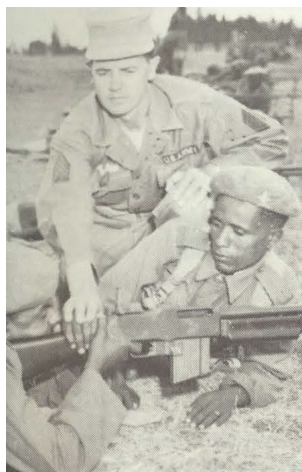# Cultural Engineering

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In earlier days individual combat skills frequently played the decisive role in warfare. But war has grown in size and magnitude, evolving from conflict between individuals to battles between tribes, to combat between nations, to global warfare between alliances. Technology has developed more effective mechanisms for firepower, communications, and mobility. Man has had to mediate his skills through larger organizations, and by means of more complex equipment.

Almost since the end of World War II, the United States has been in a technological race with the Soviet Union, a race that has focused primarily on the development of equipment with ever-increasing capabilities.

Unfortunately, the improvements in equipment were not accompanied by similar developments in the utilization of human beings. The increased complexity of weapons systems aroused dismay that the skills required to operate the systems might exceed the capabilities of the available personnel. A new type of specialist, the human engineer, has emerged to cope with these problems.

Just as human engineering arose in response to the increasing complexity of military equipment, so a new function–cultural engineering–is today being required because of the growing complexities involved in the worldwide Military Assistance Program. The complexities stem less from an increase in the extent of the military assistance operations than from a shift in the character of those operations.

Military Assistance Program

In general, the Military Assistance Program has gone through five distinct phases since the end of World War II:

- Immediately after the war, from 1945 to 1947, foreign aid was directed largely toward providing countries relief from wartime damage. The first of the military assistance postwar programs was begun in the Philippine Islands in 1946, and this was only a modest program designed to complement the war damage aid.
- The intensification of cold war hostilities during 1948-50 led to the extension of foreign aid from relief to recovery, from consumption to productivity and investment. Geographically, the program centered in western Europe. Due to the spread of communism for reasons which seemed primarily nonmilitary, the economic aspects of foreign aid were emphasized. Thus the Mutual Defense Assistance Program was designed primarily to furnish tangible support for NATO.
- The beginning of the Korean War saw a great rise in the military assistance aspects of foreign aid. In contrast to the mainland China

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experience, our vulnerability in Korea seemed to indicate that economic aid was in itself insufficient to counter external attack. Therefore, the Mutual Security Act of 1951 gave primacy to military considerations, still mainly to the European Continent.

- From 1955 to 1961 we saw the era of "competitive coexistence." There was a reduction in the level of military aid. Throughout this period, too, there was a shifting of emphasis from Europe to the underdeveloped countries of the world, and from advanced weaponry to materials usable by those countries for conducting limited wars. In 1961, some 8,400 United States military personnel were involved in the Military Assistance Program.

- Since the advent of the present administration, greater emphasis has been placed on counterinsurgency and other unconventional warfare capabilities, including the use of military forces for civic action. The Military Assistance Program itself has shifted to give a larger role to civic action. Much of the change in orientation, though, seems reflected by a buildup of special, unconventional warfare forces which advise and train in matters similar to Military Assistance Advisory Groups (MAAG's) and military missions. This includes those personnel sent to countries in southeast Asia after six weeks' training in the Military Assistance Training Advisor Course at Fort Bragg, and a more

than doubling in the authorized size of Special Warfare Forces to serve as "paramilitary support forces" throughout the world.

Changes in Requirements

There has been, then, a reorientation in the objectives of the Military Assistance Program and of relationships with foreign troops. The reorientation is sometimes difficult to distinguish from the providing of military assistance alone. And this evolution has changed the job requirements of the Army officers who are, or will be, involved in providing the requisite military assistance.

The task of constructing conditions to encourage the security of less-developed nations differs greatly from that involved in assisting European countries to rebuild their military strength. Establishment of new institutions is a much more complex process than merely providing funds and equipment to rebuild, or just to modernize. Too, the major long-range task in the underdeveloped countries appears to be less that of the development of military capabilities than the promotion of conditions of general material and psychological well being and satisfaction with Western political approaches to economic development. The latter goal requires a need for a combination of internal security, technical development, and political development.

