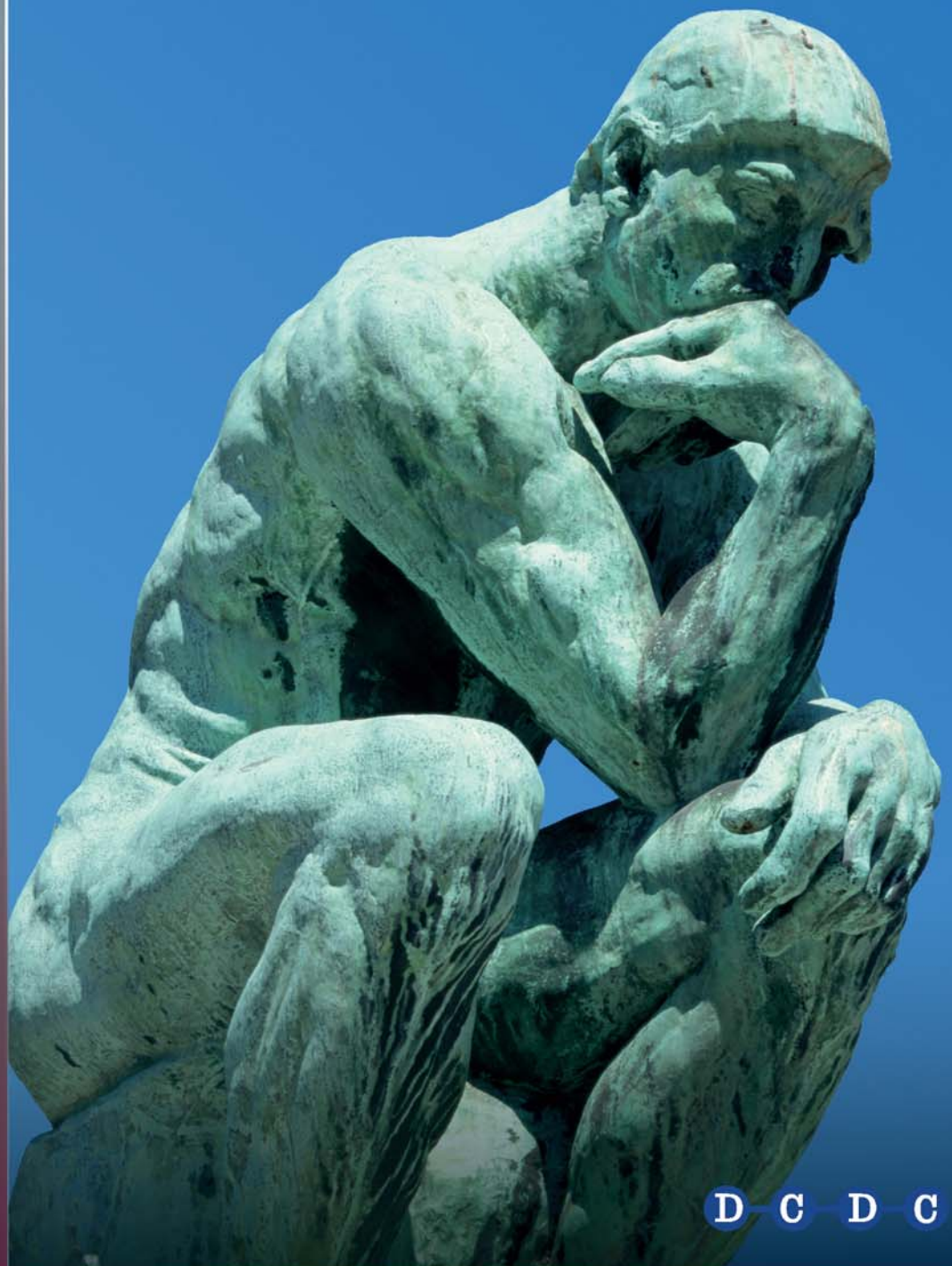




MINISTRY OF DEFENCE

Joint Doctrine Publication 04

Understanding



D C D C

Development, Concepts and Doctrine Centre

JOINT DOCTRINE PUBLICATION 04

UNDERSTANDING

Joint Doctrine Publication 04 (JDP 04), December 2010,
is promulgated
as directed by the Chiefs of Staff

A handwritten signature in black ink, appearing to read 'MP Colley', with a large, sweeping flourish underneath.

Assistant Chief of the Defence Staff (Development, Concepts and Doctrine)

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PREFACE: WHY A DOCTRINE FOR UNDERSTANDING?

‘Know the enemy and know yourself; in a hundred battles you will never be in peril. When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal. If ignorant of both your enemy and of yourself, you are certain in every battle to be in peril.’¹

Sun Tzu

1. It is often said that *knowledge is power*.² However, in isolation knowledge does not enable us to understand the problem or situation that we face without further interpretation. Analysis and judgement equips decision-makers at all levels with the insight and foresight required to make more effective decisions. Understanding is therefore the ability to place knowledge in its wider context to provide us with options for decision-making. In the national context, understanding underpins the decision-making process that informs the application of national power. It also enables us to understand the implications of our decisions for our adversaries, allies or bystanders.
2. One common analogy used to explain understanding involves the game of chess. Knowledge involves having the insight to recognise where the pieces sit on the chessboard and the rules on how they can move; understanding is having the foresight to anticipate how the game is likely to develop. Unfortunately, we tend to view understanding as a natural reflex, like breathing. Comparable to learner swimmers, who quickly discover that breathing is not a straightforward task but a technique that must be mastered to improve performance, understanding also requires application and effort.
3. Understanding is indispensable to informed decision-making not only within the MOD, but also across government to ensure the effective application of all elements of national power in support of UK national security policy. **Understanding is, therefore, a non-discretionary element of decision-making.**
4. The aim of JDP 04 is to develop the commander’s approach to understanding, whether as an individual, as part of a team, or in a coalition.
5. **Structure.** JDP 04 is divided into 4 chapters:
 - a. **Chapter 1** explains understanding in the national defence context.

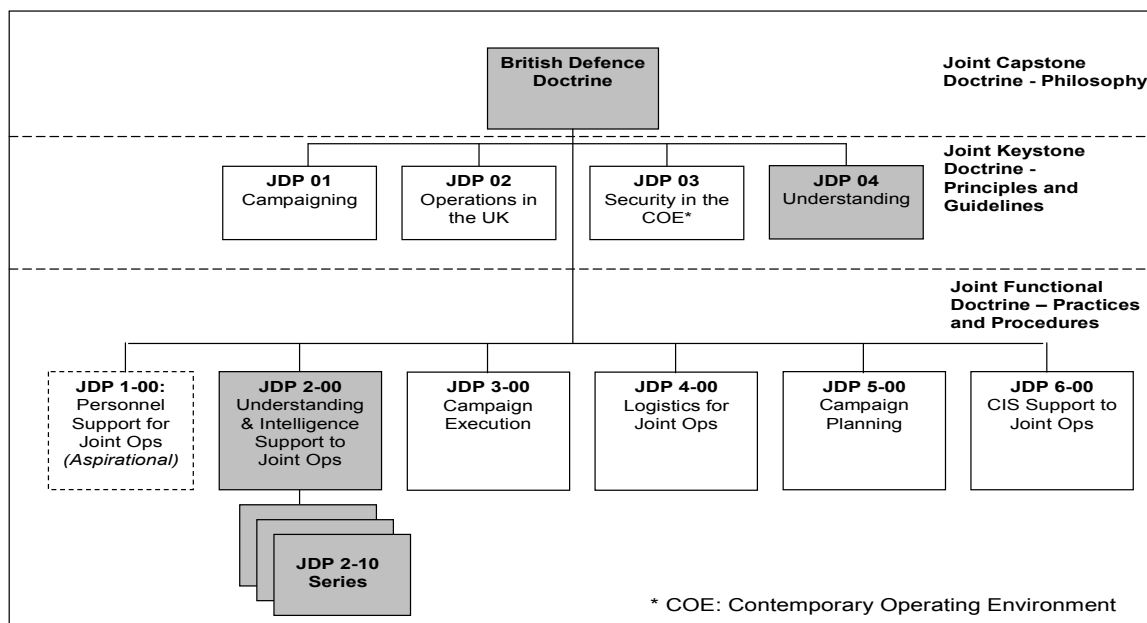
¹ Sun Tzu, *The Art of War*, Samuel B. Griffith trans, Oxford University Press 1963, page 84.

² Sir Francis Bacon, *Religious Meditations, of Heresies*, 1597. English author, courtier, and philosopher (1561 - 1626).

- b. **Chapter 2** explains why understanding is important to the MOD.
- c. **Chapter 3** explains how to develop understanding.
- d. **Chapter 4** explains the implications of understanding.

LINKAGES

6. JDP 04 is intended to be read in conjunction with JDP 0-01 *British Defence Doctrine* (which it supports) and JDP 2-00 (3rd Edition) *Understanding and Intelligence in Support of Joint Operations*.³ It should also be read in conjunction with NATO doctrine (Allied Joint Publication-2 (AJP-2) *Joint Intelligence, Counter Intelligence and Security Doctrine*. It is linked with JDPs 01 *Campaigning*, 3-00 *Campaign Execution* and 5-00 *Campaign Planning*. JDP 6-00 *Communications and Information Systems Support to Joint Operations* provides additional detail on information management and communications and information systems, and JDP 3-40 *Security and Stabilisation: the Military Contribution* provides guidance on the application of understanding within the stabilisation and counter-insurgency environments. Elements of this publication also draw on work conducted at Brunel University's Centre for Intelligence and Security Studies by Dr Philip Davies and Dr Kristian Gustafson. Assistant Chief of the Defence Staff (Development, Concepts and Doctrine) would like in particular to thank them for their support to the Case Studies in this publication and their work developing the concept of a Human Domain.



JDP 04 in the Hierarchy of Joint Doctrine

³ Due to be promulgated in early 2011.

CONTENTS

UNDERSTANDING

Title Page	i
Preface	iii
Contents	v
Chapter 1	The Importance of Understanding
Introduction	1-1
The Purpose of Strategic Understanding	1-1
Understanding in the Operational Environment	1-3
Defence Support to National Understanding	1-5
 Annex A – Case Study 1. Failure to Understand: Napoleon and the Invasion of Russia 1812	
Chapter 2	The Fundamentals of Understanding
Introduction	2-1
Defining Understanding	2-1
Characteristics of Understanding	2-3
Principles of Understanding	2-9
 Annex A – Case Study 2. Effective Collaboration and Fusion: Operation CROSSBOW 1943-1945	
Chapter 3	Developing Understanding
Introduction	3-1
Articulation of the Requirement	3-1
Networks	3-2
Analysis	3-3
The Human Domain Framework	3-5
Human Terrain	3-11
Factors Affecting the Development of Understanding	3-13
Understanding Enablers	3-18
Summary	3-20
 Annex A – Case Study 3. The Cyprus Problem: Actors and Complexity	

Annex B – Case Study 4. Understanding and the Human Domain: The Loss of Singapore 1942

Chapter 4 The Implications of Understanding

Introduction	4-1
Ethos, Philosophy and Culture	4-1
Enhanced Decision-Making	4-3
Conclusion	4-8

Lexicon

Part 1 – Acronyms and Abbreviations	Lexicon-1
Part 2 – Terms and Definitions	Lexicon-2

Doctrine Development

CHAPTER 1 – THE IMPORTANCE OF UNDERSTANDING

‘The aim must be to establish and maintain a broad level of understanding that allows better decisions, both on the timing and on the application of power, and on the sequencing for best effect of the different levers of power.’¹

Future Character of Conflict Experiment

SECTION I – INTRODUCTION

101. Understanding provides the context for the decision-making process which informs the application of national power. The purpose of understanding is to equip decision-makers at all levels with the insight and foresight required to make effective decisions as well as manage the associated risks and second and subsequent order effects. Chapter 1 explains the importance of understanding and describes how the military supports national understanding.

SECTION II – THE PURPOSE OF STRATEGIC UNDERSTANDING

102. **The Relationship between Understanding, Power and Influence.**

Understanding is rooted in a framework of statecraft, defined as *the skilful management of state affairs*.² Statecraft applies to the internal and external affairs of the state and, in the case of the latter, specifically to foreign policy. The 3 components of statecraft are understanding, power and influence:

- a. **Understanding at the National Level.** At the national level, understanding underpins everything that we do as a nation. It informs choices on the development of state policy and strategy, supports the application of national power to achieve influence, and is a pre-requisite of effective decision-making. In terms of conflict, it identifies the triggers and thresholds for transitions between the traditional phases of engagement and the context required for determining the mechanisms for conventional deterrence and coercion.
- b. **Power.** Power is the capacity to influence the behaviour of people or the course of events. The national instruments of power, or means of achieving influence, are categorised as diplomatic, military and economic. They are described in detail in Joint Doctrine Publication (JDP) 0-01 *British Defence Doctrine*, which also sub-divides

¹ Development, Concepts and Doctrine Centre (DCDC) Future Character of Conflict Experiment 5 May 2010, Deductions in Plenary.

² *Concise Oxford English Dictionary*, 11th Edition.

power into hard and soft power. Hard power is *the threat or use of military or economic coercion or physical effect to achieve influence*.³ Soft power is *the ability to persuade or encourage others to adopt an alternative approach without recourse to hard power*.⁴

c. **Influence.** Influence is the capacity to have an effect on the character or behaviour of someone. Political, military and economic credibility, together with a coherent diplomatic agenda, plays a large part in the ability to influence. Understanding assists in the identification of those we might wish to influence and the most effective approach for it. We must, however, be careful not to conflate understanding with influence. Defence needs to be able to listen to its partners as well as persuade them how to act. We need to develop meaningful 2-way relationships with others who are acting with and alongside us, and we need to interact with those with and amongst whom we are operating. There is therefore a clear difference between transmitting a message to a target audience and genuinely interacting with that audience.

d. **The National Perspective.** Strategic understanding provides a global view that underpins UK aspirations as a global actor.⁵ Our interests are defined in the National Security Strategy, which defines the security of our nation as the first duty of government, because that is the foundation of freedom and prosperity.⁶ Understanding (when working well) helps to avert crises through enabling early application of soft power or coercion, and it also enables the identification of new and emerging threats based on this national vision. The national perspective also informs the configuration and preparation of our armed forces, including how they develop their understanding and operate with other agencies to support national interests. However, global influences, including social, political, economic and cultural trends, suggest that defence cannot develop in isolation the understanding that underpins national decision-making. Few regions of the world are so remote that global cultural, institutional and technological developments do not have an impact. The military contribution to understanding should always be placed within this overriding national perspective.⁷

³ JDP 0-01 *British Defence Doctrine* (3rd Edition), page 1-7.

⁴ New definition.

⁵ This includes a detailed view of our national interests, our strategic partners and our international obligations (e.g. the UN and NATO).

⁶ National Security Strategy 2010: *A Strong Britain in an Age of Uncertainty*, 18 October 2010.

⁷ *Ibid.*

103. **National Strategy and Understanding.** Understanding provides the context for the formulation of national strategy based on national interests and obligations. Commanders should consider the national strategy when developing their own understanding. This will include consideration of threats to international security, foreign policy and the UK's obligations.⁸ This is increasingly necessary at even the lowest levels of command as tactical activity can have effect at the strategic level.

SECTION III – UNDERSTANDING IN THE OPERATIONAL ENVIRONMENT

*'No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict. The key is not to be so far off the mark that it becomes impossible to adjust once that character is revealed.'*⁹

Sir Michael Howard

104. **Understanding the Contemporary Operating Environment.** Within the contemporary operating environment the nature of war remains constant, but the character of conflict itself is changing.¹⁰ Therefore, while we hope to learn from experience, this must be tempered by anticipation of change. Whenever a crisis arises, the environment at that instant will determine possible courses of action. The best that we can hope for is to understand the contemporary situation with sufficient granularity in order to minimise the chance of total surprise. The Development, Concepts and Doctrine Centre's (DCDC) *Global Strategic Trends* study outlines a world in transition out to 2040 and beyond.¹¹ This transition will include significant demographic challenges, the impact of climate change and a mismatch in the demand and supply of energy, food and water. Maintaining a clear understanding of the evolving operating environment is a critical element of identifying future challenges.

105. **The Future Operating Environment.** The DCDC Strategic Trends Programme *Future Character of Conflict* and the associated deductions work highlight 4 national challenges to which military capability must respond: terrorism; hostile states; fragile and failing states; and hybrid adversaries or

⁸ Foreign policy defines how the UK attempts to influence other international actors to support our own interests. National obligations are activities that the UK has agreed to support such as coalitions, alliances, treaties and support to international organisations (UN and NATO).

⁹ Attributed to Professor Sir Michael Howard.

¹⁰ DCDC Strategic Trends Programme, *Future Character of Conflict*, February 2010.

¹¹ DCDC *Global Strategic Trends – Out to 2040* (4th Edition).

threats.¹² In addition, the deductions paper identifies the main challenges of the future operating environment as:

- a. Information anarchy.
- b. A continuous battle to achieve focus and clarity.
- c. The requirement for prioritisation and multi-tasking of finite resources.
- d. Increasing reliance on other information and intelligence partners.
- e. Operating in a multi-agency and multinational context.
- f. A congested, cluttered, contested, connected and constrained operating environment.¹³

106. **Capability Development in the Future Operating Environment.**

The future operating environment has significant implications for the types of capabilities we need to develop and maintain understanding. It will be more complex and interconnected than ever before. Moreover, the speed and quality of the data flow will provide commanders with unparalleled access to information. This will place additional requirements on commanders and their staff who should consider the following factors:

- a. **Information and Communications Technology.** Improvements in information and communications technology may have a marked effect on the way that we are able to collaborate and fuse information. Greater availability of information, particularly unregulated external information, may mask our understanding through the sheer volume and lack of veracity of multiple sources. Creating federated or networked structures of understanding is a complex process, demanding a willingness to share information, but it will usually repay the effort expended. Commanders should seek to use common operating methods and interagency protocols to enable effective information sharing to take place wherever possible.
- b. **Information Quality Control.** Commanders should ensure that processes are in place to control the quality of information. Future adversaries will attempt to exploit cyberspace for their own ends, including broadcasting their viewpoint, achieving deception and spreading misinformation. All this underscores the need for quality control, placing great demands on our ability to monitor and understand

¹² DCDC *Future Character of Conflict Experiment Deductions* dated 5 May 2010.

