

UNDER COMMAND, OUT OF CONTROL— THE EMERGING PARADIGM FOR ARMY OPERATIONS

J. Marc Widdowson

Abstract. It is widely recognised that information technology will create a case for changes in the structure and function of the command chain. The most radical projections involve flattened command hierarchies and drastic decentralisation of decision-making responsibility. Others have argued that the special requirements of the military environment will continue to necessitate commander-subordinate relations that are not much different from those of today. This paper sheds light on the issue by presenting a mathematical model of the relationships between information technology, command centralisation, unity of purpose and operational complexity. It suggests that the operational paradigm has been evolving in a consistent direction over a period of many centuries, and that future adaptations due to digitisation can be understood in the same context. This involves a continuing emphasis, at each command layer, on the human and moral function of leadership, but a steady movement downwards of administrative and managerial activity.

COMMAND AND CONTROL

Armies implement a command hierarchy, in which orders cascade from the commander-in-chief via senior and junior commanders to the troops on the ground. The commander is supported by a staff, which at higher echelons is distributed among several headquarters, some of them dually redundant. The structure typical of NATO armies is fundamentally the same as that employed during the First and Second World Wars, while many of its essential features go back a considerable time before that. The British Army, for one, has experimented with alternative arrangements over the last few decades, but none has proved lasting.

It has commonly been argued that digitisation will reverse the historical trend for an increasing number of command layers and growing staff size. Automation of information gathering and processing should reduce the need for headquarters manpower, shorten lines of communications between the commander and his subordinates, and allow the commander to manage a greater number of entities. The same claims have been made in industry. Information technology is said to have produced flatter hierarchies, less bureaucracy, and a more decisive, high involvement style of management [1].

An important question is how this will affect the responsibilities of different levels of command. One argument suggests that delayering might be associated with a greater emphasis on team working and empowerment of junior ranks, to make up for the loss of traditional mechanisms of direction. An opposing argument is that digitisation might actually increase the control of senior ranks. Advanced battlefield sensors could give the headquarters a clearer view of the battle than the troops who are actually there, so that decision-making responsibility will migrate naturally upwards. Commanders who have a very detailed tactical picture alongside powerful, interactive command tools will be able to micromanage the formation.

In this discussion, it is helpful to distinguish between command and control as two functions of a military hierarchy. Command is associated with such concepts as decision making, motivation, direction, authority, leadership, accountability and responsibility. Control is not the equal of command but is said to be one component of it. Control refers to the process whereby a commander, assisted by a staff, organises, directs and co-ordinates the formation. It is a managerial function, involving the allocation and regulation

of resources. Control is about administration, whereas command is a moral issue [2].

Information technology primarily affects the task of control, that is, the administrative/managerial element of command. Today, the ability to control a given formation is limited by the commander's capacity to keep up with fast-flowing activity. Since digitisation will make it easier to handle information, it should improve the commander's effectiveness in this area. However, the relative difficulty of control also depends on such issues as the complexity of the force structure, the challenges of the environment, and the formation's own experience and continuity. Digitisation may affect these to a lesser extent or not at all, and so it should not be regarded as a panacea.

At present, the most prevalent theme within digitisation is about supporting the needs of headquarters at battlegroup level and above (although the issue of enhancing individual capabilities in the contact battle is not being neglected). In this respect, digitisation is primarily relevant to the operational level of command. This is the level intermediate between tactics (the prosecution of particular engagements) and strategy (the overall problem of winning the war) [3]. It is defined in British doctrine as the process of fulfilling a strategic objective [4]. It involves the setting of missions and objectives in order to achieve a desired end state in an entire theatre. Typically it looks ahead for a period of between two days and several months.

To explore how information technology will affect roles and activities at the operational level, this paper proposes a general model of command decision making. Digitisation can then be viewed in the light of broader themes in military affairs that extend back thousands of years. Its characteristic features and implications appear not as *sui generis* but as relating to issues that have always faced military commanders. Both digitisation and its associated organisational changes may be regarded as evolutionary not revolutionary. The requirements on future command structures then appear simply as the latest logical twist in a long-standing historical development.

ORIGINS OF COMMAND HIERARCHY [5]

Stratification develops naturally when large numbers of people apply themselves to a common task. The management