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The Problem of Realism and Reality in Military Training Exercises

Anne Irwin

One of the significant characteristics of militaries as organizations is that they can be described as "contingent" organizations; designed to perform certain tasks that they may seldom or even never be called upon to perform. Militaries, as contingent organizations, spend the bulk of their time engaged in preparation and training, not in fighting battles. Training often takes the form of simulations or exercises designed to instruct, practise, and evaluate individual and group performance in military skills. Simulations vary in scale and complexity and can range from a mock section attack involving no more than fifteen men and lasting a half-hour or less, to full-blown, two-sided war games involving thousands of soldiers; vehicles, materiel, and ammunition worth millions of dollars; and lasting for several weeks at a time. Regardless of the scale, the real world constantly impinges on the simulated world of this exercise, posing problems for both planners and participants. In this analysis, the use of the term the "real world" refers to the mundane world that is not part of the simulation. Similarly, "reality" refers to physical and environmental factors that confront soldiers and affect their experience of the simulation, for example: weather conditions, fatigue, hunger, and/or injury. In contrast, the term "realism" refers to soldiers' evaluations of how closely a particular simulation accords with how they imagine wartime conditions.

Reality is a problem for planners who must decide how to achieve desired levels of realism within the constraints of safety, logistics, and various economic and political limitations. For example, there are limits to the number of training casualties that are considered acceptable in a peacetime army. However, in order for the training to have value, a certain level of realism and authenticity is required in order to necessarily include an element of risk for participants. Thus, there is constant, dynamic tension between the competing imperatives of authenticity and safety.

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Reality is a problem for participants; such things as real accidents and real casualties interfere with the conduct of an exercise, and logistical requirements for feeding and supplying troops affect the conduct of the exercise and influence the participants' activities. Soldiers must eat real food, (sometimes) practise with real equipment, and (sometimes) are supplied with real ammunition. Despite precautions, real casualties do occur, both to people and vehicles. Sometimes these casualties occur in the midst of a simulation in which medical evacuation and vehicle repair are being practised. Realism is also a problem for participants, because what constitutes appropriate realism is often a subject of debate. Despite the problems that both realism and reality pose for planners and participants, they are essential elements in the lives of soldiers and their commanders. In this paper, I adopt an ethnomethodological approach to analyze how soldiers in a Canadian infantry battalion routinely manage the problems posed by reality and realism during military exercises.

Military organizations are, of course, not the only organizations that use simulations as a pedagogical tool. Some of the literature devoted to simulations and gaming can shed light on the problem of reality in war games (see, for example: Anderson, Hughes, and Sharrock 1987; Crookall et al. 1987; Crookall and Oxford 1990; Watson and Sharrock 1990). However, most of the relevant literature examines business games or games used by primary and secondary schools, and these differ in significant ways from military simulations. Business games typically are treated as a "time-out" from the "real" business of an organization. Executives are removed from their normal work setting for a day or two to play the game. They are then sent back to their "normal, regular" business with the expectation that they have learned lessons in the game that can be applied in the "real" world.

Simulations and games are exceptional and extraordinary, but they are not part of everyday life. In the army, however, games and simulations are part of the normal routine of everyday life and are, therefore, not exceptional. The "real" business of the army—fighting wars—is, in fact, not routine, but exceptional and extraordinary, so the relationship between the game and "real" life can be seen as a reversal of the process of business games. The vast majority of any soldier's or officer's time, during peacetime and to a lesser degree even in wartime, is spent participating in a simulation of one type or another, including preparing for them or cleaning up and debriefing afterwards.

Another difference is that in both business and educational games, participants normally assume roles that differ from their customary identities; a personnel manager may play a purchasing agent, a school

child may play a shop assistant. In the military, participants much more commonly play their own role throughout the game or simulation, thus there is a great deal more overlap between the "real world" and the simulation. The relationship, then, between reality and the simulation is particularly problematic and complex in the case of the military.

Most theorists who have studied simulations and gaming have examined how realistic a simulation is by measuring it against their own notions of realism, adopting a correspondence theory of reality or epistemology (Anderson et al. 1987). Using an ethnomethodological approach entails a congruence epistemology; that is, suspending judgment about whether the simulation corresponds to some objective reality and, rather, attending to participants' assessments of whether a particular game or simulation is a realistic event. Watson and Sharrock (both ethnomethodologists) acknowledge the importance of the participants' perspectives:

> We must not ask whether any given simulation maps or reflects some real-world situation, but instead we should ask how, and to what extent, do students and other parties to the simulation treat it as simulating reality: What are their practices in changing the "constitutive accent" so that the simulation is collaboratively taken by participants as realistic-for-all practical purposes? Obversely, what are participants' practices in jointly sustaining an understanding that this simulation is not realistic or real-worldly? What is the communicative work which contributes to both the suspending and the sustaining of disbelief in simulations and games? (Watson and Sharrock 1990: 235)

This approach means adopting the "native's point of view," as Malinowski urged anthropologists to do (1984: 25). It means entering the native's world, but it does not imply entering the native's mind. The distinctions between reality and simulation, and assessments of the reality of simulations are interactively accomplished by members and are thus as available to us as analysts as they are to members of the military.

A short description of one event I participated in illustrates the problems mundane reality can cause for exercise participants. During an exercise, the rifle company was conducting a "mounted advance to contact," which meant that the whole company, including its support elements of medics and mechanics, was moving forward, expecting to meet and engage a notional enemy. The support elements were being exercised as well as the fighting elements, so that, after engagements, the proper casualty (both human and vehicle) treatment and evacuation

procedures were to be practised. During one attack, however, the vehicle in which I was traveling hit a trench that had been hidden by snow, and several soldiers were injured when the vehicle came to a sudden stop, throwing them forward. Thus, in the middle of this exercise practising medical evacuation, we actually had several real casualties.

These types of events are common during military exercises, creating a necessity for the development of methods for distinguishing between real events and exercise events. The radio codeword used to identify real events, which is also used in everyday speech to distinguish between exercise events and real events, is "no-duff." In other words, exercise events are simply "exercise events," while real events are "no-duff" events. "No-duff" is called over the radio by the unit reporting the event, and all hearers of the message know to treat the event with the seriousness that a real injury entails. I have many times been on an exercise with other excited and tense participants during which there was a very strong sense of realism when a no-duff call was passed over the radio. It was remarkable how quickly the atmosphere changed. What seemed real before the call was recognized clearly as game-playing and pretence, and abruptly everyone attended to the radio in a new, more serious fashion.

The ongoing interplay between reality and simulation is such that soldiers become adept at switching back and forth between the two frames of reference. One question to consider, then, is how the status of a present situation is constituted and communicated. Defining any situation is an ongoing process, constantly subject to renegotiation and reconstitution. The definition of a situation as "simulated" or "no-duff" is accomplished by the participants who make current definitions of the situation available to each other on an ongoing basis so that they know what sort of behaviour is expected and appropriate.

The impossibility, if not the undesirability, of replicating an authentic war experience in training is acknowledged by members of the military. The literature produced by soldiers who have participated in combat is replete with accounts of how field training did not prepare them for the "real thing," and a number of NCOs informed me during my research that they have no idea whether or not the tactics they practise during field exercises will work in an actual wartime situation. Caputo, in his memoirs of the Vietnam War, adequately expresses the complex relationship between training and reality. After serving in combat in Vietnam, he describes his Marine Corps officer training:

> Our Hollywood fantasies were given some outlet in the field exercises that took up about half the training schedule. These

> were supposed to simulate battlefield conditions, teach us to apply classroom lessons, and develop the "spirit of aggressiveness"... It was easy to do in the bloodless make-believe of field problems, in which every operation went according to plan and the only danger was the remote one of falling and breaking an ankle. We took these stage-managed exercises seriously, thinking they resembled actual combat. We couldn't know then that they bore about as much similarity to the real thing as shadowboxing does to street-fighting... [we] made frontal assaults against the sun-browned hills the [fictitious enemy] defended, yelling battle cries as we charged through storms of blank cartridge fire. (1996: 15–16)

Early in his first tour of duty in Vietnam, the reality of war is confused with the make-believe of field exercises:

> I was careful to do everything by the book, setting up interlocking fields of fire, emplacing machine guns to cover the platoon frontage—in brief, all that I had learned at Quantico in Rifle Company Defensive Tactics. I was now plying my trade in earnest, but I had a difficult time convincing myself that that was the case. So far, the operation had the playact quality of an exercise. (1996: 53–54)

As Caputo becomes more experienced, the lack of fit between training and war is evident:

> Standing up in front of a stunted tree—it was the only tree in the paddy and a stupid place to expose myself—I crooked my arm and pumped it up and down. This was the hand-and-arm signal to move out on the double... Something slapped into the branches not six inches above my head; a fillip from Charlie... that one had been addressed to me; and so, for the first time in my life, I had the experience of being shot at by someone who was trying to kill me specifically... [The company commander] came up on the radio... he calmly asked me what the hell I was doing waving my arms around under fire. I explained that I was using a hand-and-arm signal they had taught us in Quantico. "You're not at Quantico any more. You'll draw fire doing that." I told him that the VC had just given me the same message in more emphatic terms. (1996: 93–94)

Later yet, he learns from experience what cannot be taught in simulated war:

> We saw enough to learn those lessons that could not be taught in training camps: what fear feels like and what death looks like,

> and the smell of death, the experience of killing, of enduring pain and inflicting it, the loss of friends and the sight of wounds. (Caputo 1996: 95)

Similar feelings were expressed to me in an interview with a sergeant who had never been in combat:

> The platoon commander is here to be trained by the platoon warrant officer how to lead a platoon. He learned how on his course, but that doesn't mean shit here, okay? Because those are textbook attacks, textbook everything. And we all know that just doesn't apply. We learn that when we go through our battle school. We come to the battalion, everything is changed, and you see it every day... It's different from what they learned... they make everything simple for teaching so you do these attacks as if you were on a parade square doing drill. And that just doesn't apply when you're out in the field. I mean, none of us have ever been—well, the odd guy's been shot at and stuff like that, in peacekeeping roles and stuff, but we've never been in combat. And hopefully, we never will be in combat, you know—Only an idiot wants to go to war. But, uh... so we don't know if any of this stuff works, but we have to take what we can and try and, I don't know, the best we can, you know. We train for what we can and we do it. (MacPhail 1991)

In this case, training in the "real" world of the battalion is contrasted with what is taught on courses, yet there is an acknowledgement that even battalion training is not the "real" thing. Moreover, what constitutes realism is by no means universally agreed upon, as the following transcript of a post-exercise discussion among a group of sergeants illustrates:

> Sgt. M: Get this. The OC [Company Commander] said in order for the troops to get the full effect, they have to walk at least forty kilometres.
>
> Sgt. C: What?
>
> Sgt. M: So we said, "Okay. So far, we've practised lying on the ground, being cold, now we're going to practise walking." What the fuck? What did he say last night? Seven platoon didn't get any contact until the early morning? He said, "Uh... well, at least you know they got two lessons learned out of it. One was how to make up like shifts; the other was endurance."
>
> Sgt. C: Ah, fuck.
>
> Sgt. D: Unbelievable.

Sgt. M: Where does this stuff come from?

Sgt. S: Anne, there's got to be a book of stupid ideas, 'cause they must look it up, okay?

Sgt. M: They learned endurance [laughter]...long time figuring that one out—what ya talking about, "learning endurance." You learn to lie in the rain.

Sgt. D: Maybe a little tolerance there, but that's about it...tolerance and stupidity of the hierarchy.

Sgt. M: Well, they learned not to sleep on fucking ambush. (Irwin 1996c)[1]

It would seem, in this case, the sergeants do not agree with the company commander's estimation of the importance of walking forty kilometres as a way to achieve an authentic experience. The evaluation of the level of realism of war games is never decided once and for all but is constantly shifting throughout the course of the game. It could also be argued that leadership in a peacetime volunteer military consists of convincing soldiers that the training they are undertaking is realistic.

There are two frames in which soldiers situate their activities: the frame of the reality of everyday life, which is the world of eating, injuries, fatigue, and equipment failure that we can identify (as do soldiers) as "no-duff"; and the frame of the make-believe world of the simulation, which we can identify as "exercise" or "tactical." These frames are not mutually exclusive, and they do overlap, so that they mutually constitute each other. Overarching these two frames is the concern for realism, which is constantly being assessed and evaluated.

There are many different types of exercises used in the Canadian army including Command Post Exercises (CPXs), Tactical Exercises Without Troops (TEWTs), and Field Training Exercises (FTXs). Each of these exercises entail different dynamics between the frames of reference identified above, as well as the different types of realism that can be achieved.

All exercises differ from real life in the sense that they are scripted in advance. Superiors have available to them a scenario prepared by the planners which they use to control the play of the exercise. This scenario is not available to participants except as a fairly general outline or sketch. Within the scenario, there is scope for independent action, even though the extent of this scope varies from exercise to exercise. But just as in real life, participants try to interpret what is going on as a guide for their choice of action and to predict what will happen next.

Another important difference between exercises and real life and real war is that exercises, although they are meant to be as authentic as possible within the constraints mentioned above, are always designed with a training goal in mind, including explicit "lessons to be taught and procedures to be practised... Training objectives... [for] a combat team FTX might include a long night approach march, a move to blocking positions, a counter-attack, occupation of a hide, or resupply in a leaguer" (CLFCSC 1986; emphasis in the original). While the exercise planners try to achieve these objectives as naturally as possible, the fact that the exercise always has training objectives precludes it from following the natural flow of real war.

All exercises are organized temporally; they all have a start time and a finish time (END EX). And while the start time is communicated to participants, they are frequently unaware of the exact time of END EX (though they may know the day). Between these start and finish times are moments when the exercise may be stopped for a period of time by the controllers for any number of logistical or tactical reasons. There are also pockets of time in which the situation is defined by participants as no-duff rather than simulated, for instance, during debriefings after engagements or during real emergencies, such as vehicle accidents.

Exercises are also organized and bounded spatially, with certain geographical areas devoted to the exercise and others used as staging areas for logistical, medical, and maintenance concerns. Another form of organization is the structural level at which the exercise is to be played. Initial instructions issued by the exercise planner specify which units will be involved as participants, and whether these units are an infantry rifle company of approximately 100 officers and other ranks, or a division of thousands of soldiers. Groups and individuals are assigned roles as combatants (both ally and enemy), directing staff (evaluators), safety staff, and umpires. Nevertheless, at the same time, administrative tasks must be performed, and in any given interaction an individual may invoke either a real role or an exercise role. All of these factors are discussed in greater depth below. For now, having sketched out some of the basic characteristics of exercises, we can turn to a more detailed discussion of particular exercise styles.

Neither Command Post Exercises (CPXs) or Tactical Exercises Without Troops (TEWTS) involve the use of soldiers except in a peripheral capacity. Although CPXs and TEWTs are quite different in organization and in design, they share the common function of training officers and command elements relatively cheaply. CPXs are designed to exercise the command

and control elements of a military unit, whereas the aim of TEWTs is to teach tactics and doctrine to officers. TEWTs and CPXs are often used prior to FTXs to allow command personnel the opportunity to practise their skills without inconveniencing the troops. This ensures that these skills are well established when the entire unit goes on a field exercise:

> Troops should never be employed solely as training aids for the training of leaders. When leaders are relatively inexperienced an exercise is best "TEWTed" first so that leaders can learn their jobs before the troops are deployed. The same exercise can then be repeated as an FTX, and the leaders, secure in their own roles, are free to provide close supervision to the troops. (CLFCSC 1986)

The aim of a CPX is to practise the command and control functions of whatever unit is being exercised. A CPX can be mounted at any level of command, but it is normally practised at battalion or brigade level. During the exercise, the various command posts of the different units and sub-units are deployed, meaning that the officers and the other ranks who work in the command post (signalers and clerks, for example) are employed in cells separate from each other, but are in radio contact with each other as well as with "higher control" and "lower control."

The extent to which the cells are realistically deployed varies. Sometimes the cells are set up in different classrooms of a lecture building, with the radios and maps installed as they would be in a proper command post. At other times, the actual command post vehicles are deployed. If the command post vehicles (usually armored vehicles) are used, there will be canvas attached to them (as they would be in the field), and the site is camouflaged. However, this is a feature used simply to add an atmosphere of realism, rather than to replicate a wartime experience. Cells communicate with each other and with superior and subordinate elements using normal battlefield means such as radio, telephone links, or messengers. Higher control is responsible for presenting a scenario and for acting as the superior element or higher headquarters. Subordinate elements in CPXs are not fighting soldiers; rather they are "lower control"—personnel who move markers on a battle map in response to commands from the exercise participants.

Although exercise planners may decide on a relatively realistic scenario, the actual experience of the CPX does not approximate realism, except with respect to time. The game may go on for twenty-four hours a day in an attempt to simulate the fatigue that would be a factor in war. It is common practice in telephone exercises, and less common in field CPXs, for exercise play to occur only during normal

working hours (between 0800 hours and 1700 hours daily), so that the problems of sleep deprivation that are a part of FTXs are avoided (which in itself compromises the authenticity of the exercise) and to save money. However, because it is considered necessary to practise a battle through the entire range of activities of a twenty-four hour day, "exercise" clocks are set in each cell. While the play is progressing, "exercise time" is in effect. When the players break for the night, the exercise clocks are stopped, and "real time" is in effect until play resumes the next morning. To enhance the sense of reality, the windows are usually sealed; participants are therefore unaware of the weather and light conditions outside. It can be extremely disorienting to stand down during the middle of the night in "exercise time" and step out of the sealed room into the bright light of 5 P.M. "real time." The different types of time parallel the difference between the "exercise" and the "no-duff" frames.

TEWTs, where the aim is to teach tactics to officers, are even less realistic than CPXs and are perhaps better categorized as case studies rather than simulations. They may be organized at any level of command at which there are a number of officers. It could be organized, for instance, from the company level up, or a platoon might even hold a TEWT for the section commanders, though this is less common. On TEWTs, officers are presented with a scenario that would include the resources available to the officer (size of unit, number of weapons, etc.), as well as the information supposedly acquired about a hypothetical enemy. The enemy is purely notional, and there are no actual troops or equipment, but officers are expected, normally as a group, to develop a plan that would involve the siting of troops, weapons systems, and obstacles such as minefields. The complexity of the plan depends on the level of the organization that the game (and I use this term purposely, as it is what officers call the exercise) is being played.

TEWTs are often used on officers' courses, where the participants are expected to play a role at least one level higher than the rank they currently hold. Officers are assessed when they present their plan to the Directing Staff (DS) who also debrief them. TEWTs may be played either on maps, which permits a wide variety of terrain to be used but which, in turn, removes the exercise even further from any correspondence with the real world, or they may be played on the actual ground, which enables officers to see the terrain rather than try to visualize it from the two-dimensional map or a three-dimensional, miniaturized map board. TEWTs are useful for teaching tactics and they are relatively cheap to run; only the officers and a small support unit (drivers, etc.) are required. Although debates often occur about

how realistic particular plans are, nobody suggests, generally, that TEWTs are remotely realistic because there are no troops involved; the plan is therefore never actually put to the test and played out, which makes the effectiveness of any plan ambiguous and constantly debatable. During the debriefing phase of a TEWT, one often hears comments from the DS such as, "we can't debate tactics, because we don't know if this will work or not." What officers are being tested on is their command of, and ability to apply, current military doctrine, as well as their knowledge of the characteristics of weapons systems (ranges and rates of fire, for example), their knowledge of the enemy's doctrine, and their presentation skills.

While there is some attempt to make the scenarios reasonably realistic, they are primarily designed to teach particular tactical principles. Thus, these training goals take priority over realism, and not much of an attempt is made to make the actual experience of playing the game realistic. There are no troops, no actual weapons, and often officers are permitted a longer time in which to develop their plans than would be available to them in a combat situation. Again, the aim is to drive home certain training points rather than to mimic or replicate a combat situation.

The type of exercise that does attempt to mimic war is the FTX or Field Training Exercise, of which there are many possible formats depending on, among other factors, the command level of the exercise and the lessons meant to be taught. For an FTX, the unit deploys to the field tactically, meaning that the soldiers are playing the game as if they were participating in a war. It is important to note the different types or dimensions of reality that a particular type of FTX may be designed to emulate.

One of the factors to be considered when planning an exercise is whether to use live ammunition, laser simulators, or blank ammunition. During ordinary FTXs, blank ammunition is used; it provides a satisfying noise when the weapon is fired. However, there is no way of evaluating the effectiveness of an attack because, of course, there is no actual damage done. Umpires (who are discussed in more detail below) may assess damage based on the observed movement of soldiers on the battlefield and on the number of rounds fired, but there is no way to measure the accuracy of those rounds. Moreover, there is no sense of danger; the soldiers, of course, know that the rounds are blank, and any sense of danger is a result of playacting or the organizational scripting of emotion, as described by Zurcher (1985).

One effective, though expensive, way of getting around the problem of evaluating the effectiveness of an attack is the use of various

types of laser receptors worn by soldiers; these buzz or give some other sign when a laser beam attached to a weapon hits the receptor. Laser simulators certainly increase umpires' abilities to evaluate the effectiveness of an attack. They also allow soldiers to evaluate their own accuracy with weapons as well as how well they use the ground to avoid being hit. There are, however, problems with lasers apart from their high cost. One of the problems pointed out to me by a number of soldiers during one exercise using lasers is that even light foliage and small trees, which would be destroyed by real machine gun ammunition, can effectively screen the laser beam allowing soldiers to hide during a simulation in places that would provide no safety at all in a wartime situation.

Another problem is that the laser receptors are attached to the webbing of the soldier, not to the soldier himself. On one occasion, I was acting as the number two on a machine gun crew during a simulated attack when the number one tried to fit himself into a small depression in the ground so that he could find a good firing position and not be seen. Finding that his bulky webbing was preventing him from achieving a good position, he removed it and set it to one side within easy reach. Within minutes his webbing beeped, indicating that he had been shot. Confused, he told me that he could not have been shot because he was in a good location, then we both realized that he had not been shot but that his webbing had been hit, triggering the beeper. With laser receptors, as with blank ammunition, there is still no authentic sense of danger, yet FTXs that use blank rounds or laser receptors are realistic in the sense that the activity on the battlefield is free-flowing and based on the assessments by commanders and individual soldiers of the ground, and by the enemy's disposition and behaviour.

In contrast, "live-fire" exercises are frequently held in which live ammunition, including machine guns and tank cannons, is used. The stated reason for the use of live ammunition is that it replicates the noise and danger of the battlefield, forcing soldiers to "take the game seriously." This increase in risk, however, necessitates sacrificing the realistic free-flow of movement on the battlefield, because limits must be placed on how close soldiers may fire at others, and movement must be strictly controlled in the interests of safety.[2]

In addition to the problem of what sort of ammunition to use, the officer in charge of planning an FTX has many factors to consider in his or her design of the training. The main factor is the training goal which dictates the form the exercise will take. This goal can be constrained by such factors as safety and the availability of time, space,

equipment, and ammunition. The officer must decide which units will be involved, where and when to hold the exercise (the spatial and temporal boundaries), and what elements of the participating units are to be exercised. For instance, is the exercise designed to practise assaults, or will logistical and medical systems also be practised? If he or she decides on the former, there is then no need "to play casualties"; therefore, logistical support is part of the real world, not the simulation. If the latter option is chosen, then there must be a system for identifying simulated casualties and for evaluating the effect-iveness of their treatment, as well as for distinguishing between actual and simulated casualties and accidents.

The organizer must decide not only the constitution of the friendly force, but also of the enemy. One option is to use a small enemy force under the control of the exercise staff, which informs the enemy force of the friendly force's movements . This option allows the organizers more control over the achievement of the training goals because the smaller force can be inserted and extracted at will, but choosing this option may somewhat diminish perceived authenticity. Another option is to have evenly matched forces, where neither is privy to information about the other force except for the information their intelligence elements are able to acquire. This option makes it much more difficult for the exercise staff to control the exercise play, but the resulting unpredictability is purported to have tremendous training value, and the competitive spirit engendered is considered valuable.

The third group that must be constituted is the umpire staff. During simulations, umpires are required to establish the outcome of any engagement, using parameters laid down by the exercise commander. Umpire teams travel with every formed unit of the friendly forces, and if the second enemy scenario described above is chosen, teams also accompany the enemy forces. The organizer must decide how these three different groups will be identified. It is usual for enemy forces to wear some sort of identifying marker on their uniforms in order for them to be distinguished from friendly forces. The umpires are meant to be invisible during the course of the exercise. They are there to observe, not to interact during the course of the battle. But paradoxically, as the combatants are camouflaged, the umpires are in effect made invisible by being highly visible. They do not wear camouflage and may be identified by the use of coloured armbands. In addition, their vehicles are also marked in a certain fashion, rather than camouflaged.

All these policies are established by the organizer of the exercise, but they are subject to interpretation and ongoing reinterpretation by exercise participants. Cicourel explains this principle:

> General procedural rules are laid down for members, and members develop and employ their own theories, recipes, and shortcuts for meeting general requirements acceptable to themselves and tacitly or explicitly to other members acting as "supervisors" or some form of external control. (Cicourel 1976: 1)

With this in mind, I turn now to an analysis of how soldiers participating in a number of FTXs (ones in which I also participated) employed their own theories and recipes to constitute situations as tactical or no-duff, and to evaluate the level of realism of the exercises.

Prior to one of these exercises, the company commander told me that he would be conducting a heliborne exercise (wherein troops are transported by helicopter) and wondered if I would be interested in attending. I knew that there might be some difficulty acquiring permission for me to participate, but I was certainly interested in doing so. He said that if I wanted to attend he would find a way to write me into the exercise because having an acknowledged observer would compromise authenticity. Inasmuch as everyone participating would be playing a role, he felt my presence would be acceptable if I, too, had a simulated role to play. The scenario he designed entailed having a civilian electronics expert assist in a covert operation to destroy an "enemy communications installation." [3] Because of budgetary restraints, all the planning phases of the operation, including orders, briefings, and debriefings, were conducted in garrison, and the troops only went into the field for the actual "fighting" of the "battle." In a conventional exercise, the briefings and debriefings would have taken place in the field in a defended location under "tactical conditions." However, because this exercise was heliborne, the actual location of the briefings was irrelevant, and tactical conditions only came into effect when the troops were loaded on the helicopters.

Before the beginning of any exercise, commanders at all levels give formal orders to their subordinates. These orders establish the spatial and temporal framework for the exercise by specifying exercise timings and spatial boundaries. Commanders tell their subordinates which of the training area locations are to be considered tactical and which are "real." They also inform the participants which members of the organization are to be considered players (both enemy and friendly), which are considered non-players, and how these different roles are to be identified. Orders also establish the criteria for defining a situation as tactical or real, as well as the codes used to interpret the status of these criteria. The following is an excerpt from a transcript of a tape-recording I made of the company commander's Warning Order, or preliminary order:

> OC: Okay. This warning order then is exercise secret. Situation: enemy forces. The enemy that we will be principally concerned with is the forces garrison in the Calgary area. If you look up on the map here, you will see that there's two main positions across the Sarcee area in Harvey Barracks. There is an enemy-mounted Quick Reaction Force on thirty minutes notice to move right here. That's important to us. And they have a number of prepared battle positions inside the buffer zone... Also, in the area of Curry Barracks, there is an enemy infantry company. And they're responsible to man a number of vital points throughout the city that are indicated, including the airport, and the, uh... support key bridges and intersections and that kind of stuff. (Irwin 1996a)

Embedded in this warning are explicit instructions for the orders to be understood as part of an exercise, so that when the OC sets the security classification of the orders as "exercise secret," which everyone should understand to mean for exercise purposes only, the orders are to be treated as if they were secret. But beyond that, the instructions are embedded in the very activity of issuing the orders. The orders were being issued in a nice warm building in a conference room. Although the soldiers were dressed in combat clothing, and some of them had red faces from exposure to the cold during rappel practice, no one could mistake this for the "real thing." What is noteworthy is that for much of the process of issuing orders, the simulation/reality dichotomy is not problematic. The interpretation of the situation as a simulation was informed by the knowledge these soldiers shared. For instance, they knew there could be no enemy in the same building where they were sitting, receiving their orders. Any references to the enemy, then, had to be understood as instructions to treat this event as an exercise.

Several times while he was giving orders to platoon commanders, the OC stepped out of the exercise frame and adopted the no-duff frame, which was done in order to delineate the appropriate approach to realism that he wanted the troops to take. In the following segment, he was encouraging realism by reminding soldiers that although in the actuality of the real world, they would have access to what would become enemy territory once the exercise proper began, they were not to take advantage of the no-duff situation:

> Good. Okay, then, we'll bash on with the updated warning order, just so everyone knows what's going on. First of all, just a couple of other sort of no-duff points have come up... given the fact that the target area is fairly close to here and obviously you have access to it and so on, um... let's have no more recce [reconnaissance], other

> than the helicopter recce yesterday, into the Harvey Barracks area. That's not going to happen. In operations, you'd have air photos, you'd have maps, and you wouldn't be able to walk into the enemy position, so now that you are going to get an idea of where your actual objective is physically, we don't want guys out there crawling around, sort of, tonight, and so on, and figuring out where their OPs [observation posts] are going to be, what the navigation route is, and so on. Use your map, and if there's any surprises in the process, then so be it. (Irwin 1996a)

And later on, at another briefing:

> And the last thing: No recce into Harvey Barracks now, gentlemen—honour system okay? I know we all know the area well enough as it is, but let's do our planning off maps and the air photos that are available and so on, just like we'd really have to do it. So we don't want to be down there tonight—Honour system. Okay, that concludes the whole shooting match. (Irwin 1996a)

On another occasion, the OC stepped out of the exercise frame in order to remind the platoon commanders that the exercise was, indeed, a simulation and that they were to refrain from causing any real damage to equipment or injuring other soldiers. At the same time, he reminded them of the cues to be used to determine whether vehicles should be considered part of the exercise or not:

> All good stuff... Anything else? [pause] Okay then, I'll finish off with just a couple of no-duff points. Common sense prevails out there. You know we don't want to be cutting fences in the link fences there. You're going to have to crawl underneath, push up, that sort of thing; or scale fences and that's when you—I know it's a bit of a hassle, but I think you understand we just can't be out there crashing up the compound [laughter]... The other thing, the armoured vehicles that we're going to destroy, we're going to simulate destruction and [the Pioneer officer] is going to explain that in just a sec. We have charges to detonate and so on, but obviously, we're not getting ready to do it in smashing up mode—smashing a periscope and some of that good stuff. I know you wouldn't do that [laughter]... anyway, we just want to be careful of obvious, uh, destruction of facilities... we want to be careful there so we can't actually destroy it, obviously... when you're defending the bridge you're only going to stop in-play personnel and vehicles. Okay? In-play enemy personnel—we know what they're going to look like, we've identified that in-

> play vehicles, all of them, will all have a large white piece of mine tape that will come off the top of the antenna. So, if you see a jeep with a long white thing dangling behind it, it's in play so, cutoff, let him have it okay? But if it's just a real MP on patrol, they know we're out doing the exercise, so don't be jumping out there and hauling him out [laughter] zap-strappin' him [laughter]. (Irwin 1996b)

It became evident during these series of briefings that there were some elements upon which the OC had insisted for the sake of authenticity and training value, which required some convincing of the NCOs on his part. In particular, in the absence of mortar ammunition, he insisted that troops be required to carry bricks to the objective. And it seems clear from the explanation he gave for this requirement that he suspected that perhaps the NCOs did not share his opinion:

> OC: Mortar ammunition... we're simulating that, eh, with sand in the tubes?
>
> Sgt. M: Actually, we, uh... we couldn't get the tubes, Sir, I already talked to the 2-i-c [second-in-command] about it, we tried to get 'em up from Wainwright. I went through the ammo guy here, but we couldn't get 'em.
>
> OC: So we're going to carry red bricks instead?
>
> Sgt. M: Okay
>
> OC: Okay, we need something to simulate it. I know, I know the old story, there's got to be a harder way, but we've got to simulate this. You need troops to help you haul ammo and there's some lessons, there's some real good lessons to be learned there, hauling the real weight. I'd like you to look at something there if you can. (Irwin 1996b)

The leadership challenge facing the OC throughout the orders and briefing phases of this exercise was to ensure that his subordinates had the required resources available to them to interpret any situations that arose in a way that would be consistent with his wishes, and yet there was no way for him to predict all the possible situations that might have arisen. He also had to convince them that his image of what constitutes a realistic scenario was reasonable.

Field notes made during another set of orders revealed the time that the company would be leaving its bivouac for the tactical area. Other "no duff" matters included the commanding officer (of the battalion) paying the company a visit to observe its performance, the

manner in which meals would be served, and the requirement for casualty cards to be issued, as the unit would be "playing casualties" during the exercise. On another occasion, during orders preceding a live-fire attack, platoon and section commanders were told by the company commander that the safety staff on the firing range was not there to control the tactical activities, but only to intervene if safety was at stake.

Before another major exercise, I recorded the following orders of the company commander: "The moment our wheels cross the start point, we are in the tactical mode until the end of the exercise. Air sentries up, covers off the guns" (Irwin 1992a: 21). Air sentries and uncovered guns would then be used by participants as evidence that the situation was a tactical one. Zimmerman has demonstrated that "whatever 'context' is required to organize a particular interaction, it is locally activated and interactionally achieved and sustained" (Zimmerman 1992: 36). This is very much the case during war games, as the following comment, overheard in a "tactical" location, demonstrates: "Since we've got a generator, I guess we're not tactical, are we?" (Irwin 1992b: 185). Tactical locations are supposed to be quiet, well-hidden, and well-protected. For this soldier, the presence of the noisy generator precluded the location from being defined as a tactical one.

The criteria that the commander uses to establish the tactical nature of an exercise do not, however, define the situation for the entire exercise. These criteria become, instead, resources used by participants to define a situation as tactical or no-duff and, as noted above, defining the situation is an ongoing process. It is not decided "once and for all." But, as Cicourelpointed out, "participants also use their own categories to depict their perception and interpretation of the social environment. Further, members of a group methodically employ categories for depicting their life circumstances and the grounds for their action" (Cicourel 1976: 16).

Participants are engaged in a continuous process of deciding whether a situation should be defined as tactical or no-duff. They must use the resources presented by their superiors and their own categories to constitute the situation appropriately. The following excerpt from my field notes describes a situation when no-duff events interrupted the progress of a tactical exercise:

> We continued with platoon attacks—practise for the "real" one this afternoon. Apparently, the reason the one this afternoon is considered real is because of having an enemy from another company. On the fourth attack, however, Master Corporal T

> threw a smoke grenade and some grass caught fire and very quickly turned into a major burn...had to call for assistance. The second in command came over in his carrier, but eventually range control came and took over. Two big fires were going all after-noon so we had to stand down. We're on fifteen minutes notice to move to fight the fire, with all the firefighting equipment in the battalion loaded on the company's carriers...did have time to do the "real" platoon attack, but dismounted. (Irwin 1992b: 187–88)

Soldiers, then, become adept at switching from tactical mode to no-duff mode on an ongoing basis. The definition of a given situation as no-duff or tactical is worked up through the interactions and conversations of the participants, and they use a wide range of resources to accomplish this social act. Moreover, the definition of the situation as tactical or no-duff is made available to participants so that they know how to situate their actions as well as have a context for their behaviour. Some of the resources used by members to constitute the situation as tactical include the practice of camouflaging people and vehicles. In making their appearance less visible, they are signalling their status as tactical elements. Conversation is another strategy or resource. Exercise radio traffic can be interrupted with a message preceded by the term "no-duff," to make clear to participants that the message concerns a real, not tactical, situation. This is not to say that mistakes do not occur. Mistakes do occur quite regularly, and are often reacted to with laughter, teasing, or ridicule. During the orders for the heliborne operation discussed above, I recorded the following interaction:

> OC: You want a photo of the bridge, eh? Good idea.
>
> Lt.: 'cause it's a critical choke point, almost.
>
> OC: Okay, so I need you [looks at the corporal photographer] to study this map, 'cause we won't necessarily...we probably won't be on headset so to save us yelling back and forth, have a good look at the map. And for that, you may have to actually lean out and take a shot forward to get a nice angle into the bridge.
>
> PHO: If needs be, maybe I could go down tomorrow, as well, take a truck down, we won't get the same height, but...
>
> OC: How the fuck are you going to drive into the enemy territory? [laughter]
>
> Lt.: Good one, Sir.
>
> Sgt. A: Cheater.

OC: The only photos that you'll be printing are ones that you take out of the helicopter.

PHO: Okay, Sir. [laughter]

OC: Don't be too hard on him. He wasn't at our big scenario brief.

Sgt. B: Play the game, son [laughter]. (Irwin 1996b)

In this case, the young corporal/photographer, who had not been present at the briefing that had spelled out the parameters of the simulation, was not operating in the same frame as the others who were involved in the interaction, and his breach was marked with laughter and ridicule.

One of the more important and more powerful resources used to constitute the situation as real or tactical is the status of the participants themselves as tactical or real. Watson has commented on the roles of the anthropological fieldworker and informant:

> They do not just happen to be fieldworker and informant, they have to make themselves available as such. They have many statuses, and at any particular time, even in the field, it is not necessarily the statuses of fieldworker and informant that are activated. (1992: 21–22)

The same is true of soldiers in the field: they have many statuses, including both real and simulated statuses, and at any particular time, one or the other or even both may be activated. The situation of the company quarter master sergeant (CQ) is a case in point. He is responsible for issuing rations and organizing the feeding of the company when it is deployed in the field. There are several methods of feeding troops. Each depends on such factors as the training aims, the tactical situation, and the availability of "IMPs" (Individual Meal Packs), known to the troops as "hard rations."[4] If IMPs are unavailable, the most common way to feed troops in the field is for the CQ and his staff to transport hot meals from the bivouac kitchen in large thermos containers called hayboxes to the troops in the tactical area. The troops may "stand down" for such haybox meals, during which time the exercise stops. Everyone takes a break and the situation is defined as real. Alternatively, the meal may be defined as a tactical feed, in which case it is often held at night in the dark, quickly, quietly, and with sentries defending the location.

When the CQ delivers a haybox meal to the field, he moves from the real world of the bivouac kitchen across a boundary into the tactical location. He activates both his real status and his tactical status simultaneously. He demonstrates that he is activating his tactical status by camouflaging his face and his vehicle and by carrying a loaded weapon

(with blank ammunition, to be sure; remember this is simulation, not real war). But he is delivering real food, and often has soft drinks and cigarettes available for purchase from the company canteen; hence, he is concurrently activating his real status.

Umpires also have both real and tactical statuses, although their situation is quite different from that of the CQs. In their status as real people, they are charged with deciding the outcome of engagements between the friendly forces and the enemy forces (i.e., the number of men wounded, the number of armoured vehicles destroyed, the number of weapons destroyed, etc.), with debriefing participants on their performance, and with keeping the exercise coordinators informed of the progress of the exercise. In their tactical status they are, quite simply, supposed to be non-existent. Ironically, as mentioned above, this is achieved through heightening their visibility.

When umpires activate their tactical status, they are co-present with, but not interacting with, exercise participants. As soon as an exercise participant (in his tactical status) enters into an interaction with an umpire, or indeed, any person activating a real status, the situation is constituted as a real one. It is next to impossible to sustain the definition of the situation as tactical in the face of an interaction with a real person. There is much power in this construction and much potential for manipulation, as we will see. Sometimes simple mistakes occur, causing a person exercising a tactical status to mistake someone exercising a real status for a tactical one, as is demonstrated in this excerpt from my field notes:

> Interesting mix of play/reality occurs when someone (e.g., the company commander, the second-in-command, or the sergeant major) observes an attack. For instance...there was a mounted platoon attack where A mistook the company commander's carrier (39) and the headquarters carrier (3) for the enemy and missed the enemy which were one bound farther up the trace [one tactical move farther up the map]. The company commander had come on the air earlier and said he wasn't playing. (Irwin 1992a: 95–96)

In this case, the enemy and the non-combatants were not specially marked, but the lead platoon commander should have recognized the commander's and the headquarters' vehicles by their identifying numbers (39 and 3), and should have remembered that they were not "in the game." But he did not; he engaged them with fire (blank, of course), and was subject to a public rebuke over the radio by the company commander.

Therefore, statuses are mobilized to help define the situation as tactical or real. Tactical statuses are activated to create a tactical situation,

and real statuses are activated to create a real situation. Often, however, statuses are mobilized to achieve different ends from what one might expect, and at times, the situation itself is defined in a particular way in order to achieve a particular goal.