¹³ Paraphrased from the DCDC Strategic Trends Programme, *Future Character of Conflict* pages 21-25.

information within the cyber domain. Information quality control is a staff function that must be enshrined in everyday practice.

c. **Automation of the Analysis Process.** Technological advances are likely to drive further automation of the analysis process; this trend is already evident in areas such as border control and the analysis of freight patterns. While automation offers significant increases in the speed of processing it can, however, incur additional risk; technology can fail and analytical processes reliant on logic lack the judgement, intuition and human empathy. Human involvement in the analysis process is thus an enduring requirement.

SECTION IV – DEFENCE SUPPORT TO NATIONAL UNDERSTANDING

107. **Defence and National Strategy.** National strategy provides guidance to commanders so that they can make decisions for the preparation, positioning and employment of military capability. This includes understanding the required force structures to meet foreign policy and home defence requirements. It also includes the technological developments required to provide the UK with influence on the international stage, informed by an understanding of the threats and challenges to be countered and the range of effects necessary. It further informs intelligence efforts, particularly horizon scanning and the analysis required to identify emerging threats. Commanders at all levels must base their decisions within the context of the national strategy.

108. **Support to National Understanding.** Defence support to national understanding falls into 5 broad categories:

a. **Horizon Scanning.** Horizon scanning is *the systematic search across the global environment for potential threats, hazards and opportunities*. It may also assist in identifying weaknesses in current assessments or policies, but it is not sufficiently granular to enable tasking requirements. Within Defence, horizon scanning is the responsibility of Defence Intelligence in liaison with other government organisations.

b. **Situational Awareness.** Situational awareness is the perception of a particular area of interest, problem or situation bounded by time and space in the context of a mission or task.¹⁴ It provides the ability to identify what has happened and what is happening, but not necessarily

¹⁴ For a full definition of *situational awareness*, see Lexicon.

why it has happened. Commanders require situational awareness to conduct detailed analysis to identify the atmospherics and boundaries of a problem. This analysis leads to understanding and the development of insight and foresight, which is described in Chapter 2.

c. **Support to the Formulation of Policy, Strategy and Planning.**

Understanding is essential for the formulation of effective policy and strategy and for the effective deployment of national resources. It sets the parameters for framing the problem, identifies the areas where there are gaps in our knowledge and determines where additional resources need to be allocated.

d. **Contingency Planning.** Contingency planning is conducted within MOD and military headquarters to prepare for potential military operations in areas of UK interest. It provides the commander with a hypothesis for future developments, against which actual events can be judged. Performed correctly, contingency planning promotes proactive, rather than reactive, responses.

e. **Defence Diplomacy.** Defence diplomacy enhances our understanding of other nations, their cultures, their strengths and their weaknesses by:

- (1) Developing links with the militaries of other nations.
- (2) Strengthening strategic alliances.
- (3) Promoting the credibility of the UK within the international system through professional competence.

Such activities serve to enhance our understanding of other nations and their cultures. This idea is developed further in Chapter 3.

Annex:

A. Case Study 1. Failure to Understand: Napoleon and the Invasion of Russia 1812.

ANNEX 1A – CASE STUDY 1

FAILURE TO UNDERSTAND: NAPOLEON AND THE INVASION OF RUSSIA 1812

‘But can it be that I’m in Moscow? Yes, there she is in front of me, but why is the deputation from the city so long in appearing?’

**Napoleon, 14 Sept 1812, before occupying a deserted Moscow
(From: Leo Tolstoy, *War and Peace*)**



**In 1812 by Illarion Prianishnikov
(1840–1894)**



**Napoleons retreat from Moscow by
Adolf Northern (1828-1876)**

1A1. In 1812 one of the greatest generals in history, Napoleon Bonaparte, decided to attack Alexander I’s Russian Empire with an army of over 500,000 men. Within 6 months Napoleon’s army was broken, and fewer than 15,000 men from his multinational force finally staggered home. The cause of this great destruction was Napoleon’s failure to understand the environment he was entering, the people who would resist him and the political system he was attacking.

1A2. From the start Napoleon failed to understand the impact that Russia’s size and terrain would have on his style of warfare. The distances and climate were known to him, but he thought his system of war would crush Russia like all others before. Although he made thorough logistic preparations, these were to European scales and didn’t account for such a great and empty landscape. When a Polish prince, who had fought against Russia, warned him to equip his cavalry mounts better for the nightmarish winters, Napoleon told him to stop exaggerating. Four days after the war began, and still in mid-summer, a freezing rainstorm killed 20% of his draft horses in one night.

1A3. Napoleon also failed to understand the psyche of the Russian people, whom he considered simple barbarians. He thought that they would fall into

his hands as a helpless mass once he had taken Moscow. However, the Russians were devout Orthodox Christians and considered Moscow the Third Jerusalem and Tsar Alexander the Defender of the Church. To them, Napoleon was the anti-Christ and *Liberté, Égalité, Fraternité* offered no attraction if Holy Mother Russia was ruled by the devil.

1A4. It was the failure of Russia's army to behave like European armies that most perplexed Napoleon. In all his European wars the matter had been settled by a major battle. Once the force in being had been defeated, the nation surrendered. Berlin, Vienna and many other capital cities were handed over to the French without a fight after Napoleon's armies had won in the field. Yet Russia's generals refused battle for weeks. After 2 French victories (at Smolensk and Borodino) the war *should* have ended. Thus Napoleon was confused when no one from Moscow brought him the keys to the city. That the Russians would abandon the city was inconceivable to him, as it was outside his experience.

1A5. Ultimately, Napoleon didn't understand that the war he was fighting was unlike the wars he had already fought. The Russians did not play by the rules that Napoleon understood. They retreated, burned, harassed and avoided the



***The Night Bivouac of the Napoleon Army during retreat from Russia in 1812 by Vasily Vasilyevich Vereshchagin (1842–1904).
Historical Museum, Moscow***

conventional battle. When they finally gave battle they knew that victory (as Napoleon would view it) would only make matters worse for him. As an empty Moscow burned, all hope for victory over Russia evaporated. In December, Napoleon and his starving army fled before the merciless attacks of the Tsar's irregular Cossacks and the well-fed Russian Army. Russia won because the over-confident Napoleon never tried to understand it.

Sources:

David G. Chandler, *The Campaigns of Napoleon*, London Folio, (2002).

Dominic Lieven, *Russia Against Napoleon: The Battle for Europe 1807 to 1814*, New York: Allen Lane/The Penguin Press, (2009).

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Adam Zamoyski, *Moscow 1812: Napoleon's Fatal March*, London: Harper-Collins, (2004).

CHAPTER 2 – THE FUNDAMENTALS OF UNDERSTANDING

‘Intelligence is knowing a tomato is a fruit; understanding is not putting it in a fruit salad.’¹

SECTION I – INTRODUCTION

201. Effective decision-making relies on thorough understanding of the environment, circumstances and situations within which we may find ourselves operating or interacting. Understanding also usefully exposes our mental limitations and informs the potential implications and consequences of our activities. Chapter 2 defines understanding from both a national and a military perspective and describes how to exploit it to our advantage. It also discusses the characteristics and principles of understanding. Like other high-level doctrine, this publication is not prescriptive; it requires interpretation and thoughtful application.

SECTION II – DEFINING UNDERSTANDING

202. **Definition of Understanding.** Understanding is defined as *the perception and interpretation of a particular situation in order to provide the context, insight and foresight required for effective decision-making.*² It is about making better decisions based on the most accurate depiction possible.

203. **Establishing Context.** The term *understanding* has a number of similar, but subtly different, meanings dependent upon the context in which it is used and the user communities or institutions who develop it. For example, military understanding traditionally relates to what military forces need to understand to identify, monitor and defeat adversaries; economic understanding is a framework of competition, supply, demand, regulation and risk. Each context provides a different interpretation or frame of reference.

204. **Insight and Foresight.** Whatever the context, understanding involves the acquisition and development of knowledge to such a level that it enables insight (*knowing **why** something has happened or is happening*) and foresight (*being able to identify and anticipate what **may** happen*).³ Developing

¹ This quote is a DCDC reinterpretation of an extract from *List of Universal Truths* by Peter Kay as at 2010. The original quote is: ‘**Intelligence** is knowing a tomato is a fruit; **wisdom** is not putting it in a fruit salad.’

² *Concise Oxford English Dictionary* (COED), 11th Edition: *the ability to understand something; comprehension; the power of abstract thought (intellect); an individual’s perception or judgement of a situation; sympathetic awareness or tolerance; an informal or unspoken agreement or arrangement; having insight or good judgement.*

³ Insight is the capacity to gain an accurate and deep understanding of something; and foresight is the ability to anticipate future events or requirements. COED.

understanding relies first on having the situational awareness to identify the problem.⁴ Analysis of this situational awareness provides greater comprehension (insight) of the problem;⁵ applying judgement to this comprehension provides understanding of the problem (foresight). Foresight will never be perfect, but improving the quality of our information sources and the analysis of them will make it more certain.

Understanding
Situational Awareness and Analysis = Comprehension (Insight)
Comprehension and Judgement = Understanding (Foresight)

205. **Objectives of Understanding.** In the military context, the most likely objectives for understanding will be:

- a. Providing the context for making better decisions.
- b. Supporting the development of policy, strategy and plans.
- c. Helping develop alliances or agreements.
- d. Achieving influence.
- e. Focusing on a particular operating environment.
- f. Developing an appreciation of the actors within an environment.
- g. Developing empathy with another individual, group or community.

⁴ It should be noted that situational awareness is the appreciation of what is happening, but not necessarily why it is happening.

⁵ In the context of understanding, analysis is the process of evaluating information about the current and past behaviour of an individual, organisation, system or country. It consists of 4 stages: collation; evaluation; integration and interpretation/assessment. Chapter 3 explains analysis in more detail.

SECTION III – CHARACTERISTICS OF UNDERSTANDING

*‘Many intelligence reports in war are contradictory; even more are false, and most are uncertain. What one can reasonably ask of an officer is that he should possess a standard of judgement, which he can gain only from knowledge of men and affairs and from common sense.’*⁶

206. **Introduction.** Understanding needs context; it is specific to a particular object or situation and is perishable, requiring continual development to maintain its currency. Based frequently on incomplete knowledge it will often be imperfect and a degree of uncertainty is inevitable. However, understanding enables individuals, groups and communities to make informed choices based on the most comprehensive knowledge available.

207. **Types of Understanding.** Understanding falls into 3 types that are defined below:⁷

- a. **Individual Understanding.** Individual understanding is defined as *the personal interpretation of the facts held by a person within their own mind*. Individual understanding will inevitably vary across a group or population.
- b. **Collective Understanding (within a Group).** Collective understanding is defined as *the shared perspective held by members of distinct groups that have their own ethos, creed and identity*. Members of specific institutions or professions have collective understanding ranging from professional standards or methods to generally held perceptions of the institution’s role in the world. Collective understanding also arises in political, religious or ethnic groups.
- c. **Common Understanding (between Groups).** Common understanding is defined as *the ability to comprehend perceptions of groups other than our own and to establish a common baseline for communication, interpretation and action*. It is created when distinct institutions, professions, communities and other groups need to cooperate for a specific purpose or simply to co-exist. These groups may have different kinds of collective understanding that involves divergent interpretations of the world and events, including views of one another. Working within, between and across multiple groups and their different collective understanding requires an acceptance of divergent views.

⁶ Carl Von Clausewitz, *On War*, Book 1, Chapter 6, 1832.

⁷ Individual, collective and common understanding are new definitions.

Figure 2.1 depicts the distinction and relationship between the types of understanding:

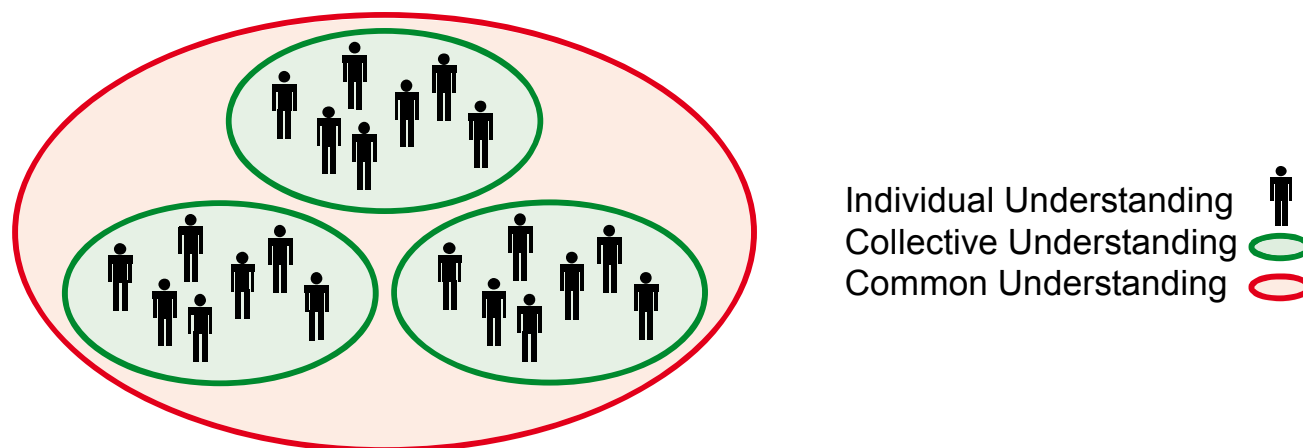


Figure 2.1 – Types of Understanding

The UK Armed Forces and Understanding

The UK's 3 armed services each have their own distinct collective understanding (including of one another), but joint operations rely on the establishment of common terms of reference and interpretation between their respective worldviews. Similarly, the armed services share certain collective understandings that are distinct from those of the Civil Service, and indeed the civilian world at large. Working at the inter-agency level also requires reaching a level of common understanding. Participants from the equivalent services of different nations in a coalition environment will also have to establish common understanding between their different collective understandings. The same issues arise in interactions with non-governmental organisations, indigenous populations and even with adversaries.

208. **Sources of Understanding.** Figure 2.2 depicts the interrelationships between sources that contribute to understanding, which derive in general terms from the cognitive, the physical and the virtual information domains (Box A).⁸ The types of knowledge sources that build understanding are extensive, but can be divided into 2 categories: *internal* (Box B) and *external* (Box C):

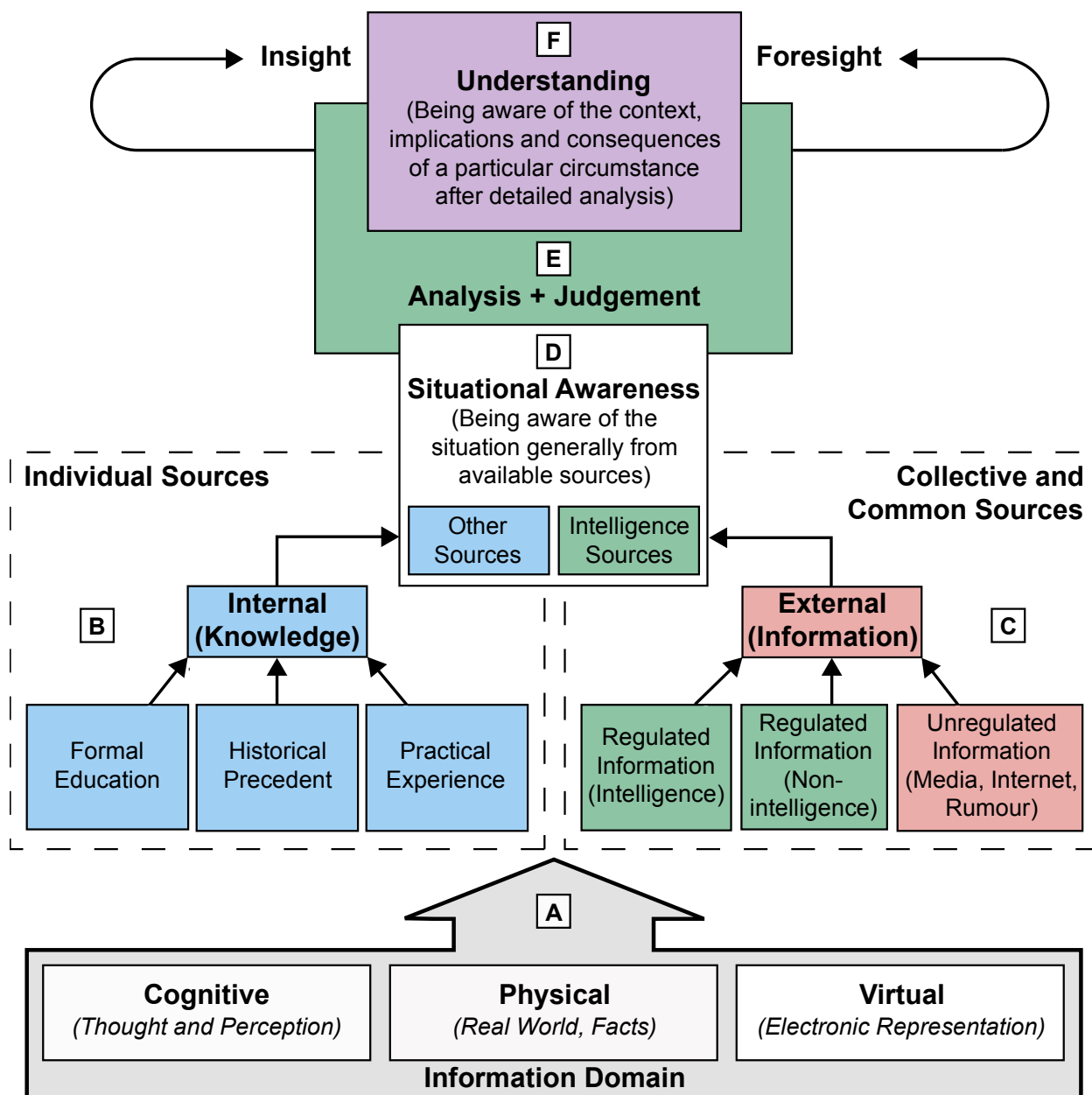


Figure 2.2 – The Sources of Understanding

⁸ The cognitive domain is the sphere in which human decision-making occurs, such as a result of assimilating knowledge acquired through thought, experience and sense. The principal effects generated are upon will and understanding. (JDP 01 (2nd Edition), Campaigning).

