

OFF-BASE:  
RETHINKING NEW MEDIA TECHNOLOGIES AND MILITARY EVERYDAYNESS

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A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill  
in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the  
Department of Communication Studies

Chapel Hill  
2014

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## ABSTRACT

Josh Smicker: *Off-Base: Rethinking New Media Technologies and Military  
Everydayness*  
(Under the direction of Lawrence Grossberg)

*Off-Base: Rethinking New Media Technologies and Military Everydayness*, provides an alternative account of contemporary military transformations, particularly in their relation to new media technologies and formations. While many academic discussions of contemporary militarization focus on its more general impacts, and the new types of weapons and warfare it deploys and makes possible, this work provides an account of some of the seemingly banal deployments of new military technologies and techniques, particularly the ways in which they construct different modes of military embodiment and military space—for example, the way new media technologies and mobile health platforms reconfigure understandings of military health or wellness, or the ways in which affectively charged robots or animals are used to change understandings of soldiering or military families. It draws on a diverse archive of policy documents, media texts, and new technologies to provide an account of how notions like resilience, wellness, and post-traumatic growth are increasingly central to military culture, and are envisioned as being desirable and achievable through a combination of new forms of governmentality and new media technologies (like PTSD mobile applications, immersive virtual environments, etc.) This dissertation develops an account of the technologies of military

everydayness, to be placed in conversation with some of the more developed discourses and accounts of the militarization of everyday life.

To Allison Schlobohm, my constant star.

## ACKNOWLEDGMENTS

Writing a dissertation is a wonderful and terrible prospect, and would have been utterly impossible without the help of so many people along the way. I would like to thank all my committee members, as well as Jeremy Packer, Kara Keeling, and James Hay for their guidance, patience, and assistance with this often arduous project, you provided invaluable support and insight. I would particularly like to thank Lawrence Grossberg for being a great friend and mentor, who always pushed me to my maximum potential, even when I didn't want to reach it. To Lisa Calvente, Lupe Garcia, Mark Hayward, and Sindhu Zagoren, your intellectual rigor and comradeship is only surpassed by the generosity and depth of your friendship, this would literally have been impossible without you. To my family, who have been there for me even though they weren't always sure what they were there for. To all my non-academic friends, particularly Amanda Stevens, Lena Kyman, and Navarre Megali, who, beyond being wonderful, provided necessary perspective and sanity. To Scott Rafferty and the Rafferties, all you need is love. And most importantly to my partner Allison Schlobohm, you have supported me in every way possible, I love you completely, and can't wait for the bigger and brighter.

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### **Introduction: The Everydayness of Military Life**

In this dissertation, I attempt to carry out a Foucauldian genealogy of the more quotidian elements of the discursive formation<sup>1</sup> constructed around the idea of a contemporary ‘revolution in military affairs’ (which I will refer to below as the RMA formation) as a way into exploring, expanding, complicating and challenging discussions of the militarization of everyday life, and the relationships between new modes of militarization and new media within a U.S. context. In brief, I am interested in mapping out the ways in which a fractious and contested discourse that has been only partially and imperfectly realized (at best) has largely been taken up as a coherent and already-accomplished reconfiguration of the US military in the vast majority of popular representations of the military, political discussion and debate, and critical academic responses to contemporary forms of militarization, in a way that often focuses on only a relatively small part of that formation, particularly new weapon technologies. I am interested in tracing the emergence and dissemination of the more everyday elements of this discourse, attempting to map out the contexts and problem spaces to which it is responding, and critically examining how adequate (or inadequate) it is as a description of the post-9/11 U.S. military formation.

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<sup>1</sup> My understanding of Foucault’s discursive formation is heavily inflected by Gilles Deleuze’s commentaries on the term, which suggests that discursive formations are always connected to non-discursive formations via “diagonal movements...[where] discursive relations become associated with non-discursive milieux” (Deleuze 10). In Deleuzian terms, this is described as the articulation of “machinic assemblages of desire” and “collective assemblages of enunciation” as two poles or tendencies that are distinct but functionally linked. This reading of discursive formations has the advantage of underscoring the material effectivities of these organizations.



Within the space of my dissertation, my way into these broader concerns will be through two interrelated questions: ‘What media and technological imaginaries do the quotidian elements of the RMA rely on, develop, and circulate at a theoretical or ‘expert’ level?’ and “How do these imaginaries get represented, enacted, or produced on the level of everyday practices and popular culture (if at all)?” The focus on everyday media technologies (such as military blogs, web videos, recruitment websites, video games, etc.) is important for me, since the majority of works dealing with new media and militarization tends to focus on more spectacular examples. While the spectacular and the everyday forms and uses of new media are not completely distinct, I am more interested in looking at the more quotidian deployments of new media technologies in imagining, enacting, supporting, and challenging the ongoing RMA. While many academic discussions of the RMA talk about its more general impacts, and the new types of weapons and warfare it deploys and makes possible, I am more interested in providing an account of some of the seemingly banal deployments of new military technologies and techniques, particularly the ways in which they construct different modes of military embodiment—the way new media technologies and mobile health platforms reconfigure understandings of military health or wellness, or the ways in which affectively charged robots or animals are used to change understandings of soldiering or military families. What I am attempting to develop here is an account of the technologies of military everydayness, to be placed in conversation with some of the more developed discourses and accounts of the militarization of everyday life.

These questions are especially vital in providing an adequate account of contemporary changes within the military, as well as the reorganization of the military’s

relationships with the nation-state, policing and security apparatuses, information and entertainment industries, and corporate contractors (private military firms, etc.). Critical discourses about these changes, academic and otherwise, often reduce this tremendously complex process to one or two key elements culled from the RMA formation, such as acceleration (Paul Virilio), automation (Manuel deLanda), securitization (Randy Martin), or privatization and the diminution of the nation-state within a neoliberal regime of power (the governmentality perspective of Henry Giroux, and most of the essays included in the Homeland Insecurities special issue of *Cultural Studies*). While all of these authors make important contributions to (re)thinking new modalities of militarization, I think what is often an unproblematized over-reliance on the narratives and images provided by the military apparatus they are critiquing sometimes skews their analysis, and prevents a more thorough, sensitive, and nuanced engagement both with the RMA formation and what's actually going on with the contemporary US military.

In exploring these questions, my focus will be on the ways in which particular imaginaries of new media structure this formation, and the ways in which new media have been involved in representing, circulating, and normalizing imaginaries of the RMA formation. In mapping out this formation, I will examine three interconnected sets of data: (1) the development of the contemporary military ideals and practices in military theory (in military publications and journals such as *Parameters*, *Strategic Studies Quarterly*, *Military Simulation and Training*, *Military Information Technologies*, etc.); (2) the ways in which elements of these discourses were structured into policy (by examining shifts in training policies, military doctrine, Quadrennial Defense Reviews, National Security Statements, etc.); and (3) popular representations of these changes (in

articles and stories in the popular press; video games like Red Storm/Tom Clancy series, *America's Army*, *Call of Duty*; military advertisements and recruiting strategies; mobile applications; virtual reality training and therapeutic technologies; contemporary war movies/television shows).

The discourse of the RMA has been the dominant trope used to describe shifts (which are, depending on the author, either actual, putative, desired, or immanent) in the organization and priorities of the US military over the last two decades. RMA typically works as both a periodization and description of these changes. In terms of periodization, the RMA is typically presented as a response to geopolitical reconfigurations after the end of the Cold War. With the collapse of the Soviet Union, the US military was forced to re-evaluate its justification, purpose, mission, and organization since it lost its principle military, political, and ideological rival. Hence, Steven Metz and James Kievet, two scholars based at the Strategic Studies Institute at the US Army War College, in a seminal monograph on the RMA entitled “The Revolution in Military Affairs and Conflict Short of War” claim that the “context of the current RMA is dominated by the transformation of the global system from the Cold War to the post-Cold War period. This shapes conflict short of war and influences the utility of U.S. military forces” (Metz and Kievet 2). The most important shift accompanying this transformation from a military perspective, they argue, is a move away from low-intensity conflicts organized around “revolutionary insurgency in the Third World” that was “viewed in general as a subset of the struggle between the superpowers.” Taking the place of this general framework for military confrontation are new forms of conflict “dominated by peace enforcement in failed states, new forms of ‘spiritual’ insurgency designed to radically alter the

ideological structure of regimes, and ‘commercial’ insurgency from quasi-political ‘gray area phenomena’ such as narcoterrorism” (ibid).

This context precipitates a move from a model of military organization geared towards confrontations between nation-states (either directly or indirectly) to a military organized to take action against failed states, fractious states, “warlords, primal militias, and well-organized politico-criminal organizations” (3). Such a dramatic reorganization of political and military space resonates with Achille Mbembe’s discussion of multifarious sovereignties dispersed amongst “geographically interwoven and plural allegiances, asymmetrical suzerainities, and enclaves” bound up in a ‘war machine’ composed of “urban militias, private armies, armies of regional lords, private security firms, and state armies” (Mbembe 31, 32). Additionally, Metz and Kievit argue that the US will increasingly work to contain conflict rather than ameliorate it, since the absence of a Communist alternative means that the US no longer needs to pursue ideological legitimacy with the same sense of urgency. All of these global factors are intensified by an American context marked by “intolerance of casualties, impatience, a shrinking military manpower base...[and] shrinking defense budgets,” to which the RMA serves as the most expedient response (1).

While there is a great deal of debate, at least within some military circles, about the causes, actuality, depth, and desirability of the RMA, there is a tentative agreement on the specific developments to which the term refers. These include:

- an acceleration of the pace of military change, which becomes characterized by sudden moments of rapid and dramatic transformation

-the notion that whoever first understands these changes can often leverage increased geopolitical power

-the increasing importance of information processing and communication technologies to 'regular' military operations (encapsulated in the doctrine of C4ISR—a commitment to Command, Control, Computing, Communications, Intelligence, Surveillance, and Reconnaissance)

- the possibility of using information/communications as weapons (infowar/cyberwar)

- a reorganization of the military (both intra- and inter-branch) into a 'network of networks' by leveraging these technologies (Network-Centric Warfare/Total Systems Integrations)

-an emphasis on technology, smaller numbers of highly-trained personnel, and precision strikes as opposed to mass mobilization (force multiplication).

These combined characteristics became definitive of the RMA, and these assumptions have become institutionalized in the military within bureaus (the Office of Net Assessment; the Office of Force Transformation) and particular initiatives within the various branches (the Army's Future Combat System; the Air Force's Cyber Command).

I will be approaching the production and circulation of the RMA as a problematic in the Foucauldian sense, an orientation expressed well by Foucault himself in an evaluation of his own work late in his career (1984):

For a long time, I have been trying to see if it would be possible to characterize the history of thought in distinguishing it from the history of ideas—that is, the analysis of systems of representations—and from the history of mentalities—that is, the analysis of attitudes and schemes of behavior. It seemed to me that there existed an element that was of a nature to characterize the history of thought: what one could call problems, or more exactly, problematizations...thought is not what dwells within an instance of behavior and gives it meaning; it is rather what allows for a step back from that manner of doing or reacting, for putting it forward as a thought-object and interrogating it about its meaning, its conditions, and its ends. Thought is liberty in relation to

what one does, the movement by which one detaches oneself from it, constitutes it as an object and reflects on it as a problem. (Foucault 117)

So my focus will be on how and why has the RMA developed as a problem? What problems does it respond to? What are the effects of its particular modes of articulation and development? What are the elements of this formation that have largely been under-discussed--for example, shifting understandings of trauma, of military health and wellness, and the increasing hegemony of the notion of resilience across a number of military spheres. As a cultural studies work it aims to be provisional--both in the sense of providing categories, concepts, and tools necessary to deal with a contemporary conjuncture, and in the sense that it is necessarily temporary and flexible, reflecting the contingent nature of the particular relations of power and articulations it is attempting to map. This orientation will guide the direction of my dissertation.

While such a question demands multiple methodologies and an interdisciplinary perspective (drawing on discourse analysis, textual analysis, medium theory, critical theories of new media, ethnography, interviews, etc.), the theoretical framework for my dissertation is most clearly delineated in Foucault's conception of genealogy, which resonates with a number of key assumptions within cultural studies. He distinguishes his understanding of genealogy from dominant modes of cultural or conceptual historicizing in two main ways. First, he argues that most conceptual histories often assume or rely on a belief in a singular (in terms of a single cause and a single moment) origin of particular concepts, discourses, or practices. Second, he suggests that they then trace the development of the ensuing discursive formations in a manner that either assumes a linear, teleological, and natural progression, often developing out of a logic inherent to the discursive formation, or alternatively, is characterized by complete, radical, and

discontinuous breaks between different moments (a position that Foucault is, ironically enough, sometimes associated with).

In the essay that most specifically details Foucault's understanding of genealogy as method, "Nietzsche, Genealogy, History," he identifies at least five significant characteristics that distinguish genealogy as 'effective history' from dominant modes of historicization, drawing on the valences of Nietzsche's use of *Entstehung* (emergence) and *Herkunft* (descent) as opposed to *Ursprung* (origins) in *The Genealogy of Morals*:

1.) *Genealogy as an understanding of actual/virtual events as the (re)articulation of singularities within relationships of forces.* Genealogy involves a radically different notion of 'the event' and 'eventuality'. Foucault's use of these terms is specifically arrayed against "an entire historical tradition (theological or teleological movement or a natural process)" (Foucault, "Genealogy" 88). Against this quasi-naturalistic and positivist understandings of events, Foucault offers four correctives. First, that events must be seen as occurring within *relationships of forces*, and are themselves interventions into these relationships of forces: "an event, consequently, is not a decision, a treaty, a reign, or a battle, but the reversal of a relationship of forces" (ibid). Second, genealogy must "record the singularity of events outside of a monotonous finality." It is necessarily sensitive to the *contingent emergence of events* which cannot be retroactively explained and justified as elements of an organically unfolding historical development. Third, Foucault foregrounds the *question of articulation*, particularly the "fleeting articulations" that discursive formations emerge from, which are later "obscured and finally lost" (Foucault, "Genealogy" 79). Attention to the occurrence of singular events within an established field of force requires a sensitivity to the fact that "the world we know is not

an ultimately simple configuration where events are reduced to accentuate their essential traits, their final meaning, or their initial and final value. On the contrary, it is a *profusion of entangled events*” (Foucault, “Genealogy” 89). Fourth, genealogy remains attentive to *non-actualized or virtual events*, and is just as interested in why certain ideas, processes, schemes, or practices ‘fail’ or remain virtual as it is in mapping the trajectory of the actualized discursive formations. Indeed, these virtualities inform and shape the actual. Genealogy traces events “even in those instances when they are absent, the moment when they remained unrealized (Plato, at Syracuse, did not become Mohammed)” (Foucault, “Genealogy” 77).

2.) *Genealogy as a theory of contingency*. It is marked by an attention to the aleatory, the stochastic, the contingent and the accidental that follows from Foucault’s definition of the event. Opposed to an “attempt to capture the exact essence of things, their purest possibilities, and their carefully protected identities,” genealogies “cultivate the details and accidents that accompany every beginning,” understanding that “they have no essence or that their essence was fabricated” (Foucault, “Genealogy” 78; 80). Perhaps best summarizing this tendency is the passage in which Foucault argues that

Genealogy does not resemble the evolution of a species and does not map the destiny of a people. On the contrary, to follow the complex course of descent is to *maintain passing events in their proper dispersion*; it is to identify the accidents, the minute deviations—or conversely, the complete reversals—the errors, the false appraisals, and the faulty calculations that gave birth to those things that continue to exist and have value for us; it is to discover that truth or being does not lie at the root of what we know and what we are, but the *exteriority of accidents* (81, emphases added).

3.) *Genealogy as an interrogation of the affective embodiments and materializations of discursive formations within the terrain and rhythms of everyday life*. As opposed to the more detached and rationalistic practices of conceptual history, genealogy recognizes that “the body is the inscribed surface of events...genealogy, as an



analysis of descent, is thus situated within the articulation of the body and history. Its task is to expose a body totally imprinted by history and the process of history's destruction of the body" (Foucault, "Genealogy" 83).

One important site where this understanding has been developed within cultural studies is Allen Feldman's work on the spatial formations of violence in Northern Ireland, where he argues "the very act of violence invests the body with agency. The body, altered by violence, reenacts other altered bodies dispersed in time and space; it also re-enacts political discourse and even the movement of history itself" (Feldman 7). Of course, Foucault's later work on biopower and different biopolitical regimes provide examples of technologies of embodiment that are not simply reducible to attempts to 'destroy' the body or, in Feldman's terms, the ongoing process of the "body's material deformation" (Feldman 9). These approaches provide potentially productive openings into exploring different regimes of embodied violence and the production of violent bodies within contemporary military formations, especially at the level of what Saidiya Hartman has called 'infravioence,' which recognizes the "terror of the mundane and quotidian" that is often obscured by the hypervisible "shocking spectacle" (Hartman 4).

An attentiveness to the mundane and quotidian is also a central element of genealogy, which seeks out events and singularities "in the most unpromising places, in what we tend to feel is without history—in sentiments, love, conscience, instincts" (Foucault, "Genealogy" 76). The specific examples he offers as 'unpromising' or 'overlooked' opens up possible articulations to work on affect and the affective (albeit in different ways and with different emphases) by authors like Gilles Deleuze, Sara Ahmed, Lauren Berlant, Eve Sedgwick, as well as to work interrogating and complicating the

notion of ‘everyday life’ by people like Henri Lefebvre, Michel de Certeau, Harry Harootunian, and Lawrence Grossberg’s efforts to map out some of the different forms of articulation between them (i.e., affect and everyday life).

4.) A commitment to the production of alternative and critical histories and knowledges, what Foucault refers to as the work of generating “countermemory—a transformation of history into a totally different form of time” (Foucault, “Genealogy” 97). This countermemory has both a ‘negative’ critical moment (breaking down, complicating, troubling hegemonic historical narratives) and a ‘positive’ constructive moment through the development of new forms of historical knowledge. In Deleuzian terms, this might be described as a becoming-minor of the historical line. This necessitates a shift in proximity and scale. Genealogy must

invert the relationship that traditional history, in its dependence on metaphysics, establishes between proximity and distance...the latter is given to a contemplation of distances and heights...effective history, on the other hand, shunts its vision to those things nearest to it—the body, the nervous system, nutrition, digestion, and energies (Foucault, “Genealogy” 89).

Concomitant with an attention to the everyday is an understanding of the imbrications of multiple scales within events and discursive formations, following Deleuze and Guattari’s claim that “everything is political, but every politics is simultaneously a *macropolitics* and a *micropolitics*” (Deleuze and Guattari 213, original emphases). It is precisely a shift in the emphasis and articulations of these levels that opens up the possibility of countermemory.

However, in his later work Foucault moves away from a purely scalar understanding of micropowers. Instead, he argues that micropower refers not to the molecular relations of power on which larger molar assemblages are built, but rather to a particular analytic perspective on power relations in general. This understanding informs

the shift in the analysis of governmentality from individual conduct to questions of the economy, the State, and civil society in *The Birth of Biopolitics*. Foucault argues this move was an experiment meant to determine

the extent to which we could accept that the analysis of micro-powers, or procedures of governmentality, is not confined by definition to a precise domain determined by a sector of the scale, but should be considered simply as a point of view, a method of decipherment which may be valid for the whole scale, whatever its size (Foucault, *Biopolitics* 186).

Rather than presenting a radical split between macro- and micro-politics (again, a position often ascribed to him), Foucault's approach opens up the possibility of mapping out their enmeshments and isomorphisms. By re-interrogating these connections, Foucault opens up genealogy as a minoritarian mnemotechnics, presenting it as a technique meant to disrupt and unsettle dominant configurations of memory and modes of remembering both by interrogating and challenging normative narratives and paying attention to alternative experiences, understandings, and subjectivities that have been elided or silenced.

Following Nikolas Rose, I would also like to emphasize that a genealogical project is not only about constructing alternative histories or generating oppositional histories of the present, but is also attentive to questions of possible futures on at least two different levels. The first refers to the way genealogical analysis remains sensitive to the range of different representations of the future and projects meant to realize particular futures, whether these were actualized or not. In this way, genealogies create "histories of possible futures" (Rose 7). The second is how an understanding that "we do not stand at some unprecedented moment in the unfolding of a single history...rather, we live in the middle of multiple histories," can help unearth and multiply the "different potential futures" latent in contemporary conjunctures (Rose 5). This opening of possible futures

is especially relevant with regard to the discourse of RMA, which participates in a broader effort to actively contain and manage the futurity of the future--that is its openness, its unknowability, its potential for difference or change (see, for example, Grossberg 2005; Harvey 2005; Martin 2007). For sedimented, hegemonic power relations, such an understanding of futurity must be constantly subjected to erasure and discredit. From the point of view of the dominant, as Derrida suggests, this type of “future can only be anticipated in the form of *absolute danger*...it is what breaks absolutely with constituted normality and can only be proclaimed, presented, as a kind of monstrosity.” (Derrida, cited in Badiou xlv) It is the task of genealogical analysis to help refigure the future as possibility and transformation through work in the present, rather than the necessary reproduction of the same, a teleological realization of broader historical tendencies, or an openness experienced as uncertain terror.

I try to articulate this genealogical approach to two interconnected intellectual trajectories within the cultural studies tradition. The first is work dealing with media materialities and cultural technologies that I associate with (contemporary) authors like Nick Couldry, Anna McCarthy, and Lisa Parks (who are of course drawing on a lineage of cultural studies work on media that moves from Raymond Williams, Harold Innis, and James Carey to David Morley, Charlotte Brunson, and Lynn Spigel). The second is Grossberg’s discussion of cultural formations, which might provide a more useful rubric for thinking about the contemporary organizations and mobilizations of militarization than the traditionally invoked ‘complexes’ (whether military-industrial, military-entertainment, military-industrial-entertainment, military-industrial-entertainment-academic, etc.).

Couldry and McCarthy's approach to media as mediaspace— which refers to media *representations of space* (spatial imaginaries), how media *reconfigure social space*, an attention to *spaces of media consumption and production*, a study of *entanglements of scale*, and how the former are all “variously experienced and understood in particular places”—is particularly useful for my project. I would like to use it to critically examine on one hand, how images of the more quotidian elements of RMA are produced, circulated, and consumed, particularly within ‘new media’; and on the other hand, to examine what types of spatial imaginaries, assumptions, practices, and configurations inform the discourse of the RMA, and how these different modes of spatiality are responded to or actively produced (Couldry and McCarthy 5-9). To this end, I would like to follow McCarthy's approach to media, which critically examines how “the diffuse network of gazes and institutions, subjects and bodies, screens and physical structures” constituting mediaspace are embodied and materialized in particular times and places, ultimately “concentrat[ing] on how media become material culture” (McCarthy 3; 9). Of particular interest to me is how these mediaspaces connect with other spatial technologies (architectural, cartographic, geological, etc.) in attempts to define, produce, territorialize/deterritorialize and manage militarized space.

To help understand how these different elements function together, I would also like to develop the concept of a military formation, a possible cultural configuration-- borrowing from Grossberg's discussion of rock formations--that would include militarized “texts and practices; economic relations; images...social relations; aesthetic conventions; styles of language, movement, appearance...media practices; ideological commitments; and sometimes media representations of the apparatus itself” (Grossberg,

*Dancing* 75). This term is meant to be more expansive than the concept of the military-entertainment complex, which usually refers to the politico-economic, ideological, and personnel convergences amongst military branches, infotech companies, and entertainment companies (e.g., movie studios, software publishers).

However, it is also more restrained than typical accounts of the ‘militarization of everyday life,’ which assumes an undifferentiated and universal dispersal of military values, logics, optics, etc. throughout the entirety of US culture. This tendency informs, for example, James Hay and Mark Andrejevic’s discussion of the “state’s mobilization of the citizen as soldier in a state of perpetual vigilance and preparedness” whose model is “the *logic of de-differentiation* associated with the network society” (Hay and Andrejevic 341). This approach, while opening important avenues of inquiry and debate, ultimately relies on establishing a set of necessary correspondences between the state, the nation, civil society, the military, the popular, and popular culture. Somehow the state (which, ironically enough, is traditionally presented as holding less power and analytic importance in governmentality studies) is suddenly able to orchestrate a dramatic, monolithic and unidirectional reorganization of all of these spheres through the figure of the citizen-soldier. How this transformation actually occurs is usually underdeveloped and seems to rely on an assumption that various state discourses (about alertness, readiness, vigilance, etc.) are simply and wholly adopted by the entire population. A more productive approach might be to examine the particular cultural forms and practices that are articulated together within the contemporary military formation, and how it in turn is articulated to other popular formations and contexts (see Grossberg, *Dancing* 132-133).

I would like to argue that the discourse of the militarization of everyday life seems to function in at least four different (and possibly contradictory) ways. In its most common usage, it gestures to the expanded presence of military personnel and technologies in everyday life. This infiltration is intensified by the increasingly rapid erosion of boundaries between the state military, police, intelligence services, homeland security and the corporate world, a process justified by linking discourses of security to a set of neoliberal policies that are now hegemonic concepts of institutional organization—efficiency, deregulation, privatization, outsourcing, markets, etc. Intentionally broad in its scope, this inflection of militarization of everyday life refers to the connections from processes as diverse as the provision under the No Child Left Behind act that opens school campuses to military recruiters and databases, to the illegal domestic wiretapping facilitated by telecommunication companies under the Bush administration, to new programs that use military Unmanned Aerial Vehicles (UAVs) to monitor US borders and cities.

These types of intervention are often justified by linking them to the second version of the militarization of everyday life. This version focuses on the redefinition of the spaces of everyday life as spaces of military risk, which must then be managed accordingly. An example of this perspective is Hay and Andrejevic's discussion of how one of the most troubling elements of the 9/11 attacks were "the ease with which everyday objects [planes, Xacto knives, etc.] could be transformed into devastating weapons" (Hay and Andrejevic 340). This, they argue, contributes to an "atmosphere of generalized risk where the most familiar aspects of daily life took on the aspect of potential targets and tools of terror" (ibid). Everyday life is presented no longer as the

space of the familiar, routine, and habitual, but as a space of perpetual potential military threat that therefore needs to be reorganized through military logics, technologies, and means.

The third level refers to the ways in which ‘ordinary’ citizens are mobilized and encouraged to actively participate in this military redefinition of everyday life, usually discussed via the trope of the new, ubiquitous ‘citizen-soldier.’ The main tasks of the citizen soldier are primarily organized around surveillance and data-mining--examples include the military initiatives such as the TIPS (now TALON) program that encourages and centralizes citizen self-surveillance (Pincus online), or Andrejevic’s discussion of the DHS ‘ready.gov’ site as a governmental technology that produces “the citizen soldier [as] the military analogue of the participatory consumer in what Dean, following Foucault, describes as the deployment of ‘reflexive governance’” (Andrejevic 442). These discourses usually emphasize the ways in which networked and interactive media serve to produce these quasi-militarized subjectivities (by soliciting active participation in the ‘war on terror’ by ordinary citizens, by encouraging civilians to develop and adopt military modes of perception, etc.) and sometimes link this to a broader trend of de-differentiation, not just between military/civilian, but work/leisure, production/consumption, etc.

Finally, the militarization of everyday life also gestures to the performative transformation of the activities of everyday life *into* military activities. For those not enlisted in the armed services, one participates in the Global War on Terror precisely by shopping, traveling, going to work—in other words, by carrying on business as usual. This both reproduces and goes beyond the more traditional technique of using the defense



of “society” and “our way of life” as the justification or reason for war, reconfiguring it (society/everyday life) as the battleground and site of participation in the Global War on Terror. Everyday life thus becomes a space/time that simultaneously demands intervention, is the site of the struggle, and is the modality of participation within and against this cultural logic for the vast majority of the U.S. citizenry.

Again, while there a number of useful points and modes of analysis within these conceptualizations of the militarization of everyday life, they certainly need to be made more complicated. On one hand, there are quite clear contradictions between the different uses of the term; for example, it’s not clear how one can reconcile redefining one’s self as a citizen-soldier with the imperative to precisely do nothing different (‘go shopping...go to Disneyworld’) to avoid handing the terrorists a victory. On the other hand, discourses that emphasize an uncomplicated diffusion of military perspectives, subjectivities, and affects across the populace ignore the many ways in which there has been a very real distancing of the military from much of everyday, civilian life. This includes, for example, the decreasing presence of the military within civilian life following the abolition of the draft, the declining percentages of veterans in business and political institutions, and the ways the military has created is own, separate versions of institutions and spaces usually associated with civilian life (shopping centers, grocery stores, banks, insurance programs, medical facilities, housing). I would like to more thoroughly engage with theoretical work on the concept of ‘everyday life’ to examine how the term ‘militarization of everyday life’ would require a radical rethinking of both of its components—militarization and everyday life, and move from there to a more nuanced engagement with how and to what extent these changes are occurring.

I envision this approach to the discursive formation of the quotidian RMA as making a contribution to cultural studies and new media studies, and hopefully to a more sustained and thorough engagement between these lines of thought. For cultural studies, I hope it will help focus attention on questions of the military and militarization, which is surprisingly underrepresented in cultural studies work, although of course there are important exceptions, such as the work of Allen Feldman, Kevin Robins, and Christopher Hables Gray, and more recent work by Randy Martin and Johnathan Rutherford. As Hay and Andrejevic point out in a special issue of *Cultural Studies* devoted to the issue of ‘homeland insecurities,’ “safety and security [are] problematics that ‘cultural studies’ has not considered energetically,” a statement even more true when applied to questions of and about the military and not just security more generally (Hay and Andrejevic 331). This relative absence is especially puzzling given how clearly issues of militarization and violence connect up with a number of central cultural studies thematics: the status of the state; national identity and the national popular; race and gender politics and representations; moral panics; youth culture; the relationships between state and civil society, public and private, etc. A re-examination of questions of militarization through a cultural studies lens would also nicely align with a number of different proposed projects and emphases for contemporary cultural studies work: interrogating different modes of governance; reworking relations between the state and the social; a critical interrogation of modernity/coloniality/post-coloniality/de-coloniality; and connecting cultural studies to perspectives in social policy studies or science and technology studies. Since so many of these issues, elements, and methodological perspectives are linked to questions of the military and militarization, it might also facilitate conversations, dialogues, and

collaborative research between these different strands of contemporary cultural studies work.

Engaging with questions of war and militarization might also help serve as a corrective to, borrowing from Raymond Williams, the ‘epochal’ histories and narratives of military transformation and shifts in militarization that characterize much of the critical theory work on ‘new war.’ In this type of epochal analysis, “a cultural process is seen as a cultural system, with determinate dominant features” and “dominant and definitive lineaments” (Williams, quoted in Clarke 980). While this type of analysis can certainly be useful in helping to produce broad typologies and classifications that can later be expanded and fleshed out, the problem arises, according to John Clarke, when “such abstractions conceal the conditions of their abstraction—becoming generalized and generalizable theoretical categories that claim to define a particular period” (ibid). It is precisely this reification of abstractions that too often dominates cultural theory approaches to modern militarization, which, as mentioned above, primarily function by isolating one trend or trope of the RMA discourse and redefining it as the ‘truth’ of the current military formation. These approaches subsequently miss out on the complexities, contradictions, divisions and disagreements with RMA formation, fail to adequately map out the residual, dominant, and emergent elements within the military conjuncture, and the “different movements and tendencies within the dominant” (Clarke 981). Although Clarke is focusing on rethinking discourses of neoliberalism, his call for thinking “about the present as being composed of multiple overlapping temporalities” and “differentiated and differentiating governmental strategies” is also relevant to rethinking discourses of militarization, especially since the two (neoliberalism and RMA/ ‘new war’) are often

implicitly or explicitly linked, discussed as sharing similar origins, logics, tactics and strategies (for a discussion of ‘military neoliberalism’, see Retort 2005; on the various confluences between RMA and neoliberal practices and modes of thought, see Martin 2007, especially ch. 2, and Hay and Andrejevic 2007; on their connection via private military firms, see Singer 2011).

Although I situate myself primarily within a cultural studies tradition and trajectory, I am also interested and invested in new media studies, and hopefully the encounter between them I would like to stage in my dissertation will prove to be mutually beneficial. I think that reframing new media studies within cultural studies demands a move outside the formalist debates that characterize so much of work within the former field (i.e. narratology v. ludology, new media as remediation v. radical rupture, etc.—for a useful illustration of these tendencies and debates, see Wardrip-Fruin and Harrigan 2006). Such work is certainly important in terms of providing a minimal definition of ‘new media’, emphasizing the fact that analytic techniques and methodologies (from literature, drama, cinema studies, etc.) can’t be unproblematically transposed onto new media practices, and in justifying new media as a legitimate and important site for intellectual work, engagement, and analysis. However, these analyses often stall at the level of defining what ‘new media really are’, not taking the further step of exploring how new media forms are taken up, used, experienced, and materialized within the spaces of everyday life. This latter move is foregrounded in cultural studies approaches to media studies and would usefully supplement critical work on new media. An engagement with new media theory could also contribute to a more general rethinking of traditional media studies within cultural studies. This could be especially fruitful since so

much of the most interesting work on media being done from a cultural studies perspective is still primarily focused on television (even though the notion of television is often nuanced and expanded—for example, see Parks’ (2005) discussion of the associations and differences between television, the televisual, and televisuality).

Along these lines, this dissertation will hopefully respond and contribute to Grossberg’s useful reminder that adequately understanding media (or culture) demands a move from a primarily formal or textual engagement with media to a more “contextual approach,” which would rearticulate the relations between media studies and cultural studies (Grossberg 2010). This form of analysis would foreground the material effectivities of media within everyday life, and would be characterized by three main assumptions: “there is no clear boundary between ‘media’ and the contexts of everyday life in which they exist and function (deconstruction);” that “what we commonly refer to as ‘media’ exist and function within discursive formations with no clear boundary between the discursive and the nondiscursive (decentering);” and “such formations exist as elements or apparatuses within larger apparatuses and configurations of power, and within larger conjunctures (articulation)” (ibid). This general understanding that media don’t ever function or exist as discrete technologies, texts, or commodities, but are always already imbricated in various discursive formations or expressive apparatuses is a position I share, and that is necessary to understand the articulations between media and militarization that I intend to study.

This dissertation is organized into four chapters. The first focuses on what I am calling affective militarization, pointing to a renewed and increasingly specific concern on the part of the military with the affective construction, maintenance, and mobilization

of military subjects, particularly the military family. The chapter maps out some of the changing constellations of affect, technology and the family in the organizations and representations of the revolution in military affairs, as well as broader national imaginaries of the military. I argue that affective technologies—understood as technologies in which soldiers and families are encouraged to develop affective investments, and that in turn quantify, manage, and mobilize these affects—are increasingly being figured as both members of military families and the means of its cohesion. In turn, this technologically reconfigured military family itself functions as an affect-image redeployed through a range of media (news stories, television shows, movies, songs, YouTube videos, gifs and blogs) meant to elicit political, ideological, and financial support for the ‘revolution in military affairs’ and contemporary military operations. This mobilization of affectively charged images of common sense is central to images of military familialism, where the image of the military family is simultaneously site, incitement, justification and metric of a range of biopolitical techniques directed at soldiers’ individual and familial bodies—ranging from fitness programs to continuous education, to financial self-management, to the regulation of sexual practice and pregnancy—all justified through discourses of (in)security that concurrently operate on a familial and national level

The second chapter explores several of these techniques in more detail, focusing on the ways in which military health is increasingly being redefined as the individual management of a holistic wellness, operating through the production and self-maintenance of resilient bodies and subjectivities. In order to account for these changes, I map out some of the military roots of Foucault’s understanding of the biopolitical, and move from some of his discussions of the biopolitical to my discussion of emerging technologies of biomilitarization. I explore the ways in which basic understandings of

what constitutes fitness are currently being transformed and expanded by incorporating discourses of ‘wellness,’ ‘resilience,’ and ‘lifestyle’ into regimes of military health. Operating in the biopolitical register, these discursive formations expand practices of military healthcare and surveillance throughout the entirety of a soldier’s everyday life. Moving beyond a primary focus on physical training and treating injuries, military health practices are now organized around the concept of Human Performance Optimization, largely through incorporating biomedica and biometric technologies into everyday military life, centralizing and automating the collection and responses to this biological data through various digital technologies, and through a wholesale adoption of the presuppositions and techniques of positive psychology into military health practices. This shift is accomplished by refocusing the primary goal of military health as a perpetual process of pre-emptively producing resilient bodies rather than retroactively responding to trauma, and by multiplying the areas of a soldier’s life subject to medical monitoring and intervention justified by this anticipatory fitness regime. Biomilitarization refers to the connections between the deployment of these understandings and technologies to soldiers’ bodies on scales that range from the general population to the cellular; the increasingly prominent role of biometrics and biological management to military occupation, counterintelligence, and individual targeting and surveillance; and new ways of weaponizing the biological.

In the third chapter I move from this initial discussion of biomilitarization to an exploration of how its premises have contributed to changing imaginaries and ideals of military embodiment, both within the military and in popular discourses and narratives. I examine how the figure of the Special Forces operative serves as the current hegemonic

ideal of the soldier, a figure that embodies contemporary military emphases on covert missions, asymmetrical visibility, and military individualism. They also function as the mirror image of spectral “enemy combatants,” and I discuss how biometrics, surveillance, and geographic technologies are understood by the military as revealing these potential enemies before they even become enemies, a rescaling of discourses of pre-emption from national (‘rogue states’) to individual bodies. After a brief discussion of these more familiar figures, I will discuss how the unfit soldier and the wounded warrior operate as the negative and positive figures of a military corporeal regime premised on technological resilience. I will first explore the elaboration of the unfit soldier in a report composed by active duty and retired generals called “Too Fat to Fight,” and several related popular articles, videos and Internet memes. In these discourses, the unfit soldier, in failing to realize proper self-assessment, management, and care, represents an internal threat to the military (and the nation more generally); a failure to adequately integrate with and operate contemporary military technologies; and a metonymic indication of declining American vitality, dominance, and masculinity. Then, after briefly mapping out some previous popular media tropes used to represent military trauma and injured veterans, I will explore how current iterations of the wounded warrior serve as a model response to a set of changing military, national, and geopolitical challenges. In these discourses, the wounded warrior functions as a spectacular figure of post-traumatic growth and resilient optimization, embodying an understanding of trauma as a resource to be managed and productively mobilized through a range of media and medical technologies.



In the final chapter, I follow Foucault's method of articulating embodied practices and technologies of the self to the various spatial imaginaries and organizations that simultaneously constitute, and are constituted by them, through a discussion of drone space and atmospheric militarization. I briefly map out the dominant military spatial imaginary of "battlespace," which involves both an understanding of military space as splintered, networked, and asymmetrical, and a more general military inflection of popular discourses of outer space and cyberspace. I argue that both these military imaginaries, and much of the academic critical discussion of and response to them, actually share a common understanding of military space as either "smooth," expansive, uniform and pervasive, or "striated," segmented, and divisive. I then draw on Deleuze's concept of "any-space-whatevers" to propose some alternative ways of thinking about military space through a consideration of drone space and atmospheric militarization. These concepts complicate the dominant imaginaries, emphasizing some of the contradictions that structure them and foregrounding the production of a number of different types of military spaces and optics through a range of material, embodied, and multi-scalar practices. Against discourses that present drone technologies as the realization of an abstract, monolithic, distanced, objective and anesthetic military space and vision, I draw on some of my earlier discussions of affective technologies and biomilitarization to examine some of the embodied practices and forms of intimate telepresence that construct drone assemblages. Drone assemblages can be understood as mobile mediaspaces that help to inscribe a militarized affective geography on top of the quotidian spaces of everyday life (and in turn highlight the micro-level violences, exclusions, policing, and surveillance that construct these sites). I conclude with a

consideration of the virtual geographies of the *Call of Duty* video game franchise and the U.S. Army's Virtual Army Experience as examples of atmospheric militarization, a paradoxical proxemics that incorporates militarized practices, representations, and perspectives into the rhythms of everyday life at the same time that it renders them distant, temporary and remote.

In my conclusion, I argue that taken together, these chapters help form the basis for thinking differently about a more quotidian RMA. I suggest that an expanded understanding of the everydayness of military life needs to be developed and placed in conversation with work detailing and discussing the militarization of everyday life, which I believe would open up more areas of analysis and critique, as well as new perspectives on some of the dominant assumptions and perspectives that inform the latter work. I attempt to outline some of the changes that we are already seeing in our current post-occupation, post-sequester era require rethinking some of the foundational arguments about the militarization of everyday life, and that a number of the concepts that I introduce and begin to develop within this work (affective and familial militarization, biomilitarization, shifting military corporeal imaginaries, and the reterritorialization of military space) can help contribute to that process.

**Chapter 1: From Battle Buddies to Daddybots: Affective Technologies of/and Military Familialism**

I would like to begin this chapter with two news articles that gesture towards some of the changing constellations of affect, technology, and the family in the organization and representations of the ‘revolution in military affairs,’ as well as broader national imaginaries of the military. Such a perspective follows Patricia Clough’s understanding of affect as a complex “new configuration of bodies, technology, and matter” that provokes and demands a “shift in thought in critical theory” (Clough 2). Both of these articles are prototypical, serving as representative anecdotes of recurring images and stories of the domestication of military technology. The first is a *Washington Post* article entitled “Bots On the Ground: In the Field of Battle (Or Even Above It), Robots are a Soldier’s Best Friend” (Garreau online). The story leads with an account of a field test of a new autonomous minesweeping robot for the U.S. Army, overseen by a robotics physicist and an Army colonel. The robot has multiple legs, and functions by intentionally detonating mines or improvised explosive devices (IEDs) and then continuing to search out more IEDs with its remaining ‘limbs.’ Describing the test, the author describes how:

Every time it found a mine, blew it up and lost a limb, it picked itself up and readjusted to move forward on its remaining legs, continuing to clear a path through the minefield. Finally it was down to one leg. Still, it pulled itself forward. Tilden [the physicist] was ecstatic. The machine was working splendidly. The human in command of the exercise, however—an Army colonel—blew a fuse. The colonel ordered the test stopped. ‘Why?’ asked Tilden. ‘What’s wrong?’ The colonel just could not stand the pathos of watching the burned, scarred and crippled machine drag itself forward on its last leg. This test, he charged, was inhumane (ibid).

This account neatly inverts the famous scene of mechanical undeath that marks the end of the original *Terminator*, where even after losing an arm and its entire lower torso the Terminator continues to drag itself after his target until she finally crushes the machine in a steel press. This opening story draws its affective charge from the paradox of a machine test being stopped because of its inhumanity, the sympathetic relation between the colonel and the warbot (note how the test stops because the colonel ‘blows a fuse’), and the rather surprising emotionality of the soldier and the ‘ecstatic’ physicist. The article goes on to document a variety of ways in which soldiers make emotional investments in the robots that they are ‘working with’ (as explicitly opposed to ‘using’). There are some familiar tropes, like personalizing the machine by giving it a name (usually feminine) or decorations. But the article also goes on to discuss how soldiers are giving robots promotions, awarding them Purple Hearts, taking them fishing, and taking ‘buddy’ pictures with the robots that they then send home to their families. “ ‘There’s an awful lot of picture-taking,’ he [a soldier] says. One guy who married just before deployment wanted his wife to see the gal who was his constant companion. It was a PackBot.” The figure of the robot as family member recurs throughout this article, and similar pieces (for example “Real Soldiers Love Their Robot Brethren,” “Bomb-Defusing Robots Become Family to GIs in Iraq,” and “Bonding with Robots”). Describing one unit’s robot ‘Frankenstein’ (so named because the unit preferred to bring him back to life with parts from other robots, rather than get a new bot when he was damaged), Garreau remarks that “not only did the troops promote him to private first class, they awarded him an EOD badge—a coveted honor. ‘It was a big deal. He was part of our team, one of us. He did feel like family’” (ibid).



Fig. 1: Packbot Talon; Fig. 2: Johnny Five

Moving from sharing images of machines which have been invested with a surprising amount of emotion with the rest of the family back home, the other article highlights the affective charge and investment into the very means of that transmission. In an article from the *Christian Science Monitor* entitled “The Virtual War Family,” Carmen Sisson discusses the increasing prevalence of online videoconferencing and digital filesharing (especially of photographs) by military families, various military and private initiatives meant to facilitate those interactions, and the possible impacts it has on the soldier and the family. After a framing scene of an Army specialist skyping into her younger brother’s graduation party, the article suggests that “the war in Iraq may be half a world away, but in the age of the internet it’s as close as the flip of a video switch—making it in many ways *the most intimate war in history*. Using video technology and the Worldwide Web, soldiers are tying into the most private moments back home—weddings, funerals, birthdays” (Sisson online, emphasis added). Even beyond the use of these technologies as a way to remotely participate in unique special occasions, they (re)incorporate soldiers into more everyday rhythms and practices, “allowing fathers to

join the family for meals or tuck their children in at night—virtually” (ibid). One soldier describes the videoconferencing technology as “a blessing and a godsend.” John Harlow, the director of the Freedom Calls Foundation—self-described on its website as a non-profit that aims to “deploy state of the art technology to keep our troops in Iraq in touch with their families”—talks about the importance of these communications for overall morale. They “‘have profound implications for family morale, and that’s what we’re trying to promote,’ he says. *A soldier with a happy family is a focused fighter*” (ibid, emphasis added).

These two articles illustrate the two poles of what I call affective technologies. On one hand, this refers to the ways in which these technologies are loci of emotional investment, functioning as part of the ‘military family’ or, in some cases, as part of a soldier’s body. On the other, it refers to the ways in which these emotionally charged technologies are inserted into and helping to compose and cohere broader affective formations (of individual families, community pride, national sentiment, etc.). In these articles, military affective technologies are increasingly being figured as both members of military families and the means of its cohesion, as well as allowing this reconfigured military family to function as an affect-image redeployed through these technologies (news stories, television shows, movies, songs, and blogs) meant to elicit political, ideology, and financial support for the ‘revolution in military affairs’ and contemporary military operations. In this formulation, I am drawing on Kara Keeling’s work that weaves together Franz Fanon, Gilles Deleuze, and Antonio Gramsci to produce a theoretically rigorous understanding of the affective “images of common sense” (Keeling 11). This is developed through an engagement with and expansion of Deleuze’s *Cinema* books that delineates an understanding of the cinematic as “a complicated aggregate of capitalist social relations, sensory-motor arrangements, and cognitive processes” (3). For Keeling, “common sense is a collective set of memory-images” that are marked by a specifically biopolitical inflection (19). By focusing on the raced, gendered, and sexed

components of the images of common sense, she moves towards a “theory of the biopolitics of the cinematic that is attentive to the micromechanisms through which power relations are (re)produced and rationalized” (30).