It is quite common for individuals attempting to achieve tactical ends to activate a real status, forcing their interactive partners to define the situation as real, rather than tactical, as this example from my field notes illustrates:

> Last night—the aim of Sgt. M's patrol was to find the "enemy" (a platoon from another company) command post and destroy it. In effect, this meant marking it with camouflage paint – doesn't wash off—or throwing a can of footpowder at it—"hand grenade"—the white powder would mark it and be hard to wash off...This morning, just after brushing his teeth, the platoon commander happened to glance over at Sgt. C's carrier (33A) and said, "Oh, fuck." Marked on it in pink chalk was, "Good night from the pioneers" and on the front, "Hey Scotty, Angus was here. Harleys suck, long live Hondas." He shows everyone in the platoon; "Oh, fuck. We'll hear about this." They wash off the chalk as well as possible. Turns out that a couple of pioneers who were buddies of T's showed up, and he let them into the hide and even told them the password and radio frequencies...Lots of talk about the problem of the "enemy" being *somebody you know*. (Irwin 1992a: 139–40)

In this case, the individuals acting in their tactical statuses as the enemy invoked their real statuses as friends of the sentry, who was acting in his tactical status. The imperative for him to produce the situation as a real one was strong. Later, I found out that he had even served them coffee, along with telling them the passwords and radio frequencies in the course of a long, friendly visit and conversation about the progress of the exercise. As they left him, they ceased to invoke their statuses as friends and "sabotaged" the section commander's armored personnel carrier. This scenario is not unusual, but is replayed on many occasions. It is one of the disadvantages of a small scale exercise, where all the participants are known to one other and have mutually known, multiple statuses to activate.

Another way real statuses are used to achieve tactical ends is a product of the paradoxical nature of the invisibility/visibility of the umpires. In this case, individuals acting in their tactical status do not use their own status but, instead, the real status of the umpire to try to predict the course of the exercise, such as in the following incident recorded in my field notes:

> This exercise is really a three-way war—friendly, enemy, umpires. People watch the umpires all the time to try to figure out what's going to happen next. Master Corporal A said last night that if you see lots of umpires around, you know something is going to happen there. But that didn't hold true last night. We were expecting a helibome assault and there were all kinds of umpires around. Nothing happened in the end so we finally got some sleep. Also, he said that I don't have to worry about having my respirator handy until I see the umpires carrying theirs because they know the scenario. In fact, from the chats I've had with the umpires, Lts. A, B, and C, and Sgt. G, it seems that, at least at their level, they don't know very far ahead what's going to happen either. (Irwin 1992b: 145)[5]

In the above case, exercise participants used the umpires' real statuses as resources to attempt to predict the forthcoming tactical situation. We are not concerned here with their motivations, which may indeed involve the real world. They may want to know what is going to happen, so that they can use that information tactically, or they may simply want to predict when they are likely to have the next opportunity to eat or sleep. What is significant for this analysis is not the motivation but, rather, what sorts of ends are achieved—real or exercise.

Not only do soldiers use real statuses (by observing their activation or by activating them) to achieve tactical ends, but they also define situations tactically in order to achieve real ends. When military units are in the field, they use a system of accounting for materiel that is much more lenient with respect to lost or damaged items than the one used in garrison. Many items of stock that are accountable in garrison (and hence must be paid for by the soldier if lost) are considered expendable in the field. It is common practice for CQs to save up reports of lost or damaged stores until after a field exercise, when field accounting takes place. In this instance, they are manipulating the tactical situation in order to achieve the real end of protecting the soldiers from their own negligence.

I have been told that another common practice is to use the field or tactical situation in order to pay back superiors for what are considered abuses. I was told that "anything can happen in the field" and "anyone can be got." The more authentic the simulation is, the higher the risk of accidents, and some of these accidents are "paybacks" rather than actual accidents. This is another example of how soldiers manipulate tactical situations to achieve real ends. Nevertheless, the one strategy that I never witnessed or heard about was misusing the term "no-duff." The reason for this, I believe, is self-evident. If the use of no-

duff were to become subject to manipulation or practical jokes, its use as a safety measure would be compromised, as would the safety of the soldiers themselves.

The distinctions between reality and the simulated world of the war game are an accomplishment of the participants in the exercise. Through their interactions with each other, they make available to one another their interpretations of what the situation should be. Using a variety of resources, including verbal cues like no duff and visual cues like vehicle markings and facial camouflage, they interactively work up a definition of the situation which holds "for now," but which is always subject to revision and reconstitution. Among the most important resources available to them are the statuses to which each participant has access. Different statuses are activated at particular moments, defining the moment as a real one or as an exercise. We have seen how these statuses can be manipulated or interpreted to achieve real or tactical ends.

This paper employed an ethnomethodological perspective to explore some of the complexities surrounding the problems of realism and reality in military exercises. I believe I demonstrated that the frames of the no-duff (or real) world and of the make-believe (or exercise) world cannot be decided once and for all by commanders, planners, or participants; rather, these frames are constantly subject to interpretation and negotiation throughout the course of military exercises. Soldiers use them to interpret behaviour as no-duff or exercise, but they are also adept at manipulating and using these frames as resources to achieve aims which may or may not be those expected by commanders and planners. I also demonstrated that realism is not some objective authenticity that exercise planners aspire to, but a negotiated and contested notion; part of the challenge for leaders in a peacetime army is to ensure that their versions of realism and reality are the ones to which their soldiers are oriented.

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NOTES

1. Here and in the reference list "field recordings" refers to conversations tape recorded with the permission of those present during the course of participant observation fieldwork. "Field notes" refers to notes written up during the course of fieldwork. In both cases, identities of those present have been disguised to ensure anonymity in accordance with the ethical guidelines I followed.
2. The year before my second period of fieldwork with the battalion, one of the soldiers had been killed during a live-fire attack, and the investigation to determine responsibility for the death was reopened during the course of my fieldwork.
3. In the end, we were unable to obtain permission for me to be transported by helicopter, so my participation in this particular exercise was limited to the planning and debriefing phases.
4. These are individually packed meals, easily carried and easily reheated, although they are often eaten cold. They are not pleasant meals, and they are extremely expensive. Thus, they are used only when the exercise scenario dictates "tactical feeding" (when, for instance, the company is practising patrolling rather than platoon attacks).
5. Interestingly enough, several of the soldiers interpreted the fact that I had been specially issued a respirator by the CQ as evidence that we would be exposed to real gas before the end of the exercise. In fact, the CQ had told me that he did not know himself, but wanted to make sure that I would be safe if, indeed, gas was used.

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Of Men and Myths The Use and Abuse of History and the Great War

Holger H. Herwig

> The poor condition of the logical analysis of history is shown by the fact that neither historians, nor methodologists of history, but rather representatives of very unrelated disciplines have conducted the authoritative investigations into this important question.
>
> Max Weber

Weber's comment regarding the "poor condition of the logical analysis of history" refocused my thoughts on my article "Clio Deceived," wherein I posed the question of whether a perverse law operated whereby those events that are most important were hardest to understand because they attracted the greatest attention from mythmakers and charlatans.[1] It also brought to mind John F. Kennedy's commencement address at Yale University on 11 June 1962, wherein he warned that the "great enemy of truth" all too often was the "myth—persistent, persuasive and unrealistic."

I use the term "myth" not in Joseph Campbell's sense, whereby myths are designed to teach us how to search for meaning, to seek the essence of being alive, and to feel the spiritual potentialities of life.[2] Rather, I use the term in its classic Greek sense, in which the myth, for all its inconsistencies and absurdities, represents the learning and wisdom of a society when accepted as truth. It is often a strange composite of primitive historical science and religion. Ancient Greeks and modern Europeans both resorted to mythmaking to serve existing social structures. Thus, as Euripedes used the tale of Theseus to restore a faltering Athenian democracy, Germans after 1918 used the myths of "war-guilt" and "stab-in-the-back" to restore a lost imperial order. But universal acceptance of myths as accepted truth is not, in most cases, the ultimate result. To make this point I have selected five instances for analysis of what I consider to have been "historical pollution" and "mythmaking."

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Finally, I decided to concentrate on the mythmaking—and the misdeeds—of Germany and Austria for several reasons. First, these are the states that I have studied for the past thirty years, and thus they are the ones with which I am most familiar. Second, while all major participants in the Great War early on presented "colour books" containing carefully selected diplomatic documents, and while all states offered up their own versions of mythologized battle experience, the relative degree and virulence of mendacity manifested by mythmakers in Berlin and Vienna stands in marked contrast to the more benign efforts of Paris and London to fudge the historical record. Thus, I have included the story of the French "bayonet trench" at Verdun as a counterpoint. Third, mythmakers, especially in Germany but also in Austria, had more immediate reason to re-forge their histories than did the allies. Their efforts were part and parcel of a national campaign of "patriotic self-censorship" designed to counter the allies' charges in the Treaty of Versailles of sole war guilt and the attendant issue of reparations. At stake were lands "lost" to Belgium, Czechoslovakia, Denmark, France, and Poland; and colonies surrendered first and foremost to Great Britain. Finally, I selected especially the German case to highlight the role—ranging from pollution of the historical record to official denial to publishing; from falsification of documents to government barring of lecture trips—that Clio's muses played in denying nonconformist scholars access to the public debate. For it was nothing short of a tragedy, in Hermann Hesse's words of 1930, that "90 or 100 prominent men" conspired "to deceive the [German] people on this vital question of national interest."[3]

WAR GUILT AND WAR DENIAL: JULY 1914

German war guilt was laid down in the Treaty of Versailles in June 1919. Under Article 231, Germany accepted "responsibility...for causing all the loss and damage...of the war" since the conflict had been brought about solely "by the aggression of Germany and her allies." Article 232 stated that Germany "will make compensation for all damage done" to allied populations and property, including the "complete restoration" of major areas of combat.[4] These charges set off a tortuous and at times devious historical investigation that has intrigued scholars to this day. Character assassinations, denials of career and research opportunities, and falsification and destruction of evidence are its hallmarks. For the Great War, as Modris Eksteins put it in this volume, was a "war about the gist of history."

As early as 3 August 1914, the day before the "war of Austrian succession" officially began, Berlin published its account of the origins of the war in the *Deutsches Weissbuch*.[5] The Foreign Office's colour book was the product of a hasty sifting of its archives; half of the thirty documents were blatant forgeries. Nevertheless, it was the starting

point of the war guilt debate. Thereafter, Legation Secretary Bernhard Wilhelm von Bülow, political archivist at the Wilhelmstrasse, undertook a careful "ordering" of the documentary record concerning July 1914. The sensational publication of materials pertaining to the outbreak of the war by the socialists Kurt Eisner and Karl Kautsky only hastened Bülow's reordering of the files, which he completed in May 1919 by way of a special card index of seven thousand documents. Bülow divided his documents into two major groups: "defense" and "offense."[6]

By 1920 the Wilhelmstrasse had created a special War Guilt Section, whose job was threefold: to "order" and "cleanse" the Foreign Office's records with regard to the origins of the war; to produce a massive documentary publication for the period 1871 to 1914 to show Germany's peaceful policies; and to subsidize scholars, both at home and abroad, who were willing to tout the official German line for July 1914.

The first task was perhaps the easiest. Researchers in the Foreign Office Archives in Berlin today will not find a single document pertaining either to German deliberations or to Austro-German discussions at Potsdam on July 5–6, where Reich leaders issued Vienna the famous "blank check." Nor will they discover Berlin's reaction to Vienna's ultimatum to Serbia; nor any notes of German discussions with the representatives of foreign powers during the month of July; nor any record of the Kaiser's talks with military or diplomatic leaders that July; nor any trace of telephone calls, telegraphs, or verbal communications.[7] The Willielmstrasse quietly gave all potentially incriminating materials back to such people as Chancellor Theobald von Bethmann Hollweg and Foreign Secretary Gottlieb von Jagow as "private" papers. Most of this material disappeared in the 1920s and 1930s with the help of willing "patriotic censors."

The second task was also completed successfully. Between 1922 and 1927, the Foreign Office, through a committee of private scholars, published the forty-volume series *Die Grosse Politik der Europäischen Kabinette 1871–1914*, which, in the words of one historian, "established an early dependence of all students of prewar diplomacy on German records."[8] Few non-German scholars appreciated that this seemingly complete publication was badly flawed: potentially incriminating documents were omitted or shortened or severely edited; a few were prejudicially falsified.

Perhaps most interesting, the Wilhelmstrasse used a number of prominent American historians to put its case before the scholarly community. Harvard historian Sidney B. Fay's sympathetic, two-volume *The Origins of the World War* was translated into German and French and distributed by the Foreign Office at taxpayers' expense, and its author

was wined and dined by Berlin.[9] Similarly, Harry E. Barnes of Smith College was singled out for support as his writings upheld the German position.[10] Barnes' works were translated into German and French and distributed for free, and Barnes toured Berlin as a government guest no fewer than three times in 1926 alone. By contrast, Bernadotte Schmitt's critical *The Coming of the War, 1914* was never translated into German, and Berlin in 1928 rejected a suggestion by its consul at Chicago that Schmitt tour Germany.[11] The Wilhelmstrasse declined to have what it termed this "incorrigible" historian spread his message within the Reich.[12]

Other incorrigible historians fared no better. To research the legal questions surrounding the origins of the war, the Reichstag's First Committee of Enquiry had turned to the eminent Freiburg jurist Hermann Kantorowicz. The latter finished his work in 1923, completed minor textual revisions two years later, and sent corrected galleys to press in 1927. The book appeared in 1967—as a private manuscript.[13] What had delayed publication for four decades?

Kantorowicz concluded after his careful study of extant documents that responsibility for the war lay largely with the Central Powers: with Austria-Hungary for the way it had exploited the Sarajevo murders to launch a war with Serbia, regardless of its ramifications; and with Germany for supporting Vienna to the hilt and for rejecting all subsequent peace feelers from Britain and Russia. Jew, Democrat, Republican, and anglophile, Kantorowicz experienced the full wrath of officialdom. In 1927 Foreign Minister Gustav Stresemann vetoed Kantorowicz's appointment to a chair at Kiel University. Next, Stresemann denied Kantorowicz private publication of his findings. Then the Finance Office withdrew the 40,000 to 50,000 RM promised to Kantorowicz as a subsidy for the official publication. Final degradation came in 1933 when Kantorowicz was one of the first German professors fired from academia by the Nazis, his writings burned publicly for being anti-German.[14]

Nor was Kantorowicz's case an isolated one. In 1932 Germany's conservative historians denied the young radical scholar Eckart Kehr the Rockefeller Fellowship that Charles A. Beard had helped him secure for study in the United States. As recently as 1964, West German Foreign Minister Gerhard Schröder, acting on the advice of senior conservative historians, rescinded Goethe Institute travel funds awarded to Fritz Fischer for a planned lecture tour in the United States—a tour that the doyen of German historians, Gerhard Ritter, compared to a "national tragedy."[15]

Last but not least, this official censorship was paralleled by an equally effective and insidious unofficial campaign to keep memoirs and diaries from coming to light. The argument of postmodernists notwithstanding, historical scholarship, at its best, comes down to the use of evidence; at its

worst, to the abuse of evidence. We may disagree about the interpretation and weighting of documents, the motivation of major actors, the precise timing of critical decisions, and the mindset of statesmen and soldiers at precise points in their careers; but we should never agree to falsify or pollute the historical record, much less to destroy it.

In Germany the critical papers of leading figures were systematically "cleansed" (destroyed) by self-appointed "patriotic censors." A few examples will make the point. In 1919, General Helmuth von Moltke's widow, Eliza, sought to publish the general's papers dealing with the outbreak of the war. She was cautioned against this by a former Prussian general, a Prussian diplomat, and "certain [other] persons," with the result that the memoirs that appeared in 1922 were virtually devoid of information on the July crisis. Moreover, Moltke's papers were so neatly cleansed by the general's eldest son, Wilhelm, that, in the words of the historian John Röhl, "they contain not a single document worth reading from the pre-War period."[16]

Much the same apparently applies to the papers of Field Marshal Paul von Hindenburg, which are still held by his grandson Hubertus, and which were cleansed in the 1960s by the nationalist historian, Walther Hubatsch. Hindenburg's published memoirs for the years 1911 to 1934 were, in fact, written by Colonel Hermann Mertz von Quirnheim of the Potsdam Reichsarchiv.[17] General Erich Ludendorff's papers likewise are still held by his son-in-law, Franz Karg von Bebenburg, who has stated that they no longer contain any materials relevant to the Great War.[18] One can only guess at the "patriotic censor" in this instance.

Even when important collections were not destroyed—despite the wishes of their authors—controversy surrounds their handling and originality. A case in point is the papers of Kurt Riezler, Bethmann Hollweg's senior adviser in July 1914. As late as the 1950s the conservative historian Hans Rothfels, a fugitive from Nazi Germany, advised Riezler against publication for fear that it would reopen the debate concerning the origins of the Great War. After Riezler's death in 1965, his brother destroyed a substantial part of the papers. When Riezler's sister, Mary White, eventually consented to their publication, the job was handed to an archconservative historian, Karl Dietrich Erdmann, who carefully "ordered" the papers once more—and then had them locked up for eight years in the Federal Archive at Koblenz. In the process, the critical notes for the period from 7 July through 14 August 1914, were edited and re-edited so many times that their authenticity has been questioned.[19] Historical evidence has been so profusely and purposefully polluted by patriotic censors from the 1920s to the 1960s that we have every right to question the legitimacy of segments of the German historical profession.

MOBILIZATION 1914: THE GREAT AUSTRO-HUNGARIAN "CONSPIRACY"

Franz Conrad von Hötzendorf, the Austro-Hungarian chief of the General Staff in 1914, has enjoyed widespread veneration in both the professional and popular press. Austrian writers—ranging from such military historians as Rudolf Kiszling, Edmund Glaise von Horstenau, and August von Urbanski, to publicists such as Karl Friedrich Nowak and Oskar Regele—have championed Conrad as their country's greatest military leader since Prince Eugene of Savoy. Cyril Falls, an English military historian, has claimed that Conrad was the "best strategist at the outset, probably of the war."[20] A French scholar, Marc Ferro, deemed Conrad the "best strategist among the Central Powers."[21] Conrad certainly agreed with such verdicts in his five-volume memoirs, stating that the 1914 mobilization against Serbia and Russia "proceeded smoothly"[22] and blaming failures in the field either on the unco-operative German ally or on incompetent subordinates. Papers that might have shown Conrad at fault were "ordered" by Viennese military archivists and historians.[23]

With regard to the mobilization of July–August 1914, the prevailing view of the past seventy years has been that Conrad was caught on the horns of a geographic/strategic dilemma—whether to concentrate first against Russia or Serbia—and that he handled it about as well as could be expected. In fact, Conrad "solved" the mobilization dilemma by sending the bulk of his army south against Serbia to deal it a quick, mortal blow, banking on the anticipated snail's pace of Russian mobilization to buy time for the expected clash in southern Poland. But when Russia mobilized much faster than planners in Vienna had believed (or hoped?) possible, Conrad turned for succor to Major Emil Ratzenhofer and Colonel Johann Straub of the Railroad Bureaus in the General Staff and the War Ministry. Thus, on Ratzenhofer's advice, Habsburg forces continued their travels to Serbia, disembarked, re-embarked, and finally headed for Galicia. In Winston Churchill's inimitable words, they left General Oskar Potiorek in Serbia before they could "win him a victory," and they returned to Conrad "in time to participate in his defeat."[24] Almost all writers from 1914 to Norman Stone's *The Eastern Front* in 1975 have stressed that Conrad's situation was hopeless and that he did the best that could have been expected.

In truth, Conrad failed to adhere to the sound plan that he had developed before 1914: to send the greater part of his forces (*A-Staffel*) to Galicia, to hurl a smaller body of two armies (*Minimal Gruppe Balkan*) against Serbia, and to maintain twelve divisions (*B-Staffel*) as a strategic reserve, to be deployed in the decisive theater at the decisive moment. Instead of holding back his strategic reserve and watching Russian and Serbian mobilization unfold, Conrad, for political and psychological reasons, immediately dispatched *B-Staffel* to Serbia, where it was to deploy

by 10 August. "Dog Serbia," in Conrad's view, had to be crushed at all costs; nothing less than the survival of the Empire depended on this. No amount of warnings about the speed of the Russian buildup in Galicia—from Conrad's former military attaché to Russia, the Foreign Ministry at the Ballhausplatz, the German military, or Kaiser Wilhelm II—could deter Conrad from his Serbian obsession.

Ratzenhofer and Straub before the war had planned mobilization for war against Russia (War Case R) and Serbia (War Case B) separately and independently of each other, and they had failed to prepare a mutual War Case R + B. Thus there existed in Vienna in 1914 no contingency plans for deployment against Serbia, followed by redeployment against Russia—the most likely scenario in any war. Caught off guard by the quick Russian mobilization and without a plan to deal with it, Ratzenhofer and Straub adamantly insisted Conrad continue deployment against Serbia. Any change in plans, they argued, would throw all existing preparations into "chaos." Even when it became clear that Russian troops were deploying in southern Poland by 6 August, Conrad ordered *B-Staffel* to continue to Serbia to undertake a military "demonstration" along the Save-Danube line.

Conrad's bungled mobilization resulted in 230,000 men being killed and wounded in the Balkans, and 250,000 being killed and wounded (as well as 100,000 taken prisoner) in Galicia. At the height of the Battle of Lemberg between August 28 and 30, *B-Staffel* (now reconstituted as the Second Army) still lacked its IV and VII Corps, which were secure in trains en route from Serbia to Poland. But the world never learned the truth about the Austro-Hungarian mobilization, which Conrad hid even from the German ally. Instead, Conrad sought to cover his ineptitude by launching vitriolic denunciations of Berlin for its alleged failure to send major forces to the Eastern Front immediately after the outbreak of war.

What quickly became the "official" picture of a heroic Conrad beset by unsolvable strategic dilemmas was cast in stone after 1918 as former officers rallied around Conrad and the k.u.k. Army. Nothing less than their survival was at stake: the Law of Exclusion of 19 December 1918 denied officers with the rank of major or higher rights in the new republic.[25] Public criticism of Conrad became anathema for these officers, as it would tarnish the glory of the venerable Imperial and Royal Army. And since they enjoyed a monopoly on access to military archives thanks to the archivists Glaise von Horstenau and Kiszling, these official apologists dominated the writing of Habsburg military history on the Great War.

Specifically, Major Ratzenhofer, the architect of the mobilization debacle of August 1914, wrote the story of the Habsburg *Aufmarsch* in the first volume of the official history, *Österreich-Ungarns Letzter Krieg, 1914–1918*. Published in 1929, Ratzenhofer's apologia was so marred by factual errors that the volume had to be recalled. When rewritten and re-

released in 1931, it turned out that Ratzenhofer yet again had penned the vital section on mobilization! Seventeen members of the erstwhile k.u.k. Army wrote the official history—the only case in which an official history of the Great War was written exclusively by former officers.[26] Moreover, two of Conrad's hagiographers, Kiszling and Glaise von Horstenau, controlled the preparation of all the volumes of *Österreich-Ungarns Letzter Krieg*, down to the last one, published in 1938. Thus, they reinforced the "Conrad legend" and suppressed evidence that might have cast Conrad in an unfavourable light.

In the interwar years, these one-time Habsburg officers dedicated themselves to spreading the mobilization myth. Ratzenhofer served as editor of the most prominent Austrian military history journal, *Militärwissenschaftliche Mitteilungen*, wherein he maintained strict orthodoxy regarding the "official" view of the 1914 mobilization. Kiszling, after consulting with the German Reichsarchiv, produced a series of books on the Dual Monarchy's major battles and campaigns in Russia between 1914 and 1918; here also Kiszling used his powerful position to whitewash Conrad's 1914 mobilization. More: by publishing numerous articles in the *Berliner Monatshefte*, Kiszling spread his view of Conrad and mobilization to a larger German readership. Kiszling never deviated from his apologia in the countless articles, chapters, and books that he wrote between 1922 and 1984.[27] As chief administrator of the Vienna War Archive from 1939 to 1945, Kiszling held a position of power from which he controlled the research and writing of Austrian military history; as well, he staffed the archive with loyal supporters. We will never know how many potentially incriminating documents Kiszling and his minions cleansed or ordered.

Still, the real story of Austro-Hungarian mobilization could not be suppressed forever. In 1993 the world finally received a detailed research book on Habsburg mobilization that debunked the Ratzenhofer-Straub-Kiszling-Glaise von Horstenau "official" mythology. In Jack Tunstall's words, Conrad's mobilization blunder was a classic case of "cognitive dissonance": a blind faith in a quick victory over Serbia in time to meet the Russian threat in Poland with full force, one that was contrary to all available evidence.[28] This academic "conspiracy" served neither the Austrian Republic nor historical investigation.

TANNENBERG: REALITY AND MYTH

East Prussia in 1914 was a most unlikely place for creating myths and heroes. A maze of irregular hills covered with brush and trees, a low terrain that alternated between barren stretches of sandy soil and bogs and lakes, Germany's easternmost province had been designated a holding area under the Schlieffen plan. Six infantry divisions and one cavalry division were to stem the onslaught of the Russian "steamroller"—two armies

consisting of nineteen infantry and seven cavalry divisions supported by rifle and artillery brigades. After a series of inconclusive clashes in and around Gumbinnen, General von Moltke cashiered the commander of his Eighth Army, General Max von Prittwitz und Gaffron—the first time in modern German military history that an army commander was relieved of command in this manner. Although few could have suspected it, Moltke therewith set the stage for the most renowned military partnership in German history.

At 4 A.M. on 23 August 1914, a special military train pulled into the station at Hanover. On board was a brilliant but eccentric staff officer, General Erich Ludendorff, who had recently received the coveted *Pour le mérite* (Germany's most prestigious military decoration) for storming the Belgian belt fortresses at Liège. On the platform, dressed in Prussian blue, stood the stout and imperturbable General Paul von Hindenburg. Kaiser Wilhelm II was pleased with neither choice: he regarded Hindenburg as not just simple but simpleminded as well, and Ludendorff as a technician and careerist lacking in social graces. As the train rolled eastward, Ludendorff briefed Hindenburg on the situation in East Prussia. "Before long," Hindenburg later wrote, "we were at one in our view of the situation."[29] The two generals quickly agreed that it was of paramount military, political, and psychological importance to keep the Eighth Army east of the Vistula River, and not to execute a retreat into West Prussia. Then both soldiers went to bed.

Unbeknown to Hindenburg and Ludendorff, Prittwitz's First General Staff Officer, Lieutenant-Colonel Max Hoffmann, had already given orders for German forces to halt their retreat in the north before General P.K. Rennenkampf's First Army, and to concentrate against General A.V. Samsonov's Second Army in the south. Upon arriving at Eighth Army headquarters on 24 August, Hindenburg and Ludendorff approved Hoffmann's dispositions. Although outnumbered 485,000 to 173,000 in East Prussia, the triumvirate at Marienburg quickly agreed that their only chance lay in a bold gamble: to concentrate first against Samsonov below the Masurian Lakes and then to force-march all available troops north against the phlegmatic Rennenkampf.

And therewith the first Tannenberg legend came into being. Hoffmann, writing his memoirs after the event and bitter at having been bypassed for senior command, told a fascinating account of a blood feud that he had witnessed as a military observer during the Russo-Japanese War. At the railway station in Mukden, Captain Hoffmann had seen how two Russian officers, A.V. Samsonov and P.K. Rennenkampf, had blamed each other for the Russian debacle, had hurled epithets at each other, had rolled on the ground in front of their troops, and had vowed never to aid one another, come what may.[30] In August 1914, remembering the

incident, Hoffmann claimed that he devised the plans for Eighth Army to concentrate against each of the two Russian commanders, secure in the knowledge that neither Samsonov nor Rennenkampf would come to the aid of the other. Thus was the campaign in East Prussia won on the dusty plains of Mukden.

The incident vividly expressed what every Western observer believed of the prewar Imperial Russian Army: that it was structurally inefficient and staffed with incompetent court favorites. Surely it was not inconceivable that Tsar Nicholas II and his stable of sycophants at military headquarters were quite willing to entrust a campaign that depended on close co-operation for its success to two commanders who hated each other. The legend was born—and it persists to the present day.[31]

But the incident never occurred. Rennenkampf was, in fact, in the hospital being treated for a battlefield wound at the time of the alleged scuffle with Samsonov. He would have required the services of several litter-bearers to have reached the railway station.[32] And while Hoffmann had indeed been in the Far East in 1905, he had been attached not to the Russian but rather to the Japanese army as a military attaché.

Thisnotwithstanding,Hindenburg/LudendorffacceptedHoffmann's plan to concentrate first against Samsonov below the Masurian Lakes, which divided East Prussia into northern and southern theaters of operations; a single cavalry division stood between Rennenkampf and the Vistula. There was no talk that day of a new Cannae, only of a chance to strike the Russian Second Army in the flanks. At dawn on 27 August, I Corps unleashed a hurricane bombardment against Samsonov's left wing, which fled the battlefield, thereby exposing Second Army's center. On 28 August, after a failed attack by Samsonov's center, the Germans charged both flanks of the Second Army. A rout ensued. Only 2,000 Russian soldiers escaped the deadly German ring; 50,000 died or were wounded, and 92,000 surrendered. Samsonov committed suicide at Pivnitz, near Willenberg.[33]

The second Tannenberg legend was about to unfold. At 5:30 P.M. on 28 August, Ludendorff began to draft his report of the battle with the words "Frögenau—leave the exact time open." Thus Ludendorff accurately gave the village of Frögenau as the site of the battle. Hoffmann quickly realized that this would not do, and persuaded Ludendorff to "transfer" the victory to another nearby village, Tannenberg. There, on 15 July 1410, as every German schoolboy knew, a Polish-Lithuanian force had dealt the Teutonic Knights a crushing defeat, ending Germanic eastward expansion. Ludendorff readily concurred with Hoffmann, and thus the legend of the Teutonic Knights helped establish the legend of the Battle of Tannenberg.

The official German history of the war, *Der Weltkrieg 1914 bis 1918*, in the mid-1920s embellished Tannenberg with revelations about a Russian reign of terror in August and September 1914. Entire villages—Domnau, Abschwangen, Ortelsburg, Bartenstein, among others—had been burned to the ground. Women and girls had been systematically raped. About 100,000 draft-eligible men had been hauled eastward as "hostages." Bridges and rail centers, factories and communications facilities had been destroyed. Overall, the Reichsarchiv's military historians set German losses due to Russian pillage and plunder at 1,620 civilians, 17,000 buildings, 135,000 horses, 200,000 pigs, and 250,000 cows.[34] In the absence of accurate Russian records it is impossible to verify or debunk the German claims. But there is no question that the Russian "reign of terror" in East Prussia in 1914 was remembered well by another invading German army in 1941.

The reality of Tannenberg quickly became the myth of Tannenberg. Hindenburg, awarded the *Pour le mérite* for the battle, became the Great War's first hero. His picture adorned newspapers and walls throughout Germany. Barbers copied his now famous muttonchops. War loans were sold by allowing subscribers to drive nails into his wooden statue in Berlin. The Imperial Navy christened a battle-cruiser in his honor. Silesia renamed the industrial town of Zabrze for the "savior of the fatherland." The official history of the war touted Tannenberg as the "greatest battle of encirclement in world history" after Leipzig (1813), Metz, and Sedan (1870). Even Cannae paled in comparison.[35]

Every legend needs its commemorative shrine. German veterans' associations after the war raised funds for a fitting monument. Architects Johannes and Walter Krüger, taking Stonehenge as their model, designed a great stone memorial by blending "myth and acoustics." Eight large towers were linked by a massive wall; each served a specific function, such as chapel, battle-flag hall, youth hostel, and the like. Mass graves attested to the titanic "clash of empires" that had taken place at Tannenberg in 1914. The "sacred space" inside the towers and wall formed a circle large enough to hold 10,000 people. Nordic imagery thus gave reality to the Tannenberg legend.[36] Schoolchildren undertook pilgrimages to the shrine. In 1935, Adolf Hitler buried Hindenburg in the Tannenberg memorial with full military honours. In 1945, German engineers destroyed the monument rather than have it fall into Russian (later Polish) hands.

VERDUN 1916: OBFUSCATION BY MYTHS AND NUMBERS

Verdun. The word still conjures up images of almost incomprehensible carnage. Legends concerning "heaps of dead" and "streams of blood" dominate virtually all accounts. Cyril Falls termed Verdun "assuredly one of the most hellish of conflicts...still one of the most famous of the

war."[37] Basil Liddell Hart informed his readers that "no battle of the whole war was more heroic or more dramatic in its course."[38] A.J.P. Taylor acerbically asserted that "Verdun was the most senseless episode in a war not distinguished for sense anywhere."[39] Marc Ferro assured us that it "gripped the imagination" and that its veterans "were lauded" in every land.[40] The list of German combatants includes the legendary air aces Manfred Baron von Richthofen and Oswald Boelcke, the future tank master Heinz Guderian, the novelist Arnold Zweig, and two eventual leaders of the Nazi party, Rudolf Hess and Ernst Röhm.

It seems almost perverse to apply the terms "myths" and "legends" to a bloody encounter that quickly became a symbol of the monotonous mass murder of the First World War. I do not for a moment intend to belittle the hell of the Meuse "meat grinder" of 1916. Both sides hurled 10 million artillery shells, or about 1.35 million tons of steel, at each other between February and December. The German Fifth Army alone in a single day expended 17.5 railway wagons of shells. Hill 304 in three months became Hill 297 as seven meters of earth were blasted off its crown. Phosgene, a novel asphyxiating gas, was first used at Verdun. Flame-throwers gave a special "face"—not to mention smell—to the battle in the subterranean caverns of forts Vaux and Douaumont.[41] Steel helmets changed the very appearance of what Ernst Jünger called the new "workers of war."

The battlefield was a hellish nightmare of sounds and sights. In what Mary R. Habeck calls the "view from below" (in chap. 4 of this volume), the men of 1914–18 quickly learned what a double-edged sword the new technology of war had become. Soldiers caught in the barbed wire or hit by shrapnel lay screaming for hours in no-man's-land before overworked medics could reach them. Many bled to death. Horses suffered in the mud and the sleet and snow of early 1916, easy prey for both artillery and snipers. Many combatants retained images of horses with belly wounds still kicking their legs in deep shell holes five and six days after being shot. The lunar craters, which a French aviator compared to the "humid skin of a monstrous toad," turned gray and brown as men and beasts filled them. The fields soon reeked of decaying human flesh. Rats ate well and often. Lime chloride was dumped between the stacked bodies of the dead to aid decomposition. Even the soil was unclean: cultivated and fertilized for centuries by the excreta of animals, it was laden with pathogenic bacteria that led to horrendous rates of infection and amputation through deadly gas gangrene. Wound mortality ran as high as 40 per cent.

No, the myths and legends of Verdun pertain to what was made of the battle, both then and later, by combatants as well as by journalists and scholars. For there can be no denying that "Verdun" took on a meaning of its own, quite beyond what took place there in 1916. Germany's Great

Captains of the Second World War, for example, never lost sight of Verdun's mythical significance. In July 1944, when the German military commander in France, General Carl-Heinrich von Stülpnagel, was implicated in the attempted assassination of Hitler, he returned to his old post at Verdun, where he had served as captain in 1916, and tried to commit suicide. As late as 1966, Charles De Gaulle, also a captain at Verdun, could still not bring himself to invite either Germans or Americans to the fiftieth anniversary commemorations at this national shrine for fear of polluting its sacred soil with a foreign presence.[42] It remained for French President François Mitterrand and German Chancellor Helmuth Kohl to break the taboo two decades later.

Almost immediately Verdun became enshrouded in myths. The French dubbed it a "sacred city." Field Marshal von Hindenburg spoke of it as a "beacon light of German valor."[43] The *mentalité* that is Verdun was consecrated in the Treaty of Versailles, signed in June 1919 in the Hall of Mirrors at Louis XIV's shrine of conspicuous self-veneration at the same table at which Otto von Bismarck had proclaimed the German Empire in January 1871. It stipulated that French graves were to be individual and sited in villages and towns, whereas German graves were to be massed and placed in remote areas; that crosses on French graves were to be white (signifying purity), while German crosses were to be black (for shame).[44]

Casualty figures for Verdun likewise became legendary. When I toured the battlefield with my children on the cold, bleak, and dreary 4 July 1992, the guide solemnly informed us that one million men had died (!) there in the spring, summer, and fall of 1916. When we visited the ossuary, pointedly inscribed *"pour la France"*; we were assured that behind its glass panes alone rested the bones of 250,000 *poilus*. Nor can historians agree on the butcher's bill: Ferro claims 350,000 French casualties; Taylor, 315,000 French losses; Alistair Horne, 350,000 men per side; and James L. Stokesbury would have us believe that 89,000 French *poilus* and 82,000 German *Landser* died on Dead Man Hill alone.[45] In truth, the German Fifth Army, which fought the Battle of Verdun, reported 81,668 men either killed or missing at Verdun between February and September 1916.[46]

The mythology of Verdun sufficed to give coin to the most outrageous actions. In 1916, in the best tradition of *opéra-bouffe*, the Prussian Army awarded the *Pour le mérite* to Lieutenant Cordt von Brandis, commander of 8 Company of the 24th Brandenburg Regiment—not for storming Fort Douaumont, in which he had only a tertiary role, but for telephoning the news of its fall to staff headquarters.[47] The truth concerning the storming of Fort Douaumont is shrouded by layers and layers of claims and counterclaims, memoirs and memoir "corrections," to the point that it is almost impossible to sort fact from fiction. According to one account, the fort was entered first by a Sergeant Kunze and ten men of the Pioneers.

More likely that honour fell to Reserve Lieutenant Eugen Radtke of 6 Company, followed by Captain Hans Joachim Haupt, commander of 7 Company. Brandis merely followed their tracks through the snow into the world's greatest bastion, which had fallen to the Germans without a shot being fired. As Haupt secured the fort against a possible French attempt to retake it, he instructed Brandis to pass news of the fort's capture to Battalion Headquarters; from there, Brandis received permission to put Regimental Headquarters in the picture as well.

News of this incredible *coup de main* immediately landed on the desk of the Prussian crown prince, commander-in-chief of the Fifth Army. Prince Wilhelm seized the moment: Brandis and Haupt, both regular officers, were awarded the *Pour le mérite*; Radtke and the enigmatic Kunze, one a reserve officer and the other a noncommissioned officer, received nothing. Brandis' noble ancestry undoubtedly advanced his cause with the crown prince. Schoolchildren received a day off, and church bells pealed to celebrate Douaumont's fall. After the war a Prussian village was renamed in Brandis' honour. Mythmaking and class bias had combined in the person of Cordt von Brandis, who took full advantage of the opportunity to embellish his claim to sole credit for the storming of Douaumont—"He who conquers the bride also gets to lead her home"[48]—both then and after the war.

As a counterpoint to the deliberate German and Austrian efforts at mythmaking, the French managed to stumble onto another myth: *la tranchée des baïonettes*. Visitors to the battlefield today are led to a squat gray concrete bunker, barely six feet high and replete with twisted and rusted bayonets sticking out of the ground, allegedly still clutched by French soldiers from 3 Company of the 137th Infantry Regiment from the Vendée, who had defended the sacred ground to their last breath. Cameras click. Video cameras roll. Visitors stand in awe. But, as the French journalist Jean Norton Cru first exposed in 1930 and as the German radio journalist German Werth reiterated in 1979, the *tranchée* was the creation of an eccentric American millionaire, a "benefactor" who decided to create a macabre shrine for effect.[49] The truth is that two companies, French 21st Division, had surrendered to a Bavarian unit and dropped their rifles on this spot on 12 June 1916. Did some of the French soldiers die on the spot, still clutching their bayonet-tipped rifles? Had some (surely not all) been buried alive by the German artillery bombardment of June 10? Had the Germans found the dead French soldiers, hastily shoveled dirt over them, and used their rifles in the absence of crosses? Or had it been a combination of all of these possibilities? The French chaplain of the ossuary willingly informs knowledgeable visitors that he finds it harder each year to replace the rusted bayonets! The power of the myth remains supreme: the saga of the *tranchée*, replete with its contradictory and fragmentary evidence, is kept alive in France through children's comic strips.

Even the distribution of medals for valour on the field of battle escalated beyond comprehension during and after Verdun. Germany awarded no fewer than 5.9 million Iron Crosses between 1914 and 1924. Staff officers at Verdun routinely joked that one could escape this decoration only by committing suicide.[50] Morale and the "poor bloody infantry," to use Leonard Smith's analogy (chap. 5 of this volume), were fused in part by this lavish outpouring ("algebraic variable") of national souvenirs.

