

The games utopians play

by Michael Minnicino

In 1917, H.G. Wells published a pamphlet which offered the fervent hope that the ongoing World War would be “the war to end all wars.”

Wells was not exhibiting pacifism. He welcomed the carnage; in fact, he had been praying for a war like the World War I for more than 20 years. Wells believed, as did the oligarchical faction for which he was a mouthpiece, that the most efficient way to modernize and stabilize the British Empire would be to use a great global conflict to sweep the slate clean, and recreate the enterprise on more “scientific” lines.

Starting with his 1905 *Modern Utopia*, all of Wells’s books from this period betray his fixation with the problem. The 1907 *War in the Air* describes a transcontinental conflict fought with a new invention, the airplane. In this book, Wells details how there is no defense from aerial attack, and aircraft sink all the naval fleets and bomb the cities of the world to rubble—a fairly complete description of the air power doctrine some 30 years before that doctrine’s official statement. In his 1914 *The World Set Free*, published just as Europe’s armies were mobilizing, Wells added the incredible idea that airplanes would be much more effective if they dropped “atomic bombs,” again described in details which can only chill a post-Hiroshima reader.

These books were not uncanny speculations. They were an attempt to outline a strategic war-fighting doctrine appropriate to the creation of the imperialist “utopia” to which Wells was committed. The history of military doctrine through the entire twentieth century is, in one sense, the story of the attempt by these utopians to dominate strategy. The recent exercise in Kosovo, and the ongoing operations over Iraq, demonstrate the continued influence of the utopians. So, in its own way, does the massacre wrought in Littleton, Colorado by a couple of game-addicted kids.

The ‘Fourth Arm’

One of Wells’s collaborators during World War I helps to demonstrate the causal relationship between utopian doctrine and the rise of military gaming. F.W. Lanchester was England’s most prolific inventor. He built the first automobile in Britain, and he invented such items as disc brakes and power steering. He was a major proponent of aircraft development, and was a member of the British government’s Committee on Aeronautics; he knew Wells in this context. In 1916, Lanchester wrote *Aircraft in Warfare: The Dawn of the*

Fourth Arm, which reproduced many of the arguments discussed by Wells. In effect, *Aircraft in Warfare* is the founding document of the Royal Air Force (RAF), which, in 1918, became the world’s first independent air arm. This book, together with Wells’s books of the time, are properly seen as the creation of the “air power” doctrine.

The RAF as an utopian instrument was tested almost immediately. In 1921, there was an uprising against British colonial rule in Iraq. It was decided in London to put down the Iraqi rebellion without a large deployment of ground troops, but—for the first time—using only aerial bombing. The goal was (for the time) high-technology terrorism, at much lower cost than the expensive transfer of troops by sea. Results were mixed, but the principle was established.

Lanchester is also the founder of mathematical modelling for military gaming. Many of the equations that underlie combat simulations were developed by Lanchester. Best known is the “Lanchester N-Squared Law of Combat,” which states that the attrition rate of two belligerents will be proportional to their weapons efficiency times the square of their troop strength. (If you ever wondered why even a simple strategy board game like “Risk” has such complicated rules, it is because of Lanchester.) Even today, when defense contractors such as Teledyne discuss their most sophisticated combat simulation systems for the U.S. military, they talk of “ELAN,” which stands for “Extended Lanchester.”

The emphasis on games was necessary to the utopians for ideological reasons. In the same way that Wells dreamed of a positivist world empire, where human society was neatly controlled, so, too, warfare had to be predictable with mathematical precision. Soldiers have usefully trained their minds with games for centuries (chess, go, and many others started as military training games). However, Wells and Lanchester believed that games should *control* the soldier’s thinking. If “A” concentrates a force of very high weapons efficiency (the RAF) against a relatively underpopulated “B,” which has a very low weapons efficiency (the Iraqis—be it 1921 or 1999), then “A” must win. Or, if not, then the equations need revision. Morale factors may affect outcome, but political and moral factors—just those things that make a soldier worthy of serving a republic—must not be allowed in.

It makes perfect sense, therefore, that neither military game fixation nor “air power” made much headway in the U.S. armed forces between the World Wars. Even the maverick flying officer Billy Mitchell never actually insisted that aircraft were the absolute weapon, as the foreign air power fanatics claimed. And the American air forces, unlike the RAF, the German Luftwaffe, and others, were scrupulously kept under the U.S. Army’s command structure.

