a third—a still from the opening sequence of *Saving Private Ryan*—which signifies and communicates the events as they actually occurred for popular consumption. The film's overture is the orchestral cinémaverité inspired opening sequence of the D-day landing at Omaha. The aerial photograph, seemingly sterile, in fact records in extraordinary relief the traumatic fallout of the battle; the realist photography verifies expectations about what constitutes the practice and production of war photography. The *Saving Private Ryan* still re-fashions and articulates the experience in cinematic simulation. The circuit formed by these three renditions—as I have arranged them—can "compel us to think traumatic memory and entertainment memory together as occupying the same public space, rather than seeing them as mutually exclusive phenomena." (Huyssen 2000: 29) Regarding the informatic repository of the archive and the supposedly privileged "reality misses the point in a contemporary cultural context. Dismissing and eschewing images due simply to their simultaneous entertainment value misses both the emerging cross-pollenization of popular entertainment and memory practices and, in TARA, the ways in which visitors are enabled to perform the burden and responsibility of cultural commemorative and communicative practices. The demands to confront the abundance of memory- and history-related material approaches sublime proportions; the materials meld together.

**Naive "New" Web Opportunities**

*virtual adj 4 Computing not physically existing as such but made by software to appear to do so*

The appearance of TARA and its emergence as I have been describing it locates a perspective, then, that embraces the opportunities of the Web despite the potential risk of
becoming swallowed and subsumed. The Web is both the medium and the vehicle. Yet, Web and Internet theorist Wendy Chun cautions against the opportunistic and emancipatory Web narrative. Her component-oriented approach to the Web and its offer of interface allows for the contention that the ability of TARA to fill the frequency of the Web and exploit its access for more popular uses of archives is a process that memorializes a narrative of integrating technologies rather than the legacy and heritage of war-time contributions.

Chun is increasingly interested in the how the Internet makes people vulnerable through increased Web use with respect to feedback loops; she alleges the tracking of this Web use constitutes the latest contemporary mode of social surveillance, specifically at the level of software (i.e., cookies, internet protocol files). While for Chun, “vulnerability does not mean endorsing paranoid narratives of global surveillance,” (Chun 2001: 4), she is confounded by the automatic embrace of Internet technologies and applications, and she attempts to scrutinize and problematize the varied uses of the Web that unfold alongside the principled tenets of free sharing and exchange. Chun anticipates the Web’s increasing role as a both a communications medium and cultural technology, acknowledging the difficulty of finding appropriate ways of discussing and conceptualizing the Web:

Faced with Internet’s dramatic emergence in the 1990’s, most popular and scholarly analyses have focused on new forms of subjectivity, agency, and visuality, new forms that seem to literalize various ideals and theories. (Chun 2001: 2)

Yet, she is suspicious of the supposedly enabling and empowering capability embedded in the rhetorical promise of the Internet. Rather than legitimate the promise of an idealized kind of deliberative public culture, Chun instead emphasizes the aggressive colonization of the Web by corporate interest and capitalist consumer culture.
Chun is dismissive and skeptical of the Web narrative of supposed immediate and
ingstant capacity of gain access to information—visual, graphic, textual, aural—online.

Against this naiveté, she writes:

The erasure of software and hardware underpin theoretical understandings of digital networks that declare that
distances are now erased and that all types of media have become the same. Communications are not
instantaneous, nor are they unfailing—“the last mile” problem combined with network traffic means that we
experience “space” as an often unbearable space of time. It also means that depending on your type of
connection, the broadcast media, such as radio and television, may be “more available” than the supposedly
always-available internet. As well, sound video, image and text may all now be stored digitally but this does not
mean that they are all now all the same, since they are all formatted differently. Photoshop for instance will not
open a sound file, not even as “raw data”...Thus [in] engaging closely all four layers of digital media—
hardware, software, user interface, and extra-medial representation...my point is thus not to condemn the
Internet but rather to deal with the ways it literalizes and explodes enlightenment—from the blinding light of
the other to the soft artificial light needed for contemplation. (Chun 2001: 4)

Chun’s sober reflection and indictment can be extended to the rhetoric around TARA and
Evidence in Camera in relation to the availability, ease of use, and the value of perpetual access.

If, as above, I have in parts described the appearance of TARA as a location to be
encountered in interaction and emergence, Chun’s brief but concise insights alter in ways
how to go about conceptualizing the virtual offers of the archive.

