

## Military Ethics and Military Technology

## I

Here is a paradox some people are aware of, while others are not. Modern military technology changes military ethics, and yet this technology leaves military ethics unchanged. It is as if the more things change the more they remain the same. This article seeks to explain why many people are not even aware of the paradox; and then, paradoxically enough, explain the paradox away.

What is unchanged here? Certainly if modern military technology has wrought changes in military ethics, it has not changed any of the basic concepts of ethics. Anyone concerned to think about ethical issues as they surround the military will continue to talk by using such concepts as good/bad, right/wrong, rights, duty, obligation, virtue, rule, principle, and value. This is the basic stuff of ethics no matter what society, what institution within any society, and what actions within any institutional setting one wishes to consider. This is not to say that these concepts do not themselves exhibit gradual change over time.<sup>1</sup> Nor is it to say that they do not vary some from culture to culture. Still, they are the stable stuff of our thinking least likely to be affected by anything like technology.

Nor, apparently, do there seem to have been many changes in military ethics when we consider the kinds of general ethical principles and rules that thinkers cite in talking about military matters. Almost all writers in the field discuss the Principles of Proportionality and Discrimination as if they were written in stone. And they talk about these principles in connection with intentions.

One must, we are told, not only do certain things to act ethically, but must do them with the right intentions. We are also told by these writers such things as "Nations should go to war only as a last resort." These things about military ethics are taken as being true for all time.

Indeed, when we consider what seems not to have changed, it is as if discussions of military ethics can take place without even considering the effects of military technology on ethics; and thus as if no paradox exists at all. This "timeless" way of looking at ethical issues is enhanced by two models of thinking many people, but especially philosophers, hold onto. The first can be called the Deductive Model. This model encourages us to suppose that the primary way we arrive at ethical conclusions about how we are to act is via some process of deductive thinking, based upon some very abstract and unchanging principles. It is as if, according to this model, we need to spend much time philosophizing about these abstract principles since they, after all, are the foundations upon which everything else rests. And, according to this model, we need, first and foremost, to spend all this time coming to understand these principles. There is a sense here of doing first things first.<sup>2</sup>

Thinking this way, it is easy to understand how the facts of technological change will seem relatively unimportant in making ethical decisions, and how the focus of attention will be more on refining the abstract principles and basic rules rather than on the mundane features of modern weaponry. To be sure, facts will need to be factored into the formula even on the Deductive Model, in order to yield the desired conclusions. Still, these facts will be there by way of helping us

apply the basic principles and rules, rather than by way of helping us modify them in any important way. According to the Deductive Model, then, our principles and rules will be pretty much fixed in place prior to any appeal to the facts of any particular situation.

What is wrong with this model is that it oversimplifies how we think about our ethical problems. To be sure, some of our thinking is done in accord with the Deductive Model. But much is also done by making comparisons and analogies between situations, and by checking for consistency. For instance, one way we can come to understand the ethics of bombing cities by air is by making comparisons to the historically more familiar phenomenon of naval bombardment.<sup>3</sup> The point is this. By attending to the similarities (and differences) between the old and the new, we are less likely to be insensitive to whatever changes might take place in ethics as the result of technology than if we follow the lofty Deductive Model.

The second way of thinking which tends to make military ethics seem unchanging even as military technology changes, I will call the Agent Model. It should be clear at the outset that I have no prejudice against the concept of agency in ethics. Without it, the concept of ethics itself would lose all meaning. After all, agency has packed inside it the concept of responsibility. An agent is just the kind of person (or group of persons) who meets certain standards by possessing knowledge, abilities, and the freedom to act so that we can identify him or her as being responsible for what he or she does. So I do not want to be misunderstood as attacking either the notion that persons can be responsible for their actions, or the notion that agents can be found in ethical settings -- military or any other kind.

What I mean by being a follower of the Agent Model, then, amounts to something more than merely giving a place to agency in our ethical thinking. But what exactly? By focusing overly much on the concept of agency, followers of the Agency Model tend to discount the influence certain factors have on agents and thus talk as if all we need to do is steel our will in order to make the right decision. Using a somewhat different metaphor, the followers of this model often talk as if all we need to do in order to act well is to toughen our moral fiber. Or they often say things like "Technology does not kill people; people kill people." People, not guns, are to blame for what happens when a soldier runs amuck among innocent civilians. Or, those who discount the effects of external factors on agents, express themselves by making a distinction between weapons and how these weapons are used. Weapons, they say, are not immoral. What is immoral are certain uses of these weapons, thereby focusing attention, once again, on the agent (the human element) in ethics; and thus, once again, discounting the role of modern technology on ethics.

