

**AFFECT, AGENCY AND RESPONSIBILITY:  
THE ACT OF KILLING IN THE AGE OF CYBORGS**

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**ABSTRACT**

I explore the role of affect (rages and panics) and pre-cognitive reflexes in enabling killing in infantry combat. I examine Vietnam-era infantry training, which constructed a practical agent of killing which operated at an emergent group level, using the trained reflexes of individual soldiers as its components. I show that individual soldiers sometimes retrospectively took guilt upon themselves (a responsibility that is traditionally reserved for acts of individual conscious intention) even though the practical agent was the group activating the non-subjective reflexes of the individual soldiers. To explain this phenomenon, I explore proto-empathetic identification, which produces psychological trauma at the sight of the blood and guts of the killed enemy, despite the common practice of dehumanization of the enemy. I also examine cutting-edge digital and video simulator training for urban warfare of the “shoot / no shoot” type, which produces a very quick decision upon recognition of key traits of the situation – an act that is close to reflexive, but a bit more cognitively sophisticated. The same proto-empathetic identification and individual guilt assumption is in play in this training regime, even as the use of real-time communication technology forms ever more distributed group cognition.

**INTRODUCTION TO THE ACT OF KILLING**

Killing in combat is less easy than it might seem to those outside the military, for whom the logic of “kill or be killed” would predict high rates of deadly interaction. While close-range killing can

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<sup>1</sup> This article would not have reached this stage without Roger Pippin (Communication, University of South Florida) who was co-author of the first draft. As the paper has developed, however, we have decided it would be best for Protevi to assume authorship of this article and for us to pursue our joint project in another publication.

be done by a very small percentage of soldiers in "cold blood" (with full conscious awareness of a subject), Grossman 1996 argues for a deep-seated inhibition against one-on-one, face-to-face, cold-blooded killing on the part of some 98% of soldiers, a figure which correlates well with the estimated 2% of the population who count as low-affect or "stimulus-hungry" sociopaths (Niehoff 1999; Pierson 1999). While distance, teamwork, command, and mechanical intermediaries increase the ability to engage in deadly combat, traditional military drill (target shooting at bull's-eyes) produced only a 15-20% *firing* rate among American infantry troops in WWII, excluding machine-gunners (Grossman 1996: 3-4, citing Marshall 1978). Now a firing rate doesn't indicate willingness to kill, as Grossman explains. The usual "fight or flight" dichotomy is falsely drawn from *inter*-species conflicts; *intra*-species conflicts are also marked by display and submission, which, along with flight, are much more likely to occur before fight (especially fight to the death). While it is true that in some territorial species, such as lions, a newly victorious alpha male will kill the offspring of his defeated adversary, the intra-species inhibition we invoke concerns animals of the same generation in one-on-one combat; chimpanzee wars and murders always involve ambushes in which at least two but often seven or eight chimpanzees attack a single, isolated victim (de Waal 1997: 38). Given these factors, Grossman concludes that much of the World War II firing rate was display rather than fight (Grossman 1996: 5-6).

I propose two factors to account for the wide distribution of the inhibition on killing among humans, each of which depends on what is at least a proto-empathetic identification.<sup>2</sup> We need not decide here on the mechanism of that empathy, for which there are two major

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<sup>2</sup> As the anonymous reviewer of the paper reminded us, the standard evolutionary explanation for the adoption of signaling rather than fighting among non-human animal conspecifics does not involve empathetic identification but rather an instinctually embedded cost-benefit analysis. For example, the risk of harm from a fight outweighs the benefits of mating, so that it is better to accept defeat and wait to find another opportunity later.