This biopolitical mobilization of affectively charged images of common sense is central to images of military familism, where the image of the military family is simultaneously incitement, justification and metric of a range of biopolitical techniques directed to soldier’s individual and familial bodies—ranging from fitness programs, to continuous education, to financial self-management, to the regulation of sexual practice and pregnancy--all justified through discourses of (in)security that concurrently operate on a familial and national level. In these discursive formations, the health, hygiene, self-management, and safety of military families is both an expression and key component of the more general health of the nation. Here, Hay and Andrejevic’s discussion of the ways in which ‘the home’ and ‘the homeland’ are both articulated (via discourses of parallelism, analogy, and micro-/macrocosm) and immanent (where the practices, processes, and techniques meant to produce a secure home at the same time produce a secure country) to each other can be supplemented by an exploration of the ways in which the family and the nation are similarly arranged, with the military and domestic militarization serving as the lynchpin of the two doublets (home/homeland and family/nation). In exploring these various articulations, I am also attempting to respond to David Morley’s call for an “analysis of the construction of national (or pan-national) identities...grounded in an understanding of the (often, literally, domestic) micro-processes through which the smaller units which make up that larger community are themselves constituted” (Morley 3). If, as Morley argues, the “articulation of the domestic household into the ‘symbolic family’ of the nation...can best be understood by focusing on the role of media and communications technology,” exploring some of the ways this occurs for and through military families is an important site of analysis (ibid).

The production, circulation, and consumption of these images, as well as the biopolitical technologies they rely upon and underpin, also needs to be situated within two broader contexts. The first begins from Lawrence Grossberg's argument that "the most powerful affective epidemic in the contemporary United States is organized around and across the family" (Grossberg, *We Gotta* 285). Although this line is drawn from *We Gotta Get Out Of This Place* (published in 1992) and while the particular forms of panic around families and children have certainly shifted and mutated since its publication (think of the recent spate of articles and events discussing 'the end of men'), this affective epidemic is certainly ongoing. Indeed, if anything, the rhetoric of 'attacks on the family' or 'families under siege' is increasingly being taken literally, with many explicitly demanding militarized solutions. Both inflections of the 'war on kids' Grossberg discusses in *Caught in the Crossfire*—kids AS risk (figuring kids as depraved superpredators, desensitized to violence by playing too many rounds of *Call of Duty*, etc) and kids AT risk (growing up surrounded by terrorists, online pedophiles, kidnapper, etc)—are presented as being potentially solved through a militarized reorganization of domestic space. I am thinking, for example, of the use drill sergeants as agents of restored domestic tranquility in daytime talks shows focused on 'troubled teens', reality shows like *Boot Camp*, and the normalization of using surveillance technologies to track and spy on one's own children

The second more general context is an increased interest within the military in issues of 'culture' and 'lifestyle,' one that is primarily organized domestically around the 'quality of life' of military families. At a policy level, this focus crystallized around President George W. Bush's National Security Presidential Directive—2 (Feb 01), Improving Quality of Life (QoL). This directive "required the Secretary of Defense to 'undertake a review of measures for improving the quality of life for our military personnel and provide recommendations for their implementation'" (DoD, QQLR1 5). This injunction was in turn formulated and codified in the DoD's 'New Social Compact'



(2002) and First (2004) and Second (2009) Quadrennial Quality of Life Reviews. These documents are especially significant in that they demonstrate an explicitly articulated desire by the military to become actively involved in the affective regulation of everyday life (moving beyond its two traditional foci of affective regulation, training and media representations of the military). These changes are to be carried out by a new model of military authority and philosophy, one that produces a ‘caring leadership’ that “understands the sacrifices and demands of the military lifestyle and reiterates the Department [of Defense]’s commitment to underwrite family support” (DoD, QQOL1 1).

In the remainder of this chapter, after a few initial remarks on the military family as exception(al) and affective technologies in/of cultural studies, I will attempt to map out these broader contexts that I suggest are composing an increasingly popular military familialism both within the Armed Services and U.S. culture more generally. It is important to emphasize that this ‘focus on the family’ is increasingly just as typical of political positions, subjects, discourses and representations that are critiquing the military and various military operations as it is of positions that are more generally supportive. The centrality of the military family to both poles of the debate around contemporary U.S. militarization and militarism suggests that it is becoming increasingly hegemonic, defining the boundaries, form, and tactics of political debate. We can see a Leftist military familialism, for example, in the initial emergence of Cindy Sheehan as the dominant spokesperson for the anti-war movement after the Feb 15 protests in 2003 failed to prevent the invasion of Iraq, and anti-war documentaries (such as *Body of War*) and art (such as Nina Berman’s *Marine Wedding*) that generate their critical argument and emotional intensity through an emphasis on war’s destructive impact on the families and relationships of the soldiers fighting it.

The growing dominance of this focus on military families within discourses critical of the U.S.’s contemporary military misadventures is deeply ambiguous. On one hand, it might function as an example of the deconstruction of dominant discourses and

logics from within (along the lines of the once ubiquitous ‘Support our Troops (Bring Them Home)’ bumper stickers), opening up at least the possibility of what Keeling describes as an attention to “the consolidation of common sense and its circulation via various media to explode common sense from the inside—an operation whereby common sense might issue something new, or, at least, send forth a different perception” (21). On the other hand, organizing political protest and critique via foregrounding the family can easily slip into (or actively participate in) what Jasbir Puar describes as the ongoing (re)production of a regime of “national recognition and inclusion...contingent upon the segregation and disqualification of racial and sexual others from the national imaginary” (Puar 2). If we accept Puar’s account of the ways in which queerness functions as symptom, cause, and analog of terror, the military family’s inclusion in a broader “exceptional form of national heteronormativity” (which is buttressed with the normative and regulatory modalities of queerness she describes as ‘homonational’) might not only limit its critical purchase and subversion, but actually delegitimize and silence alternative sites, forms, and organizations of critique (ibid).

I argue that both the critical and supportive iterations of popular military familialism is constructed around an image of ‘exceptional’ military families, drawing on Agamben’s development of the nuances of the meaning and operations of exception and supplementing it with his discussion of the ‘example.’ In a range of media texts and cultural contexts, military families are constructed as ‘exceptional’ in its paradigmatic and exemplary sense, where the military family is figured as a standard of excellence for ‘normal’ families, a intensified realization of its normative logics and ideals. However, and concomitantly, there is also the sense of the exceptional in the sense of the non-ordinary, the unusual, as that which is “included through its exclusion” (Agamben, *Signature* 25). Indeed, following Agamben’s elaboration of Michel Foucault’s notion of the paradigm, we can venture the argument that the military family operates as the paradigmatic case of the (‘normal’) US family, in the sense that “the paradigmatic case

becomes such by *suspending*, and at the same time, *exposing* its belonging to the group, so that it is never possible to separate its exemplarity from its singularity” (ibid 31, emphases added). This double function of the paradigm is present in the introduction to each of the three major military QoL documents, which all start with some variation of the idea that military families are just like any other American family, except for a range of elements that make them fundamentally different.

The principal element of differentiation is figured as the military family’s intimate linkage with trauma, and the growing normalization of trauma within and of military families. On one hand, this occurs through the micro- or infra-traumas (in military discourse, they are simply ‘stressors’) that shape the texture and rhythm of military life: “Increasingly frequent deployments, long separations, recurrent moves, inconsistent quality of housing, and sporadic spousal employment are just a few of the unique challenges consistently faced by the families of those in uniform...challenges that generate stress, anxiety, and uncertainty” (DoD, 1QQOLR 55). On the other hand, military families are increasingly dealing with the effects of war trauma, as the number of soldiers dealing with PTSD has skyrocketed following the wars in Iraq and Afghanistan. One recent study conducted by researchers at the Naval Postgraduate School and Stanford University suggests that approximately that 35-40% of the Armed Forces deployed to Iraq and Afghanistan are suffering from some form of PTSD. This heightened incident rate is attributed to a number of factors, including lengthened deployments, more frequent deployments, the highly stressful nature of counterinsurgency and urban military operations, and the fact that medical advances are allowing soldiers to survive injuries and encounters that would have killed them even a decade ago. In a *New York Times* article entitled “The Wounded: Rebuilding Bodies, and Lives, Maimed By War,” Neela Banerjee describes how

Thanks to advances in everything from flak jackets to battlefield medical attention, many soldiers survive attacks that would have killed them a generation ago. But as more survive, more inevitably return from Iraq with grievous injuries, including amputations (Banerjee online)

Military families are increasingly figured as sites of trauma management as well as a space of risk for further trauma as soldiers act out in response to their own experiences, harboring the potential to both contain and communicate trauma (and often, to do both simultaneously). Here our understanding of ‘post-trauma’ should be informed by Marianne Hirsch’s notion of “postmemory,” which is also developed in the context of trying to describe “the relationship of children of survivors of cultural or collective trauma to the experiences of their parents” (Hirsch 8). Hirsch claims that children remember these second-hand experiences through “stories and images with which they grew up, but that are so powerful, so monumental, as to constitute memories in their own right” (ibid). Postmemory is a mode of remembering “mediated not through recollection but through projection, investment and creation,” ultimately constructing “not an identity position but a space of remembrance, more broadly available through cultural and public, and not merely individual and personal, acts of remembrance, identification and projection” (Hirsch 8-9). And while Hirsch’s own interest is primarily in the ethical (im)possibilities of witnessing and solidarity such postmemories and ‘heteropathic recollections’ enable, the flip side of this formulation is the possibility of the transmission of trauma to its secondary rememberer—defined by psychologists as ‘secondary traumatic stress’ or ‘vicarious trauma’ (see Figley 1995).

This notion of ‘contagious trauma’ functions as both an ongoing process—for example, the increasing rates of anxiety and depression in military spouses with deployed partners and partners with PTSD as reported in the *New England Journal of Medicine* article “Deployment and the Use of Mental Health Services Among U.S. Army Wives”—and a more general cultural anxiety (Mansfield et al. online). The latter was especially evident in media discussions of the Fort Hood shootings, when US Army Major Nidal Hasan, a military psychologist, killed 13 people (including 5 fellow therapists) and injured 32 others in the Soldier Readiness Center where he worked. The *New York Times*

article “Painful Stories Take a Toll on Military Therapists” discusses how “repeated stories of battle and loss can leave the most professional therapist numb or angry,” and worries about how “those hired to heal end up needing help themselves. Some go home at night too depressed to talk to their children. Others...ultimately quit” (Carey online). In this presentation, not only is it possible for the psychiatrists to suffer from their patients’ trauma, but they in turn may spread this infection to their own families as well. Trauma and its effects are here imagined and discussed as a contagion, a virus capable of infecting others and then spreading to ever more removed victims. Indeed, a viral metaphor is precisely the language used by military historian Dave Grossman to discuss the aftereffects of violence (and representations of violence)—a rapidly replicating “worldwide virus of violence” (Grossman xvi).

The discussion boards for the *New York Times* articles “Combat Stress and the Fort Hood Gunman” and “Surviving Fort Hood” are instructive here, as they swing wildly between this view and those that completely dismiss it as “politically correct psychobabble.” The posts from the latter perspective repeatedly focus on claims that Hasan has received “nothing but handouts” from the Army that he didn’t want to pay for with deployment, how he is ‘naturally’ a terrorist (due to either ethnic or religious background), and that any discussion of communicating trauma is an attempt to silence these uncomfortable truths. One of the more caustic posts suggests that if we are going to try to determine any cause of contributing factors in the shooting, we might as well say that “PTSD is also transferable through DNA. Who knows what he inherited? All of these centuries of war could be gradually making us all insane. I hope we get a handle on the problem before it is too late” (*New York Times* online). What both of these extremes share is a naturalization of the traumatic events of the Fort Hood shooting, as either the result of pathologically catching traumatic experiences or Hasan’s racial and religious identity, ignoring broader structural, institutional, and quotidian contexts.

I will discuss technologies of trauma and its relation to military families and affective formations at more length below. Before this is possible, however, a brief discussion of affect, affective technologies, and affective formations within and through cultural studies is necessary in order to provide some density and definition to those terms.

*The Dog in the Night, or the Curious Incident of Cultural Studies and the Affective Turn*

Slavoj Žižek is fond of citing a passage from Arthur Conan Doyle's Sherlock Holmes story "Silver Blaze" as an illustration of moments when absences make their presences felt, or non-occurrences acquire the status of an event. The passage in question is an exchange between Inspector Gregory, a Scotland Yard Detective and Holmes, during Holmes' reconstruction of the crime that Gregory believes he has already solved.

Gregory: Is there any point to which you wish to draw my attention  
Holmes: To the curious incident of the dog in the night-time  
Gregory: The dog did nothing in the night-time.  
Holmes: That was the curious incident.

A similar sense marks the present absence of cultural studies from much of the recently published literature recounting (and composing) the 'affective turn.' After several decades of cultural studies work on affect and its relation to the popular and the political, the relatively marginal (often literally) status of the work of authors like Grossberg, Meaghan Morris, Angela McRobbie and Elspeth Probyn is puzzling, to say the least. This absence is most obvious in works like Clough's edited volume *The Affective Turn*, Teresa Brennan's *The Transmission of Affect* and Kathleen Stewart's *Ordinary Affects*. All of these texts are focused on theorizing affect's relation to and composition of everyday life, the mundane, quotidian, and habitual, which is precisely what has largely defined the cultural studies approach to affect. And while there are several relatively recent texts dealing with affect that situate themselves within the cultural studies tradition (albeit with varying degrees of explicitness), such as Melissa Gregg's and Gregory

Seigworth's edited collection *The Affect Theory Reader*, Gregg's *Cultural Studies' Affective Voices*, Sara Ahmed's *The Cultural Politics of Emotions* and Sianne Ngai's *Ugly Feelings*, the relative absence of cultural studies from more recent accounts of the 'affective turn' in general, and the sources and spaces of this turn in the humanities in particular, is curious indeed.

In part, this may be due to the specific intellectual lineages of various authors. In his foreword to *The Affective Turn*, Michael Hardt identifies two intellectual trajectories that prompted and influenced his own work on affect and affective labor. The first is work by US feminists that worked on highlighting and analyzing "gendered forms of labor that involve the affects in a central way—such as emotional labor, care, kin work, or maternal work—and that consider the nature and value of such activity both in the waged and unwaged economy" (Hardt xi). The second is work primarily by French and Italian political economists that attempt to trace "the increasingly intellectual character of productive practices and the labor market as a whole, employing terms such as cognitive labor and the new cognitariat" (ibid). These lineages in turn (often) share with the cultural studies literature on affect a common reference in an underlying understanding of affect developed out of Spinoza's *Ethics*, especially in the elaboration of Spinoza's concept in Gilles Deleuze's works *Spinoza: Practical Philosophy* and *Expressionism in Philosophy: Spinoza* (for example, in work by Grossberg, Elspeth Probyn, Gregory Seigworth, and Melissa Gregg). Again, these shared touchstones would suggest that more of an explicit engagement with cultural studies' approach to the issues of popular and everyday affects in these works.

More likely, without wanting to sound overly polemical, the cultural studies approach to understanding affect simultaneously complicates and limits the various deployments of different discourses of affect (and affective discourses). Working with

affect as either an object of analysis and/or a methodological orientation is an incredibly slippery and tricky affair. This is partially due to the fact that the ‘perspective of the affects’ present a “challenge...primarily in the syntheses it requires. This is, in the first place, because affects refer equally to the body and the mind; and, in the second, because they involve both reason and the passions” (Hardt ix). This is further complicated by affect’s peculiar and complex causality, where “affects belong simultaneously to both sides of the causal relationship” (ibid). Cultural studies work on affect attempts to move beyond this variegated and layered ontology, a focus on ‘pure’ affect, in order to understand the multiple ways that affect is woven into specific cultural formations, composing “affective relationships...articulated places within people’s mattering maps” (Grossberg, *Dancing* 79). Instead of an understanding of affect that describes it as prespersonal intensity, virtuality, and the immanent potentiality of bodies and matter, Grossberg argues that affects function and become effective by composing “different affective contexts [that] inflect meanings and pleasure in very different ways...affect operates across all of our senses and experiences, across all the domain of effects which construct daily life. Affect is what gives ‘color’, ‘tone’ or ‘texture’ to the lived” (ibid 80).

The central term for these affective compositions is *sensibility*—“each formation puts into place a particular sensibility, which describes its effects in people’s daily lives and thus the way in which a particular formation is lived” (72). Here, the sensible should be understood in its dual sense, referring both to “what can be felt or perceived” and to something “endowed with good sense, intelligent, reasonable, judicious” (OED online). Hence, sensibilities of formations refer both to the ways in which particular embodied



orientations, modes of feeling and perception, bodily dispositions, rhythms, orientations and habits come to be experienced as common sense, and to how particular dominant ideologies acquire the status and feeling of common sense at a felt, visceral, ‘gut’ level. Cultural Studies as an orientation to cultural contexts as structures of feeling is an attempt to understand the sensibility of a particular conjunctural moment. This is what Grossberg describes as the “harder work of specifying modalities and apparatuses of affect, or distinguishing affect from other sorts of non-semantic effects, or, as I said, analyzing the articulations between (and hence, the difference between, as well as how one gets from) the ontological and the ‘empirical’” (Grossberg, “Affect” 315). It seems that some of the resistance to cultural studies in recent theorizations of affect has less to do with a perceived “equation between affect and emotion,” as Brian Massumi claims, and more to do with the fact that in focusing attention on affect’s role in particular cultural formations, rather than only on affect ‘in-itself’, affect loses its (putative) purity (a la Massumi’s claim about affect’s self-organization by describing it through analytic concepts imported from quantum mechanics and chaos theory) and also demands a minimal definition instead of remaining a completely floating, polyvalent term. In this way, cultural studies, as Grossberg suggests, demands an attention to affect’s specificity but also its complexity. This latter orientation offers a corrective to those accounts that tend to reduce a particular moment or conjuncture to a single, coherent, and monolithic affective mode (such as a ‘culture of fear’ or an ‘age of anxiety’).

Affect also works in cultural studies in the broader sense of an analytic, functioning as an intellectual and embodied orientation and disposition as well as an object of analysis. As a provisional methodological principle, cultural studies combines a

commitment to contextualism with a recognition of ‘feeling’ as part of its study, and also...as part of its practice, so in that way it has something over many forms of intellectual production” (Grossberg, “Affect” 335). Cultural studies as an exploration and creation of particular conjunctures demands the cultivation of a particular sensibility on the part of the scholar. Stuart Hall expresses this sentiment in his reflections on conjunctural thinking, in particular on how one knows when a particular conjuncture is beginning to form or drawing to a close.

About my sense of a break, people do ask me, ‘How do you know of that?’ I can’t tell them that. It’s not a precise methodology; it’s not something which I apply outside to it. It’s interpretive and historical. *I have to feel the accumulation of different things coming together to make a new moment, and think, this is a different rhythm.* We’ve lived with one configuration and this is another one (Hall 665, emphasis added).

Resonating with Spinoza’s utilization of affect as a means to circumvent the presumed separation, if not outright contradiction, between reason and passion, conjunctural analysis requires the combination of an attention to shifts, breaks, twists, and transformations in “what it feels to be alive in a particular time and place” with a contextual understanding of the various processes and factors that both contribute to and result from this transformation.

Throughout this dissertation, I will be employing both of these primary understandings of affect: on one hand, the understanding of affect as the material production and regulation of a number of bodily habits, perceptions, and comportments, an orientation that is often primarily informed by the late work of Deleuze and is typified by authors like Massumi, Clough, and Protevi; on the other hand, the understanding of affect as structure of feeling, the sense of what it means to be alive in a particular conjuncture, the texture of a particular way of life, an approach primarily informed by

Raymond Williams and Stuart Hall, and visible in authors like Grossberg and Berlant. While these different poles have different foci and emphases, I consider them tightly connected, following authors like Berlant who are interested in the ways in which specific bodies and corporeal imaginaries materialize a broader structure of feeling, and in how particular affective formations facilitate, elicit and mobilize different bodily habits and modes of being. Understanding these two poles as intimately related allows me to avoid some of the more problematic elements of the first pole mentioned above (i.e. the more “magical” understandings of affect that are completely unmediated, virtual, or disconnected from ideological or political formations), and is also consistent the fundamentally relational character of affect in the work of Spinoza, Deleuze, and Williams, and its elaboration in contemporary theorists that I am using below.

### *Militarizing Affect, Affective Militarization*

Critical humanities scholarship is not the only field which can be described as undergoing an ‘affective turn.’ The US military is also increasingly foregrounding affective regulation when it is developing and implementing training, doctrine, and military support structures, at both a theoretical and practical level. By the term affective regulation, I am referring both to techniques meant to shape, manage and transform bodily intensities and capabilities, and to the attempts to articulate particular affects with particular ideologies within specific cultural formations of emotion. These two inflections of affective regulation function as connected and mutually supportive elements of contemporary military training. However, it is important to remember that

the centrality of affective regulation in training soldiers and producing proper, normalized soldiering-bodies has been around awhile (see, for example, Ben Anderson's (2010) discussion of WWI attempts to modulate national morale during WWI ). It became a point of reflexive concern for the military following the publication of S.L.A Marshall's *Men Against Fire* based on interviews with soldiers during and after World War II, which I will discuss in more detail below. What *is* relatively new is an expansion of this focus on affective regulation beyond (primarily) training practices and regimens to an increasingly explicit, reflexive concern with issues of everyday military 'culture' and 'lifestyle' within the military command, the central role of new media technologies in this process, and the various biopolitical shifts this expansion entails. This trend is now nearly ten years old, and was largely prompted by Bush's 2001 National Security Presidential Directive—2 which ordered an increased attention to military families' quality of life by the DoD, which was then elaborated and institutionalized in DoD's 'New Social Compact' (2002) and First (2004) and Second (2009) Quadrennial Quality of Life Reviews. As mentioned above, these documents are especially significant in that they demonstrate an explicitly articulated desire by the military to become actively involved in the affective regulation of everyday life, moving beyond its two traditional foci of affective regulation, training and media representations of the military. This regulation is coupled with a call for a new model of military authority and philosophy, one that produces a 'caring leadership' that "understands the sacrifices and demands of the military lifestyle and reiterates the Department [of Defense]'s commitment to underwrite family support" (DoD QQOL1 1). In what follows, I will provide a necessarily partial and incomplete account of the military's 'affective turn' following WWII, and then an analysis of some of its current forms and iterations. The latter, best expressed by the maxim now ubiquitous in military documents, reporting, technology and

culture--that 'families also serve'-- will also provide a segue into a broader contextualization of this present configuration within shifts in contemporary warfare, as well as cultural anxieties about protecting and preserving normative families, and the technological production of the nation-as-family.

S.L.A Marshall was a U.S. Army Brigadier General who became the chief combat historian in the Central Pacific theater during World War II in 1943, and later the chief historian of the European theater in 1945. In his account of Marshall's work, Lt. Col. David Grossman provides a concise account of Marshall's key findings and legacy:

He had a team of historians working for him, and they based their findings on individual and mass interviews with thousands of soldiers in more than four hundred infantry companies, in Europe and in the Pacific, immediately after they had been in close combat with German or Japanese troops. The results were consistently the same: only 15 to 20 percent of the riflemen in combat during World War II would fire at the enemy. Those who would not fire did not run and hide (in many cases they were willing to risk great danger to rescue comrades, get ammunition, or run messages) but they simply would not fire weapons at the enemy, even when faced with repeated waves of banzai charges (Grossman 3-4).

It is important to note that there is an ongoing debate about the precision and accuracy of this 15-20% firing rate produced by Marshall, largely focusing on methodological validity (statistical extrapolation from long-form interviews with soldiers). In response to these criticisms, Grossman suggests that

every available parallel scholarly report replicates his basic findings...Holme's and Keegan's numerous accounts of ineffectual firing, Holme's assessment of Argentine firing rates during the Falklands war...the British Army's laser re-enactments of historical battles...all confirm Marshall's conclusion that the vast majority of combatants throughout history, at the moment of truth when they could and should kill the enemy, have found themselves to be 'conscientious objectors' (Grossman 73).

For our purposes, the specific number of non-firers or even the general accuracy and validity of Marshall's work is far less important than the drastic shifts in the form and organization of military training that it precipitated. As Greg Goldberg and Craig Willse point out, Marshall's studies "illuminated the traumatic experiences of soldiers in war, yet this information was used not to tend to their individual needs, but to develop more effective training procedures that could, for example, anticipate and resolve the fear of killing another human" (Goldberg and Willse 265). This resulted in the organization of the modern boot camp, which relies on both poles of affective regulation mentioned

above. In terms of the organization of bodily intensities and potentials, there was a shift in emphasis from training as the habituation of repetitive, normalized series of actions to an operant condition of reflexes. And at the level of emotion (or affective investment, stitching together affect and ideology), there was an increasing emphasis on making soldiers forge, develop and sustain emotional bonds with fellow recruits so a concern for their well-being and survival would override the fear, reluctance, and guilt typically occasioned by killing another person (as well as anxieties about being themselves killed or injured). In this model, the modern boot camp functions as a sudden, shocking dislocation from civilian life ideally resulting in an accelerated re-socialization and re-corporealization that functions both as pre-emptive trauma (where the traumatic experience of boot camp prefigures future traumas to be experienced by the soldier, while desensitizing them to trauma more generally) and as ritualistic hazing that forces soldiers to rely on each other to successfully negotiate their training.

This re-envisioning of military training highlights the functioning of biopower at the heart of affective regulation. This is Michel Foucault's term from *The History of Sexuality* that is used to elaborate the increasingly direct and immanent investment by power in the basic functions, processes, and organization of life itself. Foucault claims that this emergent power over life is composed of two interconnected and mutually supportive "poles of development linked together by a whole intermediary cluster of relations" (Foucault, *History* 139). The first pole is "centered on the body as a machine: its disciplining, the optimization of its capabilities, the extortion of its forces, the parallel increase of its usefulness and docility" whose form is *discipline* and whose focus is on "an anatomic-politics of the human body" (ibid). The second is focused on the "species body, the body imbued with the mechanics of life and serving as the basis of the biological processes: propagation, births and mortality, the level of health, life expectancy" whose form is regulatory *control* (and, with a slightly different inflection in later work, *governmentality*) and whose focus is on "a biopolitics of the population"

(ibid). This overlapping, dual focus of biopower is apparent in the shift in techniques of producing and training military bodies, to which I now turn.

Classical military training holds a privileged place in Foucault's analysis of the disciplines in *Discipline and Punish*. Beyond being the site of emergence for a number of the disciplinary techniques he enumerates, the military is also where the logic of disciplinary organization is taken to its extreme, where it is most visible. Foucault explicitly states that the ways discipline simultaneously works as a means to "analyze space, break up and rearrange activities" and as a "machinery for adding up and capitalizing time...emerge most clearly in military organization" (Foucault, *Discipline* 157). He emphasizes the ways in which "Marx stresses the analogy between the problems of the division of labor and those of military tactics," and in his discussion of the origins of panopticism he describes the "ideal model" as "the military camp—the short-lived, artificial city, built and reshaped almost at will...in the perfect camp, all power would be exercised through exact observation" (Foucault, *Discipline* 163; 171). He shares this understanding of the centrality of the military model to the more general disciplinary paradigm with Henri Lefebvre, who argues in *Rhythmanalysis* that it is "still necessary to recognize that the military model [of organizing and producing normalized rhythms] has been imitated in our so-called western (or rather imperialistic) societies," serving as the rubric for the more "general organization of time" (Lefebvre 39). For our purposes, Foucault's account of the "instrumental coding of the body," the ways in which particular gestures and "body-object articulations" are standardized, decomposed into constituent micro-movements, and then learned/practiced by individual bodies to produce normalized habits provides a useful example of classical military training (153). In the *Security, Territory, Population* lectures he concisely summarizes this as the way discipline "analyzes and breaks down; it breaks down individuals, places, times, movements, actions and operations. It breaks them down into components such that they can be seen, on the one hand, and modified on the other" (Foucault, *Security* 56).

Discussing this technique in *Discipline and Punish*, he provides the example of the codification of the ways a soldier carries and raises a rifle as a central example of disciplinary training: “bring the weapon forward. In three stages. Raise the rifle with the right hand, bringing it close to the body so as to hold it perpendicular with the right knee, the end of the barrel at eye level, grasping it by striking it with the right hand...” (Foucault, *Discipline* 153). Here, military theorists develop a normalized program for bodily movements, which is then inculcated in the body of a soldier. This standardization and its inscription on the body of individual soldiers becomes the condition of possibility for the more general development of new military formations and techniques incorporating the emerging weapons technology of the time.

While elements of this mode of discipline continues to exist in post-WWII military indoctrination, the emphasis has shifted away from these types of exercises that Foucault classes as “correct training,” and towards, essentially, operant conditioning. If the classical mode of military training focuses on molding bodies by training the soldier to produce standardized, serialized gestures, contemporary training practices focus more on developing and elaborating ‘natural’ reflexes—a move from the mass production of gestures to an apparatus of mobilizing reflexes. Again, this shift was a direct response to the perception of a particularly high rate of non-firing soldiers in WWII. Grossman describes how

the training methods introduced since WWII that increased the firing rate from 15 to 90 percent are referred to as ‘programming and conditioning’ by some of the veterans I have interviewed, and they do appear to represent a form of classical and operant conditioning (a la Pavlov’s dog and B. F. Skinner’s rats) (Grossman 78).

These tactical shifts are attempts to solve a central problem that classical training presented--the fact that even though particular gestures and bodily comportments were developed to the level of corporealized routines, these processes still took time and their direction still required thought. The ‘problem’ for the military is that “a soldier who has learned to squeeze off careful rounds at the target will take the time, in combat, to consider the humanity of the man he’s about to shoot” (Baum, cited in Goldberg and



Willse 272). By contrast, post-WWII training is explicitly organized to make engaging with an enemy less a serialized process and more an immediate reaction, moving towards a zero-level of time and thought (which are explicitly linked in Baum's account).

Grossman describes how this transformation played out at the level of marksmanship training, which shifted from a more traditional disciplinary normalization like that described by Foucault above to the inculcation of a "reflexive 'quick shoot' ability:"

Instead of lying prone on a grassy field calmly shooting at a bull's-eye target, the modern soldier spends many hours standing in a foxhole, with full combat equipment draped about his body, looking over an area of lightly wooded rolling terrain. At periodic intervals one or two olive-drab, man-shaped targets at varying ranges will pop up in front of him for a brief time and the soldier must instantly aim and shoot at the target(s). When he hits a target it provides immediate feedback by instantly and very satisfyingly dropping backwards—just as a living target would. Soldiers are highly rewarded and recognized for success and suffer mild punishment (in the form of retraining, peer pressure, and failure to graduate from boot camp\_ from failure to quickly and accurately 'engage' the targets—a standard euphemism for 'kill'...what is being taught in this environment is the ability to shoot reflexively and instantly (Grossman 254)

This attempt to preempt reflection by operating on the soldier's body at the level of reflex is described by an Army trainer as an "attempt to instill a reaction. Hear a pop, hit the ground, return fire. Act instinctually" (Baum, cited in Goldberg and Willse 271). There is a shift from the embodiment of a regimen to the inculcation of habits, along the lines described by Brian Massumi. "Habit is an acquired automatic self-regulation. It resides in the flesh. Some say in matter. As acquired, it can be said to be 'cultural.' As automatic and material, it can pass for 'natural'" (Massumi 11).

The distinction between these perspectives and approaches can be usefully clarified and elaborated through Foucault's discussion of how the norm functions differently in apparatuses of discipline and apparatuses of security. While "discipline works in an empty, artificial space that is to be completely constructed," security functions by starting from and adapting to "a number of material givens" (Foucault *Security* 19). In short, discipline begins by producing an ideal norm which is then imposed on spaces, times, and bodies that it essentially views as empty or formless—"there is an originally prescriptive character of the norm and the determination and the

identification of the normal and the abnormal becomes possible in relation to this posited norm” (57). Apparatuses of security, on the other hand, are sensitive to the preexistent dispositions, relations, textures, resistances and flows of the material they are attempting to shape, deriving a statistical and probabilistic normalization from these ‘material givens.’ Foucault’s specific example proffered at this point in *Security, Territory, Population* is urban planning. On one hand, the disciplinary approach is characterized by the attempted imposition of an ideal model (again, a combination of elements of ‘the Roman camp’ and the contemporary ‘military institution’) on a space viewed as empty and infinitely pliable. Against this attempt to impose a pre-existent ideal on a space deprived of its specificity, the perspective of security begins with an attempt to map out a given milieu. Foucault defines the milieu as “that in which circulation is carried out...a set of natural givens—rivers, marshes, hills—and a set of artificial givens—an agglomeration of individuals, houses, etcetera...a certain number of combined, overall effects bearing on all who live in it” (21). Security then operates by attempting to optimize the arrangement and functions of these givens by understanding and redirecting their operations and internal logics, a tactic that Foucault will later call the conduct of conduct. A similar logic can be seen in the transformation of military training, which moves from an attempt to impose a set of standardized habits onto undifferentiated and anonymous soldier-bodies to a focus on developing and redirecting soldiers’ individual habits, reflexes and capabilities, an approach also more amenable to the more flexible forms of militarization today.

The supplement to this different biopolitical calibration of training is a focus on the emotional bonds within the military unit. This serves the double function of providing one more incentive to overcome what Marshall identified as a general disinclination to kill others by linking it to the survival of one’s ‘family’ and ‘brothers,’ and also provides a more humanizing support structure made all the more necessary by

the new technologies of training that were increasingly operating on pre-subjective bodily capacities. In *An Empire of Indifference*, Randy Martin discusses how

Studies on motivation to fight going back to the Second World War and affirmed by the sociologists Edward Shils and Morris Janowitz found that commitment to colleagues—the buddy ethos—was the most potent fact in a soldier’s ability to place his or her life on the line. A more recent study conducted toward the end of the American infiltration of Iraq ties propinquity to affect. ‘That person means more to you than anybody. You will die if he dies. That is why I think that we protect each other in any situation. I know that if he dies, and it was my fault, it would be worse than death for me.’ *The challenge of training doctrine is to turn this immediate feeling into a network of national fidelity* (Martin 89, emphasis added).

Of course, the affective valence involved in composing a military force is not particularly novel. In the interview “Friendship as a Way of Life,” Foucault, commenting specifically on trench warfare in World War I, suggests, “one can wonder how, in these absurd and grotesque wars and infernal massacres, the men managed to hold on in spite of everything. Through some emotional fabric, no doubt. I don’t mean that it was because they were each others lovers that they continued to fight; but honor, courage, not losing face, sacrifice, leaving the trench with the captain—all that implied a very intense emotional tie” (Foucault, “Friendship” 139). And of course, exploring and mobilizing these relationships are at the heart of military platoon movies, which is taken to micrological and ahuman level in *The Hurt Locker*. On one hand, the military unit in this movie is minimized—as opposed to the 7-8 characters that typically compose the narrative focus of a platoon film, the focus is on only three soldiers in a bomb detonation squad. On the other hand, the narrative role and emotional charge of inanimate objects—the Packbot, the bomb suit, and the titular ‘hurt locker’ of various fuses and IEDs that almost kill the main character—is expanded. However, it is instructive to look at the shifting ways the Army attempts to develop, monitor, and use these relationships, especially since it has become far more reflexive in doing so, partially as a response to the intensity, instability, and contradictoriness of these relations. Again, Foucault: “Look at the army, where love between men is ceaselessly provoked and shamed. Institutional codes can’t validate these relations with multiple intensities, variable colors, imperceptible movements and changing forms. These relations short-circuit it and

introduce love where there's supposed to be only law, rule, or habit" (Foucault, "Friendship," 137). As Martin suggests, however, the Army is increasingly focused on precisely accentuating and eliciting the affective components of law, rule and habit, to deconstruct their presumed opposition. If the military can in fact not always adequately capture, register, or validate the forms these relations take, its response has been to more minutely and precisely implicate itself in the production and development of these friendships through a range of governmental technologies.

A significant example of how the Army has attempted to cultivate these relations and their attached 'immediate feelings' is through the formal institutionalization of the 'battle buddy' in Basic Combat Training (BCT) and beyond. A battle buddy is a partner assigned to a soldier upon entry to the military, forming a relationship defined by a mutual responsibility to help each other learn, understand, and embody the military lifestyle. Various tasks meant to be carried out by battle buddies include sharing information, news, or orders, clarifying the day's training/mission, preparing for tomorrow, providing an informal emotional support, encouraging soldiers to complete the training regimen, monitoring and helping regulate appearance and conduct, informing superiors about any emotional or psychological changes in one's partner, and assisting each other in living up to Army values.

A number of important points can be drawn from this description of the battle buddy system. First, this regime of mutual self-responsibilization introduces what Foucault discusses as 'technologies of the self' into the military formation. Foucault defines these technologies as techniques that "permit individuals to effect by their own means, or with the help of others, a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality" (Foucault, "Technologies," 225). This increased emphasis on soldiers' individual responsibility for their training, development, and comportment is, of course, articulated to 'technologies of

power' that "determine the conduct of individuals and submit them to certain ends or domination, an objectivation of the subject," working as another instantiation of the entwinement of technologies of power and self that Foucault refers to as governmentality. The scope of this governmentalized relationship ranges from the micropractices of daily life (making sure your buddy's bed is made properly, or practicing the proper way to insert an IV needle—recounted in the unfortunately titled *Army Times* article 'Soldiers learn proper way to stab their battle buddy') to the macro level of ensuring that your buddy is properly emotionally, ethically, and psychologically integrated into the Army structure.

Second, the mutual self-responsibilization bound up in the battle buddy system is part of a more general transformation that is also evident in changing military (self) images like the 'Army of One' campaign (which continues to exist, with a different inflection, in the current 'Army Strong' brand). The battle buddy system functions as a micrological, tactical example of a broader shift that recasts military life as a particular mode of self-management. This produces a configuration of power that Martin describes as "self-managed colonialism," an apt description for the current military missions in Iraq and Afghanistan.

Third, the battle buddy system is also meant to function as a type of self-directed diversity training and multiculturalist practice. The *Army.com* webpage devoted to battle buddies points out that in basic training, "your battle buddy will most likely be a different race, ethnicity, or age from you. The Drill Sergeants want you to be able to work closely with someone from a different background. Race, ethnicity, and age are superficialities that will not matter when completing a mission...so make a conscious effort to be tolerant to that individual" (Volkin online). Here, the model of military multiculturalism moves from a primarily policy level (formal desegregation, a professed desire for inclusivity, etc.) to a uniquely tailored individual experience that also directly enacts the more general integration and indifferenciation of the 'military family.' Your singular

relationship with your battle buddy is precisely what enables you to view his or her specificities as irrelevant. It is also important to underline the conspicuous absence of sexuality and gender from the list of differences that make no difference. The battle buddy program is completely homosocial (women will only be assigned another woman as a battle buddy, men only be assigned another man). It is difficult not to postulate a connection between the expansion of the battle buddy system (beyond its standardization in BCT, its increasing presence in Advanced Individual Training (AIT) and actual military operations) and the recent overt inclusion of gay and lesbians in the military following the repeal of “Don’t Ask, Don’t Tell.” Discussing her time closeted in the Navy under the military, Capt. Joan E. Darrah discusses how a range of minutiae “straight people take for granted could have ended my career, even a comment such as ‘My partner and I went to a movie last night’” (Darrah online). Darrah describes how constantly maintained, painstakingly precise performance, self-monitoring and regulation were required to pass under the ‘Don’t Ask, Don’t Tell’ regime: “Not daring to have a picture of Lynne [her partner] on my desk, being reluctant to go out to dinner with her, telling her not to call me at work except in a real emergency, not going to church together, avoiding shopping for groceries” (ibid). Since the type of relationship encouraged by the battle buddy system directs focus to these minutiae, the inherent contradictions sustaining ‘Don’t Ask’ were exacerbated, which might have contributed to its repeal. Significantly, a number of the critiques of this policy were framed through the lens of military multiculturalism. Darrah notes, “ironically, it was in the military that I learned to work with people of different backgrounds, different religions, different ethnicities and different skin colors and to focus on getting the mission accomplished” (ibid). It will be interesting to see what effects the repeal of ‘don’t ask’ has on the modalities of the military affective regulation and what types of ‘regulatory queerness’ and ‘homonationalism,’ as discussed by Puar (2010), are promulgated, crystallized, or challenged in its wake.

Fourth, the battle buddy program's devolution of responsibility for training, military acclimation, and adjustment to military life from Army leadership to one's 'buddy' also is significant in its temporal logic—the battle buddy as perpetual presence. The battle buddy formalizes a mode of constant lateral surveillance justified by extreme and everyday emotional investment in other soldiers. In an article discussing the adoption and extension of the battle buddy system, Bobby Neal points out that the first rule of the battle buddy system is that

the soldier will never go anywhere without his Battle Buddy. Sometimes you'll see soldiers on their first on-post pass wandering around lost, literally. Hopefully, with the team, one of the Battle Buddies will know where they are. If not, they can work together to find their way back and keep each other safe in the meantime. Besides, staying with your Battle Buddy is what makes the system work. This is imperative and why it is the first rule (Neal online)

Beyond being extreme temporally (i.e. one is, literally, always with the battle buddy except when it is impossible—the examples offered by Neal are when a buddy is “getting an x-ray and no one is allowed in the room due to radiation risk” or “going into the Port-a-John that holds only one”), the stakes of enacting the system are also figured as a matter of life and death—the type of reliable, frank, trusting, and intense relationship ideally developed through the battle buddy system in basic training is the foundation for confidently and successfully carrying out military operations, since a soldier performs optimally when she knows she can literally trust the other soldiers with her life.

A more recent development, crystallized after the Fort Hood shootings, is the use of the battle buddy system as a type of proto-psychiatric screening and monitoring, with battle buddies being explicitly tasked to remain attentive to seemingly minute changes in their partners' behavior, mood, habits, etc., as these may be symptomatic of suicidal tendencies or other mental disorders. The two principal presuppositions driving this particular iteration of the battle buddy system is that the 'buddy' possesses a more detailed, complete, and minute knowledge of the soldier than (often overworked and overextended) official military mental health specialists, and that the emotional intensity of the 'buddy bond' will be stronger than the aversion to seeking mental health treatment

that many soldiers share (since it is often framed as implying weakness, failed masculinity, lack of professionalism, etc.). If that side of the battle buddy relationship fails to work, then the buddy also serves as a failsafe and will report his buddy out of care and concern. In Neal's words, "a good battle buddy will 'tell on' his buddy if it is in his buddy's best interest. This takes great courage" (ibid). In this instantiation of the system, battle buddies simultaneously serve a preventative and regulatory role in ensuring the development of normal, optimal soldiers. The bond forged is meant to allay the difficulties of transitioning to military life, schedules, rhythms, and habits, and is also in place to alert the leadership if this transition fails to take. The diagram of this particular technology, affective regulation and monitoring through governmentalized lateral surveillance justified through a discourse of care, has become the dominant model of intra-military power today. It has also developed from a focus on only (or at least primarily) enlisted soldiers to encompass the entire military family, a development to which we now turn.

### *'Quality of Life' as Governmental Technology*

In February of 2001 (and so, quite obviously, predating the 9/11 attacks) President Bush issued the second National Security Presidential Directive, (NSPD) entitled "Improving Military Quality of Life." In effect, this was really the first NSPD dealing with policy, as NSPD-1 ("The Organization of The National Security Council System") served to outline the structural changes of the NSC that would be taking place during the new administration and to provide the framework and expectations for future directives. Interestingly, these directives have received extremely limited news coverage or academic discussion, even though a number of them have been declassified. This may in part be due to the fact that the visions and models set out by presidential security directives (which have been used, in slightly different forms, by all U.S. presidents after



WWII) are seldom actualized. In a *Washington Post* article discussing the issuance of President Obama's first security directive, Karen DeYoung points out that "few presidents have followed the letter or even the spirit of their national security directives under the pressure of crises and internal power struggles" (De Young online). She offers as an example George W. Bush, whose "six-page directive set out an orderly policymaking system that was thwarted early on by the relative weakness of his initial security adviser, Condoleezza Rice, the supremacy of Vice President Cheney among his advisers, and clashes between Donald Rumsfeld and Colin Powell" (ibid). In spite of their partial (or non-existent) realization, these documents offer useful illustrations of the different political rationalities and imaginations that characterize different administrations and governments, and both the Bush and Obama administration have been extremely committed to instantiating the programs and general perspectival shifts called for by them.

Unfortunately, the specific content of NSPD 2 remains classified, but through the Quadrennial Quality of Life Reviews (QQOLR) mandated by the directive it is possible to extrapolate the central points of the directive. The reviews were prompted by a perceived demoralization of the military by a number of shifts and occurrences in the 1990s: the post-Cold War base realignment and closure (BRAC) policies; the involvement of the US military in failed (Somalia) or morally and politically ambiguous (Bosnia) missions; a sense of non-participation of military families in the 1990s US economic boom/bubble; and the development of a military policy and vision of the future that placed more emphasis on technologies than personnel. These general concerns are layered on top of the multiple difficulties facing military families mentioned above: "Increasingly frequent deployments, long separations, recurrent moves, inconsistent quality of housing, and sporadic spousal employment are just a few of the unique

challenges consistently faced by the families of those in uniform...challenges that generate stress, anxiety, and uncertainty” (DoD, QQOLR1 55).

The latter issues are both measured and indexed by a classificatory system of tempos of military life and actions developed by the Army, marked by a logic not far removed from Lefebvre’s aforementioned call for the development of a rhythmanalysis. A DoD article explaining the different activities provides four interconnected but distinct registers of military tempo: optempo, perstempo, worktempo, and deptempo. Optempo, or ‘operations tempo,’ refers to ‘a measure of the pace of an operation or operations in terms of equipment usage—aircraft ‘flying hours,’ ship ‘steaming days,’ or ‘tank (driving) miles.’ Perstempo, or personnel tempo, is “the time an individual spends away from home station.” Worktempo is “the pace of work that military personnel experience at home stations.” Finally, deptempo (deployment tempo) is “a measure of the number of days in one month that a unit would have to deploy to accomplish assigned training or operational missions” (Garamone online). The article points out that while these different inflections of tempo may “seem the same because they often rise and fall together...they don’t have to” (ibid). However, in practice they are often all collapsed into ‘optempo’ as a more general register of the speed of military life and length of deployment. As one milblog suggests, the term is “used in the Army in reference to ‘being busy.’ When we are breakneck busy we say we have a high optempo, when we are deploying more often we have a high optempo, when we use up resources quickly because of deployment or assigned mission we have a high optempo” (*Down Range* online). Regardless of the specific inflection these terms get in different units and branches, there is a general consensus that all of these tempos are accelerating, and that

this acceleration strains military personnel, equipment and infrastructure, and military support structures (often primarily, or only, figured as military families). The QQLORs are presented as a means to measure, specify, and quantify these general and specific concerns about personnel and families, and to provide a platform for developing different techniques to manage and alleviate these stresses to make soldiers more productive and effective.