World War II

The utopians used World War II to make their play for dominance. The U.S. Army Air Force came deeply under the influence of the RAF; bit by bit, the U.S. fliers abandoned

their concepts of integrated offensive operations, and began to rely on the pure and simple terror bombing of civilians. The utopian faction of the U.S. intelligence community set up the Strategic Bombing Survey, a unit designed to confirm the air power doctrine. Ironically, the Survey (which lasted into the postwar period) conclusively demonstrated that air power was really effective only on a tactical support level; the strategic bombing of infrastructure had limited effect, and the massive terror bombing of civilians was next to useless.

Despite these and other similar findings, the most utopian version of air power ideas became dominant in the United States after the war. The reason? Just as Wells predicted: the atomic bomb. The combination of the aircraft and the A-bomb represented the “absolute weapon,” it was argued, demanding wholly different kinds of strategic thinking. The Air Force was granted its independence as the “fourth arm,” and, despite the fact that the USAF was then, and is now, staffed by the most patriotic of Americans, that branch became a plague vector for utopianism.

Key to this was the Air Force’s creation of Project RAND, eventually the independent Rand Corp. Realizing that bombers could eventually be replaced by rockets, and wanting to make sure that the air forces never lost their new-found dominance, Army Air Forces Chief of Staff Hap Arnold tasked Rand with one mission: What will the atomic weapons of the

future look like, and how might they be delivered? The earliest Rand staffers used this brief as an opportunity to dump classical military ideas, like those of Clausewitz, and to go whole-hog into scenario-mongering and gaming. Because atomic weapons are “absolute,” it was argued, the simulation of their possible use was more important than strategy.

John von Neumann was brought into Rand to develop the games section. Soon, how one used the simulations themselves became an independent discipline at Rand, called “strategic systems analysis” — which came into general use under the name “systems analysis.”

The tragic effects of Rand’s utopian influence became clear in the Vietnam War, where a company commander could not call for air support until he had checked with the Pentagon directly: Secretary of Defense Robert McNamara, a systems analysis fanatic, had to make sure that such support was within the parameters of the currently running scenario!

Almost all of today’s video combat simulations for the civilian population are based on hardware and software originally funded by Rand and the Air Force, for military use. Simulation training, like chess, has its uses. However, the dominance of computerized scenario games in every pore of today’s U.S. society could never have occurred without the takeover of U.S. military thinking by H.G. Wells’s soulless utopian ideas.

The genocidalist who built video games

The “blast ’em” computer video games of today all derive from a U.S. Air Force project in the late 1940s to develop realistic flight simulators.

The U.S. Air Force had pioneered the use of computers. However, the need for realistic computerized simulation demanded a much faster system than that based on the analog technology of the immediate postwar period. The USAF heavily funded a team at the Massachusetts Institute of Technology (MIT), under electrical engineer Jay Forrester, to develop new methods. Forrester came up with “Whirlwind,” the first high-speed digital computer.

From the beginning of the 1950s, USAF planners became increasingly enamored with the cybernetics ideology being fed to them by the RAND Corp. — especially ideas about “man-machine interface.” The Air Force wanted a complete radar network to guard against Soviet bombers, but it became convinced that human operators could not handle the volume of information. Forrester was tasked with creating SAGE (Semi Automatic Ground Environment), which allowed digital computers to analyze information before it was delivered to the human beings. The

long process of getting the human beings and their moral compunctions “out of the loop” had begun.

Forrester was so impressed by the success with which his digital computers seemed to simulate combat, that he left MIT’s computer lab and moved to the same university’s Sloan School of Management. There, he developed an idea he named “system dynamics,” which purported to model global society, including ecological and population dynamics. But, as the saying goes, “garbage in, garbage out.” Forrester’s model incorporated the Malthusian ideology of limited natural resources; therefore, his model’s output could only confirm that overpopulation was the world’s biggest problem.

This appealed to the so-called Club of Rome, the Malthusian group that sponsored Forrester and Dennis Meadows to write *Limits to Growth* in 1971. Throughout the 1970s, the Club of Rome and its environmental-extremist friends extensively used *Limits* to give a scientific veneer to their attempts to shut down industry and to commit genocide against “overpopulated” parts of the Third World. It is telling that Lyndon and Helga LaRouche and their collaborators spent considerable effort during the 1970s explicitly attacking *Limits*, and combatting the ideology behind it.

The digital technology Forrester developed lives on, in the innards of all of today’s video games.