There is another argument, a variant of the ones I have just given, that helps us to better understand the Agent Model. Most recently, I was assaulted with this argument in a debate over the issue of abortion. I argued, in effect, that this issue is practically unresolvable, and that the only way to get rid of the actual problem of dealing with abortion cases is to develop, and make widely available, long-term, birth-control technology (e.g. an injection which would prevent pregnancy for months or years at a time).<sup>4</sup> Presumably with this technology available, the real problem (but not the theoretical issue) of abortion would go away since women would simply not get pregnant if

they did not want to. With the proper injection, no matter how careless people might be in their sexual forays, pregnancy would not result. Once I had finished my presentation, my interlocutor accused me of looking for a "technological fix" to this difficult and profound ethical problem. For him, it was as if the ethical problem could be dealt with only from inside the agent. We needed, he said, to somehow change our (free) wills, our thinking, our attitudes, our minds, our hearts, or something inside of us, in order to deal with this ethical problem -- and, by implication, all such problems. The battle of ethics must, he said, be fought in the minds and the hearts of people; not inside scientists' laboratories or engineers' computers.

In response, I wished my interlocutor good luck since, given his views, he obviously needed all the good fortune he could muster. I also told him he is a prisoner of the Agent Model and, insofar as he is, he has made a serious logical mistake. He has confused the legitimate point that in the strict sense only agents are responsible for what gets done in ethical settings, with the mistaken point that the main thing agents must change, if any change is called for in such settings, are the agents themselves. Of course, at times, agents need to alter their minds and their hearts in dealing with moral problems. But there are times when other things need to be changed -- things like technology, for example. Technology cannot literally be responsible either for what it does or what we ourselves do, since it is not an agent in the strict sense of this term. Technology does not know what it is doing the way a person does; and technology is not free to act in the same way a person is. It is not even strictly correct to say that technology acts. All technology does is have (causal) effects. But

in military affairs these effects can be literally earth-shaking.

## II

In the remaining portion of this paper I want to focus on how modern military technology has changed and continues to change war; and then on how these changes have changed and continue to change military ethics. I will first, ever so briefly, list what some of these technological changes are and then, also ever so briefly, point to how these changes affect military ethics.

First, and most obviously, modern military technology has greatly magnified the disabling function of weapons. From rapid fire weapons to nuclear bombs, modern weapons can do more damage than in the past. This, in case you have not noticed, is a vast understatement. Second, the reach of modern weaponry has been extended so that practically everything and everyplace a warring nation might want to reach can be reached. Whether the target is in space, deep underground, deep under the sea, or around the world, it can be targeted. And, with many technologies, this reach is far swifter than it was even a generation ago. Third, targets can be located in ways they could not be in the past. Both by day and by night, under the cover of fog, dust, clouds or whatever, technology has magnified and extended the military's power of location many times over. Fourth, combining their new-found powers of reach and location along with some others, the military has gained the power of greater accuracy. Using "smart" and "brilliant" weapons, the military has the capability of reaching out, finding, and maneuvering bombs, rockets, missiles and shells so that they can destroy a target with one well-aimed thrust. Fifth, paradoxically, while accuracy has been enhanced, so has

"inaccuracy." Military technology has also given us new and more powerful area weapons in the form, for example, of various kinds of sub-munitions.<sup>5</sup>

These first five changes pertain directly to the weapons themselves. Each and every one of these changes can be rightly said to be revolutionary. However, revolutionary changes have taken place in two areas of non-weapons technology as well. First, information processing has figuratively exploded from practically being a non factor in military matters fifty years ago to being extremely important today; and, second, communications has improved many times over thanks in large part to satellites.

Before turning to some ethical implications of these technological changes I would like to point to one more change brought about largely by modern military technology. This change is also not in the weaponry as such, but is instead in the societal infrastructure which is required to design, manufacture, distribute, and teach people how to use these weapons. What I have in mind is what is popularly called Military Industrial Complexes (MICs). These complexes are a relatively new to this world. It could be argued that they are in place primarily because of the great political and ideological differences we are living through in this century. But, of course, nations have had these kinds of differences in the past, and yet no such complexes in the way that we know them today emerged before World War II. What changed things to create these complexes is military technology. This technology put so many powerful, quick-strike, and far-reaching weapons into the hands of warriors that nations with potential enemies had to be always ready for war. These nations could no longer put off arming

themselves after a war had started. Technology triggered the creation of MICs for another reason. Many of these new weapons are so complicated that a gestation period of several years is required before they can be put into the hands of warriors. Without a MIC, then, no nation can be said to have a credible military force.

So what effects have all these changes had on military ethics? Perhaps the greatest has been in fostering certain forms of ethical uncertainty, especially when it comes to considering what might happen in a major high-technology war. Many commentators tell us such a war would likely be nasty, brutish and short, while others tell us it would be nasty, brutish and long. Since a major high-technological war has never been fought, in truth, no one knows how long such wars are likely to last; and just now nasty and brutish they might be. So it is actually difficult to know even whether such a war could be fought within the bounds of ethics (i.e., within some form of just war theory).