The physical domain is the sphere in which physical activity occurs and where the principal effects generated are upon capability. (JDP 01 (2nd Edition))

The virtual domain is the sphere in which intangible activity occurs, such as the generation, maintenance and transfer of information (for example, the internet is part of the virtual domain). The principal effects generated are related to understanding. JDP 01 (2nd Edition)).

- a. Internal sources include our own formal education, historical precedent and practical experience.
- b. External sources can be sub-divided into 2 broad categories: *regulated* and *unregulated*. Regulated sources include intelligence agencies and other agencies that control both their own sources and the intelligence they share.⁹ Unregulated sources include the media and the internet.

209. These sources provide the basis of our general situational awareness (Box D). Situational awareness allows us to frame the analysis (Box E) that is critical to the development of understanding.¹⁰ It must also account for opposing views and test thoroughly any resultant hypotheses. Analysis allows the development of comprehension (insight) and, combined with the application of judgement, leads to the development of foresight (Box F). Insight and foresight are the 2 key outcomes of understanding. This is a continuous process.

210. **Understanding, Time and Consequences.** Understanding is perishable; an evolving situation can present a significant challenge if insufficient time is available to develop, analyse or refresh our understanding. Often, we may have to strive for the best level of understanding that can be achieved in the given timeframe and accept that our response to an unfamiliar situation will inevitably lead to some mistakes and missed opportunities. This issue highlights the importance of recognising the potential for intended and unintended consequences, and the critical need to learn and adapt to improve our understanding.

- a. **Intended and Unintended Consequences.** Any action we take will result in intended and unintended consequences; the extent of the latter will depend largely on our level of understanding at the start of the situation. Potential consequences can be foreseen during the policy and strategy formulation process in the form of best or worst case scenarios and contingency plans developed. The intent will be to see our actions achieve the desired result with as few unintended consequences as possible. There will, however, always be unforeseen consequences which we will need to address as they arise; such consequences are not always negative and may provide opportunities for exploitation.

⁹ For example, intelligence assessments are an important source.

¹⁰ The emerging NATO knowledge-development doctrine is rooted in framing a problem and developing common situational awareness to aid decision-making. While these look similar in concept, understanding goes beyond knowledge-development in the development and application of insight and foresight.

b. **The Need to Learn and Adapt.** Understanding requires a mindset of *learn-adapt-exploit-influence*. Rapid learning and adaptation allows faster evolution of our understanding to account for the changing context, leading in turn to a decline in unforeseen consequences, more effective exploitation and greater influence. However, developing a command climate that embraces a culture of *learn* and *adapt* requires commanders to be open-minded and to learn from their own mistakes. As the critical enabler for developing a *learn and adapt* culture, commanders should show a willingness to admit mistakes and tolerate their subordinates making honest mistakes.

211. **The Competitive Nature of Understanding.** An inherent characteristic of understanding is its competitive nature. This may involve individuals and groups competing for the primacy of their own individual or collective understanding. The trait applies equally to our own internal collective and common understanding, as much as it does to our allies, other government departments, the host nation or our adversaries. Since expeditionary operations are likely to have to overcome the advantages in understanding enjoyed by the host nation, our ability to compete effectively to gain and maintain the initiative will, in part, rely on our ability to adjust or improve our understanding quickly in response to the environment. This will be based on the network that we develop with the host nation and the other actors within the wider environment. Additionally, individuals or groups may compete for authority over, or ownership of, various information or knowledge sources that contribute to understanding. This places an additional premium on developing common networks, protocols and processes to develop understanding when working with multi-agency and coalition operations, together with the underlying ethos of a *duty to share* information. Commanders must emphasise the importance of understanding to the achievement of common aims and objectives and the impact of inefficiencies in the ability to share knowledge.

212. **The Concept of the Narrative.** Narratives serve as a vehicle to convey ideas and views supporting collective and common understanding. In many cases, narratives produced by different groups will compete for influence among a specific audience. Recent operations demonstrate how our adversaries will seek influence among local, regional and world audiences through their own narrative, probably based on their comprehensive understanding of the local situation. Our own narrative will often compete with those of external individuals or groups holding views so ingrained or diametrically opposed to our own that they will be difficult to influence. This situation is commonly termed *competing* narratives. This again places a premium on our ability to understand how people think, recognising both

individual and cultural differences. Some actors or groups will understandably see any form of external intervention as an affront, complicating our ability to challenge a competing narrative. *‘Imbued as most people in the world are with distinctive credos of tribal, cultural, or national identity, the impulse to repel outside intruders is an intrinsically human response, and there are few things more likely to spark off the spirit of the rebellion than a military invasion of [or intervention in] one’s country by a foreign power’.*¹¹ There will, however, be pragmatists alongside them who are potentially more supportive of our narrative: *‘I don’t care what kind of government Iraq has as long as it works.’*¹² Understanding is therefore critical to the development of our own narrative, which must remain sensitive to the external environment and competing narratives. Our aim must be to match such understanding to gain influence over their decision-making and with the appropriate audiences.

The Nature of Understanding

Understanding is:

- Contextual
- Perishable
- Imperfect
- Competitive

The quality of understanding determines the level of risk required in decision-making.

213. Visualising the Information Domain. Figure 2.3 provides a visual representation of the information domain and how it relates to the key elements of understanding. Box A highlights the 3 main inputs of the cognitive, virtual and physical domains shown earlier in Figure 2.2. Box B depicts the inter-relationships between real world events, the network connectivity that delivers information, the information itself, the persona that develops from it in the form of a narrative or narratives, and the actors and the social groups (both collective and common) that interpret and exploit the information.

¹¹ Jon Lee Anderson, *Guerrillas – Journeys in the Insurgent World*, (Abacus, United Kingdom, May 2006).

¹² *Ibid.*

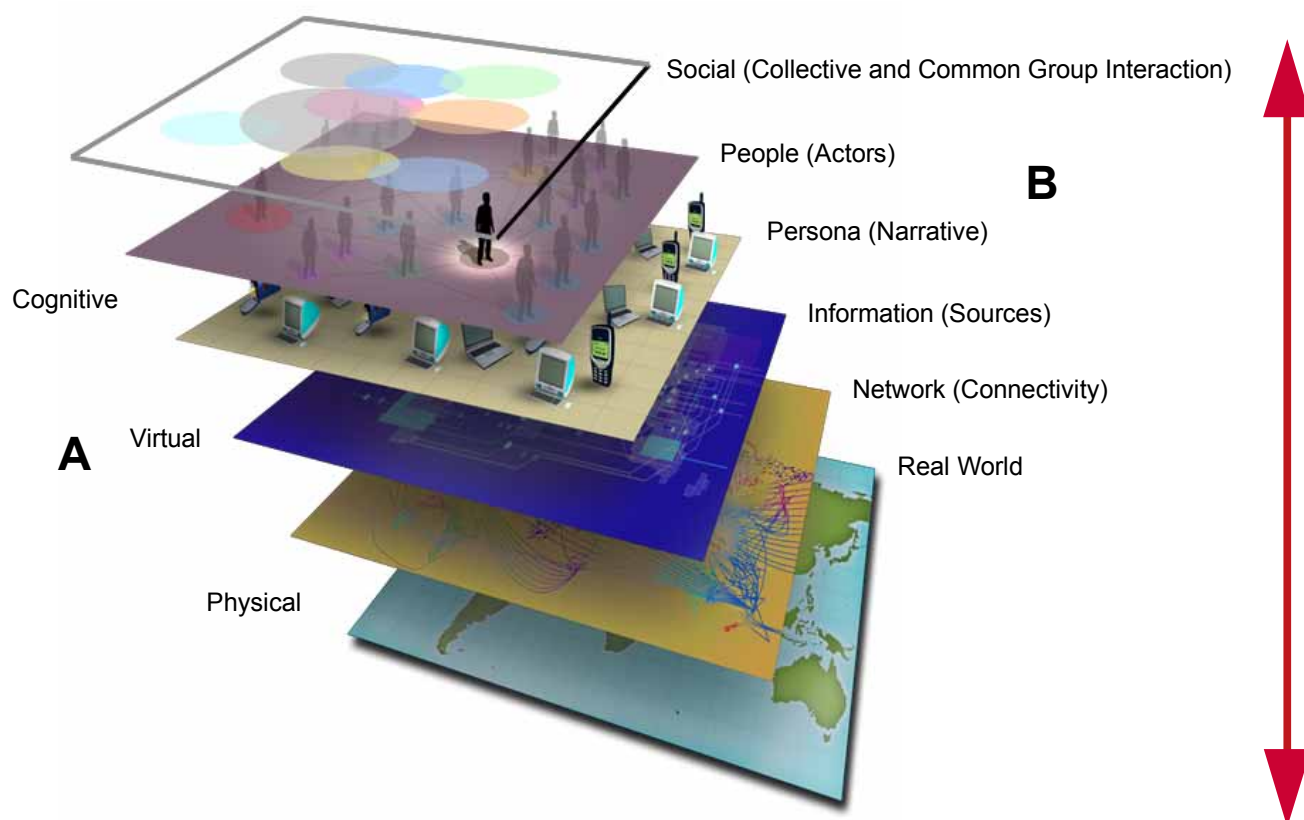


Figure 2.3 – Visualising the Information Domain

SECTION IV – PRINCIPLES OF UNDERSTANDING

214. **Introduction.** The principles of understanding aim to improve awareness of our own strengths, weaknesses and biases. They also promote recognition of the views of other actors and of the need to think creatively and open-mindedly about problems. The 6 principles of understanding are described below.¹³

Self-awareness
Critical Analysis
Creative Thinking
Continuity
Collaboration
Fusion

¹³ These principles of understanding were determined at the DCDC Intelligence Conference on 27 May 2010.

215. **Self-awareness.** It is important to be aware of why or how we *know* something and the limitations of certainty that *knowing* entails. We should audit our knowledge for its grounds, origins and composition with rigour and clarity, taking into consideration our own biases.

216. **Critical Analysis.** Critical analysis is *the intellectual discipline that applies deliberate introspective judgement to interpret, analyse and evaluate a problem and explain the context upon which that judgement is based*.

However, it is subject to the same biases and perceptions as those inherent in developing understanding and relies on intellectual integrity. Tools such as creating analogies and red teaming should be utilised as common practice to encourage individuals and groups to apply critical analysis.¹⁴

217. **Creative Thinking.** Creative thinking is *the examination of problems or situations from an original or unorthodox perspective*. Background, training and experience can often create conditional thinking prejudicial to critical analysis. Creative thinking can allow examination of a situation from a fresh perspective and the creation of imaginative and competing hypotheses. Hypotheses should be tested against existing information to infer meaning or to develop alternative solutions. Creative thinking can be stimulated by free flow thinking (brainstorming) or through a more structured step process.

218. **Continuity.** In areas where change is slow or the requirement is enduring, development and maintenance of understanding requires continuity in observation and expertise.¹⁵ Achieving continuity will require: the development of an effective network of sources to provide access to the knowledge needed; the creation of a common way of storing and sharing knowledge; and the sharing of insight between relevant subject-matter experts. Over time, the development of trust within this network of sources aids understanding. The need for continuity is not limited to deployed operations, but includes those organisations providing reach-back and those involved in national or strategic decision-making. However, the operating context, experiences and expectations all serve to condition our expectations, with the associated risk that over the long term, they support any hypothesis already held to be true. This can lead us to find apparent patterns in almost any set of data or to create a coherent narrative from any series of events. We also tend to assimilate new information to existing perceptions and fail to notice gradual, evolutionary change. This explains why intelligence analysts assigned to new areas often generate insights previously overlooked by more

¹⁴ The DCDC Guidance Note *A Guide to Red Teaming* provides further guidance on methods that can be used for critical analysis and creative thinking.

¹⁵ This includes understanding in respect of long-term operations, historic adversaries or enduring tactics and techniques developed by the single-Service warfare centres.

experienced personnel.¹⁶ Gaining a fresh perspective will demand making assumptions and reasoning explicit and open to challenge by others. Commanders should emphasise procedures that expose and critique alternative points of view and encourage periodic re-examination of important problems to avoid the pitfalls of misperception by gradual assimilation. Similarly, more explicit formulation of hypotheses can direct more effective searches for information; this is best undertaken by *disproving* whatever possible and considering what remains, rather than proving existing beliefs.

Northern Ireland – How Continuity Helped to Develop Understanding



At the start of the troubles in Northern Ireland in 1969 the British military did not fully understand the nature of the situation. Used to fighting insurgents in colonial campaigns, applying similar thought processes and tactics to Northern Ireland, on home territory, did not work. It arguably led to a cycle of reaction and over-reaction, including the infamous *Bloody Sunday* in 1972. By the early-1980s, however, through a process of learning and adapting the military forces understood better the dynamics of the theatre in terms of the roles played by individual and group actors, including paramilitary groups. This understanding was supported by collaboration between the police and the military to develop foresight about how particular communities and actors would react to certain events. The police network, particularly the Special Branch, formed the bedrock of continuity of understanding, with the Army working in support of the police (Royal Ulster Constabulary/Police Service of Northern Ireland) under the legal arrangements of Military Assistance to the Civil Power. A further pillar was the Ulster Defence Regiment (later the Royal Irish Regiment) who lived and worked amongst the community, and Resident Infantry Battalions who served for 2 years to provide continuity. Those units

¹⁶ Richards J Heuer Jr, *Psychology of Intelligence Analysis*, CIA 1999, page 11.

on 6- month tours often completed further tours in the same locations, such as South Armagh, and consequently retained knowledge of the actors which developed further with each deployment. In addition, the introduction of Intelligence Continuity NCOs saw these personnel overlap between 6-month rotational units to provide continuity of intelligence until such time as the new unit intelligence section had assimilated the knowledge and experience of the previous unit. Supporting Intelligence staff at brigade level and above also generally completed 2-3 year tours, as well as multiple tours. One further aspect of continuity often forgotten is the training base; the highly successful Northern Ireland Training and Advisory Team in the UK and its subsidiary in Northern Ireland prepared all individuals and units for duty in the Province using veterans of multiple tours. Northern Ireland thus provides useful insight into the information and intelligence architecture necessary to sustain enduring operations in a complex environment and how continuity of knowledge can enhance understanding.

219. Collaboration. Sharing individual understanding to achieve greater collective understanding can lead to significant benefits during joint or coalition operations. This process may demand collaboration with other nation's information and intelligence agencies. The *need to know* principle endures, but a collaborative environment relies on information sharing, based on a *duty to share* culture across and possibly outside government, underpinned by pragmatic risk-management. Without collaboration, attempts to develop a collective narrative are doomed to partial success or to failure. Commanders should, however, be aware of the potential danger from collaboration of *groupthink*, which may distort analysis. *Groupthink* is a tendency to adopt majority decisions among group members who are similar in background and share common values. Internal group dynamics will elicit conformity of opinion that is difficult for any individual to overcome, even when they know that the opinion of the group is wrong. In extreme cases, the group may begin to feel invulnerable and may be prone to take excessive risk; the group may discount warnings, apply pressure to those who oppose the prevailing mood and an illusion of unanimity develops.¹⁷ Overcoming *groupthink* requires acceptance of authentic dissent, but can be difficult owing to the group often seeking to shun dissenters. Commanders should support the airing of dissenting views, even if they appear contrary to the majority view.

¹⁷ Ian Brooks, *Organisational Behaviour – Individuals, Groups and Organisation*, 2003, Prentice Hall.

220. **Fusion.**¹⁸ Fusion melds information from a variety of diverse organisations into a coherent entity. It requires agreement on a common set of rules and procedures between the agencies involved, as well as the will to make it happen. An important part of fusion is the ability to corroborate sources or specific pieces of information. Some information or intelligence will not be coherent. The key to understanding is recognising why that information does not fit, its significance and the risk that as understanding develops, it may increase in importance and ultimately alter the common understanding. A collaborative approach to fusion between and within agencies provides the best possibility of achieving better coherence. Successful fusion is based on:

- a. **Interoperability.** Interoperability is the ability of a number of organisations to work within a shared framework of understanding.
- b. **Integration.** Integration relies on the use of fully integrated systems with shared operating protocols and management.
- c. **Co-operation.** Co-operation relies on agreement between agencies and organisations to work together on key issues. This may vary from interoperability to the attendance of key personnel at relevant meetings.

While some favour integration, the most likely methods of collaboration and fusion are interoperability and co-operation. In reality, fusion involves elements of all 3. An example of effective collaboration and fusion during the Second World War, Operation CROSSBOW, is at Annex 2A.