German military writers in the interwar period struggled to create a final myth: that Verdun had not been a military defeat but rather the apex of a kind of modern technological warfare that rendered meaningless traditional concepts of victory and defeat. And the mythology of Verdun continued well into the Second World War. In November 1942, Adolf Hitler, a veteran of the Western Front, assured the Nazi Old Guard at Munich on the anniversary of the "beer-hall putsch" of 1923 that Stalingrad, then raging at its climactic height, would never become a "second Verdun."[51] The remnants of the German Sixth Army, 93,000 men, surrendered to the Soviets two months later.

DOLCHSTOSS: THE GRANDDADDY OF MYTHS

On 18 November 1919, Field Marshal von Hindenburg strolled to the Reichstag in Berlin, ostensibly to "testify" on the technical issue of the timing of unrestricted submarine warfare in 1916–17. Instead, Hindenburg, ably stage-managed by the Conservative Party leader Karl Helfferich and his former quartermaster-general Ludendorff, turned his "testimony" into a triumphant farce. Escorted by an honour guard, the "wooden titan" took his place in a witness box adorned with chrysanthemums tied with ribbons of the imperial colours of black, white, and red. Resolutely ignoring the Committee of Enquiry's specific questions on the timing of the U-boat campaign, Hindenburg instead read a prepared statement. Under oath he swore that neither the Kaiser, his government, nor the general staff had wanted war in 1914; and that, as verified by no less an authority than a "British general," the German Army "was stabbed in the back" by the home front in 1918.[52] A stunned committee was barely able to cross-examine the "witness."

While the term "stabbed in the back" had been in circulation among soldiers and statesmen well before the end of the Great War, Hindenburg's "testimony" gave official birth to the *Dolchstosslegende*. From that point on, the alleged "November criminals"—Jews, Marxists, and pacifists—were equated in the public's mind with defeat and revolution. A year later Hindenburg repeated the charge of domestic treason in his memoirs—written, as stated earlier, by Colonel Mertz von Quirnheim—with reference to the ancient Germanic Nibelungen saga. "Like Siegfried,

stricken down by the treacherous spear of savage Hagen, our weary front collapsed."[53] Five years before Hitler set down on paper his notion of the "big lie," Hindenburg had already demonstrated its effectiveness.[54]

And yet Hindenburg could hardly have been further from the truth, as he well knew, for the German army was badly beaten by August 1918. In four years of bitter warfare, the Reich had enormous casualties—1.8 million men killed, 4.2 million wounded (including 1.1 million invalids), and 618,000 prisoners of war. The process of demoralization and decimation within its ranks had escalated, especially in the summer of 1918. According to General Hermann von Kuhl, the German army had lost about one million men during Operation Michael from March to July; concurrently, U.S. Army forces in France increased by one million men. Moreover, 420,000 more Germans were killed and wounded, and 340,000 were missing and taken prisoner between mid-July and the Armistice of 11 November 1918.

Anglo-Saxon scholars often overlook that German battalions, divisions, and corps were mere skeletons by 1918. One corps within the Second Army, for example, was down to 2,683 combatants and 2,000 reserves—against a normal strength of about 40,000 men. More than one-third of the divisions in army groups Crown Prince Rupprecht of Bavaria and Crown Prince Wilhelm of Germany were down to 600 men— as compared to full strength of about 15,000. Many units experienced 20 per cent loss of personnel whenever front- and rear-echelon troops were exchanged. Desertions had reached epidemic proportions: the official history placed their number as high as one million in the late months of the war.[55] In truth, the German army had been decisively beaten at the latest by July 19, when General Ferdinand Foch counterattacked at Château Thierry—and not stabbed in the back by the equally suffering and demoralized home front.

But this military defeat had not been reported to the German people under cover of military censorship, which helps account for the success of the stab-in-the-back legend. One minute German troops stood victorious on the soil of France and Belgium, Russia, and Romania; the next minute they allegedly collapsed and sued for peace at any price. How could this be? The *Dolchstosslegende* provided a powerful and convenient explanation, one that was widely and readily accepted, especially by the German middle classes, denied political direction and threatened with social and economic chaos by the collapse of the Hohenzollern Monarchy and the outbreak of revolutions throughout Germany.

"Proof" was piled on top of "proof." General Hans von Seeckt, the future "father" of the Reichswehr, had ruminated as early as the political crisis of July 1917 on Chancellor von Bethmann Hollweg's alleged

"weakness" in directing the war effort. "Why do we bother going on fighting?" Seeckt mused. "The home front has stabbed us in the back and therewith the war is lost."[56] General Ludendorff, about to flee Germany (and thus responsibility for the military defeat), on 29 September 1918 maliciously instructed the Supreme Command to turn power over "to those circles which primarily have brought us to this state of affairs...Let them now stew in their own juice."[57] The German official history incorporated the *Dolchstosslegende* into its final volume.[58]

At the lower end of the scale of officer ranks, Lieutenant Martin Niemöller, commander of *U-67* at Pola in the Adriatic Sea, also allowed his thoughts to turn to the search for those responsible for the sudden collapse after Operation Michael. Surely, Niemöller wondered, those at home must have had a hand in the inexplicable and sudden demise?[59] On 18 November 1919, Field Marshal von Hindenburg merely gave his stamp of approval (and legitimacy) to such thoughts.

Hindenburg knew well that German Jews, for example, had served in large numbers in the front lines during the Great War. In October 1916, shortly after his appointment as chief of the General Staff, the Prussian army had undertaken a "Jew count" (*Judenzählung*) in its ranks to find out whether charges from the radical Right that Jews refused to serve were true. The final tabulations, published only after the war, were revealing. About 100,000 Jews, or 17.3 per cent of the German Jewish population, had served in the armed forces; of these, 84,000 had been in the front lines, where one in seven had died or been lost. Just over 35 per cent of those Jews who served had been decorated, and 23 per cent had been promoted.[60] These figures compared favourably to those for German non-Jews.

Yet to make quite certain that no one misunderstood who had wielded the proverbial knife, Heinrich Class, head of the Pan-German League, on 19 October 1918 suggested that his followers single out the Jews as a convenient "lightning rod for all that is unjust" in the German collapse. Citing Heinrich von Kleist's shrill outcry of 1809 against Napoleon's rape of Prussia, Class concluded with reference to the Jews: "Beat them to death; the court of world history will not ask for your motives."[61] Is it too far off the mark to suggest that the "twisted road to Auschwitz" began with the *Dolchstosslegende*? After the period of what Zara Steiner in her essay in this volume calls the "truce" of the Peace of Paris of 1919, a new generation willingly allowed Germany's rulers to remove the "criminals of 1918" from the body politic.

CONCLUSION

The Spanish-born American philosopher George Santayana once perspicaciously observed, "Myths are not believed in, they are conceived

and understood." I have tried on the basis of five case studies to document the power of myths. It remains to draw conclusions from this saga of deliberate mythmaking and charlatanry. Are the myths merely the ruminations, however intriguing, of a pedantic German historian? Or are there deeper and more universal "lessons" to be learned?

For the professional historian, some conclusions are apparent. The scholar who goes to Berlin seeking to find the proverbial smoking gun concerning the July 1914 crisis in the files of the Foreign Office will be sadly disappointed. These were "cleansed" of potentially damaging documents by 1920 at the latest. Similarly, the researcher who goes to the Federal Military Archive at Freiburg and works through the Moltke papers will also be denied a single document that sheds light on the origins of the war. And even should someone have the proper credentials to gain access to the private papers of Hindenburg and Ludendorff, I suspect that they will discover that these, too, have been well ordered by patriotic censors.

The situation in Vienna is somewhat the same. Historians can trace the information traffic on Foreign Minister Leopold von Berchtold's desk at the Ballhausplatz month by month, right up to 27 June 1914. Then a gap appears. The paper trail resumes only on July 5—that is, after the decision for war had been taken and the "blank check" received from Berlin.[62] Recent scholarship suggests that Berchtold's papers were cleansed long before Hugo Hantsch's 1963 biography.[63] Across town at the War Archive, students will find that the records of the Intelligence (*Evidenz*) Bureau of the Habsburg Army likewise underwent cleansing. Its files contain three copies of the telegram of 28 June 1914 from General Oskar Potiorek in Sarajevo informing Vienna of the assassination of Archduke Franz Ferdinand; the next entry is a request for war supplies from the Eastern Front one year later.[64]

But sheer perseverance and doggedness can partially compensate for this lack of first-source materials. Numerous historians, beginning with Fritz Fischer and his host of students, have mined regional archives at Dresden, Munich, and Stuttgart for information shared by Berlin with the former royal legations of Saxony, Bavaria, and Württemberg. As a result, the picture largely has been filled in, much as a mosaic is pieced together chip by chip and stone by stone.

The process is never-ending. Let me offer but one example. In October 1993 I undertook a research trip to the Bavarian archives. Knowing that under Article 11 of the German Constitution, the Federal Council needed Bavaria's votes to gain the required two-thirds majority vote for war—and thus had to keep Munich in the picture—I combed the files of the Bavarian legation in Berlin. Indeed, Munich was kept in the loop. On 9 July 1914

Undersecretary of State Arthur Zimmermann informed the Bavarians that Berlin saw the moment as "very propitious" for Vienna to launch a "campaign of revenge" against Serbia, believing that the war could be localized in the Balkans. Nine days later Berlin instructed Munich that it fully backed Vienna's decision "to use the favorable hour" to settle accounts in the Balkans, "even given the danger of further entanglements." The latter reference was cleared up by the Wilhelmstrasse with the comment that it would back Austria-Hungary even at the risk of "war with Russia." And to confuse European capitals, Berlin informed Munich that it was sending Kaiser Wilhelm II on his annual Norwegian sailing trip, and generals Helmuth von Moltke and Erich von Falkenhayn on their yearly vacations.[65] One could hardly find a more direct recitation of the scenario of July 1914—one designed strictly in confidence for King Ludwig III of Bavaria.

At a more general level, such ongoing research helps not only explode the myths put forth by the mythmakers and charlatans from the 1920s to the 1960s, but also the recent fascination with computer-assisted simulations. In a word, the "1914 analogy" used by political scientists such as Ole Holsti—and alluded to by Michael Howard in this volume—simply does not stand up to closer scrutiny. It all comes down to the GIGO factor: garbage in, garbage out. As long as computers are programmed to accept that in July 1914, in the words of Henry Kissinger, "nation after nation slid into a war whose causes they did not understand but from which they could not extricate themselves,"[66] we will never get beyond a superficial understanding of the origins of the Great War. A quick perusal of American history textbooks, for example, shows that most American students read only that the Great War was caused by the existence of two rival alliances.[67]

Finally, and most important, disinformation, pollution of historical scholarship, and patriotic self-censorship go well beyond the history of any country or the origins of any war. They raise basic questions about the role of the historian in society, about scholarly integrity and public morality. They illustrate the universal problem of establishing the critical record of events sufficiently vital to the national interest to become the object of partisan propaganda. They cause us to query whether a nation is well served when its intellectual establishment conspires to distort the historical record and to obstruct honest investigation into national catastrophes on which past, present, and future vital national interests can be reassessed.

Despite this dismal tale of campaigns of delay, obfuscation, preemptive historiography, and mass campaigns of disinformation, I close on an optimistic note: while in the short run myths may serve immediate political and psychological goals, in the long run they serve neither the nation nor the truth—and are doomed to failure.

NOTES

1. Holger H. Herwig, "Clio Deceived: Patriotic Self-Censorship in Germany after the Great War," *International Security* 12 (Fall 1987): 7. The themes first expressed there I followed up in *The First World War: Germany and Austria-Hungary, 1914–1918* (London: Arnold, 1997).

2. Joseph Campbell, *The Power of Myth* (New York: Doubleday, 1988). See also William H. McNeill, "Mythistory or Truth, History and Historians," in *Mythistory and Other Essays* (Chicago: University of Chicago Press, 1985), 3–22.

3. Cited in Eckart Klessmann, "Als Politischer Zeitkritiker neu Entdeckt: Hermann Hesse," *Die Zeit: Zeitmagazin* 15 (14 Apr. 1972): 10.

4. Lawrence Martin, ed., *The Treaties of Peace, 1919–1923* (New York: Lawbook Exchange, 1924), 1, 123.

5. The story of the German "patriotic censors" has been told by Ulrich Heinemann, *Die verdrängte Niederlage: Politische Öffentlichkeit und Kriegsschuldfrage in der Weimarer Republik* (Göttingen: Vandenhoeck & Ruprecht, 1983); Wolfgang Jäger, *Historische Forschung und politische Kultur in Deutschland. Die Debatte 1914–1980 über den Ausbruch des Ersten Weltkrieges* (Göttingen: Vandenhoeck & Ruprecht, 1984); Erich J. C. Hahn, "The German Foreign Ministry and the Question of War Guilt in 1918–1919," in *German Nationalism and the European Response, 1890–1945,* ed. C. Fink, I. V. Hull, and M. Knox (Norman, OK: University of Oklahoma Press, 1985), 43–70; and Herman J. Wittgens, "War Guilt Propaganda Conducted by the German Foreign Ministry During the 1920s," *Historical Papers* (Ottawa: Canadian Historical Association, 1980). The German *White Book* was paralleled by the Austro-Hungarian *Red Book,* the British *Blue Book,* the French *Yellow Book,* and the Russian *Orange Book.*

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7. Imanuel Geiss, ed., *Julikrise und Kriegsausbruch 1914* (Hanover: Verlag für Literatur und Zeitgeschehen, 1963), 1, 33–34.

8. Wittgens, "War Guilt Propaganda," 231.

9. Sidney B. Fay, *The Origins of the World War,* 2 vols. (New York: Free Press, 1928).

10. Harry E. Barnes, *The Genesis of the World War: An Introduction to the Problem of War Guilt* (New York: Alfred A. Knopf, 1927), and *In Quest of Truth and Justice: Debunking the War Guilt Myth* (New York: National Historical Society, 1927).

11. Bernadotte E. Schmitt, *The Coming of the War, 1914,* 2 vols. (New York: Charles Scribner's Sons, 1930).

12. Wittgens, "War Guilt Propaganda," 238–39, 240–45.

13. Hermann Kantorowicz, *Gutachten zur Kriegsschuldfrage 1914*, ed. I. Geiss (Frankfurt: Europäische Verlagsanstalt, 1967).

14. Herwig, "Clio Deceived," 34–36.

15. Ibid., 36.

16. J. Röhl, ed., *1914: Delusion or Design? The Testimony of Two German Diplomats* (London: St Martin's Press, 1973), 37–38. See also Helmuth von Moltke, *Erinnerungen. Briefe. Dokumente 1877–1916. Ein Bild vom Kriegsausbruch, erster Kriegsführung und Persönlichkeit des ersten militärischen Führers des Krieges*, ed. E. von Moltke (Stuttgart: Der Kommende Tag, 1922). The few papers that survived were collected by Moltke's younger son, Adam.

17. Even Walther Hubatsch, *Hindenburg und der Staat. Aus den Papieren des Generalfeldmarschalls und Reichspräsidenten von 1878 bis 1934* (Göttingen: Musterschmidt, 1966), 53, concedes this point. The Hindenburg Papers at the Federal Military Archive at Freiburg contain only notes by Hindenburg on Mertz von Quirnheim's edition of his "memoirs."

18. Egmont Zechlin, "Ludendorff im Jahre 1915. Unveröffentlichte Briefe," *Historische Zeitschrift* 211 (1970): 318.

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22. Franz Baron Conrad von Hötzendorf, *Aus meiner Dienstzeit, 1906–1918*, vol. 4 (Vienna: Rikola Verlag, 1923), 304.

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27. Ibid., 98.

28. Tunstall, *Planning for War,* 222.

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31. H. H. Herwig and N. M. Heyman, eds., *Biographical Dictionary of World War 1* (Westport: Greenwood Press, 1982), 188.

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33. Reichsarchiv, *Der Weltkrieg 1914 bis 1918,* vol. 2: *Die Befreiung Ostpreussens* (Berlin: E.S. Mittler & Sohn, 1925), 230.

34. Ibid., 325–30.

35. Ibid., 242–43

36. Showalter, *Tannenberg,* 348

37. Falls, *Great War,* 186.

38. B. H. Liddell Hart, *The Real War, 1914–1918* (Boston: Little, Brown and Company, 1930), 215.

39. A. J. P. Taylor, *The First World War: An Illustrated History* (London: Penguin Books Ltd., 1963), 94.

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41. See Herwig, *First World War,* 183 ff.

42. German Werth, *Verdun. Die Schlacht und der Mythos* (Bergisch Gladbach: Lübbe, 1979), 11, 399.

43. Paul von Hindenburg, *Aus meinem Leben* (Leipzig: S. Hirzel, 1920), 140.

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53. Hindenburg, *Aus meinem Leben*, 403.

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55. Figures calculated by Wilhelm Deist, "Der militärische Zusammenbruch des Kaiserreichs. Zur Realität der '*Dolchstosslegende*'," in *Das Unrechts-regime. Internationale Forschung über den Nationalsozialismus*, ed. Ursula Buttner (Hamburg: N/A, 1986), 1, 112–18. On the transfer of German units from Russia to France, see Tim Travers, "Reply to John Husey: The Movement of German Divisions to the Western Front, Winter 1917–1918," *War in History* 5 (1998): 367–70.

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The Northern Frontier

David Curtis Wright

For two thousand years, the primary military and diplomatic preoccupation of the Chinese empire was the northern frontier. From the Xiongnu tribes who menaced the Qin (221–206 B.C.E.) and Han (202 B.C.E.–220 C.E.) empires to the Manchus who conquered China as the last imperial dynasty, the Qing (1644–1912 C.E.), pre-modern China was harassed, intimidated, and partially or even fully conquered by its northern nomadic neighbours. Indeed, the history of pre-modern China's foreign relations is largely a history of war, or preparation for war, with the nomads. Steppe empires built by Xiongnu, Türks, Uighurs, and Mongols menaced China from a distance, while "conquest dynasties" such as the Tuoba Wei, Kitan Liao, Jurchen Jin, and Manchu Qing successfully imposed alien rule over portions or all of historically Chinese territory.

The *New Tang History* (*Xin Tangshu*), a work largely written and edited by the Song dynasty Confucian scholar Ouyang Xiu (1007–72), contains specific strategic recommendations for dealing with the threats posed by the nomads:

> Our Chinese infantrymen are at their best in obstructing strategic passes, while the barbarian cavalrymen are at their best on the flatlands. Let us resolutely stand on guard [at the strategic passes] and not dash off in pursuit of them or strive to chase them off. If they come, we should block strategic passes so that they cannot enter; if they withdraw, we should close strategic passes so that they cannot return. If they charge, we should use long two-pronged lances; if they approach, we should use robust crossbows. Let us not seek victory over them.
>
> They are like unto all manner of insects, reptiles, snakes, and lizards. How could we "receive them with courtesy and deference"? [1]

Of course, this passage also reflects deep frustration and hostility. This was typical of many eleventh-century Chinese intellectuals who were greatly distressed by China's past and present humiliations at the hands

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of its "barbarian" neighbours to the north. Ouyang Xiu's literary career flourished at a time when portions of northern China had been conquered and ruled for several decades by the barbarian Kitans and their Liao dynasty (916–1125). He had no way of knowing it, but the situation would only worsen after his death; the Jurchens and their Jin dynasty were to conquer the northern half of China early in the twelfth century, and by the end of the thirteenth century, all of China would fall to the Mongol conquerors of Khubilai Khan, grandson of Chinggis Khan.

The region inhabited by the "barbarians" was the Eurasian steppeland, an enormous belt of land that extended, with some intervening desert and forested lands, from the Carpathian Basin of Hungary in the west to Korea in the east, and from the Manchurian, Siberian, and Russian forests to their north, to the Caucasus, Pamirs, and Yellow River (including a portion of the North China Plain) to the south.[2] A generally arid, continental climate prevails throughout most of the steppeland region, which often experiences extremes of summer heat and winter cold. China was by no means the only civilization to be menaced by mounted archers from this region. They threatened the Middle East, particularly Persia, a great deal as well, and barbarian threats against Europe are recorded by Herodotus (c. 485–425 B.C.E.), who described the Scythians, and by Ammianus Marcellinus (c. 330–95 C.E.), who covered the Huns known to the later Roman Empire. Nevertheless, approximately one-third of the length of the steppeland bordered on China's north, and China more than any other Eurasian civilization clashed with nomadic warriors and empires.

WHY ALL THE FIGHTING?

Historians considering the long and troubling history of Sino-nomadic warfare have often sought to adduce reasons for it. The traditional Chinese explanation expressed revulsion at the harsh and nonsedentary ways of nomadic tribes, implying that warlike tendencies were somehow ingrained in their natures, which seemed less than fully human. These attitudes are perhaps best typified by the great Han-dynasty historian Sima Qian (c. 145–87 B.C.E.), who in his *Historical Records (Shiji)* describes the Xiongnu as shiftless, primitive, shameless, and pugnacious:

> As early as the time of Emperors Yao and Shun and before, we hear of these people, known as Mountain Barbarians, Xianyun, or Hunzhu, living in the region of the northern barbarians and wandering from place to place pasturing their animals. The animals they raise consist mainly of horses, cows, and sheep... They move about in search of water and pasture and have no

> walled cities or fixed dwellings, nor do they engage in any kind of agriculture. Their lands, however, are divided into regions under the control of various leaders. They have no writing, and even promises and agreements are only verbal. The little boys start out by learning to ride sheep and shoot birds and rats with a bow and arrow, and when they get a little older they shoot foxes and hares, which are used for food. Thus all the young men are able to use a bow and act as armed cavalry in time of war. It is their custom to herd their flocks in times of peace and make their living by hunting, but in periods of crisis they take up arms and go off on plundering and marauding expeditions. This seems to be their inborn nature. For long-range weapons they use bows and arrows, and swords and spears at close range. If the battle is going well for them they will advance, but if not, they will retreat, for they do not consider it a disgrace to run away. Their only concern is self-advantage, and they know nothing of propriety or righteousness.[3]

There is really nothing uniquely Chinese about Sima Qian's description of the Xiongnu and their lifestyle; as A.M. Khazanov has pointed out, Ammianus Marcellinus describes the Huns in much the same terms.[4]

Sima Qian does not directly comment on the significant tactical and operational advantages the nomads enjoyed over the Chinese. The nomads' military superiority was primarily the result of their mobility and their superb horsemanship and marksmanship. Equestrian skills, which nomads learned at a very early age, were of course important for herding their animals from one pasturage to the next, but they were also useful for hunting, something nomads also engaged in to supplement their diets and hone their military skills. The nomads' ability to shoot arrows accurately while riding their horses at full gallop gave them an enormous tactical advantage over the huge armies of infantrymen that Chinese generals often fielded against them. In addition, of course, the figure of a galloping nomadic cavalryman offered a difficult target for Chinese archers to hit. The nomads' mobility was often their greatest defensive as well as offensive asset. Because they had no cities or villages to defend, they often allowed Chinese armies to pursue them out into the steppes, there to be weakened by logistical difficulties and their own inability to live off the grasslands.

Sima Qian, perhaps because he was so overawed by the military acumen of the nomads, also failed to note that China's population always vastly outnumbered that of the steppes. In ecological terms, the

"barbarians" he so deplored were pastoral nomads. They were pastoral because they domesticated and husbanded animals (mainly sheep), and nomadic because they were highly mobile, riding on horseback or on simple carts from one naturally occurring stretch of grassland to another in the steppes north and west of China's borders, living in collapsible and portable tent-like shelters made of wooden latticework frames covered with felt. Pastoral nomads chose not to corral their animals and feed them cultivated hay the way their agricultural neighbours in China did, and they valued the mobile life of the nomad over the stationary life of the farmer. Their mobility demanded a simple and efficient economy; as a result nomads were seldom as wealthy or as technologically innovative as their sedentary neighbours.

They were also never as populous. An ecology based on pastoral nomadism might sustain more people per surface unit of land than an exclusively hunting and gathering one, but neither way of life can come close to matching the demographic sustainability of agriculture. But militarily, pastoral nomadic societies made up for their small populations and technological backwardness with superior mobility and tactical skills. Nomadic cavalrymen were often quite literally able to run circles around large groups of Chinese foot soldiers, shoot arrows into their midst, and then quickly withdraw out of the range of Chinese archers. Nomadic cavalrymen greatly outnumbered by Chinese foot soldiers could and often did achieve smashing victories against them.

The Chinese attempted to develop countermeasures against such tactics. Sustained campaigns into nomadic territory in what is now Mongolia did occasionally weaken nomadic power, as did the Han Emperor Wudi's massive excursion into the Xiongnu homeland in 119 B.C.E. But such campaigns were rare because they imposed huge financial and logistical burdens on the Chinese state. Other responses to the nomadic threat were more tactical in nature. One type of long weapon was used to trip or injure the hoofs of the nomads' horses, but this of course was useful only when the nomads attacked Chinese infantrymen at close range. Another obvious countermeasure for the Chinese was to learn to be cavalrymen themselves. Mounted Chinese warriors did sometimes prove effective against nomadic warriors, but this was the exception rather than the rule. For most Chinese, horsemanship was an acquired skill, not second nature as was the case for their opponents. In short, Chinese cavalrymen by themselves could rarely hope to match the skill of the mounted nomadic warrior on the battlefield. In addition, Chinese horses were seldom as good as the horses bred out on the steppes, possibly because the nomads took measures to keep their best stock from falling into Chinese hands.

Modern historians have suggested other theories to explain the prolonged pattern of Sino–nomadic warfare. Some have proposed that the basic ecological incompatibility of agricultural and nomadic peoples inevitably produced periodic misunderstanding, friction, and open warfare. Others maintain that famine or drought in the steppe regions might have led nomadic peoples to attack sedentary civilizations for food. This theory, while appealing upon first glance, must be regarded at most as an insightful piece of speculation because it can neither be proven nor disproven; there is simply not enough meteorological information in historical sources.

More recent explanations of Sino–nomadic warfare are offered by Mongolian historian Sechin Jagchid, Russian anthropologist A.M. Khazanov, and American anthropologist Thomas J. Barfield. In his book on the subject, Jagchid briefly describes the ecology of pastoral nomadism and then argues that the Chinese were almost always responsible for outbreaks of Sino–nomadic hostility and warfare, because the nomads needed three basic commodities that their simple pastoral economies could not produce: grains, textiles, and metals. When the Chinese were willing to permit mechanisms such as intermarriage of royal families, tribute missions, and border markets to facilitate the transfer of these goods to the nomads, peace prevailed. But when the Chinese, for whatever reason, shut down these mechanisms, nomads were ultimately driven through sheer economic necessity into raiding China. Thus, in Jagchid's view, the nomads were essentially peaceable and were far from the warlike people characterized in almost all imperial Chinese historical materials. Jagchid's argument is essentially economic and has been called the "trade-or-raid" thesis.[5]

Thomas J. Barfield's perspective is quite different. While he agrees with Jagchid on the material dependency of pastoral nomads on the Chinese, he sees the nature of this dependency in different terms. What the nomads needed from the Chinese, he argues in his important survey of Sino–nomadic interaction, was not subsistence commodities but luxury items, which nomadic empires used to strengthen their weakest link: that between local chieftains and regional rulers. Barfield's is, then, essentially a political argument.[6]

A.M. Khazanov's perspective on this question also emphasizes the material dependency of nomadic societies on civilized societies. But Khazanov points out that conquest, when and where it was possible, was the most profitable way for pastoral nomads to secure the items they needed from civilized societies: "Wherever nomads have the corresponding opportunities their raids and pillaging become a permanent fixture."[7] Thus, the nomads may have been more rational than some traditional historians

have thought. Raiding was in fact probably the easiest way for the nomads to get what they needed from China, but they were astute enough to know that they often could not get away with this for very long.

THE GREAT WALL OF CHINA

One very common misconception about the northern Chinese frontier that must be dispelled right from the start concerns the Great Wall of China. The standard textbook account claims that it was either constructed or connected from earlier wall segments during the Qin dynasty in order to keep the "Huns" and other "barbarians" at bay; over the centuries thereafter, the wall was supposedly alternately shored up or allowed to fall into a state of disrepair, but its site was always known. The best-preserved sections of the Great Wall today, near Badaling (not far from Beijing), are the results of Ming dynasty repairs. Historian Arthur Waldron, however, questions this and argues that the Great Wall of China as we know it today is not an ancient structure, but was built for the first time during the Ming dynasty.[8]

Even a brief perusal of a good Chinese historical atlas demonstrates that the wall did not usually define precisely the geographical extents of Chinese and nomadic polities. Moreover, ecological boundaries between sedentary and pastoral nomadic societies were sometimes fluid and seldom were neatly demarcated by anything as dramatic and final as a fixed wall. Thus, theories about the Great Wall of China that see it as a definitive ecological, linguistic, and cultural demarcation or emphasize the inherent permanence of China's "walled frontier" should probably now be revised or discarded altogether.[9]

But Waldron has not completely proven his case. There remains, for instance, the matter of an eleventh-century poetic reference to the wall (or a wall) by Su Song, a Song dynasty literatus who twice travelled to the Kitan Liao state in the eleventh century on diplomatic missions. In a poem he wrote in 1077 upon crossing Gubei Pass, a well-known point along the modern Great Wall, Su Song noted that he was once again crossing over "the ten-thousand *li* wall of the Qin monarch."[10] It is of course possible that this is a literary trope, but its focused geographical and chronological specificity by a scholar-official who twice travelled by Gubei on diplomatic business seems at least to indicate that Su Song knew that some sort of Qin wall was once here. That the Ming also chose to run its Great Wall through Gubei suggests that both dynasties understood its strategic importance.

Han and Xiongnu

The Xiongnu, sometimes identified with the Huns known to the late Roman Empire, were the first great steppe empire to threaten the security of an organized and unified Chinese state. The Xiongnu and the Han dynasty, in fact, rose to power at roughly the same time. During the very early years of the Han dynasty, the founding emperor, Gaozu (Liu Bang), was defeated in a major battle with the Xiongnu and narrowly avoided capture. The Han both feared and respected the Xiongnu after this, and for the next few decades, the so-called intermarriage (*heqin*) system was the basic framework for diplomatic relations between the two powers. The original peace agreement, which was expanded over the years, contained the following provisions:

1. a Chinese princess given in marriage to the leader of the Xiongnu,
2. fixed annual payments of food, silk, and wine to the Xiongnu,
3. equal or "brotherly" status between the two powers,
4. a fixed border between the two powers.[11]

The intermarriage system endured as the basic vehicle for Han–Xiongnu relations until the Han emperor Wudi (r. 141–87 B.C.E.) cancelled it and initiated hostilities with the Xiongnu in 133 B.C.E. Wudi seems to have concluded that the provisions of the intermarriage system were demeaning to China and that the Chinese had endured insults and humiliation at the hands of the Xiongnu long enough. As part of his overall program of territorial expansion, Wudi decided to face down the Xiongnu militarily and out-manoeuver them diplomatically. Han Wudi's fourfold strategy was to:

1. push the Chinese frontier back to the old Qin boundaries,
2. ally with the Yuezhi and Wusun, old adversaries of the Xiongnu,
3. expand into the Tarim Basin and occupy a long segment of the Silk Road there, thus "cutting off the right arm" of the Xiongnu by depriving them of their revenues from the oasis city-states that were involved with overland trade,
4. launch destructive, punitive expeditions into Xiongnu territory.[12]

In 119 B.C.E., Han armies drove deep into Xiongnu territory and destroyed an important headquarters of the *shanyu*, or leader, of the

Xiongnu. Three decades later, the two powers had more or less exhausted themselves and stalemated each other into an uneasy period of détente. By Wudi's death in 87 B.C.E., however, it was becoming clear that the real losers in the decades-long confrontation were the Xiongnu. Their defeats at the hands of relatively minor nomadic adversaries in the 70s and 60s B.C.E. indicated their internal weakness, and a Xiongnu civil war also did much to further weaken their power and prestige. By 54 B.C.E. the majority of the Xiongnu agreed to surrender to the Han.

During his lifetime, Han Wudi had long insisted that the Xiongnu accept a new framework, the so-called tribute system, for relations between the two powers. The elements of the new system were much more symbolically favourable to the Han than the old intermarriage system elements had been, so the Xiongnu had long feared and resisted the tributary system in the belief that it would entail actual subjugation to the Han. They repeatedly demanded the restoration of the intermarriage system, but the Han would not assent to this. The tributary system contained three major elements:

1. Far from receiving a royal princess from the Han in marriage, the Xiongnu would now send a hostage from their royal family to reside at the Han capital.
2. The Xiongnu *shanyu*, or an envoy personally representing him, would come periodically to China to pay homage.
3. The Xiongnu would send tribute to China in return for imperial gifts from China.[13]

After 54 B.C.E. and the surrender of the majority of the Xiongnu to the Han, the Xiongnu quickly discovered that this "tributary system" was, in reality, a sham that did not involve actual submission to Han power. The Chinese demanded mere ritual and material submission to the Han emperor; in return, they bestowed imperial gifts out of all proportion to the value of the tribute. Thus tribute missions became enormously profitable to the Xiongnu, and soon they were requesting permission to conduct them more and more frequently. The tributary system was in fact an institution that the Xiongnu could manipulate for their own material benefit, just as they had the former intermarriage system. Chinese intellectuals eventually caught on to Xiongnu attitude, which they interpreted as "insincerity."[14]

By 43 B.C.E., the Xiongnu had resolved their differences and reunified themselves, and they continued to manipulate the tributary system to their own advantage. They now saw it more or less as the same

old intermarriage system, but in a new ritualized package that seemed to make the Chinese feel better. The tribute system provided peace until 8 C.E. and the usurpation of the Han throne by Wang Mang, who like Han Wudi before him, changed relations with the Xiongnu and tried to subjugate them. The Xiongnu balked at this and went to war with Wang Mang's new regime, which at any rate was overthrown in 23 by Han restorationists. Then the Xiongnu themselves disintegrated into civil war by the late 40s, resulting in a north/south split among the Xiongnu: the Southern Xiongnu submitted to Han authority, while the Northern Xiongnu remained independent and defiant. In 89 the Southern Xiongnu and the restored Han dynasty attacked the Northern Xiongnu and soundly defeated them. Most of the remaining Northern Xiongnu them submitted to the Han, but a small, defiant minority followed a leader to the north and west, far away from Han China. A controversial theory dating to the eighteenth century attempts to equate these Xiongnu with the Huns who entered the Carpathian Basin in Hungary in 375 and eventually, under the leadership of Attila, threatened Rome in 452.[15]

CHINA'S FIRST CONQUEST DYNASTIES

In Chinese history the period from the collapse of Han in 220 until the complete reunification of China under the Sui dynasty in 589 is known as the Six Dynasties, a period during which pastoral nomadic peoples took advantage of China's division and internal weakness and conquered the northern portion of the country, while a series of weak, native Chinese dynasties ruled in the south with their capital at Jiankang (modern Nanjing). One such dynasty, the Eastern Jin, harboured ambitions against the barbarian occupiers of northern China and seemed for a time to be making good on its vow to reunify China under its rule. In 383 the Eastern Jin turned back a barbarian invasion at the Battle of the Fei River in Anhui, and by 417 the dynasty had reconquered a portion of the Silk Road. By 420, however, the Eastern Jin fell due to internal strife, and barbarian rule over the north was assured for another 168 years while a series of short-lived native Chinese dynasties ruled over southern China. Southern and northern China had more or less fought one another to a standstill that lasted from 420 until the Sui reunification of China in 589.

From the fourth through the sixth centuries, several barbarian peoples conquered portions of northern China and ruled over it with semi-barbarian, semi-Chinese regimes that were dubbed "conquest dynasties" by early twentieth-century Japanese historians of China. These differed from the classic steppe empire model established by the Xiongnu in that they actually occupied and governed Chinese territory; while the Xiongnu often fought with the early Han and intimidated them

into establishing the intermarriage system, the early Xiongnu seldom if ever seriously thought of actually occupying and administering Chinese territory. The conquest dynasties, on the other hand, were familiar enough with Chinese ways that they learned the rudiments of governing an agricultural society and collecting taxes.

Barfield has pointed out that throughout Chinese history, most of the conquest dynasties (with the very significant exception of the Mongolian Yuan of the thirteenth and fourteenth centuries) seem to have been "Manchurian" in origin, or from the area the Chinese now call the Northeast. This is probably because the natural environment of the region accommodates all ecologies, including agriculture, pastoral nomadism, and hunting and gathering. Manchuria was thus a sort of training ground or experimental laboratory for barbarian peoples who harboured ambitions of conquering portions or all of China. Several more conquest dynasties followed in Chinese history; the Kitan Liao (916–1125), the Jurchen Jin (1126–1234), and the pre-Yuan Mongols (1234–1279) ruled over significant portions of northern China, while the last two conquest dynasties, the Mongol Yuan (1279–1368) and the Manchu Qing (1644–1912), successfully conquered all of China and ruled as alien emperors. Thus, in the last 1,003 years of imperial Chinese history, alien regimes conquered and ruled over some or all of Chinese territory for 730 years, or more than 70 per cent of the time. Serious historians of China cannot, therefore, ignore or skim over times when non-Chinese peoples ruled China.

Conquest dynasties have been called "dualistic" because they applied "barbarian" laws and administrative techniques to the non-Chinese peoples and Chinese methods to the Chinese. Conquest dynasties might thus be thought of as multicultural, or at least multiethnic. The first significant conquest dynasty was the Tuoba Wei, which ruled a portion of northern China from 386 to 439 and over all of northern China from 439 to 535.

TANG CHINA AND THE TÜRKS AND UIGHURS

The Türks, or Tujue as they are known in Chinese histories, had their homeland in the Altai Mountains and were originally subjects of the Rouran. But during the mid-sixth century they overthrew their Rouran masters and themselves became rulers of the steppe, with a far-flung empire from Manchuria in the east to the Caspian Sea in the west. Civil war broke out among them by 581, however. This seriously weakened their empire and divided them into Eastern and Western segments. The Eastern Türks themselves also fell into civil war, and one rival khan among them submitted to the Sui in 584. Eventually the Eastern Türks helped Tang forces capture Chang'an from the Sui in 617, the year before the Tang dynasty was founded.

The founding emperors of the Tang dynasty (618–907) were ethnically part Türk. The first Tang emperor, Li Yuan (Tang Gaozu, r. 618–26), was a cautious man vis-à-vis the Türks, but his son, the young Li Shimin (Tang Taizong, r. 626–49), was more confrontational. He proved his mettle on two separate occasions during the 620s. In 624, while still a prince and during the Türks' menacing of the Chang'an region, Li Shimin rode out with a hundred men to challenge rival Türk khans to personal combat. When they refused, he spread misinformation among them that destabilized their polity. In 626, directly after Li Shimin had deposed his father and assumed the Tang throne, the Türks threatened Chang'an again, probably wishing to probe the new emperor's strength and resolve. Much to the distress of his advisers, Li Shimin galloped out of the gates of Chang'an and rode to the Wei River with only six men. He berated the Türk khan across the river for his aggression. When an attendant remonstrated with him for despising the enemy in this manner, Li Shimin responded that he wanted to disabuse the Türks of their notion of internal Tang weakness. Bad weather, internal divisions, and major Tang campaigns against them eventually led to the submission of the Eastern Türks to the Tang in 630, and with this, the first Türk empire came to an end. Li Shimin reigned as emperor over the Chinese and Heavenly Khaghan over the Türks, and several thousand prominent Türk families moved to Chang'an and became Tang government officials.

Türk submission to Tang China began to unravel after Li Shimin's death in 649. His successor, Gaozong, generally favoured the indigenous Chinese elite at the expense of the Türk officials. Discontent among the Türks arose with a new generation that lacked its parents' and grandparents' memories of the great Taizong. Rebellion against the Tang broke out in 679, and in 680 many Türks abandoned their defense posts at the Tang frontier and fled back to their homeland in Mongolia. The Türk empire was soon reborn, and its leaders immediately began attacking China again, not to invade and hold Chinese territory, but to intimidate China into making economic concessions.