The progressive direction and development of electronic, digital, online applications
is inherent in the capabilities offered most basically in the virtual archive. TARA rhetorically
capitalizes on the conflation of the four layers of digital media in two ways. First, regarding
the original use of the collection, the photographs were, in their original context, dependent
on how they were developed and rendered so as to be “seen” as proper reconnaissance
records. The Evidence in Camera homepage offers little explanation regarding the
reconnaissance images as software, the computational “hardware” of interpretive schemes,
and the interface and extra-textual demands of what constitutes “proper” interpretation (i.e.,
which targets are militarily, politically, and politically and practically expedient). Furthermore,
in the context of actual Web presentation, the conflation of those layers enable the shift of
TARA from physical archive to a virtual archive premised on musealized, attraction-like exhibition.

In the area of actual physical labour, TARA's portal and interface reduces the intensity of work necessary to locate and access holdings. In terms of geography and space-binding properties, Evidence in Camera via the Web vehicle annihilates space: the space of physical travel to access the archive and the space required to store materials. Virtual storage “frees” up space, allowing records to be removed to some even-more reclusive and permanent storage location. The collection is available by remote control, and by remote sensors—literally, remote users and visitors—removed in private sterility from the poetic dust of folders. Yet, newly oriented toward a new public audience in release and dissemination, how many visitors would have patronized the archive at Keele? The attractiveness of the website is the ease, efficiency, and ability to virtually handle materials; namely, to allow and accommodate a temporary but durable moment of encounter for mainstream public visitors curious about the uncanny traces of a war-time past.

The archive, keeping up with the demand of staying current, is reformatted, essentially remediated\(^1\) and re-articulated for new, more accessible use. I have already outlined the strategy of attracting and cultivating users, visitors, and citizens by seizing and remediating the discourse and topic “Second World War” and infusing it with new meanings by recycling old residues and inventing a new historical topic within the domain of the history of the Second World War. The hardware—network capabilities, video cards—built into personal desktop computers and the software of web browsers and visual imaging programs like

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\(^1\) In *Remediation: Understanding New Media* (2000), Jay David Bolter and Richard Grusian outline a theory of remediation, arguing that new media technologies are less new and more accurately agents of remediation; that is reformattting at the level of form and delivery for mass use, a veritable refashioning of antecedent forms of new media. Their theory is historical in the sense of attempting to caution against the embrace of “great divide” theories of media development and emergent in communication contexts. See, “Theory”, 21-84.
Photoshop, or even the most basic viewers available (like the package-included *Image Viewer* in the recent Microsoft XP operating system) allow interface the ability to transfer photographs in digital form from the website of the archive itself to one's own "desktop" to view, manipulate, and alter. The attraction of TARA is in part the ability to "play" with the image, to virtually handle it like the interpreter. Offering interactive entertainment, the interface allows users to "work over" photos while being able to escape the slow, mundane process of serial comparison and target analysis that characterized the original material mode of processing and production during the war. Visitors using the web interface will find the collection scalable and modular. This amounts to part of TARA’s moral defense of *Evidence in Camera*: arranging encounters with a mass public culture in periodic and extended intersections with the basic abilities of visual web technologies so as to amplify the importance, case, and role of the archive.

So, besides the war and the mandate of the archive itself, what is monumentalized in TARA online is - like MIT - the integration of two formal systems: internet-web technology and the archive. *Evidence in Camera* is indicative of a utopian and imagined origin that both commences because of and is commanded by the state-organ behind the creation of TARA: the capability to make relevant and mutable and useful the archive’s holdings. That is the memory established, and the energy metaphor used by Richards to describe the archive as a place for the imagined comprehensive documenting of morphology and metamorphoses of knowledge—a place generated by paranoia and threat—reconnects to the waning role of the state to matter, to recuperate and redeem itself. The heritage organ is refashioning and reconstituting its own grand narrative at the limits of visual culture and through virtual

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62 Lev Manovich attempts to classify and define what qualities make and qualify new media as “new”. He cites the scalar and modular properties of media as contributing qualities to the classification of “newness”. See (2001) *The Language of New Media*, specifically the chapters “How Media Became New” and “Principles of New Media”, 21-53.
archival technology, establishing a new resonance transferred from the energies stored and released in “new” forms.