221. **Summary.** Sound understanding relies on adherence to 6 principles. However, the subject and context will require flexible application of the principles to achieve the most effective balance of emphasis for a particular problem or situation.

Annex:

A. Case Study 2. Collaboration and Fusion: Operation CROSSBOW 1943-45.

¹⁸ The blending of intelligence and/or information from multiple sources or agencies into a coherent picture. The origin of the initial individual items should then no longer be apparent. (AAP-6)

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ANNEX 2A – CASE STUDY 2

EFFECTIVE COLLABORATION AND FUSION: OPERATION CROSSBOW 1943-1945

2A1. CROSSBOW was the Allied codename during WW2 for operations to counter German long-range weapons. This case study examines the role played by intelligence fusion in Operation CROSSBOW.

2A2. The UK was aware of German interest and competence in rocket research before WW2, not least through the academic work of Hermann Oberth in the 1920s and 1930s (OSINT).¹ The suppression and classification by the German Army of Werner von Braun's doctoral thesis on rocket design, influenced by Oberth's work in 1934 was, therefore, significant. However, the UK only received warning about German long range weapons in 1939 from a letter originating in Oslo that outlined specific weapons projects, together with a specimen proximity fuse for artillery shells as a token of goodwill (HUMINT, TECHINT).^{2,3}



2A3. Further evidence on the V-weapons programme was adduced from multiple sources. Unguarded conversations between German prisoners were intercepted and analysed (HUMINT). The Polish Home Army Intelligence Service penetrated activity at Peenemünde (Reconnaissance), providing a detailed report to London in March 1943. Simultaneously, a combination of theoretical studies and analysis of imagery allowed Professor R V Jones, working for MI6, to construct a speculative model of the V2 design (fusion and creative thinking), which later proved to be accurate in all significant respects. The first physical evidence of intent to use the V1 was the erection of pre-fabricated launch sites across Northern France. Their location and orientation gave an

¹ OSINT – Open Source Intelligence: *intelligence derived from publicly available information, as well as other unclassified information that has limited public distribution or access.* (Allied Administrative Publication (AAP)-6 NATO Glossary of Terms and Definitions.

² HUMINT – Human Intelligence: *a category of intelligence derived from information collected and provided by human sources.* TECHINT – Technical Intelligence: *intelligence concerning foreign technological developments, and the performance and operational capabilities of foreign materiel, which have or may eventually have a practical application for military purposes.* AAP-6.

³ It is in fact hard to categorise the report accurately; the initial approach to the UK was unsolicited and anonymous, delivery was initiated by a blind radio broadcast and was effected by post. No UK agent knowingly met the originator. Although HUMINT is probably the closest categorisation, it stretches its boundaries somewhat.

indication of the likely range of the system and its target (the launcher orientations converged on London), (IMINT).⁴

2A4. The British Intelligence apparatus created an *ad-hoc* committee to coordinate analysis of the various reports about the V2. This multi-disciplinary organisation allowed for the considered assessment of disparate information sources (Data Fusion). The Committee report to the Cabinet Defence Committee (Operations) in June 1943 led to the direction to bomb Peenemünde, carried out as Operation HYDRA on 17-18 August 1943.

2A5. Despite this response, the V1 and the V2 were made operational from June 1944. V2 launches could be detected and located very approximately from acoustic information picked up by directional microphones on the English coast, allowing for some warning of likely impact (Acoustic SIGINT).⁵ The principal involvement of intelligence services in countering V-weapons was in feeding erroneous impact assessments to the German operators (guidance of both systems was rudimentary and the Germans hoped to improve performance by correcting for aiming errors). The entire German network of agents in the UK had been penetrated (Counter-Intelligence(CI)) and the British authorities were able to mitigate some weapons effects by inducing greater errors. One genuine German agent in Portugal participated in the programme by falsely claiming to have un-turned agents still in the UK; luckily his information was penetrated by ULTRA – decryption of ENIGMA-encoded messages – (SIGINT), and exploited by the Allies.

2A6. Nevertheless, errors were made. TECHINT was misinterpreted from the Oslo Report, which did not indicate whether V2 rockets were solid or liquid fuelled. The V1 and the V2, although separate designs, were both developed at Peenemünde, leading to Allied confusion. Debris from a V2 recovered in Sweden included test equipment that was mis-interpreted as a radio-guidance system, leading to nugatory effort to jam the V2 in flight. Overall, however, Intelligence fusion and creative thinking did much to mitigate V-system effectiveness.

Sources:

R V Jones, *Most Secret War*, (Hamilton, London 1978).

ACM Sir Roderick Hill, *Air Operations by Air Defence of Great Britain and Fighter Command in Connection with the German Flying Bomb and Rocket Offensives 1944-1945*.

⁴ IMINT – Imagery Intelligence: *intelligence derived from imagery acquired by sensors which can be ground based, sea borne or carried by air or space platforms*. (JDP 0-01.1(7th Edition), *United Kingdom Glossary of Joint and Multinational Terms and Definitions*.

⁵ SIGINT Signals Intelligence: *the generic term used to describe communications intelligence and electronic intelligence when there is no requirement to differentiate between these 2 types of intelligence, or to represent fusion of the 2*. AAP-6.

CHAPTER 3 – DEVELOPING UNDERSTANDING

‘The first condition of understanding a foreign country is to smell it’.¹

T S Eliot

SECTION I – INTRODUCTION

301. Chapter 2 explained the fundamentals of understanding. Chapter 3 describes how to develop understanding. Understanding is reliant on developing the best possible perspective of an environment, situation, group or actor. Building understanding takes time; rarely will comprehensive understanding of an area of interest be available at the outset of a potential crisis. Intelligence, itself derived from information, is a significant source for building understanding; accessing and processing information into intelligence is predominantly a cross-governmental, multi-agency and multi-source activity. Commanders should be sufficiently inclusive, flexible and adaptive to accommodate a wide range of experts, both within and external to the state’s own national agencies. Subject matter experts including sociologists, anthropologists, historians, geographers and economists may hold the key to understanding within the contemporary operating environment.

SECTION II – ARTICULATION OF THE REQUIREMENT

302. **Articulating Requirements.** During the development of understanding it is essential that commanders articulate clearly their requirements. Commanders may have direction from higher authority that frames thinking about a problem and will influence their intelligence requirements. However, the commander’s own level of knowledge, an ability to understand what intelligence and information sources are available, how to use them, mutual trust within the staff and the command climate all determine the level of understanding that will be achieved. As a situation arises and develops the commander should address 6 generic questions:

- a. What do we want to understand and how soon?
- b. What do we know?
- c. What are the potential gaps in our knowledge?
- d. How do we fill those gaps?

¹ Essay written by T S Eliot entitled *In Praise of Kipling’s Verse*, published in Harper’s Magazine in 1942, June Issue, page 156. Eliot praises Kipling’s ability to bring India to life in his novel *Kim* by making you feel as if you can smell it, the first requirement to understand a country in real life.

- e. How do we achieve continuity?
- f. How do we improve the level of detail?

SECTION III – NETWORKS

303. **Introduction.** Often we consider networks to be electronic entities, but human networking is equally important to the generation of understanding.² Human networking offers significant benefits, including the potential for greater objectivity, burden sharing and innovation. It also serves to engender professional trust and mutual risk identification, factors critical to the development of common understanding between disparate groups.

304. **Relationships within Human Networks.** Successful human networks rely on the knowledge and experience of the people that contribute to them and on an ability to establish and maintain personal relationships. They should develop naturally, rather than along rigid organisational lines; successful groups will often gather as a network and share information on a regular basis without a firm agenda. However, relationship building within collaborative and free-flowing networks, particularly within open systems, can appear nugatory or wasted activity. Commanders should, therefore, balance carefully the need for technical networking standards and efficiency against the establishment of less rigid guiding principles on when and how members should contribute. Network members must want to contribute on their own terms, or in many cases have authorisation to contribute from their respective group or organisation. Commanders should also remember that individuals representing intelligence agencies may face constraints on what they can contribute to understanding.

305. **Intelligence Networks.** To achieve the requisite knowledge base, intelligence agencies draw on expert advice from widespread and interactive networks that include academics, environmental specialists, former government personnel employed as subject matter experts and foreign area specialists.³ This activity supports development of assessments, reports and detailed briefing material on operational areas and actors of interest, including historical, geographical and technical information. The exchange of personnel between agencies and development of individuals within those agencies can be fundamental to success, but limited opportunities for such exchanges highlights the need to develop more informal, flexible and collaborative

² Human networking is considered to be the broadening of the traditional day-to-day professional contacts by cultivating and increasing personal relationship, building rapport and creating mutual trust based on professional respect.

³ For the purpose of this document, the term *foreign area specialist* includes Foreign and Commonwealth office experts, Defence Attachés and Military Intelligence Liaison Officers.

networks. This activity supports the 6 principles of understanding discussed in Chapter 2 and demonstrates the need for a comprehensive approach to the development of understanding using creative thinking, collaboration and fusion.

SECTION IV – ANALYSIS

306. Analysis is the process of evaluating information about the current and past behaviour of a state, system, organisation or individual. Thus, analysis is an essential component in the process of converting situational awareness into understanding. It tests and refines hypotheses about future behaviour, including responses to our behaviour and enables decision-makers to evaluate potential courses of action as fully as possible. The commander will often state what he thinks the situation is, based on his own knowledge or intuition. It is the role of his staff and analysts to develop his ideas and, as part of the staff process, constructively challenge his hypotheses. If a hypothesis is proved, staffing continues along the line of the direction given, but uses critical thinking throughout to continuously validate the assumptions. If the hypothesis is disproved, it is the duty of the staff to recommend to the commander that the problem should be reconsidered.

307. The analysis process comprises:

- a. **Collation.** Collation is the first stage in analysis, grouping together related items of information or intelligence to provide a record of events and to facilitate further processing.
- b. **Evaluation.** Evaluation involves appraisal of an item of information in respect of the reliability and credibility of the source and the information.
- c. **Integration.** Integration involves a structured review to identify significant facts for subsequent interpretation using a variety of tools and techniques.⁴ The techniques chosen ensure that the approach to a particular problem or issue is robust and not subject to cognitive or institutional biases.
- d. **Interpretation.** Interpretation is the final step in the analytical process and judges the significance of new information in relation to the current body of knowledge. It is used to provide a final assessment and to integrate other relevant information or intelligence to identify patterns.

⁴ Analysis techniques and principles are explained in greater detail in JDP 2-00 (3rd Edition) *Understanding and Intelligence in Support of Joint Operations*, Chapter 5, due to be promulgated in 2011.

- e. **Continuous Review.** Since understanding is continuous the analysis from which it derives must also be continuous. An assessment that is fixed in time has limited utility and a review process ensures that we will recognise, learn and adapt to changes in circumstances.

308. **Choice of Problem-Solving Framework.** Selection of a problem-solving framework must focus on whether it provides the necessary degree of granularity to meet a specific situation. All participants must adopt the framework selected during subsequent planning and operations to ensure a consistent approach and to enhance interoperability. Section V explains the human domain framework. This does not preclude a commander choosing an alternative framework that may be better suited to a particular situation in an operational area or theatre; rather, it intends to provide a strategic to tactical framework that highlights the features, factors and scope that detailed problem-solving should incorporate. Other problem-solving frameworks in frequent use that may be encountered include:

- a. **PEST** – Political, Economic, Social and Technological.
- b. **PESTLEI** – Political, Economic, Social, Technological, Legal, Environmental and Information.
- c. **PMESII** – Political, Military, Economic, Social, Infrastructure and Information. This is a widely used and effective U.S. model.
- d. **STEEPLEM** – Social, Technological, Economic, Environmental, Political, Legal, Ethical and Military.
- e. **ASCOPE** – Area, Structure, Capabilities, Organisation, People and Events (used by the US and the International Security Assistance Force in Afghanistan).

All of these frameworks can be used within the construct of the human domain.⁵

⁵ Further detail is provided in JDP 2-00 (3rd Edition) due to be promulgated in 2011.

SECTION V – THE HUMAN DOMAIN FRAMEWORK

309. **Introduction.** The human domain concerns the interaction between human actors, their activity and their broader environment. It is defined as *the totality of the human sphere of activity or knowledge*. This broad environment is shaped by 4 principal factors: the *culture* that affects how they interpret and orient themselves towards that environment; the *institutions* which embody cultural ideas as practices; the *technology and infrastructure* that people assemble to survive in their environment; and the *physical* environment in which people live. The human domain framework considers these 4 areas as environments (cultural, institutional, technological and physical) to capture the interaction between human actors and their wider environment. The framework takes the approach that considering the role of people as actors on the global stage - as states, non-state actors, populations, organisations, groups and individuals – provides insufficient depth to develop effective understanding. Actors must be set within their cultural, institutional, technological and physical environments to provide the appropriate context for developing understanding.

Environments within the Framework

310. **Environment.** The framework divides the 4 environments into further categories that capture the interaction between human actors and their environment:

a. **Cultural Environment.** The cultural environment includes the general and pervasive ideas of a society such as: language; historically-rooted concepts of collective identity; and fundamental existential and moral beliefs such as those provided by religion. The cultural environment is sub-divided into 2 categories:

- (1) **Ideological.** The ideological environment concerns common ideas, language, rituals and theories providing a common bond for communities such as tribes, religious groups and ethnic groups.
- (2) **Psychological.** The psychological environment concerns the mental and emotional state, and behaviour of individuals or groups and their interrelation. It concerns what motivates them, their fears, attitudes and perceptions, and how these factors affect the courses of action available to them. It relates to the notion of competing narratives of individuals and groups with different interests and needs, which sometimes join in a common cause.

b. **Institutional Environment.** The institutional environment embodies ideas such as practices and conventions that form the landscape of social life. It covers political institutions, law and judicial machinery and bounded communities such as families, clans and tribes. It also includes criminal associations and dissident groups operating outside of institutional conventions. The institutional environment is divided into 4 categories:

(1) **Political.** The political environment is the political belief system within which a population operates. The political environment consists of global, regional, national and provincial systems.⁶

(2) **Military.** The military environment consists of the system, beliefs and allegiances within which military personnel operate, their reputation at home and abroad, their relationship to the political environment and the capabilities, structures and equipment they can bring to bear in support of the state.

(3) **Economic.** The economic environment consists of the economic factors (resources, employment, income, inflation, interest rates, productivity) that influence the material prosperity of an environment. It also covers the ability to produce and distribute goods, their consumption, the provision of financial services and the gross domestic product. Economic environments can be local, national or international and are linked to the political environment.

(4) **Legal.** The legal environment is characterised by the international and national laws applicable to a State, community or organisation.

c. **Technological Environment.** The technological environment includes the technology and infrastructure essential for day-to-day life. It refers to how communities shape the environment to suit their needs and includes physical artefacts, from mobile phones to highways and from irrigation to architecture. The technological environment can be divided into 2 categories:

(1) **Technology.** Technology considers the level of technical and scientific development and supporting infrastructure within the environment. It includes: transport; manufacturing; power; financial technology; information and communications technology;

⁶ Provincial is used here generically; this includes the US equivalent of states, districts and counties.

media; as well as intelligence and military technology including sensors and weapons.

(2) **Cyberspace.** Cyberspace refers to any activity reliant on information and its exploitation. It can be defined as *a global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the Internet, telecommunications networks, computer system and embedded processors and controllers.*⁷

d. **Physical Environment.** The physical environment is where people live and it provides both the raw materials for survival and many of the most significant challenges to survival. It reflects the way that the environment *shapes* communities, dealing with conditions that they cannot control and to which they must conform, including the climate. Categories within the physical environment are maritime, land, air, space, climate and natural resources.

311. **The Interdependency of the Four Environments.** The cultural, institutional, technological and physical environments overlap in many areas. Certain religions carry with them prescriptions for specific institutional arrangements such as religious courts; the physical environment in which they must operate fundamentally shapes many communication and transportation technologies. Economic affairs seem to lie at the very centre, overlapping the technological in terms of assets (from farms to factories) and the institutional in terms of means of exchange (currency) and regulatory frameworks for that exchange (contract law). More fundamentally, while everything in the human domain relates to underlying cultural influences such as language, almost everything in the cultural sphere, at some level, is aligned with how humans survive in the physical world.

Actors

312. **General.** Consideration of actors must go beyond the traditional characterisation of friendly forces, enemy forces and civilians. We should instead consider actors along a dynamic spectrum ranging from friendship to enmity, with adversaries occupying one extreme. This spectrum is a continuum and the positions of some actors will shift as circumstances develop. Indeed, some actors may change position frequently and may be a mixture of friendly and adversarial at the same time depending on their motivations, which are in turn fed by their aspirations. Their motivations are

⁷ At the time of promulgation, this is the current working definition for cyberspace. It is subject to change based on direction from the promulgation of Defence's cyberspace policy.

often based on combinations of *self-interest, values, ideology, survival and fear*. Similarly, numerous motivations may affect our own position on the spectrum in relation to various actors. The objective must be to influence actors to be receptive towards a neutral and non-hostile relationship with our perspective. Mutual recognition of different perspectives provides at least the basis for continued dialogue and the opportunity for further engagement.