In fact, the Bilgä khaghan, one of the major leaders of the second Türk empire who reigned from 716 to 734, urged his people to avoid the mistakes of their predecessors under the first empire by staying away from China; better for them to exploit China from a distance than to approach it too closely and risk being drawn into the Chinese morass. He literally carved in stone his admonitions to the Türks of his generation:

> Deceiving by means of [their] sweet words and soft materials, the Chinese are said to cause the remote peoples to come close in this manner. After such a people have settled close to them, [the

> Chinese] are said to plan their ill will there. [The Chinese] do not let the real wise men and real brave men make progress. If a man commits an error, [the Chinese] do not give shelter to anybody [from his immediate family] to the families of his clan and tribe. Having been taken in by their sweet words and soft materials, you Turkish people were killed in great numbers. O Turkish people, you will die! If you intend to settle at the Choghay mountains and on the Tögültün plain in the south, O Turkish people, you will die! ... If you stay in the land of Ötükän and send caravans from there, you will have no trouble. If you stay at the Ötükän mountains, you will live forever dominating the tribes![16]

The second Türk empire endured until 744, when internal succession disputes weakened it, and the Uighurs, former subjects to the Türks, came to power and established their own steppe empire, the wealthiest and most sophisticated that East Asia had yet seen. The Uighurs built a capital city and central storehouse of sorts called Karabalgasun in modern Mongolia. They were a more stable polity than the Türks because their linear or vertical succession system made transitions to power much less ambiguous and controversial. The Uighurs developed a writing system for their language and seem to have learned even better than the Türks how to exploit and intimidate China from a distance. They secured annual payments of silk from the Tang and got the best of the silk–horse trade that developed between themselves and the Chinese. They also intermarried with the Tang imperial family, and during the middle of the eighth century, the Uighurs helped the Tang quell the great An Lushan uprising. Uighur horsemen sometimes rode haughtily through the streets of Chang'an, but the Tang Chinese endured this because they knew they owed their dynasty's survival to them. Ultimately, however, the riches extracted from China and stored at Karabalgasun proved too valuable and irresistible a target for other steppe peoples. In 840 the Kirgiz, a warlike tribe living along the Yenisei River, swept down into Karabalgasun and destroyed it. The Uighur empire could not endure the loss of its capital and collapsed soon thereafter. The Kirgiz, for their part, retreated to their Yenisei homeland and were not heard from again in Chinese history. Other northern frontier peoples closer to home would soon emerge to threaten China's northern borders, even conquering large sections of northern China.

SONG CHINA AND THE KITAN LIAO AND JURCHEN JIN

A proto-Mongolian people known as the Kitan came to power in Mongolia, Manchuria, and northern China in 907, the same year as the fall of the

Tang. (China did not achieve lasting national unification until 960 and the founding of the Song dynasty.) The Kitan regime eventually became known as the Liao and ruled over Manchuria, southern Mongolia, and parts of northern China (including modern Beijing) as a classic conquest dynasty until 1125, when it was destroyed by the Jurchens, who ruled over an even greater portion of northern China as the Jin dynasty (1126–1234), a conquest dynasty par excellence.

A portion of northern Chinese territory that came to be known as the Sixteen Prefectures of Yen and Yun had been lost to the Kitans in 936, and the founding Song emperor refused to consider China completely reunified until this territory was recovered. As it turned out, however, the Song never did govern this territory, although two attempts were made in the late tenth century to recover it militarily. In 976 the Song attacked the Liao but were beaten back with heavy losses; during the campaigns even the founding Song emperor himself was injured by two arrows. His brother and successor tried again in 986 to recover the territories and met with some initial success, but was ultimately forced to withdraw after Liao generals managed to cut his supply lines.

The accession in 997 of Zhenzong, the timid and naïve third Song emperor (r. 997–1022), emboldened the Kitan to make their own incursions into Song territory. Low-level clashes between the two states broke out between 1001 and 1003, but the real conflict began in the summer of 1004, when Kitan cavalry launched several reconnaissance raids deep into Song territory. By the fall the Kitans' hostile intentions were obvious even to Zhenzong, and he reluctantly began making preparations for a major military confrontation with the Liao. He accepted advice from his two imperial counsellors to rally the Song troops and overawe the Kitan by personally leading an expeditionary force from Kaifeng (the Northern Song capital, just south of the Yellow River) to Shanyuan, the first major town on the north side of the river.

Meanwhile, the Kitans were advancing steadily southward into Song territory, and by late 1004 they seemed poised to overwhelm Shanyuan, cross over the Yellow River, and advance to Kaifeng. Zhenzong wavered in his resolve and momentarily considered withdrawing to Jiangsu or Sichuan, but ultimately his bravest and most competent imperial counsellor, Kou Zhun, persuaded him to proceed with the expedition to Shanyuan in January 1005, which according to Song sources had the desired effect of rallying and encouraging the troops. Meanwhile, Song armies managed to outflank the main Liao offensive and make their way north, thus threatening to cut off the Liao armies deep in Song territory. Both sides recognized that they had fought each other to a standstill,

and peace negotiations began in November, although sporadic fighting continued. A truce was concluded at Shanyuan on 19 January 1005. The Song essentially bought off the Kitan; if they would stop menacing Song territory, the Song would drop its territorial claims to the Sixteen Prefectures and would agree to annual payments to the Liao of 100,000 ounces of silver and 200,000 bolts of silk.

The Treaty of Shanyuan began over a century of peace between Song and Liao and made the eleventh century one of the most peaceful, prosperous, and innovative (both technologically and intellectually) in Chinese history. Minor skirmishes and disagreements over border delineations broke out in the 1040s and again in the 1070s, but the peace held for the most part. The treaty also led to the exceptional development of "equal diplomacy" between Song and Liao, with a body of Chinese diplomatic language and ritual that regarded the Liao not as an inferior or tributary state, but as a full-fledged equal. After the fall of the Liao to Jurchen forces in the 1120s and the withdrawal of the Song capital from Kaifeng to Hangzhou, annual payments and equal diplomatic treatment on the Shanyuan model were transferred to the Jurchens and their Jin dynasty, although for a brief period from the 1140s to the 1160s, the Southern Song were forced to accept the humiliating self-designation of "vassal" (*chen*) vis-à-vis the Jin.

THE MONGOL CONQUEST OF CHINA

The rise of the Mongols and their world empire was an important geopolitical and military development in thirteenth-century Eurasian history. In 1206 a conqueror named Temüchin united by force the tribes of Mongolia and was proclaimed Chinggis Khan, or supreme khan of nomadic peoples north of China. In 1209 Chinggis Khan attacked the minor border state of Xi Xia and secured its nominal submission. His campaigns against the Jin began in 1211 and continued intermittently throughout his life. At his death in 1227, Chinggis Khan had not fully subjugated the Jin; that task was left to his son and successor, Ögödei Khan (r. 1229–41), who accomplished it in 1234.

The final conquest of the Jin left the Mongols the rulers of the steppe and of northern China. During the rest of his reign, Ögödei Khan concentrated on campaigns against Russia and eastern Europe. His nephew and ultimate successor, Möngke Khan (r.1251–59), expanded the Mongol world empire in different directions with campaigns against the Middle East, Korea, and China. Mongolian armies under the command of Möngke's younger brother Hülegü set out for the Middle East, where during the 1250s they conquered Persia, sacked and butchered Baghdad, overthrew the Abbasid Caliphate, and encountered European Crusaders

in the Holy Land. The Mongol campaign against Korea began in 1252, and by 1258 their general Jaliyar had conquered the peninsula.

Meanwhile, Möngke and his younger brother Khubilai launched a campaign in 1256 against a much greater prize than either Korea or the Middle East: Southern Song China. Popular stereotypes about the weakness and effeteness of the Southern Song's military notwithstanding, the conquest of Southern Song China was the most difficult military task the Mongols undertook. The Southern Song fought bravely against the Mongols and were finally conquered in 1279, nearly three decades after the Mongols began their attack.

The campaign was complicated by several factors, chief among them the terrain. Much of northern China is flat and relatively dry, and Mongol cavalry usually made short shrift of any resistance offered them there by Chinese infantrymen. In southern China, however, a wet climate and mountainous terrain frequently made progress on horseback tough going, as did the ubiquitous irrigation ditches, waterways, and muddy rice paddies. The heat and humidity of central and southern China were also distressing to the Mongols, who on at least one occasion suspended a campaign until autumn brought more tolerable temperatures. And then there was always the Yangzi River that bisected central and southern China. Any conquest of all China would necessarily mean that the Mongols and their allies would need to deal with the Yangzi. This, in turn, meant that they would need a large navy. The Mongols knew nothing about building or using a navy. In this campaign they were aided and advised by scores of Chinese defectors who had concluded that the political future of China was with the Mongols rather than the moribund Southern Song government.

Möngke's strategy was to attack down the Yangzi River from Sichuan in the west with a naval force he hoped would destroy the economic foundations of Southern Song China. Möngke envisioned a grand, multi-pronged attack that would defeat the Southern Song: He would come down the Yangzi with his naval force, while Khubilai moved down through Hubei and other generals advanced along China's east coast. The strategy looked quite feasible throughout the planning, but the entire offensive was called off in 1259 because of Möngke's death in Sichuan. The Mongols now had to convene a grand tribal council, or *khuriltai,* to select a new khan.

After much nasty politicking and bickering, Khubilai was enthroned in 1260 as the new khan. When his overtures to the Southern Song were rebuffed, he resumed the China campaigns, which were to be a central preoccupation for the first nineteen years of his reign. The Southern Song

proved a very tough nut to crack, and there are even scattered indications that the Chinese defenders of the dynasty used some gunpowder weaponry against the Mongol invaders. The Mongol naval attack on the fortified city of Xiangyang on the Han River (a northern tributary of the Yangzi) was waged for five years before the city surrendered in 1273. Chinese, Jurchen, Korean, and even Persian engineers and strategists helped out during this key siege and built a great catapult and mangonel to hurl huge stones at Xiangyang's walls.

After the surrender of Xiangyang, Khubilai chose the Mongol general Bayan to continue the China campaign. Bayan's armies swelled with Chinese defectors such as Lü Wenhuan, the gallant defender of Xiangyang, who were convinced that the Mongols would be the new rulers of China. Bayan's sheer numbers, the high morale of the Chinese defectors who threw in their lot with him, and the tactical advantage afforded by his superior artillery made him invincible. Bayan occupied towns along the Yangzi that surrendered to him and utterly devastated those such as Changzhou that repeatedly resisted his overtures. In January 1276 the Southern Song capital at Hangzhou finally surrendered to the Mongols and submitted the dynasty's official seal to Bayan. A few die-hard Song loyalists fled farther south and set up a scion of the Song royal family as a claimant. On 19 March 1279, however, these pretensions came to an end when the last Song emperor, a child, perished in the arms of a Song loyalist who jumped with him into the sea off southern Guangdong province. From this time until his death in 1294, Khubilai reigned as Grand Khan of the Mongol world empire and as emperor over China.

YUAN CHINA

The Mongols started out as a steppe empire but ended up a conquest dynasty. This political transformation from intimidation to administration was remarkable and was apparently begun by Möngke and finished by Khubilai, two grandsons of Chinggis Khan who had grown up with some familiarity with the Chinese world and probably some knowledge of the early Tang emperors' dual positions as khans of the nomads and emperors to the Chinese.

Khubilai and subsequent Yuan emperors did not please everyone among the Mongolian elite. Mongol accommodationists approved of Khubilai's adoption of Chinese-style administrative techniques for China. Steppe traditionalists, on the other hand, were suspicious of this tactic and deplored Khubilai's seeming fascination with the Chinese world. They seem to have resented Khubilai's removal of the capital of the Mongol world empire from Karakorum in Mongolia to Beijing in

China. Thus, as with emperors of native Chinese dynasties, Khubilai had to worry about threats and challenges from the northern frontier. At the very beginning of his reign, Khubilai was challenged by a hard-line steppe partisan named Ariq-böke and fought a four-year civil war before finally defeating him. Another steppe dissident and rival named Qaidu proved a continual challenge to Khubilai.

Yuan administration in China after Khubilai's death was very unstable and unpredictable because it was determined by the orientations or worldviews of the much lesser emperors who succeeded him. Yuan governance after Khubilai was a comedy of jarring errors and lurching inconsistencies as accommodationist and traditionalist emperors sought to reverse the policies and approaches of their predecessors. By the 1350s Yuan rule over China was so disorganized and decentralized that a native Chinese insurgent named Zhu Yuanzhang was able to overthrow the dynasty in 1368. Zhu became founding emperor of the Ming dynasty and spent much of the rest of his life recentralizing imperial power and concentrating it in his own hands. Ming administrative centralization and political "despotism" was probably more of a reaction against Mongol government than a continuation or result of it.

Ming and Mongols

The Ming was the only major native Chinese dynasty that did not have a powerful unified nomadic steppe empire on its northern border. This may well have been, as Barfield argues, because the Ming largely refused to accommodate the Mongols commercially, thus depriving them of the material prerequisites of nomadic empire.[17] After all, Ming China had thrown off the Mongol yoke with the greatest of difficulty and was quite fearful of contributing to its own reconquest. But this very fear of Mongol revanchism also led to seemingly incessant nomadic raiding on China's northern frontiers. Definitive peace between Ming China and the Mongols was not achieved until 1571, near the end of the dynasty.

The first Ming emperor (Taizu; r. 1368–98) and his son (Chengzu, or the Yongle emperor; r. 1402–24) personally led campaigns deep into Mongolia, probably not for conquest but to keep the Mongols divided and off balance. After about 1400, the Mongols were increasingly divided into two competing groups: the Western Mongols, or Oirats, in the Altai Mountains and the Eastern Mongols in central and southern Mongolia. Construction of the Great Wall began during the Yongle emperor's reign, and thereafter there seem to have been few if any Ming excursions north of it. As early as 1389 three Mongolian groupings known as the Three Commanderies submitted to the Ming and served in their armies in order

to escape recriminations by other Mongols. These Mongol tribes and also several Jurchen groups who submitted to the Ming around 1400 were allowed to offer tribute to China twice a year, which as usual proved handsomely profitable for them.

By the mid fifteenth-century, however, these tribute relationships were largely disrupted as Esen-tayiši came to power and attempted to establish a steppe empire unifying all Mongols under his rule. Esen was an Oirat and not a member of the Chinggisid lineage, so he could not lay claim to the title of khan, but only to *tayiši*, more or less "grand master." In order to appear more legitimate. he maintained a Chinggisid khan as a puppet and claimed to be acting on his behalf. In 1449 Esen launched a huge attack on Ming China in three columns and managed to march almost all the way to Beijing. A chief eunuch at court, perhaps thinking of the Shanyuan precedent, convinced the Zhengtong emperor (r. 1435–49) to go out and meet the Mongols in battle. This turned out to be a disastrous strategic miscalculation, however, because Esen surrounded the imperial encampment at Tumu and eventually captured the emperor. Thinking that he now had a valuable bargaining chip to pressurie the Ming into concluding a tributary alliance with him, he pressed his attack on Beijing but failed to take the city. And the Ming, as it turned out, responded to the capture of the Zhengtong emperor simply by enthroning another, Jingtai (a monarch whose posthumous title, Daizong, means something like "substitute emperor"), who reigned from 1449 to 1457, when the old emperor finally reclaimed his throne, this time as the Tianshun emperor. Seemingly deprived of the value of his imperial captive but apparently still fearful of recriminations lest any harm befall him, Esen gave the hapless emperor back to the Ming in 1450. Esen was eventually assassinated in 1454 or 1455 by jealous and disgruntled Mongols disappointed with the failure of his China campaign and resentful of his outright assumption in 1453 of the title of khan. With his death the frequency of tribute missions diminished, and by 1500 they had fallen off altogether.

By the mid-sixteenth century, the main raids on Ming northern frontiers were led by the Altan-khan (1507–82) of the Tümed Mongols from his base at Guihua. Unlike Esen-tayiši, the Altan-khan was a member of the Chinggisid lineage and could thus legitimately be called "khan." The purpose of his raiding was to compel the Ming to reinstitute the tribute system that had previously applied to the Three Commanderies. The Altan-khan's raids grew larger until, in 1550, Mongol cavalrymen once again were at the very walls of Beijing. This frightened the Ming court into establishing border markets and allowing the Altan-khan to present tribute, but mutual suspicions and antagonisms soon led to the curtailment of the missions and the border markets, and fighting broke out anew.

Definitive peace between Ming China and the Altan-khan was not established until 1570, largely due to the intelligent policy recommendations of Wang Chonggu, a border official who understood the reasons for the raids. Wang convinced the Ming court to reopen border markets and establish tribute relations with the Altan-khan in 1571, after which the Mongol raids dropped off sharply (although they did not cease altogether), and peace with the Mongols largely prevailed.

From 1571 to the end of the dynasty, there was little further threat to the security of the Ming empire from the Mongol quarter. By the early seventeenth century, the Ming's foreign policy and defense preoccupations were primarily with another frontier people: the Jurchens, a Manchurian people of mixed ecology who would eventually become known as the Manchus and conquer all of China by the end of the seventeenth century.

For most of its history, imperial China was either threatened or conquered, partially or fully, by its northern nomadic neighbours. It seems that major native Chinese dynasties were invariably either threatened by steppe polities at various stages of organization or else overrun by conquest dynasties. Imperial China's failure to solve its barbarian problem definitively before the advent of the Manchu Qing dynasty was a function neither of Chinese administrative incompetence nor of barbarian pugnacity, but of the incompatibility and fixed proximity between very different societies, ecologies, and worldviews. Many statements in historical records strongly suggest that the Chinese and the nomads had clear ideas of their differences and were committed to preserving them against whatever threats the other side posed. At the front of Sechin Jagchid's work on Sino–nomadic relations, a book dedicated "to the myriads of people who, because of misunderstanding, suffered and died along nomadic sedentarist frontiers,"[18] there is a tidy apothegm from Carlyle: "All battle is well said to be misunderstanding." But it may be that the Chinese and the nomads clashed so fiercely and for so long not because they misunderstood each other, but because they understood themselves and each other only too well. Battle and conquest are perhaps best said to have constituted understanding for them.

SUGGESTIONS FOR FURTHER READING

The best single-volume survey of Sino–nomadic relations is Thomas J. Barfield, *The Perilous Frontier: Nomadic Empires and China, 221 BC to AD 1757* (Oxford: Basil Blackwell, 1989). Barfield's book is based on previously translated primary sources, and some of his theories and perspectives are controversial. But the book is still a good survey for beginning and

advanced students alike. Sechin Jagchid and Van Jay Symons, *Peace, War, and Trade along the Great Wall: Nomadic–Chinese Interaction through Two Millennia* (Bloomington: Indiana University Press, 1989) is also based on primary materials but seems more difficult to read because it is topically rather than chronologically organized. Anatoli M. Khazanov, *Nomads and the Outside World* (Cambridge: Cambridge University Press, 1984) is a fine anthropological treatment of the historical interactions between pastoral nomads and civilized societies, including China. Owen Lattimore, *Inner Asian Frontiers of China* (New York: American Geographical Society, 1951) and *Studies in Frontier History: Collected Papers, 1929–1958* (London: Oxford University Press, 1962) remain important reading, although some of Lattimore's conclusions now seem somewhat inadequate.

The single most important book on Han–Xiongnu relations is still Ying-shih Yü's *Trade and Expansion in Han China: A Study in the Structure of Sino–Barbarian Economic Relations* (Berkeley/Los Angeles: University of California Press, 1967). Tang–Türk relations are covered in detail in Pan Yihong, *Son of Heaven and Heavenly Qaghan: Sui-Tang China and Its Neighbors* (Bellingham: Western Washington University, 1997). Aspects of Tang–Türkic relations are also covered in Christopher I. Beckwith, *The Tibetan Empire in Central Asia: A History of the Struggle for Great Power among Tibetans, Turks, Arabs, and Chinese during the Early Middle Ages* (Princeton: Princeton University Press, 1987). Liu Mau-ts'ai, *Die chinesischen Nachrichten zur Geschichte der Ost-Türken (T'u-küe)*, 2 vols. (Wiesbaden: Otto Harrassowitz, 1958) is also an important work. Colin Mackerras' *The Uighur Empire According to the T'ang Dynastic Histories: A Study in Sino–Uighur Relations, 744–840* (Columbia: University of South Carolina Press, 1972) is a documentary study of Tang–Uighur relations, but unfortunately it contains some errors of translation.

The most extensive treatment of the Treaty of Shanyuan in a Western language is still Christian Schwarz-Schilling, *Der Friede von Shan-yüan (1005 n. Chr.): Ein Beitrag zur Geschichte der chineschen Diplomatie* (Wiesbaden: Otto Harrassowitz, 1959). On Song diplomacy and foreign relations in general, see *China among Equals: The Middle Kingdom and Its Neighbors, 10th–14th Centuries*, ed. M. Rossabi (Berkeley/Los Angeles: University of California Press, 1983). On various aspects of Song–Liao diplomacy, see Jingshen Tao, *Two Sons of Heaven: Studies in Sung–Liao Relations* (Tucson: University of Arizona Press, 1988).

David Morgan's *The Mongols* (Oxford: Basil Blackwell, 1986) is a solid and readable general survey of the Mongol world empire. Paul Ratchnevsky, *Genghis Khan: His Life and Legacy* (Oxford: Basil Blackwell, 1991); Thomas Allsen, *Mongol Imperialism: The Policies of the Grand Qan Möngke in China, Russia, and the Islamic Lands, 1251–1259* (Berkeley/

Los Angeles: University of California Press, 1987); and Morris Rossabi, *Khubilai Khan: His Life and Times* (Berkeley/Los Angeles: University of California Press, 1988) are all biographies of individual Mongol khans. Chinggis Khan's attacks on the Jurchen Jin are treated in detail in Henry Desmond Martin, *The Rise of Chingis Khan and His Conquest of North China* (Baltimore: Johns Hopkins University Press, 1950).

The field of Ming–Mongol relations is largely dominated by Henry Serruys, whose major book-length studies include "Sino-Mongol Relations during the Ming II: The Tribute System and Diplomatic Missions (1400–1600)," *Mélanges Chinois et Bouddhiques 14* (1969); "Sino-Mongol Relations during the Ming III, Trade Relations: The Horse Fairs (1499–1600)" *Mélanges Chinois et Bouddhiques 18* (1975); and "The Mongols in China during the Hung-wu Period (1366–1398)" *Mélanges Chinois et Bouddhiques 11 (1956–59).* Dmitrii D. Pokotilov's *History of the Eastern Mongols during the Ming Dynasty from 1368 to 1634* (Philadelphia: Porcupine Press, 1976) is also a useful survey. Arthur Waldron's *The Great Wall of China: From History to Myth* (Cambridge: Cambridge University Press, 1990) contains extensive coverage of Ming–Mongol relations. The nonpareil account of the capture of the Ming emperor Zhengtong in 1449 is Frederick W. Mote's "The T'u-mu Incident of 1449," in *Chinese Ways in Warfare,* ed. F. A. Kierman Jr. and J. K. Fairbank (Cambridge: Harvard University Press, 1974), 243–72.

SUGGESTIONS FOR FURTHER RESEARCH

There is still no authoritative and up-to-date survey of Sino–nomadic relations that draws on both primary sources and modern scholarship. The history of China's first conquest dynasties during the Six Dynasties period is so complicated that it would probably make writing (and reading) a book-length monograph on the subject quite difficult. Three biographies of important Mongol khans are now available, but one has yet to be written on Ögödei. Morris Rossabi's biography of Khubilai covers aspects of Khubilai's campaigns against Southern Song China, but a full-length study in English of the entire scope of the conquest would be useful.

NOTES

1. Ouyang Xiu, *Xin Tangshu* [New Tang History] (Beijing: Zhonghua shuju, 1975), ch. 215A, 6025.

2. A concise geographical description of Central Eurasia and the steppelands can be found in the chapter by David C. Montgomery in *Inner Asia: A Syllabus,* Denis Sinor (Bloomington: Indiana University Press, 1969), 7–17.

3. Sima Qian, *Records of the Grand Historian*, vol. 2, trans. Burton Watson (Hong Kong and New York: Columbia University Press, 1993), 129.

4. Anatoli M. Khazanov, *Nomads and the Outside World* (Cambridge: Cambridge University Press, 1984), 8.

5. Sechin Jagchid and Van Jay Symons, *Peace, War, and Trade along the Great Wall: Nomadic–Chinese Interaction through Two Millennia* (Bloomington: Indiana University Press, 1989).

6. Thomas J. Barfield, *The Perilous Frontier: Nomadic Empires and China, 221 BC to AD 1757* (Oxford: Basil Blackwell, 1989).

7. Khazanov, *Nomads*, 222.

8. Arthur Waldron, *The Great Wall of China: From History to Myth* (Cambridge: Cambridge University Press, 1990).

9. See, for example, Owen Lattimore, *Inner Asian Frontiers of China* (New York: American Geographical Society, 1951), 21–25, and *Studies in Frontier History: Collected Papers, 1929–1958* (London: Oxford University Press, 1962), 73–84. By no means do I mean here to denigrate the whole of Lattimore's scholarship or to downplay his important role in establishing and popularizing Sino–nomadic relations as a field of historical inquiry.

10. David C. Wright, "Wealth and War in Sino–Nomadic Relations," *Tsing Hua Journal of Chinese Studies* 25 (1995): 138. The passage reads, *"Qin wang wanli cheng"* and is from Su Song, *Su Weigong wenji*, vol. 1 (Beijing: Zhonghua shuju, 1988), ch. 13, 169.

11. Ying-shih Yü, *Trade and Expansion in Han China: A Study in the Structure of Sino–Barbarian Economic Relations* (Berkeley/Los Angeles: University of California Press, 1967), 43–44.

12. Barfield, *The Perilous Frontier*, 54.

13. Yü, *Trade and Expansion*, 43.

14. Barfield, *The Perilous Frontier*, 60, 63.

15. For a brief outline of the debates surrounding this theory, see David C. Wright, "The Hsiung-nu–Hun Equation Revisited," *Eurasian Studies Yearbook* 69 (1997): 77–112.

16. Talat Tekin, *A Grammar of Orkhon Turkic* (Bloomington: Indiana University Press, 1968), 261–62.

17. Barfield, *The Perilous Frontier*, 230–31.

18. Jagchid and Symons, *Peace, War, and Trade along the Great Wall*, v.

Nomadic Power, Sedentary Security, and the Crossbow

David Curtis Wright

ABSTRACT

The threats, both real and perceived, posed by pastoral nomadic peoples to the security of sedentary societies and states are too well known to bear repetition here. Civilized states were not always completely helpless before the onslaughts of nomadic warriors and could sometimes choose from a repertoire of diplomatic, tactical, and strategic measures and cautions in response to present or imminent nomadic attacks. This article, which draws on Chinese, Byzantine, and European sources, surveys several of these measures. Following an in-depth consideration of crossbows and other arcuballistae, the author concludes that these were often the most effective weapons for fighting nomadic cavalrymen.

USING NOMADS TO CONTROL NOMADS

One limited military alternative for some sedentary civilizations facing nomadic raids or invasions was to make an alliance with one group of "barbarians" against another, or at least create the illusion of having done so. This of course presupposed an extensive familiarity with nomads and nomadic ways, but it was a game that imperial China learned to play. As one Han dynasty work notes, "Serving strong powers submissively is the style of small states; to unite small groups to attack a large power is the style of our enemies; and to set foreign tribes at each other's [sic] throats is the Chinese style" (Selby 2000, 178). According to the mediaeval Chinese strategic classic *Tang Taizong/Li Weigong Wendui*, "The ancients said, 'Using the Man [insects, worms] to control the *Ti* [dogs] is China's strategic power' " (Sawyer 1993, 335; Boodberg 1930, 38).

FIGHTING CAVALRY WITH CAVALRY

By the fourth century at the latest, nomadic peoples north and west of China had launched the first mounted incursions into Chinese territory, raiding and menacing the northern states of Zhao and Yan. The first sedentary government to mimic and adopt nomadic cavalry tactics in order to attack

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the nomads was likely the Chinese state of Zhao in 307 B.C., during the reign of its King Wuling. According to Sima Qian (ca. 145–87 B.C.),

> King Wuling of Zhao changed his [state's] customs, wore the clothing of barbarians,[1] and learned equestrian archery. To his north he broke up the Forest Hu [Barbarians] and the Loufan. He built a long [defensive] wall[2] from Dai to the foot of Yin Mountain to Gaoque as his boundary and established Yunzhong, Yanmen, and Dai commanderies.[3]

Soon thereafter, the state of Yan apparently also launched aggressive cavalry raids against its nomadic enemies. Sima Qian continues with the following;

> Thereafter in [the state of] Yan was a worthy general [named] Qin Kai who had been a hostage among the Hu [Barbarians] and was greatly trusted by the Hu [Barbarians]. [After] returning [to Yan] he attacked, broke up, and dispersed the Eastern Hu; the Eastern Hu moved away from Yan a distance of more than a thousand *li*[4]... Yan also constructed a long wall from Zaoyang to Xiangping and established the Shanggu, Yuyang, Youbeiping, Liaoxi, and Liaodong commanderies to thwart the Hu.[5]

Thereafter cavalry forces were gradually adopted in other states and regions of China, although throughout the Warring States period (403–221 B.C.), the chariot remained more important militarily than cavalry. Even the mighty conquering armies of Qin were only about ten per cent cavalry, and Liu Bang, who in 202 B.C. founded the long-lasting Han dynasty (202 B.C.–A.D. 220), never had more than twenty per cent cavalry among his armies. It was the great expansionist and militaristic Han emperor Wudi (r. 140–86 B.C.) who in his campaigns against the Xiongnu finally brought cavalry into its own in Chinese armies, and after his time the chariot ceased to be a major war machine.[6] But even so, Chinese cavalrymen did not literally grow up on horseback the way the nomads did, and in both their equestrian skills and the quality of their horses, they seldom equalled their northern neighbours.

ATTACKING NOMADS IN SPRINGTIME

Associated with the task of learning how to fight cavalry with cavalry was the question of when to attack with the greatest effect. The first sedentary people to figure out that pastoral nomads were at their most vulnerable during the spring, when their animals were frail and their milk down after a long winter of sparse grazing, were the Chinese of the Han dynasty during the reign of Emperor Wudi (r. 140–86). Springtime flight from invading Han armies was a hardship for nomads and their animals, and Chinese armies (which included cavalry) did not necessarily even need to engage their enemies, the Xiongnu,

in order to inflict significant damage on them and their pastoral economy. During the 120s B.C., there were several autumn attacks by Xiongnu against Han and springtime reprisals by Han against the Xiongnu.

WARINESS OF FEIGNED RETREAT AND AMBUSH TACTICS

European writers were acutely aware of the dire peril of falling victim to the nomads' feigned retreat tactics, something first described in Herodotus's colourful account of the wily Scythian commander Idanthyrsus' luring of the Persian commander Darius the Great (ca. 549–486 B.C.) into dangerous Scythian territory and his saucy reply to Darius's written message berating him for his refusal to stand his ground and fight (Wright 1998, 44–45). Both the *Strategikon* and Carpini recommend pursuing a retreating nomadic force for only a short distance. An oberservation from the *Strategikon* notes that

> They prefer battles fought at long range, ambushes, encircling their adversaries, simulated retreats and sudden returns, and wedge-shaped formations, that is, in scattered groups... When pursuing, the assault troops should not get more than three or four bowshots away from the formation of defenders, nor should they become carried away in the charge... If the battle turns out well, do not be hasty in pursuing the enemy or behave carelessly. For this nation does not, as do the others, give up the struggle when worsted in the first battle. But until their strength gives out, they try all sorts of ways to assail their enemies. (Maurice/Dennis 1984, 117–18)

Carpini likewise warned that

> if the Tartars feign flight they ought not to pursue them very far, certainly not further than they can see, in case the Tartars lead them into ambushes they have prepared, which is what they usually do... Each line should take care not to pursue them for long, on account of the ambushes they are wont to prepare, for they fight with deceit rather than courage... Even if the Tartars retreat our men ought not to separate from each other or be split up, for the Tartars pretend to withdraw in order to divide the army, so that afterwards they can come without any let or hindrance and destroy the whole land. (Carpini/Dawson 1955, 47–48)

ORDER OF BATTLE

Carpini does not make many specific recommendations about battle lines, logistics, and deployment of force; instead he limits himself to a list of what in his estimation would have been appropriate weaponry

and equipment against "the Tartars." It is not altogether clear in the passage quoted below that he is thinking of mounted warriors, but later passages make it clear that he does envisage sending out cavalrymen to meet the Mongols in battle.

> Whoever wishes to fight against the Tartars ought to have the following arms: good strong bows; crossbows, of which they are much afraid; a good supply of arrows; a serviceable axe of strong iron or a battle-axe with a long handle; the heads of the arrows for both bows and crossbows ought to be tempered after the Tartar fashion, in salt water when they are hot, to make them hard enough to pierce the Tartar armour. They should also have swords and lances with a hook to drag the Tartars from their saddle, for they fall off very easily; knives, and cuirasses of a double thickness, for the Tartar arrows do not easily pierce such; a helmet and armour and other things to protect the body and the horses from their weapons and arrows. If there are any men not as well armed as we have described, they ought to do as the Tartars and go behind the others and shoot at the enemy with their bows and crossbows. There ought to be no stinting of money when purchasing weapons for the defence of souls and bodies and liberty and other possessions. (Carpini/Dawson 1955, 46)

Cavalry equipped with all items he recommends would be "heavy" cavalry indeed and would be burdensome to the limited number of horses available to Europeans. "Another reason for avoiding too long a pursuit after the Tartars," he notes elsewhere, "is so as not to tire the horses, for we have not the great quantity which they have" (Carpini/Dawson 1955, 47).

The *Strategikon,* on the other hand, is quite specific about the order of battle:

> If an infantry force is present, it should be stationed in the front line in the customary manner of the nation to which it belongs. The force should be drawn up according to the method shown in the diagram of the convex line of battle, that is, with the cavalry posted behind the infantry. If only the cavalry is ready for combat, draw them up according to the manner set down in the book on formations. Post a numerous and capable force on the flanks. In the rear the defenders are sufficient. (Maurice/Dennis 1984, 118)

DISMOUNTED NOMADIC WARRIORS

Interestingly enough, Carpini and the *Strategikon* seem to differ in their assessments of the danger posed by dismounted nomadic warriors.

According to the former, "If any Tartars are thrown from their horse during the battle, they ought to be taken prisoner immediately, for when they are on the ground they shoot vigorously with their arrows, wounding and killing men and horses" (Carpini/Dawson 1955, 49). The *Strategikon*, on the other hand, seems even to see the possibility of forcibly dismounting a mounted warrior as a nomadic vulnerability or liability:

> They are hurt by a shortage of fodder which can result from the huge number of horses they bring with them. Also in the event of battle, when opposed by an infantry force in close formation, they stay on their horses and do not dismount, for they do not last long fighting on foot. They have been brought up on horseback, and owing to their lack of exercise they simply cannot walk about on their own feet. (Maurice/Dennis 1984, 117–18)

In this, the *Strategikon* echoes Marcellinus, who wrote of the Huns that

> Their shapeless shoes are not made to last and make it hard to walk easily. In consequence they are ill-fitted to fight on foot and remain glued to their horses, hardy but ugly beasts, on which they sometimes sit like women to perform their everyday business. Buying or selling, eating or drinking, are all done by day or night on horseback, and they even bow forward over their beasts' narrow necks to enjoy a deep and dreamy sleep. (quoted in Wright 1998, 62)

This contention about nomads not being effective warriors on their feet is not limited to European materials. Chinese records dating to the Han dynasty have a similar view of dismounted Xiongnu or Huns: "Once you get them off their horses and fighting on the ground, battling it out with swords and halberds, pressing them back and forth, then the Huns can't keep their footwork together. These are the natural talents of the Chinese" (Selby 2000, 178; cf. Sawyer 1998, 505).

But nomadic warriors were not always completely inept on their feet. Another Han source specifically notes that Xiongnu forces defeated by the Han general Li Guang managed to flee on foot (SJ 109.2868; Watson 1993a, v. 2, 118). Reuven Amitai-Preiss has recently shown that one Mongol army literally did stand and fight. In 1299 the Il Khan Ghazan (r. 1295–1304) led a force of 65,000 into Syria against the Mamluks, who attacked the Mongols before they were ready for battle. Ghazan had his troops *stand*, either on the ground or on their horses' backs, in the face of Mamluk charges. Also contrary to some sedentary historians' claims that nomads consider it no shame to flee battle, the Mongols stood their ground in the face of repeated Mamluk onslaughts and were, after heavy casualties, ultimately victorious (see Amitai 2000).

SCOUTS AND RECONNAISSANCE

Both Carpini and the *Strategikon* emphasize the importance of scouts and reconnaissance. According to the latter, placing and alerting scouts is the first thing an army ought to do in preparation for a fight with nomadic forces; only after this is done should positioning and logistical efforts be undertaken:

> When they are moving up for battle, the first thing to do is have your scouts on the alert, stationed at regular intervals. Then make your plans and actual preparations in case the battle should not turn out well. Look for a good defensive position for use in an emergency, collect whatever provisions are available, enough for a few days for the horses as well as for the men, especially have plenty of water. Then make arrangements for the baggage train as explained in the book treating of that subject... When possible seek a clear and unobstructed area to form the battle line, where no woods, marshes, or hollows might serve as a screen for enemy ambushes. Post scouts at some distance from all four sides of the formation. If at all possible, it is helpful to have an unfordable river, marshes, or a lake behind the battle line, so that the rear is securely defended. (Maurice/Dennis 1984, 118)

Carpini also highly recommended the effective use of scouts as a way to avoid being flanked by nomadic forces:

> Moreover they ought to have scouts in every direction, behind, to the right and to the left, to see when the other lines of Tartars are coming, and one line ought always to be sent to meet each Tartar line, for the Tartars always strive to surround their enemies; the greatest precautions ought to be taken to prevent their doing this, for in this way an army is easily vanquished. (Carpini/Dawson 1955, 47)

PRISONERS AND DESERTERS

Carpini and the *Strategikon* have remarkably similar ideas about prisoners and deserters from among the nomads. Both possess some appreciation for the inter-tribal instability inherent in many large and militaristic pastoral nomadic polities, and both argue the possibility of exploiting this instability to their own advantage through judicious reception and employment of prisoners, defectors, and deserters. The *Strategikon* lists general inter-ethnic and inter-tribal instability as an item in its paragraph of liabilities and vulnerabilities that nomadic armies face: "They are seriously hurt by defections and desertions. They are very fickle, avaricious and, composed of so many tribes as they are, they

have no sense of kinship or unity with one another. If a few begin to desert and are well received, many more will follow" (Maurice/Dennis 1984, 118). On the other hand (and somewhat surprisingly), Carpini, who understood pastoral nomads better than the author of the *Strategikon* ever did, seems to have perceived the fissures between Mongols and non-Mongols more than those emerging between the various Chinggisid lineages themselves:

> There are many of other nations with them and these can be distinguished from them by means of the description set down above. It is important to know that there are many men in the Tartar army who, if they saw their opportunity and could rely on our men not to kill them, would fight against the Tartars in every part of the army, as they themselves told us, and they would do them worse harm than those who are their declared enemies. (Carpini/Dawson 1955, 49)

CROSSBOWS AND ARCUBALLISTAE

The crossbow was the most effective weapon sedentary civilizations could use against nomadic cavalry forces. The Franciscan friar John of Plano Carpini (ca. 1182–ca. 1253), who was sent to the Mongols by Pope Innocent IV (r. 1243–54) in 1245, recommended in his report on his long journey that those who wish to fight the "Tartars" ought to use, among other weapons, the crossbow, "of which they are much afraid" (Carpini/Dawson 1955, 46). (It is interesting to note that the second Lateran Council had, more than a century earlier in 1139, condemned the use of the deadly crossbow against Christians. Foreville 1970, 112.)[7]

A. The Deadly Effects and Practical Limitations of the Crossbow

Drawing, aiming, and shooting a bow properly is a complex art requiring physical strength, disciplined mental focus, and a certain amount of calm, acquired intuition for how and where the arrow will fly under different conditions. The archer's efforts are divided between drawing and aiming his bow, which cannot be held in the drawn condition for more than a few minutes at most without fatiguing him and detracting from the accuracy of his aim. The crossbow, on the other hand, is a very different weapon which, once drawn and armed, remains in a ready state until the shooter releases the string by means of a trigger mechanism. After drawing and arming his weapon, the crossbowman may concentrate his entire efforts on aiming it accurately. More initial physical effort is required to draw a crossbow, but this of course means that its power and range are greater than hand-held bows. (These same considerations largely constitute the rationale for many North American states and

provinces prohibiting crossbows during archery hunting seasons for all except physically challenged hunters.) But these advantages of the crossbow must be considered against the weapon's slower rate of fire: it cannot be armed and shot with the same speed of the hand-held bow. In short, the crossbow is a more lethal weapon because of its superior range and accuracy, if not of speed and ease of arming.

B. The Crossbow in Chinese Military Writings

The crossbow first appears in Chinese historical materials dating to the mid-fourth century B.C. By the third century B.C., its battlefield use is mentioned in those materials much more frequently, and by the end of the second century B.C., it was, according to one important authority, "a commonplace" and "nothing less than the standard weapon of the Han armies." One of the reasons for the crossbow's widespread use was the relative ease with which use of the weapon could be taught; no extensive investments of time or physical conditioning were required (Selby 2000, 154, 162). (See figure 1 for line drawings of typical Chinese crossbows.)