Formally, as military policy documents, these reviews are rather unique in terms of graphic design and page layout, with this distinction much intensified in the second QQLOR. The first review's cover art is provided by "Savannah Loberger, Marine Corps Air Station, Beaufort, South Carolina. Savannah's drawing is the USMC winner in the Armed Services YMCA 2004 annual art contest."



Fig. 3: QQLR 1 Cover Art

It is a crudely drawn crayon picture of a happy, white military family (mom, dad, and five children) standing under a tree on a sunny day. The mother is holding what appears to be a newborn baby; a toddler is hiding behind the father's leg. While the first report quickly moves from this sentimental introductory image back into the more arid domain of xeroxed memos and bar graphs, the second review is completely defined by this 'family-friendly aesthetic.' Text is superimposed over photographs, the fonts are rounder and colored, a number of the charts and graphs also incorporate graphics, and most of the inserted pictures are framed to look like Polaroids.

## Military OneSource Center

### VISION

**That families have a dynamic and responsive set of resources to improve their quality of life as they face the challenges of military life.**

**T**HE MILITARY ONESOURCE CENTER is a new component to meet the need for a joint outreach support system to military families for the active duty and the National Guard and Reserve — a need that has grown increasingly important with the long and repeated deployments associated with the Global War on

Terror. The Center is an expansion of the resources provided by the joint Military OneSource 24/7 Call Center and website tools.

By providing quality of life support for commanders, the Center will serve to ease both deployment-related and military lifestyle challenges faced by troops and their families.

Details about Center initiatives are included throughout this section, along with other DoD programs.

The final piece in this report, the Military OneSource Center Commanders' Resource for Quality of Life Surge Support, details the resources available on-demand for commanders.



Fig. 4: Typical page from QQLR2

The overall visual tone is far closer to a high school yearbook or summer camp brochure than a government military policy document, and serves as an example of how the text attempts to formally embody the very ideals of a friendly, caring military that it is calling for.

This reimagining of military life through an ethic of care opens the document, which claims that it will “articulate a caring leadership who understands the sacrifices and demands of the military lifestyle and reiterates the Department’s commitment to underwrite family support” (DoD, QQLR1 i). The slogan that ‘families also serve’ is the guiding principle and insight of both reports (in the latest iteration of the Army Strong campaign, ‘army mom’ is actually included in the Army’s ‘career lineup,’ embodying the ‘strength to support’ arm of the “Army Strong” doctrine). They both make the argument that questions of quality of life and lifestyle cannot simply be thought of as perks peripheral to military missions and goals, but instead function as a core component and determinant of operational success which have to be studied, managed, and optimized accordingly. The explicit aim is to highlight how “matters affecting the quality of life of members of the Armed Forces” must be viewed through their “relation to the national security strategy of the United States” (ibid). This point is perpetually reiterated throughout the review: “per SECDEF [Secretary of Defense] guidelines, as we embark on transforming our forces, our focus must not be entirely on operational issues but include the quality of life of our personnel and family members as an integral part of this process” (16). Or again: in developing “the unique culture of the military way of life...quality of life programs are not just ‘nice to have,’ but are the *foundation of our*

*military culture* by taking care of people so they can focus on the mission” (20, emphasis added).

So on one hand, we can see the elaboration of an understanding of military lifestyle that argues that the production of a regularized, comfortable and pleasurable military culture across the branches is a crucial component of the ‘global war on terror.’ On the other hand, and seeming slightly contradictorily, there is an attempt to recast these lifestyle initiatives as ‘benefits’ instead of ‘entitlements’ in order to render them more flexible and amenable to change. This is most visible in 2002’s “New Social Compact,” which outlines how the military should shift from a model where the military is seen as providing entitlements to enlistees and their dependents, to a tripartite “reciprocal partnership between the Department of Defense, service members, and their families” (DoD, NSC 1). This figure is the framework for the QOLRs, which also emphasize that they are purposely attempting to “shift the culture of military quality of life from one of entitlements toward that of a *bargain* between the military and its members—in exchange for members’ effort, the military provides programs and services to facilitate the fulfillment of their duties” (DoD, QQLR1 145, emphasis added). This dual process of making military culture and lifestyle central to military operations, while simultaneously reframing these issues through a discourse of familial self-responsibilization and mutual concern composes what we might hazard to call a ‘cultural turn’ in the military. Exploring why this cultural turn emerges at this particular moment, and, following Tony Bennett, what ‘cultural logics’ and ‘logics of culture’ it proposes and develops to cultivate a proper military lifestyle follows below.

A contemporary managerial logic marks the first review from its opening lines, which claim that

despite the tremendous investments our Nation makes in information, science, technology, and all the rest, by far the most important capital we possess is human capital...nowhere, perhaps, is this more evident than in the U.S. Military where all the technology in the world would be useless without the courage and dedication of the men and women who put that technology to work defending the freedom that makes all of our prosperity possible (DoD, 1QQLOR i).

The need to import this managerial logic from contemporary corporate practices was explicitly emphasized a few years earlier in the ‘New Social Compact.’ This report notes that in response to “demographic changes” and

changing lifestyle values of American workers...employers have become increasingly family-friendly. Wise employers are selectively adopting new practices to strengthen their relationships with the workers they want to keep. Investment in these approaches makes sense for building morale, efficiency, continuity and bottom-line strength...[and] the idea that ‘we’re all in this together’ [which] is paramount for the provision of a successful military defense (DoD, NSC 2).

Hence, part of the foregrounding of questions of lifestyle and cultural management through the discourse of human capital is attributable to an incorporation of the various techniques Andrew Ross (2002) calls ‘humane managerialism’ into military organizational logics. Likewise, in the first QQOLR, policy objectives are framed as a response to “the great social change occurring in America” through “business-based approaches to transforming quality of life support to Service members and their families” (DoD, QQLR1 61). In this way, the re-emphasis of ‘the human’ within contemporary military discourse is deeply inflected by contemporary corporate logics of ‘human capital’ and ‘human resources.’

However, the mobilization of this logic should also be situated within a more general attempt to ‘rehumanize’ the military that takes shape in a number of different sites as a reaction to the technocentric military imaginaries that dominated military policy and debate in the late 90s and early 00s. These include, for example, the demand for a

renewed focus on ‘human intelligence’ following the intelligence lapses leading up to 9/11; the incorporation of embedded anthropologists in military units through the Human Terrain program; and the move from the atomistic, hyperindividualized ‘Army of One’ campaign to the current, more holistic ‘Army Strong’ (which includes ‘Strong Bodies,’ ‘Strong Families,’ and ‘Strong Communities’ within its ambit). What all of these examples share is a move away from the technological imaginary that made soldiers secondary to a web of networked information and communication technology, which emphasizes investment in and development of this network and broader technical infrastructure over personnel concerns. This should not, however, be read as a sign of any flagging interest or investment in high technology by the military but rather a shift in the place, status, and function of the military’s technological imaginary. Instead of a vision of the soldier enfolded into a pre-existent and pre-defined technological infrastructure, the Army is moving towards the inclusion of soldiers, their families, and technological objects within a broader technological assemblage envisaged as an extended, all-encompassing ‘military family.’

In this way, questions of technological rehumanization and familial management emerge as solutions to a series of macro and micro-level concerns, stresses, and dissatisfactions, which are articulated in the Army’s concern with issues of re-enlistment and retention. Perhaps the dominant way that military lifestyle becomes directly connected to national security and operational success in these documents is the foregrounded connection between familial satisfaction and happiness with decisions to stay in the military. Again, this central concern makes its appearance on the first page of the first report:



one thing for certain is that while the decision to enlist is generally an individual decision, the decision to remain in the military is more frequently a family decision. More than half of today's active duty military members are married, and military quality of life is a key determinant of whether that soldier, sailor, airman, or Marine remains in the military or returns home (DoD, QQLR1 1).

As with most of these reports' central tenets and principles, this theme is also repeated and developed throughout the document, specifically via the phrase that "although we enlist the individual in the Armed Forces, the decision to re-enlist is made around the family's kitchen table," which is repeated at least five times in the review (DoD, QQQLR1 59). The importance of familial satisfaction for re-enlistment is highlighted in a survey of enlisted personnel that found that the top three most important reasons for officers and enlisted personnel thinking about or planning to leave the military before retirement were 'amount of time separated from family' (for officers and enlisted personnel), 'amount of enjoyment from my job' (for officers) and 'overall quality of Army life' (for enlisted personnel) (QQLR1 155). The conclusion drawn from these findings in the second QQLR is that

the intention to leave the military is best predicted by factors related to personal happiness and sense of identity, as opposed to monetary factors and job alternatives. Key events of military experience can be identified that reliably predict changes in commitment. Thus, the management of key events can help increase commitment and reduce attrition (QQLR2 108).

More precisely defining what those 'key events' are and how to best manage them are put forth as topics of further research.

Another site where familial investment in the military is foregrounded is in the classificatory system the military uses to measure a soldier's depth of commitment to the armed forces through their "Commitment to Military Life Index." The ideal, top level of commitment is termed "affective commitment," defined as "people who *want* to stay in the military because they like it" (DoD, QQLR1 112). This maximal investment is opposed to "normative commitment," when "people believe they ought to stay in the

military because of their sense of duty to country,” and “continuance commitment,” the bare level of “people who believe they have to stay in the military because they have so much invested (time/pay/tenure)” (ibid). This possibly surprising arrangement, where pleasure, desire, and lifestyle preference has superseded the more traditional appeal to patriotic duty as the ideal motivational form is again based on “research in the private sector” that attempts to facilitate “feelings of commitment” because they are “are among the best predictors of employee turnover” (ibid). The military has begun to translate these corporate assessment and human resources metrics and methods into its own idiom, and its preliminary research indicates that “both large events (deployments, etc.) and the smaller daily experiences of life in the military can impact commitment; that both work and family experiences influence the commitment of members and spouses; and that members and spouses ‘negotiate’ their commitment and re-enlistment decisions” (113). Again, with its focus on macro (‘large events’) and micro (‘smaller daily experiences’) forces working on and through military families, which in turn necessitates responsive management on both of those levels, we can see both the justification and emergence of a differential military biopolitics that is increasingly taking the military family, and not simply the individual soldier, as its target.

There are two other related complicating factors that have helped draw so much internal attention to the military family, made it an urgent issue, and that also provide challenges to traditional military modes of containment and management. The first is the massive mobilization of National Guard and Reserve members during the recent wars, which is seen as offering distinct challenges above and beyond the active duty military force. The reserves have their own separate sections in the Quality of Life reviews, and

are also a specific focus of various Congressional hearings (for example, “The Needs of Military Families: How are states and the Pentagon responding, especially for Guards and Reservists”) and policy documents (such as RAND’s *Deployment Experiences of Guard and Reserve Families* or the DoD’s *National Guard and Reserve Family Readiness Strategic Plan*). These works all underscore how Guard and Reserve members and families are far less amenable and available to the mode of disciplined mobilizations typical of military life. On one hand, they are far more dispersed—practically none of the Guard/Reserve corps live on bases, but are dispersed throughout various communities throughout their home states. On the other hand, they are far more rooted in those communities than off-base active duty families, as they hold civilian jobs that are (most often) site-specific.

This relative diffusion and immobility has made the realities facing Guard/Reserve components—increasing number of reservists deployed, increasing number of deployments, for longer periods of time—especially difficult for Guard/Reserve members and their families, and consequently the military’s attempt to manage these challenges. For example, “where less than one in 100 members of the Guard and Reserve were deployed in FY 2000, more than one in five are now deployed” (84). Additionally, the length of deployments has steadily increased since the invasion of Afghanistan, moving from a policy of no more than one year cumulative active duty per 5 years, to 18 months per 5 years, to 24 months with a 24 month minimum reprieve before the subsequent deployment. And since most of the military’s service provision—everything from fitness programs, daycare, and discount shopping to basic medical care, counseling services and support groups—are organized in and around military bases,

reserve families are often more isolated from those resources than active duty families, even though they may need them more precisely because it is a more exceptional and disruptive experience for them.

This situation is connected to the effects of the various stresses of military life more clearly emerging, particularly noticeable in divorce rates and suicides. An article in *Military Review* noted that the “high stress levels endured among military families after years of multiple combat tours and lengthy deployments” has resulted in the number of divorces among enlisted Soldiers and Marines reach[ing] a 16-year high in fiscal year 2008. There were nearly 1,000 more divorces among enlisted Soldiers in 2008 than in 2007” (Gomulka 111). The intensified deployment tempos have also been connected to heightened rates of soldier suicide, child abuse, and spousal depression, which have generated their own horrific anecdotes: for example, an Army sergeant who served in Iraq was been arrested for allegedly waterboarding his four-year old daughter when she refused to recite the alphabet (see Friedman 2010; Zoroya 2010; Levin 2009). With advances in military medical technology ensuring that more soldiers will survive previously fatal injuries, but concomitantly that more soldiers will return from the war having undergone severe trauma, we have entered a mode of warfare where people within the military are concerned that “the suicides and psychiatric mortality of this war could trump the combat deaths” (Gomulka 112). Again, the biopolitical inflection of the family management projects become clear, when the conduct of families is meant to guide the conduct of soldiers, in a context where not only their re-enlistment but their very survival is at stake.

The military's proposed solution to these issues take a variety of forms, but the central focus is on using "technologically-based family support services" as a means to "achieve 'jointness' across different branches" in their approach to "family readiness" (DoD QQLR 85, 86). Since an increasing number of families undergoing the stress of military deployment are dispersed, the most effective solution is to build "self-reliant families by arming them with the tools for success" (110). The ultimate goal is to "leverage technology to meet the communications needs of the 'digital generation' so that military families maintain a sense of community, with access to help and assistance any time of the day or night" (QQLR2 10). Here, networked communication technology is figured as simultaneously a portal to other services, as well as an end in itself through its fostering of a sense of an ever-present 'connection' and 'community' with and beyond the military. This vision is meant to be realized primarily through the Military OneSource Center, a joint call center and online assistance site that is presented as offering both families and the military command "on-demand quality of life support" (QQOLR2 140). Phone consultants are available to discuss parenting and childcare, elder care, coping strategies for deployments and returns, health and wellness, crisis support, financial assistance, and other special needs. However, the ways in which technologies are figured simultaneously as a crucial element of preserving family togetherness and an actual component of the family is even more obvious in some other, complementary examples of military domestic technologies, to which we now turn.

## *Flat Daddies and Military Reproduction*

Let's begin here: daddy<sup>2</sup> is home again, already. He's back in business, hanging out at all his old haunts: the dinner table, the grocery store, the local Chili's, the kids' baseball and soccer games, the campground, the playground, Chuck E Cheese for a birthday party. (see fig. x) He's even trying out some new locales: the hairdresser; the gynecologist; the confessional booth; chaperoning a younger sister's after-prom party. (see Zezima A1; Macquarrie A1; AP online) But here's the catch: it's not really daddy at all, but Flat Daddy, a high-resolution, life-size foam board replica (from the waist up) of soldiers deployed to Iraq and Afghanistan provided to their families to help cope with the separation. According to NPR, the idea came from a woman in Bismark, ND named Cindy Sorenson who was trying to figure out a way for her husband to be present and recognizable to their daughter when he was deployed to Iraq. (NPR Online) She mentioned this to Elaine Dumler, the author of a book entitled *I'm Home Already...Again*, a popular collection of different tips and techniques to stay connected and maintain family bonds for military families with a member facing (re)deployment. This strategy struck a chord with Sgt. First Class Barbara Claudel, the director of the Maine National Guard Family program, who incorporated the Flat Daddy concept into their family outreach program.

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<sup>2</sup> Although within its state appropriation, Flat Daddy is supplemented with Flat Mommy, the vast majority of the discussion around Flat Daddy/Flat Mommy (by the state, the mainstream media, books on military family life, and blogs and chat room) flattens into a conversation about Flat Daddy, and I primarily refer to Flat Daddy here to underscore this sense of the heteronormative patriarchal work Flat Daddy is imagined and hoped to accomplish, although I hope to challenge this conception later in this chapter, and hope I'm not performatively redoubling this position because of this choice.

An *Observer* article traces the inspiration of Flat Daddy to Flat Stanley, a book character and program used by elementary school teachers to encourage literacy and correspondence between students from different locales. (Harris and Espinoza 35) On the Official Flat Stanley Webpage, the project is described in the following terms:

In the book, *Flat Stanley*, by Jeff Brown, Stanley is squashed flat by a falling bulletin board. One of the many advantages is that Flat Stanley can now visit his friends by travelling in an envelope. This premise provides a reason for us to keep in touch with each other. The Flat Stanley Project is a group of teachers who want to provide students with another reason to write...Students make paper Flat Stanleys and begin a journal with him for a few days. Then Flat Stanley and the journal are sent to another school where students there treat Flat Stanley as a guest and complete the journal. Flat Stanley and the journal are then returned to the original sender. Students can plot his travels on maps and share the contents of the journal. Often, a Flat Stanley returns with a pin or postcard from his visit. (Official online)

Like Flat Stanley, the Flat Daddies travel around with their families, both to everyday, banal spaces where the emphasis is on maintaining the sense of the family as a coherent whole, and to ‘once-in-a-lifetime’ events like birthdays, weddings, and funerals, where they’re often included in photographs which are subsequently sent to the real Daddy so he can see where ‘he’s’ been and what he’s been up to. In this way, one of the multiple functions of this double of the soldiers’ body is soliciting more doublings and reproductions, becoming re-pictured in other spaces and images, and precisely through this proliferation of (re)doublings to affectively produce a sense of unity, coherence, and stability for the soldier, his place in the heteronormative family unit, and the metonymic state and national ‘family’.



Fig. 5: Flat Daddy at the Playground

So already, we have double doublings (Flat Daddy as double of real daddy, the concept of Flat Daddy a double of Flat Stanley, Flat Daddy's doubling in other pictures), and the uncanny repetitions only bounce around further from here, feeding back, reverberating, permutating and popping up in all sorts of expected (and unexpected) places. Following Alan Feldman's discussion of the use of images of Rodney King's body by the state to manage, contain, and effectively disappear his corporeal, actual body, the production and circulation of images of soldiers by the state assists in the maintenance and deployments of actual soldier's bodies. The reproduction of the soldier's body meant to operate on a familial, privatized, and personal level--by assuaging the pain and hardship of the separation for both families and soldiers, by allowing the soldier to feel that some part of him is still visibly and affectively present within the spaces and routines of his 'normal' life—resonate with and articulate to broader strategies of managing images of soldiers' bodies by the state. These techniques include everything from their digital reproduction in recruitment, training, and therapeutic video games, to the interdiction on the production and distribution of images of the soldier's corpse, or even their coffins. The management of images of soldiers is



intimately tied up with the management of actual soldiers' bodies. The repetition of the soldier's body with Flat Daddies, with its image of stability, coherence, and wholeness of the paternal soldier's body (and following the metonymic links of normative phallogocentrism, the family and the nation) subtends the role of actual soldiers in creating what Achille Mbembe calls death-worlds, "new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of *living dead*." (Mbembe 40)

What is the function of Flat Daddy? Primarily, it is the deployment by the state of a peculiar form of still life, a still life that once again harbors within it at least a double meaning. On one hand, it invokes a temporal fixing--life has decelerated, frozen, reached degree zero. Life, particularly as it had been known, stops, stills. The presence of Flat Daddy constantly raises the specter, in fact is the *specter*, of over-emphasizing, re-emphasizing the loss and absence its presence is supposed to redress. The absence of the soldier's body from family functions, from the photographs at weddings and birthdays is far more present in the pictures featuring these uncanny doppelgangers than in those without them. Of course, the ultimate realization of this would be the scenario in which Flat Mommy or Flat Daddy is forced to replace the real thing—the death of the represented soldier. I was unable to find any discussion of cases in which the soldier inscribed in Flat Daddy is killed or returns wounded, disfigured, no longer capable of living up to his own image, performing a perverse inversion of the picture of Dorian Gray. Still, the types of psychic, emotional and affective impact potentially created by this double, this present absence in such a situation is a significant omission inflecting all the discussions of Flat Daddy. It seems to be assumed that Flat Daddy functions both as

a placeholder and a promise, that the soldier returning will be similarly whole (although what type of wholeness is implied and generated by a bisected body-image is an open question that could be further explored), available, and amenable to unproblematically returning into the routines and spaces of everyday life. Flat Daddy serves to provide and promise an imaginary heteropatriachial familial unity that its very presence ruptures and belies.

Still, life goes on. Maybe. This is the other valence of still life, where the 'still' indexes a perpetuation, propulsion, continuation. This still life, this immobilization within an image of the soldier's body, enables everyday family life to persist in a way that parallels and enables the continued smooth functioning of broader military formation. It also gestures to the continued survival of actual soldiers bodies even in states of injury or pain, particularly those wounded and amputated veterans whose 'bodily integrity has been replaced by pieces, fragments, folds, even immense wounds that are difficult to close.' Increasing numbers of soldiers are in this situation: "thanks to advances in combat medicine and body armor, more than 90 percent of the 20,000 U.S. forces wounded to date in Iraq and Afghanistan are surviving their injuries. (In Vietnam, that figure was closer to 75 percent.)...[this] presents a huge challenge for the military as this sizable population of wounded veterans returns to society, bearing complex disabilities that will require lifelong care." (Breslau 19) Injuries that would have been fatal even ten years ago are increasingly survivable, and more injured soldiers are returning to active duty combat than ever before. These wounds are often complicated and traumatic, particularly since most of them are inflicted by explosions from IEDs (improvised explosive devices) which often use particularly damaging shrapnel (rusty

nails or ball bearings) and bomb blasts “can embed bacteria, dirt or pieces of clothing deep into the wound,” leading to frequent infections. (Macur online) As of February 12, 2006:

Explosions have killed 1,123 American service members in Iraq and have wounded at least 10 times more, often with a devastating combination of injuries — ruptured organs and severed spines, obliterated limbs and burst eyeballs... among the more than 16,653 Americans wounded in Iraq are 387 amputees, including 62 who... have lost more than one limb. The amputations, traumatic though they are, are often accompanied by painful complications. (ibid)

Beyond the physical wounds are the mental scars of enduring such a trauma and dealing with the ensuing effects of the wounds, which is often particularly difficult for young, active soldiers constantly encouraged to think of themselves as invincible and indestructible. The constant exposure to violence of the soldier’s body that remains untranslatable to their flat reproduction intensifies the latter’s macabre and uncanny quality. It calls to mind the generic conventions of still life paintings, where the threat of death, decay, dismemberment, and destruction implicitly haunt the scenes of everyday abundance and stasis presented in the image. The perpetually fragile wholeness both captured and denied by the Flat Daddies harmonize with the still life *vanitas* paintings, where a random skull is tucked away in the pictured cornucopia, the slow putrescence of fruit and flesh lurking just beneath their glistening surfaces.

Flat Daddy functions as a rendering of the soldiers’ body, one element of a much broader process of rendering, with the conscious invocation of the multiple connotations that term implies: to cause to be or to become (render someone helpless); to do or to perform (render a service); to exhibit or show (obedience, attention); to represent or depict; to give in return or requital; to give up or surrender; to melt down or process, as for industrial use. The soldier’s body is rendered, is sur-rendered and passed over to the state, which in turn renders (one might add rends and rents) that body into a properly

militarized subject. The body is melted down, reduced to its essential parts, with the state attempting to erase any visible marks of individuality, except to the aforementioned battle buddies, who serve as the corollary and counterweight to this process of anonymization:

when you arrive at the intake center, barbers shear you bald. Your clothes are taken and you are dressed in gray. If you wear eyeglasses, technicians remove and discard them and regrind the lenses to standard contours...[the next morning] for 900 of the next 960 minutes...your actions will be involuntary. You will not be allowed to choose your food...your sergeants will 'mandate fluids.' They will tell you when you can relieve yourself of those fluids and of the solids the cafeteria workers tell you to eat. (Tietz 55)

This initial basic training program for new recruits is called, with a refreshing lack of euphemism, Total Control, an operation that costs about \$2 billion dollars a year and that deploys thousands of researchers, psychologists, and social scientists in institutions like the Army Research Lab and the Army Research Institute for Behavioral and Social Science “to invent virtual-reality environments, to calculate the maximum volume of information a recruit can absorb in fourteen weeks, to determine the emotional state in which recruits will most freely shoot at the human form, to discover how much punishment their bodies can take.” (ibid) This painstakingly organized and nuanced production (rendering) of the soldier’s body is the initial response to the passage over (rendering) of that body to the power and control of the state, so it can more efficiently render service to the state in its various deployments and mobilization.

This surrender of control of one’s body to the state includes not only the rendering process of basic training but also forced vaccinations, experimentation with new technologies, and imprisonment for attempts to leave the military formation (which is increasingly difficult during the indefinite war on terror, with extended tour of duty times and compulsive re-enlistment becoming common in order to attempt to sustain a multi-front occupation), and of course, the exposure to the threat of killing and being killed.

The rendering of the soldier's body in Flat Daddy form is an attempt to stabilize and manage the disruptions to heteronormative familial and everyday life such mobilizations of the body entail through the (re)production of paternal and patriarchal militarized presence within family spaces and practices. "I just bought a new table from the Amish community, and he [Flat Daddy] sits at the head of the table. Yes, he does." (Macquarrie A1) Flat Daddy wordlessly gestures to the military's increasing dependence on and reproduction of an idealized heteropatriachial family unit, and its simultaneous disruption and disorganization. A reliance on and disruption of the heteropatriachial family unit is also apparent in the state's displacement of the welfare of both military families and soldiers onto the families themselves. Here, I am thinking of the various initiatives that attempt to produce 'self-reliant families' discussed above, as well as private campaigns organized by military families to buy body armor for soldiers and their vehicles, or the Operation Homefront and America Cares program. Operation Homefront is a nonprofit organization founded to help sustain military families, who are often living at or below poverty levels, particularly when the military family member is injured. The program provides emergency aid, teaches computer literacy to help families keep in touch, procures financial assistance, especially for families facing illnesses, homelessness, or funeral costs, and organizes social outreach by offering services like child care. Programs like this function as the corollaries to the state's progressive withdrawal of welfare functions, even for its most representative embodiment, the soldier, which results in the increasing deployment of the heteropatriachal "'family' as a regulative formation in the current governmentality." (Reddy 107).

I will return to this broader context of a more general military familialization below, but would also like to point out another proposal that was floated by the DoD that directly articulates this form of military familialism with our earlier discussion of affective technologies. It was in some ways an attempt to assuage the unsettling and discomfiting elements of Flat Daddy, which seems just as likely to haunt as to help a child. However, this project also exhibited a spectral element that perhaps even surpasses the Flat Daddy. A *Slate* article entitled “Night of the Living Dad” describes the program itself as the production of a “virtual ghost” (Saletan online). I am referring to the “Virtual Dialogue Application for Deployed Service Members,” which has become more colloquially known as ‘Daddybot.’ Like the Quality of Life reviews, the proposal begins with an acknowledgment that “family outreach and advocacy is pivotal for both the psychological health of the family and the resilience of the Service Member. Deployments put stress on the entire family, and communication is key” (DoD online). While actual communication with deployed family members was comparatively easy and frequent during the wars in Iraq, a number of limiting factors (such as differences in time zones, different daily schedules, bandwidth availability, etc.) still remain, which makes anything resembling constant contact an impossibility.

The solution? The DoD solicitation for Daddybot begins with the claim that “historically families have derived comfort and support from photographs or mementos,” of which Flat Daddy and the practices of reimaging and circulation it entails is a part. However, the DoD also believes that “current technology SHOULD allow for more personal interactive messages of support” (DoD online, original emphasis). Beyond the more realistic, interactive elements of contemporary media technologies, the DoD also

emphasizes that more than 80% of American children between the ages of three and five regularly use computers, so “computer-based applications would resonate with children and capture their imaginations”(ibid). Following these underlying premises, the DoD wanted to develop applications that would

allow a child to receive comfort from being able to have simple, virtual conversations with a parent who is not available ‘in person’...that explore and harness the power of advanced interactive multimedia computer technologies to produce compelling interactive dialogue between a Service member and their families via a pc-or web-based application using video footage or high-resolution 3-D rendering. The child should be able to have a simulated conversation about generic, everyday topics. For instance, a child might get a reponse from saying “I love you,” or “I miss you” or “Good night mommy/daddy” (DoD online).

This proposed development, where the image of the deployed soldier moves from a simple presence and placeholder to a moving, responsive, and speaking virtual presence, a program that is constantly available in domestic spaces to “soften the stresses of deployment” and maintain the “psychological health of the family” represents the ideal convergence of affective technologies and military familialism outlined in this chapter. It is also representative of a more general desire of the military to find ways to program and automate intimate, emotional interactions through computer simulations, for a variety of purposes that range from recruitment to therapy. For example, the Army has been working on developing a software version of its controversial Human Terrain System program, which would sidestep the difficulties of recruiting and embedding anthropologists into combat brigades by developing a computer program capable of “cultural modeling, dynamics, and understanding” (US Army online). It also includes simulation programs like “UrbanSim” and the “First Person Cultural Trainer,” which attempt to teach soldiers how to move through communities and “understand the social structures and issues that inform them, then address those issues with the community to affect missions” (Stockton online). These are all attempt to quantify and code complex

cultural habits, relationships, and emotions, in a dynamic and open-ended way.

Discussing the First Person Cultural Trainer, Marjorie Zielke (its PI) claims that “much of the cultural data is being developed in real time by the military...by having it in systems-based approach that is composable –in other words, we can generate culture in certain aspects of the game on the fly—we can respond to the data as soon as it becomes available. We could change it overnight if we needed to” (ibid). As opposed to the numerous discussions of the military’s use of technology to desensitize, distance, and dehumanize, all of these examples point to the military’s desire to develop affective technologies meant to maximize familial and cultural management and translation (an issue that will be explored in more detail in Chapter Four).

*Conclusion: Exceptional Families*

The increasing centrality of the family within military discourses and practices, as well as the desire for cultural and affective military technologies of familial management which I have been discussing as military familialism, should be situated within what Lauren Berlant has termed a “familial politics of the national future,” one characterized by citizens “defined as [people] traumatized by some aspect of life in the United States,” by “citizen-victims” (Berlant 1). Here, the family and domestic space, traditionally defined in opposition to, and as less important than, both the ‘public’ sphere of state politics and the ‘private’ sphere of civil society is refashioned as “the core context of politics” (3). This development unsettles what Wendy Brown has described as “a social ontology imagined to be divided naturally into state, economy (civil society), and



family,” as well as the presumed devaluation of the family compared to the other two spheres, where the family is “necessary but insufficient to man’s ethical life in civil society and freedom in the state” (Brown 144; 147). On one hand, the strict delineations of these presumptive spheres begin to blur, retaining a relative autonomy at best. On the other, the family as image, narrative, and allegory becomes the dominant mode, the model for the organization of both the state and civil society (cf. “*Foucault Society Must Be Defended*”). This is perhaps best illustrated in the constant invocations of the metonymic ‘kitchen table,’ where the family gathers and makes difficult decisions, as a metaphor for every political discussion about issues ranging from automobile bankruptcy restructurings, to the Affordable Care Act, to the federal budget.

This is part of the process in which, following David Morley, familial (and familiar) images and mediatized domestic spaces “articulate the dispersed members of the nation to the centres of symbolic power,” which in turn generates “the everyday process of...the ‘cultural thickening’ of the nation state” (Morley 106). The military family as exceptional American family plays an especially important role in these processes. We can see an example of this in the numerous deployments of military “reunion videos” as media spectacles and viral videos. These are typically surprise homecomings of a deployed family member at an already heavily mediatized event (sports games, concerts, etc.) which are then often mixed with other videos and music (“I’m Coming Home” by Skylar Grey remains the default favorite) and recirculated as videos on YouTube and other social media sites, often with subtitles like “I bet you cry if you watch it all” or “Take the challenge and try not to cry.” These reunions attempt to enact a series of linkages between the military, corporations, the broader public and

individual families through the figure of the military family. By foregrounding, amplifying and remediating intense moments of military togetherness and reunion, they attempt to generate an emotionally charged sense of national togetherness and belonging both in the moment of the reunion and in its subsequent recirculation. The military-entertainment apparatus capitalizes on the emotional intensity of the reunited military family, and the military's family togetherness and exceptionality is performed and confirmed through its elevation to national media spectacle. In this way, the reunion videos also provide another example of the military family being both composed of and composing affective technologies.

Military familialism is also present in the linkage of discourses of the home and the family to discourses and technologies of security, in the formation of what James Hay and Mark Andrejevic call a "Homeland Security [developed] out of the intertwined programs of 'civil defense' and state-sponsored welfare (including 'social security')" (Hay and Andrejevic 336). While these linkages are certainly not new, the particular form these relations take, as well as their centrality to both understandings of contemporary military readiness and civil responsibility, are particular and unique. So while Hay points out that "the formation of the modern household occurred through concerns about safety, security and risk" and particular instantiations of family security like "the idea of a family communication plan is not new," their deployment in the current context as strategies of mobilization is given more urgency during a "war on terror that purportedly affects the daily lives of citizens" and functions differently than in the past as it plays a "role in a ('new') program of social welfare and security" (Hay 354; 372). In the exceptional case of military families, in the dual sense detailed above, the networked

and mobilized family is not only responsible for these forms of normalized domestic (self) surveillance and readiness, but is also called upon to provide expansive therapeutic and support functions to service members, and to the military and state more generally. There is an increasingly intense injunction for family participation in the self-management of injured and traumatized soldiers, one which is codified in a number of policies and technological assemblages we will discuss at more length in the following chapter, which are organized around the twinned principles of ‘resilience’ and ‘post-traumatic growth.’

Due to the increasing importance of the inclusion of the family in the self-management of military injury and trauma, there is also an emerging discourse of the military family itself *as a risk* to be managed through various technologies, since ‘improper’ military families are represented by the military as resulting in everything from a soldier refusing to re-enlist to soldier suicide. Accordingly, military families are also being interpellated into the new technologies of health that are meant to measure soldiers’ ‘wellness.’ This more expansive understanding of wellness is no longer simply organized around the maintenance of a baseline level of physical fitness and the treatment of injuries, but rather through a constant process of optimization through the deployment of a range of technologies meant to monitor and maximize soldier’s physical, mental, emotional, and even spiritual status. This involves the careful monitoring and management of soldiers’ domestic lives, habits, routines and environments, and the connection of these modes of technological surveillance, imaging, and biometrics to broader shifts in underlying conceptions of trauma, military health and wellness, and the

medical production and management of individual soldier-bodies are the subjects to which we now turn.

**Chapter 2: Notes on Biomilitarization, Part 1: Comprehensive Soldier Fitness, Flexible Militarization and Resilient Subjects**

If there is one clear lesson to come out of the ongoing occupation of Afghanistan and Iraq, it is that contemporary warfare remains a thoroughly embodied experience. While this may seem obvious, it is worth underscoring at the beginning of this chapter discussing the concept of biomilitarization, since there has been a great deal of academic and popular writing asserting the contrary—that contemporary war is defined largely, if not wholly, by its increasing tendency towards the incorporeal, the informatic, or the virtual. This particular line of thought takes strong and weak forms. In more restrained versions of the claims of military disembodiment, the argument is that in contemporary military formations the human body is displaced (or replaced) by cybernetic or telepresent technologies that maximize distances between soldiers and their targets, resulting in a totally asymmetric bodily exposure. In this way, the bodies of the targets of the military assemblage are made ever more perceptible, and consequently vulnerable (by increasingly sophisticated surveillance, reconnaissance and targeting technology guiding smarter, tinier, more precise weapons) while the soldiers operating those systems are physically, mentally, and emotionally detached from their hypervisible targets through multiple layers of mediating technology. A prime example of this formulation is Kevin Robins and Les Levidow's claim that

combat is increasingly mediated through the computer screen. Combatants are involved in a kind of remotely exhilarating tele-action, tele-present and tele-engaged in the theatre of war, sanitized of its bloody reality. Killing is done 'at a

distance, through technological mediation, without the shock of the direct confrontation. The victims become psychologically invisible. The soldier appears to achieve a moral dissociation (Robins and Levidow 47).

The contemporary paradigmatic example often offered is the UAV, where the operator of a surveillance or strike operation is far more likely to be in an office building in Nevada than in the country with his drone. While bodies are still involved, they are figured as distant and anaesthetized, with physical distance assuring mental, emotional, and even spiritual or ontological difference between combatants (we will complicate this understanding in a later chapter, which focuses on the changing spatial technologies, imaginaries, and experiences of contemporary warfare in general, and drone technologies in particular).

In more extreme formulations, the entire theatre of war is transferred to an incorporeal plane, as in the discourses of infowar, cyberwar, or pure war. No longer simply mediated or attenuated, here the body and bodily effects are supplemental or secondary to the real conflicts raging beyond the purview of embodiment and perceptibility, constantly churning away instead in the technological battlespaces of electronic impulses and radio waves.

Against these discourses of war as technological idealism, the campaigns in Iraq and Afghanistan have been largely defined by countless examples of intimate violence, a commingling of traumatized bodies. Indeed, the entire premise of the counterinsurgency strategy implemented in Iraq and Afghanistan is structured by a very different proxemics, demanding a minimization of distance between soldiers and the population, integration into daily life and routine, and building relations and feelings of trust with the community. However, new forms of warfighting and new technologies have certainly led

to shifts in the narratives, iconographies, and practices of military health and embodiment.

As a way to explore these shifts, this chapter will focus on transformations in discourses of military health, wellness, and fitness that occurred throughout Operation Enduring Freedom (Afghanistan) and Operation Iraqi Freedom (Iraq). Concerns about health, both of the military and the general U.S. population, have been central to both of these missions, and have been intensified for a number of reasons. First, as I have noted in the first chapter, the sheer length of the occupations, the number and durations of deployments, and advances in military medicine that have allowed soldiers to survive what would have previously been deadly wounds has led to a huge number of non-fatality casualties being absorbed into U.S. military and civilian health institutions. Second, the ‘signature wound’ of these invasions, traumatic brain injury (TBI), is particularly vexing and difficult to deal with, as it traverses and confounds the boundaries of the physiological, neurological, and psychiatric (official military discourse currently defines it with the doubly hybrid term ‘mind-brain/body injury’), and whose symptoms are often elusive, misdiagnosed, or read as signs of other problems.

Third, these more diffuse difficulties facing military health care were focused and publicized in two scandalous and widely-covered tragedies: the infrastructural degradation of Walter Reed (the main Army hospital in the continental U.S.), and the shootings at the Soldier Readiness Center in Fort Hood, the largest U.S. military base. Finally, discussions of military health and wellness are overlaid on a more general panic about the health and vitality of the U.S. population, particularly in regards to obesity and physical fitness among youth. The obesity epidemic is reframed as an issue of national

security, both directly--otherwise acceptable recruits being turned away from various military branches because they're unable to reach the minimum fitness levels--and indirectly--it is a process of a more general physical, mental, economic, and geopolitical weakening of America that places the entire country at risk. The conjunction of all of these factors leads to a fundamental crisis in military health, not only in specific facilities and delivery practices, but in more basic understandings of what defines proper health, national health as an element of national security, and the various technologies and techniques through which health can be produced, maintained, monitored and optimized.

The main reaction to this crisis has been the generation and elaboration of a notion of 'total fitness' within the military, which will be the analytic focus of this chapter, primarily through an examination of the US Army's Comprehensive Soldier Fitness and Total Force Fitness programs. Both of these programs move beyond the traditional military optic of viewing health primarily as a defined level of physical fitness to be maintained and periodically verified by a set of fitness tests. Instead, basic understandings of what constitutes fitness are transformed and expanded by incorporating discourses of 'wellness,' 'resilience,' and 'lifestyle' into regimes of military health. Operating in the biopolitical register, these discursive formations expand practices of military healthcare and surveillance throughout the entirety of a soldier's life. Moving beyond a primary focus on physical training and treating injuries, military health practices are now organized around the concept of Human Performance Optimization, largely through incorporating biometric technologies into everyday military life, centralizing and automating the collection and responses to this biological data, and through a wholesale adoption of the presuppositions and techniques of positive



psychology into military health practices. Operating in concert with the increasingly “molecular” modes of biopolitics discussed by Nikolas Rose that focus on bodies at the cellular and sub-cellular levels—for example, recent efforts within military neurology to develop techniques to repair and rebuild individual neurons and synapses--these practices generate a more expansive, holistic biopolitics. This move is accomplished by refocusing the primary goal of military health as a process of pre-emptively producing resilient bodies rather than responding to trauma. This in turn is effected by a multiplication of the areas of a soldier’s life subject to medical monitoring and intervention justified by this anticipatory fitness regime, defined as “the ongoing development of the five dimensions of strength: physical, emotional, social, spiritual, and family” (US Army, “CSF” online). This move to a holistic and comprehensive view of wellness, resilience, and flourishing also operates through an increasingly detailed attention to the individual soldier through personalized testing and surveillance regimes exemplified by the Global Assessment Tool test, its correlating Soldier Fitness Tracker, and related technologies like PTSD mobile applications.

This concurrent generalization and individualization of military health interventions can best be understood through Michel Foucault’s definition of biopower, and we begin with how these programs allow us to elaborate a definition of biomilitarization as a category to both understand the specific modalities of power producing and shaping military bodies, and how they connect up to a broader politics of health and life itself. I am using the term biomilitarization as a convenient way to bring together four different lines of thought and emphasis. First, it is meant to foreground the centrality of military discourses, images, logics, and practices to Foucault’s notion of

biopolitics, which are often elided by locating the novelty and explanatory force of the concept either in its scale or target (the ‘population’ or ‘society’) or its mode of operation (‘productivity’). However, both of these elements derived their meaning and urgency at least partially from their inflection by discourses of militarization, specifically race war. This recognition needs to be placed squarely in the foreground of any consideration of the biopolitical, as it continues to be vitally relevant and has by no means simply been superseded or rendered anachronistic. This recentering is especially necessary if we are to effectively leverage the notion of biopolitics to help with Paul Gilroy’s injunction to “focus on which particular bodies are most at risk and the conditions in which they are produced as objects of intrusive, violent attention...the diverse ways in which the operations of racial discourse make those bodies—always in relation to each other” (Gilroy, *Darker* 72). It is also meant to resonate with discussions of therapeutic and biological citizenship (Rose 2007; Nguyen 2010) that articulate everyday health, nutrition, and wellness to national security and safety (a linkage we will explore in Chapter 3 through an analysis of the release and coverage of a report entitled ‘Too Fat to Fight’ by a group of retired generals, as well as the revisions in the military’s physical training program).

Second, it is meant to highlight and join up conceptualizations of health, wellness, and the body that are shaped through and framed by military metaphors, images, and rhetorics. On one hand, this refers to academic work such as Emily Martin’s (1995) discussions of ‘immunophilosophy’ and Ed Cohen’s (2009) history of the importation of juridical, philosophical, and military notions of immunity and defense into understandings of individual body’s boundaries and integrity, where “the organism’s own

cells now seem to engage in the very warlike actions that the modern state itself enlists to protect its subjects' lives as its most vital aspect" (Cohen 22). On the other, it refers to how military models, practices, and language saturate quotidian biopolitics. These take a variety of forms--for example, the proliferation of 'boot camps' as an ideal form for physical training, emotional therapeutics, and criminal rehabilitation, or in fitness regimes like 'BodyAttack' organized around shocking one's own body into better shape.

It is also present in right-wing anti-immigrant narratives that frame non-white, primarily Latino immigrant populations as enacting a biological war of revenge on 'native' US population, a discourse which has a long history in American discussions of the politics of immigration and public health. These discourses often figure immigrants as biological threats in two main ways. First, as a more general demographic threat--by reproducing faster than the native population, migrant populations endanger 'traditional,' normative populations, cultures and politics. This is the discourse of a demographic *reconquista*, with authors like Samuel Huntington (2004) claiming "the single most immediate and most serious challenge to America's traditional identity comes from the immense and continuing immigration from Latin America...and the fertility rates of these immigrants compared to black and white American natives" (Huntington online). Second, there is the characterization of immigrants as more direct biological threats, especially illegal immigrants who circumvent the health inspections typically required of incoming immigrants. This notion of immigration as direct biological threat is visible in panics about immigrants overusing emergency rooms, or the U.S. health care system more generally, or in discourses that claim that illegal immigrants are carriers for diseases that have already been overcome in the U.S. A typical example of this narrative is

present in an article from *FreeRepublic*, a right-wing news aggregator, which claims that “illegal aliens are not [medically] screened and many are carrying horrific third-world diseases that do not belong in the United States. Many of these diseases are highly contagious and will infect citizens that come in contact with an infected illegal alien. This has already happened in restaurants, schools and police stations” (*FreeRepublic* online). Both types of panic about the biological security threat of immigrants pose the racialized, migrant body as an anachronistic disruption of the American body politic, carrying with them atavistic diseases and geopolitical histories, memories and understandings that the U.S. has supposedly already overcome. They also demonstrate how individual and collective health and fitness are increasingly framed directly as matters of national security, not simply personal and public safety.

Third, it is meant to highlight the ways in which medical discourses construct and shape military imaginaries and practices, from the level of terminology (i.e. ‘surgical strikes’) to doctrine and strategy. For example, this is evident in the current dominant language of counterinsurgency premised on a vision of removing pathological insurgent cells from an otherwise healthy body politic. This language is not restricted to military writing and doctrine, but also inflects more critical work, as in Baudrillard’s discussion of contemporary warfare as “a fractal war of all cells, all singularities, revolting in the form of antibodies...[that] haunts every world order, all hegemonic domination” (12). This is also connected to the final, and for my analysis the most important, element of the biomilitarization—a reference to the technologies and techniques of contemporary biopolitics and biometrics directed at military and enemy bodies. These include, for example, the regulation of sex and pregnancy within a mobilized military context, and the

expansion and institutionalization of biometric surveillance and data collection directed at the military population and enemy combatants. In this way, biomilitarization indexes the various ways in which military action is premised on gathering, centralizing, analyzing and classifying the biological data of both potential enemies and the military itself.

Biomilitarization thus refers to both the changing underlying conceptions of health, vitality, and resilience that inform military policy, doctrine, and technologies, on one hand, and the different understandings, practices and ideals of military embodiment that result from these changes, on the other. In this and the following chapter, I will explore each of these in turn. The rest of this chapter will explore the first pole (changing conceptions of health and wellness within the military) through an investigation of the Comprehensive Soldier Fitness program, and the ways in which its institutionalization has refigured understandings of military health through the lenses of “total fitness,” “resilience,” and “wellness,” all of which are to be measured and maintained through soldiers’ work on themselves through the utilization of a range of networked and semi-automated technologies (ranging from prescribed online computerized tests like the Global Assessment Tools, to therapeutic chatbots, to mobile applications designed to help self-monitor and treat PTSD). The following chapter will explore the second pole (the military corporeal imaginaries and ideals resulting from these visions of health) through an analysis of the changing corporeal ideals, both of the soldier and of the enemy combatant, that result from these changes and through the broader integration of a range of biometric technologies into the quotidian tasks of warfighting. In particular, it will explore how panics about unfit soldiers connect up to more general discourses of American weakening and decline, and how the prominence of a new, vitalized

understanding of the “wounded warrior” in military discourses and representations reflects and reproduces the discourses of technologically produced resilience that will be explored in this chapter. As Foucault’s discussion of biopolitics and the care of the self serve as my central theoretical grounding for understanding and analyzing these changes, I would briefly like to sketch out the key components of his ideas that I am drawing on, and to highlight their already existing military provenance, before I move on to the specific example of Comprehensive Soldier Fitness.