explanations in the current literature. First, we find simulation theories. The most current scholarship here does not rely on action-oriented mirror neurons (as Vittorio Gallese thought in his “shared manifold” article of 2001), but on what Gallese, Keysers, and Rizzolatti 2004 call “viscero-motor centers”; here they refer to the findings of Singer et al. 2004, in which “empathy for pain” is correlated with increased activity of the anterior insula and the anterior cingulate cortex. Secondly, we find phenomenological accounts. Some supplement simulation theory with an account of an embodied intentionality, as in Thompson 2001; others, however, will find the simulation theory approach still too representational and appeal to a field of directly felt corporeal expressivity or “primary embodied intersubjectivity” grounding our “pragmatic interaction” with others (Gallagher 2005: 223). The phenomenological approach finds support in the widespread recognition of the humanity of the opponent through the sight of the face. Face-recognition is one of the earliest infant capacities (Hendriks-Jansen 1996: 252-277; see also Stern 1985 and Gallagher 2005), and many battlefield accounts show how the face of the enemy has profound inhibitory effects; the blindfold on the victim of a firing squad enables the shooters by breaking eye contact between victim and executioners (Grossman 1996: 225).

Either approach seems superior in accounting for this inhibition on killing to Theory Theory (agreeing here with the emphasis on affect found in Maibom 2007). Rooting the sort of intense identification we find in cases of anticipation or recollection of close-range killing – consider the trembling limbs, the intense nausea, the bouts of vomiting that we find here – in a cognitive inference via the observation or anticipation of outward behavior (in this case writhing in agony and clutching at spilled guts) so that we *attribute* the emotional state of agony to the *mind* of another person seems rather thin soup. Thin soup that is akin to the “folk cognitivism” of media reports that describe waterboarding as the production of the “belief” in the mind of the

victim that he or she is drowning. We should rather describe waterboarding as triggering an evolutionarily-preserved panic module which acts by means of a traumatizing biochemical cascade. We here see the link of internalist or cognitivist approaches and a certain “neurocentrism”: it’s only by bracketing the endocrine system in favor of an exclusive focus on the CNS (and there, focusing on electrical activity somehow abstracted from its biochemical milieu of neurotransmitters and hormones) that one could think of “beliefs” here.

Whether it’s a simulation or an embodied intersubjectivity, there is a fundamental linkage of affect, body image and bodily integrity in the experience of proto-empathic identification. Anecdotal evidence is clear that seeing someone else’s blood and guts spill out of them is powerfully felt by many soldiers (Kirkland 1995; Kilner 2000). These phenomena invite a concept of “political physiology” – the linkage of social and somatic – that can shed light on pornography and thanatography (the bodily reaction to images of violence) and their intersection in the Abu Ghraib scandal as well as in the current wave of “torture porn” films (the *Saw* and *Hostel* series in particular). Susan Hurley broached this topic in her work on media violence (Hurley 2004).

Whatever the mechanism, these proto-empathetic abilities underlie two factors we propose as underlying the wide-spread inhibition on cold-blooded close range killing: (1) Sensing what the intensity of the fight to the kill would be like: an attack beyond the threshold mutually recognized as that indicating display might provoke a deep panicked self-defense on the part of the opponent rather than the desired submission. Niehoff 1999 offers support here. See page 75 on “protective aggression,” citing Archer 1988; page 127 on the release of norepinephrine in attack situations; and page 130 for a summary of Gray 1977, which postulates a behavioral inhibition system tied to physiological arousal. (2) The need to avoid the intensity of

revulsion afterward: living with having been a killer would be too much; the “memories of the future” (Casey 2000: 62-63) are in this case intolerable for the subjective present (see also Damasio 1994 and 1999 for accounts of the role of “somatic markers” in entertaining “as if” scenarios of future action).

### **RAGE, REFLEXES AND THE ACT OF KILLING**

As we have seen, the vast majority of soldiers cannot kill in cold blood and need to kill in a de-subjectified state, e.g., in reflexes, rages and panics. But who does the killing when reflexes, rages and panics are activated?