**TARA and Failure in “No precise vectors of distribution”**

So, virtual TARA has no “precise vectors of distribution” but is purportedly and rhetorically open for business, the monument always available. Yet, there are two specific “blockages” to the TARA’s intended offer of historical and commemorative experience. The act of viewing the collection is based on a rather complicated and less-than streamlined method of acquisition. Initially, TARA users were instructed to connect an external map co-ordinate website, Multimap, which offered a search engine that translates requests based on specific addresses to obtaining coordinate locations. These locations can then be cross-referenced with TARA’s collection and a list of existing reconnaissance sorties that correspond to the coordinates is generated, upon which sets of photographic coverage can be accessed.

The necessity of consulting two or three different websites in order to locate and find the desired set of photographs does two things. First, it creates a bulge in the seamless offer of easy access; as an extra dimension of labour and navigation, the mediation of access discourages the use of TARA. Consider things like modem speed, processor size, RAM, cache, bus speed—all electronic and digital parts of a computer running the browsing program through which TARA is accessed. The image-intense exchange and the searching can tax the capability of a computer; slower, older computers without sufficient software or hardware cannot perform the tasks a visitor would like. The searching process also necessitates some knowledge of mapping coordinates, another hurdle to gaining access. The labour required to gain access to specific runs or sets of cover and images perhaps. In some ways, part of the intended pleasure of using TARA, before the apprehension of the
Figure 4.5  Search Instructions, Evidence in Camera, TARA

Figure 4.6  Sortie Plot Search, Evidence in Camera, TARA
photographic images themselves, is the labour of getting them. Yet, in this seems counter-intuitive the organ’s claim of immediate and easy access to the collection online.

Regardless of the searching process, TARA suffered initial problems. The new archival technology manifested itself first in the form of the accident. Amid the fanfare, something not unpredictable occurred: Evidence in Camera’s search engine failed. Early on, during the inaugural day of release, the interface—bandwidth, software, the main server, all the component parts—designed to provide the reconnaissance of much-anticipated photographs failed. The accident, following Virilio, was not much of an accident at all; it was primal, basic, given. The elegance of TARA’s new web solution to exhibit its holdings, and for the anticipated function and role the archive could play in a public context, was actually
consolidated in breakdown. Just as aerial reconnaissance and surveillance attempted to saturate the ground being surveyed—as did the later area bombing campaign—the website was saturated as well, this time by eager historical tourists hoping for a peek into the workings of a mythologized technology and its role in a conflict amplified by the totality of destruction the reconnaissance organ coincidentally contributed to producing.

The system “working” is not so much the issue as is properly predicting when the system will break; mode of destruction precedes production. The consonance between didactic and political emphasis projected and the topic used to perform that projection—aerial reconnaissance—is ironic in contextualizing this particular moment of failure. The public culture organ was overrun; its designers failed to establish the necessary parameters for access to the zone of holdings. The archive, like reconnaissance, is where we recognize and re-know and object or thing or space, where one can establish and re-establish what has passed. The exercise is one of probability and assessment based on the point of observation available.

The failure suggested the value of TARA’s new form: the intrinsic value of the collection affirmed by demand is conferred on the archive by way of the breakdown of the search engine. Yet, that the breakdown occurred during the first day suggests perhaps that the content itself was not the draw, though its war-based specificity served as a novelty and certainly attracted visitors; rather, the interface, the opportunity to encounter imaginary transport, to participate with the presentation of iconic and momentous moments in a sort of history amusement machine designed to fascinate and duplicate the experience of the act

63 Following the initial expression of outright apology, TARA’s homepage currently reads as follows: “Although we are currently reconstructing the website, you can view a collection of D-Day imagery in our Exhibition Area, and we are compiling other exhibits to go online in January. An exhibition of five posters is also available to view and purchase. An online shop for purchasing imagery including those that are on the website will be available in late February.” (August 2005, TARA, “Who Are We?”) The establishment of a semi-permanent exhibition using images of the penultimate event of the war—at least, in Western historical accounts—now anchors the collection.
of interpretation. Demand becomes a threat in this instance, something to predict and respond to with a sustainable and appropriate strategy.