### *Biopolitics of/as War*

In many ways, Foucault’s 1975-1976 lectures at the College de France collected in the volume “*Society Must Be Defended*” serves as an elaboration of Foucault’s partial or preliminary answer to the vexing question of the now famous final chapter of *The History of Sexuality, Vol. 1*—how do we account for the incredible explosion of violence, destruction, suffering and death in modernity if it is supposedly characterized by a form of power characterized by fostering and maximizing life? Before we examine Foucault’s response, and how the practices, logics, and narratives he describes are both continued and refigured in the contemporary, we should briefly revisit Foucault’s account of the emergence of biopower. Foucault claims that a historical shift begins in the seventeenth century, when emergent forms of biopower displace the previously dominant form of power, sovereignty. Sovereign power, according to Foucault, is at its heart the “right to take life or let live...power was exercised mainly as a means of deduction, a subtraction mechanism” (Foucault, *History* 138). The modern period, by contrast, is marked by the

ascendance of a mode of power that operates by “working to incite, reinforce, control, monitor, optimize and organize the forces under it: a power bent on generating forces, making them grow, and ordering them, rather than one dedicated to impeding them, making them submit, and destroying them” (ibid).

In this account, biopower functions as a complement to sovereign power: rather than taking life or letting live, it fosters life and allows death. Foucault then discusses the organization of biopower around two poles, as I have discussed in the previous chapter. However, it is precisely at this moment of the apotheosis of a biopower organized around fostering life that “wars were never as bloody as they have been since the nineteenth century, and all things being equal, never before did regimes visit such holocausts on their own populations” (137). How can we account for this seemingly contradictory situation? Foucault’s answer is, in short, that the justification of war dramatically shifts within societies where biopower is the hegemonic modality of power. If war was previously justified as an expression or defense of the will of the sovereign within a particular territory, it is now figured as safeguarding the continued existence and wellbeing of the population.

Wars are no longer waged in the name of a sovereign who must be defended; they are waged on behalf of the existence of everyone; entire populations are mobilized for the purpose of wholesale slaughter in the name of life necessity: *massacres have become vital*. It is as managers of life and survival, of bodies and the race, that so many regimes have been able to wage so many wars, causing so many men to be killed...the existence in question is no longer the juridical existence of sovereignty; at stake is the biological existence of the population (ibid).

So, at the very beginning of his discussion of biopower, Foucault marks the continuing centrality of violence, war, and death to its operations. Biopolitics is not totally separate and opposed to sovereign organizations of power like thanatopolitics (Foucault’s term) or

necropolitics (Achille Mbembe's), but comes into being and derives its urgency with and through them. The "formidable power of death...presents itself as the counterpart of a power that exerts a positive influence on life" (ibid). This point about the existence and persistence of the necropolitical within the biopolitical is perhaps most clearly expressed in the notion of the 'vital massacre,' which mobilizes the multiple meanings of 'vital'—simultaneously 'of the utmost importance', 'concerned with or necessary to the maintenance of life', and 'recording data relating to lives'. Just as Foucault will qualify and challenge progressivist interpretations of his various discussions of epistemic shifts (the idea that one form of society, power, subject, etc. totally replaces the pre-existent forms), we should be careful to resist the impulse to simply imagine that sovereignty and the power of death disappears with the emergence of biopower and the power over life. The latter re-animate and rearticulate the former. While this is clear in these tantalizingly brief passages from *The History of Sexuality*, Foucault greatly expands these arguments in '*Society Must Be Defended*'.

*'Society Must Be Defended'* marks a moment of transition in Foucault's thought, which he argues is necessitated by "a certain number of changes...changes in the conjuncture" (Foucault, *Society* 11). As Alessandro Fontano and Mauro Bertani point out, the lectures were delivered "between the publication of *Surveiller et punir* and *La volonté de savoir*, and they occupy a specific, one might say strategic, position in Foucault's thought and research...a momentary halt and no doubt a turning point" (273). The early discussions of biopolitics that threads through this work, and their explicit connection to discourses of militarization, violence, and war, was initially meant to be an extended project for Foucault: "For roughly the last five years it has been disciplines; for



the next five, it will be war, struggle, the army” (24). This change in direction was largely prompted by his uncertainty about the continued political efficacy of his previous attempts to unearth and mobilize ‘subjugated’ or ‘minor’ knowledges. Foucault asks ‘if we are really in the same relationship of force, and does it allow us to exploit the knowledges we have dug out of the sand, to exploit them as they stand, without becoming subjugated once more?’ (ibid).

A central element of this shift in the conjuncture Foucault is discussing is the emergence of a new figure of power—the ‘war-repression’ model—that increasingly displaces the ‘contract-oppression’ schema that informed his earlier work on institutions of normalization (*Birth of the Clinic, History of Madness, Discipline and Punish*). Foucault’s account of the ascendance of this military model of civil society consists of two main lines of analysis. First, he wants to move away from the traditional narratives of how the metaphors of war came to serve as the model of analysis for political economy (and perhaps even political ontology) by “eliminating the very people who are said to be the theorists of war in civil society, and who are in my view no such thing namely, Machiavelli and Hobbes” (18). Second, he offers an alternative account of the specific conjuncture that enabled the elevation and normalization of the relationship of war as a model for ‘society,’ which is itself a relatively novel term. This is the “context of the race problem, as it was racial binarism that led the West to see for the first time that it was possible to analyze political power as war” (ibid). The war that served as a model for understanding civil society was first and foremost a race war, initially framed as a war between races, and eventually as an internal war within one, human, race.

This understanding is in turn dependent on a shift in how war's temporality and exceptionality are understood. Contemporary society, these narratives suggest, have their ultimate origin in actual, "real battles, victories, massacres, and conquests which can be dated and which have their heroic heroes," as opposed to the more generalized "theoretical savagery" located in some impossibly removed pre-history that marks the thought of Hobbes and Machiavelli (50). Because of this violent, and largely repressed genesis this view sees "war continuing to rage in all the mechanisms of power, even its most regular...in the smallest of cogs, peace is waging a secret war. To put it another way, we have to interpret the war that is going on beneath peace; peace itself is a coded war" (51). So instead of an appeal to an atemporal and ahistorical warlike tendency located within human nature, the temporality of these new discourses of society at war is both more focused (in its identification of an originary conflict in an established history) and more expansive (through its recoding of peace, law, and everyday life as so many perpetual re-enactments, extensions or displacements of this original battle). This telescoping temporality, which normalizes a state of permanent war as the substance and stake of everyday life, then undergoes what Foucault terms a "biological transcription" (60). This transcription redefines the enemy 'society' is fighting, and the battleground itself, as "a race that is permanently, ceaselessly infiltrating the social body, or which is, rather, constantly being re-created in and by the social fabric...the reappearance, within a single race, of the past of that race" (61). This explicit racialization of the notion of permanent war lies at the heart of the development of the language and tactics of purification, normalization, and vitalization that define the eugenics movement, which achieve their most "paroxysmal development" in the Nazi state. These connections were

not solely metaphorical, as eugenic practices like forced sterilization and immunization derived their legal rationale from the view that “the state’s authority to enforce compulsory health measures derived from its ‘police powers’ and the example of compulsory military service” (Pernick 1770).

This brief overview of Foucault’s discussion of the imbrication of biopolitics and militarization, in addition to providing the theoretical grounding for my own analysis, is also meant to remind us of the importance of the notions of war, violence, death, and race to contemporary discussions of the biopolitical. Even in works exploring some of these correspondences, there is a tendency to locate issues related to the military on the ‘anatamo-politics’ pole of biopower, focusing on the centrality of military techniques, organizations, and doctrine to the development and proliferation of the disciplines (for example, see Cohen 18-21). Beyond its disciplinary valence, where Foucault’s discussion of early modern military drills serves as the model for his discussion of ‘correct practices’, war, violence, and militarization also vitally inform the more expansive pole of biopolitics focused on populations more generally. It is to the specific forms that this takes in contemporary regimes of biomilitarization that we now turn.

### *Bodies of Trauma*

Over the last decade, a narrative of an expansive health crisis facing the military has been composed across a range of journalistic articles, internal military reports, and government policy documents. The underlying cause of this crisis is attributed to an articulation of the impacts of two extended military occupations, which in their intensity and duration

wear on the body and mind of soldiers even if no direct injuries are sustained, with a more general weakening of the U.S. population. The fundamental problem, the Army asserts, is that “many of the recruits who reach basic training have less strength and endurance than privates past...[which is] the legacy of junk food and video games, compounded by a reduction in gym classes in many high schools” (Dao 1).

Adding to this generalized crisis of military health are the specific complications and challenges presented by the ‘signature wound’ of both Iraq and Afghanistan, traumatic brain injury (TBI). Often described as an ‘invisible’ or ‘hidden’ injury, TBI poses unique difficulties for etiology and diagnosis. As a brain injury, it precludes any easy separation of physiological and psychological components and causality (e.g. are its different symptoms the result of psychological impact of post-traumatic stress, or the physiological impact of micro-lesions in the brain?). As a result, determining proper courses of treatment is incredibly complicated, since so many of its primary indicators are also connected to general stress and rather mundane health problems (headaches, trouble concentrating, minor memory loss, etc.) and are also often dealt with in military facilities that pose “numerous challenges [to health care], including austere conditions, limited supplies and medical personnel, and multiple simultaneous patients” (Ling et al. 457). These elements combine to produce an encompassing context of generalized attrition of the military population, visible in the increasing incidence of PTSD, soldier suicides, prescription drug prescription and abuse, and medical leave.

Beyond this slow attrition, there have also been a number of recent institutional failures of the military health system, most spectacularly in the cases of Walter Reed and Fort Hood, where the medical infrastructure and personnel assembled to care for soldiers

became actively harmful. Substandard and unsafe conditions in Walter Reed were revealed by a 2007 *Washington Post* expose that discussed how areas of the hospital were covered in “black mold...rotted holes, mouse droppings, and belly-up cockroaches,” and the ways in which staff often failed in such basic tasks as “feeding soldiers’ families who are close to poverty, replacing a uniform ripped off by medics in the desert sand or helping a brain-damaged soldier remember his next appointment” (Priest and Hull 1).

The shock of the revelations of such widespread infrastructural and institutional degradation (documented elsewhere as well, for example in the *New York Times* series of articles on shortcomings in the Warrior Transition Units meant to help soldiers move from primary care providers back into active service) paled in comparison to the events surrounding the 2009 Fort Hood shootings, when an Army psychiatrist working at the Soldier Readiness Center killed 13 people and wounded 29 others. The fact that the shooter was an Army medical doctor treating a number of patients dealing with PTSD, and that the attacks occurred not simply within a military base but in a military medical installation, made an already horrific event more unsettling. Much of the coverage read the events through an autoimmune discourse, where the elements of body responsible for defending and supporting health turn against themselves. As a result, the report issued by the independent panel that reviewed the build-up and response to the Fort Hood shootings (*Protecting the Force: Lessons from Fort Hood*) called for policies that focus more intensely on identifying ‘internal threats,’ emphasizing that “there are no safe havens—for Soldiers, Sailors, Airmen, Marines, their co-workers and their families” (DoD, *Protecting* 7). This generalized vulnerability and insecurity, even on ‘home base,’ and its clear articulation to the military medical services also generated renewed and

intensified calls to rethink ‘healthcare readiness’ for new forms of mobilization and warfare. The results of these demands are becoming institutionalized in the development and elaboration of the Army’s new Comprehensive Soldier Fitness program, which will be the focus of the remainder of this chapter.

### *Comprehensive Soldier Fitness and Networked Biomilitarization*

In August 2010, the journal *Military Medicine* published a special supplement addressing the concept of Total Force Fitness, including an introduction from the Joint Chiefs of Staff Michael Mullen. This document serves as a useful entry point into understanding some of the ongoing shifts in the military’s understanding of health and fitness. It emerges out of a longer process of rethinking the guidelines for military health in 21<sup>st</sup> century combat. In 2006, the Pentagon convened a conference on the topic of “Human Performance Optimization in the Department of Defense,” which introduced a number of currently pervasive terms and tropes (“wellness,” positive psychology, “resilience”) into the military lexicon. Some of the presentations and discussions from the conference were published in a 2007 issue of *Military Medicine*, and shortly afterwards an office was established in the DoD specifically dedicated to developing a new paradigm of military health through human performance optimization (the office is the Human Performance Office, housed in the DoD Office of Health Affairs). This office convened a 2009 conference on ‘Total Force Fitness for the 21<sup>st</sup> Century,’ and it is the findings, papers, and discussions from this conference that makes up the 2010 supplement.

The introduction, “On Total Force Fitness in Peace and War,” begins by interrogating the meaning of “fitness,” with Mullen arguing that it is composed of several distinct elements. Mullen begins by claiming “conventionally, being fit means being adapted to a particular condition or circumstance” (Mullen 1). This initial definition immediately frames the definition of ‘fitness’ within the (Social) Darwinist logic of situational adaptation, with the additional resonance and implication of the ‘survival of the fittest,’ which obviously carries a particular urgency within a military context. From this primarily evolutionary or biological valence, a number of additional characteristics of the military’s understanding of fitness are enumerated. First, Mullen emphasizes that “fitness is not just something that is merely physical; it is *holistic*” (ibid, emphasis added). Here, fitness is framed as a *transversal* category that cuts across and applies to “individuals, families, and organizations...[as a] state of adaptation to the conditions at hand” (ibid). This holistic view foreshadows the various ways the military has codified and institutionalized discourses of wellness into their conceptions of military bodies and health, and also complicates readings that frame the production of military bodies as simply a process of hardening and mechanization. Moving from the scope of fitness, Mullen goes on to emphasize the ways in which it is a *dynamic* mode of being, an ongoing and constantly renewed process rather than a steady state to be achieved. Here, “optimal fitness lies in the *constant* awareness of the changing environment and the *continuous* pursuit of *flexible adaptation* to inevitable shifts” (ibid). Lt. Gen. Mark Hertling, the head of the Army’s Training and Doctrine Command newly formed unit on Initial Military Training, echoes this view in a recent statement discussing the revamped Army fitness program. Hertling claims that one of the central goals of the new tests,

renamed the Physical Readiness Test and the Combat Readiness Test, is to “change the mindset so you’re no longer training for a test, but instead having the test be an indicator of the shape you’re in” (Bacon online).

In these passages, we get a glimpse of the ways in which the Army is attempting to develop and introduce a different spatial and temporal understanding of fitness. In terms of temporality, the scope of fitness is expanded indefinitely, demanding constant self-work coupled with an ongoing reflexive monitoring and assessment of the results of that work—fitness as eternal vigilance. However, this assessment is not solely directed at one’s body—calling for increasingly nuanced perception and recording of weight, appetite, energy, mood, etc.—but also at one’s family, the environment, and perhaps more importantly, the relationships between them. We are left with a model of fitness that is radically *open*, in terms of space and time. We can immediately note the resonances of this program with Foucault’s discussion of techniques of the self from *The Hermeneutics of the Subject*, which articulate two separate but related understandings of the work on the self. The first, more familiar version is that “administrative labor of self-inspection” specifically modeled on “the technical verb meaning to make an inspection of an army, a military camp, or a ship,” that is discussed at length in *The Care of the Self* (Foucault, *Hermeneutics* 483). The second element, less developed in Foucault’s published work, is the ways in which bios takes “the form of a *test* of the self,” in “the sense of experience...through which we know ourselves, discover ourselves, and reveal ourselves to ourselves” and “in the sense of exercise...where we form ourselves, transform ourselves, advance towards an aim or salvation, or head towards our own perfection (ibid 486).



This more expansive understanding of fitness as ‘wellness’ and ‘resilience’ is largely rooted in positive psychology, which serves as the primary underlying medical and theoretical basis for the CSF program. Given this relatively controversial field’s central role in the program, it is necessary to understand some of the basic elements of positive psychology before moving on to the ways in which it has been adopted, expanded and implemented within a military context. Positive psychology is most closely associated with the work of Dr. Martin Seligman, a psychiatrist at the University of Pennsylvania and author of bestselling books such as *Flourish: A Visionary New Understanding of Happiness and Well-being* and *Learned Optimism: How to Change Your Mind and Your Life*. Interestingly, before his work developing and advocating positive psychology, Seligman was most famous for his involvement in developing the theory of learned helplessness, which has also been deployed by the military in developing interrogation techniques. The central understanding of learned helplessness is that at a certain point, particular emotional responses can be created that are functionally separate from the actual contexts in which they are occurring. That is to say, learned helplessness generates subjects that “have learned to behave helplessly, even when the opportunity is restored for it to help itself by avoiding an unpleasant or harmful circumstance to which it is has been subject”—a subject thinks that nothing can be done about a negative situation even if it is readily apparent that there are options for escaping an unpleasant stimulus (Seligman online).

This disjunction between actual circumstances and subjective feeling is also fundamental to positive psychology: instead of learned helplessness, the goal is to generate ‘learned optimism,’ producing subjects who “thrive on the shocks that come our

way instead of merely learning to escape them” (Greenberg 34). The underlying premise of positive psychology is that throughout the history of psychology, the discipline has been dominated by a focus on the pathological and abnormal. This in turn means that most of its research and treatment is devoted to engaging mental illnesses--identifying them, understanding how they develop, and generating techniques to manage or cure them. Positive psychology intends to replace this “negative” and “unhealthy” focus on mental illness with a more “positive” focus on the elements of “human flourishing”—identifying and facilitating characteristics, habits, and beliefs that generate happiness and holistic well-being. For positive psychologists, “well-being comprises not only the positive emotion we call happiness, but also meaning...positive relationships, achievement, mastery, and competence” (Greenberg 32). For our purposes the most important elements of positive psychology are its different *temporalities* of intervention (preemptive and preventive rather than responsive), its emphasis on *optimization* and *individualization* rather than normalization, and its *holistic* and *integrative* understanding of health, apparent in its primary concepts of resilience, wellness, and flourishing.

While positive psychology is now a somewhat accepted subfield of psychology, with its own programs, journals, and hundreds of millions of dollars of research and grant money, it still has many skeptics. For example, within the field of psychology critics have pointed to a number of problems with its approach, including

its failure to appreciate the valuable functions played by ‘negative’ emotions such as anger, guilt, and fear; its slick marketing and disregard for harsh societal realities such as poverty and oppression; and its growing tendency to promote claims without sufficient scientific support (e.g. the relationship between positive psychological states and health outcomes, or the mechanisms underlying ‘posttraumatic growth’)” (Eidelson et al. online; see also Eidelson et al. 2011).

This latter element is particularly significant, as even such centrally crucial terms such as ‘resilience’ remain scientifically undefined. After conducting a literature review and attempting to get in touch with a number of psychologists associated with positive psychology (including at the Positive Emotions and Psychopathology Lab at UNC-CH), I could not find a specific scientific definition of resilience, or examples of consistent metrics that could quantify and measure it. Instead, there is a repeated and rather nebulous invocation of resilience as the ability to ‘bounce back’ from events that range from slightly challenging to incredibly traumatic. Indeed, before the implementation of CSF within the Army, the largest experiment involving the deployment of positive psychology techniques was focused on non-military populations, particularly on helping middle-school and college students focus in class and feel better about themselves and their schoolwork. According to Eidelson

A 2009 meta-analysis of 17 controlled studies reveals that the PRP [[Penn Resiliency Program] a program has been only modestly and inconsistently effective...regardless of how one evaluates prior PRP research, PRP’s effects when targeting middle-school students, college students, and adult groups can hardly be considered generalizable to the challenges and experiences that regularly trigger military PTSD (Eidelson online)

Another key positive psychologist, Dr. Karen Reivich, has paired with Pepperidge Farms to create the ‘Fishful Thinking’ program, which stars Goldfish crackers in various articles and videos meant to teach parents and children about the benefits of positive psychology. CSF is in part precisely a giant experiment meant to facilitate gathering the necessary data that might make more concrete and scientific definitions possible, which raises a range of ethical problems of its own that we will discuss below.

The notion of post-traumatic growth so central to these narratives serves as a particularly lucid example of “cruel optimism,” which Berlant defines as an incitement of individuals to desire and inhabit conditions that lead to the “attrition or wearing out of the subject,” highlighting the ways in which so much of contemporary everyday life is composed of “the ordinariness of suffering, the violence of normativity, and the ‘technologies of patience’ or lag that enable a concept of the later to suspend the questions of the cruelty of the now” (Berlant, “Cruel” 97). The tenets of positive psychology have also been taken up as scientific justification for the type of managerial ethos and techniques described by Andrew Ross in *No Collar* (2002), which details how rhetorics of the “humane workplace” and techniques of openness, cooperation, and self-management are tied to a recalibration of labor to “incorporate activities, feelings, and ideas that are normally pursued during employee’s free time...[so] there are no longer any boundaries between work and leisure” (Ross 19). Positive psychology is a crucial component of contemporary governmental technologies built around the incitement of positive thinking, which often demand that subjects ignore the particular conditions of their lives, the possibility of change, or the demands of fairness or justice as opposed to a vaguely defined notion of individual wellness.

Despite reservations and criticisms from a range of sources, faced with endemic problems with soldier suicides and PTSD, the Army set out to develop a new health program to deal with the rapidly increasing incidences of these issues. Rhonda Cornum, the officer placed in charge of developing the Comprehensive Soldier Fitness program, and then chief of staff of the U.S. Army George Casey met with Seligman to discuss radically revising the Army’s approach to soldiers’ health. According to an account in

*The Chronicle of Higher Education*, Casey told Seligman that he wanted “to create an army that is just as psychologically fit as it is physically fit,” and offered Seligman 60 days to outline the basic elements of a program he would implement to achieve that goal. “The components included self-improvement programs, resiliency training designed to prepare soldiers to deal with trauma, and an online test called the Global Assessment Tool (GAT) that allowed them to see in which areas of psychological fitness, like ‘spiritual’ or social,’ they fell short (Bartlett 1). These elements provided the basic infrastructure of the CSF. Beyond its actual instruments and planning, the wholesale importation of positive psychology is apparent in early descriptions and assessments of the program, and even in the language and terminology that the Army now uses to discuss health and fitness. For example, in an article discussing the implementation of the Comprehensive Soldier Fitness program, the authors point out that “despite occasional efforts to measure psychosocial fitness, the *Army has paid more attention to negative indicators* such as suicide, PTSD, drug and alcohol use, child abuse and neglect, domestic violence and divorce...however, the mere absence of problems in these areas is not equivalent to being psychologically fit. Needed is a comprehensive approach to soldier fitness that addresses psychosocial fitness and assesses strengths and assets” (Peterson et al 10).

The specific mode that Comprehensive Soldier Fitness takes is a form of networked self-work, which is then supplemented through a range of monitoring and classificatory technologies. The Army currently identifies four central elements of the CSF program: the Five Dimensions of Fitness (Social, Emotional, Family, Spiritual, Physical); Online Self-Development; Institutional Training; and Metrics and Evaluation. The point of

articulation of these elements is the Global Assessment Tool (GAT), which is described as a ‘web-based survey instrument,’ essentially operating as an online multiple-choice test. While the entire GAT is not available to civilians, accessible sample questions are primarily organized around the soldier situating themselves in a number of scaled questions meant to quantify and measure individual soldier’s resilience in four main areas—emotional; social; family; and spiritual (the final point of the Army fitness regime, physical, is covered by other programs and testing within CSF). For example, the GAT asks “How satisfied are you with your family” (with responses ranging from ‘extremely dissatisfied’ to ‘extremely satisfied’) in the Family Fitness section, and in The Spiritual Fitness section asks “I feel like what I do matters to the world” (from ‘not like me at all’ to ‘very much like me’). The primary function of this test is to determine a soldier’s ‘baseline resilience’ in all of these areas, and to identify their weakest areas, which are then immediately reported to the soldier. It is also meant to record and display the soldier’s development, or failure to develop, resilience in each of these areas over time. It is important to note that this is primarily framed as a technique to facilitate soldiers’ self-awareness. This is made quite explicit on the FAQ page about the GAT.

The response to the question “what are results used for?” is

For you. Your results should be used for self-awareness purposes. Stated another way, your GAT scores give you an accurate snapshot of particular areas of strength and areas for improvement relate to resilience. Developing human resilience is a life-long process, and there’s never an ‘end-point’ or ‘final objective’ because people can always improve. With this in mind, we recommend that you initially focus on those areas that need the most improvement according to your GAT scores, though ultimately how you interpret those results is left to you (US Army online)

This last claim is a little disingenuous, in that specific training can be assigned to soldiers based on their GAT scores regardless of what they think about it; moreover, the GAT

itself is not simply an optional self-monitoring tool, but is in fact a requirement for all active duty personnel that has to be completed every 90 days. Still, it is instructive to note the ways in which the entirety of the GAT process—from actually taking the test, to receiving “virtual resilience training” from individualized modules generated based on test scores, to the interpretation and meaning of all of the above—is placed squarely on individual soldiers. The vision of military fitness materialized in the GAT is that of a semi-automated, networked technological infrastructure that elicits and facilitates perpetual self-work.

This also illustrates some of the strategic ambiguity characteristic of the CSF program, particularly a slipperiness around defining what type of intervention it actually is: a medical program? A training regime similar to boot camp and PT? Distributed psychiatry? There is actually a great deal of equivocation among the psychiatrists, medics, and scientists developing and implementing the program on this point. There does seem to be fairly open acknowledgment that CSF in fact functions as a grand experiment, both in terms of it being a novel application of the principles of positive psychiatry, and as a means to gather vast quantities of data about the different components and presuppositions that comprise the program. For example, its main architect, Dr. Seligman, acknowledges that “one million soldiers taking the GAT is an unprecedented database for the prospective longitudinal study of the effects of psychological variables on physical health, mental health, and performance. The Soldier Fitness Tracker [the database that stores the information collected in the GAT] is the backbone of this longitudinal study, and we predict that this database will become a national treasure for psychological and medical research” (Seligman 85). The CSF is

also explicitly recognized as providing a model or template for other institutionalizations of positive psychology, with Seligman stating that “the use of resilience training and positive psychology in the Army is consciously intended as a model for civilian use (ibid).”

However, if the CSF program is a massive experiment, then it also raises a series of ethical questions about responsibility and consent that are never really addressed in its implementation. This has been a source of much of the criticism of the program, which often brackets the question of whether civilian psychiatrists in general, and professional organizations like the APA in particular, should be actively contributing to the training regimes of soldiers rather than treating them if and when they develop psychiatric problem. However, this criticism has not gone completely unaddressed. For example, Eidelson et al. point out the contradictory ways that effective “resilience training could...harm our soldiers by making them more likely to engage in actions that adversely affect their psychological health” (Eidelson et al 643). But the majority of objections from within the psychiatric community focuses on two issues: the lack of credible evidence about the effectiveness of this particular program and positive psychology in general; and the ambivalent and possibly unethical ways the program is being implemented. Eidelson offers a convenient summary of these main lines of critique. Moving beyond the discussion of the limitations of positive psychology mentioned above, Eidelson points out that, at its core, “the CSF program is a massive research project launched without pilot testing to first determine the effectiveness of the training in a military environment” (ibid). This lack of pilot testing is described as “irregular and obviously worrisome,” especially since so many other public health interventions



premised on positive psychology have had only “modest and inconsistent” results, and as mentioned above, were directed at populations so different from the military demographic that “they cannot be generalized to the challenges that soldiers face in combat, including those that trigger posttraumatic stress disorder” (ibid).

Beyond the question of effectivity or validity, the specific ways in which the program is being rolled out are also cause for concern. Further along, Eidelson et al. point out that in addition to being offered as an already functional program without any confirmational testing, “no evidence was provided indicating that CSF received preliminary review by an independent ethics committee...this is particularly disturbing since the program includes components that are *mandatory* for all soldiers” (Eidelson et al 634). Part of the reason this is especially troubling for the authors is the provenance of those ethical reviews in the Nuremberg Code as a response to the grievous misuses of medical science in a military context during WWII.

They could also have easily mentioned the problematic history of medical experimentation on soldiers, ranging from the tests on the effects of the atomic bomb and radiation fallout in Operation Crossroads to the MKULTRA programs, which, according to the Department of Veterans Affairs, tested “hundreds of chemical and biological substances on soldiers, including VX, tabun, soman, sarin, cyanide, LSD, PCP and World War I-era blister agents like phosgene and mustard” (Falconer online). U.S.soldiers are ideal experimental subjects, because they are legally precluded from taking action or seeking redress for these experiments, no matter how debilitating or unethical they were, due to a 1950 decision, *Feres vs. United States*. This decision determined that “the Government is not liable under the Federal Tort Claims act for injuries to servicemen

where the injuries arise out of activity incident to service” (*Feres v. US*). The definitional purview of ‘incident to service’ essentially guarantees that if the soldier is on active duty, and is acting in an official military program, institution, or operation, then they have no legal recourse for any experimentation (or harm more generally, including medical malpractice) inflicted on them.

This doctrine is still effective, and has been used to disqualify a number of lawsuits responding to various experimental military programs (cf. *U.S. v. Stanley*, for example). Additionally, the Supreme Court has consistently declined to hear cases that might alter or limit the definition or jurisdiction of the law, most recently in July 2011 when it refused to hear a California case, *Witt v. U.S.* The case was filed by the family of Staff Sgt. Dean Witt, who was left in persistent vegetative state after an Air Force hospital at Travis Air Force Base botched a routine appendectomy. What should have been an unremarkable medical operation was plagued with multiple mistakes, including “pushing a breathing tube into [Witt’s] stomach and using resuscitation equipment designed for children” when complications arose (Tritten online). The Supreme Courts’ inaction is being interpreted as a “defeat that strengthens the 61-year-old legal precedent and could effectively stop future legal challenges” (ibid). It is this legal void that serves as an ultimate safeguard for the CSF program, promising compliance and an inability to respond regardless of the effects of the program.

These ambiguities in the characterization of the CSF program by its own architects and implementers are never really directly addressed. In the special issue, it is primarily described as a new paradigm of wellness and fitness, capable of limiting PTSD symptoms, and even repurposing their causes into opportunities and impetuses for post-

traumatic growth. In the response to criticisms, it is no longer research, or even really a health program, but instead a mode of quotidian training on the same level as morning PT jogs or learning about the safety benefits of seat belts. While part of this vacillation may be tactical, as a way to lower expectations or avoid responsibility, what I believe is important about it is the way it demonstrates a more general shift to *management*, rather than *treatment*, as the dominant logic of military health. The different terminology also carries with it a different temporal inflection—treatment implies an eventual ending, whereas management is a process that is ongoing and open-ended. The underlying logic of CSF emerges as perpetual para-medical monitoring of and work on the self, organized and enabled by automated and networked technologies. CSF and its related technologies and practices can be understood as supplemental technologies, in two main ways. On one hand, they are marked by the hedging and modesty of its developers—indeed, nearly every article on CSF contains a caveat that it is not meant to replace or supersede other medical interventions such as therapy, group counseling, etc. They serve as supplements to these in a literal sense, peripheral and supportive. However, and at the same time, it is also envisioned as even more vital and necessary than these other, ‘reactive’ interventions, ideally operating constantly on the levels of subjectivity and everyday life, in a way that makes these ‘harder’ (and more expensive) medical interventions unnecessary. The development of a proper lifestyle, of a set of solicited, monitored, and approved habits, attitudes, relationships, and comportments are imagined as a resilient protective layer guarding against physical and psychological damage.

How is the development of this lifestyle accomplished? Besides the generation and collection of vast amounts of information about individual soldiers, the GAT and the CSF

modules that are given to soldiers in response are seen as effecting a number of different tasks. According to the CSF website, there are a number of goals that the program is meant to accomplish. First of all, it is meant to provide a “systematic and comprehensive measure” of the health of the military, creating a common inventory and metric along the lines we have explored above. Secondly, it is meant to create a “common vocabulary” for defining and discussing issues of health, with an emphasis on “describing what is right about soldiers” rather than their pathology and problems (which also informs a number of changing discourses about “wounded warriors” that we will discuss in the following chapter). Third, the GAT provides “immediate feedback about a soldier’s profile of strengths.” The rapidity of the program, both in terms of the time it takes to complete the assessment and the immediate provision of a health profile to a soldier afterwards, is an element of the program that is often highlighted in both popular and academic discussions of its implementation. Here, the speed of implementation and response enabled by the individualized modules are directly articulated to effectivity. In another article from the CSF issue of *American Psychiatrist*, one author’s central claim is that “feedback can be a critical component of behavior change, especially when it is immediate and tailored to the individual” (Peterson et al. 16).

Fourth, through the provision of uniform metrics and language, and the requirement that all soldiers participate, the GAT is meant to reduce the stigma surrounding mental health assessments and services. That is, it is meant to disarticulate mental health interventions from suspicions of abnormality, on one hand (especially difficult to deal with in an often insular military culture), and as a sign of weakness on the other—hence the constant invocation of “core strengths” and identifying and developing “strength

profiles.’ Finally, the GAT is meant to refer soldiers to programs that are generated by and tailored to their responses and scoring on the test. Here, the emphasis moves from the commonality, generality, and universality inflecting the other goals (a common language of health, consistent metrics, etc.) and instead focuses on the flexibility and specifications of the responses to soldiers’ individual scores. As one of the GAT’s developers argues:

There is no shortage of existing programs in the Army, formal and informal, that attempt to enhance the psychosocial fitness of soldiers. However, most programs take a one-size-fits-all approach and target only selected groups (perhaps increasing the stigma of participation). In contrast, *individually tailored training for all soldiers* is likely to be more effective than current training models (Peterson et al 14, emphasis added)

In this way, the GAT attempts to produce and enact logics and practices of self-work through networked, automated technologies that 1) compile a wealth of individualized data about the military population, 2) attempt to establish a new medical common sense through a focus on the “positive” elements of military life, and 3) are described as more effective through invocations of their speed and modularity—the fact that they are digital technologies *ipso facto* makes them a better, more advanced form of intervention. These premises are shared with a number of other, non-required technologies developed by the military and private contractors meant to contribute to this mediated self-management. In particular, a number of mobile applications (apps) developed by the National Center for Telehealth and Technology, part of the military’s Defense Centers for Excellence for Psychological Health and Traumatic Brain Injury, illustrate the ways in which these core logics of military wellness, resilience, and self-management have been incorporated into a range of quotidian technologies that are meant to operate throughout everyday military life, an extension to which we now turn.

*PTSD: There's an App for That*

The recent development of a range of mobile applications meant to help self-manage PTSD are connected to broader popular practices of public health organized around self-diagnosis and self-management through networked, mobile technologies (Web M.D., SparkPeople) and individualized, constant or near-constant biometric self-surveillance (Nike + or Jawbone UP). These technologies, in turn, are connected through discourses of the possibility of holistic wellness and self-actualization enabled through this type of sustained, intimately detailed technological monitoring. For example, the Nike + FuelBand is a biometric wristband that enables users to “track not just how much, but how often and intensely you move,” connect to mobile devices or fitness programs on the Xbox Kinect, and allows that information to be shared through social media as a way to “connect with your friends and so you can keep each other going, share your progress, cheer each other on, or compete for top slots on the leaderboard” (Nike online). Every bodily movement or gesture is presented as a possibility for self-knowledge: “picture yourself on a run. With Nike +, that run transforms into an endless parade of information about yourself” (Nike online). A similar tone characterizes the description of the Jawbone UP, another commercial ‘wellness tracking wristband’:

People know more about their iPhone than they do their own health. So how do we make them consumers of their own wellness? [Through] UP, a wristband, smartphone app and web app trio working together to monitor your exercise habits, sleep cycles, and eating decisions... You have to create a Facebook-like engagement that keeps people coming back. The UP wristband is meant to be worn 24 hours a day. When you're awake, its accelerometer monitors your movement—whether you're running, walking, or climbing stairs—and then sends that data to the app, which shows how many calories you've burned. When you're asleep, the UP

monitors your sleep stage...when its time to wake up the wristband vibrates slightly, and times its alarm to the best phase of your sleep cycle. And finally, the UP smartphone app allows you to take pictures of your food and log your meals. If this works, it could be a revolutionary technology for individual personalized health.

Here wellness is described as achievable through enlightened technological consumerism, involving constant self-monitoring and the quantification and diffusion of the data thus collected. In these discourses, media devices are presented as both the source of health problems (“people know more about their iPhone than their own health;” think also of the stream of discourses decrying the inactivity, dissipation, and lack of productivity connected to surfing the internet, social networking, online gaming, etc.) and the cure, through a redeployment of the various capabilities and affordances of those technologies (which is also the idea driving the development of a number of fitness video games, which actually have a long history—think of NES’ *Track and Field*—but have become far more popular over the last few years, following the release of *Wii Fit* and the development of a range of workout games using the latest round of motion sensor technologies like the Xbox Kinect and Playstation MOVE). And while some basic biometrics have long been associated with exercise regimes (pedometers, heart rate monitors on treadmills), these newer technologies are far more comprehensive. They are meant to function not only as a way to monitor and calibrate fitness regimes but one’s entire life, both waking and sleeping, and are capable of monitoring a range of bodily data, ranging from blood pressure and skin tension to brain waves and blood alcohol content.

It is within this general context that a push for PTSD mobile apps has occurred within the U.S. military. The subtitle for this section (“PTSD: There’s an app for that”) is

taken from a Fox News report discussing the release of a number of apps over the last two years that are meant to help soldiers dealing with PTSD, or even those simply coping with the more mundane stressors of everyday military life. Discussing one of the older and most popular apps, *PTSD Coach*, the report describes it as providing “stress-management tips and tools—but with a mobile twist. For example, users can upload special photos or their favorite soothing music. When they’re stressed, the app provides a convenient place to turn for de-stressing” (Johnson online). Another article provides more detail about its structure and functioning:

The app begins with education about PTSD and why certain feelings crop up. You then take a self-assessment test for PTSD, before the app ultimately guides you to speak with someone, if necessary. Through the app, you can find information about professional care and meet with a local doctor. PTSD Coach offers many opportunities to find support through the social network of professionals and connecting with servicemen and women experiencing similar feelings (Baker online).



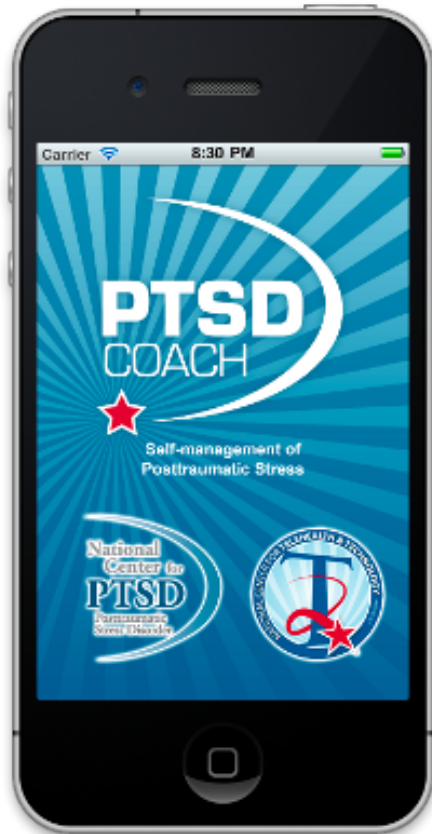


Fig. 1: PTSD Coach Startup Screen

*PTSD Coach* is one of over a dozen mobile apps developed by the DoD’s National Center for Telehealth and Technology (T2). While they all share the basic premises discussed above, each of them offers their own distinct emphasis and inflection. These apps range from relatively simple guided exercises—for example, *Breathe 2 Relax*, which offers “interactive diaphragmatic breathing exercises...that have been documented to decrease the body’s fight-or-flight (stress) response, and help with mood stabilization, anger control and management”—to programs only available to healthcare providers like *Mobile Screener*, which provides electronic versions of psychiatric intake tests that can then be stored and sent offsite for analysis and diagnosis. *PTSD Coach* integrates a number of different elements within its architecture and is representative of the structure

and logics of many of these apps, so we will primarily be using it to briefly explore the military technological imaginaries underlying them.

*PTSD Coach* describes itself as an application for “the self-management of post-traumatic stress.” It acknowledges its para-medical and supplemental status, but only within the dense boilerplate of its end user license agreement. Within the various legal disclaimers, we find that “the content of this application is intended for use only as an informative tool,” and should “not be used in any way as a substitute for professional medical advice or health treatment.” However, while it cannot “diagnose or offer you treatment,” it can help you “learn about PTSD, and will give you tools for managing the stresses that can come with life after a trauma.” Additionally, *PTSD Coach* also allows distributed surveillance, acknowledging that “for statistical purposes the VA collects anonymous usage data and sends it to a database.”



Fig. 2: PTSD Coach Main Screen

The *PTSD Coach* app is divided into four main sections—‘Learn,’ ‘Assess,’ ‘Manage’ and ‘Find Support’ (Fig. 2) The Learn section essentially functions as a PTSD FAQ, providing brief answers to questions like “What is PTSD?” “Who develops PTSD” and “How long does PTSD last” After this initial section that provides basic information about PTSD, the user is instructed to take a 17-question self assessment quiz, which then places them into a high, medium, or low range for expression of PTSD symptoms or the likelihood of actually having or developing PTSD. Beyond this initial diagnostic, the app also monitors the responses to the various questions over time, and prompts users to retake the test on a regular basis—after completing the evaluation for the first time, you are automatically prompted to schedule a follow-up using your phone’s calendar function. Depending on the results of the self-assessment, the app next refers you to either the ‘Find Support’ (if you have ‘high’ indications of PTSD) or ‘Manage’ (if you have ‘low’ to ‘medium’ indicators) sections of the app. Finding support directs you to a range of emergency and military medical contacts (the Veterans Crisis Line, 24/7 Veteran Combat Call Center, the VA Facility Locator), and also prompts you to generate your own support network, composed of other people and individualized media. For example, the app is able to access and scan your call log, and automatically suggests adding the contacts you call or text the most into your “virtual support community.” Additionally, in the setup stage, you are also encouraged to select “pictures on your phone you find comforting or funny” and “songs on your phone that you find relaxing or that put you in a good mood,” which are then integrated into the “management” section of the app.

The “Manage” section of the app consists of a number of different activities, exercises, or suggestions meant to respond to different elements of PTSD. After clicking on the ‘Manage’ tab, you are prompted to choose what is bothering you at that moment, ranging from being reminded of the initial trauma, to feeling disconnected from reality, to being unable to sleep. After specifying what element of PTSD is the problem, the user is prompted to rate the intensity of the problem on a ‘distress meter’ on a scale of 0-10. Based on those two responses, the app will generate different ‘tools’ that are meant to deal with those responses. These tools range from inspirational quotes and meditation exercises when indicating a low level of distress, to connecting with a crisis hotline when reporting a heightened distress level. Additionally, the app attempts to adapt to and mobilize the user in a number of ways. It can automatically generate slideshows of the pictures you have chosen as comforting or funny, setting them to a soundtrack of your music you have indicated you find relaxing. It also often suggests a number of “pleasant activities” like “go to the movies” or “treat yourself to lunch” that can also use the phone’s locative function to make specific suggestions on where to eat or what movies to see, integrating the app with other mobile media applications and the logics of therapeutic consumerism.

In these ways, *PTSD Coach* reifies and enacts the discourses of self-management, self-assessment, automation, individualization and mobility discussed above. All of these apps are described by the Army as ideal “management tools” for soldier health, located at the intersection of “individual experience of care,” “population health,” and “per capita cost” (DoD, T2 5). Even in these brief descriptions, we can observe a number of defining premises that these apps share with the logics and technologies of CSF. They are

primarily meant to be educational; they operate through self-reporting and self-assessment enabled by a networked technology that provides individual feedback, as well as centralized data collection; and it they mobilize and function through discourses of continuous connectivity, with institutional figures of expertise, the broader community of soldiers and the technology itself. Unlike the computer stations used to administer the GAT/CSF, however, mobile media platforms are specifically described as offering a range of additional benefits. Most importantly, they are ubiquitously available in space, and constantly accessible in time, providing an easy confluence with the discourses of health management understood as an unending process rather than an end goal, that we have discussed above. This is understood as an especially significant advantage in responding to PTSD within a military context, both because soldiers are often confronted by a paucity of therapists or session availability, and because PTSD is often intensely isolating. Many veterans suffering from PTSD have difficulty leaving their homes, or even specific sections or rooms within their house, since these are experienced as the only reliable safe zones in an otherwise threatening and unreliable world.

Here, the very mobility of these media platforms serves as an ideal, potentially reactivating the mobility of veteran bodies. PTSD apps are figured as an element of a mobile military technological assemblage capable of transforming public space experienced as threat into a personalized mobile safe zone through their ubiquity, constancy, and sensory immersion (in much the same way as du Gay et al. (1997) discuss mobile music technologies transforming public space into a literal realization of mobile privatization). Privacy and individualization are also key components of their presumed effectivity, in a variety of ways that we will examine below. Finally, the familiarity and

multifunctionality of these devices are meant to help encourage otherwise reluctant soldiers to feel comfortable exploring PTSD treatment by enabling the process through discrete mobile devices—i.e., on a subway, it is not readily apparent that someone using a PTSD app is doing anything other than listening to music or checking text messages on their phone.

There is also a peculiar self-justifying logic that characterizes the military's discussion of these apps. A recent *Psychology Today* article reviewing some of the recent apps approvingly characterizes them as “an alternative to medication-only approaches to treatment (which are often the only treatment many veterans receive),” but by presenting this as the only option effectively forecloses any discussion of individual, face-to-face sessions with a therapist, which is, ironically, the type of therapeutic intervention that has the most medical literature demonstrating its efficacy (Vitelli online). Later, the *Psychology Today* article poses the question of “how effective is *PE Coach* [the app it focuses on]?” Its answer is “to date, there have been more than 5,000 downloads, although research is still ongoing to see its effectiveness” and that “according to a recent review in *Psychological Services*, PE Coach is just one example of how new technology is changing the traditional therapist-patient relationship” (ibid). Here, evidence of it being utilized (“5,000 downloads”) and being novel (“new technology...changing the therapist-patient relationship”) supplants the fact that any actual research demonstrating efficacy is “still ongoing.” This presumption that new technologies are in themselves better and more effective is characteristic of the Army's discussion of these apps, which also presumes that soldiers raised in “the Internet Age” will be instinctively drawn to and more comfortable with therapies that either utilize or

are delivered via new media technologies, an attribution they share with some of the VR immersion therapies discussed in the following chapter. In these ways, the circular logic of self-justification is closed, as these apps are developed with the military medical ideals outlined above as their guiding principles, and are then understood as effective precisely because of their inclusion of those ideals.