These needs are closely interrelated in the minds of the peoples of the underdeveloped countries, and military personnel influence all three areas as they attempt to provide military assistance.

Emphasis is now given to unconventional warfare capabilities (US Army)

Proper Understanding

One must understand the novelty of the functions involved in rendering military assistance if he is to understand those functions as being a part of the larger strategic picture of nation-building toward democracy rather than as small efforts designed only to communicate particular military skills.

Western cultures have many social as well as equipment systems to export. But few of the Western

systems can be incorporated into underdeveloped cultures without major modifications of both the indigenous cultures and of the Western systems themselves.

It is generally agreed, even by the citizens of the underdeveloped countries, that many of the traditional indigenous customs, capabilities, and values should be changed, that is, low educational levels and low standards of living. There is also general agreement that it is unrealistic, and probably undesirable, to make their own cultures into mirror images of Western societies.

Cultural Adaptations

With different religious and historical backgrounds, it is fairly certain that different cultural adaptations will occur. Accordingly, the social and technological systems which serve our society should also be subject to redesign, a redesign that must go beyond merely adapting equipment to match the anthropometric and educational characteristics of the peoples of the underdeveloped countries.

It is not enough to make weapons more appropriate for men of smaller stature; to provide vehicles that can be better operated in terrain with more jungles than roads; to minimize the dependence on manuals and on other written material. It is also necessary that we recognize the implications which characteristically different social relationships and values may have on the functioning of all types of systems.

To illustrate ways in which foreign cultural values may require differently designed systems:

- Roger Hilsman has described how the mountain tribes of Burma, because of their seminomadic way of life, see no point in taking or holding ground in war.* During World War II, Office of Strategic Services tactics and weapons had to be adapted to the Burmese customs of ambush and lightning raids.

- The problem of face-saving, so notorious in oriental cultures and not unknown in the Western World, often impedes instructors from discovering how well students understand the subject matter. Tests which could damage prestige are not tolerated, or they are reduced to being a mere formality. New instructional systems must be developed in

which an individual's "face" may be "saved" without loss of efficiency. Self-instruction systems, as represented by teaching machines which minimize the opportunity for error, may have special value in oriental cultures.

- Westerners prefer personnel systems which treat employees as individuals, each of whom must demonstrate job competence. Nepotism is viewed as a violation of efficiency. In underdeveloped countries, however, family, clan, and tribal ties are close. People cannot live in relative economic independence but must, as a part of the social security system, help to care for members of their extensive families. Nepotism represents one of these security mechanisms. Because members of the same clan are interdependent, they cooperate on jobs to an unusual degree, and, perhaps, achieve more effective subsystems. But these same people often lack broader identification than with their clan or tribe. Members of different tribes may be too antagonistic to work together cooperatively. These considerations of group identification suggest that personnel systems devised for use in underdeveloped countries may be more efficient and less disruptive of social relations if hiring and assignment includes the factor of group cohesion, even at the expense of individual abilities.

- It is often easier to introduce new ways of doing things than to reeducate people concerning the basic ideas which underlie a new procedure. New techniques may be introduced most easily by grafting them onto existing beliefs. Medical treatment may be designed and explained in terms compatible with folk medicine. Herbal teas may be prescribed when large quantities of boiled water are to be ingested.

The task of cultural engineering is difficult even for specialists in the field. To military personnel oriented toward direct applications of military technology, the subjectivity of the bases for action and the indirection often necessary to accomplish change presents a considerable challenge. But the needs of the times, rather than the ease of accomplishment, define the missions of the military establishment.

Cultural engineering is now being added (at least as a requirement, if not yet an accomplishment) to the already extensive repertoire of military skills. ■

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* Roger Hitsman, "Internal War—The New Communist Tactic," *Military Review*, April 1962, pp 11-22.

" US MAAG's and the Military Assistance Program are the backbone of mutual security. A major portion of this mutual security requirement rests on the capability of Army forces, US and allied, since … the key to Free World success in Pacific-Asia is winning in Asian land areas. I think we sometimes underestimate the amount of US *Army* effort and strength that is necessarily–and desirably–committed to military assistance for our allies. "

–General James F. Collins