The potential offer of making meaning through the archive, the browser interface, and real-time and automated ability to access the collection at any time was turned on its head. The online revolution, stretched thin in a moment of fulfilling its mission, instead reveals inability, which paradoxically reinforces the impetus or motivation to perfect the very organ of provision and supply which has broken down and failed. The need for the clean dissemination of consigned materials is regarded with greater importance.

To fix the problem, which still hinders the archive, TARA has installed a temporary gallery, the set of photographs representing the archive-established category of “D-Day”. The gallery is comprised of images that denote and connote the mission of the archive—to transmit and make useful the collection—and present in exhibition the “highlights” of the standing-reserve. While the specific index of determination and selection is unknown, these particular photos have to stand as the collective essence; they trim the collection and its historical basis into a streamlined and digestible generic event.

**Last Metaphor: Monument to the Perceptual Arsenal**

TARA and *Evidence in Camera*, a staple of the revolutionary state of artifice of the archive, is a perhaps most appropriately a perceptual arsenal. The arsenal and the archive are relations in the art of storage and the art of supply and deployment; they maintain, in the administration and transmission of supplies, a frequency amid the fray—in battle and in the intertext of contemporary culture. There is a consonance between archive and arsenal: both are, traditionally, abject places and both operate under the functional and causal rubric of

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64 The exhibition page actually displays photographs “taken” by specific pilots during their respective sorties. See <http://www.evidenceincamera.co.uk/exhibits/> for the images.
provision. The virtual archive is an organ designed to address and assuage the threat of waning faith and dominant state-sponsored sentiments about the Second World War. After all, TARA is incidentally the organization of actual military information and intelligence fashioned as a route to historical and cultural heritage.

The virtual archive hovers between amusement and relevance; between entertainment and some feigned sacred commemoration of loss in the age of war, an offer of spurious images, representations presented as reality. The offer: See the war like never before. The aerial perspective is doubled by the capability of the virtual archive to allow that seeing to occur from a vantage point embracing a rhetoric that is aerial, that dispels the integrity of the horizon where history, memory, and amusement are conjoined. The compression of space in relation to the archive—that is, the eradication of labour of travel and the scaling of the geography of a visit, the efficiency of online access, and the “searchability” of the catalogue—comes at the expense of an expansion and parsing where horizons disappear, where TARA is entangled with other discourses and bodies of knowledge despite and in spite of its best institutional intentions.

Keele University, together with the National Archives, expounds a kind of infantile faith in the potential ability of TARA and Evidence in Camera to reach would-be users outside the pre-figured expert groups always-already patronizing TARA. The policy infantilizes the potential population of users, assuming a desire for the pleasure of historical associations and affiliations with a particular politics of heritage and memory. The plenitude provided by

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65 I am drawing here on Lauren Berlant. In her “Theory of Infantile Citizenship”, writes in an American postmodern context about the technology of citizenship. She locates and maps the play between faith in representations of national historical narratives and the immanent cynicism and disavowal of the burden of patronizing those narratives for the sake of the immediate financial and cultural concerns of everyday life, “the dialectic of infantile citizenship and cynical reason.” (29) Berlant emphasizes the conglomeration and convergence of older forms of national self-identity, cultural literacy, and leisure in a global cultural economy that “continuously reacclimates consumer identifications during structural transitions in national and international public spheres.” (30)
the heritage organ is premised on a perceptual battle with the infinite and artificial plenitude constituting mass and popular public culture. TARA essentially operationalizes a kind of pilgrimage, pushing a pedagogical and didactic lesson in historical knowledge, consciousness, and awareness.

Further, TARA anticipates—in hoping for users to justify its own mandate—the patronage of both national and global citizens who reside beyond categorizations of some pre-defined interest group. In cultivating a concern for the commemoration of war-time actions and exhibiting its holdings, TARA memorializes itself, its integration of new media technologies, and its role as still maintaining a pertinent presence in the cultural and political fields of everyday life, or at least in and across the cultural citizens constituted by a global cultural economy where the “audience” is up for grabs.

The media and contents here are many: the Web, the technology of history, the topic of the Second World War, aerial reconnaissance. The artifice of the archive, in conglomerating these mediums and contents, is finally the most significant. If the medium was the message according to Marshall McLuhan, Jean Baudrillard, and others, the message is that state-organs can make the medium matter so as to enable a meaningful encounter with materials and contents so as to disavow the traditional authority and exclusion of the physically-emplaced archive. The ability to bend the medium to the needs of the heritage organ is what is most resonant: the provisional authority, the organ initiating the logistical supply, is what matters. The heritage organ itself becomes the “monumental edifice” (Nora 1989: 11), the object in which infantile faith can be had by both the state and the prospective audience addressed.