Crossbows had entered Chinese strategic and tactical literature by the Warring States period (403–221 B.C.). The earliest reference to them in Chinese military classics occurs in the *Taigong Liutao* ("The Six Scabbards of the Grand Duke"), a work purporting to contain strategic and tactical advice to Kings Wen and Wu of the Zhou in the eleventh century B.C. but which actually dates, at least in major part, to the late Warring States period (Sawyer 1993, 37, 400, n. 67). The large majority of the *Taigong Liutao's* view of the crossbow is as a defensive and ambush weapon. It repeatedly advises defensive deployment of crossbows at the flanks and rears of large armies (Sawyer 1993, 76–77, 82, 88, 91) and also urges defensive placement of crossbowmen near gates to fortifications (Sawyer 1993, 78). Large numbers of crossbow-men should be deployed defensively in ambush a few *li* away from threatened walled cities (Sawyer 1993, 90). Crossbowmen may also be used to sever and block roads (Sawyer 1993, 82). When an army deep in enemy territory suddenly encounters a numerically superior army, the *Taigong Liutao* advises, crossbowmen should conceal themselves along their army's retreat route. "When the enemy passes our concealed forces, the crossbowmen should fire en mass into their flanks" (Sawyer 1993, 92). And again, "Wait until all the enemy's troops have emerged, then spring your concealed troops, rapidly striking their rear. Have your strong crossbowmen on both sides shoot into their left and right flanks" (Sawyer 1993, 94).

Sunzi's *Bingfa (The Art of War),* certainly the Chinese military classic best known in the West, makes only passing and incidental mention of the crossbow. One passage lists it among several weapons and provisions

which, collectively, will consume 60 per cent of the ruler's resources (Sawyer 1993, 160), while another compares an excellent army's strategic configuration of power *(shi)* and its constraints to a fully drawn crossbow and its trigger mechanism (Sawyer 1993, 165).[8]

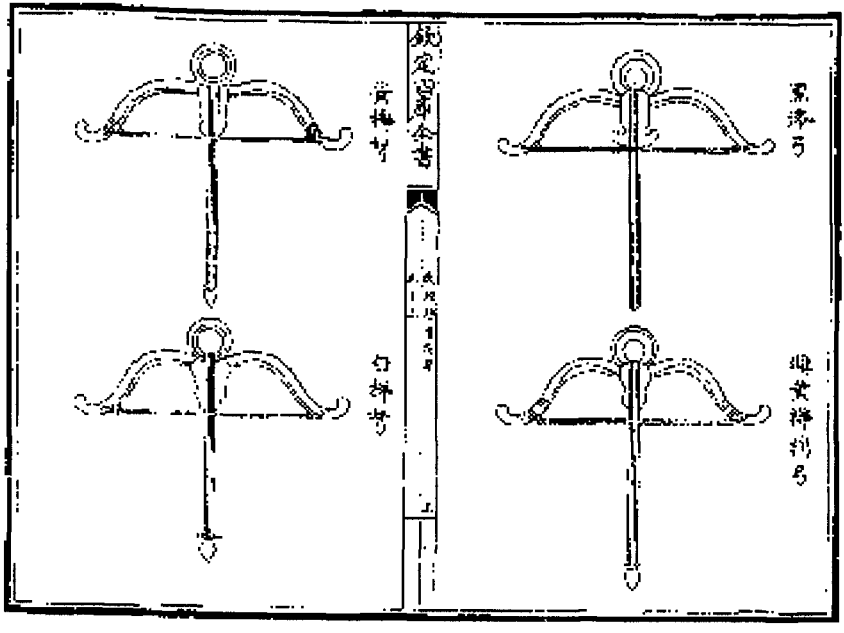

FIG.1. TYPICAL CHINESE CROSSBOWS WJZY 726.436

C. The Crossbow in China as a Defensive and Ambush Weapon

One important authority speculates that the simple configuration and theory of the crossbow was likely known in China before 1000 B.C. (Yang 1985, 206–09; Selby 2000, 153).[9] The crossbow probably originated in China as some sort of trap.[10] According to Sima Qian, crossbow booby trap devices guarded the entrances to Qin Shihuang's tomb late in the third century B.C.[11] Some of the famous terra cotta soldiers in Qin Shihuang's tomb complex were clearly crossbowmen, although actual crossbow bows are not found among them because they were so difficult to make and could not be sacrificed (Selby 2000, 170). In A.D. 608, crossbow booby traps were deployed to guard Sui Yangdi's camp (ZZTJ 608.5638). The Chinese frequently used crossbows against both infantry and cavalry in ambushes, a type of warfare for which crossbows were well suited due to their ability to remain drawn and armed for long periods and their essentially horizontal profile which allowed crossbowmen to operate

from positions of cover close to the ground. (Conventional handheld bows had to be shot in vertical attitude.) Crossbows could not be rearmed as quickly as handheld bows, but this disadvantage was negated in part by the cover behind which crossbow ambushers could operate. Further, ambush warfare did not attach the same premium to rapid rates of fire that open battlefield warfare did, and since crossbows had greater ranges than did handheld bows, crossbowman shooting from long distances had a decided advantage over cavalry.

Luring nomads into ambush was an important strategy. The *Wujing Zongyao,* an eleventh-century Song military compendium, notes that taking advantage of nomadic greed and disorder was an important part of resisting them:

> We Chinese do not excel in mounting great, pitched, all-or-nothing battles with them out on the open plains or in the wilds. Moreover, their skill is with ordinary bows and arrows, whereas we ought to press them with our strong crossbows. Thus in the Warring States period the method for combat stated: "Have some courageous but not resolute men test the invaders but then quickly depart, setting up three ambushes to await them. If the barbarians lightly advance without good order, if they are greedy and disharmonious, if they do not yield when victorious or rescue each other when in defeat, then those in front, when they see some rewards, will certainly strive to advance. When they advance and then encounter an ambush, they will certainly run off disappointed." This is already a method for testing them. (Sawyer 1998, 507–08)

The first recorded use of crossbows in Chinese history dates to Sun Bin's ambush of Wei troops under Pang Juan's command at Maling in 341 B.C.,[12] a heroic act applauded centuries later by the Ming military writer Jie Xuan (Sawyer 1998, 304–05). Along the road to Maling, Sun Bin (a descendant of the famous Sunzi) hid "ten thousand" crossbowmen in ambush at a narrow defile. He had his men fell a large tree across the road and ordered characters written on it that said, "Pang Juan shall die beneath this tree!" When Pang Juan and his troops arrived at the spot, they saw the tree and lit lanterns to read the writing on it. Just then Sun Bin's crossbowmen shot from ambush, throwing the Wei troops into chaos and decimating their ranks. Seeing that he had been outwitted and defeated, Pang Juan committed suicide by cutting his own throat. As he died he said, "The boy [Sun Bin] will become famous now!" (SJ 65.2164) Immediately prior to his founding of the Han dynasty, Liu Bang was shot and wounded by his rival Xiang Yu, who used a crossbow (SJ 7.328; Watson 1993a, v. 1, 42). In 125 B.C., Han leaders attempted to lure the Xiongnu into an ambush set up near Mayi, but there is no indication of whether or not

crossbows were used (SJ 109.2870; Watson 1993a, v. 2, 120). Tang armies used the crossbow in ambushes.[13] In early January 1005, an important Kitan[14] military commander named Xiao Dalin was killed instantly during the Song-Kitan war when a projectile loosed by a Song arcuballista from a position of cover struck him squarely in the forehead, an incident Kitan Liao dynasty records themselves acknowledge (LS 14.160; LSJSBM 24.448; QDGZ 7.68; see also SSJSBM 21.144 and XCBSL 244).

D. The Use of the Crossbow in China Against Nomadic Cavalry

Crossbows were of course effective weapons all around and were frequently used to deadly effect against infantry, but within Chinese armies they occupied a special niche as the weapon of choice against enemy cavalry. Chinese infantry of course had little hope of besting nomadic cavalry in the open field. The best strategy for them was to not even attempt to equal the nomads in open warfare but to ambush them with crossbowmen. This often entailed awaiting the nomads at a pass or defile and then overwhelming them with massive crossbow fire. The crossbow ambush was manifestly defensive; its purpose was not to conquer the nomads but to fend off their attacks and inflict maximum casualties upon them. Han dynasty officials cited the Xiongnu lack of city walls, moats, and "strong crossbows" as one of the Xiongnu defensive deficits (Sawyer 1998, 421–22). According to the *Bingfa Baiyan* by late Ming military writer Jie Xuan, Li Ke had his son intermarry with Rong barbarians and thereby get experience in crossbow use that enabled the Han to later extinguish the Rong (Sawyer 1998, 185). In 728, four thousand Tang crossbowmen defeated a Tibetan force in Gansu (ZZTJ 213.6782–83),[15] and in early 756, the Tang general Li Guangbi successfully used crossbowmen against cavalry of the rebel general Shi Siming (ZZTJ 217.6954–55). The Chinese occasionally picked off nomadic leaders with crossbows or arcuballistae. The aging Han general Li Guang (d. 119) (Biographies SJ 109.2867–78; Watson 1993a, v. 2, 117–28; Loewe 2000, 220–21) shot and killed a Xiongnu sub-commander and several cavalrymen with his crossbow "Big Yellow" *(Dahuang)* in a pitched battle in 120 B.C. (SJ 109.2873; Watson 1993a, v. 2, 123).[16] The Han general Li Ling (Biographies SJ 109.2877–78; Watson 1993a, v. 2, 127–28; HS 54.2450–59; Loewe 2000, 224–25) (d. 74 B.C.) is said to have shot a *shanyu* (an important leader among the Xiongnu) with a compound multiple-bolt crossbow *(liannu)*[17] sometime in 99 B.C.[18]

A Han dynasty work comments on the devastating effectiveness the crossbow could have, under the right circumstances, against the Xiongnu. The work does not specifically mention an ambush situation, but an effective ambush could certainly lead to the lethal scenes the work describes.

> When it comes to heavy crossbows and long halberds, when the shooting is light and at long range, then the Huns' bows are outclassed. When it comes to tough armour and sharp blades, when long and short weapons are used in combination, when artillery crossbows are brought into play, when brigades and divisions advance together, then the Huns' troops can't withstand them. When the heavy crossbow divisions mount an assault with heavy fire concentrated on a single target, then the Hun's [sic] leather breastplates and wooden shields cave in under the onslaught. (Selby 2000, 178; cf. Sawyer 1998, 505)

The Tang and Song Chinese had an appreciation for the advantages and limitations of the crossbow in warfare against mounted nomadic archers. According to the mediaeval Chinese military classic *Tang Taizong/Li Weigong Wendui,*

> Barbarian armies only rely on their strong horses to rush forth to attack ... Han armies only rely on their strong crossbowmen to hamstring the enemy ... The barbarians are strong in the use of horses. Horses are an advantage in fast-moving fighting. Han troops are strong in the use of crossbows. Crossbows are an advantage in a slow-paced battle ... Horses have orthodox tactics, crossbows also unorthodox employment. What constancy is there? (Sawyer 1993, 334)[19]

Eleventh-century Chinese thought highly of the crossbow and its utility against nomadic invasions. According to the Song Chinese polyhistorian Shen Gua (1031–95) and to various biographies (see SS 331.10653-37 and Franke 1976, v. 2, 857–63),[20] the crossbow was to the Chinese what the horse was to the Kitan—their greatest military asset (Forage 1991, 260). Many Song crossbows were so powerful that they had to be armed by means of a stirrup cocking device attached directly to the crossbow. (Shen Gua claimed that an individual Song soldier could arm a stirrup-equipped crossbow with a draw weight of nine *dan,* or 645 kilograms/1417 pounds,[21] a figure which is, of course, wildly exaggerated.[22] The renowned Neo-Confucian xenophobe Ouyang Xiu (1007–72) tried to convince himself that defensive positioning of crossbows at strategic passes would somehow approximate the superior barbarian management techniques he imagined existed in Chinese antiquity. According to his prolegomena to the section on the Turks in his *Xin Tangshu (New History of the Tang),*

> Our Chinese infantrymen are at their best in obstructing strategic passes, while the caitiff cavalrymen are at their best on the flatlands. Let us resolutely stand on guard [at the strategic passes] and not dash off in pursuit of them or strive to chase

them off. If they come, we should block strategic passes so that they cannot enter; if they withdraw, we should close strategic passes so that they cannot return. If they charge, we should use long two-pronged lances; if they approach, we should use robust crossbows. Let us not seek victory over them. (XTS 215A.6025; Wright 2002, 383–84)

The *Lan Zhenzi*, a Song work dating to the twelfth century, assesses the crossbow's usefulness against nomadic cavalrymen in glowing terms:

> Since ancient times we Chinese have fought against the barbarian tribes [the Yi and the Di] and we have always made use of the crossbow. Long ago Chao Cou, in his memorial to the emperor, said "The strong crossbow *[jingnu]* and the [arcubal-lista shooting] javelins are effective at long range, and cannot be matched by the bows of the Huns." As the Pingcheng song goes,
>
> Take heart, my lads, for we have got
> The crossbow, and the Huns have not.[23]

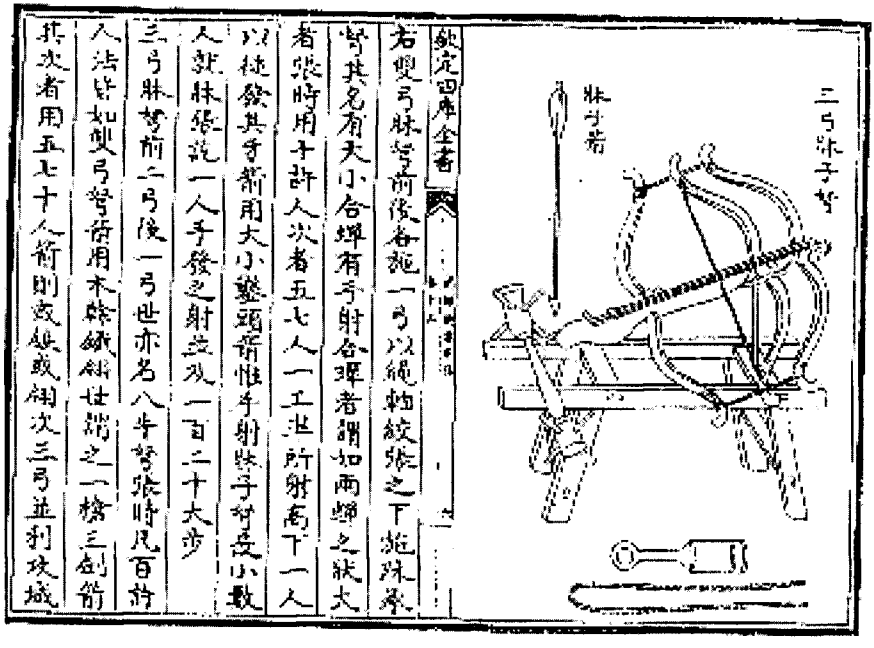

Fig. 2. Chuangzinu of Chinese triple-bowed arcuballista WJZY 726.437

Chuangzinu, or large crossbow catapults which Needham and Yates call arcuballistae (Needham–Yates 1994, 184), were powerful frame-mounted, multiple-spring crossbows too large and heavy for transport-

ation and operation by a single soldier. They came into general use in China between the eighth and eleventh centuries (Needham–Yates 1994, 198), and early in the eleventh century one such was indeed used to deadly effect, as against Xiao Dalin above (figure 2 is a line drawing of a Chinese triple-bowed arcuballista; WJZY 726.437). Ironically enough, by the mid-thirteenth century the Mongols themselves had learned to use arcuballistae and other artillery in sieges they mounted against walled cities and fortifications inside and outside China. In 1256 Mongolian armies under the command of Khubilai's younger brother Hulegu used an arcuballista constructed by Chinese ("Khitayan") craftsmen during their campaigns into Persia against the Ismä'lli (Assassin) stronghold at Ala-milt. According to the Persian historian Juvaini, this ballista, which he called a *kaman-i gav* (literally, "ox's bow"), had a range of 2,500 paces and "was brought to bear on these fools, when no other remedy remained; and of the devil-like Heretics many soldiers were burnt by these meteoric shafts" (Juvaini/Boyle 1958, 630–31).[24]

CONCLUSION

Crossbows and arcuballistae were, if properly used, effective weapons against nomadic cavalrymen. Arcuballistae were not very portable, and along with crossbows, they were best used from stationery positions of cover. They did not have the rapid rates of fire that conventional bows had, but they made up for this shortcoming with their tremendous range and superior accuracy; crossbow bolts flew much farther than arrows shot from any conventional bows. Nomadic warriors had good reason to fear the crossbow; if they were unable to scout out strategically positioned crossbow-men and arcuballistae crews, bolts might reach them well before they could return fire with their arrows. For a few terrifying seconds, they would quite literally not know what hit them.

NOTES

1. "Clothing of the barbarians" referred mainly to pantaloons and tunics or blouses, which of course were much more suitable to horse riding than were Chinese robes.
2. *Changcheng;* definitely not to be confused with the Great Wall of Ming times. Notions of the Great Wall's existence prior to Ming times cause no end of historiographical mischief. Arthur Waldron's 1990 work, *The Great Wall of China: From History to Myth,* is at present the definitive study of the Great Wall; it is, unfortunately, still ignored by prominent scholars and translators such as Watson and Sawyer.
3. *Jun;* Hucker (1985, 200, entry 1731.1). Quoted and translated passage from SJ 110.2885; see Watson (1993a, v. 2, 133) for an alternate translation.

4. The *li* was equivalent to approximately one-third of an English mile.
5. SJ 110.2885-86; see Watson (1993a, vol. 2, 133) for an alternate translation.
6. For a useful and informative sketch of the history of cavalry forces in late feudal and early imperial Chinese armies, see Sawyer (1993, 367–68) and Graff (2002, 22).
7. I am grateful to Dr Johannes Giessauff of the Karl-Franzens-Universitat fur Geschichte (Austria) for this reference.
8. Several of the "seven military classics" of ancient China discuss the use of the crossbow, but space limitations prevent further examination here. See Sawyer (1993, passim).
9. Selby (2000, 154–61) covers the putative origins of archery and the crossbow according to the *Wu-Yue Chunqiu*, a historical romance by Zhao Ye (A.D. 40–80).
10. David A. Graff, personal correspondence, 9 Oct. 2003.
11. SJ 6.265/Watson (1993a, v. 1, 63). The relevant passage is a brief fourteen characters in length and reads as follows: "Artisans were ordered to make [booby trap] machines with crossbow bolts [so that] if anyone broke in and approached [Qin Shihuang's coffin], they were shot." While interesting, the rigging of these crossbow traps does not seem to be told "in all circumstantial detail," as claimed by Needham–Yates (1994, 141).
12. David A. Graff, personal correspondence, 9 Oct. 2003; Needham–Yates (1994, 139–40).
13. See, for example, ZZTJ 186.5832. This particular crossbow ambush was not against nomadic warriors.
14. Kitan is usually spelt incorrectly as "Khitan" in English scholarship. ("Qidan", in pure Chinese, has now unfortunately achieved some currency as well.) But "Kitan" is the most accurate and proper spelling because it complies with the rules of Altaic orthography. Conventionally, "Kh" stands for "Q" in Altaic languages, but before the "I", only the palatal "k" can stand (Professor Denis Sinor, personal correspondence, 25 Apr. 1997).
15. It is not clear from this reference whether the Tibetans were cavalrymen (although it seems likely that they were), or whether the Tang crossbowmen shot from ambush.
16. "Big Yellow" crossbows are also mentioned in the *Taigong Liutao;* see Sawyer (1993, 76).
17. Needham–Yates (1994) understand the *liannu* to be either a multiple-bolt crossbow (156) or a multiple-bolt arcuballista (188). They claim that in this instance the *liannu* was an arcuballista (123).
18. The twelfth-century Taoist work *Lan Zhenzi* claims that Li Ling shot the *shanyu* himself; on this, see Needham–Yates (1994, 123). Needham and Yates claim elsewhere (1994, 191) that the *(Qian) Hanshu* has Li Ling shooting the *shanyu*, but in fact the Hanshu account (HS 54.2453) claims only that the *armies* of Li Ling shot the *shanyu* with a *liannu*.

19. See also Boodberg (1930, 36), which renders the passage as follows: "The Barbarians rely mostly on strong cavalry for shock action ... The Chinese, on the other hand, use chiefly strong crossbowmen to withstand the shock ... The Barbarians excel in horsemanship and the horse is of peculiar advantage in brisk fighting; the Chinese excel in the use of the cross-bos [sic] and this weapon is suitable for protracted fighting."

20. Forage (1991, 1, n. 1) insists that "Kuo" rather than "Gua" is the correct pronunciation because "*Kuo* is the pronunciation commonly used in China and is the only pronunciation given in the *Ci Yuan*, whereas gua is used in the Taiwanese edition of the *Ci Hai* ... Since Chinese, rather than Taiwanese, standards are adopted for this study, Shen Kuo is taken for the reading of this character." This, however, is questionable. The differentiation between "China" and "Taiwan" is of course quite controversial, and the Mandarin Chinese spoken in Taiwan is in no meaningful sense "Taiwanese". The inception of the *Cihai* dictionary goes back to 1915 in mainland China, where it was first published, and it has since been republished in the Republic of China on Taiwan with revisions by mainly mainland Chinese scholars. Its pronunciations and usages have deep Chinese roots. (My thanks to Dr. Hur-li Lee of the School of Information Sciences at the University of Wisconsin-Milwaukee for this information.)

21. Forage (1991, 266, n. 1). A Song *dan* weighed 71.62 kilograms or 157.5 pounds.

22. The most powerful modern hunting crossbow commercially available today, the Hunter XS (a product of Horton Manufacturing, Inc. in Tallmadge, Ohio; technical specifications viewable at <http://www.crossbow.com/crossbows>), has a draw weight of two hundred pounds and is a technologically complex piece of equipment with laminated speedlimbs, steel cables, cable mufflers, and precisely timed wheels. Although it is possible for a strong person to arm this crossbow using its attached stirrup, many crossbow hunters today prefer to use detachable mechanical cocking devices to arm such powerful weapons. According to Mr. Alan Southwood of the Calgary Archery Centre, one person equipped only with a stirrup cocking device could not possibly arm a crossbow with a draw weight of 1400 pounds. (Conversation of 2 Oct. 2003.)

23. Needham–Yates (1994, 123), with the eccentric "modified Wade-Giles" romanisation converted to Pinyin. The two lines of poetry in this translation are of course sly and somewhat wrenching echoes of the French-born British poet Hilaire Belloc's (1870–1953) sardonic summation of the Battle of Omdurman (1898), during which Lord Kitchener made exceedingly brutal use of the Maxim machine gun against the Mandists of the Sudan: "Whatever happens / We have got / The Maxim gun / And they have not."

24. That this arcuballista was called an ox's bow is intriguing; if an ox was actually necessary for its use, the weapon's power and difficulty of operation may well be imagined (Needham–Yates 1994, 198). According to a third-century Chinese commentator, one multiple-bolt arcuballista was so powerful that an ox was in fact used to arm it (Needham–Yates 1994, 191).

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LSJSBM *Liaoshi Jishi Benmo.* Beijing: Zhonghua, 1983.

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SJ *Shiji* (by Sima Qian). Beijing: Zhonghua, 1982.

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SSJSBM *Songshi Jishi Benmo.* Beijing: Zhonghua, 1977.

WJZY Wujing Zongyao. *Wenyuange Siku Quanshu* Vol. 726, 235–966. Taibei: Shangwu Yinshuguan, 1983.

XCBSL *Li Tao Xu Zizhi Tongjian Changbian Song-Liao Guanxi Shiliao Jilu.* 3 vols. Taibei/Nangang: Institute of History and Philology, Academia Sinica, 1974.

XTS *Xin Tangshu.* Beijing: Zhonghua, 1975.

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Artillery is Not Needed to Cross a River: Bayan's Swift Riparian Campaigns Against the Southern Song Chinese, 1274–1276

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The Mongol conquest of southern China depended in large measure on crossing the great Yangzi (Yangtze) River. The Mongols and the Chinese Southern Song dynasty (1127–1279) they sought to crush both knew that large numbers of horses and men would have to be landed on the southern shore of the Yangzi if southern China was to be conquered. Earlier attempts during the reign of Möngke Khan (r. 1251–1259) to conquer Sichuan and thence proceed eastward down the Yangzi met with failure. When Khubilai Khan came to the Mongol throne in 1260, he renewed attacks on Sichuan and even won a major battle near Diaoyushan in 1265, where he captured over 150 Song ships.

The Song defector Liu Zheng was instrumental in persuading Khubilai that a huge naval force would be necessary if southern China was to be conquered. He further convinced Khubilai that the best approach to the Yangzi was not via Sichuan, but from Xiangyang on the Han River, a tributary of the Yangzi.[1] Khubilai accepted Zheng's advice and began a major campaign against Xiangyang in 1268. The Southern Song were well aware of Xiangyang's strategic position and fortified it stoutly with huge walls and a deep moat. Song commander Lü Wenhuan was in charge of Xiangyang's defences, and Xiangyang's sister city across the river, Fancheng, was also heavily fortified. Meanwhile, mainly Jurchens and Koreans designed and built the ships for the Mongol navy.

The Xiangyang campaign developed into a protracted stalemate lasting five long years. Mongol ships tried to blockade Xiangyang, but a few Chinese ships always seemed to slip through to relieve the beleaguered city. Liu Zheng and the Mongol general Aju attempted

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several times to capture the city but were unsuccessful, despite the massive reinforcements Khubilai repeatedly sent them. The Southern Song, for their part, made several valiant but unsuccessful attempts to break the Mongol blockade of their city.

The stalemate was finally resolved in late 1272 when two Middle Eastern engineers in Khubilai's service went to Xiangyang and constructed two huge artillery pieces (a mangonel and a catapult), each capable of hurling huge rocks over great distances. In December 1272, the new artillery quickly battered down Fancheng's walls, and the city fell to the Mongols. By March 1273, Lü Wenhuan could see that it was all over in Xiangyang, and he surrendered his city and defected to the Mongol cause.

Khubilai was determined that subsequent riparian campaigns would not get bogged down the way the Xiangyang campaign had. He wanted a quick and relatively bloodless conquest of southern China, and this made him decide against more protracted sieges of cities and the use of heavy and cumbersome artillery that this would entail. Khubilai felt in his bones that the best way to subdue northern China was to persuade it to surrender rather than to conquer it after long and bloody confrontations. And Khubilai knew that the key to persuading southern China to surrender was showing the Southern Song Chinese that the major strategic barrier they were relying on, the Yangzi River, had been crossed by Mongol cavalry and infantry with ease. Indeed, Khubilai's ultimate objective was not conquering cities per se, but simply crossing the Yangzi. In 1273 he chose the Mongol general Bayan to take charge of the next phase of his conquest of southern China. Bayan made preparations for nearly a year, and as he set out in the summer of 1274, Khubilai gave him the following admonition: "The one person in times past who excelled in securing southern China was Cao Bin. If you can avoid killing, you shall also be a Cao Bin." [2]

On 15 October 1274, naval and infantry forces under Bayan's command set out from Xiangyang and Fancheng and proceeded southward along the Han River. Their first major objective was Yingzhou City, which was roughly 140 kilometres northwest of modern Wuhan in Hu-pei province. More than 100,000 Song troops were stationed in the vicinity of Yingzhou on both sides of the Han River. It was claimed that 1000 Song warships plied the waters here and an iron cable spanned the river, as did a connected string of several dozen large warships, thus impeding any possible movement further downstream by the Mongol boats.[3] Later in the month, Bayan's reconnaissance scouts observed these defensive measures and returned with bleak and sobering reports about the fortifications of Yingzhou City: the walls on the northern bank of

the river were made of stone and so high that no arrows or projectiles could pass over them. Attacking them would be useless. Others came and offered similarly grave assessments:

> On the south of the [Han] River[4] is a city ... where they have densely placed wooden posts in the middle of the [Han] River's waters to cut off the movements of boats and oars. What is more, downstream[5] they have put up a wall at Huangjiawan, which their armies stubbornly defend. It shall be extremely difficult for our generals to do anything about it.[6]

In addition to all of this, the defender of Yingzhou, Zhang Shijie,[7] had strategically deployed ballistae and wooden pickets.[8]

Bayan could tell that a potentially protracted confrontation at Yingzhou was a distinct possibility, and he wanted no part of it. Ultimately his solution to the dilemma posed by the fortifications at Yingzhou was simply to bypass the city altogether. Bayan himself went out to have a look at the lay of the terrain around Yingzhou. He observed that west of Huangjiawan Fort[9] (also known as Huang-jiayuan Fort) was a waterway, variously described in Yuan sources as a canal[10] or a creek,[11] that passed through Jizaishan and ultimately reached the Han River at Danggang. He concluded that his boats could use this waterway to bypass Yingzhou and re-enter the Han River downstream from it. The Song were not unaware of this possibility, however, and had dammed off the entrance to the canal on the Han River and stationed troops and a connected string of several hundred boats there. Apparently determining that his forces stood a much better chances against the defenders of the fort and dam than against Yingzhou itself, Bayan attacked and captured both on the same day. He then sent troops to surround Yingzhou, probably as a ruse but perhaps also as a defensive measure to prevent the city from sending troops to recover the dam and the fort. Bayan ordered holes drilled into the dam, and apparently the resulting flow of water eventually enabled his troops to pull their boats into the waterway. A month of heavy rainfall had caused to canal to overflow and connect southward with Lake Teng, which was very close to the banks of the Han River. His boat commanders made it into Lake Teng and then had to find an exit for themselves. This they did by flattening or levelling the levees or embankments between the lake and the river, placing bamboo matting over the tops of the flattened levees, and then muscling their boats back into the river near Danggang.[12]

The relevant passage from the Ping Song Lu is *po zhu wei xi di dang Zhou er guo Yingcheng.*[13] I was initially tempted to understand and render this passage as something similar to the following: "[Bayan's forces] rode their boats and bypassed Yingzhou as [easily as] if they had been

breaking up bamboo to make mats and entered the Han River." (This involved translating the *di* adverbially and interpreting *po zhu* as some sort of an ellipsis of *pozhu zhi shi*.) But a look at relevant parallel passages elsewhere and at Francis Cleaves' translation of Bayan's Yuanshi biography[14] convinced me that this was to be taken not figuratively, but literally. Bamboo was indeed broken up into mats or ramps of some sort and placed on the earth atop the flattened levees, and Bayan's forces then propelled their boats along them and back into the Han River. This I think hardly amounts to "portaging" the boats, as Hsiao Ch'i-ch'ing (Xiao Qiqing) has it;[15] these boats were quite heavy and were not likely carried on the shoulders. Here, *dang zhou* refers to rolling or skidding the boats along on the wet and muddy bamboo mats with a great deal of effort and grunting, perhaps somewhat like the hardy Canadian voyaguers and tripmen of the nineteenth century.[16]

This dazzlingly clever leapfrogging of Yingzhou's defences likely impressed Mongol cavalry forces and depressed Yingzhou's defenders, but it distressed several Chinese commanders in Bayan's forces, who insisted that the city should be taken. They remonstrated with him about this, maintaining that Yingzhou was "a collar at our throats" and would, uncaptured, present them with no end of difficulties upon their return. Bayan did not heed these objections, and after the generals had reiterated them several times, he finally criticized them severely, demanding to know if they really wanted to repeat the experience at Xiangyang. "I know all about when to slacken and when to hasten in using troops," he told them firmly, after which he alluded to Sunzi's cautions about the relative foolishness of attacking walled cities: "What is more, military writers regard attacks on walled cities as last-resort tactics.[17] How could the use of our troops be only for this one city? If we attack this city, we shall lose [our momentum for] greater things." And with that the matter was apparently settled, and no siege of the city was mounted. Song forces from Yingzhou made the fatal mistake of pursuing Bayan for some distance and were soon wiped out.[18]

The greatest of the "greater things" Bayan had in mind was the immediate and pressing tactical objective of crossing of the Yangzi River. In fact, this single objective coloured much of his tactical thinking. The Yangzi was, of course, an enormous strategic and psychological barrier, and he was determined to cross it and land large numbers of infantry and cavalry on its southern shore in order to break Song's morale and boost that of his own forces. This was his overall objective, and he did not allow other considerations to adumbrate it. For him there would be no mission creep, no yielding to incidental temptations brought by swift victories.

Yingzhou was the first fortified city that Bayan chose to bypass rather than besiege. He seems for the most part to have been interested in

attacking cities only if they could be taken expeditiously, and even then he did not always decide to attack them. He stubbornly avoided doing anything he thought might bog him down operationally and interfere with his major purpose of crossing the Yangzi River.

The next city Bayan encountered was Shayang, on 22 December 1274. Bayan summoned the city to surrender, but its defenders responded by fortifying their positions. When a fortuitous wind blew by in a favourable direction, Bayan ordered his artillery to attack with flame catapults, and soon "smoke and flames burned up to the heavens," and the city was captured. The defending troops who resisted Bayan's forces were beheaded, but contrary to earlier Mongol practice, the city's populace was spared.[19]

Five *li* (a *"li"* is roughly equivalent to one-third of an English, or imperial mile) further to the south of Shayang was Xincheng, a city which Bayan also summoned to surrender, this time with the added visual incentive of laying out the heads of Shayang's defenders at the foot of Xincheng's walls. The Mongols had kept a few of Shayang's commanders alive as prisoners, and these they sent to the walls to call out their warnings to surrender or face the gruesome consequences. At dusk one of the city's commanders did come out and surrender, and he was rewarded handsomely. When Xincheng was once again summoned to surrender, one of its commanders requested that Lü Wenhuan, the defender of Xiangyang who had finally surrendered that city to the Mongols in 1273, come forth for negotiations. When Lü arrived at the walls, he was met with a hail of arrows and hit in the right shoulder, and he had to press himself directly against the walls to avoid further injury. (Xincheng's stubborn defenders apparently had nothing but contempt for Lü.)

By 26 December Bayan had had enough of the city's defiance and sent in troops for the attack. With this, another of its commanders surrendered, but the majority of the Song troops stubbornly maintained their defence. Bayan once again sent word to the city that those who surrendered would be treated leniently, while those who resisted would all be beheaded. This time his warning was heeded, and large numbers of the city's military and civilian population came out and surrendered. Later that same day the city was captured, and its one remaining commander committed suicide. The prisoners from Shayang were then beheaded.[20]

Bayan's tactics soon bore fruit. When he promised the next city, Fuzhou, that it would not be so much as touched or even militarily occupied if it surrendered peacefully, its military commissioner[21] came out that same day and surrendered his city. Bayan's generals were eager to formally negotiate the instrument and terms of the city's surrender, but Bayan would have none of it; Fuzhou was not in a position to impede

the progress of his forces, and he was eager to press southward along the Han River: "Not so. Even if Fuzhou were unwilling to submit, it would not behoove us to attack it. Henceforth we shall be quite pressed for time, and the Yangzi River is not far ahead of us. The entire battle strength of our forces does not lie in this. It lies only in crossing the [Yangzi] River." [22]

Soon thereafter, Bayan conferred with his generals and deliberated on tactics for crossing the Yangzi. The next major obstacles to their progress were Hanyang and Ezhou, at the confluence of the Han and Yangzi Rivers.[23] Bayan's forces arrived at Caidian, which was north of the critical confluence on the Han River, and from there he assessed the situation at Hanyang and Ezhou. His scouts learned that the doughty Song defending general Xia Gui had stationed marines at Hanyang and had deployed large warships in the middle of the confluence and joined them up with an iron rope, thus completely sealing off the confluence from passage by Bayan's ships. Other strategic points in the vicinity were also stationed with heavy concentrations of troops and in complete control of their areas. East of Hanyang along the Yangzi and at the confluence with the Shawu River was Yanglo Fortress, which the Song had fortified with eight thousand troops.[24]

Bayan seems to have concluded that the Song blockade at Hanyang and Ezhou was impregnable. He began exploring ways to circumvent it, and his scouts discovered that Xia Gui had also stationed forces at the Shawu River confluence with the Yangzi. Apparently having concluded that the Shawu confluence was more vulnerable than the Han/Yangzi confluence, he sent a portion of his forces to surround and besiege Hanyang in a ruse attack and spread false rumours that he planned to enter the Yangzi from there. The ruse worked; Xia Gui transferred several thousand elite troops from the Shawu/Yangzi confluence to defend the Han confluence. On 7 January 1275, Bayan's forces opened the levees between the Han and Lun Rivers and guided their ships along the Lun River, through the Dong, Hou, and Wu Lakes, into the Shawu River, and finally into the Yangzi.[25]

A Yuan source describes the spectacle in colourful terms:

> [Bayan's] ships ten thousand in number[26] arrived [tethered to] each other [prow to] stern. At first, several thousand warships were ordered to anchor at the northern bank of the [Han] River, [where] they were stationed and deployed with light craft supporting them at their rear. They assembled at the mouth of the Lun River. Several tens of thousands of his infantrymen and cavalry in Chinese armies fighting for the Mongols were deployed on the northern bank of the [Han] River. There were flags and banners as far as the eye could see, and when the Song people saw them, they were terrified and their morale suffered.[27]

At nightfall on this same day, Xia Gui secretly sent Song naval forces to attack the Mongols' warships. They were spotted, however, and had to withdraw. Bayan's generals began to suggest that they could easily capture the Song fleet anchored at the southern bank of the Shawu confluence, but Bayan did not respond. When Lü Wenhuan himself began urging Bayan to capture the fleet, he responded:

> I also know that we would certainly capture them [the warships]. What concerns me is [the possibility of] the generals achieving small merit and [then] becoming haughty and indolent in their ambitions; this would be a loss to the greater matter [at hand]. I myself have anticipated this so that we may cross the [Yangzi] River in one overwhelming movement and achieve the entire merit of the matter. Let us not covet [such] small gains.[28]

Again, Bayan would not be sidetracked or distracted. He had a larger and more immediate purpose in mind: an assault on Yanglo Fortress. The very next day, 9 January, he sent people to summon Yanglo Fortress to surrender, and Xia Gui, the defender, wasted no time in rejecting his offer. Xia lined up several hundred Song warships all the way across the breadth of the Yangzi, clearly impressing and distressing the Mongol attackers. On 10 January, the fortress was again summoned to surrender, but its generals adamantly refused and answered defiantly:

> We have repeatedly received weighty favour of the Great Song. Now is the time for us to be upright and proper, to combine our strength and [make good] our intention to die in requital. How could we possibly mutiny and surrender to you? We have prepared our armour and weapons and will decide [the matter] today. Our Song empire stakes its all on this; losing or winning shall be with this last throw [of the dice].[29]

Bayan's response to this defiance was to attack the fortress on that very day, but he did not capture it. He then ignored the input of an astrologer in his armies about the military implications of the relative positions of Venus and Jupiter.[30]

The attack on Yanglo Fortress resumed on 11 January. Bayan and Aju secretly weighed various military options that night. Bayan opined that the Song had likely assumed that capturing Yanglo Fortress was essential to the Mongols' objective of crossing the Yangzi. This assumption, Bayan reasoned, could be applied tactically to the Mongols' advantage. Bayan could see that Yanglo Fortress was heavily defended and that attacking it would be an enormously burdensome task. Why not surprise the Song enemy where they would not fully expect it? Bayan put it to Aju this way:

> If tonight three thousand of your heavy cavalrymen rode in boats against the current and travelled upstream, [you could] hasten to observe their deployment. I anticipate that upstream, although they have made preparations, they are not strong. We should make plans to attack their weak points. On the morrow at dawn, cross over and surprise attack the south shore of the [Yangzi] River and quickly dispatch a man to report to me.[31]

Aju enthusiastically accepted this plan and set out at nightfall, travelling more than twenty *li* upstream to the west. Around midnight, Aju led his navy into battle with Song naval forces in the middle of the river. The Song navy won some initial engagements but ultimately was soundly defeated by Aju's navy, suffering innumerable casualties and losing more than a thousand boats to the Mongols. When the Mongols landed on the southern bank of the Yangzi at Qingshanji, they initially encountered tough Song resistance but eventually overcame it after they unloaded their horses from their ships and launched cavalry attacks on the Song forces there, chasing them several *li* downstream.[32]

"The Grand Councilor [Aju] went forth as you commanded and has already crossed the [Yangzi] River!" This report, delivered on the morning of 12 January 1275 by a messenger dispatched from Aju, was welcome news to Bayan and was apparently the big psychological breakthrough he had been waiting for. He immediately dispatched several tens of thousands of infantrymen to attack Yanglo Fortress.