*Conclusion: Total Force Fitness in/of the Military Family*

Despite all of this uncertainty about CSF and its related technologies like mobile medical apps, including the lack of experimental data to support claims of their medical efficacy and the absence of definitional clarity for some of the central concepts of these programs (“resilience,” “wellness”) the CSF has been taken up and implemented enthusiastically within the Army for a number of reasons. These include the exhaustion or failure of other military medical resources; the fact that a number of the components of CSF and its related technologies are relatively inexpensive—the cost of developing a multipurpose app is far less than paying for long-term individual therapy for hundreds of thousands of soldiers, especially in the post-war/sequester era; and speed, referring to the speed with which a soldier can access a mobile app, the short amount of time it generally takes to complete self-assessments or practice recommended exercises and activities, and the immediacy of automated feedback. In these ways, CSF and its related technologies neatly align with both military ideals of human performance optimization and more general neoliberal principles of health as a technological assemblage of constant self-monitoring and self-management.

In the last year, the Army has reaffirmed its commitment to CSF, developing the second generation of the program in CSF2 (Comprehensive Soldier and Family Fitness) and the GAT 2.0, which are framed as part of the Army's new Ready and Resilient campaign. In this updated iteration, CSF2 is even more obviously articulated to the discourses of military familialism and affective technologies that were discussed in the previous chapter. CSF2 codifies this familial language within military medicine, attempting to “integrate and synchronize multiple efforts and programs to improve the readiness and resilience of the Army Family” as a totality, in addition to the resilience of individual soldiers (US Army online, 2014). This more expansive understanding of the Army Family includes “Soldiers (Active Duty, Reserve, National Guard), Army Civilians, and Families,” a family composed, connected, and managed through the types of new media technologies we have discussed—not just the CSF programs and the networked mobile apps, but also military-developed social media platforms (like Military Kids Connect), military-themed groups on corporate social media like Facebook and Twitter, military-family developed networking sites like Camo.com and the milblog community, and the circulation of digital videos and pictures throughout these different platforms . This more expansive resilience program aims to “integrate resilience training as a key part of the Army’s professional military education throughout a soldier’s career, from induction to separation or retirement” and to “develop improved methods and metrics to aid them in better identifying ‘at risk’ and ‘high-risk’ Soldiers, enabling early intervention.” Both of these central elements underscore the arguments I have made about the changes underlying the current military medical imaginaries, especially their spatio-temporal expansion and their pre-emptive logic of producing resilient subjects.



The Ready and Resilient campaign elevates the notion of resilience to an Army core value, and even more closely articulates the definition of resilience to “performance” and performance optimization. The Army describes their most current definition of resilience as follows:

When faced with stress and/or adversity, resilience is a key factor in the mental, emotional, and behavioral ability to cope with and recover from the experience, achieve positive outcomes, adapt to change, stay healthy and grow from the experience. Resilience is closely linked to performance. Performance is one measure used to assess an individual’s level of resilience. A resilient individual is better able to leverage mental and emotional skills and behavior that promote optimal human performance (U.S. Army online, 2014).

Again, resilience remains rather nebulous and tautological. The lack of specificity about the types, intensities, or frequencies of either “stress” or “adversity,” the distribution of resilience among mental, emotional, and behavioral abilities, and its ability to transform a range of traumatic experiences into possibilities for self-actualization and development makes it simultaneously vague and omnipresent. It is also far more strongly connected to the managerial discourses of “performance” and performance optimization, in ways that presumably solidify its definition. If a soldier is able to perform, and perform optimally, then s/he is resilient. Failure to flourish, to thrive, and to stay positive and productive is framed as having less to do with the specific nature of traumas a soldier may experience (tellingly, “trauma” is not even mentioned in this definition, subsumed under the milder terms of “stress” and “adversity”) and more to do with the failure of that soldier to develop a properly resilient subjectivity that could presumably cope with any possible scenario. The corollary of the soldier’s technologized self-assessment and self-management of their own, individualized resilience and wellness is a self-responsibilization for any failures to live up to this optimal state, a problem we will

discuss next chapter when we examine some of the problems generated by the ascendancy of the “wounded warrior” ideal.

**Chapter 3: Notes on Biomilitarization, Part 2: Unfit Soldiers, Wounded Warriors and Military Corporeal Imaginaries**

In this chapter, I would like to move from an analysis of the shifting military imaginaries and technologies of health, premised upon human optimization through the technological production and management of resilient subjects, to a consideration of the military corporeal imaginaries and ideals that these developments entail, and the ways they have been instantiated in popular discourses and cultural formations. The current centrality of regimes and technologies of wellness and resilience to the military is intimately connected to two central developments in popular military corporeal imaginaries I will discuss below (following Berlant 2011 and Butler 2010's elaboration of this concept): public anxieties about "unfit soldiers" as a threat to national security and an indication of a more general dissipation and weakening of the American population; and the increasing prominence of an idealized and optimized "wounded warrior" in military policies, public relations, and popular representations.

After briefly discussing the central characteristics of traditional military corporeal imaginaries, and the current popular military figures of "special forces" and "enemy combatants," I will discuss how the unfit soldier and the wounded warrior operate as the negative and positive figures of a military corporeal regime premised on technological resilience. I will first explore the elaboration of the unfit soldier in a report composed by active duty and retired generals called "Too Fat to Fight," and several related popular articles, videos and Internet memes. In these discourses, the unfit soldier, in failing to

realize proper self-assessment, management, and care, represents an internal threat to the military (and the nation more generally); a failure to adequately integrate with and operate contemporary military technologies; and a metonymic indication of declining American vitality, dominance, and masculinity. Then, after briefly mapping out some previous popular media tropes used to represent military trauma and injured veterans, I will explore how current iterations of the wounded warrior, on the other hand, serve as a model response to changing military, national, and geopolitical challenges. In these discourses, the wounded warrior functions as a spectacular model of post-traumatic growth and resilient optimization, while also providing an experimental ground for new relationships between the human body, computing technologies, and robotics. I will trace the emerging dominance of an idealized figure of the wounded warrior both within military discourses and across a range of media like film and video games, arguing that while they do possess some positive potential in terms of destigmatizing wounded veterans, they largely serve to minimize the difficulties and challenges of dealing with military corporeal practices in general, and with grievous bodily injury and trauma in particular. Instead, they literally embody the ideals of technological resilience and post-traumatic growth elaborated earlier. In a number of popular representations (including *Call of Duty: Black Ops*, *The Hurt Locker*, *Source Code*, and *Avatar*) military trauma actually serves as the ground for literally superhuman becomings. Trauma is presented as a reconfiguration of soldiers' experience and perception of their bodies and the world, and if a sufficiently resilient subject experiences the trauma, it is often presented as leading to a heightening, rather than a diminishing, of bodily potential and capability. This in turn articulates to a militarized version of cruel optimism, where traumatized

subjects who fail to experience trauma as liberating and enabling opportunity are themselves blamed for their traumatization, their “negative” experience of trauma serving as the evidence of a failed production and maintenance of a resilient self.

*Ghostly Bodies: Special Forces, Enemy Combatants and Spectacular Secrecy*

In his book *Political Affect: Connecting the Social and Somatic*, John Protevi (2009) argues that there are two traditionally dominant military corporeal ideals. The first is the “warrior body,” whose origin Protevi traces to antiquity (his exemplary figure here is Achilles), which is a model of the military body characterized by extraordinary physical abilities, an individualizing style, the adherence to strict codes of honor, an emphasis on single combat, an experience of violence as a transcendent experience, and a reliance on ‘berserker rage’ as a motive force in battle. Against this individualized notion of the warrior, Protevi poses the ‘soldier body,’ which, while rooted in such ancient techniques and formations such as the phalanx, is a much more modern phenomenon. Rather than the heroic individual, the soldier body is one component of a larger, mass corps. Standardization replaces individual style, and restraint and obedience takes precedence over the intensifications of battle rage.

While this is obviously an oversimplified schema, and while I am hesitant to endorse some of Protevi’s speculations about the central role of endorphin addiction in the production and utilization of these bodies, his remarks offer a useful framework to mark two traditional dominant tendencies of the representations, practices, and ideals of military corporeality. Elements of this binary remain present in contemporary military

organizations, training regimes, and institutional practices—for example, the recent, explicit codification of and focus on the U.S. Army’s Warrior Ethos, which emphasizes traditional (humanistic) warrior values of duty, courage and honor. At the same time, a number of top strategists were emphasizing the importance of technology and automation. This tension is present in broader popular representations of the military. The latter include a number of films like *Jarhead* or television shows like *Generation Kill*, where direct infantry engagement with the enemy is prevented by aerial bombardment or long-distance artillery, which in turn prompts a series of identity crises—about their bravery, their skill, their masculinity—within the ground troops. It can also take more allegorical form; for example, what is the *Star Wars* series if not an extended lament about the decline of an authentic warrior ethos, in which the noble Jedi are literally overrun and replaced by a mass of standardized, faceless clones?

However, in the last decade, there has been a complication of these traditional military ideals. For example, there is an increasing prominence of “special forces,” both within military policy, strategy, and budgetary allocations, and in popular media, especially in film (*Zero Dark Thirty*, *Act of Valor*, *Lone Survivor*) and video games franchises (*Call of Duty*, *Rainbow Six*, *Splinter Cell*, etc.). Special Forces unsettle traditional distinctions between the military branches, and blur the boundaries between the warrior body and the soldier body, borrowing elements from each while being ultimately reducible to neither, and also introducing new characteristics and attributes. The Special Forces operate as the embodiments of a broader reconfiguration of (and institutional desire for) military action focused on strategic disruption, the production of ordered disorder, the confluence of military and intelligence practices and programs, and

new perceptual technologies. They operate through what Michael Taussig calls the “strategic use of uncertainty and mystery,” a combination of asymmetric perceptibility and uncertain violence that confirms that “in the case of the Armed Forces, ordered disorder is surely intrinsic to its modus operandi, where the arbitrariness of power is practiced as an exquisitely fine art of social control” (Taussig 16; 17). Drawing on Derrida’s discussion of spectral power, special forces are perhaps the most exemplary incarnation of what he calls the “supreme insignia of power: the power to see without being seen” (Derrida 1994, 8). They are defined through a unique relation to perception and perceptibility, spectacular secrecy, and memory and forgetting. Particularly at the level of national memory, they function as the embodiment of public secrecy; they are plausibly deniable, a peculiar recombination of elements of the warrior, the soldier and the secret agent.

A number of institutional and technological convergences we will briefly sketch out below serve as the general context for the emergence of the Special Forces as a military corporeal ideal. Special Forces embody and materialize the increasing concatenation of military and intelligence agencies, responsibilities and actions at the level of the individual body, operating through the logic of spectacular secrecy and of military action as a national public secret. Special Forces function, at least ideally, as what one Army general calls “networked ninjas,” where individual soldiers shaped by and equipped with mobile biometrics and locative technologies will function as flexible modules capable of being composed into different types of units (both in terms of size and task—from small covert strike forces, to larger counter-insurgency, peace-keeping, and community outreach units). The Special Forces operative is distinguished from the

‘normal’ soldier through a number of key elements. They are understood as possessing a different set of *bodily and perceptual capacities*; their most important characteristic is the ability to perceive what others cannot, and to remain imperceptible themselves. This encompasses relatively minor differences—the avoidance of various corporeal regulations, such as not having to wear a military uniform, or the deregulation of military standards for hair and hygiene, thus abrogating the embodied markers of soldiering—and major ones, understood as possessing physical and perceptual capacities that border on the superhuman, enabled through intense dedication and training and the deployment of advanced technologies. They operate according to the logics of *spectacular secrecy*. Finally, Special Forces are intimately connected to different forms of *paramnesia*, at the national and personal level—plausibly deniable subjects, not installed in official national histories or practices of memorialization, and often prohibited from speaking about their true identities, activities, or location, even with family and friends, although they themselves are constant subjects of public discussion and spectacular representations.

In film, this is evident in two main ways: the generic convergence of the spy thriller with military-action film; and a number of blockbuster movies promising audiences realistic depictions and experiences of recent covert military actions. The generic convergence of the spy thriller and the action movie is apparent in a number of recent popular franchises (the recent Bond films, the Bourne series, and the Mission Impossible series) combining elements of the spy film (a focus on technological gadgetry, an emphasis on mistaken identities or manipulated memories, convoluted plotting centered around political intrigue, etc.) with elements of the action film (spectacular and elaborate stunt work and scenes of violence, (para)military protagonists,



a Manichean moral universe, etc.). The other way that this militarized logic of spectacular secrecy is produced on film are through movies like *Zero Dark Thirty* and *Act of Valor* that promise realistic portrayals of secret moments or practices in recent national history—the killing of Osama bin Laden in the former, and Navy SEAL training and missions in the latter.

*Act of Valor* is particularly relevant to our discussion of popular military spectacular secrecy. The film was actively solicited by the Navy, which in 2010 began “inviting proposals for projects that would depict the SEALs in more realistic—and favorable—light than in such bombastic fiction features as *Navy Seals* and *G.I. Jane*” to use as a recruitment tool (Hornaday online). The film stars actual active-duty Navy SEALs playing fictionalized versions of themselves, a fact prominently featured in its promotion as a mark of the film’s authenticity. In addition to this imprimatur of military realism, it was also marketed as offering access to military secrets (training techniques, knowledge of previously classified missions) otherwise unavailable to the general civilian population. Indeed, one reason why the use of soldiers as actors is so striking here is that Special Operations soldiers typically keep their names and likenesses secret and, in fact, revealing the name of a covert military or intelligence officer is a federal offense, as became obvious when Fox News and the AP revealed the real name of one of the operatives in the Bin Laden mission (Orr online). The film was specifically envisioned as offering virtual access to restricted and secret military spaces. In a discussion of the Navy’s investment in the film, the chief Navy spokesman acknowledged that “we wish we could take the American people and fly them out to aircraft carriers and destroyers and submarines, so they could see what their Navy does on a daily basis...we can’t get

them out to our ships every weekend, but we know they can go to the movies every weekend” (Hornaday online). *Act of Valor* is here imagined as a mode of cinematic military tourism, meant to articulate the quotidian habits of the general population (‘going to the movies every weekend’) with an allegedly more intense and exciting military everydayness (‘what the Navy does on a daily basis’—a perspective also apparent in the Air Force’s recent slogan, ‘It’s not science fiction. It’s what we do every day.’), with the goal of facilitating identification, and ideally active participation in the military. The Navy’s use of the film goes beyond hoping that it generates positive associations with the military, or directly aids recruitment; it has also fed back into the training process itself. Military training sites that were used as ‘real’ locales in the film have retained the changes made to them during filming the movie to provide more ‘authentic’ training spaces to soldiers, and parts of the 300 hours of raw footage shot during the making of *Act of Valor* have also been used in training preparation, evaluation, and interagency advertising and funding campaigns.

Even more obvious examples of the ascendance of the Special Forces operative as a predominant popular military imaginary abound in contemporary video games. This is most evident in the exploding popularity of ‘stealth-action’ games, a genre typically traced back to the early installments of Hideo Kojima’s *Metal Gear* series. Unlike traditional action games, which are usually focused on killing the largest number of enemies possible, stealth games reward players for employing evasion, distraction and non-lethal attacks and takedowns for dealing with large groups of antagonists. In most stealth-action games, full-frontal assaults typical of first-person shooters result in guaranteed failures. Instead, game dynamics typically focus on identifying and avoiding

enemies through a range of techniques—using stealth technologies like night/infrared vision, portable surveillance devices, and physical techniques like hiding on ceilings or in vents. A number of these games have special rewards, achievements and trophies for gameplay that maximizes this secretive approach, celebrating accomplishments like successfully avoiding any kills over the course of the game, or remaining undetected throughout its entirety. While the popularity of the genre has been rising in general, visible in the success of recent blockbuster games like the *Assassin's Creed* franchise, *Hitman*, *Dishonored*, and *Batman: Arkham Asylum* and *Arkham City*, stealth-action has become particularly dominant in military video games, typifying all of the most popular military game franchises—*Call of Duty*, *Splinter Cell*, *Rainbow Six*, *Medal of Honor*. One particularly popular and representative game, *Call of Duty: Black Ops*, illustrates both several of the key elements of the stealth-action genre, and the ways in which they are connected to logics of spectacular secrecy more generally.

After a loading sequence composed of a montage of historical footage of military assaults and government documents, which are redacted as they play on the screen, *Black Ops* begins in 1968. The player's avatar is strapped into a chair in an interrogation room, surrounded by screens playing recordings of covert U.S. military actions, and shadowy and invisible interrogators using voice modulators demanding to know 'what the numbers mean' and the location of the station broadcasting them (Fig.1; this unspecified use of 'the numbers' also serves as a reference to other popular numerical cryptographies in television shows like *Lost* and *Numb3rs*). The captive begins to recall several historical events he was involved in as he attempts to answer their questions, and each of these memories serves as a level in the game.

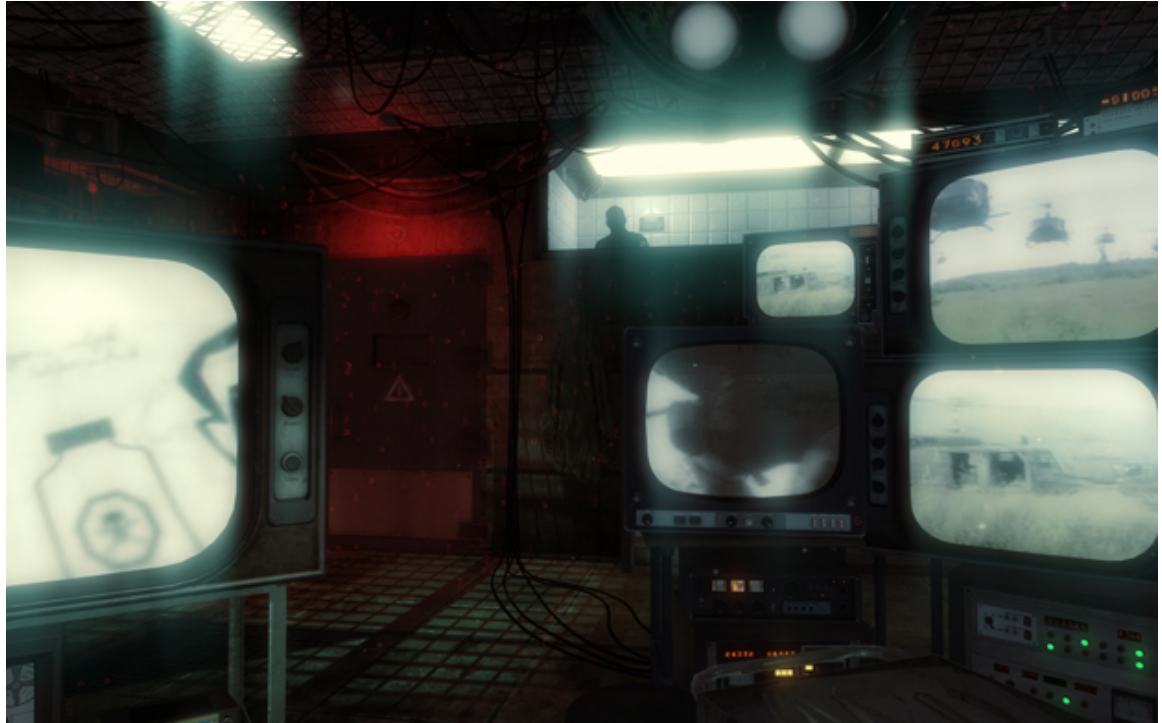


Fig. 1: Spectacular secrecy and national memory in *Call of Duty: Black Ops*

Over the course of the game, it is gradually revealed that the main character is Alex Mason, a CIA operative in the Special Activities Division (SAD) most famous for its covert operations in Vietnam and Laos in the 1960s and Central and South America in the 1980s. After a failed attempt to assassinate Fidel Castro, Mason was captured and sent to a Russian gulag. During his time in the gulag, he learns about the development of a new and particularly virulent nerve gas called “Nova 6” by an ex-Nazi defector and the Soviet government, and that a rogue Soviet general (Dragovich) might deploy the nerve gas in an attempt to push the US and Russia into a full-scale war. Mason escapes, and is personally tasked by John F. Kennedy (Fig.2) and Robert McNamara to eliminate Dragovich. After participating in Gump-like fashion in a number of famous, historical, covert actions (Bay of Pigs, the attempted infiltration of the Soviet Soyuz launch site,

U.S. incursions into Laos and Cambodia), it slowly becomes clear that Mason never escaped from the gulag, but was in fact brainwashed by Dragovich and allowed to leave to serve as a sleeper agent, sent back to the US to help unleash the Nova 6 gas on the American populace, kill off any other loose ends that knew about the plan, and assassinate President Kennedy. Mason's interrogators turn out to be the other CIA operatives that accompany him throughout the various game missions, attempting to deprogram him in order to find a way to prevent the diffusion of the nerve gas. They are ultimately successful, confronting and killing Dragovich and earning Mason a presidential commendation. However, the game ends with archival footage of Kennedy's motorcade immediately before his assassination and a shot of Mason on the 'grassy knoll', suggesting that his Soviet programming may have been successful after all.



Fig. 2: Meeting JFK in *Black Ops*

*Call of Duty: Black Ops* is significant for a number of reasons. At first glance, simply the fact that such a hugely popular and successful video game franchise is focused on having players participate in reenactments of historical military actions that are generally actively ignored or suppressed in mainstream American public memory

(attempted assassinations of Castro; American involvement in Latin and South American civil wars; CIA coups in Iran, Guatemala, and Chile) seems an almost progressive maneuver, directly acknowledging the ways in which dominant narratives of national history are dependent upon a series of elisions, disavowals, and misremembering. This is not simply a subtext of the game, but is in fact quite explicit thesis of the franchise: for example, the game's opening sequence contains a voiceover by Mason stating: "A lie is a lie. Just because they write it down and call it history doesn't make it the truth. We live in a world where seeing is not believing, where only a few know what really happened. We live in a world where everything you know is wrong." The game presents itself as enacting a particular mode of authenticity, both through the typical military video game focus on historical aesthetic and stylistic fidelity (accurately recreating architecture, clothing, uniforms, weapons, etc.) and by enabling the virtual experience of some of the most secretive and shameful moments in American history and foreign policy—the game hence promises the player a virtual experience of the hidden truth that underlies the lie of official history.

However, this potentially disruptive exposure of national secrecy is then immediately reined in by the fictional narrative laid over (or, perhaps more accurately, under) the historical events that compose the world of the game--an even *deeper*, second-level secret that in fact justifies and redeems most, if not all, of the most infamous American covert operations recreated in the game. Rather than generating a counterhistory that interrogates US military support for various imperialist and colonialist interests—one that might, following Avery Gordon, open up "ways of seeing... what is usually invisible or neglected or thought by most to be dead and gone"-- this secret

history is instead recast as one long effort meant to prevent a domestic assault on the US by the two enduring figures of international evil, the Nazis and the Soviets (Gordon 195). This concatenation of historical accuracy and the logics of reenactment with popular, generic fictions drawn from spy novels and conspiracy films (brainwashed sleeper agents, an ongoing Soviet conspiracy, etc.) is the dominant (pseudo)historical logic of most contemporary military video games.

This can be usefully understood by drawing on Marita Sturken's discussion of the linkages between trauma and kitsch and the desire for reenactment and 'authentic' historical experience in US consumer culture, which delineates the ways in which "American memorialization [functions] as tourist practices and cultural reenactment," generating a "politics of memory and emotion [that] helps to enable particular notions of innocent victimhood and a consumer culture of comfort" (Sturken 4). These games, along the lines that Sturken maps out, generate "cathartic 'experiences' of history" that, while acknowledging problematic, secretive, and illegal aspects of American history, still primarily serve to reinscribe a feeling of national innocence and victimhood—our secret military history is recast as simply a first-order secret, barely hinting at even more diabolical machinations and threats that underlie and justify them. In this way, the games operate in the paranoid style that Richard Hofstadter so astutely diagnosed decades ago, enacting his claim that "the distinguishing thing about the paranoid style is not that its exponents see conspiracies or plots here and there in history, but that they regard a 'vast' or gigantic conspiracy *as the motive force* in historical events. History *is* a conspiracy" (Hofstadter 29).

In this way, *Call of Duty: Black Ops* is structured through the construction of two concurrent and connected sets of secret memories: covert military operations at the state level; and Mason's altered memories and reprogramming at the personal level. Both are accessed and mobilized through technological interventions. In both cases, these potentially disruptive or subversive secret memories are recast as redemptive—either justified by an even deeper conspiracy at the state level, or actively empowering and in fact vital to the nation's safety on the individual level. Mason's imprisonment and torture, at the hands of both the Russians and the CIA, end up being vital to maintaining national security—torture and mnemonic manipulation install a set of memories that can then be unlocked and redeployed through the exact same techniques of 'enhanced interrogation.' It is through the repetition of torture that Mason accesses the Russian programming that then allows the CIA/Special Forces to prevent a national chemical attack. In these ways, *Black Ops* deploys an understanding of human memory as essentially machine memory, which is written and accessed through trauma, and the traumatized soldier body is seen primarily as a machine to be programmed and connected to technological assemblages in a variety of ultimately productive ways.

Representations and narratives like this effect a convergence of the supersoldier with the wounded warrior; it is precisely through sustaining, surviving and remobilizing trauma within a technological network that the soldier reaches his ultimate potential. This draws on and connects the long cultural history of representing trauma properly processed through technology as enabling superhuman transformation (e.g. basically every Marvel superhero origin story) and the medical imaginaries of post-traumatic growth and optimized trauma discussed earlier in Chapter 2, constructing popular



discourses of productive trauma that conflate the supersoldier and the wounded warrior, and present trauma as a means to access secret capacities and truths lying dormant in ‘normal’ soldier bodies..

This logic of spectacular secrecy extends beyond U.S. Special Forces and their popular representations, also encompassing putative enemies (“ghost detainees”), cryptocartographies and secret infrastructures (think of the discussion of “ghost planes” carrying “ghost prisoners” to “black sites” as part of the extraordinary rendition program), and even entire “ghost wars,” a term which refers to the increasing frequency and intensity of semi-clandestine Special Forces interventions into countries that we are not technically at war with, such as Somalia, Pakistan, and Libya. In response to these “shadowy networks” of enemies—shadowy precisely because of their networked form—there has been an emphasis on the military deployment of technologies of biological identification and regulation. This emphasis on technologies and techniques of collecting, compiling, and utilizing bodily and corporeal knowledge serves as a counterbalance to the diffuse sense of an unknown and potentially unknowable threat. While still functioning at the level of virtuality and potential, a number of biometric technologies are understood as offering the means of localizing and quantifying threat at the level of individual bodies, ‘sticking’ an unlocalizable feeling of threat to specific bodies (following Sara Ahmed), and consequently making both the bodies and the threat containable and manageable. These attempts to incarnate virtual threats includes a range of official practices typical of biomilitarization—the incorporation of biometrics into the routines of daily soldiering (Fig. 3); biological reconnaissance such as the faux vaccination drive that was the means by which U.S. ascertained Bin Laden’s

whereabouts; and the establishment of a biometric apparatus, ABIS—the Automated Biometric Intelligence System—meant to collect, regulate, and store biological data about potential enemy bodies. In these ways, the figure of a spectral enemy combatant (virtual, expansive, omnipresent) is counterbalanced by an emphasis on the technological recording and management of bodily traces and remains, composing bodies of/as data that can be collected, analyzed, quantified and controlled, and that offer the promise of true, verifiable knowledge of an ineffable and threatening Other—through practices of appropriating, imaging, and circulating the bodies of the enemy Other as a data set or biometric marker.



Fig. 3: Quotidian biometrics: U.S. soldiers gathering retinal biometric data

These anxieties about spectral enemy combatants have also been accompanied by the emergence of new modes of invisible and flexible violence meant to identify and contain them (for a concise summary of a number of these developments, see Arike

2010). In particular, there has been an increased emphasis on the development and intensification of ‘less than lethal weapons’ and ‘signature strikes’ as examples of the types of military action typical of counterinsurgency and special operations, respectively. The deployment of less than lethal weapons—including multi-velocity bullets, acoustic weapons, ‘pain rays’, laser arrays that induce nausea, and more—are attempts to develop individualized and scalable levels of violence that can be matched to particular enemy bodies and potentials, all of which are meant to directly induce biological and physical effects on potential enemy sensoriums without leaving any visible traces on the surface of the body. ‘Signature strikes’—attacks against targets that are not justified by any specific intelligence, but rather through statistical projections of data collected from individual bodies, habits, and locations—provide an example of the way in which the logics of preemption have been scaled down to the micro-level—preventative strikes launched at individual bodies, and enabled and justified through a range of biometric technologies that are imagined to determine if any body is a potential threat. The prominence of drone technologies in signature strikes, as well as their utilization of location, proximity, and regularities and movements as key elements of determining and marking enemy bodies also provides an entrée into the discussions of changing formations of military spatiality in the final chapter.

This prominence of Special Forces and “shadowy” enemies in turn reflects and responds to a range of contemporary military transformations, which have largely resulted from an unprecedented institutional convergence of military and intelligence organization and operation that has occurred over the last decade. This convergence has occurred at a number of levels. In the last decade, there has been a confluence of military

and intelligence leadership, with Gen. David Petraeus serving as director of the CIA, and former CIA directors Robert Gates and Leon Panetta serving as Secretaries of Defense. These appointments were explicitly made in order to facilitate the legally mandated coordination of military and non-military intelligence following the 9/11 attacks and the establishment of the Department of Homeland Security and the Joint Terrorism Task Force. More closely linked intelligence sharing also led to increasing numbers of joint operations, as the CIA became centrally involved in two of the most common military actions of the past two wars--special operations raids and drone strikes. This was partially due to the fact that soldiers under the Joint Special Operations Command (JSOC), the section of the military that manages the Special Forces of all of the branches, had relatively little direct combat experience prior to the Afghanistan/Iraq wars, and didn't have an independent intelligence apparatus of their own. As Spencer Ackerman points out, "U.S. commandos trained constantly, but they didn't have much combat experience during the 1980s and 1990s" (Ackerman 2011, online). This lack of combat experience was compounded by a lack of familiarity with Afghanistan and Iraq, and a lack of resources to gather intelligence there, which initially resulted in tension with the CIA—"JSOC had minimal intelligence capabilities. The CIA, the agency that knew Afghanistan the best and led the hunt for Al-Qaeda, distrusted it. It was hived off from the conventional military, whose low-level commanders were left to deal with angry civilians after one of JSOC's raids" (ibid).

Gen. Stanly McChrystal, who took over as head of JSOC in 2003, decided that the current state of affairs was unsatisfactory, and that closer coordination with a range of agencies, most importantly the CIA, was necessary to carry out more effective military

actions, and that this coordination needed to be both institutional and technological. As McChrystal wrote in a piece in *Foreign Policy*, “it became clear to me and to many others that in order to defeat a networked enemy we had to become a network ourselves” (McChrystal online). This network would be composed not just of the JSOC and the CIA but also of “satellite analysts from the National Geospatial Intelligence Agency, regional experts from the State Department, and surveillance specialists from the National Security Agency” (Axe online). Beyond pushing for closer coordination between these various agencies, McChrystal also worked to develop a technological infrastructure that would facilitate intelligence sharing among any operative within a particular region, setting up a computer network and database called the ‘Real Time Regional Gateway’ that “allowed operatives who seized scraps of intelligence from raids—cellphone contacts, receipts for bomb ingredients, even geolocated terrorist cellphonones—to send that data to different nodes around the network” (Ackerman online). This last example also illustrates the numerous ways in which ‘regular’ soldiers are increasingly tasked with intelligence gathering and dissemination, with many soldiers, for example, now collecting fingerprints, iris scans, and DNA samples from anyone passing through routine military checkpoints. And going beyond institutional cooperation, intelligence sharing, and joint technologies, there has been significant operational integration with Leon Panetta, in the hearing leading up to his confirmation as Secretary of Defense, endorsing a command hierarchy that would allow the CIA to temporarily direct military personnel, arguing that for some operations it makes sense for the “head of the appropriate department or agency to direct the operations of the element providing military support while working with the Secretary of Defense” (Panetta 3).

This general outline of the increasing convergence of military and intelligence operations has been developed in much greater detail by a number of authors, often journalists with long histories of covering the military or intelligence communities (for example, Priest and Arkin 2011; Turse 2012; Scahill 2013). Additionally, this convergence between the military and intelligence services has intensified the ongoing militarization of police and local law enforcement units, with police also developing their own intelligence units that occupy a legal grey zone in the regulations and restrictions governing domestic spying and surveillance. The largest and most high-profile example of this is the NYPD's creation of an Intelligence Division, which used both retired and active CIA agents to construct a Demographic Unit tasked with mapping out and spying on New York's Muslim community, infiltrating mosques, eavesdropping in popular ethnic restaurants, and even following city residents to other cities and countries.

It is within this general context that the figure of the unfit soldier and wounded warrior also emerge. The unfit soldier serves as the foil to the Special Forces soldier, unable to achieve an optimized military body, and potentially introducing the lack of fitness, vitality and intensity attributed to the civilian population into the military corps. The wounded warrior, on the other hand, functions as a properly technological resilient military subject, and in some popular representations is capable of developing corporeal capabilities that supersede those of the Special Forces. These resilient bodies are understood as a new ideal type of flexible military bodies, which I will briefly elaborate and discuss.

*Flexible Militarization, Resilient Bodies*

In her seminal book *Flexible Bodies*, Emily Martin (1995) defines the key elements and characteristics of ‘flexible bodies’ against the “hardness” of military bodies and a pervasive militarized metaphoric of embodiment. According to Martin, the dominant early-20<sup>th</sup> century metaphor used to think of the body in general, and of immunity and hygiene in particular, was the ‘castle of health.’ This conception envisioned individual bodies as so many military fortresses, each surrounded by a series of protective walls and bulwarks. Within this imaginary, “the most important defense was strictly preventing the entrance of any germs into the interior of the body” (Martin 25). The locus of health and hygiene was the surface of the body, and concerns about bodily danger was focused on “openings in the body’s surfaces...that would allow disease to get in,” and the necessity of securing, closing, and guarding against any potential breaches (27). Thus, the “portrait of the body conveyed most often and most vividly in the mass media shows it as a defended nation-state” where corporeal borders are “scenes of total war between ruthless invaders and determined defenders” (51; 54). This model of the body as a militarized fortress with defensible, impermeable boundaries on constant guard against a threatening exterior world is simply the extreme form (or perhaps ideal type) of the normal(izing) ‘modern’ body, which according to Ed Cohen (2009) is marked by the way it “aspires to localize human beings within an epidermal frontier that distinguishes the person from the world for the duration of what we call a life’ (Cohen 7). Separation, self-containment and boundary defense are the key elements of proper health and personhood within this vision.

Although the basic fortress model of the body persists after the 1950s, Martin argues that academic, medical, and popular attention is increasingly directed towards the defenses *within* the body, waiting for invading pathogens and toxins inside the first, epidermal layer of defense in the newly visible interiority of the body. Finally, with the development of genetic technologies, microbiology, and the field of immunology, and following the AIDS crisis and post-70s economic and social restructuring, the fortress mentality is more or less abandoned, in favor of a vision of the body as system, where, “possessed of agile responses, and flexible specificity, our adroit, innovative bodies are posed to anticipate any conceivable challenge” (37). The outdated, military model of body is displaced by one organized around the representations and exigencies of contemporary capitalism and its regime of flexible specialization and perpetual transformation. The ‘flexible bodies’ described throughout the rest of Martin’s book are simultaneously premised on and redeployed in her discussion of flexible capitalism (see Martin 40-43). This shift in emphasis from military to economic security is also discernible in Nikolas Rose’s discussion of contemporary forms of biopolitics, where the military model is essentially an antiquated remainder—while it subsists in some residual vocabulary (‘bodily defenses’, ‘killer T cells’, etc.), there is a definitive shift away from a militarized, disciplinary, compartmentalized vision of the body in favor of a capitalized, controlled, and modulated ideal. Indeed, the military is one of the few areas that Martin leaves off the list of fields and institutions marked by the shift towards flexibilization (which includes nearly every other field, including manufacturing, immunology, computer science, economics, philosophy, government organizations, psychology, and feminism, among others).



The omission of the military from this list, especially one composed during the mid-90s moment that saw the beginnings of discourses of the revolution in military affairs, is somewhat puzzling. A few factors help explain this absence. First, clearly the associations and images associated with ‘the military’ are caricatured and outdated, based around spatial models of wars like the castle and trench warfare. Second, between its rigid hierarchization and deeply rooted masculinist and misogynist inflections, the military may seem less availing to the discourses and structural transformations connected to ‘flexibilization’ that Martin talks about in other sites. Third, with the exception of the spate of 1980s movies critiquing American involvement in the Vietnam War, the Reagan era marked a return to military triumphalism in both popular culture (*Rambo*, *G.I. Joe*, etc.) and journalistic coverage that helped reproduce a cartoonish vision of military invulnerability. What is SDI but the classical immunological vision of national impermeability projected out to an atmospheric, cosmological level, with old visions of complete closure promising to be actualized by the latest technologies, most visible in its departmental logo of a medieval shield hovering protectively in orbit above the US? Finally, Martin seems to think that military metaphors in general are premised upon “a sharp, clear boundary between self, which is to be kept in, and nonself, which is to be kept out” (Martin 100).

It should be noted that Martin is by no means alone in this conceptualization of militarized bodies, and in fact offers a fairly representative account of critical work discussing military imaginaries of the body. These range from Douglas Kellner’s discussion of military bodies as technologically saturated examples of ‘phallicized hardness,’ to Adriana Cavarero’s claim that when images of soldier’s bodies appear they

are “no longer a warring body made of muscles and flesh, of fear and fury, but rather a creature with robotic features and a mechanical pace” (Cavarero 94). The military body also serves as a foil in other works rethinking corporeal phenomenology, such as Judith Butler’s *Precarious Life* and *Frames of War*. Butler describes her project as an elaboration of a “new bodily ontology, one that implies the rethinking of precariousness, vulnerability, injurability, interdependency, exposure, bodily persistence, desire, work and the claims of language and social belonging” (Butler 2). She goes on to discuss how contemporary modes of militarization operate by attempting to minimize or erase perceptions of this vulnerability, injurability, and, consequently, grievability of different lives. This abrogation marks both the body of the soldier and the enemy combatant in an attempt to generate and direct “affective responses that are highly regulated by regimes of power and sometimes subject to explicit censorship...to support the war effort, and more specifically, nationalist belonging” (Butler 39-40). The military body functions here as the opposite of the precarious life, since for Butler there “is no thinking of life that is not precarious—except, of course, in fantasy, and in military fantasies in particular,” which she claims are dominated by visions of ‘masculine impermeability’ (25). Randy Martin also maps out some of the ways in which a fairly recent (2003) military training guide attempts to harden military bodies, reconfiguring them following the laxities of civilian life. Reading the 2003 Standardized Physical Training Guide, Martin argues that it poses “toughening...as a means of reconditioning the body from its soft, civilian form...fitness needs to meet measurable targets: thirteen push ups, seventeen sit-ups, a mile in eight minutes and thirty seconds...the hardening process must control all injuries, all the while working toward corporeal standardization” (Martin 91).

In account after account, the military body is described as cold, hard, impenetrable, invulnerable, and insensate, if only on a phantasmatic level.

While elements of these analyses are certainly true, I want to argue the bodily contours that outline and compose military bodies are considerably more complex than these sclerotic accounts. If we can productively think about the current military regime as a complex formation, we should expect that the bodily imaginaries, practices, behaviors, regulations, and representations will be equally complicated. Far from being the polar opposite of contemporary flexible bodies, military bodies present their own unique mode of flexibilization, characterized by the increasingly dominant discourses of resilience we have outlined above, which are gradually overtaking and superseding that more traditional fundamental characteristic of military bodies—hardness and strength. As I have discussed, this understanding of resilience is premised upon a technological and physiological model of flexibility that is able to anticipate and prevent traumatic disturbances, allowing subjects to ‘bounce back’ from any perturbation of their optimal state through a network of closely monitored regimes of bodily practices (exercise, therapy, fitness programs, biometrics, pharmaceuticals, surgery, etc.). In some cases, the rejection of rigidly defined bodily boundaries is quite literal—for example, in recent studies that suggest that ‘hard’ body armor may amplify rather than attenuate the effects of IED explosions and other shockwaves, or in the incorporation of yoga and pilates into physical training regimens. In other cases, it is more metaphorical, such as our discussion of the rapid adoption and integration of ‘positive psychology’ into Army fitness plans in an attempt to reframe post-traumatic stress as an opportunity for ‘post-traumatic growth.’ In both cases, they challenge the dominant conception of military

rigidity, and cut across military policy, training doctrine and practices, and popular representations in film, television, video games, blog postings and discussion boards, and YouTube videos. These practices are also articulated to other contemporary U.S. discourses around bodily integrity and fitness, particularly the ‘crisis in masculinity,’ a resurgent anxiety about national vitality, and the production of enemies as pathological others that may already be undermining the body politic. Exploring these different instantiations will also serve as an occasion to question the sometimes unproblematic political and ethical assumptions that accompany various phenomenological and ontological accounts of corporeal flexibility, vulnerability, and injurability. A number of these concerns, and the possibility of a more flexible military response to them, are attached to images, discussions, and anxieties about a proliferation of unfit soldiers, and a consideration of those discourses provide a useful entry point to some of these issues.

*From Flat Daddies to Fat Soldiers: Public Health Anxieties and Military Health*

In April 2010, a group of retired military leaders organized under the non-profit group ‘Mission: Readiness; Military Leaders for Kids’ published a report entitled *Too Fat to Fight: Retired Military Leaders Want Junk Food out of America’s Schools*. The report was widely publicized, and was covered in a number of US and world newspapers with rather predictable titular punning: “U.S. young are a fat lot of good for army” (*The Times, London*); “It’s time for a school war on blubber” (*New Zealand Times*); “The military wages war on obesity” (*USA Today*); “National Security vs. The Waistline” (*New York Times*); “Overweight Teenagers Putting America at Risk” (*Daily Mail*). The central

stated goal of the report is to warn Congress that “at least nine million 17- to 24- year-olds in the United States are too fat to serve in the military,” and that being overweight is the leading medical reason for potential recruit rejection, nearly doubling in the period from 1995 to 2008 (Mission: Readiness 1). Coupled with other disqualifying factors (criminal records, educational deficits, other medical concerns, problems with drugs and alcohol), the authors argue that over 75% of the American population of 17- to 24-year-olds is currently ineligible for military service (4). This expanding ‘crisis of obesity’ threatens retention as well as recruitment, as the military also discharged over 3,000 soldiers in the fiscal year of 2012 before their contracts were up because of weight problems or failing PT tests, making it the primary reason for non-voluntary discharge from the army (Tan 2013).

National fatness is here figured as a crisis presenting a polyvalent threat not only to national fitness, but also to national security, public health, cultural values, and economic prosperity. The report claims that “childhood obesity has become so serious in this country that military leaders are viewing this epidemic as a potential threat to our national security,” in danger of undermining “the fighting readiness of our military” (Mission: Readiness 1). The economic costs are figured by calculating the costs of how much it costs to recruit and train the replacement of discharged overweight soldiers, which is pegged at “\$50,000 for each man or woman, thus spending more than \$60 million a year” (4). And this number doesn’t factor in the treatment of “obesity-related problems of military personnel and their families under the military’s health care system, TRICARE, or the cost of treating obesity-related problems under the veterans’ health care system” (ibid).

The preferred point of intervention for these generals is childhood health, which articulates these concerns about national security to moral panics about contemporary youth. The specific demands formulated in the report are to “get the junk food out of our schools; support increased funding to improve nutritional standards and the quality of meals served in school; and provide more children access to effective programs that cut obesity.” The priority is about managing future populations through intervention in their present dietary activities and habits, maximizing the potential for more kids to be considered fit for military service and keeping the nation as a whole “Army fit.” Indeed, beyond the pragmatics of expanding the recruitment pool and accession acceptance rates, the symptomological reading of rising obesity rates as both a sign and realization of a more general national weakening underlies both this report and the various coverage and responses it received.

This articulation of overweight, out of shape soldiers to a more general anxiety about a weakening body politic is especially obvious in the images accompanying the report. For example, the *New York Times* article discussing the report’s findings and its proposed alternative health programs (“Making Soldiers Fit to Fight, Without the Sit-ups”) is illustrated with a photo foregrounding a miserable-looking female recruit struggling and failing to do a push up, the most basic and prototypical component of military PT regimens along with the drill run, picturing her awkwardly contorted and with her glasses falling off her face (Fig. 4). In the background, we see the blurred images of two other recruits arranged in the yoga pose *adho mukha svanasana* (‘downward dog’), while a final recruit is hunched over on his knees. The image effectively frames and superimposes three key elements of the military’s understanding

of their current health crisis: first, the underlying causes rooted in a national population that is overweight, out-of-shape, unhealthy and unmotivated; second, the problems this causes for the military, resulting in recruits who are unable to fulfill basic fitness requirements; and finally, a potential solution in new understandings and programs of health in the Total Force Fitness program, touted as a new, holistic vision of ‘wellness’ that incorporates everything from advances in biotechnology, molecular biology and nanotechnology to ‘alternative’ modes of conditioning, therapy, and treatment like yoga, acupuncture, raiki, and biofeedback.



Fig. 4: Unfit Recruits and Flexible Training

Another representative image that actually predates the report and its coverage is a Demotivational poster of a morbidly obese soldier that has been widely circulated on the internet, much more directly articulating bloated military bodies with the national body politic (Fig. 5). The picture foregrounds another overweight soldier, this time kneeling down in full battle gear (camouflage, helmet, rifle, etc.) in the middle of a field. Unlike the *New York Times* image, here the singular body of the fat soldier fills almost the

entirety of the visual space of the photo, pressing against and spilling past the confines of the frame. The photo is embedded in the typical minimalist black and white framing and typeface characteristic of the Demotivational posters (as well as their more optimistic, motivational forebears), and is captioned: “America: Is This What We’ve Become?” The image, and the discussions circulating around it, materialize metaphors of military bloat and excess, projecting discussions of rampant spending, ‘military pork’ and fears of military overreach onto the physical bodies of overweight soldiers and the equally expansive circulation of these digital images over the Internet. The sheer physical presence, fleshiness and inertia captured in the image of these soldiers contravene the military’s self-image as a sleek, technologized force captured in the image of the Special Forces soldier and premised on efficiency, flexibility, mobility and speed.



Fig. 5: The Unfit Soldier as Embodiment of National Decline



In this way, the anxieties generated and indexed by the figure of the fat soldier go beyond individual soldiers failing military fitness protocols, and even beyond their function as a condensation and materialization of other discourses of military excess (in terms of spending, geographic and political overreach, etc.).