So, spectacle, amusement, and the monumentalization of the Web archive as an exhibitionary apparatus converges around the state of artifice of the archive. Virtual TARA
is both transformed and in transition, while transforming how History is to be stipulated, iterated, interfaced, and encountered. Carolyn Marvin, a cultural historian of technology, writes:

Media are not fixed objects; they have no natural edges. They are constructed complexes of habits, beliefs and procedures embedded in elaborate codes of communication. The history of media is never more or less than the history of their uses, which always leads us away from the social practices and conflicts they illuminate. (Marvin 1989: 8)

The conflict illuminated is an attempt at the re-casting of edges, a fight for a perceptual frame and a method of display. Neither TARA nor the cameras capturing aerial images are neutral: reconnaissance always implies an contrived aim, a search rather than some idealized and open “finding”. That is the kind of mediation TARA implicitly attempts to provide; as an organ of history and heritage, the artifice of the archive itself is the process that is becoming memorialized, monumentalized, and commemorated.
Conclusion
Allocating Apprehension About the Invisible

The unprecedented acceleration of technological innovation and circulation have created conditions in which consciousness is more than ever inadequate to the state of technological development, its power to destroy and enslave human bodies, hearts, and minds. At the same time, new media such as video and the digital media have expanded the formal and material arsenal for imaginative practices and have opened up new modes of publicness that already enact a different, and potentially alternative, engagement with technology... This antinomic situation [...] requires understanding the practices, both productive and receptive, of technology in increasingly overlapping yet fractured, unequal yet unpredictable public spheres. It urges us to resume Benjamin's concern for the conditions of apperception, sensorial affect, and cognition, experience and memory—in short, for a political ecology of the senses.

-Miriam Hansen, "Why Media Aesthetics" (emphasis mine)

Contemporary critical theory treats technology as a trope or representation rather than a physical reality in the world. The “machine” is not just a metaphor for a particular technology, but for technology itself. And at a deeper level, this metaphor enframes technology within a semiotically constituted field [...] for the putting into discourse of technology.... [Yet] to retain what Derrida calls a 'politics' in relation to the image[...] we must articulate [sic] technologies as they exist in a dual space: they exist at once as representations and as material opacities.

-Belinda Barnett, "The Erasure of Technology in Cultural Critique"

The most startling aspect, circling aloft in concerted attention and analysis, is a sense of apprehension regarding the yield of the invisible. Apprehending the visible is a process that necessarily occludes, obscures, and obfuscates in relation to the continued invisibility of things lurking in the problematic assembly of political, cultural, and historical concerns specific to TARA. In fleshing out these concerns in an academic way that attempts to enforce a programmatic approach, much is equally visible and invisible; there occurs in the act of apprehending feelings of apprehension at things left undone. The technologies of the archive, of photography, of the airplane, of the mimeograph, of the computer, and of a conceptual method unfolded in the assembly of critique all accommodate and enable while also implicitly imparting regulation and prevention in relation to the set of experiences and the supply of perceptions made available.

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Can TARA—as an organ of heritage, an apparatus of memory, an attraction in visual culture—be expected to tease out and offer an encounter that adequately addresses and exhaustively connects every thread, every intangible trace? Certainly, the answer is, equivocally, no; it would be an overdetermination to assume that TARA could manage the burden of even marginally alluding to each and every thread animated in whatever approach one may take in encountering the archival assembly. Yet, TARA should allude to its own careful construction; it ought to in some way affirm and embrace its original status as an operating system—a sort of hard-drive—for the supply and application of knowledge for the purposes of destruction. Further, it must acknowledge its asymmetrical hold on the power of dissemination that is disproportionate in relation to the ability to supply knowledge regarding the war. This is an ideological and ethical issue inherent of the archive: the power to name and frame and dictate the provenance and endurance of elements, arranging how they in fact come to be understood in relation to each other in occurrence. This institutional self-awareness, throughout, is absent. The voluntary and involuntary utterances and pronouncements made by the archive evade and elude this acknowledgement.