The next day, 13 January, Bayan donned his armour and led Yuan naval forces out to a great battle with the Song navy on the Yangzi. The Yuan forces won the engagement, but only after a very fierce battle in which tens of thousands of bodies "covered the River and sank." Xia Gui barely escaped with his life and fled overland.[33]

On 14 January, Yuan forces crossed the Yangzi to Qingshanji, and Bayan began considering how best to capture Ezhou. Lü Wenhuan and others led troops westward on 15 January, and summoned the city to surrender:

> What your Song kingdom relies on are but the [Yangzi] River and the Huai [River]. Our great troops have now flown right across the Yangzi River as [easily as] treading on flat ground. [And yet] you people do not surrender. Why delay? If you resolutely resist, then [the fate of] your bleeding corpses being [piled up like] pillows will, with a single movement of our troops, soon be upon you. What guilt have your living souls?[34]

This bit of psychological warfare apparently did the trick; on 16 January, Ezhou surrendered; two days later, Bayan slightly rearranged

the structure of the city's governmental hierarchy. A Yuan source claims that Bayan reduced the city's taxes and allowed troops drafted into the Song armies to return to their native villages.[35]

On 25 January 1275, Bayan and Aju proceeded eastward down the River with their forces. The next day Bayan ordered Aju to approach Huangzhou. The city fell easily into Mongol hands when the leading authority in the city requested, and was granted, a grandiose title in exchange for surrender.[36]

Bayan summoned Lü Wenhuan on 2 February to develop a strategy to capture Qizhou, which was a few *li* north of the northern bank of the Yangzi. He had learned that Lü was close friends with several of the leading figures at Qizhou and suggested that he send secret communications to them urging them to surrender. Lü followed this suggestion and the response was positive; the city agreed to submit to the Mongols. Just a few days later, there was an orderly and uneventful transfer of power in the city.[37]

On 7 February, Aju led naval forces eastward to Jiangzhou. A couple of days later, Jiangzhou dispatched personnel to welcome Aju's forces, and on 11 February, Mongol forces entered the city unopposed and were feted to a banquet. There was more banqueting on 13 February, and two beautiful girls from the Song's imperial clan of Chao were sent to Bayan that day. Bayan, however, refused them and sent them back home, suspecting that they had been sent to distract him from his ambition of conquering Jiangnan.[38]

Incessant rains that delayed further campaigns for several days began on 14 February. Bayan sent out propaganda workers to encourage the cities and towns of the region to submit to the Mongols. It was during this time that Fan Wenhu, the defender of Anqing, made known his intentions to submit to Bayan, intentions he reiterated on 26 February. (Fan Wenhu was later to participate in Khubilai Khan's abortive invasions of Japan.) The Song's Campaign Commander of Chizhou also sent people to announce that city's intention to surrender. In response to these developments, Bayan sent Aju to call on Anqing while he himself led naval forces farther down the river to Hukou. Aju eventually sent word to Bayan at Hukou that Fan Wenhu in Anqing had indeed surrendered and had encouraged Chizhou to do likewise. On 4 March, Liu Zheng, the architect of the Yuan's naval campaign against the Southern Song, passed away.[39]

On 5 March, Bayan left Anqing, arriving on 7 March in Chizhou, where the Song Campaign Commander came out and personally received him. That same day, Song general Jia Sidao withdrew from Chizhou

and led several tens of thousands of his troops farther downstream to fortify Dingjiazhou Island in the middle of the Yangzi.[40]

Jia Sidao sent emissaries with a letter requesting peace and claiming that the Song would call themselves "vassals" *(chen)* and make annual tribute payments if the Mongols would withdraw their forces. Bayan replied that his entire mission had been undertaken because of Jia Sidao's failure to observe good faith, and that he would certainly not withdraw. Jia Sidao had, Bayan continued, two choices: Surrender territory and submit, or prepare his best armour and weapons for the battle to decide the outcome. Jia Sidao responded by more or less repeating his initial offer and gave no indication that he would submit to the Mongols.[41]

On 14 March, Bayan led forces downstream to Dingjiazhou Island, and the next day he gained a full appreciation of the massive force of 100,000 men Jia Sidao and his lieutenant, Sun Huchen, had deployed there. On 16 March, Bayan conferred with his generals regarding possible strategies for capturing the island. They decided to surround both sides of the island from the opposite shore and there deploy trebuchets and ballistae and other siege weapons. A few days later, Bayan and Aju boarded ships and directed the assault on the island. The end result was defeat for the Song forces, and as one Yuan source puts it, "The face of the River flowed with bodies, and the water was red from them." Jia Sidao and Sun Huchen barely managed to escape with their lives.[42]

This defeat terrified the next major city down the river, Taipingzhou, and its leader came out of the city and surrendered. The Supervisor of Jiankang, the next major city after Taipingzhou and more or less the site of present Nanjing (Nanking), also hastened to send word of his intended surrender to Bayan. In response, Bayan sent Lü Wenhuan to Jiankang to soothe its population and prepare the way for its surrender, which was completed on 30 March. Zhenjiang and Guazhou, cities more or less across from one another on opposite sides of the Yangzi River, also surrendered, as did a number of smaller towns and villages in the vicinity.[43]

In April of 1275, Bayan sent emissaries to the Southern Song capital at Lin'an urging its surrender, but they were intercepted and murdered, apparently without the Song court's knowledge or approval. A message from Lin'an to Bayan was sent claiming that the Empress Dowager and the young emperor, Gongdi (c. 1274–76), were unaware of these killings and blaming them on border officials. The message continued that they did not wish to see the Mongols proceed further eastward and that the Song were willing to make annual payments to the Mongols if they would withdraw. Bayan refused, and on 21 May, he again sent an emissary to Lin'an to demand the city's surrender. But once again, Bayan's emissary was murdered, this time in Suzhou.[44]

On 21 May, Aju was directed to lay siege to Yangzhou, a major city a few *li* northeast of the northern bank of the Yangzi River at Guazhou. Bayan and Lü Wenhuan returned to Jiankang and decided to wait until the cooler weather of autumn before mounting further campaigns. Bayan and Aju then returned to Mongolia and were both promoted by Khubilai Khan for their meritorious achievements.

Bayan did return to the south in the fall, arriving at Yangzhou, which still had not been captured, on 12 October. Bayan ordered an attack on Changzhou on 14 November, but the city was not captured. Bayan received orders from Khubilai later in the month to keep Yangzhou surrounded, but to ratchet down that attack and station his forces at Guazhou, Yangzhou's approach on the Yangzi. On 1 December, Bayan left Zhenjiang (opposite Guazhou on the south side of the Yangzi) and from there set out for Changzhou, encamping at Danyang. On 4 December, he arrived at Changzhou and surrounded the city.[45]

Bayan had a special interest in Changzhou because the city had, in the spring of 1275, submitted to the Mongols, only to revert later to the Song. Such perfidy and inconstancy was absolutely deplorable in Mongolian political and military culture, which may well explain why Bayan treated the city so harshly. He made one seemingly pro forma appeal to the city to come back to the Mongol side once again, but this was rejected. On 6 December 1275, he broke through the city's walls and brutally massacred all but a few hundred of its approximately 250,000 inhabitants. This he did for both strategic and cultural reasons: Strategically, it served as a grim warning both to cities that had already submitted to the Mongols and those that had not, while culturally, it satisfied the Mongolian imperative to annihilate the treacherous.[46]

The devastation of Changzhou was of course noted in the Southern Song capital of Lin'an. In the latter part of December, the Empress Dowager again attempted to persuade the Mongols to withdraw in exchange for yearly payments, but Bayan was too close to victory now to be swayed. The Song court's final attempt on 11 January 1276 to offer a specific payment of 250,000 ounces of silver and 250,000 bolts of silk was also rebuffed. Bayan agreed to negotiate terms of surrender only in late January 1276, when the Song described their emperor as Khubilai's vassal. The surrender was complete when the Empress Dowager submitted the dynasty's seal to Bayan. Lin'an was then occupied by the Mongols but was spared a general massacre because of its orderly surrender. The magnificent city of over four million people survived intact to dazzle Marco Polo a decade or so later.

Bayan eventually accompanied the Song emperor and empress dowager back to Shangdu and Khubilai's court, where they participated

in formal surrender ceremonies. The young emperor took Buddhist monastic vows and was eventually exiled to Tibet. A Song pretender to the throne managed to escape the city, however, and fled to the south, where he was eventually captured near modern Hong Kong by other Mongol forces in 1279.

Bayan all but accomplished the Mongol conquest of southern China, and he did so swiftly. After his campaigns on the Yangzi, there were mostly mopping-up operations left for the Mongols and their Chinese allies. Bayan was culturally quite Mongolian, but he apparently informed himself about some of China's military writings, particularly Sunzi. On his campaigns, he had a single objective and clung to it most tenaciously, almost to the point of having a one-track mind. But his tactics worked. His campaigns did not involve one enormous engagement after another; most of the cities that submitted to him did so without a fight at all. Sunzi 15 and 16 almost seem to be blueprints of his conquests. According to Sunzi 15, "Preserving the [enemy's] state capital is best, destroying their state capital second best."[47] And Sunzi 16 might almost serve as an encomium of Bayan:

> Thus one who excels at employing the military subjugates other people's armies without engaging in battle, captures other people's fortified cities without attacking them, and destroys other people's states without prolonged fighting.[48]

NOTES

1. Li 1988, 2.948–49.
2. Cao Bin, 931–999; biography SS 258.8977-83. Cao Bin originally served as a government official in the Later Zhou dynasty (951–960), but later changed allegiance to the Song. During the mid 960s, he campaigned for the Song against holdouts in Sichuan. When other Song generals wanted to massacre holdout cities, he restrained himself. It was said of Cao Bin's campaigns in China south of the Yangzi River that he never indiscriminately killed a single person.
3. YS 8.157. Li 1988, 2.1171 n. 231, discounts the numbers of Song troops and boats claimed here.
4. Directly across the river from Yingzhou.
5. That is, downstream from where Bayan was at the time. (Huangjiawan was upstream from Yingzhou.)
6. PSL 1.2.
7. Biography SS 451.13272–75.
8. SS 451.13272.
9. The placement of Huangjiawan Fort in Tan 1982, 6.63–64, is impossible.

10. PSL 1.2; YS 127.3100.
11. YS 8.157.
12. PSL 1.2; SS 451.13272; YS 8.157; YS 127.3100; Cleaves 1956, 211–12.
13. PSL 1.2.
14. YS 127.3100; Cleaves 1956, 211–12 and nn.
15. Hsiao 1993, 589.
16. Voyageurs skidded the Hudson Bay Company's heavy York boats atop logs along the brief but arduous overland stretches of the routes on the Nelson and Hayes Rivers from Norway House on Lake Winnipeg to York Factory on the Hudson Bay.
17. The allusion here is of course to Sunzi's *Bingfa 16:* "The highest realization of warfare is to attack the enemy's plans; next is to attack their alliances; next to attack their army; and the lowest is to attack their fortified cities." (quoted in Sawyer 1994, 177).
18. PSL 1.2.
19. PSL 1.2–3.
20. PSL 1.3.
21. An-fu; Hucker 1985, 104, entry 17.2.
22. PSL 1.3–4.
23. Li 1988, 2.1145. The PSL is surprisingly brief and garbled about the details of Bayan's campaigns against Ezhou and Hanyang.
24. Li 1988, 2.1154. The PSL is very brief and somewhat garbled about Song deployments in the Hanyang and Ezhou vicinities.
25. Li 1988, 2.1154–55. The PSL account of these events is garbled and brief.
26. I.e., very many; not literally.
27. PSL 1.4.
28. Ibid.
29. Ibid.
30. PSL 1.4–5.
31. PSL 1.5.
32. PSL 1.5; Li 1988, 2.1157–58.
33. PSL 1.5.
34. PSL 1.5. The rhetorical question "What guilt have your living souls?" here means that many innocent people would die needlessly if the city refused to surrender.
35. PSL 1.5.
36. PSL 1.6. The title was *Yan Jiang Dadudu,* or Yangzi Area Commander; cf. Hucker 1985, 474, 6096.2.
37. PSL 1.6.

38. PSL 1.6–7.
39. PSL 1.7.
40. Ibid.
41. PSL 1.7–8.
42. PSL 1.8.
43. Ibid.
44. PSL 1.8–9.
45. PSL 2.11–12.
46. On the Mongol massacre of Changzhou, see Wright 2002.
47. Sunzi, in Sawyer 1994, 177.
48. Ibid.

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The Mongol General Bayan and the Massacre of Changzhou in 1275

David Curtis Wright

Any halfway serious student of world military history knows that the Mongols in the thirteenth century were particularly brutal. Almost all of us have heard the horrifying accounts, whether of the massacre of Transoxiana in 1219 by Chinggis Khan or the murderous sack of Baghdad by Hülegü in 1258. But in the West we are perhaps less familiar with Mongol atrocities in the conquest of China. If we give credence to early Yuan documents, we might conclude that the conquest of southern China was not especially gruesome, at least compared with Mongolian campaigns in other times and places. A relatively bloodless conquest of southern China was apparently Khubilai Khan's ideal. He gave the following admonition to the Mongol general Bayan late in the summer of 1274 as he dispatched him to conquer major Yangze River cities: "The one person in times past who excelled in securing Southern China was Cao Bin. If you can avoid killing, you shall also be a Cao Bin."[1] But Bayan did not avoid killing; an important Yuan source on his conquest of southern China describes several intense battles in which many Southern Song troops died. And in December of 1275, his forces massacred almost the entire population of Changzhou. Still, according to his biographer, Bayan's campaigns overall were not characterized by excessive bloodshed:

> At no time, it seems, did Bayan forget the instructions given by Qubilai to emulate Ts'ao Pin [Cao Bin] in conquering the South as bloodlessly as possible. He put his trust in political and psychological means to destroy the Song defence: strict discipline over his own troops and generous promises to the Song generals and officials were his most effective instruments to induce the Song people to submit. Such means proved so effective that only a few pitched battles were fought, and massacres of inhabitants in fallen cities, which were so frequent elsewhere, occurred only twice in the entire campaign.[2]

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This article examines the reasons for one such apparently exceptional massacre of a Chinese city. I cannot explain the Mongols' massacre of Changzhou; ultimately I cannot justify it or really even understand it. Instead I seek to explicate it in terms of one strand of Mongolian political and military tradition. And in seeking to come up with explanation for the massacre, I strive not merely to look at it as an academic exercise or an item of gruesome antiquarian interest, but to remember that the massacre of Changzhou did in fact happen to real people at a definite time and in a specific place. I am sure that the depth of human suffering and misery at Changzhou and its environs must have been immense, especially for the very few survivors.

Khubilai Khan greatly intensified the Mongols' campaigns against the Southern Song in the 1270s. The strategically important twin cities of Xiangyang and Fancheng on the Han River fell to the Mongols and their Chinese defectors in 1273 after a protracted siege begun in 1268. After the Xiangyang campaign, Khubilai appointed Bayan (1237–95) to continue the Mongol onslaught down the Yangze River and toward the Southern Song capital at Lin'an.

Bayan is mentioned in Marco Polo as Khubilai Khan's general who captured "Kinsay" (Lin'an), the Southern Song capital. Understanding the Chinese transliteration of Bayan's name to mean "Hundred Eyes," Marco relates that the Southern Song emperor and his empress supposedly learned from their "horoscope" that they would lose their kingdom to none but a man who had a hundred eyes; when Bayan finally approached Lin'an in 1276, the emperor fled and left his empress to defend the city. When she learned that "Bayan Hundred-Eyes" was approaching, she recalled what the "astrologers" had foretold and thereupon surrendered the city, and indeed the entire kingdom, without a fight.[3] The Persian historian Rashid al-Din (1247–1318) provides some biographical details of Bayan's life, including his service in Persia to Abaqa Khan (the second Il Khan and Hülegü's successor), and then briefly covers Bayan's commission from Khubilai Khan to fight the Southern Song.[4] He credits him with a role in the downfall of Xiangyang[5] and notes that he was a "great emir" of Khubilai Khan who died only eight months after the great khan's death in 1294.[6]

The *Ping Song Lu*, written by Liu Minzhong, is a record of Bayan's campaigns against several Chinese cities, including Lin'an itself. Its author seeks to portray Bayan as a principled, resolute, reasonable, and clement man, if not exactly the epitome of a Confucian princeling. Its coverage of the battle against Changzhou is brief but telling. Changzhou had originally submitted to the Mongols in the spring of 1275, but a few months later, it reverted to Song control. This had ominous implications

for Changzhou should it ever again fall into Mongol hands, and this may explain in part why the city so resolutely resisted Bayan's offensives and overtures. Liu Minzhong, however, would have us believe that Bayan in his magnanimity was willing to overlook this reversion if the city would once again submit promptly to the Mongols. Messages written by lower-ranking officials were attached to arrows and shot into the city on 5 December 1275. According to the *Ping Song Lu*, they read as follows:

> To the supreme commander, general officers, lieutenants, and ordinary soldiers of Changzhou: Changzhou is a city that has already submitted to our Great Yuan, but all of you have come and occupied it once again. The Chief Grand Councilor [Bayan] is leading troops and approaching your city for a four-pronged attack, and you are as vulnerable as brittle dried wood. But for the sake of our lord,[7] who delights in life and abhors killing, we must first summon you to come [and surrender]. For many days we have sent people to exhort you, but they have not been heeded. Your troops and civilians need not have misgivings about having submitted to us and then rebelling once again; your officers and men need not fear that they have resisted and striven with our troops. If within the next few days they leave your city and submit to us in order to preserve its living souls, then we shall not inquire into any of your former crimes and shall not indiscriminately slaughter a single person. You will still be given titles and rewards in the same manner as other prefectures and cities along the Yangze River, and your Four Classes[8] will all be allowed to pursue their livelihoods in peace. But if you persist in your delusions and stubbornly resist us, then on the day we break through into your city, we shall drain your carcasses of blood and use them for pillows; neither old nor young shall be spared. It behooves you to evaluate and consider this promptly; do not leave yourselves cause to regret later.[9]

Bayan waited only one day to conclude that these warnings were being ignored. Between 9:00 and 11:00 a.m. on 6 December 1275, his forces scaled the city walls with ladders and planted his red standard atop them. After this Bayan himself appeared on the city walls. That same day, Yuan troops broke into Changzhou, routed its defensive forces, and (as the *Ping Song Lu* notes laconically) "butchered the city."[10]

The *Ping Song Lu* may have glossed over the gory particulars of the atrocities at Changzhou, but the early Ming poet and official Gao Qi, who was in a position to know much of Yuan history by virtue of his role as one of the sixteen scholars appointed to write the official Yuan dynastic history, fills in some of the appalling details. Prior to capturing

the city, Mongols cut off the breasts of Chinese women captured in the vicinity of Changzhou, fried and pressed them into "human oil," poured the oil onto the wooden balustrades beyond the Changzhou city walls, and set them afire with flaming arrows.[11] Yuan forces also compelled people captured outside the city walls to transport earth and stone for use in laying ramparts by the city walls. Some of these people were themselves laid like bricks into the ramparts, which were eventually as high as the city walls themselves.[12] (Bayan's savagery was later duplicated and perhaps even surpassed by the Turkic conqueror Timur [also known as Tamerlane; 1336–1404] who, at one town in Sîstân in the 1380s, "varied the idea of towers of severed heads by having his towers formed of two thousand live men bound and built up with brick and mortar; presumably, for a time, such a tower would give off sound as well as light."[13]) For centuries after the Changzhou massacre, there was a large mound of earth more than twenty feet high and slightly more than half a football field in diameter, for a total surface area of about 2200 square yards just inside the city's eastern gate. Within this earthen mound were piled many of the corpses from the massacre, and during the early twentieth century, there were still reports of dried bones being dug up from it.[14]

Quantifying the scale of the Changzhou catastrophe is problematic, in part because "separate population figures for cities apart from the county or prefecture by which they were administered usually do not exist."[15] But a specific population figure of almost 250,000 people does exist for the city of Changzhou (as opposed to the entire prefecture that the city governed) for the year 1102.[16] Given the extremely high population density of the lower Yangze region where Changzhou was located,[17] it seems likely that the city's population would have been equal to or greater than this number in late 1275. When it was all over, the ponds and wells of Changzhou were over-flowing with bodies, and of the city's original population, only 400 women and babies were left alive.[18] If we take the 1102 population of 250,000 as a base figure, this means that approximately 99.84 per cent of the city's population was liquidated. In sheer magnitude and numbers, then, the Changzhou massacre approaches that of the Rape of Nanking perpetrated by Japanese forces in China in 1937.[19] But it seems to have been Changzhou City, and not the entire prefecture of Changzhou, that was depopulated; a prefecture-wide census done in 1290 has Changzhou prefecture's population at one million.[20]

How are we to make sense of such butchery? Chinese historians writing during the early Ming certainly deplored it and scoffed at claims made in the *Yuanshi* that Bayan did not kill anyone in conquering southern China.[21] Reputable scholars in modern times have argued that it was not

simply a random act of senseless brutality; surely at the bottom it had some strategic purpose. "Bayan stormed the city, captured it, and had the entire garrison and civilian population killed to intimidate other would-be holdouts," writes Frederick Mote.[22] Jennifer Jay's conjecture is that

> If he had intended to intimidate Hangzhou into quick capitulation by instilling terror, he was immediately successful, at least as far as Empress Dowager Xie was concerned. She was determined at all costs to avoid actual fighting in the capital, and offered increasingly more concessions in suing for peace, but in each case the Mongols turned a deaf ear...Fighting was avoided in the city itself, concurring with Empress Dowager Xie's firm determination not to have the Changzhou massacre of the entire population repeated.[23]

"The liquidation of Changzhou may have erupted as a frenzied fit of rage or maybe as an act of vengeful retribution for unacceptably high casualties on the Mongol side," speculates Richard L. Davis. "But more likely, it was shrewdly calculated to serve some strategic purpose":

> He [Bayan] surely intuited the added advantage, militarily, of setting a harsh example of Changzhou. For the first time in the eastern Yangzi River valley, Mongol conquerors had perpetrated mass annihilation on an entire city of Song loyalists, lending immediacy and credibility to a threat heretofore perhaps perceived by locals as remote. This could only have terrified, even paralyzed, holdouts in neighboring cities, and especially cities having only recently reverted to Song control.[24]

But the best understanding of the Changzhou massacre might be found not in strategic considerations, but in Mongolian political culture itself. Bayan's brutality was neither senseless nor random, but it was also not primarily strategic or tactical. Nor was it, as the distinguished historian of Song-Yuan warfare Li Tianming argues, "because Bayan was bitterly angry at the long-term resistance by the military and civilian populations within the city."[25] It was, I think, primarily a rational and vindictive act of retribution, one born of a genuine revulsion in Mongolian culture against perfidy and inconstancy.

The Mongols have traditionally abhorred disloyalty and rebellion, and this may well be the single most important reason for Bayan's putting the city of Changzhou to the sword. "To punish the city for its obstinate resistance and dubious loyalty, Bayan had the entire population massacred," writes Jennifer Jay.[26] "Failing to get any positive response," writes Ch'i-ch'ing Hsiao, "his [Bayan's] army stormed the city within two days and massacred the populace in punishment for its revolt and

resistance—a traditional Mongol practice."[27] Mongolian abhorrence of disloyalty and betrayal is both reflected and perpetuated in *The Secret History of the Mongols,* a historical and literary work committed to writing in the Mongolian language sometime during the thirteenth century. Several of its passages indicate that Chinggis Khan abominated disloyalty, promise-breaking, and betrayal. The Jurchens once pledged loyalty and allegiance to him, but when it came time for him to campaign against the Tatars, the Jurchens refused to join the fight. The *Secret History* records Chinggis Khan's response to their leaders' unreliability:

> After that we said we should set out to fight and jointly attack the Tatar, the enemy which in former days destroyed our ancestors and fathers. We waited for the Jürkin for six days but they did not come. Now, drawing close to becoming enemy, they [the Jürkin] have become the enemy? Saying this, Chinggis Qahan set out against the Jürkin. At that time, the Jürkin were at Dolo'an-bolda'ut on Ködö'e island in the Kelüren river. [Chinggis Qahan] plundered their people and Sacha-beki and Taichu escaped with [only] a few of their men. [Chinggis Qahan] pursued them and, catching them up at the Teletü Pass, captured both Sacha-beki and Taichu. To Sacha-beki and Taichu, Chinggis Qahan said, "What did we agree on in former days?" Sacha and Taichu both said, "We did not keep the words that we uttered. Makes us keep to our word." Remembering their words, they stretched out their necks [for his swords]. But having made them remember their words and keep them, he suffocated them [instead] and left them on that spot.[28]

Chinggis Khan detested disloyalty, whether towards himself or even towards his rival khans. Once some of his enemies captured their khan and were bringing him to Chinggis Khan, but on their way they thought the better of it, set him free, and went alone to offer service to the great khan. Chinggis Khan both accepted their service and heartily approved of their loyalty to their khan:

> When old man Shirgü'etu, together with his sons Alaq and Naya'a, arrived, [Chinggis Qahan] said to them, "Why have you come?" Old man Shirgü'etü said to Chinggis Qahan, "We captured Tarqutai-kiriltuq and were coming [to you with him], but after seeing our rightful Qan, we asked ourselves "How can we let him die? We cannot forsake him," [so] we released him and sent him back. We wish to serve Chinggis Qahan and with this intention we have come." At this, Chinggis Qahan said, "If you had laid hands on your own Qan, Tarqutai, if you had been those who lay hands on their rightful Qan, I should

> have executed all of you and your clan. [But] you were unable to forsake your rightful Qan; your heart was right." He said this and showed favour to Naya'a.[29]

On several other occasions Chinggis Khan displayed similar approval of constancy to his rival khans. One Khadagh the Brave fought valiantly for Ong Khan, one of Chinggis Khan's bitterest enemies, and Chinggis Khan applauded and rewarded him:

> Qadaq-ba'atur came to surrender, saying, "We fought for three nights and three days and I thought "How can I let my rightful Qan be captured and killed?" As I was unable to forsake him, I fought and battled so that he could save his life and be rid of [the enemy]. Now, if you kill me, I will accept death, but if I should be favoured by Chinggis Qahan, I will serve him."' Chinggis Qahan approved Qadaq-ba'atur's words and issued a decree: "He could not forsake his rightful Qan. Did he not fight in order to save his [i.e., the Ong Qan's] life and rid him of the enemy? [This] man is worthy as a companion." After saying this he favoured him and did not have him killed.[30]

Chinggis Khan did not like being crossed. The Tanguts and the Mongols fought a brief but intense war in 1209 before the Tangut leader submitted to Chinggis Khan's overlordship and even gave him one of his daughters to wed. But in 1210, when Chinggis Khan was on his way to attack Islamic city-states in Central Asia, the leader of the Tanguts refused Chinggis's request for auxiliary troops. Chinggis continued with his westward campaigns but never forgot this refusal, which he took as a slight. When Chinggis Khan finally returned to Mongolia in the mid 1220s, his last order of business was to settle the old score with the Tanguts. In 1227 he sent ambassadors to the Tangut leader with the following message:

> Last year, you, Burqan, said, "We Tangqut people wish to be your right hand [army]." So you said, [but] when I sent [a message] and requested [your help], saying, "The Sarta'ul people have not entered into my consultation, let us ride out [against them] you, Burqan, did not keep your word and you did not give me [your] soldiers. [Instead] you came and ridiculed [me] with [your] words. I was heading towards others [but] I said that later on I would confirm [your rebellion]. I rode out against the Sarta'ul people and ... brought the Sarta'ul people directly into submission. Now Burqan, I intend to come and confirm [your rebellion]."[31]

Burkhan Khan, apparently terrified of the recriminations of having thus trifled with Chinggis Khan, claimed that not he but another Tangut

leader had offered the insults. This other leader had the bad judgement to own up to his earlier insults and offer new ones. Asha Gambu sent the following reply to Chinggis Khan:

> I spoke the ridiculing words. By now you Mongqols [should] have learned [how] to fight. If you say, "Let us fight!" well, I have a camp in the Alashai myself.
>
> With yurts [that are] latticed tents,
> With laden camels,
>
> [So] head towards the Alashai and come to me. There we shall fight. If you need gold, silver, satins and [other] goods, then head for Eri-qaya or Eri-j'ü instead."[32]

Chinggis Khan was of course enraged by the cheekiness of this communication. As the *Secret History* records it:

> After saying [this] he sent [the emissary] back. When these words were delivered to Chinggis Qahan, Chinggis Qahan—his flesh [still] hot [with fever]—said, "That is [too much]. How can we withdraw, letting him speak boastfully like this! Even [if] I die, I must face his boastful words. Let us act!"[33]

The end result was the destruction of Tangut civilization:

> Plundering the Tangqut people, making Iluqu-burqan [change his name to] Shidurqu [and then] suffocating him, [Chinggis Qahan] finished off the mothers and fathers of the Tangqut up to the seed of their seed [until] they were no more. Then he issued a decree, saying, "While we eat [our] food, talk [of how] we made them die, [how] we finished them and say, "That was the end, they are no more." Because the Tangqut people spoke words [i.e., made promises] but did not keep their word, Chinggis Qahan a second time hunted down the Tangqut people. Having finished off the Tangqut people he [passed away in August 1227].[34]

Chinggis Khan was devastated by the betrayal of Jamuka, his *anda*, or sworn blood brother, from childhood. Jamuka's followers took him prisoner and handed him over to Chinggis Khan. Chinggis, of course, had them killed for this: they were beheaded in Jamuka's presence. Chinggis seems to have been reluctant to have Jamuka put to death, because an *anda* was regarded as closer than blood relations, and killing an *anda* was thought worse than fratricide.[35] For once in his life, Chinggis seemed to have been willing to forgive and forget betrayal, but Jamuka refused his offer of renewing their old *anda* relationship. Insisting that he would be too ashamed to be Chinggis's *anda*, he requested that Chinggis Khan kill

him without shedding his blood, which was how the Mongols executed royalty. The romanticized *Secret History* version of Jamuka's death has Chinggis Khan having him executed because of his refusal to reenter the *anda* relationship with him, but burying him with full honours.[36]

The offer of clemency in this account is interesting. Not all scholars seem to think that Chinggis made it in sincerity,[37] and indeed, Chinggis may have needed a fresh rebuff to justify the execution of Jamuka. The analogy with Changzhou suggests itself here: Bayan was doubtless quite indignant at Changzhou's repudiation of its alliance with the Mongols and may well not have been ready to forgive and forget all. But he apparently still thought it good form to have a fresh refusal of clemency from the city before putting it to the sword, even if his offer of amnesty did not last even twenty-four hours before being withdrawn. Perhaps Bayan had little alternative but to butcher the city. News of the fate of Changzhou likely had strategic and tactical implications for cities that had recently submitted to the Mongols or that remained unconquered (including Lin'an, of course), but these were probably secondary or tertiary to the Mongolian political and military imperative of annihilating the treacherous.

NOTES

1. *Ping Song Lu* [hereafter PSL] (Shanghai: Boguzhai, 1921): 1–2.
2. Ch'i-ch'ing Hsiao, "Bayan (1237–1295)," in *In the Service of the Khan*, ed. de Rachewiltz et al. (Wiesbaden: Harrassowitz, 1993), 606.
3. Henry Yule and Henri Cordier, *The Travels of Marco Polo: The Complete Yule-Cordier Edition* (New York: Dover Publications, 1993), 2.145–46.
4. John Andrew Boyle, trans., *The Successors of Genghis Khan: Translated from the Persian of Rashid al-Din* (New York: Columbia University Press, 1971), 270–72.
5. Ibid., 290–91.
6. Ibid., 297.
7. Khubilai Khan.
8. Scholars, peasants, artisans, and merchants.
9. PSL, 13.
10. Ibid., 13.
11. Gao Qi, *Fuzao Ji* 4, biography of Hu Yingyan; quoted in Li 1988, 2.1241–42. (See also SSJSBM, 106.1156). Gao Qi, who wrote the biographies on women for the Yuan dynastic history, would perhaps have been in a strong position to know of such accounts involving Song women.

12. Li Tianming, *Song-Yuan Zhanshi* (Taipei: Shihuo Chubanshe, 1988), 2.1242.
13. Marshall G. S. Hodgson, *The Venture of Islam: Conscience and History in World Civilization*, Volume 2: *The Expansion of Islam in the Middle Periods* (Chicago: University of Chicago Press, 1977), 434.
14. Li, *Song-Yuan Zhanshi*, 2.1244.
15. Frederick W. Mote, "Chinese Society Under Mongol Rule, 1215–1368," in *The Cambridge History of China*, Vol. 6, ed. H. Franke and D. Twitchett (Cambridge: Cambridge University Press, 1994), 658.
16. Hope Wright, *Alphabetical List of Geographical Names in Song China* (Paris: École pratique des hautes études, Centre de recherches historiques, 1956), 4.
17. See the population map in Mote, "Chinese Society," 619.
18. Li, *Song-Yuan Zhanshi*, 2.1244.
19. On the Rape of Nanking, see Iris Chang, *The Rape of Nanking: The Forgotten Holocaust of World War II* (New York: Basic Books, 1997).
20. Mote, "Chinese Society," 658.
21. SSJSBM, 106.1154.
22. Frederick W. Mote, *Imperial China, 900–1800* (Cambridge: Harvard University Press, 1999), 464.
23. Jennifer W. Jay, *A Change in Dynasties: Loyalism in Thirteenth-Century China* (Bellingham: Western Washington University Press, 1991), 34, 36.
24. Richard Davis, *Wind Against the Mountain: The Crisis of Politics and Culture in Thirteenth-Century China* (Cambridge: Harvard University Press, 1996), 100.
25. Li, *Song-Yuan Zhanshi*, 2.1244.
26. Jay, *A Change in Dynasties*, 34.
27. Hsiao, "Bayan," 595.
28. Urgunge Onon, *The History and the Life of Chinggis Khan* (Leiden: E. J. Brill, 1990), 54.
29. Ibid., 64–65.
30. Ibid., 89–90.
31. Ibid., 157–58. Onon's translation does not give an end quote mark here, but it seems necessary contextually.
32. Ibid., 158.
33. Ibid., 158.
34. Ibid., 160.

35. Paul Ratchnevsky, *Genghis Khan: His Life and Legacy* (Oxford: Blackwell, 1991), 20, 87.

36. Onon, Paragraph 201.

37. See, for instance, Ratchnevsky, *Genghis Khan, 87,* where it is argued that "Jamuka knew his friend well enough to realize that his fate was sealed."

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British "Lend-Lease" Tanks and the Battle for Moscow, November–December 1941; A Research Note

Alexander Hill

ABSTRACT

This research note suggests that those British tanks supplied to the Soviet Union during the first months of the Great Patriotic War were, despite their shortcomings, of considerably more significance to the Soviet war effort than is generally accepted in the literature, highlighting the critical resource situation faced by Soviet forces in the early winter of 1941.

This research note is concerned with the significance of British-supplied tanks for the Soviet war effort up to the end of December 1941, by which point Soviet forces had gone over to the offensive along the whole front after having fought stubbornly at the gates of Moscow and even at Leningrad. This note, continuing discussion on the significance of Lend-Lease for the Soviet war effort in other articles,[1] suggests that the input of British armour into the later stages of the Battle for Moscow, though it was certainly not decisive, was far more significant for the Soviet war effort than was widely realized in the West or was acknowledged in published Soviet sources or in recent post-Soviet Russian language works. The strength of this argument rests on Russian language source material that was unavailable to Western or to most Soviet authors prior to the collapse of the Soviet Union. Much Soviet archival material on Lend-Lease aid to the Soviet Union has either not yet been declassified,[2] or it remains "secret" in the Central Archives of the Ministry of Defense of the Russian Federation and in the Russian State Archive of the Economy.

The recent publication of the wartime service diary of N.I. Biriukov, Military Commissar of the Main Auto-Armor Board of the Red Army from 10 August 1941, is crucial for gaining an appreciation of the use to which British tanks were put during the first months of the war. Biriukov was responsible for the distribution of recently manufactured or acquired

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tanks to front-line units.[3] Soviet and post-Soviet Russian academic authors (i.e., those providing scholarly apparatus) have been unwilling or unable to systematically trace British or American tanks or aircraft provided to the Soviet Union through to front-line units, a task made possible for armour by Biriukov's information on the units to receive such vehicles. This information can be used in conjunction with published works and with the *Order of Battle of the Soviet Army* during the war[4] (a work that was also unavailable to Western and to many Soviet researchers prior to the collapse of the Soviet Union) to gain an appreciation of the importance of these imported tanks in the fighting before Moscow in late 1941.

When Allied (particularly British) deliveries of key weapons systems for the war as a whole are compared to Soviet production for the same period, they can understandably be viewed as being of little significance. If 110,340 is accepted as the figure for Soviet production of tanks and self-propelled guns for the whole war,[5] then the 4,542 tanks supplied by Britain is but a small portion.[6] However, actual Soviet production of principle types of tanks and self-propelled guns (T-34, KV series) and light tanks was in the region of only 4,649 for the second half of 1941.[7]

Under the provisions of the 1st Lend-Lease (or Moscow) Protocol, Britain supplied Matilda (Mk II) and Valentine tanks to the Soviet Union. While these models were inferior to the T-34, Soviet production of the T-34 (and to a lesser extent, the KV series), was only just getting seriously underway in 1942,[8] and hence the relative inferiority of British tanks to the Soviet armoured pool as a whole was less during this period than it would be only a few months later, after the 1st Moscow Protocol period through to the end of June 1942.

Soviet production was well below planned targets. Production of the T-34 at Factory Number 112—which according to a GKO order of 9 July 1941 had been ordered to switch from producing submarines to tanks on 1 July 1941—was supposed to rise from 10 units in August 1941 to 250 by December—a total production of 710 units over five months.[9] Given the conversion of this factory from the series production of submarines to armoured vehicles, the actual production of 173 units to the end of 1941[10] was itself a significant achievement. Production targets continued to be unrealistic well into 1942, with Factory Number 112 targeted to produce a total of 1,240 units from June–September 1942 alone, although production for all of 1942 was only 2,584 units.[11] According to Krivosheev, from 22 June to 31 December 1941, only 3,200 medium and heavy tanks were delivered to the Red Army, figures which included Lend-Lease equipment that was starting to filter through.[12] Simonov gives production of the T-34 and KV series for the second half of 1941 as 2,819 units, with Suprun noting that 361 heavy and medium British Lend-Lease tanks reached the Red Army by this time, for a grand total of 3,180.[13]

The Matilda and Valentine had only two-pounder main armaments that were increasingly only considered satisfactory for light tanks. The absence of a high-explosive capability was a significant drawback that prompted Soviet attempts to "up-gun" both (the Matilda with a 76 mm gun).[14] Nonetheless, the armour of the Matilda and Valentine tanks put them firmly in the heavy and medium categories, respectively. Aside from the issue of main armament, both the Matilda and the Valentine required modification for service in Russian conditions. It soon became obvious, for instance, that the pneumatic transmission on Matildas could not stand up to the temperatures to which they were subjected in Russia; they required replacement with mechanical alternatives.[15] Similarly, the track plates on Valentines were considered too narrow for anything but summer conditions, thus spurs were considered necessary in Russian conditions and had to be manufactured locally. British-supplied track pins were also deemed weak and difficult to replace.[16]

In British service in North Africa, both the Matilda and Valentine faced contemporary German tanks. In Soviet service, they were apparently increasingly frequently used in defensive operations or for infantry support in conjunction with Soviet tanks.[17] This was certainly a realistic limitation from the second half of 1942 onwards, but prior to this, Soviet stocks of medium and heavy tanks did not always permit the relegation of British tanks to supporting roles. While the Soviet Union had developed tanks far superior to those in service in Britain and the United States (indeed, they were so effective that they drove Germany to produce the overcomplicated Panther in response to the T-34 and KV-1), it not only did not have the expected quantities of these types, it was also barely able to maintain force levels in the face of horrendous losses. According to Krivosheev, the Soviet Union lost 20,500 tanks between 22 June and 31 December 1941, of which 3,200 were either heavy or medium, with an initial stock of such types of 1,400. Only 5,600 tanks were received during the same period, of which, as noted above, only 3,200 were medium or heavy tanks, including imports.[18]

By the end of 1941 Britain had delivered 466 tanks of the 750 that had been promised; 259 were Valentines, 187 were Matildas, with the remainder apparently being Tetrarchs. Of these, 216 Valentines and 145 Matildas had been supplied to the Red Army.[19] With total Red Army tank stocks being in the region of 7,700 as of 31 December, according to Krivosheev (or 6,347 on 1 December, according to Suprun)—of which only 1,400 were medium or heavy models—then British deliveries to date represented in the region of only 6.5 per cent of total Red Army tank strength, but the number delivered by the British represented over 33 per cent of their medium and heavy tanks. British vehicles actually in Red Army hands represented about 25 per cent of medium and heavy tanks in service.[20]

Given high losses and the disruption of Soviet production, the Soviet Union was understandably concerned to put British and American armour into action as soon as possible, attempting to quickly amend any serious defects. A good indication of such Soviet efforts can be gleaned from the service diary of N.I. Biriukov noted earlier in this article. According to his notes, the first twenty British Valentine tanks arrived at the tank training school in Kazan' on 28 October 1941, at which point a further 120 were unloading at Arkhangel'sk.[21] Courses for the preparation of Soviet crews for Valentines and Matildas had started during November while the first tanks, with British assistance, were being assembled from their in-transit states and undergoing testing by Soviet specialists.[22]

According to the British Military Mission in Moscow, by 9 December 1941 about 90 British tanks had seen action with Soviet forces.[23] On 20 November 1941 Biriukov reported that 137 and 139 Tank Battalions of 146 Tank Brigade, along with 131 Independent Tank Battalion had been equipped with 21 Valentines each, with 132 Independent Tank Battalion having 19 Valentines and 2 Matildas, 138 Independent Tank Battalion 15 Matildas and 6 Valentines, and 136 Independent Tank Battalion having 3 Matildas and 9 Valentines.[24] Of these units, the British Military Mission was referring to 146 Tank Brigade and 131, 136, and 138 Independent Tank Battalions. The first of the units to have been in action seems to have been 138 Independent Tank Battalion which, as part of 30 Army of the Western Front—along with 24 and 145 Tank Brigades and 126 Independent Tank Battalion—was involved in stemming the advance of German units in the region of the Volga Reservoir to the north of Moscow in late November.