The discourse around these images gestures towards a more general concern about current forms and norms of national embodiment, a term borrowed from Lauren Berlant's work on the ways various "national norms of corporeality work" through interlocking political and cultural processes and images that structure "which kinds of bodies can legitimately enter the body politic" and generate the "norms and principles of national embodiment" (Berlant, *Queen* 101; 105). If, as Kathleen LeBesco suggests, fat bodies are marked and viewed as "failed citizens" precisely and directly through the material fact of their fatness, the concern that this "monstrous excess" has spread to those bodies most directly identified with normative citizenship, the corps of the military, would be expected to generate particularly intense concern. It also allows the multiple failures of the occupations of Iraq and Afghanistan, always threatening to reopen the "wounds of Vietnam" marring the American body politic and neatly stitched up by Reagan, to be attached to the "failed" bodies of soldiers. This follows a typical logic of biopower that recasts "political crises...as conditions of specific bodies and their competence at maintaining health or other conditions of social belonging....who come to represent embodied liabilities to social prosperity of one sort or another" (Berlant, "Slow Death" 765). This move is readily apparent in commentary on the military's wartime decision to lower entrance standards (in terms of fitness and intake test scores), which

tends to focus on how the new policies make the accession of ‘bad apples’ like the ones blamed for scandals such as Abu Gharib all the more likely.

Of course, these anxieties are not without precedent. LeBesco points out how “national governments have historically become concerned with bodies during moments of social change and economic/military crisis” (LeBesco 56). In *Too Fat to Fight*, historical examples of military biopolitical intervention are invoked in the report as both examples of past successes of biomilitary programs and as justification for contemporary initiatives. Of particular importance is the immediate post-WWII moment, when the massive amount of biological data extracted from the US population during war mobilization was used to develop new military and civilian health and training policies and protocols. For example, after emphasizing that “military leaders have stood up before to make sure America’s youth had proper nutrition for a healthy start in life,” the authors claim that through the enlistment processes in World War II, “the military discovered that at least 40% of rejected recruits were turned away for reasons related to poor nutrition. Stunted growth from inadequate nutrition and poor health was so common that the young men who made it into the military during World War II were more than an inch and a half shorter, on average, than young American men today” (Mission:Readiness 2).

The advocacy by the military for the National School Lunch Act that resulted from these findings was just one response to a broader concern about national decline in physical health and increase in weight (and by extension in national power, vitality, and prestige) discussed by Lauren Berlant in “Slow Death (Sovereignty, Obesity, Lateral Agency).” Berlant argues that while general anxieties around these themes were clearly

articulated by the beginning of the twentieth-century, they “became a state and federal topic during the cold war when Sputnik and the rise of product plenty in the U.S. combined to create anxiety about the weaknesses of American children” (767).

If the body of the unfit soldier is thus constructed in these discourses as the embodied articulation of a range of crises (of public health, individual fitness, self-motivation, vitality, etc.) both within the U.S. military and within the national populace more generally, the dominant discourses of wounded warriors serve as the image of the possible overcoming of these crises—the technological, optimistic transcendence of any difficulty or challenge, ranging from the mundane to the traumatic. I will now turn to a brief discussion of traditional popular representations of wounded warriors, before turning to how a number of current popular discourses, both within and outside the military, are positioning them as a new military ideal. As Kenneth MacLeish has argued, contemporary forms of war violence and trauma are both “ordinary, in that they are routine, anticipated, and institutionalized, even as they remain extraordinary—intense, unpredictable, profoundly disruptive, and difficult to communicate” (MacLeish 2). Within this context of “crisis as ordinary,” discourses and images of technologically optimized wounded warriors serve as the embodied evidence of the efficacy and desirability of the discourses of resilience and post-traumatic growth we have discussed above, and mapping out the development of this optimistic rendering of the wounded warrior will be the focus of the following section.

*Histories of Violence: Wounded Warriors as Bare Life, Tragic Cyborgs, and Therapeutic Entrepreneurs*

In this section, I will briefly analyze a range of popular representations of the wounded warrior, looking at some characteristic examples from older films and then focusing on three more recent films—*The Hurt Locker* (2008), *Avatar* (2009), and *Source Code* (2011). Filmic representations are undeniably key components in establishing popular military imaginaries and memories and are part of broader military media formations, and deserve sustained critical attention. The military certainly recognizes this, which is why “every service branch of the armed forces has its own film office, staffed with active duty officers, whose job is to work with Hollywood, review scripts and provide support in terms of military hardware, advice, and sometimes people” (Hornaday 2). It is also illustrative to contrast the more contemporary treatments, which often present the wounded warrior as a kind of supersoldier, producing images of traumatized military bodies that are (literally) capable of mastering and transcending space, time, and reality itself, to older popular representations of wounded warriors. It allows us to map a trajectory from the body of the wounded soldier functioning as the materialization of, and witness to, the horrors and destructive capacity of modern warfare, to the body of the wounded soldier figured primarily as an optimistic locus of technological possibility and post-traumatic growth. For brevity’s sake, I will begin with a brief discussion of three central and representative historical examples of popular depictions of wounded warriors—*Johnny Got His Gun* (1971), *RoboCop* (1987) and *Forrest Gump* (1994). Each of these films are representative of a genre moment: *Johnny Got His Gun* of the critical

anti-war films of the late Seventies and early Eighties following the Vietnam War (*Platoon*, *Hamburger Hill*, *Full Metal Jacket*, etc.); *Robocop* of Eighties and early Nineties action movies and military science-fiction (*Rambo*, *Universal Soldier*, *Total Recall*, etc.) and *Forrest Gump* of the Nineties and early Aughts military melodrama (*Saving Private Ryan*, *Pearl Harbor*, etc.). While this is by definition a generic and thus a somewhat oversimplified schema, each of these films is representative of the hegemonic mode of popular military representation of their era. They also present different figures of the wounded warrior, alternatively defined primarily through embodied loss, tragic cyberneticisim, and redemption through therapeutic capitalism and entrepreneurialism, moving slowly towards the currently dominant discourse of trauma as optimistic possibility enabled through advanced technology.

*In Johnny Got His Gun*, a traumatized quadruple amputee who has also been rendered blind and deaf by an enemy artillery shell awakens in a hospital, unsure if he is living or dead, in reality or a dream. He gradually figures out his situation, developing a way to communicate to his military caretakers that he would like to tour the United States as a living memorial to, and warning against, the atrocities of war, or be allowed to die. He is ultimately denied both requests, and is instead forced to stay alive but secreted away, constructing a vision of the wounded soldier as the maintenance of a deliberately covered bare life. In *RoboCop*, a programmable human/machine hybrid operated by a private security firm is developed as a replacement for an underfunded but still unionized police force in a bankrupt, near-future Detroit. Constructed by fusing the corpse of a policemen killed in action with a robotic body and computer intelligence, after struggling through both his programming and his own traumatic memories, he is able to reveal the

collusion between the private security company that developed him and the criminal network that corporation is being paid to suppress. While heroic, RoboCop is a fundamentally tragic figure; over the course of the film, his memories begin to partially return, although mostly reduced to a set of bodily gestures and habits, thus making his half-life even more difficult. Finally, in *Forrest Gump* we encounter a vision of military trauma managed through redemptive entrepreneurialism, with financial success in the private sector and emergent technologies, coupled with the development and cultivation of individual friendships, enabling an optimistic triumph over traumas endured in the name of the nation-state (which is also inadequate in redressing them). On one hand, the film depicts the relentlessly positive Forrest as totally immune to the traumatic experiences of war, with his own wartime injury primarily working to enable him to meet the president, tour the world, and secure an athletic endorsement deal; on the other, it maps the transformation of the crippled Lt. Dan from an angry, alcoholic, and welfare-dependent paraplegic veteran to the co-CEO of the Bubba Gump shrimp company, a traumatized soldier saved by the unrelenting blind optimism of Forrest Gump and the equally beneficent powers of the free market.

Before proceeding, I want add as a caveat that I am certainly not calling for all representations of those wounded in combat to be negative, depressive, or focused on the multiple daily struggles and changes in routine that result from such catastrophic injuries. Stories of triumph over adversity, adjusting to new bodily and medical circumstances, and salvaging positive lessons out of terrible situations are certainly both possible and desirable. However, I am concerned that an increasing number of more recent discourses--fictional representations, official military statements and programs for

wounded soldiers, and journalistic and popular accounts of injured veterans--tend to minimize these difficulties, ignore well-documented problems with the military health care system, and reinforce and reinscribe popular fantasies such as the possibility of overcoming trauma through the 'power of positive thinking' and maintaining the 'proper attitude.' It also implicitly or explicitly stigmatizes those soldiers who fail to experience their trauma as liberating, empowering, or positive as even more pathological, and shifts blame for difficulties dealing with the traumas of war from the traumatic experience to the failed subjectivities and bodies of the soldier. In this way, people struggling with the everyday issues involved in coping with trauma are figured as subjects that have failed to develop the proper habits, dispositions, belief systems and outlooks that would allow them to primarily and productively experience their trauma as an opportunity for personal growth, individualizing and privatizing both the source of the problem and its potential solutions, and functioning as a particularly egregious example of what Berlant's "cruel optimism" (Berlant *Cruel* 3; see also Ehrenreich 2009).

*Johnny Got His Gun*, a film from the early 1970s that is in turn based on a 1939 novel set during WWI written by Dalton Trumbo, is about as far from this optimistic vision of trauma as possible. In the film, a young soldier named Joe Bonham awakens in a hospital an indeterminate amount of time after an enemy artillery shell hit his unit.



Fig.6: The traumatized military body as bare life

He is confused and disoriented, and at first is incapable of distinguishing fantasy and reality (in a manner similar to *Source Code*, as we will see)--unable to move, see or hear; for a while even the most basic levels of bodily orientation and coherence remain impossible. The film's form mirrors this derangement, moving haphazardly between the hospital room, Bonham's memories of his earlier life, enlistment, and war, and his own fantasies and dreams. Over time, he slowly realizes that he is still alive, but has lost his arms, his legs, and a large part of his face—we never see his post-trauma body, which throughout the entirety of the movie is entirely contained inside of an iron lung and further obscured by bandages and sheets, massive and hypervisible in its invisibility. Instead the audience is constantly incited to imagine the horror of his appearance, which is reflected through reaction shots of the faces of his caretakers and visitors (Fig.6).



When he has fully understood his situation, Bonham attempts suicide by trying to suffocate himself with his pillow, but discovers he has been given a tracheotomy that makes it impossible. Struggling to remain sane and to somehow establish a meaningful connection with the outside world, Bonham gradually orients himself in the world through the development of different bodily sensibilities—for example, learning new ways to establish a sense of time (feeling the different intensities of the sun on his head), or to figure out when people are near by being attentive to the vibrations of their footsteps. He eventually develops a rudimentary way to communicate with other people by tapping out Morse code with his head. At first, the doctors think he is simply spastic or having seizures and respond by sedating him, but his nurse gradually realizes what he is trying to do, and responds by tapping code directly onto his body. Bonham expresses his desire to be placed into a glass box, and to tour the country as a constant reminder of the lasting consequences of war. This request fits into the logic of memorialization immediately following World War I, which “produced a culture of memory in the early twentieth century, most of it regretful and concerned that such violence and destruction not be repeated” (Sturken 13). His doctors and military supervisors, unsurprisingly, refuse his request, as well as his request for them to simply let him die if he can’t serve as a witness to the war. Instead, he is simply left in his state, in a hazy borderland between life and death, serving as one of the purest examples of bare life and the injunction to let live in film or literature.

In this film, the figure of the wounded warrior is primarily an embodiment and materialization of the trauma and violence of war, a direct realization of the breakdown, dissociation, and rupture characteristic of traumatic experience. Bonham is a subject of

pervasive disintegration, losing not only his corporeal integrity, but also the most basic matrices of his temporal, spatial, and social orientations. What results is a radically isolated subjectivity, both physically and mentally, left within a covered box in a room by himself, essentially reduced to the status of pure object. This treatment and literal warehousing of the wounded military body crystallizes the violence not just of war, but of the biopolitics of mandated life more generally, the violence of being forced to persist in living by structures of state power, a tactic that continues today with, for example, the force-feeding of prisoners in Guantanamo Bay. The traumatized body is rendered totally immobile and isolated, and Bonham can only find redemption through a spectacular witnessing of its traumas, a bodily circulation through national space as a constant reminder of what the state would prefer to remain invisible and forgotten. A sense of timelessness also infuses the film, not only through the breakdown of coherent personal narratives, or through the disjunctive montage of memory, dream and reality, but also the mobilization of an anti-war story set in WWI, initially published directly before WWII, as one of the first anti-war films of the Vietnam era. The trauma of war here functions both as temporal disruption and eternal return.

A middle ground between the tragic pessimism of *Johnny Got His Gun* and technological optimism of contemporary representations of transcendental trauma is the 1987 film *Robocop*. The film is set in a dystopian (and now eerily prescient) Detroit plagued by unemployment and environmental degradation, where a multinational corporation (Omni Consumer Products, OCP) is attempting to completely demolish the old city and replace it with a privately owned and operated urban space, Delta City. However, rampant crime and unrest, and an unruly and intractable urban population

combined with an underfunded and undermanned police force has made the whole project too risky to investors. OCP enters into a contract with Detroit to operate their police force; its president Dick Jones leads a program meant to replace unionized officers with fully automated robotic replacements (the Enforcement Droid 209, or ED-209s) and plans to use the robots' anticipated success in pacifying Detroit as an entrance into more lucrative military sales. However, during a high-level product demonstration one of the robots malfunctions and kills a junior executive; another aspiring executive uses this catastrophe to push his own plan for a cybernetic 'Robocop', which would fuse the mind and reflexes of an actual human police officer with a robotic 'full body prosthesis,' rather than relying on fully automated machines. The plan is approved, but requires the body of a police officer for its implementation.

That officer is Alex Murphy, a recent transfer to Old Detroit, who is violently killed and dismembered while pursuing the crime boss of the city. OCP takes his remains and uses them to construct the Robocop, outfitting him with a new titanium body, recording capabilities, thermal imaging, etc., and then wiping his residual human memories in order to allow the cyborg to be fully programmable. Following the scene in which Murphy is gunned down, the film moves back and forth between objective shots and POV shots from Murphy's perspective, beginning in the ER, through flashes of consciousness during his reconstruction (fig. 7), to his perspective during his police deployments.



Fig. 7: Bodily recoding: trauma enabling new human-technological interfaces

Initially, the Robocop is a huge success, acting according to his main programming, composed of directives to serve the public trust, protect the innocent, uphold the law, and a fourth, classified program (fig. 8). This causes a dramatic drop in crime, and leads the unionized officers to worry that they are all going to be replaced by a small, privately managed unit of Robocops. Over time, it becomes apparent that the memory wipe on Robocop was not completely effective. On the one hand, Robocop begins to embody Murphy's personal ties, gestures and mannerisms, such as twirling his pistol like a TV character his son likes before he holsters it, or peeling out of the police parking lot in a particular way that causes the bottom of his car to hit the ramp. On the other hand, Robocop starts having dreams about his family life and flashbacks to his own death, which lead him to hunt down the gang that killed him.



Fig. 8: Wounded warriors and secret memories

This eventually leads Robocop back to the crime boss he was pursuing at the beginning of the movie, who, during his arrest, admits that he has been collaborating with the OCP executive in charge of the ED-209 program, to destroy and discredit Robocop so the company can refocus on the fully automated robots. After this confession, Robocop attempts to go arrest this executive, but discovers he is unable to as the fourth, classified directive is to take no action against anyone working for OCP. The ensuing programming contradiction between upholding the law and not arresting OCP employees causes Robocop to malfunction and he is forced to escape, with the help of his old partner. Jones mobilizes his criminal network to go and destroy Robocop, but his old partner helps him makes sense of his memories and gets him functioning again, and they defeat the waves of attackers deployed against them. Robocop returns to OCP headquarters as Jones is using Robocop's alleged breakdown as a way to restart his ED-

209 program, and plays a recording of Jones' admitting to a number of criminal activities. Backed against the wall, Jones takes the chairman hostage and gloats that Robocop can do nothing to stop him because of the fourth directive. Not surprisingly, the chairman immediately fires Jones, and Robocop promptly shoots him out of the building. When the chairman asks who he has to thank for his rescue, Robocop gives him a big thumbs up and tells him "My name is Murphy."

*Robocop* presents a vision of tragic cyberneticism typical of a range of 1980s fiction (other examples include films like *Universal Soldier*, the replicants in *Blade Runner* and other cyberpunk sci-fi, and the Marvel character Deathlok, among others). In these figures, there is typically a fundamentally irreconcilable tension between the machinic and organic components of the cyborg, causing various forms of identity crises and throwing into question the meaning of what it is to be 'human.' In just about all these figures, a machinic element of cybernetic control is placed in conflict with intractant and resistant flesh, with the best case scenarios resulting in an uneasy détente or balance between the organic and the machinic, between memories and programming. *Robocop* itself is a rather hybrid and transitional text, on one hand darkly humorous, dystopian, and pessimistic, while on the other hand foreshadowing the more unabashed contemporary figures of technological optimism about traumatic productivity that we will explore below. Robocop is imagined as the best of both worlds, meant to seamlessly combine the 'instincts' of the human with the supplement of a robotic body, all organized and operated under a totalizing cybernetic control. Trauma is also presented as enabling the direct integration of bodies into complex technological assemblages, in a way that is ultimately manageable—Murphy is able to reconcile the memories of his former life with

his new cyborg status, so while the overall worldview of the film is deeply pessimistic, its one hint of optimism is embodied in a paramilitary police cyborg whose corporate funding, advanced technology, and excessive responses to criminality, while questioned, are ultimately necessary and appropriate to the situation he finds himself within.

The final example I would like to briefly discuss is the 1994 film *Forrest Gump*, which intensifies and expands this note of optimism, presenting a vision of trauma overcome through the intervention of therapeutic enterpreneurialism, with the corporation transforming from a figure of malfeasance and manipulation to a benign and naïve locus of redemption. *Forrest Gump* also presents its own version of a secret history, and formally engages in the manipulation of national memory, using CGI to insert Tom Hanks' character Forrest into a number of iconic cinematic and televisual moments over the course of the movie. The film, whose main plot is organized around Forrest Gump's lifelong love and devotion to his childhood sweetheart, Jenny, also posits that this single-minded pursuit also inadvertently shapes a number of key moments in American history and culture: for example, teaching Elvis Presley his signature dance moves when Forrest is a child in leg braces (hence he can only shake his hips), or exposing the Watergate burglary. As in *Call of Duty: Black Ops*, we are given a spectacular presentation of a secret history running parallel to official history, but instead of being orchestrated by shadowy government forces and clandestine international enemies, this is a benign secret history composed of the blind optimism, incomprehension, and serendipity of an individually focused American everyman, whose actions, through happenstance and sheer persistence, outweigh those of economic elites, politicians, artists, and social movements alike, an example of what Berlant (2012) terms infantile citizenship.

The film presents a generally rosy view of trauma, and of military trauma in particular. There are a number of ‘magical’ moments of overcoming trauma, which begin relatively early on in the film, such as when Forrest, who has had to wear leg braces for years as a child, is getting chased by some neighborhood bullies, and is suddenly and inexplicably not only able to walk normally, but to run so fast that he is given a football scholarship to the University of Alabama. Lt. Dan’s process of optimistic overcoming takes a little longer, but follows a similarly enchanted trajectory. Lt. Dan, played by Gary Sinise, is Forrest Gump’s commanding officer when Forrest enlists in the Army during the Vietnam War. While on patrol, they are ambushed by the Vietcong in an attack that kills Forrest’s best friend Bubba and severely wounds Lt. Dan, whom Forrest saves. Both of Lt. Dan’s legs require amputation, and he is furious that Forrest saved him instead of allowing him to be killed in action like most of the men in his family. While recovering from his wounds, Forrest learns how to play ping-pong and discovers he’s extremely talented at it, allowing him to go on a goodwill tour of China, receive endorsements, and eventually earning him a visit to the White House to meet Nixon (where he stays at the Watergate hotel and accidentally helps expose Nixon’s burglars), all examples of him effectively capitalizing on his own trauma. Later that year, Forrest runs into Lt. Dan on New Year’s Eve of 1972—Lt. Dan is now an embittered, homeless alcoholic barely subsisting on state welfare, presented as an almost monstrous figure, completely disheveled and unkempt (Fig. 9).





Fig. 9: Monstrosity as the result of military trauma left to the state

Forrest tells Lt. Dan about his plan to buy a shrimp boat to honor his fallen friend Bubba, and Lt. Dan caustically mocks him, repeatedly telling him he's too dumb to operate the boat itself, let alone a business based on it, and claiming that if Forrest ever does manage to get a boat he will come serve as his first mate. Of course, Forrest does end up purchasing a boat with his ping-pong endorsement money, and true to his word Lt. Dan travels down to help him work the ship. For a while, their shrimping business is floundering, but that changes when they are caught out in their boat in the middle of a hurricane that totally destroys all the boats that are still docked. After nearly dying during the hurricane, Lt. Dan has an epiphany and decides he wants to start living positively again, transitioning into a mostly genial hippie at peace with his life and situation; it takes a repeated exposure to another traumatic moment to shock him out of his depression, allowing him to affectively reconstruct himself, exploring the different

embodied potentials of his disabled body and developing a new, positive attitude (Fig. 10).



Fig. 10: Embodying positive trauma

The same hurricane that washes away Lt. Dan's self-doubts and negative attitude also literally destroys all of their competition, a fortuitous 'act of God' that immediately transforms their previously anemic shrimping business into a huge success. Called away to deal with his sick mother, Forrest leaves the company in the hands of Lt. Dan, who invests most of their profits in what Forrest thinks is a fruit company, but is in fact Apple Computers, making both of them extremely wealthy. The movie ends with a different form of technological redemption, since Lt. Dan, can now purchase the latest leg

prosthetics, showing up to Jenny’s funeral in a designer suit, Italian leather shoes, and what Forrest refers to as ‘magic legs’ (Fig. 11)



Fig. 11 : “Magic legs” figuring private enterprise as redemptive technology

These films are important both because they are representative of particular generic types that have deeply shaped popular imaginaries of militarization, technology, and trauma—the anti-war films of the 1970s and 1980s, dystopian (but celebratory) action and cyberpunk of the 1980s and 1990s, and the military melodramas of the 1990s and 2000s—and because they continue to be culturally resonant today, articulated to broader cultural formations. For example, *Johnny Got His Gun* has also been adapted into a stage play, a musical, and is the inspiration for the Metallica song and video, “One.” *Robocop* spawned a vast franchise that included two movie sequels, numerous toy lines, comic books, and a cartoon series, and a cinematic relaunch of the franchise in early 2014, using

the ongoing depression and bankruptcy in contemporary Detroit as its inspiration and backdrop. Timed to coincide with the release of the new film, and in the midst of its bankruptcy, the city of Detroit also installed a 10-foot tall statue of Robocop on Wayne State University's TechTown campus thanks to a Kickstarter campaign that raised \$67,000 in less than six days (Acuna online). And Gary Sinise continues to embody the character of Lt. Dan in live performances, playing music in the Lt. Dan Band, a cover band that tours mostly in military cities, bases, and hospitals, largely to raise money for charities assisting wounded veterans and their families, with Sinise often dressed as Lieutenant Dan and performing classic rock songs featured in the film. Beyond their inclusion in broader cultural formations and memes, they also map out a shift to a vision of trauma as optimistic technological possibility that has become more dominant today, to which we now turn.

*Friendly Ghosts: Contemporary Figures of Technologies of Trauma in Contemporary Film and Medico-Military Imaginaries*

The 2011 film *Source Code* begins with a tranquil image of mobility, a Chicago commuter train slowly winding its way towards the center of the city. On board the train, Cpt. Colter Stevens is abruptly jarred awake, totally confused about where he is or what is going on around him. For some reason, everyone is referring to him by a different name; they seem to think that he is a high school teacher instead of a helicopter pilot, and the woman sitting across from him that he doesn't recognize speaks to him as if they were old friends. Increasingly agitated and confused, he stumbles to the bathroom.

Going through his wallet, he sees that his license does in fact read ‘Sean Fentress, Teacher’ and he sees a different face than his own in the mirror, moments before the entire train explodes, killing everyone on board (Fig. 12).



Fig. 12: Traumatic misrecognition in *Source Code*

Following a rapid montage of images, with only the famous Cloud Gate sculpture from Millenium Park recognizable, Cpt. Stevens wakes up alone in an unfamiliar, dark and cramped cockpit (fig. 13). On a television screen on the control panel, a woman in an Air Force uniform (Goodwin) asks him about what just happened, which he doesn't seem to remember until they go through a series of 'recall activation' exercises.



Fig. 13: Memory as virtual military space

The woman refuses to answer his questions about whether he is stateside, if his family has been informed of his whereabouts, or if the entire experience was part of some training exercise. Instead, she tells him that his purpose on the train is to find and identify a bomb and the person that planted it, that he has 8 minutes to do so, and that she will be sending him back soon. The second time, he is mostly distracted by how impressive and immersive the simulation is, referring to the other passengers on the train as programs and marveling at the detail and realism of it all, until the explosion happens again. Again, after a flash of images, and a return to the cockpit, which is in a noticeable state of disrepair, Goodwin tells him that he needs to focus on the mission and the other passengers, particularly those that seem quiet, withdrawn, or nervous. Following another flash of images, he finds himself back on the train.

The jumps back and forth between train and cockpit continue, with Colter pursuing a range of profiled suspects (a Pakistani man, some teenagers on computers) and the bomb exploding despite his efforts in each scenario. Every time he returns to the cockpit, it is increasingly degraded, to the point that he has to repair the oxygen filtration systems and his connection to Goodwin. Increasingly distressed and agitated, and refusing to do anything else until someone explains what is happening to him, Goodwin's supervisor Rutledge appears and tells him that he is participating in an experimental program known as 'source code,' which through a fuzzily defined McGuffin of "very complicated technologies" (such as quantum mechanics and parabolic calculus) allows someone to enter into the last eight minutes of memory of someone who has recently died. The cockpit is a virtual space inside of Colter's memory, and he has been entering the memory of a passenger on a train outside of Chicago that was blown up earlier in the day. Finding the bomber is urgent because the DHS believe that he plans on following up his initial attack by detonating a dirty bomb downtown. The supervisor also points out that since the source code technologies only allow the user to enter already existent memory, prosthetically preserved and accessible through the source code program, it isn't actually time travel and that nothing done within source code can have any impact on the outside reality.

Stevens ultimately identifies the bomber, and in the process starts to look for more information about Goodwin (based on her uniform insignias) and also looks himself up on the internet to try and figure out where he is and what's going on. Unfortunately, he finds out that he has already been killed in action, which Goodwin tacitly acknowledges on his next return to the cockpit, and that his bodily remains have been wired into the

source code hardware-- that he is, effectively, deceased. Her supervisor points out that many soldiers would find this preferable to death, providing him the opportunity to serve his country from beyond the grave. However, Colter convinces Goodwin to send him back into the train one last time so he can save everyone, and then pull the plug on his body in 'real space.' Her supervisor, thrilled by the success of the technology in identifying and apprehending the terrorist, just wants to wipe Colter's memory and keep him in reserve for a future crisis. Goodwin decides to ignore these orders, sends Colter back into the source code one last time, and locks herself in the room with the remains of his body—little more than a torso and head with an exposed brain in a box, and dramatically exposed unlike in *Johnny Got His Gun*—ready to cut off the power when his eight minutes are up (fig. 14).



Fig.14: Technological optimization of bare life

Inside the source code, Colter stops the bombing and then uses the rest of his time to reconcile with his estranged father over the phone, ask the woman he's gotten to know through his repeat visits out on a date, send Goodwin a text to let her know that a crisis has been averted and that source code works, and pay a comedian traveling on the train to



make everyone in the car laugh. When the eight minutes are up, Colter kisses the woman he has been flirting with on the train, the scene freezes and there is a slow pan throughout the car, capturing all the smiling faces—and then, impossibly, the scene abruptly starts up again (fig. 15). Colter and the woman he asked on a date get off the train, and go out to Millennium Park, and their distorted image in Cloud Gate is revealed as the central recurring picture in the transitional montages. Meanwhile, Goodwin, who is watching a television report on a foiled bombing attempt on a Chicago commuter train, which might have been a test for the source code program if it wasn't prevented, receives a text telling her that source code works even better than they thought, that they were actually producing parallel realities and not just entering into a simulation, and asks her to help him in the future.



Fig. 15: Technological immersion as optimistic transcendence

I have spent some time detailing the film's plot and structure, both because it employs a rather convoluted narrative structure that requires a little unpacking, and because many of the formal and narrative elements are relevant to our discussion of the new figure of the wounded warrior: the centrality of repetition, particularly traumatic repetition, resulting in a reconfiguration of temporality; an emphasis on the 'magical' elements of the soldier's body, which are unlocked and utilized by its inclusion in machinic assemblages; the technological convergence of virtual and actual space; and the infusion of military perceptions/consciousness into civilian bodies, again through technological apparatuses. The centrality of memory is important here, with *Source Code* providing a machinic vision of memory—where memory is no longer the dynamic and embodied act of remembering, but is instead transformed into a closed but manipulatable virtual space that can be accessed, invaded and utilized through the employment of a range of mnemonic technologies. The film *Inception* (2010) provides another recent cinematic example of this vision. This depends on machinic or computer metaphors for the human body and mind—for example, the residual memory in the brain is likened to the afterglow of a light bulb after it is switched off.

Ultimately, *Source Code* presents a figure of the wounded warrior that possesses pseudo-mystical powers through his direct integration into advanced mnemonic technologies. In computing, source code is a technical term, the mediating layer between the machine (machine code) and the human. *Source Code* (the movie) constructs a fantasy about bypassing that mediating semiotic layer, and providing a direct connection between the body and the machine, the human and the computer. Through this type of direct connection, the wounded warrior, here traumatized to a point of bare life only

barely distinguishable from death, also becomes a transcendent Special Operative; the film constructs a vision of a military subjectivity shaped by trauma capable of mastering not only death, not only time, but reality itself. In the final moments of the film, what is initially presented as a fundamentally epistemological problem posed by technologies of trauma (knowing one's self, knowing what has happened, and what is going to happen) transforms into an ontological one, with the technologies of trauma literally being able to create a new world, through a vaguely defined notion of some sort of spooky action at a distance, to borrow from Einstein.

This vision of temporality and memory radically opened by technological assemblages is placed in clear distinction with the rhythms of quotidian military life, where time is never one's own, where time is pre-regulated, allotted, and spoken for. Against this foreshortened experience of time, foreshortened both in the sense of lack of control and the more direct possibility of grievous harm or death that perpetually haunts military bodies, *Source Code* offers a military fantasy of temporal mastery through bodily integration with computing technologies. This technological mastery does not extend only over one's own timeline, one's own memories, but over the fixity of the past and possible constraints of the future. These technologies not only repair the soldier's life, by moving it into the sphere of a biotechnic ideal, but also repair his personal relationships, both familial and romantic. Colter is able to reconcile with his estranged father, find a new girlfriend and develop a positive worldview by using mnemonic technologies to literally create another reality, another timeline, one that resolves the various lacunae and distortions that haunt the soldier's identity in the 'source' reality. We will see later in this chapter how this is not only a science fiction fantasy, but a current military medical

fantasy as well, with a similar logic underpinning the development and deployment of the therapeutic simulation *Virtual Iraq*.

*Source Code* is one popular example of a traumatized military body becoming integrated into a technological assemblage that facilitates not just novel military interventions, but an overcoming of personal feelings and experiences of ‘stuckedness’ (following Ghassan Hage); as Colter is both literally stuck reliving the same eight minutes for most of the film, and also feels more generally stuck in his personal life and its possibilities, as he discusses multiple times. Another example, the 2009 film *Avatar*, provides a vision of this traumatic transcendence elaborated on the spatial, rather than temporal, level. *Avatar* presents another story of a wounded warrior undergoing a severe identity crisis, who overcomes it through a techno-mystical union of the organic and inorganic, the body and the machine, through the avatar. The avatar is a third term, a biotechnical production which in turn mirrors the film’s artificial construction of a completely natural and integrated (organic in the strong sense) environment.

This film’s story also begins with military trauma, with former Marine Jake Sully reflecting on the ‘hole blown in his life’ by a catastrophic spine injury that has left him paraplegic and unable to fulfill his dream of becoming a pilot. Although in the future setting of the film (2154), the military possesses the technology to completely repair his spine, he is unable to afford it with his ‘vet benefits.’ Instead, he enlists as a private contractor with a company extracting a precious metal—the unsubtly named ‘unobtainium’—from the planet Pandora, whose atmosphere is poisonous to humans. In order to explore the dangerous environment, the company uses Avatars, bodies that are synthetic hybrids of human and the native Na’vi DNA, and that are operated through a

direct neurological interface with a genetically matched human. In another example of doubling, Jake is brought on board to replace his recently deceased twin brother who was operating one of the Avatars; because his brother was a PhD in biology, while Jake is only a self-defined 'grunt,' he is generally viewed by those running the project as an inferior replacement and is only integrated into the program because of his DNA match.

However, it rapidly becomes apparent that although he lacks his brother's experience and academic credentials, Jake's wounded body seems to have a more embodied and instinctive connection with his avatar, and adapts to the connection far more rapidly than other users. The experience of leaving his own body to inhabit another is liberatory rather than disorienting, and he is quickly outside bounding through the woods even though he is constantly told that he is not supposed to be running, that he is moving too quickly, but as he mentions in his video logs he "was sick of doctors telling him what he couldn't do." After being separated from a corporate expedition, Jake's avatar is saved by a local N'avi woman named Neytiri, who accepts him even though the avatars are generally despised, because she can "sense that he has a strong heart, and no fear." As Jake's Avatar adapts to and begins to embrace the N'avi community, particularly their sense of integration into the environment around them, the corporation promises to reconstruct Jake's spine if he works as a sleeper agent to gather information about the N'avi's home, which sits on a gigantic deposit of unobtanium, but also serves as the central hub in the biological network that connects every living thing on the planet. Jake is eventually integrated into the N'avi community, and supports them when the company attempts to destroy their home to access the mineral resources underneath. Although the private military contractors have overwhelming technological superiority,

the various flora and fauna of Pandora rise up against them, and although Jake's human body is exposed to the toxic atmosphere during the ensuing battle, he is saved when his consciousness is permanently transferred into his Avatar.

Again, military trauma is presented as facilitating a primarily liberating experience. The avatar Jake inhabits not only surpasses the physical capabilities and mobilities of his own wounded body, but of the human body more generally, giving him access to spaces, mobility, and modes of being unavailable to other humans. The singular and bounded understanding and experience of the body are exploded and overcome, with the body instead presented as a number of layered assemblages—Jake-wheelchair, which is then linked to neurotech-Avatar, which is eventually connected to Na'vi community and indeed, the entire planet, literalizing the ideological connection of the native and nature, making it a direct, electronic interface which refigures nature itself as network technology, albeit one defined by its organicism and semi-magical properties. In this example, as in *Source Code*, the incompleteness and disorientation of the traumatized body is refigured as an advantage, opening it up new combinations, inputs, and configurations in a way that is presented as more difficult, if not impossible, with a more organically constructed and coherent body, enabling the creation of a new wholeness through the incorporation of the wounded body into an expanded technological assemblage.

This figure of the superhuman wounded warrior possessing a special, organic connection to technology is not limited to military science-fiction, but also informs more “realistic” popular portrayals of the military, as evidenced in the 2009 film *The Hurt Locker*. As opposed to the films discussed above, *The Hurt Locker* was widely taken up

and discussed as a “realistic” portrayal of the occupation of Iraq. Of course, a number of veterans and military critics challenged this discourse of military realism, pointing out numerous inaccuracies in everything from uniforms and equipment to wildly impermissible deviations from standard operating procedures (most of what William James, the main character played by Jeremy Renner, does throughout the film would result in him receiving disciplinary action ranging from official rebuke to a court martial). The film employs a number of formal effects to generate this sense of realism, including the use of a handheld camera, utilizing a washed color palette, and composing the plot as a relatively disjointed series of vignettes rather than a polished and composed narrative arc. Most of these vignettes are posed as ethical dilemmas with life or death stakes, played out in real time—soldiers deciding if the car speeding past a check point is a lost taxi driver or a suicide bomber, or if an Iraqi man who says we was forced to wear a bomb vest and needs help getting it off is telling the truth or not. Many reviews suggested that the film managed to recreate the pervasive and palpable atmosphere of tension or danger that characterizes wartime Iraq. The film presents the entirety of the space of everyday military life as potential threat, highlighting the way weapons are embedded in public infrastructures, and the way that seemingly everyday actions (hanging out on a balcony or near a shop, making a phone call) can serve as elements composing the technological assemblages that produce and detonate IEDs.

The film begins with a mix of hectic handheld shots of Baghdad streets and a “bots-eye view” of a robot (which appears to be a MKII Talon, one of the bots discussed back in Chapter One) being used to identify and defuse a possible IED in some rubble in the middle of the road. The bot is operated by a three-man team composed of two of the

film's main characters, SSgts. Sanborn and Eldridge, and their commanding officer. They use the bot to successfully identify the IED, but when they load up a wagon with C4 and attach it to the bot to create a controlled detonation of the IED, as it navigates uneven roads and a herd of goats the wheel falls off the wagon (which the team attributes to the fact that "the Army made it"). Instead of repairing the wheel, the commanding officer decides to hand-deliver the C4 to the bomb in a crowded street in the middle of the day. Eldridge notices a man with a cellphone watching them, but can't decide whether he is simply a man checking his phone or a bomber preparing a remote detonation. He is, in fact, a bomber and Eldridge doesn't shoot him until he detonates the bomb, killing their commanding officer and generating debilitating feelings of guilt and paranoia in Eldridge

Their replacement commanding officer is Sgt. William James, a former Special Forces operative (Army Ranger) who has transferred to EOD largely because he thinks it is more exciting. James immediately sets the rest of his team on edge by rejecting and removing a number of the protective layers they are used to, such as the plywood they keep over windows to help protect against shrapnel, their remote-controlled robot, and the hard armored suit that failed to protect the squad's first leader. James ignores Army protocol and standard operating procedures, going by himself to defuse bombs by hand, and even cutting himself off from his team completely by throwing smoke grenades behind him or turning off his communication radio. James is portrayed as both a reckless adrenaline junkie and a preternaturally gifted EOD operative, possessing a seemingly intuitive understanding of bomb technologies and composition, which is actively



enhanced by his willingness to make direct bodily contact with the bombs and their detonators.

The rest of the film is composed of a series of moral dilemmas, loosely connected through a few narrative lines: a countdown of the number of days until the unit's deployment is over (starting at 38); Sanborn and Eldridge's initial distrust, but eventual acceptance of James; Eldridge's improving relationship with the military psychiatrist (Dr. Cambridge) he is seeing following the death of his first commander; and James' developing friendship with a young Iraqi boy (Beckham) allowed on base to sell DVDs and local goods. Scenes between the EOD missions portray the soldiers listening to heavy metal, drinking whisky, and seeing how hard they can punch each other in the spirit of masculine camaraderie. During one of these roughhousing sessions they literally stumble upon James' titular "hurt locker"—a box full of parts of all the bombs he's defused that he keeps with him under his bed. James describes it as a collection of "all the things that could have killed him," which gives them a special and intimate meaning and charge even though they are actually just "a bunch of shit you can buy at Radio Shack."

The mission after this revelation is the turning point of the film; the EOD team is called in to investigate a warehouse that has been identified as a bomb-manufacturing site. Inexplicably, Dr. Cambridge decides to come along on an EOD mission because he is "tired of sitting behind a desk all day," a move that impresses Eldridge and solidifies their friendship. During their exploration of the warehouse, James, Sanborn and Eldridge find a "body bomb" (an IED hidden inside a dead human body) that James thinks was made with the corpse of his young friend Beckham. Even though the team just wants to

blow up the entire warehouse, James takes the time to remove the bomb from Beckham's body, preventing his reduction to the status of weapon or "becoming-bomb" (see Packer 2006) and takes his body off site to give it a proper burial. However, during the time it takes him to remove the bomb, a crowd has gathered outside and only Dr. Cambridge is left to deal with them, which he does in an especially genial manner (he is actually polite, speaking instead of shouting, using some Arabic phrases, etc.). However, his humane treatment ultimately results in him being literally vaporized by the Iraqi men he was talking to, as they end up detonating a bomb he was standing on and they were completing as he was engaging them in conversation.

That night, James goes rogue, drawing on his former Ranger training to sneak out of the Army base to follow the Iraqi DVD salesman that has replaced Beckham, thinking he will lead to the men producing the bombs. His search is fruitless, and after another bomb goes off a few days later he convinces Eldridge and Sanborn to follow some men in the area, thinking they are responsible for Beckham's death and playing on Eldridge's guilt about Cambridge to persuade them to join him. During the ensuing chase, they are split up and a group of insurgents briefly capture Eldridge. Although James and Sanborn manage to rescue him, they accidentally shoot him in the leg in the process. The next day, as Eldridge is medevac'd out for surgery, Beckham returns and tries to sell James some DVDs; apparently he misidentified him as the body bomb, but instead of blaming himself he appears to blame Beckham, and totally ignores him as he walks by.

Soon after these events, James returns home to his family in the United States, and we are shown a number of scenes of him in everyday domestic life, such as being disoriented and wary in a grocery store, disinterestedly cooking dinner with his wife, who

is worried about him going on another deployment, and playing with his infant son. In a monologue delivered to his baby, he notes that the child seems to love everything, but tells him that as you get older, all the things you love don't seem that special anymore and that you love "fewer things, maybe one or two things...maybe only one thing." As he is talking, the sound of a helicopter slowly crescendos, and there is a hard cut to James walking off a helicopter in Iraq and meeting his new EOD unit, followed by another hard cut to him walking forward in his flak suit and helmet towards another IED, with a smile on his face as heavy metal blares and the countdown of the days until the deployment is over is reset to 365.

*The Hurt Locker* reproduces a number of the tropes of the wounded warrior and post-traumatic optimization we have explored above. James is clearly represented as traumatized and unstable, acting out and breaking down in a variety of ways over the course of the film. However, this trauma does not just fail to prevent him from doing his job, but is instead posed as both produced by and enabling his singular approach to defusing bombs, which is presented as the most successful in the entire Army (he has single-handedly defused 873 since joining OED). His rejection of the Talon bot, the hard flak suit, etc. is not a simple rejection of technology in general, but rather the composition of a different technological assemblage composed of the wounded warrior's body, his own tools (which include basic elements like pliers, and more advanced technology like a helmet cam) and the bomb systems he is attempting to disarm and disrupt. James successfully incorporates these technologies of trauma into his life, both literally into his body (at one point, he mentions there is shrapnel in his body that he has voluntarily chosen not to have removed) and through the constant intimate presence of his "hurt

locker,” which he keeps under his bed and provides both a perpetual reminder of his own bodily vulnerability and exposure, and the close, intuitive, and felt connections he enters into with the bombs he is disposing. This constant danger and vulnerability is primarily experienced by James not as exhausting and debilitating, but exciting, intense and liberating, especially compared to his home life, which is portrayed as dull, monotonous, and grey.

The film also literally embodies a cynical view of military clinical psychiatry in the figure of Dr. Cambridge. Cambridge is presented as not understanding what real soldiering is like, and is inept both in the clinic and the field. His presence ultimately does more harm than good, both for the well-being of Eldridge, who is retraumatized by his death, and for the unit as a whole. His attempt to adopt a humane and open approach to the Iraqis he encounters is ultimately a weakness, leaving him and the soldiers with him vulnerable to a bomb that was being constructed literally under his nose. The multiple failures of Cambridge as both psychiatrist and soldier serves as a clear contrast to James’ successful individualized optimization of his own traumatic experiences, facilitated through an intimate embodied integration into various technological assemblages, and the development of his own singular soldiering style and mode of perception. This understanding of trauma as optimally prevented or utilized through the integration of the wounded warrior into a technological assemblage, shared by all of these films, also informs a number of recent military medical initiatives, and I will end this chapter with a consideration of some of the ways the military is trying to realize and operationalize some of these understandings of productive trauma that we have mapped out above.

### *Virtual Iraq and Military Mnemonic Technologies*

These optimistic cinematic visions of technologies of trauma are connected to a number of military medical imaginaries that underlie a range of technologies meant to prevent or efficiently operationalize trauma through the integration of the soldier-body into various technological assemblages. Some of them are, in fact, directly inspired by some of these films. For example, the military's FY 2013 budget included a \$7 million allotment for a "Project Avatar" meant to leverage "key advancements in telepresence and remote operations of robotic ground systems" to "develop interfaces and algorithms to enable a soldier to effectively partner with a semi-autonomous bi-pedal machine and allow it to act as the soldier's surrogate" (Drummond, "Avatar" online). In addition to enabling operations like disarming bombs and infiltrating dangerous or fortified buildings, they are also envisioned as offering therapeutic benefits to wounded soldiers, allowing them a prosthetic experience of unrestricted mobility.

Somewhat more realistically, the Army has also started developing plans to construct a unique digital avatar for every individual soldier for use in training simulations, social networking and potentially in therapy, based on that soldier's actual body and capabilities. According to the Army's executive officer for Simulation, Training, and Instrumentation, you would "design an avatar that has the individual facial features of a soldier...then you add more of what he [sic] looks like, physical attributes. If he's a tall person, the avatar would be tall...when you're in your game environment, you'd like to have the physical and mental attributes of that individual reflected in that virtual world" (Beidel online).

The main justification for the development of these digital avatars is to introduce more realism into virtual programs—recruitment, training, and therapeutic—in two main ways. First, the Army developers working on the project believe that having an avatar that resembles the soldier will make virtual scenarios used for training and therapy more immersive, and hence effective, for their participants. They suggest that soldiers will have more of a sense that they are really present in virtual space if their avatar physically resembles them, rather than being forced to inhabit a generic military body typical of the current generation of games and simulations used for training. Second, by importing biometric and aptitude data about individual soldiers into virtual avatars, avatars in training environments would act more realistically. For example, “the computer character would run as fast or jump as high as a soldier did during a physical training test, and the avatar’s marksmanship would be tied to how effective a soldier has been during weapon drills” (ibid). This would mitigate some of the discrepancies between virtual and actual training scenarios for soldiers who might be excellent at first-person shooters, but not that good at actually firing a rifle. It would also potentially allow commanders to run simulations using the data gathered from their soldiers to see “how their skills, or lack thereof, would play in life and death situations,” and to identify areas, skills, and maneuvers that might require additional attention or training.