The historical rubric of moral authority and “victory”, when dismantled, appears as a durable cultural, pedagogical, and didactic technology of truth applied to govern and regulate commemoration and heritage. The regulatory role that TARA performs also has significant implications at a larger metadiscursive level: the online virtual archive is itself an interpretation of how a collection of this kind and size can function in a contemporary context. It engages with these issues, or is at least entangled with them, in spite of the archive’s own self-imposed positioning.

TARA accommodates and prioritizes a specific set of politics and imaginings that induce an idealized encounter; ultimately, the project is an exercise in response to the threat
of a radically deregulated cultural economy and the waning relevancy of a substantial historical narrative about the war. The archive’s new fluid and leaky virtual boundaries allow for simulated visitation to the traditional geography of the archive, actual archival access, and a temporality that appears immediate and transparent. That TARA eschews and effaces its highly contrived and original mode of production—revoking its operational impetus in favour of exhibiting spurious images of war-time Europe—suggests the validity of the question asked by Huyssen: “Could it be that the surfeit of memory in this media-saturated culture creates such overload that the memory system itself is in constant danger of imploding, thus triggering the fear for forgetting?” (Huyssen 2000: 28) The aerial reconnaissance images stand-in as “imagined memories” produced by an ever-mutating version of the past affected and inexorably unavoidably altered by new media and information technologies, which alter “how” memory is practiced and accessed (Huyssen 2000: 28). Though the line of inquiry here has come up short regarding actual visitors and users, it is reasonable to elicit that patrons will never entirely swallow whole the accounts given by TARA. Just as reconnaissance photographs write and inscribe war, the archive inscribes meaning as well: the habitual place of storage where timely negotiations undertaken can produce new versions and accounts of events. The archival permutation of TARA as it exists is conceptual in that it is part of a larger communicative act to mediate the process so as to enforce a specific politics of historical experience.

Emphasis, though, is invested by TARA in the potential image event, the encounter. A written description accompanying a recent exhibition of aerial photographs, proceeding under the rubric of aesthetic evaluation, reads:

Most rural homes in Western Canada have at least one aerial photograph of the farmstead. In many cases, a series of farm portraits is taken every few years, representing a complex bundle of fact and emotion that defines the home place. Despite their place as an iconic staple of rural culture, these photographs form a vast and unexamined archive...Another component of the exhibition are vertical aerial photographs...
acknowledging the utility of these vertical aerials, [the curator] sees them as found art and images of considerable aesthetic interest. (Folia 2003: 34)

The aesthetic import of TARA’s contents is startling and arresting, a virtual attraction with some equivalence to pre-cinematic panoramas now in the context of a wired visual and semiotic economy. The “found” aspect suggests further the perception of the collection: an abundant and inexhaustible set of images with a capacity to transform and convert the war’s “neurotic energy into sensory affect” (Hansen 2003: 2). This inexhaustible capacity also allows an economic and thrifty approach to heritage: refurbish old holdings in affordable ways rather than generating new venues of commemorative methods and contents. In a way, these residues are a kind of pollution saturating the new circuits of memory practice, flooding the emerging place of virtual cultural space with the “junk” of the past.

The political ecology of sense to which Miriam Hansen refers—arranged at the beginning of this chapter—gains some added weight in this context. The current ecology of memory culture requires this recycling; rumination and subsequent regeneration exploit the entropy and atrophied energy of the remains in a protracted recuperation of the old. Decomposition, though, is measured in the rate political safety and a dampened kind of mass cultural sensitivity where meta-narratives can be malleably re-cast as spectacle, an especially powerful process in relation to the scale of events that construct the topic of “Second World War”. TARA is an exemplary instance of the cybernetic impulse: it is assembly demanding the management and governance of energy in a system as it atrophies and decomposes. The virtual archive is a way of literally modulating the affective energy of the past. TARA is an

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66 Paul Virilio calls this pollution “dromospheric pollution”, referring to the continued “pollution” of the global mediascape by contents proliferated by speed and the acceleration of delivery. See Virilio 1997, 19.
67 Marianna Torgovnick recent work identifies the prolonged and inherited affect of the Second World War's cataclysmic events by outlining the symbolic and cultural weight of the war in terms of its role in contemporary consciousness. See (2005) The War Complex: World War Two in Our Time. Chicago: University of Chicago Press.
actual “settling up” with the past, a confirmation of how that past has been reconciled and nostalgically reconstituted for a contemporary mass public who experience it through

figure 5.1  Auschwitz-Birkenau, *Evidence in Camera*, TARA
figure 5.2  Auschwitz (enlarged), Evidence in Camera, TARA
figure 5.3  Cologne 1943, *Evidence in Camera*, TARA
distant historical proximity. The holdings have been mobilized, militarized in an effort to provide a bulwark through the leaky Web-archive that has a viscosity sticky with the heaviness of state-sponsorship.