The exploits of 136 Independent Tank Battalion are more widely noted as they were part of a scratch operational group of 33 Army of the Western Front consisting of 18 Rifle Brigade, two ski battalions, 5 and 20 Tank Brigades, and 140 Independent Tank Battalion. The 136 Independent Tank Battalion was combined with the latter to produce a tank group of only twenty-one tanks, which was to operate with the two ski battalions against German forces advancing to the West of Moscow in early December. The 131 Independent Tank Brigade was in action on the Western Front along with 50 Army to the east of Tula (south of Moscow) from early December; During that same period, the 146 Tank Brigade also saw action with 16 Army of the Western Front in the region of Kriukovo, immediatly west of the Soviet capital.[25]

According to Rotmistrov, at the end of November 1941 there were only 670 Soviet tanks—of which just 205 were heavy or medium types—for the fronts before Moscow, that is, the recently formed Kalinin, Western, and South-Western fronts. Most of this tank strength was concentrated with the Western Front, with the Kalinin Front having only two tank battalions (sixty-seven tanks) and the South-Western Front having but

two tank brigades (thirty tanks).[26] Alternative figures suggest that of 667 tanks with front-line units of the Kalinin, Western, and right wing of the South-Western fronts as of 1 December 1941, 607 were with the Western Front (205 were KV series and T-34s),[27] while the Kalinin Front and the right wing of the South-Western Front had seventeen and forty-three tanks, respectively, none of which were apparently KV series or T-34s.[27] Either set of figures is a significant improvement on the 141 heavy and medium tanks available to the Western, Reserve, and Briansk fronts before Moscow as at 1 October 1941.[28] In light of these statistics, it is reasonable to suggest that British-supplied tanks made up in the region of 30–40 per cent of the heavy and medium tank strength of Soviet forces before Moscow at the beginning of December 1941, and that they made up a significant proportion of such vehicles available as reinforcements at this critical juncture.

NOTES

1. See, for example, B. V. Sokolov, "The Role of Lend-Lease in Soviet Military Efforts, 1941–1945," *Journal of Slavic Military Studies* 7, no. 3 (1994): 567–86; and V. F. Vorsin, "Motor Vehicle Transport Deliveries through 'Lend-Lease'," *Journal of Slavic Military Studies* 10, no. 2 (1997): 153–75.

2. As much for want of funding to formally sort through the vast quantities of material still "secret" as the desire to keep much of the material classified, if reliable sources are to be believed.

3. N. Biriukov, *Tanki–frontu! Zapiski sovetskogo generala* (Smolensk: Rusich, 2005).

4. Voenno-nauchnoe upravlenie General'nogo shtaba. Voenno-istoricheskii otdel. *Boevoi sostav Sovetskoi armii. Chast' I (iiun'-dekabr' 1941 goda)* (Moscow: undated), and *Chast' II (Ianvar'-dekabr' 1942 goda)* (Moscow: Voennoe izdatel'stvo Ministervstva oboroni SSSR, 1966).

5. N. Simonov, *Voenno-promishlennii kompleks SSSR v 1920–1950 godi* (Moscow: ROSSPEN, 1996), 164.

6. M. Suprun, *Lend-liz i severnie konvoi 1941–1945* (Moskva: Andreevskii flag, 1997), 358.

7. Simonov, *Voenno-promishlennii kompleks*, 162.

8. Ibid., 163–64.

9. Postanovlenie Gosudarstvennogo Komiteta Oboroni, "Ob organizatsii proizvodstva srednikh tankov T-34 na zavode "Krasnoe Sormovo," No. 1 ss, 1 July 1941 g., in *Gosudarstvennii Komitet Oboroni postanovliaet (1941–1945). Tsifri, documenti*, ed. I. A. Gor'kov (Moskva: Olma Press, 2002), 495–97; and GKO. Postanovlenie No. GOKO-82/ss ot 9 July 1941 g. Moskva,

Kreml'. Ob obespechenii proizvodstva tankov T-34 na zavode "Krasnoe Sormovo." Russian State Archive for Socio-Political History [RGASPI], f.644.o.1.d.1.1.272.

10. Simonov, *Voenno-promishlennii kompleks*, 163.

11. GKO. Postanovlenie No.GOKO-1880/ss ot 5 iiunia 1942 g. Moskva, Kreml'. O proizvodstve tankov T-34. RGASPI f.644.o.1.d.38.l.266; and Simonov, *Voenno-promishlennii kompleks*, 163.

12. Along with 2,400 light tanks, according to *Soviet Casualties and Combat Losses in the Twentieth Century*, ed. G. F. Krivosheev (London: Greenhill Books, 1997), 252; and Simonov, *Voenno-promishlennii kompleks*, 162.

13. Simonov, *Voenno-promishlennii kompleks*, 162; and Suprun, *Lend-liz i severnie*, 52.

14. Biriukov, *Tanki–frontu*, 55, 71.

15. Ibid., 62, 68–69.

16. Secret Cipher Telegram. From: 30 Military Mission. To: The War Office. Recd. 22/11/41. UK National Archives [TNA] WO193/580.

17. Suprun, *Lend-liz i severnie*, 52.

18. Krivosheev, *Soviet Casualties*, 252; Suprun, *Lend-liz i severnie*, 52.

19. Suprun, *Lend-liz i severnie*, 49, 52.

20. Krivosheev, *Soviet Casualties*, 252; Suprun, *Lend-liz i severnie*, 53.

21. Biriukov, *Tanki–frontu*, 16, 47.

22. Ibid., 51–55.

23. Secret Cipher Telegram. From: 30 Military Mission. To: The War Office. Recd. 11/12/41. [TNA] WO193/580.

24. Biriukov, *Tanki–frontu*, 57.

25. P. A. Rotmistrov, *Vremia i tanki* (Moscow: Voenizdat, 1972), 107–18.

26. Ibid., 112.

27. Not including 9, 17, and 24 tank brigades. "Moskovskaia bitva v tsifrakh (period kontrnastupleniia)," *Voenno-istoricheskii zhurnal*, no. 1 (1967): 92.

28. "Moskovskaia bitva v tsifrakh (period oboroni)," *Voenno-istoricheskii zhurnal*, no. 3 (1967): 71.

The Partisan War in North-West Russia 1941–44: A Re-Examination

Alexander Hill

ABSTRACT

This article examines the extent to which the limited achievements of the Soviet partisan movement in north-west Russia during the first months of the Great Patriotic War can be attributed largely to inadequacies in the organization, leadership, equipment, and training of the movement. While this is the position emphasized in Soviet and post-Soviet Russian published works, the author concludes on the basis of Soviet archival sources that while these factors were important, German occupation policies far more effectively inhibited partisan activity in the area than existing published material would have us believe. However, these policies seem only to have been effective in the context of German military successes (or perceived successes) at the front. Factors contributing to the dramatic increase in Soviet partisan activity towards the end of the period of German occupation are also examined.

The SOVIET partisan movement was formed on Soviet territory occupied by the Germans from the first weeks of the Great Patriotic War. It has typically been presented in the literature, particularly Soviet and post-Soviet Russian literature, as suffering early reverses as a result of inadequacies in its organization, leadership, equipment, and training. Due consideration has not, however, been given to the role of German activity in stifling partisan effectiveness. Previously classified Soviet documentary sources indicate the extent to which the partisan movement suffered as a result of German counter-measures, especially during 1941. Particularly important in the early failings and subsequent successes of the partisan movement was the impact events at the front had on the war in the German rear.

Faced with the possibility of war with the Soviet Union during the 1950s and 1960s, considerable attention was paid by Western

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academics to the Soviet partisan movement during the Great Patriotic War. Their works were often scholarly, and perceptive use was made of the available, largely German source material.[1] However, lack of access to Soviet documentary sources, save for a limited quantity of material captured by German forces, left much to conjecture with respect to the nature of the partisan movement and the impact German operations had on it. Published Soviet works of the time provided little assistance in understanding many of the problems faced by the partisan movement, particularly the extent to which its units suffered as a result of German policy. Although Soviet accounts implicitly accepted that the partisan movement was less effective in damaging the German war machine during 1941 than towards the end of the war, the change in effectiveness was attributed largely to improvements in the organization, leadership, equipment, and training of the partisans without duly considering the role German anti-partisan measures played; these were typically seen as consistently and brutally ineffective.[2]

Whilst the increasing effectiveness of the Soviet partisans in damaging the German war machine, at least to some extent resulting from Soviet improvements to the partisan movement, could be well documented from German sources by Western historians, the scale of Soviet investment to achieve these results, in the context of German anti-partisan activities, could not. Despite access to a range of previously classified Soviet archival sources and a climate of revisionism regarding many aspects of Soviet history, recent post-Soviet works on the partisan movement have tended to unquestioningly accept standard lines of argument established prior to 1991.[3]

Drawing extensively on Soviet archival materials from the former Central Party Archive (until recently *RTsKhIDNI)* and the Central Archive of the Ministry of Defence, the purpose of this article is to provide depth to a partisan movement often two-dimensionally presented in Western literature, and still typically inaccurately portrayed in much post-Soviet Russian material. In doing so, it becomes possible to better understand the interaction between German anti-partisan policy and the partisan movement, and the relative effectiveness of each.

This article is particularly concerned with the partisan war in north-west Russia, that is, on the territory occupied by the German Army Group North from the summer of 1941 to early 1944. The bulk of this territory was *Leningradskaia oblast'* [region] in Soviet administrative terms, with the southern portion, bordering on Belorussia, being part of *Kalininskaia oblast'*. In focusing on this particular area, which had little economic value to the Reich and where there were few non-Russians

and even fewer Jews, it is accepted that regional characteristics provided specific influences on the partisan war in the area concerned which were not necessarily influential in other parts of the occupied Soviet Union. These differences are identified towards the end of the article.

The case-study area is also interesting owing to the considerable local initiative shown in the development of the partisan movement in *Leningradskaia oblast'*, where measures were quickly taken to reduce the overlapping responsibilities of the party, the NKVD, and the Red Army over a partisan movement resulting from only general instructions from Moscow. The organizational development of the partisan movement in *Leningradskaia oblast'*, which in many ways paved the way for the Central Headquarters of the Partisan Movement *(TsShPD)* formed in May 1942, is therefore outlined.

The rapidity of the German advance towards Leningrad during the summer of 1941 was a major military achievement, particularly given that the retreat of Soviet forces in this sector was relatively orderly, and they did not suffer encirclement on the scale suffered by their compatriots to the south. By the end of August German units had reached the outskirts of Leningrad; by September the city had been cut off from the rest of the unoccupied Soviet Union.

Given the speed of the German advance, the lack of Soviet preparedness for a war on home territory, and the initial shock of invasion to the administrative-command system, it is not surprising that there was chaos in the Soviet rear immediately ahead of the advancing German armies. By the time Leningrad had been reached and German forces were continuing to make gains in the Tikhvin direction, Soviet peasants and the depleted populations of the towns of north-west Russia could, whether aware of the actual situation at the front or not, be excused for often believing that the Soviet Union was likely to collapse. In *Leninskii raion* [district], *Kalininskaia oblast'*, in a report dated 24 November 1941, the *Leninskii* partisan detachment reported that "in certain villages of the district *(Zhel'ninskogo, Bistrianskogo selsovetov* [rural parishes]) which we recently visited, we came across the attitude amongst peasants that "Soviet power is clearly finished *[vidno ne bivat']*, since almost all of Russia has been captured by the Germans."[4] A report of the *Politupravlenie* [Political Board] of the Leningrad Front,[5] commenting on *Kingiseppskii raion* for the period up to 31 December 1941, identifies similar sentiments, particularly for more isolated areas:

> Eyewitness observations on the mood of the local population living on the banks of the Koporskii and Luzhskii bays explain that the bulk of the population of these settlements has been

> favourably disposed towards the German forces of occupation, and considers that Soviet power will not return to the area concerned *[bol'she uzhe ne budit]*.[6]

Such sentiments were fuelled by German propaganda. The exaggerated claims of German propaganda were at least believable given the rapidity of the German advance. One example of plausible, if exaggerated German propaganda at the time was noted for September 1941 in a December report to the Head of the *Politupravlenie* of the Leningrad Front, where the Germans had encouraged the notion that "Leningrad had been taken, that Moscow was surrounded on all sides." [7]

Such claims seemed to owe more to the reality around them than the propaganda material which penetrated the occupied territories from the Soviet side of the front. Soviet propaganda produced during the autumn and early winter of 1941, in the absence of clear strategic successes at the front, sought significance, for instance, in tactical victories such as the recapture of El'nia or Rostov-on-Don,[8] or put forward clearly unrealistic figures for German and Soviet losses. A leaflet distributed by the *Politupravlenie* of the Leningrad Front from the end of November 1941, for instance, claimed that German losses from the beginning of the war were 6 million killed, wounded, and captured, with more than 15,000 tanks and about 13,000 aircraft lost, compared to Soviet losses of just over two million men killed, wounded, and missing, and 7,900 tanks and 6,400 aircraft lost.[9]

Not that much Soviet propaganda got through to the civilian population. For instance, a Soviet report on partisan activity in *Tosnenskii raion, Leningradskaia oblast'* for October 1941 notes that

> For the whole period of the existence of [partisan] detachments [in the district] nothing was dropped to them—not newspapers, not leaflets, and plenty of German newspapers were available. The population reads German literature, and does not possess its own ...[10]

Partisan detachments had been formed from the first weeks of the war in response to a range of decrees from regional- and union-level party institutions. The foundations of many early partisan detachments were the so called "destruction" battalions for rear-area security. Such detachments were formed in prefrontal districts of *Leningradskaia oblast'* by *raikomi* [district-level party organization] even before the end of June 1941 in response to a resolution of the Leningrad *obkom [oblast'*-level administration] of the party of 24 June 1941 "Regarding the formation of detachments for the struggle with enemy parachutists in *Leningradskaia*

oblast'."[11] As early as 29 June 1941, despite its decimation of the partisan movement in waiting only a few years before during the purges, the central apparatus was calling on party and Soviet organizations in the prefrontal districts to "establish partisan detachments and diversion groups for the struggle against units of the enemy army." This 29 June 1941 call to arms was subsequently elaborated upon on 18 July in a decree "Concerning the organization of the struggle in the rear of German forces" which called on party and Soviet organizations from republic to *raion* level to take in hand the organization of the fledgling partisan movement, drawing on the destruction battalions.[12] A streamlining of the *raion*-level party organization was undertaken from 4 July 1941 in *Leningradskaia oblast'* with the establishment of *troiki* led by the first secretary of the *raikom* to take decisions on behalf of the local party apparatus.[13] *Troika* members would also be members of partisan detachments, closely identifying the partisans with the party and residual Soviet power on occupied territory.

In theory, a key role in the formation of *raion*-based detachments in the first months of the war was played by the military departments of the *raikom*. These departments had been established at *raion-*, *gorkom-*[town] and *obkom*-levels of the party administration after the 18th *sezd* of the party in 1939 for the "strengthening of mass-military *[oboronno-massovaia]* work amongst workers as a result of the increasing threat of war."[14] Since the party had been involved in mobilizing conscripts and in preconscription military training, for which the Red Army relinquished authority in 1935, local party organs were in a good position to locally mobilize personnel for service in the partisan detachments.[15] Hence there was a certain practical reasoning behind the party dominating the partisan movement from the outset.

In circumstances where Soviet defeat seemed likely, the activities of locally raised partisan detachments (and increasingly those dispatched from Soviet lines, where possible drawing on local personnel who had initially retreated) seemed futile. Poorly equipped and lacking communications with the Soviet rear, such detachments were typically dominated and even led by those lacking serious military training, not only members of the *troiki* but typically including other local party and state officials. For example, the 14-strong *Sebezhkii* partisan detachment *[Kalininskaia oblast']*, which crossed the front line to start its activities in the German rear on 11 August 1941, although led by the head of the *raion* NKVD who would have had some (relatively recent) military training, included three *raikom* secretaries, the chairman of the district council, the chairman of the Sebezh town council, the head of the *raion* health department, and other members of the local governmental structure.[16] The effectiveness of such units was no doubt supposed to

stem more from their political reliability than military prowess, where many members of such detachments were civilian party members or candidate members.

More effective than these party-organized detachments were numerous Red Army and NKVD reconnaissance and demolition units. For example, on 4 September 1941, on the orders of the *Kalininskoe oblastnoe upravlenie* [Board] of the NKVD, a 24-strong "partisan-diversion group" was formed, which after due preparation, was dispatched on 12 September to undertake operations in the enemy rear in the Idritsa area.[17] However, such units were relatively few, and the attentions of Red Army units in particular were focused on the immediate prefrontal zone.

With the party and the NKVD, as well as the Red Army all sponsoring partisan detachments in the enemy rear, it became increasingly apparent that their command and control needed to be more unified and coordination between the above organizations increased for the partisan movement to be anything more than a nuisance to the Germans. While specifically NKVD-organized units increasingly disappeared or came under party control,[18] there was still a need for more centralized coordination of party/NKVD units and for increased coordination with the Red Army.

As early as 2 August 1941, the Leningrad *obkom* took a major step towards developing a more unified system for the command and control of the partisan movement in the *oblast'* by creating a *troika* for this role, headed by an *obkom* secretary, Bumagin, the head of the military department of the *obkom*, Alekseev, and one of the staff of the *Oblastnoe upravlenie* of the NKVD, Kozhevnikov. Dividing the occupied territory into sectors, an operational group was sent to the prefrontal area of each of the sectors. These operational groups were charged with directing the partisan movement there. They sought to establish contact with the military soviets of the fronts, additionally working with Red Army reconnaissance departments, which through their reconnaissance units had a radio network of sorts on the occupied territory which the party-led organization lacked.[19]

Apparently at the suggestion of the above *troika*, on 27 September 1941 the Leningrad *obkom* formed the Leningrad Headquarters of the Partisan Movement *(LShPD)* in order to formalize the increasing coordination between the party/NKVD and the Red Army. Headed by a secretary of the Leningrad *obkom*, Nikitin, members also included the head of the military department of the *obkom*, Alekseev, the head of the Reconnaissance/Intelligence Department of the Leningrad Front, Evstigneev, and the head of the *Oblastnoe upravlenie* of the NKVD, Kubatkin.[20]

Meanwhile, on occupied territory, the apparent futility of partisan activity against the German onslaught, combined with the fact that detachments were dominated by Soviet officialdom, gave those hostile to the regime good reason to openly collaborate with the Germans and act against the partisans. Be it in order to ingratiate themselves with the Germans or as retribution against a regime hostile to them, a core of collaborators was soon assisting German security forces in suppressing the territorial partisan detachments. For instance, according to NKVD agents and the Reconnaissance Department of the Northern Front, before the winter "in *Kingiseppskii raion* and in certain parts of *Oranienbaumskii raion [Leningradskaia oblast']* part of the population actively assisted the occupiers in the betrayal of Soviet personnel, the giving up of partisans and in the dissemination of anti-Soviet propaganda."[21]

In the countryside, former *kulaks*, exiled from the villages in which they lived prior to the collectivization drive, began to return home and provided an important anti-Soviet, and at least initially pro-German, core. The *troika* for *Dedovichii raion, Leningradskaia oblast'* reported that:

> after the German occupation ... many kulaks returned. They hoped to get back their former houses and later on to possess some land ... Still at the very beginning of 1942 it became known that the kulak M. Frolov ... had appeared in Yukhalov village of the Tipino selsoviet. He was smart enough to become, in a very short time, the village chairman of the *kolkhoz* [collective farm] "Red Dawn", and then [he] began to work against the Soviet regime ... It is noteworthy that counter-revolutionary activity developed particularly in the Soshitsy selsoviet. Those engaged in this activity were mostly former kulaks who had come here from Staraia Russa.[22]

The value of such collaborators was often appreciated by local German commanders, who rewarded them with land and offices. In the village of Pestovo, *Velichkovskii selsovet*, of *Leninskii raion, Kalininskaia oblast'*: "The Germans appointed Moiseev Pavel, a yeoman farmer *[edinolichnik]* and in the past of anti-Soviet disposition as the village elder. As elder he actively carried out all of the German's instructions ..."[23] Moiseev's daughter was subsequently killed and his wife wounded in a partisan attack on his house.

In the hinterland, where German authority was weakest, increased reliance would be placed on locally recruited officials and police to maintain order. As one observer noted:

> The Germans were here for a long time. But they were rarely in our village, rarely. This was because there were more [indigenous] police there. They [the Germans] only came you see to bring or take someone away.[24]

At least while German fortunes appeared to be on the rise and German forces had the upper hand in the partisan war, a cost-benefit analysis of whether to collaborate with the Germans or not would favour collaboration. However, the case of Moiseev Pavel illustrates the risks of open alliance with the Germans even during the summer and autumn of 1941.

During that period, the effect of German violence against partisans and the civilian population often tenuously associated with them was, in most areas, to make even the more enthusiastically pro-Soviet elements of the civilian population increasingly reticent either to join or to assist the partisan movement. The threat from German forces was typically far greater than was the threat from the partisans. In many cases Soviet accounts, particularly secondary sources, suggest that the bulk of the civilian population, including the *kolkhoz* peasantry, wanted to assist the partisans. Although accurate assessment regarding to what extent the population was pro-Soviet (in the sense of desiring Soviet victory) in 1941 is not possible, certainly both partisan and German reports suggest that a significant proportion did in principle favour the partisans.

However, though in numerous cases such persons seem to have willingly assisted partisans at least to the extent of providing food and suchlike, increasing fear of German reprisals often prevented those who wanted to contribute similarly or more significantly from doing so. In a partisan diary captured by the German 281st Security Division, it was reported for 14 September 1941 that "[our] reception in the villages has become gradually worse; the Germans warn the civilian population [of the consequences of assisting us]."[25] It went on to state that "the population of the villages is intimidated [by the Germans]. They barter with us and assist us only with great trepidation, lest the German troops annihilate them."[26] Certainly the partisans were not seen in the same positive light as the Red Army, partly as a result of the repercussions of a partisan presence in the locality. The above partisan diary reports that on 29 September 1941, the partisans arrived in a village to be told, "we are German subjects—move on! We don't have any bread. Many of your sort come through here. Better that you were at the front with the Army!"[27]

This situation, in which the civilian population was intimidated into avoiding where possible even the slightest indication of support for the partisans, seems to have been the case both in more isolated yet garrisoned areas relatively untouched by growing German economic exploitation, and in those more accessible areas typically situated along the main arteries of communication. Only in the most isolated and negligibly garrisoned areas were the partisans able to gain a position by the onset of winter whereby, with the assistance of the civilian population, they could continue to operate for extended periods on occupied territory.

At no point were German security forces considered adequate for the geographical areas for which they were responsible, and German troops available for security duties declined as 1941 progressed. From as early as the summer of 1941, demands for troops at the front had stripped the security divisions of considerable manpower compared to their initial complements. The 281st Security Division had 7,827 personnel on 21 June 1941, but by 11 and 21 August, this number was reduced to 3,137 and 3,706 respectively, recovering somewhat to finish the year on 21 December with 7,053.[28]

Replacements for the better quality troops drawn off to the front line, though they kept divisional strength up, were of inferior quality to those they were replacing. Thus, the 281st Security Division reported that "the bulk of [replacement] personnel are too old, more than 80 per cent more than 30 years old." A large number came from reserve forces and were deemed unsuitable for aggressive, anti-partisan operations, particularly given the lack of transport they were provided.[29] Although even during 1941, the arming of indigenous personnel in a specifically anti-partisan role had apparently started in some areas with the formation of local "self-defence" units, there is little evidence that such units were frequently encountered until the spring of 1942.[30]

As German strength declined, early partisan losses were being replaced by units sent from Soviet lines up until the onset of winter. Particularly in those areas overrun during the first weeks of the war where territorial partisan detachments had either not been, or had been inadequately, organized, local personnel who had initially been evacuated were formed into partisan detachments and sent back to their home areas. One example is the previously mentioned *Sebezhskii [Kalininskaia oblast']* partisan detachment. Prior to the occupation of Sebezh by German forces on 7 July 1941, members of the executive committee of the *raisovet* [district council], the *raikom,* and local NKVD personnel retreated with the Red Army to Velikie Luki; they were then

summoned to Toropets, where a partisan detachment was formed from the "Party-Soviet active." On 11 August, they were dispatched back to *Sebezhkii raion*.[31]

While party and NKVD personnel local to the area in which partisan detachments were operating continued to play an important role in the leadership of partisan detachments, rank and file partisans were increasingly being drawn from urban centres, Leningrad being one of the principal sources. They were allocated as partisans as an alternative to serving in the Red Army, but many of those drafted into the partisan movement nonetheless ended up serving in the Red Army after initial enthusiasm for the creation of partisan units, particularly in Leningrad, had waned. As of 10 December 1941, of seventy-one detachments formed in Leningrad and comprising 2,524 men, thirty-one detachments totalling 1,103 men were transferred to the Red Army, and another thirteen (669 men) were disbanded.[32]

Adequate figures for the number of partisans for the case study area as a whole are difficult to come by for 1941, even for a single *oblast'*. Nonetheless, piecing together information from several sources, it is clear that figures often given in Soviet accounts for the number of partisans for *Leningradskaia oblast'* misrepresent partisan presence on occupied territory by including those accounted for as partisans who were not active on occupied territory.

According to the *Politupravlenie* of the Northern Front, no earlier than 25 July 1941, "the numerical composition of destruction battalions, partisan detachments and self-defence forces *[gruppi samoboroni]* for 25 July 1941, according to incomplete figures," was "about 5,000 men for the *oblast' [Leningradskaia]* as a whole."[33] As is apparent from numerous reports, many from the destruction battalions did not become partisans; therefore figures for 10 August 1941 produced by the military department of the Leningrad *obkom* of the party perhaps give us a better idea of the number of partisans operating in the *oblast'* during the summer of 1941. These figures suggest that 2,675 men, in seventy detachments in forty-eight districts, were operating as, or preparing to operate as, partisans.[34]

Despite the formation of additional units during the autumn, and including units formed without the knowledge of the military department of the *obkom*, by 10 December 1941 figures from the *Politupravlenie* of the Leningrad Front give a total of only 2,430 partisans in fifty-nine detachments operating in the enemy rear, including figures for partisans originating from Leningrad (113), from the *oblast'* (806), and for those accounted for by the command of the

North-Western *napravlenie*[35] (1,511) operating on the territory of the *oblast'*. The figures for detachments disbanded, handed over to the Red Army, or unaccounted for from Leningrad and the *oblast'* (669/1,103/219 for Leningrad and 579/596/640 for the *oblast'*, respectively) betray the extent to which many of those accounted for as partisans by the party in August were either only active for a short time or were never active at all on occupied territory.[36]

Nonetheless, it can be suggested that up to 4,000 partisans and other Soviet forces were operating in the rear areas of Army Group North in mid-December 1941. This figure has been calculated by adding the figure of 2,430 partisans for *Leningraskaia oblast'* to 1,429 personnel of occupied *Kalininskaia oblast'*, according to NKVD figures for 12 December 1941.[37] It has been assumed that units whose destruction or dissolution in the field had gone unreported compensate for additional personnel operating as part of specialist Red Army reconnaissance and diversion units.

The above partisan units were primarily up against three German security divisions, elements of *Einsatzgruppe A*, and troops temporarily drawn off from front-line units in the immediate vicinity of the front, including for much of the time a regiment of the 2nd SS Brigade. These forces represent a strength of not more than 30,000 men being ostensibly responsible for the security of approximately 70,000 square kilometres, although they were concentrated to the immediate rear of the German front line and along the main transport arteries.

In such circumstances, partisan concentrations such as the Leningrad partisan *krai* [zone] were bound to emerge. In this instance partisan units, which became part of the 2nd Leningrad Partisan Brigade, gained "control" of an area 120 kilometres from north to south by 90 kilometres east to west by October 1941. The area was bounded by the Dno-Staraia Russa railway in the north, to the west by the Dno-Bezhantsi railway, to the south by the main Kholm-Bezhantsi highway, and to the east by the Staraia Russa to Kholm highway.[38] Major German anti-partisan operations were needed to clear such concentrations, and it was difficult to muster the troops required. Nonetheless, during the summer and autumn of 1941, given the low military quality of most partisan detachments, German support from a core of collaborators and the intimidation of much of the rest of the population, and a concentration of German resources around the transport arteries and population centres, German security forces were able to secure key objectives and lines of communication, destroying a significant number of partisan detachments and forcing many others to leave the occupied territories.

The partisan detachment for *Loknianskii raion, Kalininskaia oblast'* was one of many detachments harried by German security troops assisted by collaborators. It reported that during the autumn of 1941:

> For the first days of activity of the partisan detachment there was no support whatsoever from the remaining civilian population, in fact the opposite. Former kulaks and those repressed by organs of Soviet power, and part of the population under pressure from the Germans, assisted them, assisting German units in showing them where the partisans were hiding.

A specific example is given where *"Edinolichniki* [yeoman farmers/ kulaks] of the village of Chernoguzov brought German soldiers to the village of Kopti, where partisans were washing in a *bania."*[39]

Winter made the lives of both partisans and Germans more difficult. The problems faced by most partisans during the winter of 1941 are well illustrated in a report on the activities of partisans of *Luzhskii raion, Leningradskaia oblast':*

> With the coming of winter the activity of partisan detachments did not take the same active form which it had done in the autumn ... The coming cold forced partisans to prepare winter dugouts, which temporarily tied a partisan detachment to one place.

The combination of having to depend on winter camps and facing hostility from elements of the civilian population were often severely detrimental to the partisan detachments. The report continues:

> Not infrequently *karatel'nie* [lit. retribution] detachments attacked the partisan dugouts with the help of traitors from amongst the civilian population, and in such cases the partisans had to live in the forest under open skies in severe frost. The food situation became worse. All of these factors lowered the military activity of the partisans, the number of which dropped dramatically during the winter.[40]

The image of Russian troops in white camouflage smocks attacking German troops equipped at best for autumn weather during the winter of 1941–42 is prevalent in Western historiography of the war in the East, yet it is apparent that "General Winter" was not always on the Soviet side. An interesting additional disadvantage of winter for the partisans was that after the initial snowfall, German troops and collaborators were far more easily able to track the partisans owing to footprints left in the snow that helped them locate their camps.[41]

Partisans, particularly those who had been on occupied territory since the summer, often found themselves in positions as dire as those experienced by their German opponents, not only with respect to food, but also clothing and footwear during the winter months. Like the Germans, the partisans of 1941 were often forced to beg for food and clothing or requisition it from the civilian population as and when they were able.[42] This was not always possible, however. During October 1941, the *Kalininskaia oblast'* partisan-diversion group led by and named after Timofeev was prevented from moving into villages to gather supplies from the local population by German *karatel'nie* detachments.[43]

Any civilians who might have wished to provide assistance to the partisans were often prevented from going to the forest by a strict German passport regime. All those more than fifteen years of age were to have a pass for the area in which they lived.[44] If found outside their home area without authorization from the local German command, they could theoretically be shot on the spot. Night-time curfews were similarly enforced.

The partisan detachment of Timofeev reported that as a result of German security policies preventing access to the civilian population, whose food supplies were limited anyway, "in general our people had to eat bread and horse meat, 100–150 grammes a day, as a result of which with every passing day people came closer to emaciation." This detachment, harassed by the Germans, finally crossed the front line on 4 November 1941.[45]

The damage done by partisans to the German war effort during 1941 was extremely limited compared to what it would be nearer to the end of the occupation. The war diary for the 281st Security Division for 1941 gives an impression of partisan activity and its results in the area under its jurisdiction, where although attacks and acts of sabotage by partisans were frequent, they typically, although not always, caused little damage or loss of life.[46] Before the intervention of winter, as partisan reinforcements were being sent from Soviet lines, *Einsatzgruppe A* noted in a report of 29 September 1941 that the number of partisan attacks and acts of sabotage had risen continuously, and that partisan activity resulted in the "not insignificant" loss of men and material. Nonetheless, the report was simply calling for "systematic" action to deal with the partisan nuisance, which had hitherto been lacking, noting that the organized nature of the partisans in the USSR was not to be compared to what was merely a "sniper problem" in Poland and the West.[47]

Whilst General von Roques was able to report on 9 October for the Army Group Rear Area of Army Group North that "recently some

success has been achieved against the partisans," he made it clear that the danger had not passed.[48] To the contrary, on 26 November, the increasing strength of the partisans to the south of Lake Ilmen in the area of the partisan *krai* was noted in the War Diary of the OKW, although in other areas, particularly to the north-west, German units reported successes in suppressing the partisan menace.[49] By the end of November 1941, the shooting of three armed partisans on the Pskov-Luga railway line, part of a detachment that had originally been fifty strong and whose remaining twenty men were dispersed in small groups in several villages, was considered an important enough incident to be reported in Operational Situation Report No. 7 of the *Sicherheitspolizei* and SD in the USSR.[50] The novelty of this incident reflected the destruction of a few and the withdrawal of many detachments to Soviet lines, leaving the remainder forced to focus on survival as much as on military activity. Such partisan units, despite their often small size, could have represented a real threat to German forces had they not been dealt with through both the active and passive security measures taken.

By early 1944, the Soviet partisan movement had become more than a nuisance in the rear areas of Army Group North. Increasingly frequently partisan operations in German rear areas significantly inhibited German operations at the front line. Howell, basing his assessment on Army Group North's war diary, notes that during the Soviet offensive of January/February 1944, the success of which was guaranteed with or without partisan activities by the extent of Soviet superiority and the lack of German strategic reserves, partisan attacks which focused on railway and to a lesser extent road communications "played ... havoc with all operational and logistical movement in the whole [18th] army area." Both the 8th Jaeger and 12th Panzer Divisions, among others, were delayed by partisan activity as they made their way to the front. In the case of the 12th Panzer, "partisans made a night raid on its column as it moved through forest and swamps and destroyed a number of vehicles, halting the entire division on the road for some time." Partisan activity also seriously impacted German communications, in particular via telephone, forcing reliance on less reliable and secure radio communications.[51]

Until the partisan movement was swelled by a mass of new recruits in late 1943–early 1944, a professionalization of the movement's personnel was a key factor increasing the effectiveness of partisans in the area occupied by Army Group North. This was coupled with improvements in the organization, supply, and coordination of partisan units. However, events at the front line significantly affected the partisans' fortunes, having underpinned Germany's ability to suppress

the partisan threat throughout 1941. During most of that year, the German advance could feasibly have seemed unstoppable, a suspicion often reinforced by German propaganda whose penetration and credibility were far more extensive than Soviet materials. By late 1943 the reverse was true—the return of the Red Army was clearly imminent. This led to German occupation forces giving up any pretence of winning the civilian population over to its side. The result was a sharp increase in the intensity of exploitation of the economic resources of the occupied territories along with increased barbarity in the suppression of an increasingly effective partisan movement. At the same time, declining German fortunes at the front not only drained manpower from the rear areas but also undermined the confidence of collaborators, particularly those in German military formations. Increased German rapaciousness and barbarity and a declining ability to deal with the partisans could only push increasing numbers of civilians into either assisting or joining the partisans, particularly in light of questions which would be raised about their conduct during the occupation upon the return of the Red Army and Soviet authority.

With the start of the offensive below Leningrad of January 1944 and the rapid Soviet advance, the inevitable had happened; the end of German rule was in sight. If those who had not already done so did not act quickly to show their true loyalties by going over to the partisans, it was clear that there would be Soviet retribution not only against collaborators but also against their families. *GKO* [State Defence Committee] order No. 1226 of 14 June 1942 stated that "adult members of the families of persons (military and civilian) sentenced by judicial organs or special court of the NKVD SSSR to corporal punishment according to article 58-1 "a" of the criminal code of the RSFSR ...: For spying for the benefit of Germany ...; for deserting to the enemy, betrayal or joint action with the German forces of occupation; service in German anti-partisan or administrative organs ...; are subject to exile ... for 5 years." In addition, families could expect the same punishment for the "voluntary retreat" of family members "with the forces of occupation" as Soviet troops advanced. However, it went on to state that "families of such traitors of the Motherland are not subject to arrest and exile," where family members were "Red Army personnel, partisans, persons rendering assistance to the Red Army forerunners and partisans during the occupation ...".[52] This order and forerunners and developments of it would have been of little value if the civilian population was not aware of it. While it was not necessarily presented in the above form, partisans made sure that those not taking sides knew the sort of treatment they could expect as "traitors"—the

wartime equivalent of "enemy of the people"—with the liberation of the occupied territories. A leaflet of the Leningrad *Okrug* Committee of the party on occupied territory bluntly stated that "at this time to stand aside from the struggle [against the Germans] is to betray the Motherland. Persons who at this decisive hour do not act against the Germans are traitors."[53]

Although German activity was reason enough to go over to the partisans, the threat of Soviet retribution against those without a suitably patriotic record under German occupation provided additional motivation to join them. Partisan units were suddenly swamped with new recruits. For *Leningradskaia oblast'*, between 1 October 1943 and 1 January 1944, the number of partisans accounted for by the Central Headquarters of the Partisan Movement leapt from 4,836 to 20,662.[54] More detailed figures showing local variation in the growth of partisan units were provided by the head of the personnel department of the Leningrad Headquarters of the Partisan Movement, Matveev. According to his figures, from a low of 2,993 partisans active on the occupied territory of *Leningradskaia oblast'* on 1 January 1943, by August 1943 that number was still only 4,203. However by 1 November the figure had risen to 14,358, then further increased to 24,449 by 1 January 1944.[55] While it is unclear where the discrepancy in the *TsShPD* and *LShPD* figures lies, the same scale of growth and timing is nonetheless apparent in both sets of figures.

During 1941 the fledgling Soviet partisan movement in the rear areas of Army Group North had, from the evidence of the partisans themselves, suffered greatly as a result of German anti-partisan measures, particularly with the onset of the winter of 1941–42. Despite an increasingly "professional" partisan movement and more damage done to German communications and economic activities in the rear areas, German anti-partisan measures continued to limit the partisan movement's impact throughout 1942 and into 1943. Not until the autumn of 1943 was the partisan movement's leadership at all satisfied with the effect it then had.

Events—or the perception of events—at the front were crucial to the scale of the impact the partisan movement had on the German rear areas. As German fortunes there declined, not only were troops drawn away from the rear areas, but the population of the occupied territories became more willing to assist or even join the partisans as it grew ever more aware of changing German fortunes. Local willingness to assist the partisans was mirrored by the declining morale of collaborators and by the ineffectiveness of indigenous anti-partisan forces in the partisan

war. However, right up until the winter of 1943–44, although German authority was increasingly localized, German forces were able to inflict significant damage on the partisans, containing local enthusiasm for, and participation in, the partisan movement until liberation by the Red Army was imminent.

There is some evidence that elements of the German command for the rear areas of Army Group North were, during much of the occupation, more willing to deviate from Berlin's official line regarding the treatment of Soviet civilians than were their counterparts in other areas. Of particular note when comparing Army Group North with Army Groups Centre and South, is the greater extent of albeit still limited agricultural reform and very low *Ostarbeiter* [Eastern worker] recruitment for work within the Reich during 1943 in proportion to the population. Such factors, combined with the threat of violence, arguably encouraged the civilian population's greater passivity in the partisan war in the rear areas of Army Group North than elsewhere.