A range of mnemonic technologies relevant to our discussion of technologically optimized wounded warriors have also been proposed or developed by the military over the last decade, following the military’s difficulties in successfully dealing with the wave of PTSD, TBI, and CTE cases coming out of the Afghanistan and Iraq wars. Of particular interest is an emphasis on *pre-emptive forgetting*—that is, the idea that a

combination of pharmaceuticals and biotech would be able to prevent traumatic memories from forming in the first place. Military imaginaries of memory as both extremely malleable, on one hand, and externalizable and technologically controllable on the other, inform the approach of more recent work on memory and PTSD by a number of military medical researchers.

While these fantasies of technological and/or pharmaceutical control and management over memory has a fairly extensive military history (ranging from institutional examples like military experiments with psychotropic drugs in the 1950s and 1960s, to popular texts like *The Manchurian Candidate* and *Bourne* series), recent advances in neurobiology, targeted pharmaceuticals, and VR technologies, coupled with the difficulties in treating PTSD/TBI, cases have reinvigorated serious consideration of them. For example, it is visible in the recent push for the utilization of more types of virtual reality exposure therapy in the treatment of military PTSD patients. The fundamental idea of exposure therapy is to have the patient actively re-experience traumatic events in safer therapeutic settings, using either their imagination or digital technologies to virtually recreate the event with as high degree of detail as possible, with the goal of eventually defusing the traumatic charge of the events. Modern exposure therapy is in turn premised on experimental neurobiology that suggests that every act of remembering opens up and alters the memory being remembered, and that pharmaceutical interventions at the moment of remembering will allow doctors to ‘reprogram’ the content and/or emotional intensity of that memory. Consequently, across a range of military medical fields, there has been an increased interest in developing and exploring various pharmaceuticals that prevent memory formation and consolidation,

detach the affective charge of memories from their representational content, or that completely erase memories.

Last year the Pentagon had an \$11 million grant for researchers at Emory University, University of Southern California, and Cornell Medical Center to study the effectiveness of incorporating D-Cycloserine (DCS) into exposure therapy regimens. DCS “binds to receptors in the amygdala, the region of the brain that governs fear response...so by blocking out fearful reactions while a patient revisits trauma, experts think DCS can, literally, ‘extinguish’ fear right at the source” (Drummond, “No Fear” online). Another technique, a neck injection called a stellate-ganglion block, involves “the injection of anesthetic, administered into a bundle of nervous tissue in the neck...appears to turn off something called nerve growth factor, that can surge during stressful experiences, promoting the sprouting of nerves that may trigger chronic stress” (ibid). The injection can also “trigger seizures, hit an artery, or even puncture a lung, however rarely” (ibid). The Navy officer responsible for Pentagon funding of research on the technique, describes it using the machinic metaphors of memory that we have noted above: “I think of SGB as being similar to re-starting a computer, only we’re talking about circuitry of the nervous system and chemical pathways...if somebody’s circuitry is going haywire, then the anesthetic shuts it off, and reboots the system.” And in a particularly hyperbolic *Wired* article on PKMzeta, another neural inhibitor, the author, Jonah Lehrer, goes so far as to claim that “in the very near future, the act of remembering will become a choice;” the drug is presented as offering an even more precise and effective mode of selective forgetting (Lehrer online). Extrapolating from some early experiments with PKMzeta, Lehrer argues that “the end result will be a menu



of pills capable of erasing different kinds of memories—the scent of a former lover or the awful heartbreak of a failed relationship. These thoughts and feelings can be made to vanish, even as the rest of the memory remains perfectly intact” (ibid).

In most cases, these drugs are meant to be used during exposure therapy interventions that are increasingly using digital technologies to intensify both the experience of the traumatic recall, and to maximize the level of control over the experience of that recall afforded to the therapist. The project overview for one of these programs describes the clinician as operating behind a ‘Wizard of Oz’ interface. The most widely used example of this type of virtual therapy—according to its developer, it can be found at “approximately 50 sites, including VA hospitals, military bases, and university centers”—is the military’s *Virtual Iraq* program. The program, which promises to augment exposure therapy regimens by “leveraging virtual art assets that were originally built for the commercially successful X-Box game and combat tactical simulator, *Full Spectrum Warrior*,” also incorporates a range of other auditory, haptic, and even olfactory stimuli which are slowly added to the therapeutic scenario to make it more realistic (Rizzo et al. online). For example, the Virtual Iraq suite includes “trigger stimulus options...such as sounds of weapons fire, explosions, incoming mortars, and helicopter flyovers...visual stimuli such as night vision, wounded civilians and combatants, and wrecked vehicles...and olfactory stimuli...including such scents as burning rubber, diesel fuel, weapons fire, and spices” (Gerardi et al. 210).



Figs. 16 and 17: Screenshot of the Virtual Iraq program, and its apparatus

The therapist initially solicits details about the traumatic event from the soldier, and then constructs a digital approximation of that event using the *Virtual Iraq* system. The first time a soldier uses the system, the clinician might include just the visual elements of the scenario—as the patient repeats the event in the virtual space, more and more sensory details are added. On one hand, Virtual Iraq offers an increasingly detailed technological elaboration of subjective memories, but the translation of these memories into a technological apparatus and their management by experts in its operation are often described (both in reporting and academic case studies) as producing an experience ‘more real’ than the soldiers’ actual memories. In addition to detail and control, VR therapy is presented as a therapeutic model that would be more acceptable and interesting to soldiers suffering from PTSD, in much the same way as the PTSD apps discussed in the previous chapter. This is ascribed both to the ‘wow factor’ of the VR technologies involved, and because “young military personnel, having grown up with digital gaming technology, may actually be more attracted to and comfortable with a VR treatment approach as an alternative to traditional ‘talk therapy’” (Rizzo et al. online).

While military researchers and PR officers, as well as popular coverage of these initiatives in various periodicals and websites, tend to be optimistic about the prospects of these treatments (on a scale ranging from cautious to wildly enthusiastic), the available experimental results of a number of these approaches have been far from encouraging. For example, in the mostly laudatory article discussing the use of DCS for memory suppression, the end paragraph acknowledges that “DCS’s efficacy is far from proven...and earlier research efforts that tested supposed ‘fear-extinguishing drugs, most

notably a series of much-touted, Pentagon-funded studies on propranolol at Harvard have all been disappointments” (Drummond, “No Fear” online). An article reporting on a case study of VR exposure therapy notes, “the subject did not consistently indicate substantial decreases [of PTSD symptoms] within the session” (although they also claim “in-session habituation may not be necessary for the treatment of PTSD”). Many of the medical studies on the use of VR therapy focus on only one subject, or a small, uncontrolled sample population. A number of veterans have also begun voicing concerns about the deployment of some of these more experimental PTSD treatments, worrying that they may be used to classify soldiers with PTSD as fit for active duty more quickly than older, more established approaches, or that that they may become a substitute for veteran’s benefits, or a way to reject VA claims (Hanafin online). However, the ways in which these treatments articulate two powerful regimes of truth (neuroscience and digital reproduction) as well as the relative simplicity, brevity, and inexpensiveness of their technologies, has made them highly desirable from a military perspective. This sense of the possibility of intervention in the real world through the expert construction and control of a virtual military space, characteristic of the *Virtual Iraq* program, is part of a changing regime of military spatiality more generally, which is the focus of the final chapter.

*Conclusion: Bodies of War*

In this chapter, I have sketched out a range of dominant military corporeal imaginaries—the Special Forces operative, the enemy combatant, the unfit soldier, and

the wounded warrior--and argued that they each embody some elements of the military technological and medical imaginaries that we are provisionally terming biomilitarization. I have also attempted to demonstrate that these logics are not only produced and contained within military policy, documents, and discussion, but are reflected and reaffirmed in a number of popular cultural formations, in a way that largely serves to justify and legitimate their central discourses of human optimization and post-traumatic growth. The Special Forces operative is presented as embodying the current ideal of flexible, clandestine, asymmetric, and precise warfare, serving as a seamless integration of the soldier body with a network of surveillance and stealth technology. Enemy combatants, while figured as stealthy, shadowy, and hidden, are understood as vulnerable to a regime of biometric and surveillance technologies that are capable of revealing the truth of their identities through the monitoring and analysis of a range of bodily traces, behaviors, and comportments. Unfit soldiers are constructed as failed military bodies and subjectivities, individually responsible for any problems, failures or shortcomings within the military (the “bad apple” argument), and also as an indication of a more general weakening of the American civilian populace. Finally, wounded warriors are presented as the materialization of the logics of post-traumatic growth, with properly resilient bodies and subjectivities able to leverage trauma to reveal and realize potentials, capabilities and truths that were hidden within them.

The ongoing salience of all these corporeal imaginaries is visible in a range of ongoing discussions within and about the military, continuing to circulate in everything from the way the services are going to institute budget cuts, to the handling of an ongoing epidemic of sexual assault and violence, to debates about veteran health care following

the reduction of forces in Afghanistan and Iraq. The centrality of the Special Forces operative has been reaffirmed in the most recent military budgets, with funding allocation for Special Forces and drone systems increasing even as vast reductions in the main corps loom on the horizon. The figure of the unfit soldier is increasingly being deployed with a regulatory inflection, as stricter enforcement of soldier fitness standards and the use of previously overlooked shortcomings in the different Comprehensive Soldier Fitness metrics are emerging as ways to identify the soldiers that will be targeted for discharge first. And images of wounded warriors mark the ways in which the long occupations of Iraq and Afghanistan “continue despite this appearance of an end: war persists in the lives, bodies, and social worlds it has touched, and the enduring structural conditions from which war necessarily arises guarantee that these most recently ravaged lives, bodies, and worlds will not be the last” (MacLeish 6). They also serve as the ideal of military commitment and resilience, especially in typical and stories and videos featured on site like the *Army Times* and *Stars and Stripes* that highlight wounded warriors achieving Paralympic athletic success, or actually returning to their units on the front line (for a recent example of the latter, see Pena online). Here, the wounded warrior is able to utilize the technologies discussed above to reintegrate their individual body, and the military corps more generally.

Of course, this discussion of bodily ideals, figures, and imaginaries does not engage enough with the lived experience of military bodies, which would require a more sustained ethnographic work. Ideally, in the future I would like to be able to supplement the type of analysis I have started here, which has mapped out a number of key developments in institutional and popular imaginaries about military health, wellness, fitness, and

embodiment, with sustained work with actual soldiers inhabiting and enacting those regimes. I am unable to do so now largely due to the constraints of time, but I believe that the work of mapping out changes in the hegemonic forms of military embodiment is a necessary prerequisite to this latter type of intervention and understanding. Along the same lines, I would now like to turn to a consideration of some of the dominant military spatial imaginaries that these bodies are situated within, and how these imaginaries are also participating in shifting understandings and formations of military everydayness.

***Drone Wars and Atmospheric Militarization: Reterritorializing Popular Militarism***

On July 21, 2011, the U.S. space shuttle *Atlantis* returned to Earth for the last time, and the U.S. space shuttle program officially came to a close. Approximately a million people traveled to the Space Coast to witness the historic final launch and return, and the coverage invariably focused on both the intense emotions generated by the experience, and the periodization marked by the mission, the unmistakable sense that a discrete and important era was drawing to a close. Writing about the scene at the final launch, the *New York Times* reported that even the “most dispassionate and critical engineers” and “the wonkiest mathematicians”—implicitly, the most rational and unemotional national subjects--were moved to tears by the sight of the launch. When asked about his thoughts on the mission, NASA’s launch director Mike Leinbach responded:

It's hard to describe all the emotions ... certainly sadness that it's over...I saw grown men and grown women crying today ... It was just human emotions coming out on the runway today, and you couldn't suppress them” (Chang online).

These types of purportedly uncontrollable and intense sentiments were not restricted to people actively involved in the shuttle program. A number of interviews with spectators described the tears running down their faces, and included testimonies about how the shuttle program wove their families into a broader national narrative, with interviewees often discussing earlier experiences of watching shuttle takeoffs and landings, and



regretting that their own children might never have the chance to participate in similar moments of civic excitement and pride. In some cases, the shuttles themselves were also personified and described as subjects worthy of mourning, with various authors fondly wishing them well in their retirement, or more grimly, discussing them as being laid to rest, attending the ‘funeral’ for space exploration, or more wittily as ‘shuttling off their mortal coil’ (Hannaford 14)

In addition to functioning as a media spectacle that generated an affectively charged national space, the last Atlantis mission was also interpreted as marking a significant temporal break, with a number of articles and commentators articulating the shuttering of the shuttle program to a more general sense of American crisis and decline. Some of this was quite direct: for example, a *New York Times* article entitled “A Hush Falls Where Rockets Once Roared” detailed how after “the space shuttle program ended in 2011, 8,000 people lost their jobs, and the boomtowns born of the space race began to lose their footing;” it then ties this job loss to anxieties about national unemployment in other American locales that have lost their most important employers and manufacturing bases (Calvert 8). Taking a slightly different approach, another article articulates the ending of the shuttle program to the prolonged national recession through a discussion of the downsizing and redeployment of the astronaut corps as one more field of precarious labor. It maps a shift from an age where astronauts “were national heroes—John Waynes in moon suits...[where] virtually everything they did was pioneering,” to one in which they have become “ever more anonymous, their work more quotidian...astronauts have become more like interchangeable members of yet another small, highly motivated and skilled 21<sup>st</sup> century workforce” (Spotts 1).

This direct concern about the thousands of jobs that would be lost with the end of the program, and how the jobs that remained would be more mundane, demystified, and uninspiring was coupled with more general feelings of economic stagnation and immobility, and to a pervasive sense of a general loss of American power and prestige. If the initiation of the shuttle program was understood as “a symbol of U.S. prestige and dominance, two-fingers to Russian premier Konstantin Chernenko at a time when Reagan was imposing diplomatic and economic pressure on Russia at the height of the Cold War,” its end was connected to a pervasive mood of uncertainty and precarity (Hannaford 14). There was considerable ambiguity about how the space program would continue after the end of the shuttle era, since the program ended with nothing lined up to replace the shuttle, beyond a vague plan for new exploration vehicles (the Orion) not even in test phases and with no building sites, destinations, or target dates for completion. In response to the closing of the shuttle program without a roadmap for what would follow it, Neil Armstrong and Gene Cernan, the first and last men on the moon, penned an open letter with fellow astronaut James Lovell bemoaning the fact that “NASA’s human space flight program is in substantial disarray with no clear-cut mission in the offing. After a half century of remarkable progress, a coherent plan for maintaining America’s leadership in space exploration is no longer apparent...the voyage is over ” (Armstrong, Lovell, and Cernan)

This tone of loss ranged from melancholic and nostalgic to actively alarmist and xenophobic. As Matt Novak has pointed out, a futurist nostalgia—the belief that in the past, the American populace was more enthusiastic and hopeful about the future in general, and the technological possibilities of the future in particular—is the dominant

mode of popularly reflecting on and analyzing the shuttle program. And although dominant discourses about the space race suggest that after the Sputnik launch “Americans rallied behind the idea of a better, more technologically advanced future for all,” the reality was far more complicated (Novak). As Novak notes, “in a 1969 poll taken after the lunar landing, just 53 percent of Americans believed that the moon excursion was worth the expense. In fact, during the nine years of the Apollo program, American support pretty much fluctuated between 35 and 45 percent” (Novak). Nonetheless, different modes of nostalgia, ranging from contemplative to bellicose, provided the dominant tone in conversations about the shuttle program’s end. The discussion ranged from wistfulness about feel-good movies centered on the shuttle program (such as *Space Camp*) and reflections on childhood fascination with outer space, to the ways in which we were approaching the end of American dominance in space, paranoia about it marking an American defeat in a new space race with China, and humiliation about having to ‘hitch a ride with the Russians,’ our old interstellar enemies, in order to get American astronauts to the international space station. This combination of nostalgia, anachronism, and poignancy was bitinglly skewered by *The Onion*’s response to the media spectacle, with an article entitled “USSR Wins Space Race as U.S. shuts down.” The satirical piece featured faux interviews with patriotic Soviet textile and tractor factory workers making proud claims like “our great Soviet republic has conquered the West and achieved technological and ideological superiority over America... We have established our unrivaled dominion over the stars and planets and stand now at the dawn of a new era, an era in which the tenets of communism shall echo loudly across the Earth's entire expanse” (“USSR Wins”)

Other commentaries read the end of space flight through a more general metaphorical lens—that it was indicative of the lack of interest and excitement about science and technology in the United States, particularly about science education. Others viewed it as an index of the failure of American optimism and confidence, a sign of our literal inability to reach for the stars. Even the language of the end of ‘manned’ space flight lent itself to discussions about concerns about dehumanization of technology (replacement through automation) and an ‘emasculatation’ generated by ‘unmanned’ space aviation, with a number of articles lamenting the end of the astronaut (such as the aforementioned article describing them as ‘John Waynes in moon suits’), the last great American frontiersman (and I am using ‘man’ purposely) and articulating it to other contemporary anxieties about failing American masculinity, man-babies/man-cessions, and the end of men.

Despite the range and breadth of popular anxieties articulated to the end of the shuttle program, at the very same moment the USAF was issuing press releases and policy statements asserting quite the opposite—that the American space presence was expanding, not contracting; instead, it was simply taking on a new form. A few months before the last Atlantis launch, news of a new military X-model spacecraft, the X-37 space plane, started circulating through aviation, space tech, and military periodicals, and eventually trickled down into the popular press. In many ways, the available descriptions of the X-37 make it sound like a miniaturized and remotely piloted version of the recently retired space shuttle. In a typically hyperbolically titled *Wired* article, “Secret Space Plane Heading Back into Orbit,” we learn that the X-37, “the Air Force’s most mysterious aircraft,” was heading back into space for an equally mysterious, 8-month

long test flight (Axe). Nobody outside the Air Force seemed to know exactly what the plane was for, and the author claims that this very ambiguity had in fact “sparked a minor space race as Russian and China threatened to build similar vehicles” (in another article, it becomes “official--the space race is on again”) (Axe, “Russia” online). With this dearth of official knowledge, rampant speculation about the capabilities of the plane and the nature of the tests followed, as internet commentators began to trade theories and pictures of the craft. Axe also speculates on potential uses and capabilities of the X-37:

It could be a commando transport, a bomber or an orbital spy. It could launch, repair or reposition U.S. satellites in low orbit. It could sneak up and disable or steal enemy satellites. Its pickup-bed-sized payload bay is particularly enticing to observers. “You can put sensors in there, satellites in there,” said Eric Sterner, from The Marshall Institute. “You could stick munitions in there, provided they exist” (Axe).

The X-37, like the Space Shuttle, is a spectacular technology, but the logic of its spectacle functions very differently. The space shuttle and its attendant coverage primarily operates through the logic of public media rituals along the lines mapped out by Nick Couldry, where media rituals and spaces allow us to “imagine ourselves connected to the social world” and whose primary function is to “produce or maintain social integration...[through] the management of conflict and the masking of social inequality (Couldry 2-3). The X-37, on the other hand, is better understood through the rubric of spectacular secrecy. The popular aspect of the shuttle program functioned as part of an open-air and televisual spectacle, enabling national pilgrimages and group viewings meant to generate feelings of national togetherness, purpose and progress (which is why the dramatic tragedies of the Challenger and Columbia were so traumatic, serving as spectacular failures of these notions, and often playing out in real time in front of millions of families and children). In this way, the shuttle program was a key component in the

production of what Gramsci calls “the national symbolic,” understood as both “the circulation of the population around the sacred landscapes and national monuments of the community and simultaneously, of the circulation of those images, in mediated form, in the lives (and homes) of the population” (Morley 35). Meanwhile, the X-37 has become a far more localized subject of intense fascination of a smaller, virtual community, with its very lack of visibility and national focus, mission or explanation leading to the multiplication of blurred images and uncertain discussions and speculations of how it works, where it is, and what purpose it serves.

The investment in the X-37 program is part of a more general expansion of military investment in drone technologies in general, and in unmanned military high-atmosphere and space technologies in particular. In addition to the X-37, for example, in 2014 the Air Force is planning on launching a Geosynchronous Space Situational Awareness Program, which would involve placing two new “space situational awareness satellites” into geosynchronous orbit. These satellites possess improved capabilities for hi-resolution imaging and reconnaissance of the Earth’s surface, but also “electro-optical sensors to collect information on satellites and other objects” in orbit, which is described as a vital element in securing the American national spatial infrastructure (Butler online). The Air Force is also currently planning on phasing out the high altitude U-2 spy plane and replacing it with a modified version of the RQ-4 Global Hawk drone, as the latter’s cost has moved significantly below the U-2, even though the U-2 is still generally acknowledged as more effective for reconnaissance (Sisk online). These specific examples are taking place within an expansion of drone technologies even as the military more generally is facing a range of budget cuts. Drone programs are the only element of

the military budget slated to increase in at least the next two years, seeing an overall increase of \$59.7 million for drone acquisitions, with similar scheduled increases for drone research and development budgets (Mead online).

I began this chapter with a brief discussion of the termination of the shuttle program and the expansion of the Air Force's Space Command and increased investment in projects like the X-37 because I believe it usefully marks a retrenchment of an explicitly militarized definition of outer space, and a reterritorialization of military space more generally. While NASA and the shuttle program have indelible military roots, over the last several decades they have also been articulated to a more general civic national imaginary, one in which discourses and sentimental celebrations of 'pure science' and national optimism tended to eclipse the military elements of the program. What appears to be the end of this era, and a concurrent re-emphasis on the specifically military uses of space at the national level (discussions of the concomitant focus on the potential privatization of space are certainly relevant, but not necessary, for our purposes here) is a useful entrée into our exploration of the significant reimaginings of military space on a tactical, legal, policy, and popular level, over the last ten years. In this chapter I will be drawing on some of these discussions in order to map out some of the hegemonic forms of contemporary military territoriality. To this end, I will be developing the concept of *atmospheric militarization* to describe some of the dominant logics and contradictions of these developments, and then explore two central examples of this concept—the military theory definition of 'battlespace,' and the ways in which the pervasive use of drones and other atmospheric technologies have changed the configuration, understandings, representations and experiences of military spaces. In turn, changing laws and policy

regarding drone usage are reconfiguring the spaces of everyday life, legal definitions of public and private space, and personal feelings and experiences of spaces of safety and vulnerability. I choose these examples because they offer different (though interconnected) entrances into the exploration of contemporary military territorializations: abstract/theoretical, tactical/technical/legal, and popular/quotidian. Atmospheric militarization both connects to the earlier discussions of military affective technologies and biomilitarization in the previous chapters, and functions as a supplement to discussions of the spatial logics of contemporary militarization that tend to operate in one of two modes. The first tends to diagnose a constant and uniform dispersal and diffusion of military architectures, structures, optics and spatial logics and practices--understood as detached, objective, dehumanized and unfeeling--throughout society (e.g. Paul Virilio, Manuel DeLanda, and Jean Baudrillard). The second develops a more narrow and empirical focus on the production of specific militarized zones, with an emphasis within recent work on the different techniques of militarizing urban areas (e.g. Mike Davis, Stephen Graham, and Derek Gregory). What I am more interested in developing is what often remains a footnote or relatively scant subchapter in much of this work: the embodied practices and virtual geographies that make up much of the contemporary military formations. I will now specify what I mean by some of these admittedly abstract and diffuse terms, and develop how they might help us more fully account for the diverse forms and functions of contemporary military territorialization.



## *Military Atmospherics*

I am using the term atmospheric militarization to highlight a few central characteristics of contemporary military spatial imaginaries and assemblages. First, it gestures to the ways in which contemporary military theory is reconceptualizing the scale of military space, which is both expansive (extending the boundaries of the battleground outwards into outer space, inwards onto the homeland, and virtually into cyberspace) while also increasingly specified, developing new technologies and strategies that are meant to intervene into ever more precisely delimited layers and segments of this generalized battlespace. Significant amount of academic attention has been paid to the shifting temporalities of military action occasioned by the war on terror (endless and infinite war; the temporal logics of preemption and preventative war), but similar work on the transformation of spatial technologies, particularly at a policy and doctrinal level, has been relatively neglected.

Second, I am utilizing the term atmospheric militarization because the paradoxical spatial connotations of the word ‘atmosphere’ are especially relevant to current military practices. In doing so, I am following Lisa Parks’ insights on the paradoxical status of satellite technologies in contemporary cultural formations. Discussing these, she describes the ways in which they lie “on the threshold of everyday visibility and critical attention, but mov[e] persistently through orbit, structuring the global imaginary, the socioeconomic order, and the tissue of everyday experience across the planet” (Parks 7).

This description of satellites operating simultaneously on the center and periphery of cultural, politico-economic and academic life informs the way that I am attempting to

use the term atmospherics. On one hand, atmosphere implies something intimately close, felt on our skin and in our breath, diffuse and omnipresent, suffusing the spaces between things, saturating the ordinary with constant pressure. On the other hand, and at the same time, atmosphere refers to a relatively thin and distant layer of gasses, far away and remote, lingering on the horizon of perceptibility. This paradoxical proxemics, simultaneously close and distant, familiar and strange, is nicely analogous to the spatial logics of contemporary militarization in the US. On one hand, we have seen an expansion of military presence, technologies, logics and perceptions into the spaces of everyday life: through the expansion and intensification of militarized surveillance technologies; an increasing number of spaces where the military can operate within the United States; the thickening bonds amongst military, intelligence, police, and immigration officials; and attempts to integrate civilians into military logics, perceptions, operations through a number of tactics and strategies. On the other hand, beginning with the abolition of the draft and with the persistence of an all-volunteer military supplemented by private military contractors, direct experience of the military and military life is often infrequent and brief for the majority of the population. There are of course exceptions to this remoteness, as in the heavily militarized communities organized around bases and base cultures that authors like Catherine Lutz (2001) have mapped out and explored, areas that are targeted for military recruiting, and (often racialized) communities marked for militarized policing and surveillance. However, outside of these enclaves contact with the military most often occurs through brief encounters with the more spectacular elements of the military formation, especially the virtual worlds of

military video games, or fleetingly—a chat with a recruiter at a county fair, a soldier at a hockey game being put on the Jumbotron for a passionate but short standing ovation.

Understanding some of these paradoxes of atmospheric space allows us to construct a more complete and nuanced understanding of contemporary military spatial imaginaries, practices and understandings. Against analyses that tend to privilege one particular site or spatial tactic (i.e urban militarization; expansion of panoptic technologies) or one particular affective modality (anxiety, fear, etc.), atmospheric militarization refers to more complex spatial and affective assemblages that certainly achieve stabilizations and density, but that are also shifting, impermanent, recombinant and in motion. This does not negate or contradict the important work exploring contemporary military urbanization and surveillance culture, for example, or that foregrounds military tactics of urban segregation, compartmentalization, and division, but rather situates those elements as specific sets of tactics that constitute parts of broader spatial formations consisting of a range of different spatial imaginaries, technologies, and practices. Similarly, the emotional inflection, charge, and intensity of these spaces needs to be broadened for a more thorough understandings of these military spatial formations—boredom, delight, awe, sadness, hopelessness, shame, and indifference are just as foundational to contemporary configurations of atmospheric militarization as the more-often discussed anxiety/fear/paranoia, and these diverse affective modalities need to be more thoroughly integrated into their analysis (for important work on contemporary militarization and spaces of fear, see Butler 2006; Brown 2010; Massumi 2005; we will be discussing boredom and disorientation in more detail below). While this type of integrative analysis would require its own book (at least) for proper development, I would

like for this more expansive, intersectional and contextualist perspective to inform and frame my more modest inroads below.

As an attempt to begin that type of work through the rest of the chapter, I will provide a brief overview of the dominant spatial imaginary in contemporary military policy, tactical, and strategic thought—‘battlespace’—and outline how its understandings and usages are particularly amenable to analysis through the concepts of atmospheric militarization I sketched out above, and which I will develop in further detail below. Following that overview, I will discuss the most representative actualizations of the concept of battlespace through the widespread adoption and deployment of drone technologies, and address how our current use of drones for surveillance and assault has required shifts in governmental, military, and popular understandings of military space. Finally, I will explore two more popular instantiations of atmospheric militarization—maps and mapping technologies used in military video games, particularly the *Call of Duty* franchise, and the Virtual Army Experience, a mobile simulation platform that functions as a recruitment tool, entertainment center and demographic research site—to flesh out the ways military spatial logics and practices diffuse into popular culture, and how these popular understandings are then rearticulated and remobilized in the military (in recruitment, training, weapon/interface design, etc.).

### *Spatial Reconfigurations: Battlespace and the Military Geographical Imaginary*

The concept of ‘battlespace’ is currently the central overarching spatial imaginary operative in the US military, at the heart of a range of policy, strategy, and tactical

documents. The contemporary usage of the term can be traced back to the Joint Vision 2010 paper, which was originally published in 1996 and was intended to function as a general outline for the organization and mission of the U.S. military in an era of shifting political configurations (i.e. post-Cold War) and technological possibilities (the development and expansion of computing and networking technologies). Joint Vision 2010 also introduced such contemporary military mainstays as ‘network-centric warfare,’ ‘full-spectrum dominance,’ and ‘revolution in military affairs,’ among others. The central thesis of Joint Vision 2010 is the oft-repeated claim that more than any other time in U.S. history, the future is particularly unclear, open and unpredictable—“accelerating rates of change will make the future environment more and less stable, presenting our Armed Forces with a wide range of plausible futures” (DoD 7).

The authors argue that the proper military response to this expansion of plausible futurity is to develop armed forces that are simultaneously more closely integrated (through shared technologies, exercises, deployments) and flexible (through smaller, modular forces and tech, more decision-making and intelligence-gathering devolved to lower levels of command, etc.). These shifts are also understood as efficiencies necessitated by the decrease in size of the armed forces. ‘Jointness’ becomes the central organizing principle of the military: “to achieve this integration while conducting military operations we must be fully joint: institutionally, organizationally, intellectually and technically,” allowing future commanders to “visualize and create the ‘best fit’ of available forces needed to produce immediate effects and achieve the desired results” (DoD 9).

The concepts of ‘battlespace’ and ‘dominant battlespace awareness’ are used to describe the environments and spatial imaginaries that will shape contemporary military actions and interventions. This shift in the dominant spatial imaginary is again attributed to both politico-economic and technological transformations that have dramatically changed the military’s operational environment. On the one hand, starting with the Joint Vision 2010 document there is increasing emphasis on asymmetrical threats, with dispersed, non-state actors leveraging undetectability and advanced technologies to gain advantage against superior military forces. On the other hand, and as a response to these asymmetrical threats, there is an increasing emphasis on stealth, mobility, and visualization technologies that allow the military to mimic the flexibility and fluidity of their potential adversaries. To this end, Joint Vision 2010 and its successor policy documents emphasize drawing on “advances in computer processing, precise global positioning, and telecommunications” in order to gain “dominant battlespace awareness, an interactive ‘picture’ which will yield much more accurate assessments of friendly and enemy operations within the area of interest” (DoD 13).

There are two key components of battlespace that differentiate it from related earlier military spatial and geographic imaginaries. The first is its expansiveness: contemporary battlespace is understood to constantly encompass the entire globe, and even beyond (outer and cyberspace), at least potentially. As opposed to a collection of distinct operational theaters of war, battlespace is smooth, continuous, and extensive, and marked less by regional boundaries than by differences in potentiality and intensity (for more on the concept of ‘theaters of war,’ particularly in 19<sup>th</sup> and 20<sup>th</sup> military thought, see Weber 2005). Battlespace crosses political and geographic boundaries, and includes the

homeland just as much as it does ‘rogue states’ and border zones (more on this below, in our discussion of some of the juridical and popular redefinitions of military space following the extensive deployment of drone systems). As opposed to a more classical conception of military space imagined as the combination of a number of discrete zones distinguished primarily by geographical or political boundaries, the differentiation of this more catholic battlespace is organized and classified through varying differentials of potential threats (from extremely low—purely virtual, to ongoing combat—fully actualized).

Following from this, the second key component of battlespace is its (ideally) complete integration of physical space with spatial representations and imaginaries—its synthesis of virtual and actual space, of physical space and cyberspace. Cyberspace is just as integral a part of the battlespace as the more traditional military sectors of spatiality (land, sea, air, and more recently, outer space). Cyberspace’s implication within the more general battlespace is fourfold. First, it refers to the increasingly common military understanding that cyberspace is itself a space of intervention and conflict, one which requires perpetual military surveillance and action. This is most clearly reflected in the recent establishment of a Cyber Command within the military, whose name, command hierarchy and mission intentionally mirror the traditional continental command structures. Cyberspace is increasingly conceptualized as equivalent to a physical battleground in a more traditional sense, where skirmishes are won and lost, and where infiltrations are effected or prevented. In fact, the Pentagon is spending hundreds of millions of dollars on technologies that allow them to produce visual maps and interfaces with cyberspace that mirror the imaging and control technologies for

physical space and weaponry. The *Washington Post* has reported extensively on the Pentagon's "Plan X," which is an attempt to partner with the private sector, universities, and computer-game companies to be able visualize and intervene into virtual battlespaces in a more intuitive and user-friendly way. Among the goals of the program are "the creation of an advanced map that details the entirety of cyberspace—a global domain that includes tens of billions of computers and other devices and updates itself constantly" and "the cyberspace equivalent of an armored tank...a robust operating system capable of launching attacks and surviving counterattacks" (Nakashima 1). These attempts to literalize the metaphors of cyberspace *qua* battlefield are meant to serve a number of practical functions—for example, to allow higher-ranking officials who are non-tech specialists to more accurately visualize the virtual elements of battlespace, or to be able to more rapidly carry out cyber attacks and counterattacks without being dependent on human operators manually typing in code (ibid).

Second, it is the technological assemblage popularly understood as cyberspace (the combination of computing, imaging, and networking technologies) that enables the more global and expansive understanding and image of battlespace. The layered combination of satellite imagery, drone surveillance, and other digitized reconnaissance and imaging technologies are precisely what allow the idea of a continuous military space that functions at a virtual and actual level to exist. That is to say, although cyberspace is understood as one component of a holistic battlespace, the computing and imaging technologies that comprise cyberspace are what enable the concept to be imaginable and perceptible in the first place (this circular and synecdochal logic informs the Joint Vision



documents, as well as more regular policy documents like the National Security Strategy of the United States reports and the Quadrennial Defense Reviews).

Third, cyberspace is increasingly understood as a vital resource that needs to be protected through U.S. military action. This has been accomplished primarily through its inclusion in what the U.S. military defines as the ‘global commons.’ The military definition of the global commons is primarily economic: the global commons is essentially the infrastructure that enables the “‘system of systems’ that allow for global commerce...free trade, international law, and international institutions” (Denmark 165). The global commons is described as being conceptualized and “born during wartime” through the 1944 Bretton Woods agreement as a means to “reconcile and reconstruct the Axis powers and avoid another world war” (ibid). These global commons—understood as the sea, air, space and cyberspace—are also the subject of U.S. military stewardship, with the military claiming that “the openness and stability of the global commons have been protected and sustained by U.S. military dominance and political leadership” (ibid). Beyond functioning as one element of an expansive battlespace, cyberspace is simultaneously figured as a key portion of an explicitly capitalist global commons under U.S. military guidance and control. It is part of what is at stake in these global conflicts, both as a resource in itself and a mode of transmission of other resources, in addition to being a part of the battlespace.

Finally, cyberspace is increasingly understood as being able to effect interventions in actual, physical space—the weaponization of cyberspace. There is certainly a hyperbolic and alarmist element to these discourses, some of which are a decade old, and make up a large portion of popular writing on cyberwarfare (for a recent

example, see Clarke and Knake 2012). Concerns about ingenious hackers causing planes to fall out of the sky, trains to derail or crash into each other, or power plants to explode are among the most typical (and unlikely) examples of possible cyberattacks. However, as Stuxnet—the computer virus developed by the United States and Israel that caused uranium enrichment centrifuges in Iran to malfunction and break down, and commonly described as “the world’s first real cyberweapon”—shows, the possibilities of using cyberspace to influence actual space is not entirely speculative.

Taken together, these integrations of virtual space into actual space—as a spatial imaginary, a mapping technology, a vulnerable resource, and weapon or mode of intervention—combined with an expansive model of military space conceptualized as global, continuous, and intensive, makes the military’s current understanding of battlespace fundamentally distinct from its earlier spatial imaginaries organized around ‘worlds’ (1<sup>st</sup> world, 2<sup>nd</sup> world, 3<sup>rd</sup> world), continents and theaters. This in turn requires the development of technological integrated, flexible and resilient military bodies that we have been exploring in the previous chapters. The most obvious example of these changes, both a cause and an effect, necessitating and justifying them, is the dramatic expansion of the military’s drone programs, to which we now turn.

### *Drone Wars: Drone Assemblages, Intimate Televisuality and Military Disorientation*

Despite their rising hegemony in current military policy, tactics, and operations, unmanned aerial vehicles (UAVs) are not a particularly new phenomenon in and of themselves, and in fact have an extensive and rich military history. Dating back into the

1800s, telescopic cameras attached to hot air balloons were used to survey troop movements and camp layouts in the American Civil War, and small remote controlled planes outfitted for reconnaissance and occasional ordinance delivery were used in WWII and the Vietnam War. As Mark Bowden has noted in *The Atlantic*, in most cases even the newest drones themselves are not particularly technologically remarkable—“the craft itself is just an airplane...most drones are propeller driven and slow-moving—early 20<sup>th</sup> century technology” with most models possessing “less computing power than a smartphone” (Bowden). What makes the current usage of drones significantly different is the broader technological assemblage they are part of: the communication relays that allow them to be remotely piloted from a different hemisphere; and the computer systems compiling, cataloguing and analyzing the data that it records. The Air Force refers to this as the ‘Processing, Exploitation, and Dissemination’ elements of the drone missions. This aspect of drone warfare is what has inspired some of the closest collaboration with universities and the private sector, prompting such seemingly bizarre partnerships as “asking ESPN for advice” on elements of the drone program, such as video information cataloguing and the management of multiple, simultaneous satellite feeds and transmissions (ibid).

Thinking about drones as a technological assemblage that comprises the aircraft itself, the sensors and recording devices that collect visual, infrared, and signal intelligence, the communication networks that link it to its operators, the computing systems that process that information, and the pilots themselves, also makes it clear why it is the representative technology of the military’s understanding of battlespace. The operation of one drone necessarily involves a number of the components of battlespace

(the digital space of the data; the airspace of the drone itself and its transmissions; the outer space of the satellites), and it does so in a way that cuts across and muddles distinctions between domestic and foreign space, among other boundaries.

Drones function as border phenomena in multiple senses. The first and most obvious is the political and legal quandary created by the deployment of drones in countries where we are not at war; the most politically problematic has of course been Pakistan, where there has been widespread outrage about the presence of American drones in general, and drone strikes and their collateral damage in particular, but the use of drones in Iran, Syria, Yemen, and Libya, among others, has been a sensitive issue for the U.S. for years now, partially because of the definitional ambiguity of the drones themselves. That is to say, the U.S. has been able to leverage a particularly productive ambiguity in whether drones are primarily a surveillance or an assault technology, and whether they are military or intelligence tools (until quite recently, most drone operations were conducted under the auspices of the CIA, and as we have seen in Chapter 3, the very distinction between the military and intelligence fields has become far more tenuous in the last decade).

Beyond these forms of political, legal, and institutional liminality, the drone networks also complicate the position of homespace within the broader battlespace. Despite the connotation of mindless automatism implied by the term ‘drone,’ almost all drones are operated by a human, which is why the Air Force and industry groups have rolled out an extensive PR campaign attempting to rebrand them as ‘remotely piloted vehicles’ rather than ‘drones’ or ‘unmanned aerial vehicles’. The distance between a drone and its operator is the greatest of any actively guided military weapon ever—its

closest analogue, remotely controlled, camera-guided missiles, required the operator to be within a few hundred miles of the missile s/he was guiding, usually from a battleship. Now, the majority of drones operating overseas are piloted by Air Force personnel stationed in domestic bases. While the exact distance between operator and drone may seem rather inconsequential, it raises a host of institutional, juridical, ethical and even medical conundrums. As a relatively minor but telling example, the Air Force itself has been struggling with how to classify and reward the type of military labor of piloting a drone. Technically, according to current military deployment doctrine, drone operators are in combat, and are often specifically called upon to provide air support to military units on the ground. However, the physical distance, the qualitative difference in the encounter with the enemy, and the almost complete safety of the drone operator has confounded the military's attempts to commend drone pilots. Although they are central to current military tactics and operations, and although the Air Force considers drone crews as deployed personnel even though most of them fly their planes from U.S. bases

when the Pentagon announced earlier this year that it would award a new medal to drone pilots and cyber warriors, it provoked such outrage from veterans that production of the new decoration was halted and the Secretary of Defense sentenced the medal to a review and then killed it. Members of Congress introduced legislation to ensure that any such award would be ranked beneath the Purple Heart, the medal given to every wounded soldier (Lind online).

While the specific object of discussion here is relatively banal--whether to award a particular medal or not--it illustrates a more general normative and epistemological quandary facing the military, and the populace more generally: what specific type of military action/labor is piloting a drone? Is it heroic? Laudable? What constitutes contemporary military deployment? How do the different levels of vulnerability and risk involved inform those discussions? Does it require a redefinition of vulnerability and

risk, or of military action more generally? While fairly clear distinctions exist between piloting a drone and, for example, being an infantryman on patrol in a hostile village, how different is it from piloting an F-22, or an SR-71, at the level of skilled labor, bodily vulnerability and institutional recognition? The fact that the military itself doesn't have a clear answer to these questions is indicative of the ways in which the technological infrastructures of contemporary militarization are outpacing its legal, ethical, and juridical groundings and limits.

The cognitive dissonance generated by the interstitial nature of the drone technologies, where pilots are participating in battles or killing targets essentially from the safety of their own home, is not only operative at an official, doctrinal level, but is increasingly part of a discussion within the military, academy, and press about the unique stresses involved in this type of warfare. Drone pilots are increasingly diagnosed as experiencing a range of morale and medical problems unique to their positioning within a still undefined technological assemblage. A number of accounts by drone pilots emphasize their feelings of guilt and shame for only being remotely present in military encounters where other soldiers experience most of the risk. Talking to a drone pilot who was "inspired to enlist by his grandfather's manly stories of battle in the Korean War," Bowden captures some of the conflicted feelings that appear increasingly common among drone operators. Discussing an incident where his drone had helped protect an infantry unit pinned down by machine gun fire, the pilot noticed a disjunction between the praise he received from his commanding officers and his own feelings about what he just accomplished: "There was this weird feeling...you feel bad. You don't feel worthy. I'm sitting there safe and sound, and those guys down there are in the thick of it, and I

can have more impact than they can. It's almost like I don't feel I deserve to be safe" (Bowden).

This sense of guilt experienced because of the differential levels of bodily vulnerability and risk between direct and mediated combatants is often intensified by the constant contact and personal attachments that drone pilots develop with ground troops via text messaging, radio, and satellite phone. Hernando Ortega, an Air Force colonel who has conducted wide-ranging surveys with Predator and Reaper crews, claims that "essentially, these guys [drone pilots] telecommute to a war zone... a band of brothers is built online" (Zucchini). Ortega and other military psychologists suggest that drone crews "develop strong emotional bonds with ground troops" remotely, which are particularly strong since these mediated contacts are often the primary human interactions drone pilots experience during monotonous and lengthy flight shifts, which in turn contributes to a heightened sense of helplessness and worthlessness when their colleagues are in physical danger (ibid). The tension between having to literally watch over ground units, and then sometimes being unable to intervene to protect them is described as especially disheartening and painful. The combined discourses of banality (telecommuting) and intensity (being actively 'present' in a war zone, the strength and depth of the emotional bonds with other soldiers), and the oscillation between them are typical in discussions of the actual labor of piloting drones, and has recently gone beyond vaguely defined discussions of feelings to attempts to classify and diagnose a range of stresses, and perhaps psychiatric disorders, that are unique to drone pilots.

There is still considerable debate about whether drone pilots are susceptible to PTSD of the same type, or in the same ways, as soldiers physically deployed on the

battlefield. Those more skeptical of this possibility point to the mitigating layers of mediation, and the near-complete safety of the pilots, and argue that rather than being susceptible to trauma, drone pilots are almost completely insulated from it—and for many writers, this is one of the central problems with the use of drone technologies. The equation of mediation and distance with affective sequestration is in fact the underlying premise for those commentators concerned about the dehumanization or ‘gamification’ of war through drone technologies: that the proxemics inextricably bound up in drone systems makes the act of killing abstract, emotionless, meaningless and guilt-free. Proponents of this view generally point to early studies finding lower levels of PTSD diagnoses among drone pilots, placed around 5-7%, compared to anywhere from 15-30% for the general military population (Bumiller online). More recent studies suggest that drone pilots actually experience mental health problems like depression, anxiety, and PTSD at roughly the same rates as other pilots do (11-15%), which may also be artificially low as pilots often try to avoid reporting any mental health issues in order to avoid being grounded (Dao 9). Other common claims involve the fact that drone pilots, although often working twelve-hour shifts, are still able to maintain a much more normal life than soldiers physically deployed to war zones, and that remaining on the homefront allows pilots to compartmentalize the type of actions they are performing or reduce them to banality, simply another day at the office (see for, example, Saletan “Ghosts”).

However, a number of military psychologists and academics are arguing that precisely those factors may be contributing to mental and emotional stresses on drone pilots, and that the typical definitions and diagnoses of PTSD might be unable to account for some more subtle but very real impacts of drone operation. A number of unique



difficulties have been identified for drone pilots. First, far from providing a level of security, insulation or normalcy, a number of writers emphasize the spatial and affective disorientation and dissonance of carrying out combat operations in places like Afghanistan or Pakistan during work, and then going home and having to live an everyday, mundane life. As one author of a report on the psychological impacts of piloting drones has pointed out, “They’re putting a missile down somebody’s chimney and taking out bad guys, and they next thing they’re taking their wife out to dinner, their kids to school. That can be pretty difficult to balance” (Lindlaw). The pilots themselves acknowledge this disjunction—“It’s pretty bizarre, I guess...it’s quite difficult, going from potentially shooting a missile, then going to your kid’s soccer game” (ibid). Having to move back and forth between the virtual combat spaces of the drone networks and everyday, domestic spaces, rhythms and activities has generated what some authors call “the whiplash effect,” a perpetual unease and inability to settle into a livable routine in either of those spaces. Although being physically deployed in a combat zone certainly carries heightened risks and its own powerful set of stressors, military psychologists also emphasize that those deployments construct a coherent sense of space that comes with its own structures, regularities, and forms of camaraderie that are unavailable to drone pilots, and their absence from these shared spaces exacerbates the problems they face.