Converting old energy in to new affect, the economy of visuality incites an imagined but false proximity to events that are in some ways without reference save for the actual empirical experience of things “down there”. Looking at the photographs, one knows the gnawing awareness of the impending and looming future awaiting the figures rendered and depicted a future-already-past the moment the image was seized by an intervening airborne camera. How possible is feeling it, of collapsing that sixty year hiatus? Seeing the site of Auschwitz from above (Fig 5.1 & 5.2), its neatly rendered lines and organized structures, the immensity and intentionality of the industrialization of genocide is startling as is the knowledge of realizing what was “going on down there”, what was to come, and what was not regarded with importance. What does the bombed-out rubble of Cologne feel like after a devastating saturation by bombers, where the of forty-one cubic yards of rubble per citizen—dead or alive—and the death toll of nearly 35 000 were second only to the bombing of Dresden (56 cubic yards per person; upwards of 100 000 killed) in February 1945 (Irving 1963: 211)? Neither is given much emphasis by TARA and that is the problem and this is a large part of the fascinating and affecting aspect: the reverence and awe of not being there, of relief from the historical load of these images present. Following Paul Virilio’s recent writing on the intersection of art and fear, the exhibition plays on the perception and remote experience of our worst cultural fears. The displacement of sympathy for the induction of awe and an easy surplus of gratification is troubling and dangerous. Further, as Maurice Blanchot attests, anytime one attempts to “write the disaster”, to transmit and communicate the trauma, one is left with only the text that can possibly and inadequately become
“written”, an exercise in abstraction that is unable to express that phenomena it attempts to fix. Here the legible “writing” is the collection and, of course, that is the very disaster itself: the impossibility to approach war-time suffering, trauma, and loss of the absent experience.

TARA explicates a tension between the preferred and intended institutional and cultural role of the collection as a safe, sanitized object for public historical commemoration and its status and function as a set of miniature, schematic operational diagrams exhibited to memorialize the war by obfuscating and effacing the real terms of visceral, messy devastation and destruction. The archive implicitly activates questions of not only of war-related knowledge but of transmission and inheritance of what is spectacle, what should become revered, what should stir our emotions and our affect. Yet, as such, TARA enables a process that places emphasis on the catastrophe as spectacular, plying a logic of the aesthetic exhibition of things—the trauma of messy destruction below—that stirs collective cultural fears most intensely. TARA activates the legacy of technical implements of destruction, claiming and enabling them to stand-in as a potential cultural commons under the rubric of monumental and aesthetic experience. The collection, as a set of solicitations “blasted” from the past, is transformed into a culturally contextualized text that slides to a monument. Emerging from archival obscurity, the solicitations “sonorize” (Virilio 2003: 58) the domain of war-time history with another level of discursive noise dictated by the politics of dominant heritage. Rather than “speak” in silence, the archive is the hinge for a monumental publicity project, its documents now a monument.

Yet, ironically, the online archive refuses the traditional public, refuses the agora, the outside, the external lifeworld as opposed to an internalized interior private. The private terms of encounter offered by the address of virtual TARA invites interiority and access; its

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68 See Blanchot (1984), The Writing of the Disaster.
quasi-public character is facilitated further by its personal and private terms of access via browser interfaces, web technology, and the intentions and desires of visiting virtual users, who become the unwitting cultural citizens, who validate this return to the archive as a cloistered space of a different kind. Yet, the divergent requirements of the traditional public is now further splintered and difficult to assess in the context of virtually mobile and privatized technologies and practices that problematize notions of mass historical consciousness and participation. Further, “access” is contingent on an asymmetrical source of supply by the organ tasked with the “doing” of heritage; censorship, in governing what is safe to show, shifts toward a disposition of transparency, of allowing for an archive that is present and permanent but altogether disposable to the whims of trends in public and visual culture. The hegemony of the state apparatus in the case of TARA is apparent: it has incorporated and filled another available public frequency.