313. **Categories of Actors.** The human domain framework considers 4 actor categories:

- a. **State Actors.** State actors are individual or group actors aligned with or representing their state. State actors include: governments and government agencies (political, military and economic); state controlled industries (e.g. the defence industry in some states); populations; and individuals who officially represent their state in global organisations or alliances such as the European Union (EU), United Nations (UN) or North Atlantic Treaty Organization (NATO).
- b. **Non-State Actors.** Non-state actors are individuals and groups that are independent of a state. Non-state actors include: *state aspirants* (e.g. Palestinians and Kurds); *independent groups* (such as non-governmental organisations); and *individuals* (such as lobbyists, philanthropists, pirates, criminals, refugees and displaced persons).⁸
- c. **Global Actors.** Global actors operate and have influence at the global level. They include: groups of states working together through a formal and legal body (UN, NATO, Association of Southeast Asian Nations or the African Union); trans-national companies and multinational corporations; global organisations (e.g. the nuclear protest movement, the anti-whaling movement, Greenpeace); and individual actors who transcend their own state affiliations, such as Nelson Mandela or Osama Bin Laden.
- d. **Local Actors.** Local actors are those actors with the ability to hold a common or collective perspective at the lowest level within or without the formal state structure. Local actors include communities based on regional, provincial, town, village, family, ethnic or tribal lineage. They also include communities based on criminal activity and those supporting warlords.

⁸ Non-governmental Organisations are voluntary, non-profit making organisations, generally independent of government, international organisations or commercial interests; e.g. the International Committee of the Red Cross.

314. **Membership of Multiple Groups.** Actors within the human domain should be examined as part of the groups of which they are members. It is human nature to interact with other people, and forming social groups originates in our need to band together for survival. However, individuals are never members of just one social group. For example, a non-state actor can also be a global actor. We are all members of multiple groups, whether we are born into them (as for families or ethnic groups), assimilate into them (as sports supporters, members of political parties, or jihad supporters) or achieve status (with higher education or membership of the armed services).

315. **Attitudes and Behaviour.** Being part of a group means to act according to the rules or *norms* of that group, whether these rules are explicit or unconscious practices. Each of the groups of which we are a member therefore influences what we believe and how we behave. How individuals behave will depend on the context in which they find themselves. A British naval officer will act very differently in MOD Main Building compared to when watching a rugby match at Twickenham; similarly, an Afghan farmer will act in one way when negotiating a bride price for his daughter's wedding, but act differently when attending a shura with local NATO forces. Figure 3.1 depicts this complexity using 2 cases: an Afghan farmer; and a state actor (the UK).

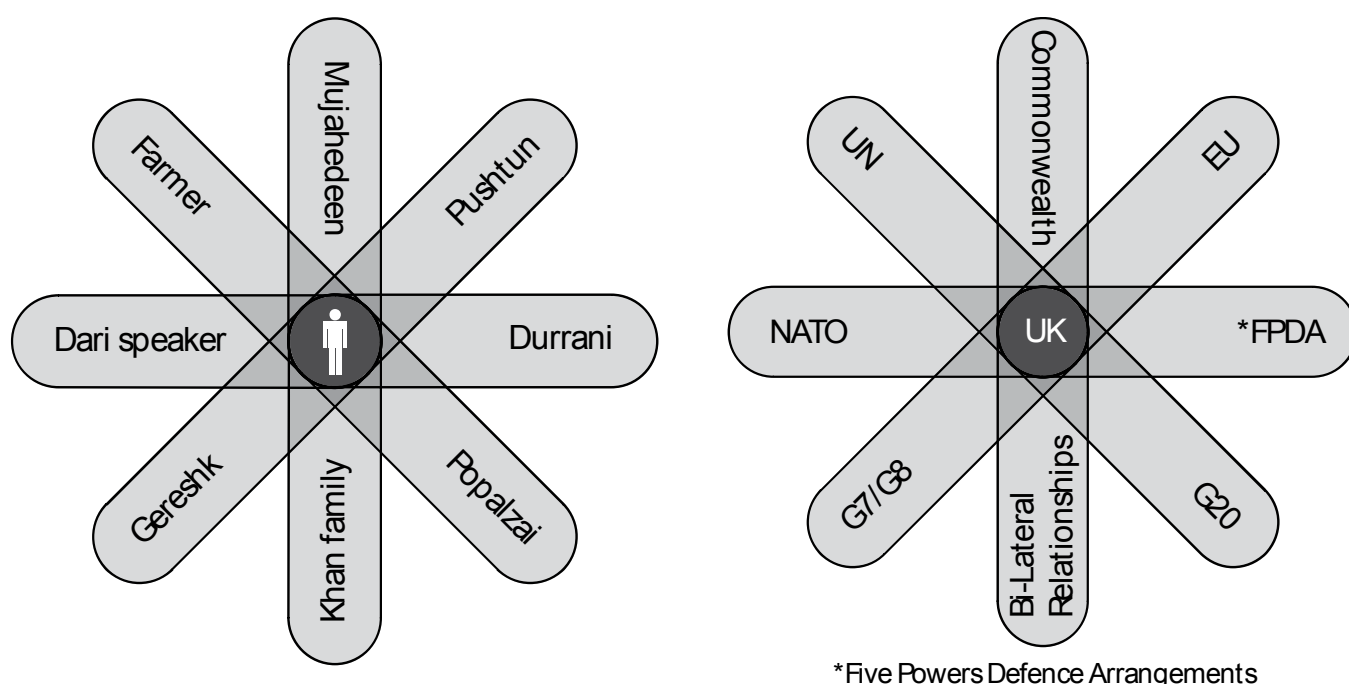


Figure 3.1 – Membership of Multiple Groups

316. **Group Allegiance.** A person does not remain a member of the same groups throughout their life, joining or leaving groups either by choice or circumstance. In all societies people change group allegiance when they move jobs or home, marry, vote for different political parties or make new friends. Even seemingly fixed groups (such as families or tribes) can change within a lifetime, through marriage or other formal arrangements with new groups. It is therefore inaccurate (and potentially dangerous) to view personal group memberships as fixed. The Afghan farmer who is part of the informal group supporting the Taliban this month because they will protect his poppy crop and hence his family's income may next month join the District Community Council (an Afghan Government sponsored group) if the financial and security benefits of doing so become more attractive.

317. **Irreconcilable Actors.** The term irreconcilable is used generally to describe a category of actors who will never change their mindset or view. In the case of extremists or fanatics this often leads to tragic fatal consequences when 2 opposing viewpoints clash. Irreconcilability is therefore a function of mutual incompatibility between groups or actors who are generally hostile. However, labelling groups as irreconcilable from the outset can lead to our own viewpoint becoming just as irreconcilable and may perpetuate the problem. Although some actors and groups are irreconcilable for long periods of time, reconciliation is often time dependent. All individuals can change their attitudes and behaviours, and the groups of which they are a member, when the conditions are right for them to do so. Defining particular groups as irreconcilable is generally counter-productive as it limits our ability to think creatively about how best to engage with them.

318. **Colouring Our Views.** The military often classifies actors or groups as *Red*, *Blue*, *White* and *Green* for planning purposes, according to our perception of their position on the spectrum of hostility. This colour-coding can be problematic as it defines people according to our (current) perception of their stance, and tells us very little about their actual links and motivations. Similarly, classifying actors as belligerents, neutrals, friendly or spoilers tends to relate their actions only towards our own forces or interests. In reality, actors can move allegiances rapidly across all of the colours or categories we use to classify them, becoming adversary, friend or neutral depending on the circumstances at the time. Our ability to understand any part of a population from their own perspective depends on examining the human domain using groupings that local people consider important, rather than our own colour coding or classification based primarily in terms of their relationship to us.

SECTION VI – HUMAN TERRAIN

319. **The Relationship between Human Domain and Human Terrain.** As described in paragraph 309, human domain comprises the conceptual framework for considering the totality of a problem. The framework focuses on the factors that help us to understand the relationship between actors, their environment and their activities both within a global and situation-specific context. Using the factors from the human domain framework as a baseline, human terrain is the term used by the UK military to describe the *actors* within a specific operating environment based on detailed analysis.

320. **Culture and Human Terrain.** The terms culture and human terrain may be used interchangeably, although they tend to be used slightly differently at different levels. Culture/human terrain is *the social, political and economic organisation, beliefs and values and forms of interaction of a population*.⁹ The emerging military disciplines of cultural understanding and human terrain are both therefore concerned with the study, analysis and interpretation of the actors and their interaction with their specific socio-cultural environment. In general, human terrain refers to identifying the '*who, what, where and when*' at the operational and tactical levels, with the term culture more prevalent at the strategic level to relate to identifying the *why* or wider contextual understanding.¹⁰

321. **Human Terrain Analysis.**¹¹ Human terrain analysis is *the process through which understanding of the human terrain is developed*. As with any other aspect of understanding, human terrain analysis draws on all available sources of information, including classified intelligence. However, intelligence collection does not traditionally focus on actors outside the broad category of hostile. Human terrain analysis often relies particularly on open source material, including academic and non-governmental organisation insights, polling and the use of cultural, regional and linguistic expertise. Human terrain analysis may be undertaken by any analyst but guidance by cultural advisors or social scientists may increase understanding of the area of operations as seen through the eyes of the population.

⁹ This definition is based on the MOD Cultural Competencies agreed by the Defence Cultural Capability Working Group in September 2009. Defence Intelligence, Permanent Joint Headquarters, Land Warfare Centre and Director Intelligence representatives agreed in February 2010 on the wording for this joint definition of either culture or human terrain. It has since been adopted by the Defence Cultural Specialist Unit and is used in the Land Warfare Centre Tactical Doctrine Note *Understanding the People*.

¹⁰ The term *White Forces* is also used to refer to the local population, primarily those elements which are neither part of the formal government nor fighting in the insurgency.

¹¹ At a strategic level human terrain analysis is known as cultural assessment.

The Civilian Experience of Human Terrain Analysis – The Radicalisation of Young Muslims



Human terrain analysis is an essential component of the PREVENT¹² strategy aimed at addressing the radicalisation of young Muslims in the UK. Its use demonstrates the critical importance of understanding the nature and dynamics of communities in order to set Islamist extremism in context and to develop effective approaches to counter radicalisation. In particular, it identifies that underlying societal factors such as mono-ethnicity, confusion of identity in second or third generation Muslims, generational divides and the influence of crime and gangs are not of themselves the causes of radicalisation. Rather, these issues provide the backdrop against which radicalisers operate to recruit individuals to extremist groups. This perspective challenges common assumptions that single issues such as deprivation or the UK Government's foreign policy are causal factors in violent extremism. Instead, it demonstrates that there is no *one size fits all* radicalisation path and that the only common factor is the pivotal role of charismatic and effective radicalisers who exploit individual's personal vulnerabilities to lead them down the path to violent extremism. Understanding the nature of specific communities, identifying the key radicalisers and helping the communities challenge these individuals themselves is therefore likely to be the most effective means of countering radicalisation.

322. Human Terrain Mapping. Human terrain mapping is *the process of considering comparatively static demographic features on a geographic map*. This may include graphic representations of population density, ethnic groups, religious affiliations, or the location of physical features with a cultural significance (including religious buildings, national sites, or cemeteries). Care

¹² PREVENT is the UK's counter-terrorism strategy.

must be taken to supplement human terrain mapping with qualitative human terrain analysis to interpret the significance of the groups, buildings or boundaries mapped.



Figure 3.2 – An Example of Human Terrain Mapping

SECTION VII – FACTORS AFFECTING THE DEVELOPMENT OF UNDERSTANDING

323. **The Commander and Understanding.** Most commanders have the requisite training and experience to conduct an estimate, solve problems and assess outcomes. However, few will have had exposure to all of the factors inherent in the development of more effective understanding. History is replete with examples of politicians and military commanders who have made poor decisions based on incomplete or flawed understanding, often with significant consequences. The additional complexity facing today's leaders¹³ including access to unparalleled levels of communications, information, intelligence and analysis, places greater reliance on decision-making based on effective understanding.

¹³ Throughout this chapter, the term *leaders* should be interpreted flexibly to include military commanders, political leaders and others with the ability to direct or speak for a particular group.

324. **Command Climate.** Commanders and their immediate personal staff must aim to create a command climate within their headquarters that is conducive to the development of understanding. They should strive to create an atmosphere that encourages open-mindedness, critical analysis and creative thinking. The command climate should enable staff to tell commanders what they need to know, even if it appears to contradict their views. However, this is a 2-way process and commanders should clearly articulate their requirements for understanding and trust their staff to deliver. For this reason, commanders and key staff should strive to achieve a high personal level of cultural and language awareness; this will enable better understanding and communication so that their intuition and judgement becomes better attuned to input from their expert advisors and the consequences of military activities.

325. **Perceptions.** Perception involves forming a view of something through intuition or interpretation of available knowledge. Internal sources, education, our experiences and prior beliefs shape the way we individually perceive situations. This issue reinforces the first principle of understanding, the need for self-awareness. However, there are limitations to perceptions. Often the initial perception may be flawed or wrong because of biases in the interpretation, inaccurate intelligence, false information or deception. There is also a tendency to look at a problem from only one standpoint. Commanders should recognise the impact that perceptions can have on the development of understanding and their decision-making process. Similarly, other actors will have their own perception of a situation on which they will base their actions. Commanders should strive to understand others' perceptions and the narratives they develop from them, as well as their own. A commander should consider:

- a. The scope of the problem.
- b. His own initial perception.
- c. What he believes or knows to be the views of the other actors.
- d. How to identify those issues on which views are similar and on which they diverge.
- e. How to identify the gaps in his understanding.
- f. Focusing his attention on the gaps.

326. **Cultural Awareness.** Cultural awareness is an awareness of the current and historic values, norms and beliefs reflected in different social structures and systems, and in particular how they contribute to an actor's

motives, intents and behaviours. Cultural awareness is critical to understanding, requiring development of cultural expertise in areas where we are likely to operate, together with a more general awareness of other cultures. The UK's focus in the future will probably be on the Middle East, South Asia and the Asian Meridian, but West Africa and the Caribbean are likely to regain prominence too.¹⁴ Commanders will need to ask 4 basic questions about the cultures within the operating area: what defines the culture (*basic ideology, beliefs and practices*)? what are the 'dos and don'ts' (*accepted behavioural norms*)? who can tell us what we need to know (*specific sources from that culture*)? and how can we exploit greater knowledge of the culture to our advantage (*application*)? Commanders may receive advice from foreign area specialists, both military and civilian, including academics, experts from the Foreign and Commonwealth Office and Department for International Development, Military Intelligence Liaison Officers and Defence attachés with intimate cultural knowledge and experience of these regions. However, advice may be available from other sources with varying levels of cultural awareness:

- a. **General Awareness.** General awareness involves a basic understanding that cultural awareness is important and an active approach to learning more about different cultures. The provision of lectures on culture during initial pre-deployment training for military personnel, before they enter an operational theatre, is one example of general cultural awareness.
- b. **Cultural Competence.** Cultural competence is gained through proximity to a culture and may be achieved during an extended operational tour. A daily requirement to interact with another culture either directly (*where basic language skills have been achieved*) or, more likely, through an interpreter, requires confidence, interest and a willingness to succeed. This approach can deliver a high degree of cultural competence which can develop over time into expertise. Commanders and key staff should aspire to this level of personal competence, accepting that other demands may constrain their ability to do so.
- c. **Cultural Expertise.** Cultural expertise requires immersion in a culture and generally develops in concert with the ability to speak the language and to think with the same mindset.¹⁵ Developing expertise is a long-term process, requiring investment to provide opportunities for immersion and proximity to the culture, as well as continuity. Selection of individuals for such opportunities should focus on their aptitude to

¹⁴ DCDC *Global Strategic Trends – Out to 2040*, February 2010.

¹⁵ The development of cultural awareness through Awareness, Competence and Expertise can be remembered by the acronym ACE.

develop such expertise; the necessary attributes may not necessarily be those required in other aspects of military life. However, we must recognise the value of cultural expertise; true cultural experts can be campaign-winners. T E Lawrence is a notable example.

T E Lawrence – 27 Articles



**Lieutenant Colonel TE Lawrence CB DSO
(16 August 1888 – 19 May 1935)**

T E Lawrence, or Lawrence of Arabia, is well-known for his part in the Arab Revolt in the First World War, which he describes in detail in *The Seven Pillars of Wisdom*. He became a prominent Arabist and developed considerable expertise in the Arab language and culture before, during and after the War. On 20 August 1917 he published an article in the Arab Bulletin entitled *The 27 Articles*, aimed at beginners who were starting their secondment to the Arab armies.¹⁶ The advice in the 27 Articles remains pertinent today and it includes useful lessons about how to develop cultural awareness through immersion and proximity, particularly when working with indigenous forces. Four of the most pertinent articles, of which number 15 is the best known, are listed below:

- **Article 2.** Learn all you can about your Ashraf and Bedu. Get to know their families, clans and tribes, friends and enemies, wells, hills and roads. Do all this by listening and by indirect inquiry. Do not ask questions. Get to speak their dialect of Arabic, not yours. Until you can understand their allusions, avoid getting deep into conversation or you will drop bricks. Be a little stiff at first.

¹⁶ The Arab Bulletin was founded on the initiative of TE Lawrence to provide 'a secret magazine of Middle East politics' written by experts for officials concerned with the area and for military commanders. Extracted from a description by Cambridge University Press.

- **Article 15.** Do not try to do too much with your own hands. Better the Arabs do it tolerably than that you do it perfectly. It is their war, and you are to help them, not to win it for them. Actually, also, under the very odd conditions of Arabia, your practical work will not be as good as, perhaps, you think it is.
- **Article 21.** Religious discussions will be frequent. Say what you like about your own side, and avoid criticism of theirs, unless you know that the point is external, when you may score heavily by proving it so. [. . .] Their religion is as much a part of nature to them as is sleep or food.
- **Article 27.** The beginning and ending of the secret of handling Arabs is unremitting study of them. Keep always on your guard; never say an unnecessary thing: watch yourself and your companions all the time: hear all that passes, search out what is going on beneath the surface, read their characters, discover their tastes and their weaknesses and keep everything you find out to yourself. Bury yourself in Arab circles, have no interests and no ideas except the work in hand, so that your brain is saturated with one thing only, and you realise your part deeply enough to avoid the little slips that would counteract the painful work of weeks. Your success will be proportioned to the amount of mental effort you devote to it.