Beyond the dissonance produced by overlaying combat space with home space, piloting drones involves an experience of battlespace composed of different rhythms, modes of perception, and engagement, in comparison with ground units and aircraft pilots. Due to overlapping deployments and longer flight times without refueling (in fact, a shoulder launched, solar-powered drone that can fly nine hours without any fuel at all

was just announced by the military contractor AeroVironment), drones are typically deployed over their targets (either specific areas or people for surveillance, or with friendly ground units for support) for extended periods of time. The number of drone sorties and uses has also outpaced the number of drone pilots, so those pilots typically work 12 hour shifts, 6 days a week, looking at the same screen as they scan for enemy ambushes, possible roadside bombs, and monitor the “patterns of life” of targets or the civilian population more generally, possibly to be used as justification for the ‘signature strikes’ discussed in Chapter 3. The sheer amount of video feed they have to process, for extended periods of time is a source of concern for military psychologists, and they have developed partnerships with Stanford and MIT to develop ideas to combat the often excruciating boredom and fatigue involved in piloting drones. In one recent survey of UAV pilots by the Air Force, the military found the pilots were primarily using phrases like “sustaining constant vigilance is mind-numbing,” “too much monotony” and “Groundhog Day” to describe their work (Plackett online).

Finally, the third unique complication seems rather counterintuitive—that although drone pilots are the soldiers most physically distant from the spaces of combat, they actually engage with the people they kill, and the aftermath of violence, far more directly and intimately than other pilots, and even more than some troops on the ground. This televisual intimacy is due to several different factors. There have been important advances in range, radius, and resolution of cameras used on drones over the past few years (developed through the military’s Gorgon Stare program), so the level of detail that drone pilots see of their potential victims has been greatly increased—so much so that DARPA is now discussing ways to incorporate automated facial recognition technologies

into the drone platforms. In an article discussing new forms of drone war, a pilot discussing a strike he recently made on a truck of insurgents attacking an infantry unit provides an example of the degree of detail and clarity the drone networks afford—"I could see what kind of gun it was in the back [of the truck]...I could see two men in the front; their faces were covered. One was in the passenger seat, one was in the driver's seat, and then one was on the gun" (Bowden online). Unlike other combat units, drones also typically remain (tele)present after attacks so that damage can be assessed and potential intelligence can be gathered. This combination of extended surveillance of potential targets (for high priority targets, perpetual monitoring can stretch on for months), increasingly detailed imaging technologies, and the drones continued presence after attacks is cited in almost all of the literature as having profound effects. As Bowden notes

The dazzling clarity of the drone's optics does have a downside...A B-1 pilot wouldn't learn details about the effects of his weapons until a post-mission briefing. But flying a drone, he sees the carnage close-up, in real time—the blood and severed body parts, the arrival of emergency responders, the anguish of pulling the trigger. Drone pilots become familiar with their victims. Seeing war by remote control turns out to be intimate and disturbing. Pilots are sometimes shaken (ibid).

Another pilot claims that "you do stick around and see the aftermath of what you did, and that does personalize the fight. You have a pretty clear optical picture of the individuals on the ground...the images can be pretty graphic, pretty vivid" (Lindlaw). The possibility of drone interventions into any-space-whatever thus layers military and everyday space doubly, both for the drone operator (the breakdown in the distinction between military/combat space and everyday/domestic space) and their victim (the everyday spaces of the targets also becomes the zone of military violence).

Of course, the distress of the drone operators pales beside that of the populations living under perpetual drone surveillance and potential violence. The most thorough accounting of the effects on the general citizenry of living under these conditions is a report out of Stanford and NYU entitled “Living Under Drones: Death, Injury and Trauma to Civilians from Drone Practices in Pakistan” (a similar paper from Columbia University’s Center for Civilians in Conflict entitled “The Civilian Impact of Drones: Unexamined Costs, Unanswered Questions” corroborates their central findings). The report was compiled and produced precisely to counter dominant governmental discourses of drones as essentially ‘clean’ and ‘humane’ military technologies, eliminating risk both to soldiers operating them and to the civilian populace in areas where they are deployed, by a complete eradication of collateral damage enabled by productively utilizing the regimes of detailed surveillance enabled through drone technologies. Amazingly, as of this writing the U.S. government still claims that there has been NO collateral damage resulting from any drone strikes, a claim that is highly improbable at best and actively deceitful at worst. According to the Bureau of Investigative Journalism, on whose reporting and aggregation methods the Stanford report depend, the most conservative estimates of drone casualties in Pakistan alone range from 2,562-3,325, of whom anywhere from 474-881 were civilians, including 176 children (Stanford online). Part of the high levels of variance within these ranges are attributable to the Obama’s administrations legal redefinition of “enemy combatants” as any male over the age of fourteen present in a space with a U.S. military presence. As a *New York Times* article discussing Obama’s justification of his administration’s continued use of drones points out, this definition “in effect counts all military-age males

in a strike zone as combatants...unless there is explicit intelligence posthumously proving them innocent” (Becker and Shane).

This system of classification premised on presumed guilt essentially makes any victim of drone violence legitimate *ex post facto*, with the logic of the signature strikes assuming that “people in an area where there has been terrorist activity...are probably up to no good” (ibid). These policies that define “enemy combatants” through location and proximity have also been instrumental in providing a minimal justification of government claims of drone strikes resulting in zero collateral casualties. However, due to the disinclination of both the U.S. and Pakistan to conduct any official and public investigations into the aftermath of drone strikes, just about every body can be classified as enemy combatants in a way that makes the production of counterevidence particularly difficult.

Populations living under drones inhabit a space where they are the objects of a constantly perceptible and visceral surveillance. Most of the drones regularly operated by the U.S. are quite loud, both in terms of acoustics and electronic signature; people who live in areas under surveillance also live in an area suffused by perpetual low-level buzzing, which is often considered an added benefit of the drone technologies by the military. The sonic element of drone technologies provides a felt, sensual reminder of constant military telepresence; it allows them to also function as a psychological weapon, meant to frighten and demoralize the enemy. Unfortunately, the fact that these effects are felt across the entirety of the space under surveillance, and not just by the specific targets being searched for or monitored by the military, generates an equally pervasive sense of

dis-ease and anxiety. The Stanford report's findings on the breadth of the impacts of this form of surveillance are striking, and worth quoting at length:

Drones hover twenty-four hours a day over communities in northwest Pakistan, striking homes, vehicles, and public spaces without warning. Their presence terrorizes men, women, and children, giving rise to anxiety and psychological trauma among civilian communities. Those living under drones have to face the constant worry that a deadly strike may be fired at any moment, and the knowledge that they are powerless to protect themselves. These fears have affected behavior. The U.S. practice of striking one area multiple times, and evidence that it has killed rescuers, makes both community members and humanitarian works afraid or unwilling to assist injured victims. Some community members shy away from gathering in groups, including in important tribal dispute-resolution bodies, out of fear that they may attract the attention of drone operators. Some parents choose to keep their children home, and children injured or traumatized by strikes have dropped out of school. Waziris told our researchers that the strikes have undermined cultural and religious practices related to burial, and made family members afraid to attend funerals. In addition, families who lost loved ones or their homes in drone strikes now struggle to support themselves (Stanford vii).

In this way, drones operate through a disjointed spatial and temporal logic that fundamentally disrupts, and sometimes completely undoes, the rhythms and habits of everyday life and the possibilities of constructing and inhabiting a lived, meaningful and vibrant public space and culture. There is a dual temporal logic to drone technologies: on the one hand, the overwhelming constancy of their general presence, the perpetual and embodied reminders of their monitoring of the everyday, the incorporation of drone technologies into the quotidian; and on the other, the brief flashes of unaccountable violence that are drone strikes. These temporal logics are echoed by a similarly tense spatial logic. Here, drones are both distant, operating beyond the visual range of the population, and certainly beyond the possibility of any direct physical or juridical response; but they are also all too close, in their ongoing felt sonic presence (here the

acoustic connotations bound up in the word ‘drone’ are literally deployed) or in their moments of destructive violence.

The structures of intimate televisuality involved in drone assemblages also complicate some of the typical critiques made of military optics that help define and construct battlespaces. These criticisms typically begin from a phenomenological criticism of the visual more generally, as remote, objective, impersonal, dispassionate, distancing, and unfeeling, and then move to a discussion of how military visuality functions as the most extreme and representative instantiation of all of these negative elements of the visual. Examples of this type of theorization are Paul Virilio’s discussion of military optics and its tendency to an “eyeless vision” characterized by automation and detachment, or Donna Haraway’s discussion of the military’s “gaze from nowhere...tied to militarism, capitalism, colonialism and male supremacy” (Virilio 3; Haraway 188). Drawing on both of these authors, among others, a more recent example of this discourse is Lisa Parks’s important and interesting discussion of satellite televisuality, particularly its relation to contemporary military formations. The military is central to her analysis of satellite technologies for two reasons. The first is the military provenance of satellite technologies; following Jody Berland, she considers “satellite television as an institutionalized practice of remote sensing...[that] arises from the complex imperatives and alliances of three interdependent industries: paramilitary space exploration; computer software; television” (Parks 77). The second is her claim that satellite imagery functions as the dominant form of military visuality, informing her discussion of how military imaging privileges “the panoramic and the territorial over the close-up and the bodily, and functions as part of a system of “global military omniscience” (Parks 89; 92).

According to Parks, these structures of vision are not limited to the members of the military-security complex, but extend more generally to the civilian population. She argues that

Part of the violence of virtual war is in the U.S. military media's schizophrenic strategy of immersing the citizen-viewer within the exploding target, on one hand, and detaching him or her from it in a seemingly serene orbital view on the other. Such alternating views structure a dialectic of anxious disorientation and pleasurable remote-control for the citizen-viewer, *generating a dangerous oblivion* for those in whose names bombs are dropped or satellites are launched (Parks 97, emphasis added).

Parks here invokes the seeming incommensurability between differently scaled modes of visuality, and between home and combat space, arguing that their ultimate effect is the “dangerous oblivion” of the citizen-viewer, producing a sort of sensory and affective short circuit that results from the inability to make sense of or articulate the different emotions, structures, and registers bound up in the conflicting registers and scales. For Parks (following the work of Kevin Robins), although the military gaze is fundamentally conflicted, both too close and too distant, even in its moment of closeness it still is fundamentally dehumanizing, focusing instead on the spectacular nature of the technologies of visualization themselves, and either erasing their target from view or utterly dehumanizing them, only capable of rendering them as a “faceless alien” (ibid). Following from this, she argues that even “as imaging technologies create the potential to move the citizen-viewer closer to a real-time experience of war, the scale of the image becomes more remote and its capacity for liveness suppressed” (ibid).

While these discussions of modes of visuality in military structures of perceptions are full of rich insights, and remain applicable to some forms of military satellite imaging, the proliferation and differentiation of drone networks (and other imaging



technologies) demand a somewhat more nuanced discussion of military visuality. We must recognize that a singular conception of ‘the military gaze’ or ‘military visuality’ may obscure more than it reveals. Instead, we need to be sensitive to the multiple forms of military visuality, explore the logics, technologies, politics, practices and phenomenologies that constitute them, and then analyze how they are deployed, combined, or placed in tension with each other. A term like ‘the military gaze’ is not adequate to the variegated and complicated array of imaging and sensing technologies and techniques utilized by the military, or to the modes of military embodiment necessary to their proper (and improper) functioning. How can ‘military visuality’ hope to usefully capture or explain the full range of distinct phenomena: digital pictures taken by individual soldiers on a smart phone; ‘helmet cam’ videos initially recorded for after-action reviews but later transformed into music videos and posted to military family websites; ‘bored Marine’ videos posted on YouTube; the virtual Afghani villages of the UrbanSim program; and the biometric and habit recognition surveillance of tribal meetings using drone networks? While it may be a rather obvious point, we need to recognize that there are multiple military gazes and modes of visuality that frame, construct and compose military space in very different ways; they have drastically different functionalities and potentials, and some of them can be placed in productive tension or redeployed for anti-militaristic ends, rather than simply reducing the entire citizenry to an oblivious stupor.

At the same time, it is important to recognize that types of military visuality focused on the individual, the bodily, the personal and the intimate are not necessarily better or more progressive than the distant, panoramic views discussed by Parks and

others. Indeed, many of them are intimately bound up in new forms of surveillance and violence, the most obvious being the now notorious ‘signature strikes’ discussed above. Against these reductive and often binaristic classifications of ‘good’ and ‘bad’ forms of visuality (or ‘bad visuality’ v. good alternative sensory structures like touch, hearing, etc., a distinction which is often premised on what Vivian Sobchack calls an “ethically impoverished sense of vision”), I am arguing for a more general delinking of particular phenomenological modes and structures from the ethical and political valences to which they are often read as being *a priori* attached (Sobchack 9).

*Dronespace and Homespace: Biometric Endocolonization and the Militarization of Everyday Infrastructure*

Up to this point, I have been primarily focusing on drone assemblages from the perspective of their operators within the military, as a way to both complicate common understandings of drone technologies (as complex technological assemblages, as opposed to the UAVs themselves): to emphasize the affective and embodied tensions and stresses they generate rather than functioning as perfectly operating and integrated systems, and to mention how these different technologies of televisuality necessitate a different way of thinking about military visuality more generally. I would now like to move from an intra-military perspective to consider drones from the perspective of their victims and targets, and particularly from the domestic civilian populace against whom they are being directed. In this section we will explore the domestication of military drone technology, both in terms of the deployment of military drones in domestic space, and the diffusion of drone technologies to civilian police and security agencies, with both of these moves contributing to what Stephen Graham refers to as the “startling militarization of civil

society...the extension of military ideas of tracking, identification, and targeting into the quotidian spaces and circulations of everyday life” (Graham 5). Making drone technologies available to select civilian groups, typically paramilitary police and security departments, has been accelerated through Congressional mandate, and provides another example of how domestic homespace is being articulated into a broader military battlespace. This rearticulation has required a number of legal interventions, ranging from a set of court rulings exempting domestic drone surveillance from Fourth Amendment challenges against unreasonable search and seizure, to a legal redefinition of domestic space as technically constituting a combat zone, which would allow the unrestricted use of (para)military drones to surveil (and potentially attack) American citizens and residents.

After briefly discussing some of these legal redefinitions, we will examine some of the ways drones have been deployed on the homefront, how that has impacted the popular imaginaries and affective registers of domestic space, and contextualize these uses within the broader application of paramilitary biometric surveillance technologies within U.S. national space. These technologies are especially focused on constructing an apparatus of mobile surveillance, both in terms of surveillance technologies that are mobile (from essentially military technologies like drones, to the quotidian technologies of GPS enabled smart phones and location tagged Facebook updates) and surveillance technologies meant to track patterns, speeds, and interruptions of mobility. Finally, we will discuss some of the creative redeployments of these drone technologies, and drawing from and expanding on Lisa Parks’ conceptualization of ‘satellite witnessing,’ we will

consider the technological and political potentialities and subversions that the drone assemblages might open.

Although we have already explored the ways in which drone assemblages complicate the boundaries between combat and domestic space simply through the technological infrastructures that constitute them, a number of more direct recent changes in the deployment of drone technologies within U.S. airspace has accelerated and intensified that dedifferentiation. Over the last two years, there has been a concerted effort by the federal government to expedite the legal and technological framework that would enable a far more wide-ranging mobilization of domestic drones for police, security, and private institutions. In March 2012, Congress required the FAA to allow local police departments to license the use of drones, and in May of that year it further stipulated that the FAA needs to “simplify and expedite drone applications” by these agencies (Morley). More recently, Congress has established 2015 as a deadline for the opening of U.S. airspace for drones of all sizes. As a recent ACLU report on the expansion of drone usage within the U.S. notes, the loosening of restrictions and accelerations for licensing of drones appear to be “lining up for the eventual introduction of routine aerial surveillance in American life—a development that would profoundly change the character of public life in the United States” (Stanley and Crump 1). Like a range of other repurposed military technologies, drone networks are following a fairly typical pattern of endocolonization, where military technological prototypes are developed and experimentally deployed in foreign combat zones, then deployed to the U.S. border, and finally integrated into the more general U.S. domestic space. For now, the densest deployment of drones in the U.S. is along the U.S./Mexico border, which has

been under drone surveillance since 2005 (Stanley and Crump 7). According to an article in the *New York Times*, the Customs and Border Protection agency

currently operates seven Predator B drones, which are controlled remotely by pilots sitting in Arizona, North Dakota and Florida, and hopes to expand that number to 24 by 2016...as of September 1, 2010, CBP drones patrol the entire length of the southern border. Starting in February, the DoD moved beyond the border, sending drones deep into Mexico in an effort to gather major drug traffickers as part of the Mexican drug war (Thompson and Mazzetti).

However, a number of local police departments are at the forefront of the expansion of drone technologies across the entirety of domestic space. Police in a number of cities—Miami, Houston, Mesa, and Arlington, among others—have already begun limited drone surveillance or testing programs, and that number is due to increase as pressure from Congress, the states and law enforcement agencies on the FAA to open up more airspace and issue more UAV licenses grows. The justification and envisioned uses of these technologies varies, ranging from enabling relatively low cost perpetual surveillance of criminal suspects, to functioning as a highly visible and spectacular monitoring technology meant to deter crime, to the automation and expansion of routine policing, such as generating traffic citations (Stanley and Crump 8-9).

This acceleration of domestic drone usage is not simply reducible to a technology transfer from the military to local police departments. In some ways, that framing itself is not particularly useful given the increasingly close ties, and sometimes direct integration, of police, intelligence, immigration and military personnel, equipment, tactics, and operation (see, for example Kraska 2001; Balko 2013). Even beyond these porous boundaries, the military itself has also been pushing for a more open hand in directly using drones in the domestic space. This trend is part of a broader redefinition of U.S. domestic space as a combat zone and potential military target, not just by foreign

forces or terrorists, but also by the U.S. military itself. Prior to the events of 9/11, while the military engaged in contingency planning and war games scenarios for actions within the U.S., there was a fairly rigorous distinction between the homefront and combat space. This is most strongly reflected in the different temporal inflections given to pre-9/11 contingency plans for military action within the U.S., which was framed as worst-case, exceptional, and hopefully short-lived possibilities. This contrasts with the now dominant view that U.S. domestic space is a constant and central component of a more broadly defined battlespace; a militarized perspective towards domestic space has become an ‘enduring mission,’ in the language of the military, as opposed to an aberrant event.

This shifting perspective has been reflected at the doctrinal level and strategic level through the establishment of a U.S. Northern Command following a revision of the Unified Command Plan in October 2002, which in October of 2009 was assigned “for the first time ever, an Army force specifically dedicated to secure not some foreign region but the United States of America” (Rothschild online). The mandate of these forces has remained rather unclear, and ranges from responding to “potential chemical, biological, radiological, nuclear and high-yield explosive incidents in the homeland” to “helping with civil unrest and crowd control” by using the “first ever nonlethal package the Army has fielded” composed of “crowd and traffic control equipment and nonlethal weapons” (Cavallero online). A number of politicians, academics, and journalists have pointed out that this unit’s very existence may be at odds with the Posse Comitatus and Insurrection Acts. NorthCom claims that the establishment of permanent units dedicated to U.S. territory does not contravene the Posse Comitatus act as they are not directly involved in

domestic law enforcement. However, leaders of NorthCom have acknowledged that they actively “support law enforcement agencies with collaboration on intelligence information,” and that the synthesis of military, intelligence, and police surveillance apparatuses allow the command to “monitor the pulse of our nation...monitoring that information is part of our daily battle rhythm” (Rothschild online). NorthCom has also been partnering with the corporate sector through the creation of “private sector cells” that have included participation with Wal-Mart, Fed-Ex, Home Depot and ‘a number of faith based organizations’ for the purposes of “creating information management tools that will allow us [NorthCom] to have a better understanding of where some of these institutions and organizations have reserve capability out there that they can apply to a domestic situation” (ibid). These developments have intensified contemporary forms of militarization, moving from a shared set of logics, equipment, and tactics to the establishment of combat units specifically assigned to domestic space that are partnering with law enforcement and corporate actors.

Beyond this doctrinal and strategic redefinition of U.S. domestic space as battlespace, there has been a legal redefinition of domestic space that justifies and institutionalizes these moves, most prominently in recent National Defense Authorization Acts (NDAA). According to its most prominent supporter, Sen. Lindsey Graham, the most recent NDAA “basically says in law for the first time that the homeland is part of the battlefield.” And Sen. Kelly Ayotte also points to the law’s juridical definition of “Americas as part of the battlefield” (Anders). In addition to the more publicized provisions of the NDAA that tacitly enable the arrest and indefinite detention of American citizens if they are deemed a ‘national threat,’ these acts have also facilitated

the doctrinal changes, inter-institutional cooperation, and technology sharing that we have been discussing.

This redefinition of domestic space as battlespace, and the deployment of drone technologies within these newly categorized spaces raises a host of potential problems. Foremost among these are privacy concerns, and the specific ways that drone technologies are imagined as crucial components in proposed extensive and intensive regimes of biometric surveillance. Currently, drones can be used for constant surveillance from aerial space, a type of monitoring not subject to Fourth Amendment restrictions because a series of court rulings have deemed people, property, objects, and actions visible from above as technically taking place ‘in public view.’ This legal circumvention of restrictions on surveillance is combined with the drones’ technological affordances of long-term surveillance. While the legal rulings on and framework for the permissibility of domestic aerial surveillance have been in place since the 1980s, the practical limitations associated with manned aerial surveillance (access to and upkeep of a helicopter or plane; training personnel for their use in intelligence gathering; fuel costs; high visibility; etc.) has generally outweighed its benefits. However, the affordability and ease of using drone technologies essentially abrogate those de facto restrictions. This becomes even more troubling when drone technologies are considered as part of a broader surveillance apparatus meant to articulate the drones to a range of biometric technologies. These systems would integrate drones already advanced visual surveillance capabilities with a range of analytic software and biometric databases to more precisely monitor and intervene into both large crowds and individual subjects. The potential biometric screening tools that could be included in the drone systems include



technologies like facial recognition software, gait identification, automated behavior recognition programs, and even long-range iris scanners. In these ways, the elements of biomilitarization we outlined in more detail earlier are given new spatial coordinates and mobility through their potential integration into drone systems, particularly domestically deployed drones. Taken together, these developments portend what Morley calls an “unprecedented conflation between the military, homeland security, counterintelligence, and domestic law enforcement” (Morley).

Beyond the serious concerns about drones being utilized for domestic surveillance and policing, the deployment of drones in U.S. home space also raises a range of safety and technological concerns. These range from the problems of integrating drones within flight patterns in an already crowded airspace, to electromagnetic interference from civilian infrastructure disrupting communication relays, to EM spectrum allocation. As Morley points out, “parts of the spectrum are allocated for specific uses such as civil aviation, law enforcement and the military. But there is no part of the spectrum that is reserved for command and control of unmanned aviation” (Morley online). This latter infrastructural problem is especially acute, as a range of other communication technologies (cellular phones, community broadband, digital broadcasting, etc.) are also vying for access to a limited amount of bandwidth. In addition to their disruption of legal and popular understandings of public and private space, drone technologies generate an infrastructural problematic as the organization and allocation of aerial and bandwidth space have to be fundamentally reorganized around them.

This combination of issues related to the introduction of drone technologies, particularly in their military and paramilitary iterations, has also generated large amounts

of criticism, and creative thinking about ways to limit, subvert, or co-opt these technologies of control. These efforts have emerged from across the political spectrum, with misgivings and resistance to the potential domestic expansion of drone surveillance providing a point of commonality between leftists concerned with the erosion of privacy protections and civil liberties and right-wingers worried about government overreach and control. One example of the latter, a direct response to several Colorado police departments applying for drone flight licenses and beginning test flights, has been the town of Deer Trail, Colorado issuing hunting permits for drones. According to the author of the ordinance, Phillip Steel, “we do not want drones in town...they fly in town, they get shot down” (Ohlheiser online). According to the town ordinance, shooting down drones, while technically illegal since damaging federal property is a crime, would be not only permissible but actively rewarded. The ordinance mandates that the town of Deer Trail “shall issue a reward of \$100 to any shooter who presents a valid hunting license and the identifiable parts of an unmanned aerial vehicle whose markings and configuration are consistent with those known to be owned or operated by the U.S. federal government” (ibid).

While this is an extreme and mostly symbolic gesture of resistance to the expansion of drone technologies deployed within the U.S., it is a small part of a broader move to contest that expansion. Understanding and contextualizing some of these forms of resistance or reappropriation of drone technology can be facilitated by placing them in conversation with Lisa Parks’ discussion of ‘satellite witnessing.’ Specifically discussing the U.S. military’s tactical and popular deployment of satellite images (for example, in public relations packages, or inclusion in military-sanctioned video games), Parks calls

for creative ways to “appropriate and demilitarize the machines and screens that are mobilized to see for us” (Parks 98). Although Parks discusses satellite witnessing as part of the development of “technologized forms of witnessing” that moves the definition and practice of witnessing beyond the ways it has been “essentialized as the physical bystander who happens to see an event unfold with his or her own eyes,” most of her examples of satellite witnessing are in fact the use of satellite images to facilitate a more direct, immediate act of witnessing of what the satellites have recorded—for example, by a reporter physically travelling to mass graves in Bosnia that were recorded by a “blurry, faxed copy of a US spy satellite” (Parks 98, 99). While she explicitly calls for a mode of witnessing and redeployment of imagery and technologies of vision that are “more about a struggle over television representation (and the way we see and know) than about a struggle for an authentic viewpoint,” the version of satellite witnessing she develops tend to reproduce this distinction—an authentic, direct, and unmediated encounter with what televisual technologies necessarily produce as framed and mediated, even if she acknowledges that these sort of media pilgrimages operate through a “fantasy of proximity” (Parks 107).

Some of the creative uses of drones might open up a vision of the type of televisual witnessing that Parks is discussing in these pages. For example, there have been a number of examples of protestors using homemade drones armed with cameras to monitor police brutality, in sites from Oakland, to Poland, to Egypt (Ackerman). The very same elements that make them so desirable to law enforcement departments and the military—their ease of use, their relative cheapness, their possible integration with a range of other technologies—open them up to productive redeployment on those very

state actors who want to mobilize them. And the reliance of drone technologies on a complicated communication infrastructure makes them available for hacking and redirection, one of the primary security concerns with these technologies. If there is a possibility of drone witnessing, that could, for example, identify individual police officers with the level of clarity and specificity directed at other targets, these technologies could be opened to a broader array of uses than typical fears of expansive state power and control.

### *Quotidian Military Space in Call of Duty and the Virtual Army Experience*

Having mapped out some of the ways in which drone assemblages are contributing to shifting definitions and experiences of military space, both through their use for military operations and in their integration into domestic spaces, I would now like to turn to another key component of quotidian military spatial imaginaries: the virtual geographies of military video games. In particular, I am interested in the centrality of maps, mapping and cartography to the *Call of Duty* series, which simultaneously aligns with some of the dominant military spatial imaginaries discussed above, reduces military space to zones of repetition, memorization, and banality, and constructs virtual military space as an everyday social space, where millions of players go to hang out with friends. *Call of Duty* paradoxically composes military space as simultaneously hyperconnected and disconnected, along the lines of the any-space-whatevers we explored at the beginning of the chapter. I will end with a consideration of the Virtual Army Experience and the way it incorporates these logics into a mobile media environment that allows

these virtual military spaces to be more fully materialized and flexibly connected to a range of different public spaces.

The beginning of most recent games in the *Call of Duty (CoD)* franchise begin with the onscreen composition of a global map, composed of networked military technologies and conflicts. For example, in *Modern Warfare 3's* opening cinematic, a camera slowly pans over blacked-out continents which slowly become illuminated, first by a few isolated nodes, and then by a gradually proliferating number of lines, technologies (satellites, cell towers, etc.), and data points superimposed on the map, constructing an image of the globe as an interconnected military network. In this sequence, images from actual military history appear alongside key characters, technologies and settings from the game, both emerging from and disappearing into this networked space. This broader space in turn oscillates between zooms into a number of different dispersed global sites that will be featured in the main game and its multiplayer maps, and an abstracted technological/game space composed of contoured grids, mirroring the polygonal meshes the games' graphics are composed of and built over (Fig. 1)

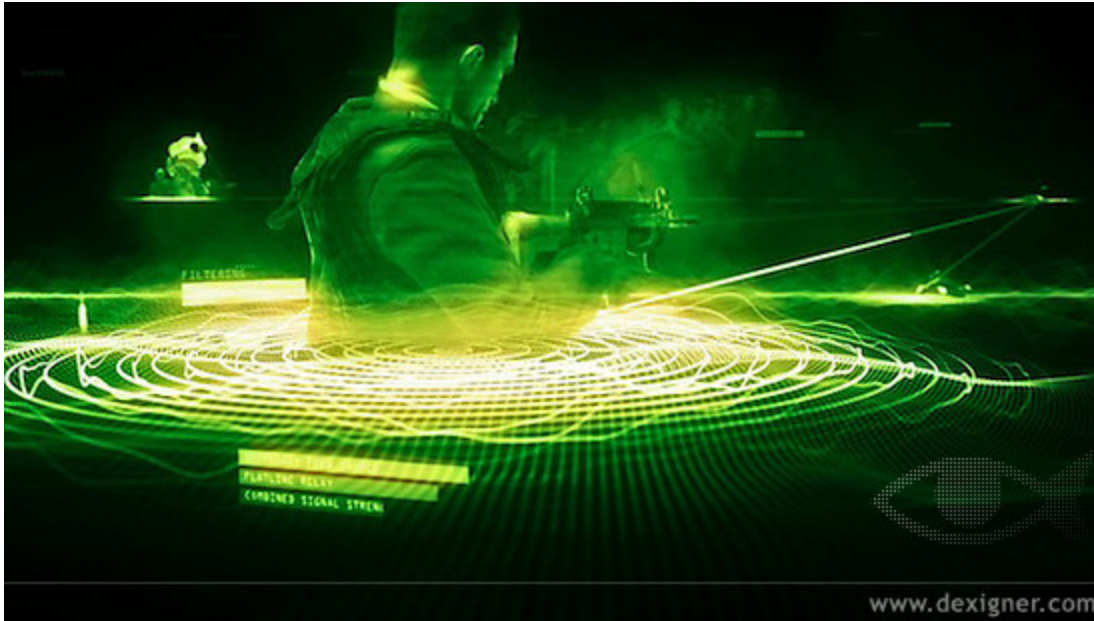


Fig. 1: *Call of Duty: MW3* opening sequence, networked military space

In much the same way that *Call of Duty: Black Ops*' narrative functions by promising to reveal a clandestine national and global history underlying and structuring official public memory, these maps present a vision of the world characterized by the revelation of hidden technological infrastructure and lines of force and violence that compose the everyday, holding forth the possibility of a direct perception of these more fundamental networks.

Beyond providing this conceptual frame to gameplay, maps and mapping are central to the *CoD* franchise in a number of ways. At the most basic level, the constant production of new multiplayer maps is the primary way of recapitalizing and extending the commodity life of the games. Most *CoD* games consist of two main game modes. The first is the story mode, a single player mode in which the player moves through a typical military stealth-action narrative along the generic lines discussed in Chapter 3. The second is a multiplayer mode, where teams of players compete in short, competitive

games like Capture the Flag, Team Deathmatch (teams compete to get the most kills in a set amount of time), Demolition (teams compete to detonate or protect different targets) or Domination (teams compete to capture and hold different waypoints on the map for as long as possible). Before each game, all the players in the lobby vote on a map they want to play in. Beyond the maps that are drawn from the main game, or are included with it initially, a number of downloadable “map packs” are released for each title in the franchise to keep people interested in the multiplayer gameplay and spending more money on each of the games’ installments. All of these maps are characterized by a paradoxical combination of abstraction and disconnection on one hand, and specificity, contextualization and detail on the other. The names of the maps are often vague to the point of absurdity, named after a geographical feature, general characteristic, or just a tone or action associated with them. Some recent representative examples from *Black Ops 2* include Turbine, Slums, Plaza, Aftermath, Showdown, Encore, Mirage, Vertigo, Rush and Grind. Occasionally, a subtitle will provide some sense of geographical specificity; for example, “Showdown” marked as a “Border Town, Kyrgyzstan” and “Slums” is located in “Panama City, Panama.”

Some of these maps are given a minimal level of meaning and context from their role in the single-player version of the game, but many are just hyper-detailed but ultimately disconnected and liminal spaces. This is perhaps most obvious in the most popular map in the *CoD* franchise, Nuketown (and its updated version, Nuketown 2025). That map is virtual reconstruction of one of the model towns constructed by the military to test the effects of atomic weapons in the 1940s and 1950s, and is full of some of the most developed background detail in the game, ranging from the inclusion of 1950s

furniture and appliances to dressed-up mannequins similar to those used in the atomic test sites. However, the detached and modular status of these types of virtual military spaces also allow them to be reconnected, redeployed, or emplaced in a variety of different ways, as we will see below in our discussion of the Virtual Army Experience.

*Call of Duty* gameplay is premised on players cultivating an intimate, instinctive familiarity with every map in the game. The first thing every new *CoD* player is told to do is “learn the maps.” This doesn’t only include memorizing the layout of each individual map, learning vantage points and hiding spots good for sniping or avoiding enemy fire, or knowing where different objectives and enemy spawn points will be before they appear. It also involves the development of an embodied understanding of the rhythms of each map, developing a sense of typical routes other players will take, and adjusting to the flows of different types of games on different maps. In this way, *CoD* gameplay combines the development of map and pattern memorization and recognition typical of video games back to the days of Pac-Man and Donkey Kong with an intuitive and improvisational sense of the affordances of each virtual environment, along the lines hyperbolized by some of the imaginaries of technological integration that we examined in Chapter 3. It involves the inculcation of a feeling for and familiarity with these virtual military spaces to the level of habit.

This can involve the elaboration and normalization of actual military techniques and practices—for example, players typically learn the proper way to round corners in a group, or how to effectively clear a multistory house. Alternatively, gameplay can also focus on breaking and exploiting those particular expectations and habits, largely through “improper” use of blatantly unrealistic, instant-kill weapons like sniper rifles, combat



axes, and ballistic lives; indeed, an integral part of the “*Call of Duty* community” is composed of recording and sharing improbable kills or gameplay on YouTube channels like “*Call of Duty* Kills of the Week,” other social media sites, and in-game video and file sharing like COD TV and the recently released *Call of Duty* mobile app, which both tracks players records, statistics, and achievements over the different versions of the *Call of Duty* games, and provides a number of social networking options like video sharing, instant messaging with other players, etc.

This latter development represents an attempt to make the game itself function as a persistent social space. When a player is in the multiplayer main menu screen, a map of the globe is always slowly spinning in the bottom left corner, with different areas of world lit up with an intensity equivalent to how many players are currently logged in to a *CoD* game in those areas. This is both aggrandizing self-promotion by the games’ publishers, providing a perpetual reminder that they are the best-selling and most-played video game franchise in the world, and a confirmation that the player is part of a broader and expansive global community.

Beyond these maps and spaces composed by the game--the game’s representation of the globe as networked military infrastructure, the hyper-realistic yet abstract maps of the multiplayer mode, and the reflexive visual rendering of the global presence of the *Call of Duty* gaming community itself—the game itself is situated within a range of domestic everyday spaces, shaping the spaces of bedrooms, dorm rooms, apartments, and barracks. While this involves a certain level of the normalization of the military in the everyday, the way it is taken up by players often ignores or contravenes properly militarized perceptions and practices, often simply providing an easy way to talk to a

number of friends at once, or to “do something” while hanging out together or online. Partially a result of this, the U.S. Army has developed a number of techniques tap into the popularity of these games while also giving them a more proper and controllable military inflection, through techniques like developing their own similar games that incorporate Army values into gameplay and that can directly connect players to Army databases and recruiters (the *America’s Army* franchise), cross-promotion and partnerships with video games (the installation of Xbox systems into the majority of military recruitment sites), or, in the Virtual Army Experience, a combination of all of the above.

The Virtual Army Experience (VAE) is the U.S. Army’s most recent foray into “experiential marketing,” with its promotional material describing it as a way to “provide participants with a virtual ‘test drive’ of life in the Army” (U.S. Army online). The VAE is a 10,000 square foot mobile media environment, composed of three main sections: the Assembly Area, the Mission Simulator, and After Action Review Area (fig. 2). In the Assembly Area, “participants fill out an online questionnaire, play the *America’s Army* video game, and are issued badges equipped with a tracking device [an RFID tag] that monitors their movements (e.g., which attractions seem to get their attention” (Voight online). After this initial stage, which also serves to collect a range of demographic and personal information about participants, participants are shown a video of former soldiers (who are current employees of Ignite Marketing, the firm the Army partnered with to develop the VAE) briefing them on a counterterrorism mission they have been tasked with. Visitors then move to the Mission Simulator, essentially a modified Humvee set up in front of a wall of HD screens, where they take part in a simulated civilian rescue in a

modified version of the *America's Army* video game, with the Humvee “shaking and rocking realistically, and the fake guns producing kickback” (ibid; fig. 3).



Fig. 2 & 3: External view of the VAE; the “Mission Simulator”

Upon completion of the mission, participants move to the After Action Review, where “soldiers evaluate participants based on their shooting and teamwork, show a video about Army heroes, and introduce participants to one of the heroes in person. Visitors leave with a video game [the latest installment of *America’s Army*] and promising prospects are contacted later by a recruiter” (Sturman online). In this way, the Virtual Army Experience employs a range of networked media technologies—online surveys, RFID tracking, internet gaming, immersive VR, and digital video—in an attempt to generate an individualized and immersive military media space. As an *Adweek* article discussing the VAE points out, the space is designed to gather personal information from participants in order to deliver customized on-site pitches. The entrance questionnaire and RFID tracking devices are used to “give information to handheld devices used by soldiers at the exhibit, so they know how best to pitch the Army’s benefits. If someone is there with his or her friends, than the soldiers talk about how people can go into training with their buddies...If a prospect indicates he came with his mother and she wants him to go to college, the presentation addresses that” (Voight online).

This media-enabled flexibility in composing and delivering recruiting messages is echoed in the flexibility of the VAE itself, which travels around the country and is capable of becoming part of a range of different social spaces—the VAE has made stops at amusement parks, air shows, county fairs, technology conferences, NASCAR races, spring break destinations, and high school graduation events, among others. As a mobile military-entertainment space, it is often temporarily localized in other zones of spectacular entertainment or everyday life, in a way that draws on their familiarity while promising to offer its own unique entertainment experience. And as the Army is the first

to acknowledge, the VAE is less about active recruitment and more about brand maintenance and marketing research, providing a space that allows the gathering of a range of minutely detailed data (e.g. individual participants' movements at the VAE, how long they spend on different components of it, the accuracy of their firing in the simulated combat missions) in a number of different locales and environments across the country. It serves a customizable space of military entertainment and research, able to be reprogrammed with new content, tasked with collecting and tracking new data, and redeployed to different locales and populations the Army is targeting. And, as in times like the current moment, when test-marketing recruitment techniques is not a high priority as they military prepares to cut tens of thousands of jobs, it is also capable of simply being taken out of circulation, returning to storage until it is needed again.

*Conclusion: Military Proxemics and Global Imaginaries*

In this chapter, I have attempted to outline some of the current dominant military spatial imaginaries and to highlight some of their contradictions through what I am provisionally describing as atmospheric militarization. Drawing on this understanding of atmospherics as a paradoxical proxemics, where the military is described and experienced as both suffusing and distanced from spaces of everyday life, we can begin to track some of the ways in which the military seems to be less fully present in public spaces, especially with the de-escalation of the occupations of Afghanistan and Iraq, at the same time that it seems to be pervasive in other ways (the introduction of (para)militarized drone technologies into domestic space, the normalization of virtual military

environments as online social space). While I would like to expand on some of these topics and specific examples in later work, I am for now mostly attempting to introduce some complications, and highlight some of the tensions, running through dominant approaches to military spatiality and optics that tend to reduce them to one single type of space, and then to one predominant experience of those spaces (anxiety, terror, etc.). As opposed to an understanding of military space composed either as a uniform saturation of the entirety of everyday life, or as the segmentation of space reliant on an increasing number of physical divisions, checkpoints, and borders, I have tried to begin to outline the ways in which a number of spatializing practices, technologies, and optics construct different types of military spaces, and how even one particular practice (e.g. drone technologies) can result in variegated and contradictory representations and experiences of space.

In addition to the examples discussed at more length above, some of these tensions and uncertainties are also reflected in the shifting dominant spatial imaginaries in military policy and doctrine. While they all share the fundamental assumptions of battlespace discussed above, over the last few years there has been a shift from a land/infantry-based model of counterinsurgency, to a discourse of “AirSea Battle” that accompanied the draw-downs in Afghanistan and Iraq, the military “pivot to Asia” that was supposed to follow the end of those occupations, and the increasing reliance and emphasis on drone networks and Special Forces operations. It appears likely that the geography of threat is likely to shift again in response to the ongoing crisis in the Ukraine. Hopefully, a fuller understanding of the military’s understanding of battlespace, and some of its complications and variations I have been trying to capture in

my discussion of military atmospherics will facilitate a clearer comprehension of these developments.

### *Conclusion: Life After Wartime?*

In 2009, the Air Force launched a new marketing campaign called “What We Do Every Day.” In its flagship commercial, a voiceover informs the viewer that the Air Force has “mastered GPS, stealth technologies, precision weapons and unmanned vehicles...we can see the license plate of a car from 50,000 feet above...we can be anywhere in the world in 10 minutes, travelling at twice the speed of sound; we have hospitals in the sky; we build, command, and launch satellites; we battle 3 million cyberthreats a day...we do the impossible every day” (USAF online). Other advertisements in the campaign begin with dramatized scenes of combat, rescue, or reconnaissance, self-consciously produced to resemble a Michael Bay film, and in the end strip away their special effects, editing, and thumping background music and cut to more “realistic” images of Air Force personnel carrying out the tasks more spectacularly portrayed in the commercial (e.g. sitting at a desk and operating a drone, carrying out a medevac, etc.), and end with the tag line “It’s not science-fiction. It’s what we do every day.” Despite this claim, the Air Force press secretary has acknowledge that it is a “very cinematic, sci-fi sort of campaign,” but that it is meant to link “a very plausible futuristic scenario to the reality of the work that we are doing today,” demonstrating that technologies that people don’t even know exist, that they think remain science-fiction, is a routine element of military life, and promising potential recruits the chance to develop



and use these emerging, cutting-edge technologies. This proleptic presentation, where future technologies are already present in the everyday life and technologies of military personnel, is meant to produce an image of military everydayness as dynamic, exciting, spectacular and intense—military technologies effect a transformation of the everyday, making it more meaningful and emotionally charged.

Around the same time this marketing push was beginning, the *Onion News Network* released a satirical news video entitled “Military Releases Hyper-Realistic War Game” to coincide with the release of *CoD: Modern Warfare 3*. The *Onion* reimagines *Mw3* as the most “authentic military video game to date,” with players tasked with completing missions like “hauling equipment” and “filling out paperwork.” Talking over a modified footage of *CoD* gameplay, an excessively enthusiastic game reviewer points out “whether you are waiting around for orders or cleaning mud off a Humvee, the real life military action in Modern Warfare 3 never stops.” Players go through levels like “standing guard outside a photorealistic warehouse for hours, digging ten foot holes in immaculately rendered sand, and sitting around complaining about how bad cell phone reception is.” One of the game’s developers claims that when you play the game, “you *are* a U.S. Army private...you’re going to do things like avoid cleaning the mess hall, and wait for the undershirts your mom said she sent three months ago.” The *Onion* video effectively inverts the logic presented by the “What We Do Every Day” campaign, using the latest technology precisely to underscore the boring, repetitive, and exhausting elements of military life.

If typical popular, journalistic, and academic accounts tend to reproduce the logic and perspective of the Air Force campaign, focusing on the spectacular and extreme

components of the current military formation, this dissertation follows a line of thought similar to that presented by the *Onion* video, one that emphasizes the mundane and quotidian elements of military life, and the deployment and functions of new military technologies, practices, and imaginaries. It has attempted to develop an account of some of these forms of contemporary military everydayness, both within and outside of the military. Through the discussions of the affective technologies of military familialism, biomilitarization, and drone assemblages, among others, I have attempted to discuss a range of military technologies of everyday life that are often overlooked or considered unimportant, and to provide alternative theories of, and perspectives on, some of my objects of analysis that do receive more critical attention (drones, military simulations, etc.).

Over the course of my research and writing, a number of the technologies and techniques of this military everydayness have been renewed and expanded. This is visible, for example, in the direct inclusion of Army families into military wellness regimes through the ArmyFit campaign, the expansion of the Comprehensive Soldier Fitness program into Comprehensive Soldier and Family Fitness (CSF2), a new version of the Global Assessment Tool to use in the CSF2, the continued and accelerating release of a number of military fitness mobile applications, the continued dominance of the military corporeal imaginaries I have outlined (for example, another story of wounded warrior as supersoldier is at the heart of the latest game in the *CoD* franchise, *CoD: Ghosts*), and continued investment in and expansion of drone assemblages and military space capabilities. At the same time, this is a moment of tremendous flux and uncertainty for the military, for a number of reasons. These include the reduced military presence in

Afghanistan and Iraq; a renewed emphasis on making drone technologies and special operations the elements of U.S. military planning; steep military budget cuts attributed to the drawdown in Afghanistan and Iraq, a prolonged recession, and the effects of the budget sequester. All of these are forcing reprioritizations of different military programs, policies and technologies. Hopefully the insights and analyses I have attempted to develop above will provide a useful context and theoretical toolbox for understanding, complicating, and critiquing the ongoing production of new forms of military everydayness.

Although I have done my best to map out the dominant trends and trajectories of contemporary US militarization and its relationship to various new media formations, there are certain limitations in this work, limitations that I would like to address and overcome in subsequent research and writing. Some of these result from typical constraints of time and money. Others are more specific to my particular subject matter—often, getting access to military documents or interviews with military personnel is extremely difficult, especially if they are going to be used in work that has any sort of critical component. Despite these difficulties, in future work I would like to incorporate more interviews with former and current members of the military, and would ideally like to introduce an ethnographic component into my research as well. The latter is particularly important given my focus on military everydayness, as a sustained ethnography would provide far more insights into daily rhythms, habits, spaces, and negotiations in various military lives, and would offer important revelations about how the various policies, technologies, and strategies that I have discussed above are

negotiated, appropriated, or contested in their application to actual military bodies and spaces.

Additionally, I would like to put my research into conversation with other contemporary work focused on rethinking the social and the political, to explore, for example, how some of my discussions of biomilitarization or atmospheric militarization could usefully add to current discussions of state theory, social ontology, and political affects. So, in my future research, I envision myself simultaneously pursuing a tighter focus on the actual lived bodies, spaces, and temporalities of the current military formation, as well as articulating my findings and insights to broader discussions of contemporary political, economic and cultural contexts. However, the type of work I have done here, focusing on fleshing out some of the contours, components, and logics of the contemporary military formation, at the level of what Foucault would term the *dispositif* or Deleuze and Guattari the abstract machinic, is a necessary preliminary step in framing and focusing that future work. The U.S. military formation will continue to expand and evolve, and I hope that my current work helps register how it currently functions, and will open up different ways of understanding, reckoning with, and contesting it in the future.

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