Zahavi (2005) and Gallagher (2005), among others, distinguish agency and ownership of bodily actions. Ownership is the sense that my body is doing the action, while agency is the sense that I am in control of the action, that the action is willed. Both are aspects of subjectivity, though they may well be a matter of pre-reflective self-awareness rather than full-fledged objectifying self-consciousness. But alongside subjectivity we need also to notice emergent assemblages that skip subjectivity and directly conjoin larger groups and the somatic. To follow this line of thought, let us accept that, in addition to non-subjective body control by reflexes, we can treat basic emotions as modular “affect programs” (Griffiths 1997) that run the body’s hardware in the absence of conscious control.<sup>3</sup> As with reflexes, ownership and agency are only retrospectively felt, at least in severe cases of rage in which the person “wakes up” to see the results of the destruction committed while he or she was in the grips of the rage. In this way we see two elements we need to take into account besides the notion of subjective agency: (1) that there is another sense of “agent” as non-subjective controller of bodily action, either reflex or basic emotion, and (2) that in some cases the military unit and non-subjective reflexes and basic

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<sup>3</sup> Here we use computer metaphors about which we have to be very careful not to let them imply any stance on cognition as computation of discrete symbols.

emotions are intertwined in such a way as to bypass the soldiers' subjectivity *qua* controlled intentional action. In these cases the practical agent of the act of killing is not the individual person or subject, but the emergent assemblage of military unit and non-subjective reflex or equally non-subjective "affect program."

A little more detail on the notion of a "rage agent" might be helpful at this point. Extreme cases of rage produce a modular agent or "affect program" that replaces the subject. Affect programs are emotional responses that are "complex, coordinated, and automated ... unfold[ing] in this coordinated fashion without the need for conscious direction" (Griffiths 1997: 77). They are more than reflexes, but they are triggered well before any cortical processing can take place (though later cortical appraisals can dampen or accelerate the affect program). Griffiths makes the case that affect programs should be seen in light of Fodor's notion of modularity, which calls for a module to be "mandatory ... opaque [we are aware of outputs but not the processes producing them] ... and informationally encapsulated [the information in a module cannot access that in other modules]" (93; my comments in brackets). Perhaps second only to the question of adaptationism for the amount of controversy it has evoked, the use of the concept of modularity in evolutionary psychology is bitterly contested. I feel relatively safe proposing a very-widely distributed rage module or rage agent, since its adaptive value is widely attested to by its presence in other mammals, and since Panksepp 1998 is able to cite studies of direct electrical stimulation of the brain (ESB) and neurochemical manipulation as identifying homologous rage circuits in humans and other mammalian species (190). Panksepp proposes as adaptive reasons for rage agents their utility in predator-prey relations, further sharpening the difference between rage and predator aggression. While a hunting attack is by definition an instance of predatory aggression, rage reactions are a prey phenomenon, a vigorous reaction when pinned down by a

predator. Initially a reflex, Panksepp claims, it developed into a full-fledged neural phenomenon with its own circuits (190). The evolutionary inheritance of rage is confirmed by the well-attested fact that infants can become enraged by having their arms pinned to their sides (189).

With this as background, let us concentrate on rage in military contexts. Without the enablers of distance, machinics, teamwork, command, and dehumanization, most soldiers must leave the state of “cold blood” in order to kill one-on-one at close range – they have to dump their subjectivity. They burst through the threshold of inhibition by super-charging their bodily intensity. Thus the tried and true method for killing in close combat is the berserker rage, the frenzy of killing anything that enters the “death zone” immediately in front of the berserker. In the berserker rage, the subject is overwhelmed by a chemical flood that triggers an evolutionarily primitive module which functions as an agent which runs the body’s hardware in its place. The Greeks called it “possession by Ares” (Shay 1994; Harris 2001). It’s important to understand that such rage is itself traumatic: it sets endorphin release thresholds so high that only more combat will provide relief, initiating a cycle of rage trapping many of those who enter it in the beserker state and greatly increasing the chance of Post-Traumatic Stress Disorder or PTSD (van der Kolk and Greenberg 1987; Shay 1994).

A common trigger of the berserker rage is the death of a comrade (Shay 1994; Kirkland 1995). We can speculate that such rage is triggered by what Damasio would call the flashing somatic marker of future pain (separation from and mourning for the comrade) coupled with the memory of pleasure tagged to the person of the comrade. See LeDoux 1996: 200-203 for a brief overview of emotional memory; although LeDoux focuses on fearful memories, dopamine would seem to be a key player in the production of pleasant memories, as summarized at Niehoff 1999: 131. The wrenching shift between the pleasant memories and the painful future triggers rage, a

notion that dovetails with Panksepp 1998, where frustration, as the curtailment to the free use of “seeking” and “play” systems, triggers rage. Another trigger, at which we have already hinted, is direct and immediate threat to life, the panicked self-defense reaction that display and submission seeks to avoid. There are of course many other rage triggers in other walks of life we can’t discuss here, among them abandonment, as when domestic violence escalates from beating to killing, as often happens only after separation. The military problem of the berserker rage is how to turn it on and off on command (and only on command): this is the problem of the conversion of the warrior (whose triggers include insults to honor) into the soldier who kills only on command.