Focusing just on the costs in lives, property and money, the temptation might be to say: "No it can't be fought within those bounds," and thus to say there is less uncertainty present than I am suggesting. After all, it might be argued, fast-striking, far-reaching, and more destructive weapons are certain to make modern wars so costly as to make them totally unethical. However, when one factors into the equation what a nation risks if it does not play the military game, uncertainty reappears. A technologically-primed military force can take away whatever values its enemies hold dear more quickly and more decisively than before. It is as if both the devastation of war and the losses a nation and its allies could suffer if they cannot



defend themselves against an attack are both magnified by technology. As a result, it becomes unclear just how one is to apply such a principle of military ethics as Proportionality. No one wants to start a major war over a border incident. That's easy enough to figure. But how about starting a major high-tech war when one's freedoms are threatened? How does one figure what a proportional response is in that kind of situation?

And once the war starts, calculations of proportionality will again be up for grabs. No one knows, for example, what the costs to the environment will be when both sides let their weapons loose upon each other -- even if we are concerned here with a "conventional" war only. The same uncertainty applies to the Principle of Discrimination. On just about every grounding of this principle I can think of (e.g., utility, duty, rights, virtue), it is not clear how discriminating military forces ought to be -- given the greater accuracy of the new smart and brilliant weapons, on the one hand, and the greater undifferentiated power of the new area weapons, on the other. I suspect only those who hold some form of the absolutist ethical position suppose they have easy answers here.<sup>6</sup> As for the rest, they often forget how loosely formulated their favorite Just War principles are even discounting, for the moment, what effect modern military technology might have on these principles.

In speaking of uncertainty, I am not arguing that the Principles of Proportionality, Discrimination, and any other principles and rules of war, will become meaningless or be impossible to interpret or apply. In medium and low intensity wars, they will probably have much the same messy application they have always had. The uncertainty I am talking

about pertains to how these rules and principles are to be interpreted, when we are making practical decisions about major high-tech wars. I am claiming that technology has changed such wars so radically in the past two or three decades that there is great uncertainty as to how all these rules and principles are to be interpreted. I am also claiming that no amount of abstract analysis of these rules and principles, which does not take technology into account is going to help us a whole lot in this regard.

Uncertainty in making ethical judgments is caused not only by military technology's sheer magnifying effects, although these are its main causes. Modern technology is also creating, and will at an increasing pace continue to create, qualitatively new ethical problems for nations fighting wars. Fighting wars in near and deep space are two examples. The ethical and legal rules for conducting such wars have only just now been broached by thinkers on these matters. Although also somewhat futuristic, consider the ethical implications of using chemical and biological agents in order to control positively the working, fighting, or mental abilities of one's own people. Or consider negative uses of similar agents on the enemy's military forces. Consider also the implications of research in genetics with respect to how both the physical and mental attributes of those on our own side, let alone on the other side, might be manipulated.

But futuristic considerations aside, there are changes in military ethics due to technology that have already taken, and are continuing to take place. I will briefly list a few of them. One of the most obvious is that modern technology has psychologically distanced the plight of the enemy in war. Some writers in ethics have

argued that putting oneself imaginatively in the position of others (i.e., role-reversing) is an important aspect of making ethical judgments.<sup>7</sup> If this is so, fighting wars with weapons of greater reach makes this role-reversing more difficult. It is difficult to imagine what those on the other side are thinking and feeling when one never (or rarely) sees them. At thirty kilometers it is easier to think of the enemy not as human beings but just as targets. So this killing at a distance will inevitably have a brutalizing effect on war -- as if war is not brutal enough. This same distancing is probably affecting the military virtues. Just what virtues are needed to manipulate and organize the use of complicated, long-reach weapons systems? Is bravery as important a virtue here as cool-headed intelligence?<sup>8</sup>

Another technologically inspired change in military ethics has to do with the locus of responsibility for what happens in war. Many writers have commented on how greater fire power has forced ground troops to fight from more dispersed formations. This dispersal has had the effect of making commanders less responsible for what their troops do than was the case in the past. Micromanagement has gone out of style. But things seem to be changing once again. With real-time communications, the use of computers and other electronic gadgetry, commanders will know much more than before about what is happening at various points on the battlefield. They will be able to exercise greater control as well. However, with this greater knowledge and control will come greater responsibility. No longer will ethical responsibility be laid exclusively or primarily at the feet of those doing the fighting. In future high-tech wars, the troops will likely remain dispersed, but responsibility will be shared by those higher up

much more than before. If a commander's troops misbehave ethically during and after battle, he or she will share the blame for whatever goes awry.