327. Information Anarchy. The increasing volume of information available and the growing absence of control over or provenance for that information create a condition known as information anarchy. This condition complicates commanders' ability to identify quickly and exploit important or useful information. Commanders should develop an efficient, dynamic and co-ordinated approach to resolving questions about information validity. Within a headquarters the ability to place relevant information in its correct context quickly should be the defining feature of an effective intelligence and information management system. Success in this respect is an important element of a headquarters' culture; it is also important for a commander to have an understanding of his own culture and an awareness of how it influences his own understanding and decision-making. In addition, clear articulation and dissemination of the commander's intent serves to enhance our ability to resolve information anarchy by allowing those within the decision-making process to place information in the correct context. The UK's approach to the single intelligence environment reflects this principle.

SECTION VII – UNDERSTANDING ENABLERS

328. **General.** Development of effective understanding requires core enablers, which fall into 3 basic categories: information management; targeted education and training; and collaborative networks.

329. **Information Management.** Information management embraces both the physical aspects of managing information (personal and staff management procedures) and the technical aspects (procurement, operating systems, technical support and upgrades).

a. **Physical Information Management.** Physical information management aims to prevent internal and external pressures, including information overload from affecting decision-making. It also serves to ensure that the relevant information is given to the commander at the right time. Chiefs of Staff should consider several factors when establishing physical information management protocols:

- (1) **The Level of Detail:** how much detail is required for strategic decision-making in comparison to what a company commander may need for tactical purposes?
- (2) **Critical Information:** what information is essential?
- (3) **Prioritisation:** what are the priorities for information and intelligence? Who are the key decision-makers who need the information?
- (4) **Resources:** what resources are available and for how long?
- (5) **Security and Protection:** how should the best balance be struck (or how should the risk be managed) between the need to circulate information to enable understanding and the need to maintain security (including operations security) and to protect sources and methods?

330. **Technical Information Management.** The pace of technological advancement in information systems presents a range of potential options for developing more efficient systems to support information management. Technological solutions can, however, be expensive and projections suggest that the cost of keeping pace with new technology will be considerable. The rate of technology advancement can also overwhelm our procurement processes, requiring constant adaptation of legacy systems to work alongside the new to maintain interoperability. This issue must feature in any network

plan. Moreover, the importance of understanding and its intrinsic reliance on information will place high priority on the optimal use of all available information systems.

331. Targeted Education and Training. Targeting education and training to support the development of understanding is a crucial enabler. Command and staff training must focus on the need to understand and provide the requisite skills to develop and apply understanding; such training should include self-awareness, critical and creative thinking skills and open-mindedness. A particular requirement will be for subject-matter experts in particular fields, including: linguists; in-country experts; geo-spatial experts; cultural experts; military intelligence liaison officers; defence diplomacy experts; and defence attachés. Associated specialist expertise in areas such as tactical questioning and negotiating should also be given consideration. Lastly, a significant element of pre-operational deployment training should continue to focus on cultural awareness and skills that enable military personnel to interact with their operational environments.

332. Collaborative Networks – The Single Intelligence Environment. Chapter 1 describes how collaboration and fusion are 2 critical principles of understanding. The single intelligence environment aims to establish a collaborative network that fuses all relevant sources of intelligence to provide a common resource within the contemporary operating environment. Accessible to all agencies that require it, a dynamic single intelligence environment will allow better adaptation to a complex environment and the changing requirements for intelligence over time. Establishing the networks within the environment will require significant investment in education and training, and the technical solutions to make it viable. However, a coherent, long-term approach will ensure that the single intelligence environment evolves constantly to meet threats and opportunities as they arise and will form an important component of sustaining the UK's global perspective. JDP 2-00 *Understanding and Intelligence in Support of Joint Operations* (3rd Edition) describes in more detail the single intelligence environment, for which the UK's Defence Intelligence organisation is the lead agency.

SECTION VIII – SUMMARY

333. **Summary.** Figure 3.3 summarises the development of understanding. In a crisis, our initial understanding could be nascent, at best. We are likely to know the location of the problem, the approximate nature of the situation, the rough timeframe during which it has been developing and have a broad idea of the information sources we will need to access (Box A). We will develop and build on that initial understanding by defining more accurately the requirement for further knowledge, establishing suitable networks (human and electronic) and selecting the most effective analytical tool (Box B). Analysis allows us to construct a more accurate perspective of the human domain and to enhance our understanding of how the separate environments interact with one another. This allows us to identify whom we can or cannot influence and how best to apply national power to achieve such influence (Box C).

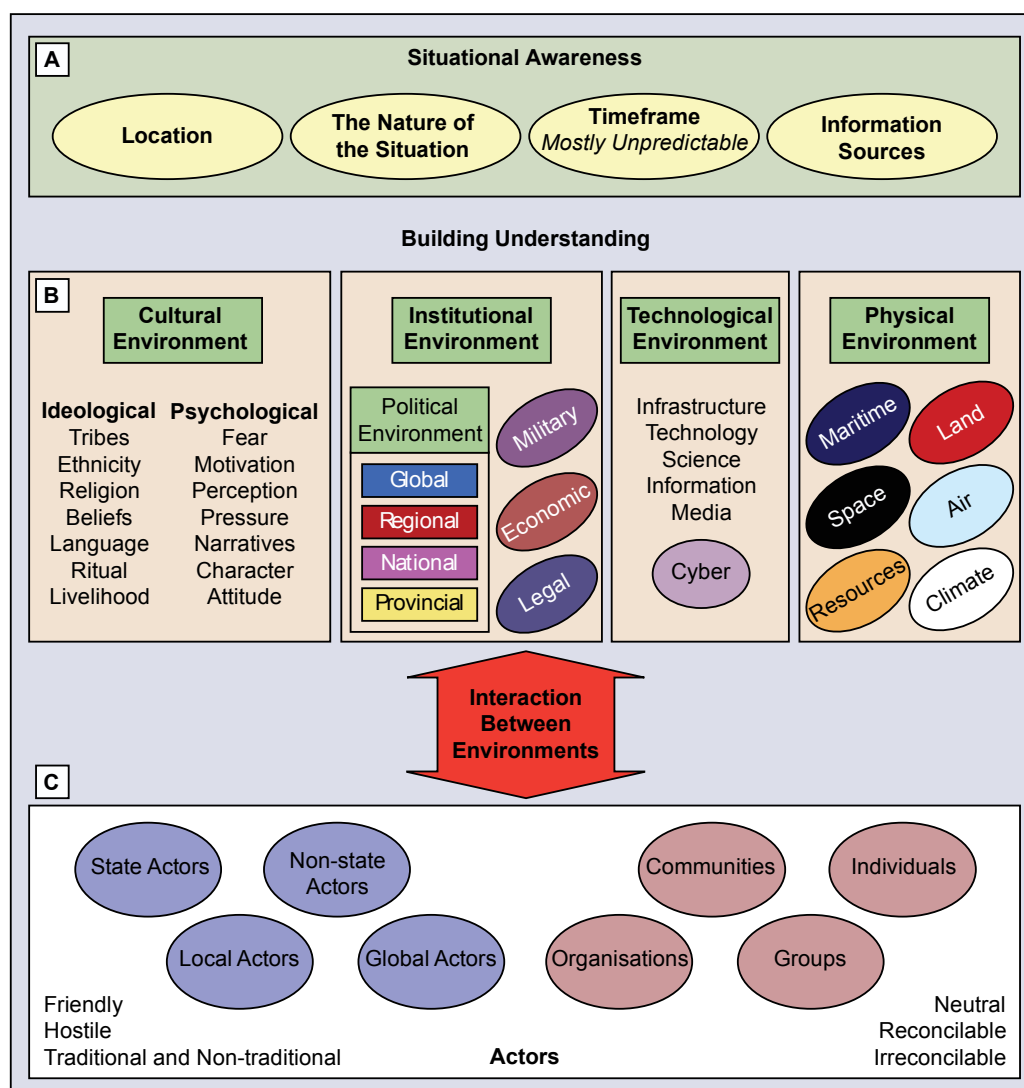


Figure 3.3 – The Development of Understanding: Human Domain Framework

334. **Guide for the Development of Understanding.** The following list of activities provides a summation of how to develop understanding:

- a. Self-awareness: knowing ourselves as individuals and as organisations; understanding our own strengths, weaknesses and prejudices and perceptions.
- b. Understanding how our own cross-government approach and relationships work, how they may be improved, and how departments may gain a better appreciation of each other's efforts.
- c. Understanding our own culture, society and the wider population and their perceptions of us and what we do, and of how this impacts on political and military decision-making.
- d. Understanding our partners and allies; understanding their interests, intent, values and best practice.
- e. Establish situational awareness by collating information and intelligence already available; this represents your initial understanding.
- f. Determine what type of understanding you require; do you need to understand something for your own decision-making? Are you trying to achieve collective or common understanding, or are you trying to influence others?
- g. Determine the level of understanding you need to achieve. Do you need strategic understanding, appropriate for national leaders, or tactical level understanding?
- h. Understand the context in which we may be deploying to operate.
- i. Understand the aims of the strategy, operation, mission and/or role and how it fits into the bigger picture.
- j. Understand the culture, traditions, population and society of the country/countries in which we may operate or from whom we may request support or desire neutrality.
- k. Understand the value and importance of personal relationships with other actors throughout the operating environment.
- l. Develop your vision, intent and narrative and share it with your staff and partners within a command climate conducive to the development of understanding. Encourage your staff to challenge the accepted wisdom.

- m. Build a network of information sources to answer your questions and provide specific knowledge; use all available resources, including headquarters' staff, intelligence organisations, academics and subject-matter experts. Encourage collaboration and open-mindedness.
- n. Clearly articulate your requirements to develop understanding, based on the 6 generic questions a commander should address (paragraph 302) and the principles of understanding. Beware of groupthink.
- o. Analyse the factors of the human domain framework based on the cultural, institutional, technological and physical environments in relation to the actors. Understand the interaction between them and identify how to achieve influence (for example the use of hard or soft power to best influence their decision-making).
- p. Analyse the human terrain to identify actors and their motivations, affiliations and needs. From this analysis determine where internal and external narratives may compete.
- q. Learn from the consequences of decisions made and adapt when necessary.
- r. Remember that understanding is perishable and must be constantly refreshed if it is to be effective.

Annexes:

- A. Case Study 3. The Cyprus Problem – Actors and Complexity.
- B. Case Study 4. Understanding and the Human Domain – The Loss of Singapore in 1942.

ANNEX 3A – CASE STUDY 3

THE CYPRUS PROBLEM: ACTORS AND COMPLEXITY

Introduction

3A1. The history of Britain's role in Cyprus is long and deep. It runs from its acquisition of Cyprus from the Ottoman Empire in 1878, through independence in 1960, until today with the continuance of the British



Sovereign Base Areas. The constant theme of the *Cyprus problem* has been the complexity of the actors involved and the conflicting narratives that this situation has generated across all levels. These narratives range from as long as a thousand years old through to those of factions who inadvertently took sides in the

East-West struggles of the Cold War. Since decolonisation, understanding these narratives has also been an important factor in holding together international alliances such as NATO. Examining the conflicting layers of actors, it is possible to see how this troubled island has consistently posed such an insoluble imperial and diplomatic problem for Britain and its allies.

Local Actors

3A2. At the level of *local actors* there is the ongoing inter-communal conflict between the established local populations of ethnic Greek-Cypriots (some 80% of the population) and the Turkish-Cypriots. For the Greek-Cypriots independence from outside power, which was achieved in mainland Greece in 1830, has eluded them. This was initially due to Ottoman domination, then subsequently due to British colonial rule from 1878 to 1960. The narrative of *enosis*, union with their fellow Hellenes, was a deep and powerful yearning which they collectively imagined would erase 800 years of poverty and subjugation in their own homeland. For their part, the minority Turkish-Cypriots, stripped of their dominant position by British rule, feared further demotion by the Cypriot's brand of Orthodox-Christian irredentism.

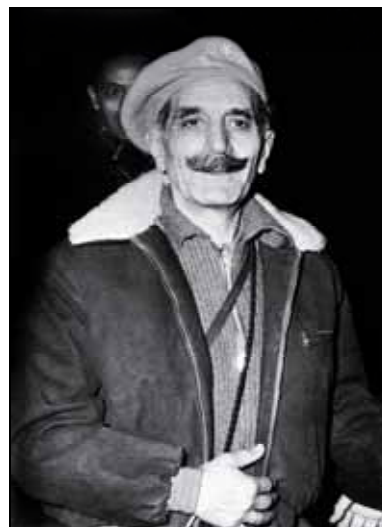
Global Actors

3A3. Global actors were yoked to these undercurrents. The UK took control of Cyprus from the Ottoman Empire in a trade for British security guarantees against Imperial Russia. The Russians had fought the Ottomans and viewed themselves as protectors of Greek Orthodoxy. With the Cold War this geopolitical dynamic was raised again with Soviet Russia the new great threat to NATO. Turkey and Greece, alongside the UK, were treaty-bound 'guarantor' powers to Cyprus, and both NATO members, but in Cyprus their ethno-political interests clashed in time with the ethnic narratives. Like the UK, the US was keen to keep Turkey and Greece from going to war over Cyprus, which would give the Soviets a wide gap to exploit. From 1960 onwards, the British Sovereign Bases were at stake. These were a key strategic asset for Britain's own purposes and for NATO and the tottering CENTO.¹ The Sovereign Base listening posts were also a key buy-in to intelligence sharing with the US. The US pressured the UK to keep their Sovereign Bases: U-2 spy planes flew from RAF Akrotiri, as did part of Britain's nuclear deterrent, and this was seen as the second line should the Soviets incapacitate Turkey.

State and Non-State Actors



Archbishop Makarios III



Colonel Georgios Grivas

3A4. Below this war of giants, a mix of individuals, both *state* and *non-state actors*, fought it out in Cyprus. The powerful Archbishop of Cyprus, Makarios III, wanted (before independence) *enosis* but hoped to seek it through diplomacy and international treaty. *Post-decolonisation*, now the President as

¹ CENTO – the Central Treaty Organisation (originally and sometimes alternatively referred to by its founding document title – *The Baghdad Pact*) was a regional security alliance created by Iran, Iraq, Pakistan, Turkey and the United Kingdom in 1959. The Cyprus crisis in 1974 demonstrated its relative impotence, and it collapsed with the Islamic Revolution in Iran in 1979.

well as Archbishop, he sought to maintain independence. Colonel Georgios Grivas, a Cypriot-born Greek Army officer, was Greece's proxy on the island but a charismatic leader with his own agenda. He and his EOKA² insurgent group pressed violent action first against the British and, once independence was achieved, against Makarios as well (under the name EOKA-B), all the while seeking *enosis*. From the British perspective before independence, Makarios and Grivas were of one camp; in actuality they were bitter foes who resented the other's power – the former nonetheless funding the latter through the mechanism of the Church.

3A5. It was, however, not this straightforward. Makarios started importing arms from Warsaw pact countries, flirted with the Non-Aligned Movement, and formed a Cypriot National Guard staffed by Greek officers. The US, UK and Turkey all tried to stop these arms imports. Yet the Archbishop needed the National Guard not to press for *enosis* or to cause more ethnic strife, but mostly to suppress EOKA-B and other proxies of the Greek junta, and guarantee his own power. The Turkish-Cypriot TMT³ movement, who called for *taksim*, or division of the island into separate ethnic communities, defended their population against the ultra-nationalist Greek groups, and were backed covertly by Ankara. Some Turkish-Cypriots were interested in contacting EOKA-B with the purpose of assisting them in deposing Makarios for their own purposes. Along the way, Makarios had to fend-off NATO-sponsored attempts to erase Cypriot independence and replace it with Greek-Turkish co-dominion. The Soviet Union wanted to avoid *enosis* as this would strengthen the fascist Greek junta; the Americans wanted to avoid *enosis* to keep NATO strong in face of the Soviet threat.

3A6. All of the state actors, UK and the US included, had spies sitting, sometimes literally, right beside Makarios. Both Greeks and Turks had spies in each other's camps. Makarios usually had forewarning from his own networks. Despite this, no one had clear optics on what was going to happen next, or what the second-order effects of any action would be; so complex were the entanglements. In 1974, EOKA-B and elements of the Greek-run National Guard launched a coup against Makarios. This provoked Turkey to invade, taking nearly 40% of the island and shutting down any further negotiations not involving an independent Turkish-Cypriot state. As Turkey was a member of NATO and CENTO, both the UK and the US were unwilling to deter their aggression. All thought the Turkish invasion was a sharp sword to cut the Gordian knot that was the Cyprus Problem.

² EOKA - Ethniki Organosis Kypriou Agoniston (Greek for National Organisation of Cypriot Fighters).

³ The TMT - a Turkish resistance group created in 1959 to promote a policy of *takism*, in opposition to the Greek Cypriot nationalist group EOKA and its advocacy of *enosis*.

Conclusion

3A7. They were, as we know now, wrong. The complexity of overlapping and dynamic currents of *cultural and institutional (including political) factors*, spread over many levels of different actors, has kept the problem of Cyprus alive. US President Lyndon Johnson, even as he was inheriting the Vietnam war, called Cyprus '*one of the most complex problems on earth*'. The Cyprus problem endures today in EU and NATO matters, no more susceptible to simplistic models of understanding – or simple solutions – than it was 30, 50, or even 100 years ago.

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ANNEX 3B – CASE STUDY 4

UNDERSTANDING THE HUMAN DOMAIN: THE LOSS OF SINGAPORE 1942

The worst disaster and the largest capitulation of British history.”