Like the photographs in TARA, the archive itself is no unmediated eye to the past; it also struggles, in its material assembly and conceptual constitution, against the threat of the operational logic offered by the Web environment and the logics of a deregulated and intertextual symbolic cultural economy. Further, the archive itself is never just simply a representation of something, serving as a buoy floating in discourse; TARA is designed to become an encounter of a new physical reality of memory and heritage, a technology of memory outstripping the experience of memory. It monumentalizes historical and culturally-mediated practices of looking and seeing in a contemporary context. Artifice and artificiality, then, is always the beginning of any notion of an authentic memory practice, be it in Nora’s lived environment or as a decomposed, site-specific rendering of that past. Bukatman writes that the power and pleasure of encounter derives
from these entertainments as if they were real. Visual spectacle provided reassurance in the form of panoptic power—the human subject was, after all, capable of perceiving and comprehending the new conditions of physical reality through the projection of an almost omnipotent gaze out into the represented world. (Bukatman 1997: 255)

This physical reality, as desired by the purveyors of accounts of heritage as refracted through the historical events of the collection, is a opaque thing; TARA offers a confrontation of sorts with its monolith construction, a monument fixing and signposting the way to commemoration and proper history.

The adequacy of images in the collection to anchor some ideal participatory public heritage endeavor supplants the ability of those same images to labour otherwise: thus, the archival legacy and its exhibition is also a consequence of power. Heritage is regulatory in this context, the governing of a repository that functions as “History” in an engineered, pseudo-public venue. With this kind of cultural authority to administer perceptions about the war, the archive is a symptom of control, a molding that is open and available. This notion gains increased relevance in the context of the current debacle in Iraq. The so-called “evidence in camera” magically inherent in American reconnaissance images provided the justification and pre-text for invasion and war; Colin Powell’s arguments to the United Nations was indeed the parasitic addition of words to visual text, the act of conjoining an interpretation to images in order to operationalize them in a charged political and global context. Powell’s staged performance stands as an act of supply: as an orchestration, it was one component, one logistical aspect in the larger symphony of administering militarized practices and perceptions. Globally exhibited, the hazy images of structures and features were images of the world below inscribed with war in a display that most now realize and understand to be a lame and ridiculous method of legitimizing the initiation of the series of messy events now underway.
Steven Shaviro attests elsewhere that interpretation is a means for mastering of trauma (Shaviro 1989:3), a method for affixing of specific significance to something based on an index of meaning. Trauma induces the hermeneutic impulse. The process of encountering TARA is an exercise in writing oneself into the war and a scale of trauma that is alienating and exotic and simultaneously awesome and inspiring. Yet, what TARA includes and excludes in its parameters as a point of departure for commemorating the destruction and devastation of the war remains its most salient feature. The self-congratulation TARA’s own administrators bestow upon themselves for providing what ought to matter for re-writing the terms of the massive and multiple limit-event of the war that is shortsighted. The five million photographs are not comprehensive renderings but a selective, retained batch of what is only a sliver of what occurred under the rubric of total war: the supply, the cultural logistics of perception of the memories of the war is essential. The claims that cite the authenticity of the collection de-emphasize the politics of investment in a consistent and habitual cultural recourse to technologies like the archive—and, now, the Web—in order to participate in some common legacy and heritage using technological prosthetics at a historical distance. The abjection and induction of trauma cues a hermeneutic rendering that, ironically, is ignorant because of the very surveying relief provided from above.

The permanence of the collection is far from solid. Its enduring value to anchor a signature of the history and memory of the war, though, is amplified in proliferation and dissemination, whether it is encountered or not. The opening of the archive sheds light on the past and on the terms of constituting how cultural heritage is mediated, stipulated, and construed. The process of exposure, like light on film or light reaching the archive’s shelves, now produces the archive as an electronic and industrial function of light. This “new” release is a confession of sorts: an illumination of safe materials and a legacy of an optics that
anchors a redemptive approach to trauma invoked by way of a set of images now undergoing a sort of political transubstantiation. Its indirection, though, to any number of audiences or viewers or preferred users suggests a strategy of colonizing an area or geography of heritage from a distance. The diagrammatic reliability of TARA’s photography is a visualization of light-based data. Much becomes apparent but much has not, does not, and will not.
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