At the same time, the relative absence of Jews among the population was another factor limiting the overall scale of German violence and the associated reaction from the civilian population on territory occupied by Army Group North. While in Leningrad itself, 6.3 per cent of the population (201,542) were Jews (indicating that Jews comprised the second largest national group after Russians), in the *oblast'*, only 0.5 per cent (17,711) were Jewish, 12,994 of whom lived in urban areas, particularly close to Leningrad—they were therefore more likely to have been evacuated before the arrival of German forces than were Jews in areas further south that were more rapidly overrun.[56] Consequently, the Slavic population living in the Army Group North's territory did not suffer the ramifications of having a significant number of Jews in their midst; elsewhere, Nazi-inspired hatred towards them would frequently extend to the non-Jewish indigenous population under the notion of the "Jewish-Bolshevik conspiracy". There is little use of such language in reports about partisan activity in the Army Group North's territory.

When comparing the partisan movement in Army Group North's territory with that elsewhere, it is also notable that with the exception of 2nd Shock Army during 1942, there were no major encirclements of Red Army forces within the territory occupied by Army Group North. Such encirclements would have increased the number of detachments dominated by Red Army personnel who went over to partisan warfare rather than give themselves up to the Germans. Such detachments were often of greater military effectiveness than were their party counterparts. The above local factors should, however, be seen as secondary to the

roles of a wider Soviet refinement of the partisan movement, events at the front, and civilian fear of either German or Soviet retribution in changing partisan fortunes.

NOTES

1. For example, in English, *Soviet Partisans in World War II*, ed. J. Armstrong (Madison: University of Wisconsin Press, 1964); and E. M. Howell, *The Soviet Partisan Movement, 1941–1944*, (Department of the Army Pamphlet 20-244, Aug. 1956), reproduced in *World War II German Military Studies* Vol. 18, , ed. D. S. Detwiler (New York: Garland, 1979). In German, E. Hesse, *Der Sowjetrussische Partisanenkrieg im Spiegel deutsche Kampfanweisungen und Befehle* (Göttingen: Muster-schmidt Verlag, 1969).

2. For example, *Istoriia Velikoi Otechestvennoi voini Sovetskogo Soiuza 1941–1945 v shesti tomakh* (Moskva: Voennoe isdatel'stvo Ministerstva oboroni SSSR tom 2-i 1961, tom 3-i 1961, tom 6-i 1965); and P.K. Ponomarenko, *Vsenarodnaia bor'ba v tilu nemetskofashistskikh zakhvatchikov 1941–1944* (Moskva: Nauka, 1986).

3. For example, L. Grenkevich, *The Soviet Partisan Movement 1941–1944* (London/Portland, OR: Frank Cass, 1999); and V. A. Perezhogin, *Partizani v Moskovskoi bitve* (Moskva: Nauka, 1996). A more recent exception is V. I. Boiarskii, *Partizoni i armiia: Istoriia uterannikh vozmozhnoste* (Minsk: Kharvest; Moskva: AST, 2003).

4. Kalininskomu obkomu VKP(b), Donesenie o rabote partizanskogo otriada Leninskogo raiona. 24 noiabria 1941g. Russian State Archive for Socio-Political History [hereafter RGASPI] f.69.o.1.d.347.l.35.

5. The Leningrad and Karelian Fronts had been formed from the Northern Front on 23 Aug. 1941.

6. Politupravlenie Leningradskogo fronta. Meropriiatiia nemtsev na okkupirovannoi territorii Kingiseppskogo raiona. 31.XII.1941. Central Archive of the Ministry of Defence of the Russian Federation [hereafter TsAMO RF] f.32.o.11306.d.63.l.54.

7. Politupravlenie Leningradskogo fronta. O provedennoi rabote vo vremenno okkupirovannikh raionakh nemetskim fashistom Leningradskoi oblasti za period so 2 sentiabria po 8 dekabria 1941. TsAMO RF f.217.o.1217.d.117.l.37.

8. Vesti s Sovetskoi Rodini, 11 sentiabria 1941g. Razgrom nemtsev pod gorodom El'nia. 22.9.1941. 48,000 copies. TsAMO RF f.217.o.1217. d.127.l.58 and 29 noiabria 1941g. Osvobozhdenie ot nemtsev goroda Rostov-na-Donu. 01.12.1941. 100,000 copies, 1.18.

9. Smekhotvornie izmishleniia gitlerovskikh fal'shivomonetchikov o poteriakh sovetskikh voisk. 27.XI.1941. 100,000 copies. TsAMO RF f.217.o.1217.d.127.l.19ob.

10. Politupravlenie Leningradskogo fronta. Opros partizana Shtileva o deistviiakh partizanskikh otriadov na territorii Leningradskoi oblasti (Tosnenskii raion) oktiabria 1941g. 14.12.1941. TsAMO RF f.217.o.1217.d.117.1.5.

11. Referred to in Protokol No. 70/27 zasedaniia biuro Gdovskogo RK VKP(b) o sozdanii otriadov po bor'be s vozdushnimi desantami protivnika, 25 iiunia 1941g., in *Nepokorennaia zemlia Pskovskaia: Dokumenti i materiali iz istorii partizanskogo dvizheniia i partiino-komsomol'skogo podpol'ia v godi Velikoi Otechestvennoi voini 1941–1944* (Leningrad: Lenizdat, 1969), 21–22.

12. Direktiva SNK SSSR i TsK VKP(b) partiinim i sovetskim organizatsiiam prifrontovoi polosi o reshitel'noi perestroike vsei raboti na voennii lad, 29 iiunia 1941g., in *Russkii archiv: Velikaia Otechestvennaia. Partizanskoe dvizhenie v godi Velikoi Otechestvennoi voini 1941–1945gg.: Dokumenti i materiali. Tom* 20, no. 9 (Moskva: Terra, 1999), 18; and Postanovlenie TsK VKP(b) ob organizatsii bor'bi v tilu germanskikh voisk, 18 iiulia 1941g., 19.

13. Iu.P. Petrov, *Partizanskoe dvizhenie v Leningradskoi oblasti 1941–1944* (Leningrad: Lenizdat, 1973), 22.

14. *Voennii entsiklopedicheskii slovar'* (Moskva: Voennoe izdatel'stvo, 1983), 146.

15. See R.R. Reese, *Stalin's Reluctant Soldiers. A Social History of the Red Army 1925–1941* (Lawrence: University Press of Kansas, 1996), 11, 16.

16. Sekretariu Kalininskogo obkoma VKP(b) tov.Vorontsovu, ot sekretaria Sebezhskogo RK VKP(b) Petrova, V.E., pred. RIK'a Sebezhskogo raiona Feschenko T.S., nach.Sebezhskogo NKVD Vinogradova V.Ia. 15 noiabria 1941g., gor. Kashin. Dokladnaia zapiska. RGASPI f.69.o.1.d.347.l.25.

17. V otdel kadrov Obkoma VKP(b) [Kalininskoi oblasti]. Ot komandira partizano-diversionnoi gruppi Timofeeva I.V. 29.XI.41g. RGASPI f.69.o.1.d.347.l.46.

18. Certainly by the end of Nov. 1941, the above mentioned NKVD-organized "partizano diversionnaia gruppa" was reporting to the Kalininskii obkom. Ibid.

19. Petrov (see note #13), 27–29.

20. Ibid., 29–30.

21. Lomagin, N.A., *Bor'ba kommunisticheskoi partii s fashistskoi propagandoi v period bitvi za Leningrad / 1941-ianvar' 1944gg./ Na materialakh Leningradskoi partiinoi organizatsii, politorganov Lenfronta i Krasnoznamennogo Baltiiskogo flota /.* Dissertatsiia na soiskanie uchenoi stepeni Kandidata istoricheskikh nauk (Leningradskii: Gosudar-stvennii Universitet, 1989), 79.

22. "On the Activity of the Troika in the Dedovichi Raion Area for the Period November 1941 to July 1942 Inclusive," Document 16, in Armstrong (see note #1), 693–95.

23. Kalininskomu obkomu VKP(b), Donesenie o rabote partizanskogo otriada Leninskogo raiona. 24 noiabria 1941g. RGASPI f.69.o.1.d.347.1.36.

24. Testimony of Natalia Andreevna Kuzmina (b.1918), in E.M. Kovalev, ed., *Golosa krest'ian: Sel'skaia Rossia XX veka v krest'ianskikh memuarakh* (Moskva: Aspekt Press, 1996), 365.

25. 281 Sich Div. Ia, Anlage I 2 zum Kriegstagebuch. Ic/IIa, Tätigskeitberichte, Kriegsrangliste, Verlustliste, Verpflegungsstärke und Kriegsgliederungen. Tagebuch eines Partisanen. Entry for 14.09.1941. United States National Archives [hereafter US NA] T-315 1870, 2.

26. Ibid., entry for 28.9.1941, 4.

27. Ibid., entry for 25.9.1941, 3.

28. [281st Security Division]. Ia Anlage I 2 zum kriegstagebuch. O.U., den 4.6.41- 22.12.41. IVa. An Ia. Der Verpfl. Stärke der Division betrug am... US NA T-315 1870, 68–87.

29. Sich.Division 281. Ia/IIa. O.U., den 25 Dezember 1941. Feldpostnummer 10589. Bezug: Ohne. Betrifft: Ersatzstellung für verst.J.R.368. An Befehlshaber des rückw.Heeres-Geb.Nord. US NA T-315 1870, 96.

30. A. Bakhvalov, *General Vlasov—Predatel' ili geroi?* (SPb: SPb visshaia shkola MVD Rossii, 1994), 52.

31. See note #16, 1.25.

32. [Politupravlenie Leningradskogo fronta] Spravka o partizanskikh otriadakh gor. Leningrada i Leningradskoi oblasti po sostoianiiu na 10 dekabria 1941 goda. TsAMO RF f.217.o.1217.d.117.l.95.

33. Iz doklada Politupravleniia Severnogo fronta Voennomu sovetu fronta ob organizatsii i deiatel'nosti partizanskikh otriadov i istrebitel'nikh batal'onov v iiule 1941g. Ne ranee 25 iulia 1941g., in *V tilu vraga: Bor'ba partizan i podpol'shchikov na okkupirovannoi territorii Leningradskoi oblasti. Sbornik dokumentov. 1941gg.* (Leningrad: Lenizdat, 1979), 50.

34. Iz spravki Voennogo otdela Leningradskogo obkoma VKP(b) o formirovanii partizanskikh otriadov. Ne ranee 10 avgusta 1941g., in ibid., 93.

35. A joint command established for the Northern and North-western Fronts on 10 July 1941, disbanded 29 Aug. 1941.

36. See note #32.

37. Spisok partizanskikh otriadov deistvuiushchikh na okkupirovannoi territorii Kalininskoi oblasti. Po sostoianiiu na 12 dekabria 1941g. RGASPI f.69.o.1.d. 347.ll., 70–74.

38. S.M. Kliatskin, "Iz istorii Leningradskogo partizanskogo kraia (avgust 1941– sentiabr' 1942g.)," *Voprosi istorii* (Moskva) 7 (1958), 30.

39. Sekretariu Kalininskogo obkoma VKP(b)...Dokladnaia zapiska o deistviiakh partizanskikh otriadov Kalininskoi oblasti. Instruktor obkoma VKP(b) – Ermochenkov. 19.XI.41g. RGASPI f.69.o.1.d.347.l.54.

40. Leningradskii obkom VKP (b). Shtab partizanskogo dvizheniia. Tov. Nikitinu M.N. Otchet o partizanskom dvizhenii v Luzhskom raione za period s 24-go avgusta 1941g. po 1-oe marta 1942 goda. Mar. 1942. TsAMO RF f.217.o. 1217.d.117.l.66.

41. Ibid.

42. In the published literature, see for example, L. Heiman, "Organized Looting: The Basis of Partisan Warfare," *Military Review* 45, no. 2 (Feb. 1965), 61–68.

43. See note #17, l.49.

44. Sicherungsdivision 281. Abteilung VII. O.U., den 21.8.1941. Betr.: Kontrolle des Personenverkehrs. US NA T-315 1871 539.

45. See note #17, ll.49–50.

46. See US NA T-315 1869.

47. Der Befehlshaber der Sicherheitspolizei und des SD. Einsatzgruppe A. Riga, den 29.9.41. Erfahrungsbericht über die Bekämpfung der Partisanen. Russian State Military Archive (formerly TsKhIDK) f.(K)500.o.4.d.93.ll., 176–77.

48. Befehlshaber d.rückw.Heeres-Geb.Nord. Ia Tgb.Nr. 1338/41 geh. H.Qu., den 9.10.41. Betr.: Bekämpfung der Partisanen. US NA T-315 1869 450.

49. Petrov (see note #13), 133, 166.

50. Tätigskeit und Lagebericht Nr.7 der Einsatzgruppen der Sicherhietspolizei und des SD in der UdSSR (Berichtzeit v.1.11.-30.11.1941), in P. Klein, ed. *Die Einsatzgruppen in der bestetzten Sowjetunion 1941/42. Die Tätigskeits-*

und Lageberichte des Chefs der Sicherhietspolizei und des SD (Berlin: Edition Hentrich, 1997), 247.

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54. [P.K.Ponomarenko] Rost partizanskogo dvizheniia v Lenoblasti (na 15.1. 1944g.). RGASPI f.625.o.1.d.18.l.314.

55. Iz doklada Nachal'nika otdela kadrov Leningradskogo shtaba partizanskogo dvizheniia Maiora P.G.Matveeva Tsentral'nomu shtabu partizanskogo dvizheniia o roste partizanskogo dvizheniia v 1943g., 9 ianvaria 1944g., in *V tilu vraga: Bor'ba partizan i podpol'shchikov na okkupirovannoi territorii Leningradskoi oblasti. Sbornik dokumentov. 1943 gg.* (Leningrad: Lenizdat 1983), 344.

56. *Vsesoiuznaia perepis' naseleniia 1939 goda: osnovnie itogi* (Moskva: Nauka, 1992), 62–63.

A New American Way of War? C4ISR in Operation Iraqi Freedom A Provisional Assessment

John Ferris

Over the past decade, the idea of a "revolution in military affairs" (RMA) has shaped debates about military policy in the United States, and every other advanced country. This idea assumes information will transform the knowledge available to armed forces, and thus their nature and that of war. Colonel John Warden, USAF planner and strategic theorist, argued, "Information will become a prominent, if not predominant, part of war to the extent that whole wars may well revolve around seizing or manipulating the enemy's datasphere."[1] Faith in that idea is central to American doctrine and policy. Joint Visions 2010 and 2020, which guide strategic policy, predict forces with "dominant battlespace awareness," better knowledge than, and a "frictional imbalance" and "decision superiority" over, an enemy, and unprecedented flexibility of command: the ability to combine freedom for units with power for the top, and to pursue "parallel, not sequential, planning and real-time, not prearranged, decision-making."[2] From this basis, American officials have created new concepts about intelligence and command, aiming to fuse matters which once were split into "stovepipes," as well as new forms of information technology into systems. These concepts include netcentric warfare (NCW), the idea that armed forces will adopt flat structures, working in nets on the net, with data processing systems at home serving as staff for the sharp end through reachback; C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance; loosely speaking, how armed forces gather, interpret, and act on information); and "IO" (Information Operations), the actions of secret agencies.

Operation Iraqi Freedom provides the first serious test of these ideas, but not a simple one. The struggle was so unbalanced that one must take

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care in extrapolating from triumph; judgments from failure are easier to make. How many lessons useful for September 1914 could have been drawn from Omdurman? How many of those could a victor have believed? Any lessons drawn from the Iraq campaign will be intended to shape military policy in 2020, and the nature of (to use the jargon) the "objective" force—yet it was fought by "legacy" forces using some elements of "interim" C4ISR. Arguably, the keys to victory were absolute air supremacy, vehicle and body armour, the incompetence and bribery of Iraqi officers, and the psychological effect on Iraqi soldiers of the power and invulnerability of coalition artillery and tanks. A marine colonel noted some of his tanks survived seven RPG rounds, and "became the unkillable beast and caused them (Iraqis) nightmares."[3] Yet any lessons learned from this campaign will be used to explain why legacy forces must be transformed. Again, this paper goes to press on 24 June 2003, before the Pentagon releases its "lessons learned" memoranda. Much good official, semiofficial, and unofficial commentary is available, but the database is incomplete, and the assessments of observers vary dramatically, depending upon their experiences. Personnel of signals units in Iraq and headquarters in the United States emphasize the power and reach of communication systems and intelligence. Colonel Dobbins, Base Commander of 392nd Air Expeditionary Group, thought the GPS satellite constellation had provided a "common and accurate picture" to all participants. The 1st Marine Division, conversely, also praised GPS, but denied that it shared a "common operating picture" with any outside authority.[4]

Any "lessons learned" process runs the risk of overgeneralizing from individual events, doubly so when military politics enters the fray. And this event will be politicized. Already, slogans like "lazerkrieg" have been coined; in a frequently cited and almost officially sanctioned phrase, General Richard Myers, the Chair of the Joint Chiefs of Staff, described Operation Iraqi Freedom as demonstrating "a new American way of war." The issues merit consideration more than cheerleading. In a study of American operations in Afghanistan during 2001–02, Stephen Biddle argued that some aspects of warfare arguably had been transformed, others certainly had not been, and that both cases had to be examined in order to learn the right lessons.[5] So, too, Iraq.

In Operation Iraqi Freedom, the success of C4ISR and IO was mixed at strategic-political levels, and overwhelming at operational ones, better at action than calculation. Authorities got Iraqi politics wrong. They overestimated their ability to topple Saddam Hussein's regime without having to smash it, and the ease of occupation. Probably these failures stemmed from policy-makers rather than specialists, but that is a condition of life; C4ISR has changed the nature neither of net assessment, nor of

the politicization of intelligence. Again, Anglo-American assessments of Iraqi weapons of mass destruction were wrong, and their use of intelligence for public relations incompetent; their dossiers of February 2003 are classic bad examples in that genre. With hostilities commenced the first website war, posing new problems for media influence. Here, American authorities mixed success at home with failure abroad. They did not counter al-Jazeerah's influence on Arab audiences, though victory discredited it, nor manage hostile European media. Western media gave Saddam Hussein better intelligence than most armies in history have ever had, while a new problem has emerged; websites focused on current and strategic affairs, which gather and assess information with power and insight, often provide archives and links to other sites. The retired General Lucian Truscott IV noted, "the book says you've got to keep the enemy ignorant of where you are, what you're going to do. And I said to my wife one day, I opened up the *New York Times,* turned it to the back page and said, 'If I was an Iraqi general I could fight the war off of this map'."[6] The problem of operational security for western military forces continues to rise. In a serious war, it might matter.

Conversely, "embed" journalists, attached to units so as to counter Saddam, "particularly practiced in the art of disinformation, misinformation, denial, deception, downright liar quite simply," as Deputy Assistant Secretary of State for Defence Whitman said,[7] played to the fad for reality television and provided a ballast of constant good television filler for home consumption. The embeds were intended to counter Iraqi disinformation, in which their success was mixed until the fall of Baghdad. More significantly, the embeds gave the military a chance to shape the tone of coverage; the 1st Marine Division treated them as "an entirely winnable constituency" and told its soldiers "media were not to be 'escorted,' they were to be 'adopted' and made members of the Division family." It noted that "sharing austere living conditions, danger and loss, journalistic desires of impartiality gave way to human nature" which "enables our story to be told in a very personal, humanistic way."[8] That American doctrine about IO fuses in one category matters once treated as "black" (psyops) and "white" (public relations) presents problems for journalists, the public, and the military itself. Embeds, after all, did follow their own professional instincts, their reports were honest, and casualties were low and action fast. One may wonder how far this experience can be repeated. Embeds on Omaha Beach in June 1944 would have transmitted pictures like the first twenty minutes of *Saving Private Ryan.*

American strategic intelligence worked better in purely military spheres. Its picture of the enemy order of battle, deployments, tactical characteristics, and quality was good, though it overrated the rationality

of their use. In the circumstances, this was a minor failure, probably unavoidable. When the ground force commander, General Wallace, said the Iraqis were "not the enemy we wargamed," he merely expressed surprise they were foolish enough to fight in the open.[9] He would have been foolish to assume that they would. Clearly, however, there had been no revolution in military intelligence at some basic levels. The 1st Marine Division noted that while American forces grasped enemy capabilities well,

> we remained largely ignorant of the intentions of enemy commanders... This shortcoming was especially critical as much of the war plan was either based on or keyed to specific enemy responses. When the enemy "failed" to act in accordance with common military practice, we were caught flat-footed because we failed to accurately anticipate the unconventional response. This was primarily due to a dearth of HUMINT on the enemy leadership. In trying to map out the opposition's reactions we were largely relegated to our OSINT sources and rank speculation based on our own perceptions of the battlefield to make our assessments... Our technical dominance has made us overly reliant on technical and quantifiable intelligence collection means. There is institutional failure to account for the most critical dimension of the battlefield, the human one.[10]

American strategic intelligence was mediocre, but better far than that of the enemy. The Iraqi regime was surprised by the time of the attack, its forces caught in normal positions, because it misread its own and the Coalition's capabilities and plans, and also perhaps because of Coalition deception. Given the lack of data about American sources of intelligence on and means to deceive Iraq, any speculation on this point must rest on assessment of only one channel of disinformation, the media. The weeks before the attack witnessed classic signs of media-borne deception. Some American forces quietly slipped from the public record (as the GlobalSecurity website explicitly noted), while the presence of others was advertised. In particular, as the Turkish front collapsed, press reports from Washington indicated the attack would begin later than it did, only after 4 Division reached Kuwait, which would take some time. One would expect American authorities to pursue surprise by encouraging the enemy to assume the attack would occur later than intended, given their IO doctrine, the sudden decline in their planned strength of attack, and their sense of Iraqi perceptions.[11] After the war, American defence secretary Donald Rumsfeld speculated that Iraq,

> very likely expected Gulf War II, a long air war that would give them time to do whatever they thought they wanted to do, leave or take cover and what have you, followed at some distance by a

> ground war, and probably a massive ground war...they did not expect a ground war to start without an air war and they did not expect a ground war to start without the 4th Infantry Division while it was still up in the Mediterranean. I also suspect that they didn't expect the first air attack that took place the day before the ground war began.[12]

That attack occurred late on 19 March when, after telling the media the war would not start that day, American authorities struck to kill Saddam when intelligence suddenly indicated his apparent location—an unintentional, improvised, and unsuccessful use of deception. A tactical feint covered the thrust through the Karbala gap during 1–3 April, while American authorities may have overplayed media accounts of their problems on 22–30 March, so as to lure Iraqi forces forward. Even if these assessments are correct, the evidence on deception in the public domain does not indicate how far it shaped Iraqi errors.

American authorities played other sorts of mind games—what the Pentagon chief of transformation Admiral Cebrowski termed "direct movement(s) into the cognitive domain."[13] This approach was not novel. Political warfare is among the oldest forms of covert action or information operations, espoused by Sun Tzu and the *Artashastra*, practiced ably by Philip II of Macedon and more recently by Britain in two world wars. Advocates of transformation, however, regard these matters as being more central to warfare than ever before. In the 1990s one pioneer of the RMA, Colonel Richard Szafranski, argued that information warfare aimed at "targeting epistemology."[14] The American practice of these principles in Iraq was among the most sophisticated and thorough on record, albeit with some original features. Through radio and television broadcasts and fifty million leaflets, psyops was conducted against Iraqi civilians and soldiers, without apparent impact. It never reached soldiers in some units, perhaps most of them, lacking personal radios and surrounded by Ba'athist security; while the Coalition entirely failed in a key area of political warfare—to make civilians affect the war. More significantly, the Coalition launched a "fused" IO attack on enemy epistemology. Cebrowski claimed that, knowing "a dictator can't trust his information" and Saddam would have to "script the whats and whens" of his war even though "he doesn't know if people will carry them out," the United States aimed to wreck his "feedback loop," his ability to know what was happening on the battlefield.[15] This approach involved the physical destruction of command and communication targets, and more. The air attacks on Saddam and the claims they rested on reports from agents in Baghdad were highly publicized to unnerve his subordinates. His trust in his officers and their mutual confidence

was sapped by announcements Americans were subverting Iraqi officers and systematically contacting via email those with access to computers. This effort, combining psyops, bribery, deception, and a human form of cyberwar, manipulated the characteristics of a Stalinist regime and a paranoid political culture, seemingly with effect. After the war, one Iraqi officer stationed on the southern Iran-Iraq frontier, Colonel Sa'ad, held that psyops had little effect on his men, whereas emails to officers had a "big impact." Even if officers immediately reported all such contacts to a superior, "imagine him thinking: 'If the Americans are able to get into the mind of a senior commander this way, how can I protect a whole division?'."[16]

At the operational level, the story is mixed. Military planners pursue a Common Operating Picture (COP) for commanders and a Common Relevant Operating Picture (CROP) for soldiers, to give everyone in any decision-making loop the same good information. Revolutionaries expect knowledge to create a higher mode of war. Rapid Decisive Operations will open with the pursuit of a Superior Information Position "(Fight First for Information Superiority)" and continue on the basis of "Operational Net Assessment" during battle, with commanders constantly gathering and analyzing intelligence on an enemy in real time and from all sources, including national ones, through reachback.[17] These ambitions seem to have been realized at the theatre level, including component commands down to corps level, which is fairly common in the historical record—but not below. The 1st Marine Division held that

> after crossing the line of departure, the Division received very little actionable intelligence from external intelligence organizations. The Division had to assemble a coherent picture from what it could collect with organic and DS [direct support] assets alone.
>
> The nature of the battlefield, the extreme distances, high operational tempo and lack of a coherent response from a conventional enemy all made it difficult for an external agency to know what was tactically relevant and required by the GCE [ground combat element] commander. The byzantine collections process inhibited our ability to get timely responses to combat requirements with the exception of assets organic to or DS to the Division. This made the Division almost exclusively reliant on organic or DS collection assets. The Division found the enemy by running into them, much as forces have done since the beginning of warfare...
>
> On a fluid high tempo battlefield, a highly centralized collections bureaucracy is too slow and cumbersome to be tactically relevant. The best possible employment option is to

> push more assets in DS to the lowest tactical level and increase available organic collections...
>
> OIF presented the intelligence community with unprecedented robust collection architecture to support combat operations. Unfortunately it also presented the community and more specifically the tactical user with the equally unprecedented cumbersome collection bureaucracy.
>
> The existing hierarchical collections architecture, particularly for imagery requirements, is wildly impractical and does not lend itself to providing timely support to combat operations.

Every standard problem of bottlenecks and overload in information emerged, and almost every "push" and "pull" technique touted to manage them failed. National intelligence sources were,

> great for developing deep targets, subject to the prioritization of high headquarters (Division and higher). Navigating the labyrinth of collection tasking processes proved too difficult in most cases to get reporting on Division targets, and certainly for Battalion-level collections.

Communications within intelligence sections were better, but "at all levels (they) were inundated with information and data that had little bearing on their mission or Intelligence requirements." The only exception to these strictures were systems organic to the division. Thus, JSTARS (the Joint Surveillance Target Attack Radar System) provided excellent intelligence on the movement and location of hostile vehicles. "Because they were close to the point of decision, those JSTARS operators shared the sense of urgency and 'can-do' attitude. They worked aggressively to find ways to answer questions instead of deflect them."[18] Granted, marine technology for communication and intelligence is less sophisticated than that of the army, while no digitalized forces fought in Iraq. Still, in 2003, divisions had no better intelligence in battle than during 1944, though that available was useful. For example, units made good and fast use of prisoners, psyops, and Iraqi cellphone traffic.[19]

At a higher level, intelligence was handled well, sometimes in unprecedented ways. Special Forces and agents with cellphones provided news and stopped demolitions of oil wells or dams which might have flooded the approaches to Baghdad. The Coalition monitored enemy signals well and used imagery and GPS with unprecedented power. For the first time, GPS was the leading source of tactical intelligence. Information surged across the system without swamping it, carried, one journalist wrote, by "an unsung corps of geeks improvising as they went, cobbling together a remarkable system from a hodgepodge of military-

built networking technology, off-the-shelf gear, miles of Ethernet cable, and commercial software," and Microsoft Premier on-line help for troubleshooting.[20] At levels above the division, C4ISR and NCW worked as planned. Reachback, push and pull techniques, and a "Warfighting Web" linked rear headquarters, like Air Force Space Command, and ground forces that were equipped with one hundred thousand portable GPS receivers, one each to most squads of nine soldiers or five marines. Commands shared a common picture of operations, as did the members of any unit, though little of this passed either way through the interface of divisional and corps headquarters. Perhaps three thousand commanders from corps to section level shared a tactical intranet with a map overlay, which always let everyone know where everybody was, and one text-messaging system, which allowed instant contact with some others at adjacent levels of command (anyone whose screen name one knew). Chat rooms on SIPRnet (the classified military intranet system) joined Tactical Operations Centers (TOC) at brigade level to the world—by sending a question to a TOC, in theory, a soldier on the front was one interface from an expert, though the number of chat rooms (perhaps 50 for the army and 500 for the navy) and people yearning to participate threatened information overload.[21] This danger, and those of micromanagement and the pursuit of certainty, seem to have been avoided, but others were not. One observer noted, "Rumour spreading was rife in particular over the most secure means, the SIPRNET. People were using it as a chat room and making unsubstantiated allegations and claims on this means. Commanders lost faith in the SIPR and chose direct voice comms as the best means. It also created confusion and fear amongst Marines that was unnecessary."[22] Nor is it certain that chat rooms gave front line soldiers much useful advice, or only that.

The greatest change appears to have come in airpower. Traditionally in air warfare, the need to build and distribute daily Air Tasking Orders (ATOs), sometimes the size of a telephone book, caused strangulation and overload in information as well as confusion and friction for command. In Iraq during 2003, conversely, web-based ATOs let commanders change many missions at will; carrier-borne aircraft striking Baghdad received their target orders just as they got to the city's edge. Fleeting news or chances which once would have been lost in the shuffle led to precise strikes—in Iraq, as in Afghanistan and Yemen, American forces could bomb a ten by ten foot box within twenty minutes of its detection by any source. A soldier using a laser rangefinder linked to GPS could send via satellite the coordinates of a target to a command site hundreds of miles away, which fed those coordinates onto the GPS-enabled bombs of an aircraft in another locale—and even change them in flight. Much of this success stemmed, however, not from transformation but, as one

senior officer said, from "having 'lots of airplanes in the air constantly with numerous types of munitions'."[23] As with the "cab rank" system for air support of 1944, the flexibility, speed, and range of air strike expanded not simply because of improvements in command and intelligence, but also because of the presence of large numbers of aircraft and the absence of air opposition.

How far this situation reflects a permanent transformation of C4ISR in airpower is uncertain. Perhaps this operation occurred somewhere above a margin for the optimum use of airpower, below which performance rapidly begins to spiral down. Just a few years before, experience in the Kosovo campaign (against an enemy with good camouflage and useful air defences, and a high degree of influence from political factors) led Air Commodore Stuart Peach to somber conclusions:

1. the drive to streamline procedures and handle ever more data has had an important side effect; airmen have become driven by process not strategy;
2. in reality, theory, doctrine and practice collide with process. Airmen claim one thing (centralized command and decentralized execution) and in fact practice another (centralized command and centralized execution); *and*
3. refining the process of airspace control orders, air tasking orders and air task messages became the performance criteria, rather than creative and bold operational ideas or campaign plans.[24]

According to a USAF officer, during the Kosovo campaign the Supreme Allied Commander Europe, "had in his office a terminal that allowed him to view what Predator unmanned aerial vehicles in the air were seeing." Once, when Wesley Clark viewed three vehicles he thought tanks, "he picked up a telephone, called the joint forces air component commander, and directed that those tanks be destroyed. With a single call, based on incomplete information, all the levels of war, from strategic to tactical, had been shortcircuited."[25] Again, in one case of friendly fire in Afghanistan during March 2002, information overload, friction between layers of command, and inexperienced personnel swamped exactly those air forces and commands which fought in Iraq a year later. Data was so plentiful that USAF squadron commanders could not, or did not, circulate much of it from ATOs to their pilots, while staff officers would not change their procedures, thus ensuring confusion between all layers of command.[26] The system processed and circulated far more information faster than ever before, but in this high-tempo environment, the need to spend thirty seconds in checking or retrieving data could produce error or tragedy. This system is

so fast moving, fragile, and complex that system errors are inevitable even in the absence of an enemy; the only questions are how often and at what cost, and how much the presence of an enemy will multiply them.

C4ISR seems to have changed little below the corps level in land warfare. Within the 3rd Infantry and 1st Marine Division, the speed of reaction between calls for fire support to the moment batteries received their orders was 180 to 200 seconds—if anything, the system was less speedy and sophisticated than that for allied artillery in the Battle of Normandy, though the guns themselves could deliver a more accurate and devastating weight of fire (the improvement was much less marked than with airpower). Personnel in both divisions were unhappy with their ability to call on or receive tactical air support.[27] The ability to push information to aircraft increased their powers in interdiction, but not their close support. Much communication equipment was incompatible or clumsy, producing unexpected failures in significant links of the chain which might have mattered against a real foe; planning cycles within marine (and probably army) corps and divisions were so slow that formations could not really coordinate and control their forces—here, the performance of 2003 fell well below the absolute standard of 1944. Below the corps level, the officially promoted COP failed; there was no ONA—indeed, there seems not even to have been operational intelligence in the classic sense. Though advocates of the RMA often claim that the operational level of war will vanish, one doubts that they quite had this in mind! One may question the assumption that ground operations in Iraq were a matter of transformed command, inspired leadership, and the conscious use of "swarm" tactics. The real picture seems to be one of a big country with few enemy forces, where attackers entered in a dispersed fashion and then continued forward, propelled by a combination of their own momentum, determined junior leaders, and the principle of "point me towards the enemy." What journalists call swarms look rather like the use of columns in nineteenth century imperial warfare. Again, in 2003 signals were not necessarily better than in 1944, nor were improvements in communications necessarily good for command. General Mattis led the 1st Marine Division as though in the western desert, through plain language radio transmissions and a personal vehicle that let him easily and quickly visit his forces in action. And one grizzled marine sergeant noted, "NCOs run the fight no matter how much you get on the radio. Sit back and listen to them. You might just learn something from them."[28]

Operation Iraqi Freedom demonstrates a new standard for conventional war. Cebrowski proclaimed "the discovery of a new 'sweet-spot' in the relationship between land and air warfare and a tighter integration of the two. The things that compel are good sensors networked with good intelligence disseminated through a robust networking system,

which then yields speed. Speed turns out to be a very, very important factor."[29] C4ISR, IO, and NCW worked as planned, because Coalition forces had the initiative and followed their plan, while the enemy was passive, overwhelmed, and unable to strike their forces or C4ISR. Had the Iraqis jammed GPS or tactical communication, they would have broken most of the Coalition's enhanced power in intelligence and precision of attack; had they harmed satellites, strategic signals, or computers, they would have crippled the enemy's command. The sources of one's strength are one's vulnerability. How far this success can be repeated is unsure—NCW, C4ISR, and IO worked less well in Kosovo; turkey shoots offer few lessons in tactics. So one-sided was this war that intelligence served primarily for target acquisition rather than ONA. Dust and heat in rooms housing SIPRnet servers and routers endangered C4ISR more than did the Iraqis. Sometimes, the tactical intranet broke down or signals went in plain language via civilian cellphones.[30] Could this near-NCW system work in complex operations against an able and aggressive enemy? In Afghanistan and Iraq, precise strikes often have failed, showing they work only when the machine performs without friction. Any friction yields failure; no system can always be perfect. An enemy which fights by its own rules, like light infantry willing to die or else silently to steal away, has caught American forces at a disadvantage.

C4ISR multiplied some forms of combat power more than others. The gains were most notable and remarkable in links between theatre and component commands, in their ability to direct centralized firepower, and for aircraft to learn of targets of opportunity and to conduct interdiction missions. On occasion, airpower was directed with unprecedented speed, precision, and reach. Yet one should not take the most spectacular rises in performance for their norm, nor overgeneralize from particulars, by assuming Iraq in 2003 represents the future for war as a whole or that land forces suddenly can behave like they have wings. Since 1933, air forces have been able to apply NCW to some aspects of air combat, as have navies since 1955, while armies have not. Technology enables transformation; the fact that it multiplied the interdiction power of aircraft far more than it did land tactics in 2003 is suggestive. It points to one of the key factors in any attempt to learn lessons—the difference between problems and conditions. Problems can be solved; conditions must be endured. If the aim simply is for national intelligence services to meet quickly and effectively the intelligence needs of each of five divisions in an expeditionary force, this can be done. One cannot eliminate uncertainty forever from war as a whole. Judgments are even harder to make because one needs so many of them. One can easily say that the enthusiasts for RMA are wrong, because their system would fail against a serious enemy or a real war; yet if the latter cannot occur in the

next twenty years, why does that objection matter? The real point is less the transformation of forces, or of their quality, than of their quantity, of one's power relative to one's enemy. When Americans draw lessons from Iraq, they can apply them to a special case of conflict, of giant against dwarf, rather than to war as a whole. Any other states drawing lessons from this conflict must adopt a broader perspective.

Advocates of transformation appreciate the limits to C4ISR and NCW in Operation Iraqi Freedom. John Osterholtz, of the DOD's chief information officer's office, notes that "there were pockets of net-centric operations, but it was not a general operating paradigm." Cebrowski held that "what we're seeing is essentially net-centric warfare for the joint task force commander. The next step is network-centric warfare for the warfighter—reflecting increased 'jointness' at the tactical level of war."[31] How far can their hopes be realized? During the foreseeable future, C4ISR and NCW may increase one's certainty and reduce that of an adversary or gain a relative advantage over it, and these gains may be great; yet a fluid but hardened information and command system will not be easy to achieve. The aims must be to simplify the flood of data and direct it where needed, so avoiding the classical problem with satellite imagery, when one knew what to look for only after the start of the crisis when that knowledge was needed. It will be hard to gain complete access to data about known unknowns and impossible about most unknown unknowns. Nor can any such systems be effective unless doctrine and training prepares people to use it. All shades of opinion recognize that C4ISR has magnified problems like information overload, micromanagement, and the fruitless search for certainty, for which they share many solutions, such as changing the culture of command. Units must be able to operate in harmony without command, through some new version of "marching to the sound of the guns," or perhaps what the revolutionaries term "swarming." Commanders must learn to act when they have a good enough picture of events even when it is imperfect and new information is arriving, and to understand when they have achieved that condition. Sometimes this process is called "to opticize"; Clausewitz termed a similar process the "imperative principle."[32] When combined, these means have power and limits. They can solve many problems of command, perhaps most of them, but not all, and conditions will remain. C4ISR will be a function of a complex system manned by many people. It will suffer from all of the things natural to humans and complex systems, including uncertainty and friction, unachieved intentions, unintended consequences, unexpected failures, and unplanned successes.

C4ISR and NCW will most affect tactics and operations where, all too often, friction at the systematic level has reduced the value of intelligence; one actor had information another could have used but did not have in

time to act, knowledge available in time could not be used with effect; failures by any one cog prevented the whole machine from working well, or at all. In conventional war, NCW and C4ISR may ensure that every cog of the machine works well at the same time, reducing friction to the lowest level possible. All national intelligence assets will focus on giving every unit every chance to exploit every fleeting opportunity; one's forces will be used to asking for or receiving such information and using it both instantly and well; it will often be able to do so. In 1917, British signals intelligence constantly located U-Boats, prompting immediate air or surface strikes that failed because units were slow and their ordnance weak. By 1943, intelligence on U-boats was little better but allied forces far more able to kill. In 1944–45, allied air forces could strike any target reported on the front immediately, if not accurately; in the 2003 Iraq war, aircraft launched instant, precise, and devastating strikes based on information acquired ten minutes earlier by headquarters 10,000 miles away.

C4ISR and NCW will raise the bar on the best use of intelligence and the frequency of optimum uses in conventional war. In particular, the United States owns airpower; this will cripple any conventional enemy, unless the latter can find a means to degrade or evade that strength—as did Serbia in Kosovo. Little, however, will change where equals engage, or the weaker side evades one's strength or strikes one's C4ISR, or against guerrillas. A force strong enough to crush an army may be too weak to control a people.

The RMA has done many things, but not everything. It has multiplied American strengths without reducing its weaknesses. It has increased the value of high technology and firepower in conventional war, but for little else; where these things matter, they do more than ever; where they do not, nothing has changed. Iraq shows that the United States will aim to practice intelligence, command, and war at a higher level than ever achieved before. When it can play to its strengths, it will succeed.

NOTES

Note to the Notes:

A number of the websites that were available when this report was written are no longer on-line. In some cases, we have been able to substitute similar sites that note the same information. However, the Urban Operations Journal, which is cited frequently herein, is down, with no replacement. Italics indicates that the site no longer exists.

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