Sir Winston Churchill¹



Lieutenant General Arthur Percival, led by a Japanese officer, walks under a flag of truce to negotiate the capitulation of Allied forces in Singapore, on 15 February 1942.



Surrendering troops: Officers and soldiers of the Suffolk Regiment held at gunpoint by Japanese infantry 15 February 1942.

INTRODUCTION

3B1. On 15 February 1942, the island of Singapore, the ‘Gibraltar of the Far East’, fell to a numerically inferior force of the Imperial Japanese Army (IJA). The surprise was not that Singapore fell – the British Empire was already over-extended and engaged in a nearly global war with Germany – but that it fell so fast. Supposed to be able to withstand a siege for at least 180 days, it fell in a mere 40. It was this unexpected speed of the defeat which caused the worst impact to British morale and credibility. While there is much misleading mythology surrounding the fall of Singapore, sound examples can still be found of how failure to understand the human domain – the *cultural, institutional, technological and physical* aspects of their own position, of their colonies, of their American allies, and of their enemies – led the British to this tragedy. Frustratingly, there are identifiable instances where environments within the human domain were understood, but the resulting lessons or analysis were discounted or ignored. There are many lessons that can be drawn from the fall of Singapore, but 5 themes stand out: a failure to develop a common approach and strategy to support Britain’s geo-strategic position in

¹ Sir Winston Churchill, *The Second World War*, Vol. III, London, 1950, page 55.

the Far East; a failure to develop a credible capability to meet national aspirations; a failure to develop a coherent plan of defence for Singapore and Malaya; a failure to understand the key actor, Japan and the slow but inexorable rise of nationalism of other actors within the Far East Colonies; and a failure to understand Japan's military capability.

PRELUDE TO WAR

Geography, Strategy and Military Capability

3B2. Singapore's place as the main British base east of Suez was first formalised in 1921, but it was an idea that was never made credible with a capable force. The world-wide commitments of the British Empire remained after 1918, and even grew, but the ability to adequately sustain them was no longer there. Nor was there an appetite, post the First World War, to spend huge sums on defence. The Treasury began to impose tight control on defence expenditure. In 1919 they introduced the '10 year rule'. This stated that Britain was unlikely to engage in a major war for at least 10 years. In 1922, Sir Eric Geddes chaired the Committee on National Expenditure which led to a severe cost-cutting exercise known as *The Geddes Axe*. The effect on defence was to spark a debate, that continued until the outbreak of the Second World War, as to what Britain's defence priorities should be. Home Defence was made the main priority, but the issue of whether to develop a military force capable of a continental commitment, or focus on policing the Empire, was never satisfactorily resolved.

3B3. The Americans, who were opposed to the empires of the old powers, sought ways to limit their activities and influence, cognisant that some of these activities supported their own national interests. The 1921 Washington Naval Conference, which limited capital ship construction for all the major powers, effectively ensured that Britain would be the weakest power in South East Asia. The result of the Conference was that Britain would now have to split her limited fleet throughout the world. Although Singapore was the key to the defence of New Zealand and Australia as well as to an increasingly economically valuable Malaya, the UK could not afford to deploy a large British naval force to counter the Imperial Japanese Navy in the region. Indeed, the deployment of a Royal Navy presence to a point where there would be parity with the Japanese would mean substantially stripping protection from the UK and completely from the rest of the world. Despite the millions spent building the naval base, it was never actually big enough for the main fleet, nor was it ever occupied by more than a token force.

3B4. Thus Singapore, as the key to Imperial defence in the Far East was, as one author has called it, 'a strategic illusion'. It was one however, that the British clung too; a failure of the British military to understand the political reality. When it became apparent by early 1937 that it was a totally bankrupt idea, the hope was to rely on American support. They intimated in return that this hope was unfounded, and that the colonial powers of South East Asia would have to fight for themselves. Despite being told clearly that there would be no assistance from the US, many clung to the idea including Winston Churchill. The envisaged *period before relief*, that time where Malaya and Singapore would have to defend themselves before the main fleet could come to assist them, was raised progressively from a few weeks in the 1920's and early 1930's, to more than 180 days at the outbreak of war.

Failure to Develop a Credible Plan for the Defence of Singapore and Malaya

3B5. Throughout the 1920s the defence of Malaya was progressively abandoned to hope and illusion; in this case to a false understanding of the environmental conditions of the theatre. In what has been called the '1926 Consensus', after the Staff College war games of that year, it was determined that the monsoon season would totally preclude any Japanese invasion of the peninsula. Further, it was a matter of faith that Malaya's largely secondary jungle (which has more undergrowth than primary rainforest)² would be impassable to large formations and to armour, in short, to the European way of war. Few who uttered these truths had actually seen Malaya's hinterlands, which had been transformed by rubber plantation and the transport infrastructure to support this and the massive tin mining industry. This had, in fact, resulted in large tracts of land which were passable to vehicles, soldiers moving rapidly on foot, and, as the British learned to their cost, bicycles. They evidently had even less understanding of the Japanese war machine and a number of pre-conceived ideas, perceptions and biases were prevalent.

Underestimation of Japan's Military Capability and Intent

3B6. Throughout the 1930s and 40s, with notable exceptions, there was a continuous underestimation of the Japanese. There were several British military and cultural appreciations of the Japanese before the war began but they were conducted by the few military experts on Japan, either in Japan itself or in London. These few experts rated the Japanese military highly, but were widely thought to have *gone native* and their sound appreciations were

² This is because secondary jungle grows after the original primary jungle has been cut down creating an almost impenetrable undergrowth to the casual observer. It is penetrable, but not without significant physical effort.

viewed as exaggerations. British military intelligence as a whole thought the Japanese could be defeated by a force ‘which held its nerve and its fire.’ This wasn’t racism against the Japanese, *per se*, although that attitude was also present, but rather what may be called *military ethnocentrism*. In other words, the standards of equipment and tactics by which the British officers were judging the Japanese were their own, and the theatre which they were situating it was European. If Japanese doctrine seemed to be different than the British, then it must be wrong; if the Japanese tanks were too light and under-gunned for European combat, then they could be discounted.

3B7. British officers and men who had served in China and India had observed the problems the IJA was having against the materially weaker and more disorganised Chinese armies, and presumed therefore that their performance against ‘proper’ professional forces such as the British and Indian armies would thus be significantly worse. As these officers were heavily represented in the joint staff at Singapore, their views held sway over the distant Japan experts. The prevailing view in Singapore itself was that the Japanese were brave but rigid, badly led and predictable, and weak in the use of technologically sophisticated systems such as tanks and aircraft. They ignored the existing intelligence that the Japanese were far advanced in amphibious joint operations.

3B8. Despite all the intelligence and sound warnings from knowledgeable corners, it was also thought in some corners of the British (but not Commonwealth) militaries that pre-occupation in China, coupled with Singapore’s supposed defensive strength, precluded an invasion. Sir Robert Craigie, the Ambassador to Japan, warned the Foreign Office not to delude themselves into believing that the Japanese could not attack the British and the United States possessions in the Far East at any time they wished. It was a thankless task. Men as notable as Field Marshal Wavell were to utter as late as December 1941 that “the Japs are just bogeymen”.

Failing to Listen

3B9. Over time a number of British officers correctly surmised how to defend Singapore and Malaya, but their tenures in post were either too remote in time or too short to make any impact. Sir William Dobbie, General Officer Commanding Malaya from 1935 to 1939, argued for the defence of Singapore by holding onto the physically defensible Johore province by a strong defensive line, equipped with sufficient infantry and backed by as few as 2 squadrons of tanks and armoured cars. He disabused his staff of their false idea that the jungle was impassable, and that the Japanese would not be able to operate in the monsoon. However, because of Malaya’s secondary importance in the imperial defence scheme, the funding was never given and



the defensive measures never undertaken. When Dobbie left his plans evaporated and his admonitions about the likelihood of a Japanese invasion and, what is more, its high likelihood of success, were lost.

Lt Gen Sir William Dobbie GCMG KCB DSO – Understood how Malaya and Singapore should be defended in 1935-39

3B10. In view of the difficulties faced in Europe, Churchill said, on becoming Prime Minister, that “*the defence of Singapore must be based upon a strong local garrison and the general potentialities of sea power.*” By 1936, and due to Dobbie’s efforts, it was apparent to all that no garrison, no matter how strong, could defend Singapore itself. Singapore’s security could not be divorced from the defence of the entire Malayan peninsula, a position that Hong Kong Island would also face with its reliance on the New Territories in mainland China. Moreover, in August 1940, an appreciation by the British Chiefs of Staff acknowledged that no fleet would be sent to support Singapore. Thus, they belatedly ordered that the Army and RAF be built up to defend Malaya. Far too few infantry battalions were ultimately despatched, and no armour. When, at the last minute, *HMS PRINCE OF WALES* and *HMS REPULSE* were sent as Z Force (without air cover),



The sinking of HMS PRINCE OF WALES – 327 men were killed. HMS Repulse lost 513 killed

they were easy targets for Japanese torpedo bombers and, on 10 December 1941 they were attacked and sunk by 86 land-based Japanese bombers and torpedo bombers from the 22nd Air Flotilla based at Saigon with considerable loss of life (840 Naval and Royal Marine personnel). The British attempt to overawe the Japanese with a small naval force had tragically backfired and showed a thorough lack of understanding of the threat that Z force faced. It was the low point of British military credibility in the region.

Failure to Prepare

3B11. At the theatre level little was done to prepare for war. There was still too much self-confidence and denial that the Japanese were likely to attack. Brigadier Ivan Simson of the Royal Engineers was sent out to Malaya with orders to improve the overall the defence of the peninsula. His very sound recommendations were denied. In any case there was no labour to help build those defensive positions, stemming from a racially-based colonial view of the local Malays. The colonial authority refused to press the local population for labour battalions based on the feeling that taking labourers out of their normal plantation jobs would hurt the economy and '*frighten the Asiatics*'. Defensive works in the south of Malaya, they argued, would be tantamount to an admission that the north could not be defended. This would be bad for morale. Moreover, defensive works would damage private property. Overall, it was felt that any indication the British gave to the Asian population that everything was not completely under control would cause panic, sow dissent, and threaten future British colonial rule.



The sinking of HMS PRINCE OF WALES and HMS REPULSE used as the backdrop for a Japanese propaganda poster

3B12. Of all the units in Malaya, only the 12th Indian Brigade, led by the 2nd Argylls, really trained for jungle warfare. When war came they fought the Japanese to a standstill with a very similar battle-of-movement tactics to what the Japanese were using. Unfortunately they had insufficient anti-tank weapons and no supporting tanks (these were not thought a priority for jungle warfare by London) and so had to withdraw in face of Japanese armour. Officers in other units had done far less to prepare for the specifics of jungle warfare; the agile, adaptive and highly manoeuvrist IJA would destroy these units wholesale.

3B13. From their point of view the Japanese made the accurate assumption that an attack on Singapore itself and its great fixed naval-gun emplacements was folly – they had to concentrate on attacking it from the landward side, through Malaya and the province of Johore, where it lacked any strong defences at all. This was reinforced by the actions (or inaction) of Lieutenant

General Arthur Percival, the British General Officer Commanding Malaya at the outbreak of war. Despite all the intelligence which showed Japanese concentration on a landward invasion, he kept focusing on defending Singapore's coasts, which were already well stocked with naval guns. His decision to strongly defend the beaches against invasion scattered his under-strength land forces further. Much has been made of the myth that Singapore's guns could not fire towards the landward side of the island. This is patently untrue. It is the case, however, that the naval guns were largely stocked with armour-piercing shell, and all had a flat trajectory. They were poorly suited to close-support or counter-battery fire. It thus remains true that the myth of Singapore as '*the Gibraltar of the East*' precluded many critical officers, Percival included, from looking to the island's landward defences.



Japanese Ha-Go tanks

3B14. A great irony is that the British actually foresaw the final Japanese plan – the launch attacks down the west coast of the Malay Peninsula via staging bases in neutral Thailand. Plan MATADOR, as it was called, was the central military defensive plan against Japanese aggression. It called for the seizing of these Thai ports in anticipation of Japanese aggression. The plan was never implemented, even when there was clear and irrefutable intelligence of an impending Japanese landing, because Percival felt certain that the invasion was a ruse by the Japanese to trick the British into violating Thai neutrality, with *that* being the pretext for war.

THE FALL OF SINGAPORE

3B15. The Japanese landed their troops in Thailand on 8 December 1941 (*simultaneously with the Pearl Harbour attack on the other side of the international date line*). This was in the middle of the monsoon, as Dobbie and others predicted. Though the British Imperial forces outnumbered the IJA (some 85,000 to 36,000) no significant defence could be mounted, as there were no naval forces to oppose the landings, and the few British fighter planes in the theatre (US hand-me-down *Brewster Buffaloes*) were outnumbered and badly outclassed by the Japanese Zero, an unexpected surprise despite all the accurate intelligence pointing to a new Japanese fighter of the first class.



RAF Brewster Buffaloes

The British battalions, not initially outnumbered, were scattered defending the now destroyed airfields instead of opposing the Japanese in pre-planned and prepared defences, and were possessed of little appropriate tactical or operational know-how.

3B16. The Japanese attack proceeded quickly; Kuala Lumpur was abandoned without defence, despite the Japanese force initially only having parity with the British and Indian forces. By 31 January 1942 Singapore itself was under siege; one it could not endure for long. On 15 February, Percival surrendered the island to the Japanese. The British Empire forces had taken near 20,000 casualties, and 120,000 British and Indian troops and civilians were marched off to a long and, for many, a fatal captivity. Fewer than 10,000 Japanese had been made casualties over the whole campaign. Still, the unexpectedly short length of the Japanese campaign should not be a surprise. The battle to defend Singapore had been lost through the 20s and 30s due to the obstinate refusal of too many of the critical officers and officials refusing to make a proper estimate of their enemy, their environment, and their own capabilities and to understand the human domain within which they were operating.



Victorious Japanese Troops march through the streets of Singapore 16 February 1942

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CHAPTER 4 – THE IMPLICATIONS OF UNDERSTANDING

SECTION I – INTRODUCTION

401. **Introduction.** Chapters 1 and 2 defined understanding and its importance and Chapter 3 described how we develop understanding. Chapter 4 discusses the implications of understanding; the *so what?* The development of understanding can not be distilled into a simple formula or checklist; understanding is as much an attitude of mind as an activity. This has implications for how we approach understanding and how it permeates our day-to-day business.

402. **The Categories of Understanding.** The implications of understanding for defence fall into under 2 broad categories: ethos, philosophy and culture; and enhanced decision-making. This Chapter considers each of these implications in turn.

SECTION II – ETHOS, PHILOSOPHY AND CULTURE

403. **Ethos.** Ethos is *the characteristic spirit of an organisation generated by a sense of community, [as demonstrated by] the people within that community and the way in which they operate.*¹ The British Armed Forces' ethos centres on 4 tenets: vision (how we see ourselves and our purpose); the desire to achieve operational excellence (professionalism); our values (what we stand for); and our traditions (character). Internalising these factors and communicating them effectively not only influences how we see ourselves, but also how others perceive us. This underpins our credibility on the global stage. We communicate our ethos in our philosophy, more often referred to as the moral component of fighting power.

404. **Philosophy.** Philosophy is *the theory or attitude that guides [our] behaviour.*² Our common understanding dictates how we develop our attitudes and opinions and how we behave or operate. It is our responsibility as individuals, as single Services and as defence professionals to understand ourselves, the world around us, and our potential adversaries. We must want to understand. Understanding is one of the cornerstones of our military philosophy. This philosophy should embrace 2 principles: a professional approach; and a proactive approach to sharing information.

a. **A Professional Approach.** We define professionalism as having *impressive competence in a particular activity;*³ an expertise in our field.

¹ *Concise Oxford English Dictionary (COED)*, 11th Edition.

² *Ibid.*

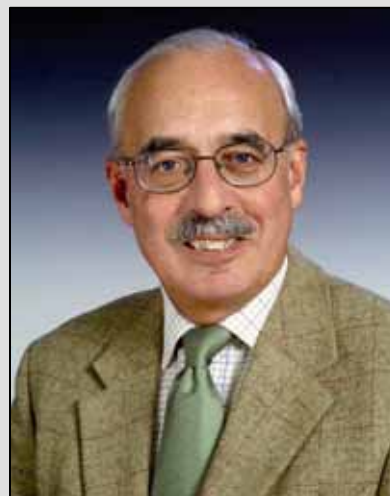
³ *Ibid.*

Our professional knowledge and experience allow us to frame problems in the correct context in order to understand them.⁴ Experience and knowledge, including the body of professional knowledge enshrined in doctrine, together with education and training, underpin effective understanding. This enhances our decision-making and our ability to take balanced risk. As defence professionals we must, therefore, seek greater knowledge, consider all available information sources (even if they hold views opposed to our own) and conduct self-study in addition to formal education and training.

Understanding – the Role of Doctrine



Field Marshal Erwin Rommel



Professor Richard Holmes

Field Marshal Rommel once famously said that “*The British write the best manuals in the World. Thank God they don’t read them!*” This sad indictment of elements of the British military in the Second World War continues to have some credence. Understanding underpins doctrine writing, which flows from analysis of vision, historical evidence, personal experience and best practice. In turn, published doctrine underpins our understanding of how to think, plan and operate in complex environments. As Professor Richard Holmes has stated, at its best, doctrine is what is taught and believed. As defence professionals it is important that we study not only our own doctrine but, like Rommel, the doctrine of our allies and our potential adversaries to enhance our understanding.