The military problem is that rage or panic agents have no “emergency brakes.” For example, the ancient Norse beserkers were very effective killers, but could not stop killing at will; their beserker state was only turned off once all members of the opposition were dead (Speidel 2002). We can note that modern soldiers are not *trained* to utilize rage states; the goal of modern military training is not to replicate the beserkers of ancient times. As we will shortly see, for most modern soldiers, the attack direction is articulated to neither the panic nor the rage agent, but in free fire zones to the conditioned response of the sight of a human silhouette or in urban warfare situations to key traits in the appropriate context. Occasionally, however, rage and panic agents can supersede controlled, that is, circumscribed and predictable, reflex killing, if the situation involves the death of a comrade (Shay 1994).

Even when a sense of agency is absent during the rage-induced or reflex-controlled act of killing, however, a sense of moral responsibility can be produced by a retrospective identification of action and ownership, a retrospective production of the moral sense of agency, even when the practical agent at the time of action was a non-subjective rage or reflex: “Oh my



God, look what I've done!" In support of this claim, let us turn to Lifton 1973, who has produced a noteworthy study of Vietnam veterans of the My Lai massacre in which the psychological trauma of such guilt-producing retrospective identification plays a central role. After discussing the ways in which many aspects of the American war in Vietnam set up an "atrocious-producing situation" (41), he provides a brief description of the "psychology of slaughter" in which rage and racialized dehumanization of the enemy plays a major role (42-43). Of particular interest to us is his description of individual soldiers' experience of guilt after the rage-fueled group performed the slaughter at My Lai (56-57; on the toxic combination of killer and survivor guilt, see 107). Even though we could argue that the practical agent of the massacre was the assemblage of unit and the distributed non-subjective "rage agents," these soldiers assumed moral responsibility, that is, they identified themselves as individual moral agents with the distributed and emergent practical agent of the massacre. In what follows we discuss two contemporary modes of military training in relation to the phenomenon of retrospective identification of ownership and agency resulting in guilt.

## **TWO MODES OF CONTEMPORARY MILITARY TRAINING**

### **REFLEX TRAINING**

Contemporary military training cuts subjectivity out of the loop so that most soldiers' bodies are able to *temporarily* withstand the stress of the act of killing. The first aspect is affective: soldiers are acculturated to dehumanize the enemy by a series of racial slurs. This acculturation is especially powerful when accomplished through rhythmic chanting while running, for such entrainment weakens personal identity to produce a group subject (McNeill 1995; Burke 2004). At the same time as the group subject is constituted, the act of killing is rhetorically sterilized by euphemisms.

Most soldiers do not “kill,” instead the enemy was knocked over, wasted, greased, taken out, and mopped up. The enemy is hosed, zapped, probed, and fired on. The enemy’s humanity is denied, and he becomes a strange beast called a Kraut, Jap, Reb, Yank, dink, slant, or slope. (Grossman 1996: 93)

Desensitization is merely an enabling factor for the role of classical and operant conditioning in modern training. Such training enables most soldiers to kill reflexively. In doing so, they bypass the wide-spread inhibition on killing we have noted above.

The major problem of modern military training that re-configures reflex action lies in going beyond what the restored subjectivity of many soldiers can withstand. The “shoot on sight” or “free fire zone” protocol begins in Vietnam with the application of human silhouettes rather than concentric targets in basic training; this new training produced a significant rise in kill-to-fire ratios (Grossman 1996: 181). In effect, such pattern recognition training increases the distribution of a “hunter agent” in the population of soldiers, so that the sight of human-shaped targets triggers a shoot reflex. The problem, here, however, is that the increased distribution of hunting agents is incompatible with the widespread proto-empathetic identification we have discussed above. Unless this proto-empathetic identification is sufficiently desensitized, many soldiers are psychologically traumatized, because in the aftereffects of battle they see the enemy’s corpse – produced by their implanted hunting agents – as human, as someone “that could have been me” (Lifton 1973; Grossman 1996). In combination with the physiological effects of long-term stress (in particular, elevated cortisol levels), such psychological trauma is linked with PTSD (Shay 1994; van der Kolk and Greenberg 1987).