Still another change in military ethics has more to do with the speed of modern war than anything else. Rapid-fire events will trigger quick decisions. That being the case, it will be even more important than in the past for the military to prepare all those who might be involved in war to distinguish right from wrong (strategically and tactically as well as ethically) far in advance of the time they meet the enemy in battle. So the process of educating people about the ethics of war will have to be enhanced and placed at an earlier point in the training schedule (as it is already in the military academies). The problem here, of course, is that since no high-tech wars have ever been fought, it is not clear just how this preparation is to proceed.

I will mention one other change, actually a cluster of changes, on the ethical scene. In truth these changes are no longer very new since they have been brought about by Military Industrial Complexes; and these complexes have been around now for almost a half a century. But they too have been caused by technological advances in weaponry (at least indirectly). Many of these changes fall under the heading of conflicts of interest between personal goals about retirement from the military versus service goals. Thus we have officers doing favors for their after-retirement employers before they actually retire, even though some of these favors may be costly to the service.

But other ethical problems have developed, especially since MICs are both powerful and permanent institutions. Here is a sample of such problems. What relationships should exist between the MICs and

the mass media? Do, for example, military personnel have an obligation to leak information to the mass media if they detect corruption within the complex? What about the relationships between MICs and educational institutions? In this connection, do MICs tend to drain off more than their share of a nation's research money, engineers, and scientists? Further, are MICs so powerful as to wield more than their share of political and economic influence on nations? Finally, are MICs encouraging escalation in the production of weaponry, both quantitatively and qualitatively, in such a way as to endanger rather than protect the security of the nations they serve?

In closing, an apology is in order concerning the absence of answers to the many questions I have raised. My main aim in writing this paper is to focus attention on some, but certainly not all, of the influences of technology on military ethics. But in doing that, no time has been left for hinting at the answer to even one of the many questions raised in this paper. That job is for some other time. It is, I think, enough for now for us to come to realize, as most of us do, that military technology is changing very rapidly but also, as many of us do not realize, that in certain ways military ethics is changing along with it.

*Nick Fotion IV*  
*Emory*

#### ENDNOTES

1. MacIntyre, A. A Short History of Ethics, The MacMillan Company, NY, 1966. See especially Chapter 1 where MacIntyre describes how even our most basic ethical concepts are subject to change over long periods of time.
2. Jonsen, Albert R. and Toulmin, Stephen, The Abuse of Casuistry: A History of Moral Reasoning, University of California Press, Berkeley, CA. 1988, pp. 3-20.
3. Cohen, Sheldon, M, Arms and Judgment: Law, Morality, and the Conduct of War in the Twentieth Century, Westview Press, Boulder, CO, 1989, pp. 120-4.
4. Fotion, N. "The Abortion Phenomenon," Anlage, 1981, pp. 10-11. The debate itself took place in a medical ethics class of the medical school at Emory University late September 1988.
5. Fotion, N./Elfstrom, G. Military Ethics: Guidelines for Peace and War, Routledge and Kegan Paul, 1986. See Chapter 8 for a more extensive discussion of how weapons can be classified.
6. Even absolutists need not have an easy time of it. In his "War and Massacre" (appearing in Malham Wakin's War, Morality, and the Military Profession, second edition, Westview Press, Boulder, CO., 1986, pp. 297-316) Thomas Nagel finds himself not quite able to hold onto an extreme form of absolutism. He admits on page 308 that "...there may be circumstances so extreme that they render an absolutist position untenable." It seems that in these terrible circumstances the absolutist would do just the same horrible thing

that the hated utilitarian would do except, of course, the absolutist, in Nagel's words, "...cannot claim justification" for for his or her violation. Anthony Hartle in his Moral Issues in Military Decision Making (University Press of Kansas, 1989) presents a parallel argument. He wants to hold an absolutist position against torture. Hartle says that we should not make calculations about these matters. Yet in extreme situations we might be forced torture somebody. "If the officer in charge does take action to force the agent to provide information, we may find the actions to be less blameworthy than they would be in circumstances, but we will not be able to justify them. We will not be able to say, without qualification, that torture of the terrorist or those involved with the terrorist was the morally right thing to do." (126) At this point, the argument seems to be not whether there will be exceptions to rules and principles upon which we operate, but what we will say about these exceptions. Thus the utilitarian (who allegedly is inherently lax about making exceptions) and the absolutist (who supposedly makes no exceptions but now it seems sometimes does) do not seem to be worlds apart.

7. Hare, R.M., Moral Thinking: Its Levels, Method and Point, Oxford University Press, Oxford, 1981. See Chapter 5.
8. This is one of John Keegan's suggestions in his The Mask of Command, Viking/Elisabeth Sifton Books, London, 1987.