- b. **A Proactive Approach to Sharing Information.** Understanding depends on access to information and knowledge, but access is often problematic, particularly in the intelligence field owing to the requirement to protect sources. The cloak of secrecy can hamper information

⁴ See paragraph 209-10 and Figure 2.2.

sharing, even when much of the same intelligence can be gleaned from open source material; caveats only apply once information is interpreted. Protective requirements will endure, but the impact of such constraints may decrease with the creation of a collaborative environment and approach that enables the rapid passage of intelligence to those who need it, by whatever means. The single intelligence environment (described in Chapter 3) reflects this approach: *proactive and dynamic it must improve clarity of understanding, identify threats and opportunities, enabling influence through effective action*. Sharing will require application of judgement, particularly regarding classification, and must be built upon trust. It is also resource intensive, requiring investment in information management and exchange systems, and relevant training. Being proactive is also an attitude of mind, and the approach to information may also extend to the fostering of individual, collective and common contacts.⁵

405. Military Culture. All 3 Services have distinct cultures that shape their attitudes and behaviour. This affects the way we interact with each other and with external agencies, and the way that we operate. Commanders must account for the resulting biases when operating in a joint environment. They must also recognise perceptions and bias can be even more prevalent when working with allies or occasional partners. Open-mindedness and a willingness to challenge our own perceptions and ideas is vital in the multinational and inter-agency environments. Patience and listening skills are vital. So is the ability grasp somebody else's perspective. Commanders should expect and plan to operate at lower tempo to allow time to develop such perspectives.

SECTION III – ENHANCED DECISION-MAKING

*'The art of command is to make choices in the midst of ambiguity . . .'*⁶
*'[It is] . . imperative not to take the first step without considering the last'.*⁷

406. The Nature of Decision-making. Timely and effective decision-making is critical to operational success, but some decision-making will need time.⁸ Chapter 1 describes how understanding supports decision-making by providing the context, insight and foresight to address a problem. It helps to shape how we look at a problem (problem-framing) and relies on knowledge and information, analysis, judgement – both deliberate and intuitive – and

⁵ The proactive approach to sharing is often described in Defence as a *duty to share* (refer to paragraph 219).

⁶ Clausewitz – Handel, *Masters of War*, page 8.

⁷ Clausewitz, *On War*, page 584.

⁸ JDP 01 (2nd Edition), *Campaigning*.

information management. Each problem will have a temporal and geographic aspect, and the nature of the problem and our own understanding of it will change over time. Decision-making is foremost a human activity with all that this entails in its occasional brilliance and fallibility.



**Strategic Decision-making on the Future of Europe:
The Yalta Conference 4-11 February 1945**

407. **Understanding in the Decision-Making Process.** Decision-making at all levels comprises 5 basic steps: *direction*; *consultation*; *consideration*; *decision*; and *execution*. *Direction*, in the form of a vision and intent is issued by the highest authority at each level; at the national level it is communicated through policy. In the military context, the overall commander develops and promulgates the vision. *Consultation* develops situational awareness and a common approach to decision-making, while *consideration*, *decision* and *execution* form the core of the joint inter-agency or military planning processes. Figure 4.1 depicts how the understanding model illustrated at Figure 2.2 applies to a generic decision-making process.

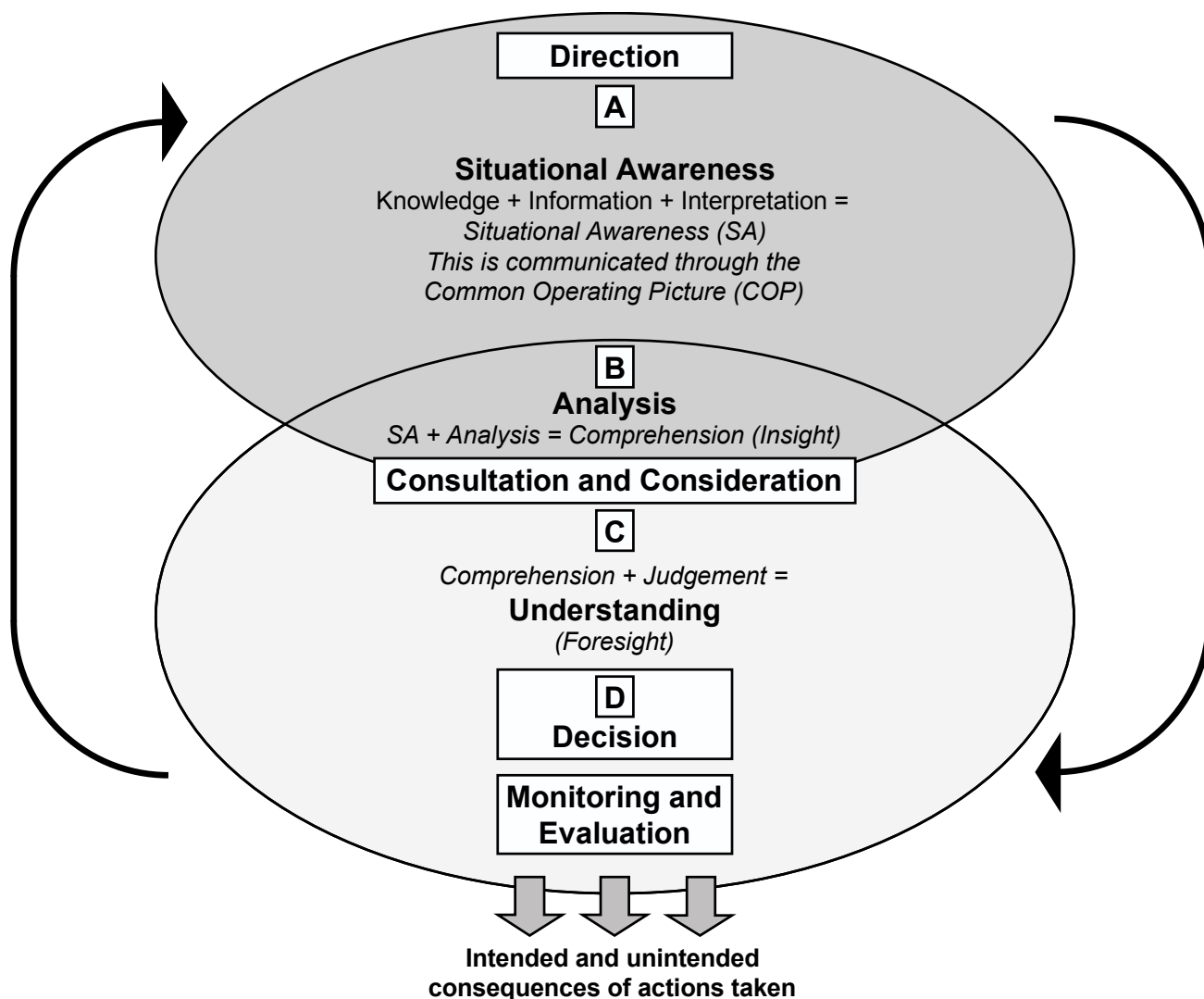


Figure 4.1 – The Role of Understanding in the Decision-Making Process

Interpretation of information and knowledge provides situational awareness, which acts as the starting point for developing understanding (Box A). Analysis of this situational awareness (the rational planning process often adopted in inter-agency work or the military operational estimate process) (Box B) provides comprehension. Applying judgement to this comprehension allows us to gain insights and to develop the foresight to provide options for taking action. Insight and foresight thus act as the broad parameters of true understanding (Box C) and the basis for taking decisions (Box D). Continuous review of the effects of these decisions (Box E) allows assessment of the implications of the actions taken and identification of the subsequent intended and unintended consequences. This information serves to update our situational awareness (Box A) and forms the basis for the next decision-making cycle. Chiefs of Staff should test their commanders' structures and processes against this model.

408. **Understanding and the Detailed Planning Process.** In a joint-interagency environment the rational planning process is the preferred starting point for developing a plan. It is logical, straightforward and avoids the use of military acronyms or jargon.⁹

The Rational Planning Process

- Step 1 – Understand the Situation
- Step 2 – Understand the Problem
- Step 3 – Determine Potential Solutions
- Step 4 – Evaluate Potential Solutions
- Step 5 – Select the preferred solution

409. **The Role of Judgement in the Decision-Making Process.**

Judgement is the most important element of decision-making and requires experience and practise. Judgement can be exercised through either a collaborative (deliberate) process or through intuition. Deliberate judgement is a command-led staff process considering all of the facts and determining the options before the leader makes a decision. Intuition is the ability to understand something immediately, without the need for conscious reasoning. Intuition is largely subconscious; a decision-maker just knows what to do.¹⁰ Intellect, experience, education, training and effort serve to enhance intuition and collectively provide the leader with the ability to recognise patterns, problems and solutions.¹¹ Some leaders are naturally gifted and intuition is second nature to them, but they are rare. Intuition is, however, subject to the leader's own biases, insecurities and idiosyncrasies borne of experience. In many cases, a successful approach to decision-making will use deliberate judgement to confirm a leader's intuitive feel for the best solution to the problem.

410. **Risk-Taking.** Understanding is an imperfect art and therefore all understanding involves risk; better understanding can reduce the potential for risk, but risks will still have to be taken. Risk-taking and risk management are important constituents of decision-making. Decision-makers can naturally become risk-averse when they have insufficient understanding of a given situation, although this can also apply when decision-makers have clear understanding. Some commanders are less able to consider solutions based on calculated risks because they are wary of the consequences of taking a decision. Decision-makers with insufficient understanding must either, if there

⁹ In practice it differs only slightly from the operational estimate process. It is included in JDP 5-00, 2nd Edition, *Campaign Planning*.

¹⁰ Army Doctrine Publication *Operations*, 2010.

¹¹ *Ibid*.

is a time imperative, accept the shortfall and make a decision or, if there is time, try to develop greater understanding through gaining more information and intelligence.¹² Ultimately, the decision-maker must reach a point where he has sufficient understanding to proceed, but better decisions invariably result from avoidance of undue haste. This implies that a good commander must develop an intuitive feel for the last sensible moment at which he can take a decision.

411. Communicating Understanding. Communicating understanding is an important element of the decision-making process. Common methods of communicating understanding include verbal and written policy decisions, official communiqués, or military orders. The creation of a clear vision and intent, the ability to create a mental image of the future with imagination and wisdom, can be thought of as the articulation of foresight, the primary outcome of understanding.¹³ At the strategic and operational level, our vision determines campaign design, how we prosecute the campaign or operations, how we allocate resources and the operational priorities. At the tactical level, vision provides the rationale for our personnel to fight and to know why they are fighting. Our vision and intent also form our narrative, a concept described in Chapter 2, which can be general or specific and tailored for an internal or external audience and can be communicated by a number of means. This can include communication with the general public, for example through use of the media. Our narrative will evolve over time as our understanding improves or as the situation changes.

412. Network Exploitation. Systematic exploitation of the available networks, and identifying the future potential of emerging networks, is critical to developing understanding and to communicating it. Networks need to be dynamic and based on communities of relevant expertise that can add effectively to collective and common understanding. Commanders in particular need to develop their own informal and formal networks to seek out information and have their understanding of a particular situation scrutinised and tested. Knowledge is often thought synonymous with power, and not always shared freely in large organisations. The need to challenge views and perceptions, however, underpins understanding and this cannot always be achieved by acceptance of the institutional *status quo*. A careful balance must be struck between the use of formal and informal networks to enable understanding, but the value inherent in using open-minded informal networks often outweighs the disadvantages.

¹² For example through more collection, better research into what is already available, or the use of Allies and occasional partners.

¹³ COED, 11th Edition.

413. **Continuous Review.** Understanding of a situation requires continuous review. The decision-making process provides a useful vehicle for enabling such review through the employment of constant monitoring and evaluation, particularly after action has been taken. This allows further analysis to enhance our understanding. The staff environment at each level should incorporate a formal continuous review process that is properly resourced.

414. **Prioritisation and Task Allocation.** Conducting operations in the contemporary operating environment with limited resources demands careful prioritisation and allocation of tasks. Leaders at all levels – political leaders, military commanders and those with the ability and authority to direct a particular group – will usually have resources at their disposal dedicated specifically to the development of understanding. Making effective use of these resources will require the leader to articulate clearly what needs to be understood. Chapter 3 provides examples of the questions that need to be asked by leaders when articulating requirements. In return, collectors and analysts should be willing and able to add or challenge the leader's requirements, based on their understanding of the situation.

SECTION IV – CONCLUSION

415. Understanding underpins effective decision-making. The better our understanding, the more effective our decisions will be. Understanding is, however, not always easy to achieve and making decisions based on a collective or common view of a particular situation will inevitably carry risk. Risk-taking is an important function of command which can be partially mitigated the better our understanding is developed. Understanding requires both the right attitude of mind and the frameworks and structures to enable its development. JDP 04 provides this information. It is a guide to commanders and leaders at all levels and is designed to provide principles, guidance and advice on how to achieve effective understanding to support good decision-making.



LEXICON

This lexicon contains acronyms/abbreviations and terms/definitions used in this publication. Many of the terms and their definitions detailed in Part 2 are either *new* or *modified*. All other UK and NATO agreed terminology is contained within the current edition of JDP 0-01.1 *The UK Glossary of Joint and Multinational Terms and Definitions*.

ACRONYMS AND ABBREVIATIONS

AAP	Allied Administrative Publication
AJP	Allied Joint Publication
CENTO	Central Treaty Organisation
CI	Counter Intelligence
COED	Concise Oxford English Dictionary
DCDC	Development, Concepts and Doctrine Centre
DI	Defence Intelligence
EU	European Union
FCOC	Future Character of Conflict
HUMINT	Human Intelligence
IJA	Imperial Japanese Army
IMINT	Imagery Intelligence
JDN	Joint Doctrine Note
JDP	Joint Doctrine Publication
MOD	Ministry of Defence
NATO	North Atlantic Treaty Organization
OGD	Other Government Department
SIGINT	Signals Intelligence
TECHINT	Technical Intelligence
UN	United Nations

TERMS AND DEFINITIONS

Cognitive Domain

The sphere in which human decision-making occurs, such as a result of assimilating knowledge acquired through thought, experience and sense. The principal effects generated are upon will and understanding.

(JDP 01 2nd Edition)

Collective Understanding

The shared perspective held by members of distinct groups who have their own ethos, creed and identity. (JDP 04)

Common Understanding

The ability to comprehend perceptions of groups other than our own and to establish a common baseline for communication, interpretation and action.

(JDP 04)

Creative Thinking

The examination of problems or situations from an original or unorthodox perspective. (JDP 04)

Critical Analysis

The intellectual discipline that applies deliberate introspective judgment to interpret, analyse and evaluate a problem and explain the context upon which that judgment is based. (JDP 04)

Cultural Terrain

The social, political and economic organisation, beliefs and values and forms of interaction of a population. (JDP 04)

Cyberspace

Cyberspace is a global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the Internet, telecommunications networks, computer systems and embedded processors and controllers. (JDP 04 but this is the current working definition and is subject to change on promulgation of Defence's cyberspace policy)

Fusion

In intelligence usage, fusion is the blending of intelligence and/or information from multiple sources or agencies into a coherent picture. The origin of the initial individual items should then no longer be apparent. (AAP-6)

Hard Power

Hard power is the threat or use of military or economic coercion or physical effect to achieve influence. (JDP 0-01)

Horizon Scanning

In intelligence usage, horizon scanning is the systematic search across the global environment for potential threats, hazards and opportunities. (JDP 04)

Human Domain

The totality of human sphere of activity or knowledge (JDP 04)

Human Terrain

The social, political and economic organisation, beliefs and values and forms of interaction of a population. (JDP 04)

Human Terrain Analysis

The process through which understanding of the human terrain is developed. (JDP 04)

Human Terrain Mapping

The process of considering comparatively static demographic features on a geographic map. (JDP 04)

Individual Understanding

The personal interpretation of the facts held by a person within their own mind. (JDP 04)

The Physical Domain

The sphere in which physical activity occurs and where the principal effects generated are upon capability. (JDP 01)

Situational Awareness

1. Generically, the understanding of the operational environment in the context of a commander's (or staff officer's) mission (or task). (JDP 0-01.1)
2. In intelligence usage, situational awareness is the ability to identify trends and linkages over time, and to relate these to what is happening and what is not happening. (JDP 04)

Soft Power

The ability to persuade or encourage others to adopt an alternative approach. (JDP 0-01)

Understanding

In the context of decision-making, understanding is the perception and interpretation of a particular situation in order to provide the context, insight and foresight required for effective decision-making. (JDP 04)

Virtual Domain

The sphere in which intangible activity occurs, such as the generation, maintenance and transfer of information (for example, the internet is part of the virtual domain). The principal effects generated are related to understanding. (JDP 01)

JOINT DOCTRINE PUBLICATIONS

The successful conduct of military operations requires an intellectually rigorous, clearly articulated and empirically-based framework of understanding that gives advantage to a country's Armed Forces, and its likely partners, in the management of conflict. This common basis of understanding is provided by doctrine.

UK doctrine is, as far as practicable and sensible, consistent with that of the North Atlantic Treaty Organization (NATO). The development of national doctrine addresses those areas not covered adequately by NATO; it also influences the evolution of NATO doctrine in accordance with national thinking and experience.

Endorsed national doctrine is promulgated formally in JDPs.¹ From time to time, Interim JDPs (IJDPs) are published, caveated to indicate the need for their subsequent revision in light of anticipated changes in relevant policy or legislation, or lessons arising out of operations.

Urgent requirements for doctrine are addressed through Joint Doctrine Notes (JDNs). To ensure timeliness, they are not subject to the rigorous staffing processes applied to JDPs, particularly in terms of formal external approval. Raised by the DCDC, they seek to capture and disseminate best practice or articulate doctrinal solutions. This can subsequently be developed in due course as more formal doctrine.

Details of the joint doctrine development process and the associated hierarchy of JDPs are to be found in JDP 0-00 *Joint Doctrine Development Handbook*.

¹ Formerly named Joint Warfare Publications (JWPs).