## **CYBORG TRAINING**

Vietnam-era reflex training is good only for free fire zones. With urban warfare, more sophisticated cognition is necessary: the “shoot / no shoot” instant decision. With the advent of digital and video simulator training for urban warfare, we see true cyborg killing.

Military training has very often involved simulated combat conditions – training dummies – to develop motor skills. While it succeeds in this, the transfer to real combat often falters because of affective limitations. Traditional simulation training puts soldiers in an everyday world of three-dimensional objects; however, the difference between the dummy and a real person is clear, so that “killing” the dummy does not desensitize proto-empathetic identification. Digital and video simulation (live action figures with a CGI backdrop) develops individual motor skills, but we can speculate that they also increase the desensitization effect of training. Because images are so life-like, they activate the proto-empathetic identification present in most. Repetition of the training attempts to produce the desired desensitization. In other words, simulation-trained contemporary soldiers have already *virtually* experienced killing before *actually* having to kill (Macedonia 2002; McCarter 2005). But they haven’t experienced the transition from the simulated environment to real life: we speculate that even though simulations can desensitize to some extent, they cannot override or completely extinguish the proto-empathetic identification capacity in a good number of soldiers. (We are dealing with very complex matters here regarding PTSD in the current Iraq campaign [Hoge et al 2004]. Anecdotal evidence relayed to the author in personal communication by LTC Pete Kilner of West Point suggests that officers who had talked and thought about the after-effects of killing had less guilt than enlisted men and women without such preparation.)

In addition to the affective aspect of heightened desensitization, simulation training constitutes a new cognitive group subject. The instant decision of “shoot / no shoot” is solicited by the presence or absence of key traits in the gestalt of the situation. Such instant decisions are more than reflexes, but operate at the very edge of the conscious awareness of the soldiers and involve complex subpersonal processes of threat perception (Correll et al 2006). In addition to this attenuation of individual agency, cutting-edge communication technology now allows soldiers to network together in real time. With this networking we see an extended / distributed cognition culminating in “topside” for a commander who often doesn’t “command” in the sense of micro-manage but who observes and intervenes at critical points (Arquilla and Rondfeldt 2000: 22). In other words, contemporary team-building applications through real-time networking are a cybernetic application of video games that goes above the level of the subject (Fletcher 1999). In affective entrainment, instant decision-making, and cognitive “topside” the soldiers produced by rhythmic chanting and intensive simulation training are nodes within a cybernetic organism, the fighting group, which maintains its functional integrity and tactical effectiveness by real-time communication technology. It’s the emergent group with the distributed decisions of the soldiers that is the cyborg here, operating at the thresholds of the individual subjectivities of the soldiers.

### **CONCLUSION: TAKING RESPONSIBILITY FOR THE ACT OF KILLING**

What happens to these soldiers once they return home and are no longer part of the larger cybernetic organism that was constituted by their very bodies? What happens to soldiers when they are separated from the group subject, the true practical agent of the act of cyborg killing? We should remark upon the tenacity of retrospective guilt produced through the “My God, what have I done?” effect. Even when the practical agent of the act of killing is the assemblage of

emergent military unit and distributed non-subjective reflexes, rage agents, or awareness-threshold decisions, we can see a “centrifugal power” to subject constitution, drawing to itself responsibility for acts it never committed in isolation. Thus it seems many soldiers paradoxically just cannot help taking responsibility. In other words, to heighten the paradox, they are irresponsible in taking responsibility, in taking upon themselves moral agency, when practical agency lies elsewhere. Questions for future research concern the genealogy of this powerful motivation for subject construction and the assumption of moral responsibility.<sup>4</sup>

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