Intelligence and Military Doctrine: Paradox or Oxymoron?

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Abstract: This article examines the evolution of the current British military joint intelligence doctrine. We argue that military intelligence doctrine is dogged by an intrinsic tension between the ethos and expectations of military doctrine and those of the professional practice of intelligence. We further argue not only that prior iterations of UK joint intelligence doctrine failed to effectively deal with this intelligence doctrine dilemma, but also that measures in the current doctrine to address this problem directly created their own problems. Moreover, as a result, otherwise sound innovations in the current UK intelligence doctrine have proven unsuitable to wider diffusion in more recent intelligence doctrine such as the new NATO intelligence doctrine which, otherwise, draws extensively on its British precursor.

"Intelligence as a whole is pragmatic, not doctrinal." Michael Herman (1996 284)

Intelligence and the Doctrine Dilemma

Between the summer of 2009 and the end of 2011, the UK's Ministry of Defence (MoD) set about a comprehensive revision of its joint military intelligence doctrine. Intelligence is a sphere of activity with which military doctrine has always struggled. British army field intelligence regulations from 1904 offered ten pages on how to do accounting for secret funds and one paragraph on duties of intelligence staff, but no guidance at all on how to undertake these duties (War Office 1904 3). To be sure, matters have progressed appreciably over the last century or so. Nonetheless, trying to capture the essence of intelligence concepts and practice within the ethos and conventions of military doctrine has continued to prove a persistent challenge. Indeed, British intelligence doctrine at the joint service level is only in its third iteration. The first edition had been issued in 1999 in the wake of the UK's peace operations in the Balkans (Joint Doctrine and Concepts Centre, hereafter JDCC, 1999) and the second four years later, concurrently with Operation TELIC, the UK's role in the 2003 invasion of Iraq (JDCC, 2003). During most of the following decade intelligence would occupy an almost unprecedentedly central significance in public policy discussion and reviews of events running up to, and during, the sustained and often troubled campaigns in Afghanistan and Iraq. At the same time, there were substantial technological transformations in the intelligence function, as much in terms of targeting and requirements as in methods of collection, analysis and dissemination. Consequently, by 2009 there was a sense that the intelligence doctrinal status quo

could not continue. The modernisation and transformation necessary to meet the challenges of the 21st Century were long overdue.

Development of the new doctrine was led by Defence Intelligence (DI, formerly the Defence Intelligence Staff or DIS) but largely undertaken by the MoD's Development, Concepts and Doctrine Centre (DCDC). The mandate laid on DCDC by then-Chief of Defence Intelligence (CDI) Air Vice Marshall (later Air Marshall Sir) Stuart Peach was for a "radical rewrite" and rethink of existing intelligence doctrine. An initial and otherwise entirely creditable first draft was firmly rejected as being not radical enough.[1] At this point the project was taken over by a newly appointed Head of Thematic Doctrine, who elected to follow an innovative and broadly engaged model of doctrine writing that had been piloted on a number of recent, doctrines on both sides of the Atlantic. This model was typified by what was, at the time, the most recent edition of the United States Army's Field Manual (MF) 3-24 *Counterinsurgency* (United States Army 2006) and the UK's Joint Doctrine Publication (JDP) 3-40 *Security and Stabilisation: the Military Contribution* (Development, Concepts and Doctrine Centre, hereafter DCDC, 2009). These doctrines had been written on the basis of the widest practicable joint consultation as well as direct involvement of other government departments beyond the defence community as well as non-governmental subject matter experts from the University and think tank sectors. In the New Year of 2010 DCDC elected to draw in academic subject matter experts in intelligence, the first time academics had been involved in doctrine production in a field as traditionally secretive as intelligence. To this end, they partnered with the Brunel University, London's Centre for Intelligence and Security Studies (BCISS). A main JDP 2-00 drafting team was assembled from members of the armed services at DCDC and MoD civilian elements as well as BCISS. This main JDP 2-00 team was supported by several specialist groups drafting on specific, mainly technical, topics. Their work was to be evaluated by interagency review panels drawing on other government departments with intelligence functions and interests as well as the MoD before being forwarded to executive levels for approval. When this elaborate armature of intelligence doctrine production was finally set in motion in the early spring that year, few of those involved probably appreciated both the breadth and depth of deliberation that the "radical" mandate would actually entail over the following eighteen months (DCDC 2011).

Military intelligence was not the only sphere of the UK's intelligence machinery undergoing profound transformations at that time. Most significantly, the top level of intelligence direction and governance via the Cabinet Office and its Joint Intelligence Organisation (JIO) were in the throes of dramatic changes to a system that had been minimally altered since the 1960s. Even as the main JDP 2-00 drafting team was being assembled, the recently elected coalition administration under

David Cameron was standing up the promised, new UK National Security Council (see, e.g. Davies, 2011 437-439; Devanny and Harris, 2014, 21-32). The NSC, its supporting structures and the status and role of the JIO remained in flux throughout the production of JDP 2-00 and really only stabilised just as the doctrine's review and approval process was drawing to a close. While this presented some challenges in keeping up and remaining accurate for the doctrine's obligatory discussion of the various organisations, jurisdictions and the wider intelligence apparatus (DCDC 2011 1-13 – 1-15), the real difficulties arose directly from the internal logic and essential constituents of intelligence doctrine itself. To be sure, the new doctrine examined the national intelligence machine in much greater detail than its predecessors and encouraged J2 personnel to think in terms of their role as contributors to national intelligence and understanding besides as beneficiaries of national assets and capabilities. It also relocated that intelligence community overview from the last quarter of the doctrine (JDCC 2003 3-1 – 3-5) to the first chapter. But these were far less ambitious alterations than the more 'radical' concerns that ultimately absorbed the lion's share of the main drafting team's efforts.

Basic definitions, the long-standing but widely unloved intelligence cycle (see e.g. Davies *et al* 2013) and the keenly fought and often vituperative debate of the relative merits of the notions of "intelligence surveillance and reconnaissance" (ISR) and "intelligence, surveillance, target acquisition and reconnaissance" (ISTAR) (see, e.g. Air Power Development Centre 2009) and many more such issues were subjected to scrutiny and adjudication. To a certain degree this question of breadth was very much to have been expected. The overarching role of joint doctrine is to provide a suite of common concepts and conventions to cope with the wide range of potential capabilities and missions that tri- and quad-service (including civilian organisations) intelligence support to joint operations might involve. However, what rapidly became apparent was that there was a *fundamental tension* between the intellectual and institutional assumptions, idioms and standards of the armed forces on the one hand and ethos, body of professional practice and collective experience what Sherman Kent's has termed "intelligence as activity" (as distinct from intelligence as information or organisation) (Kent, 1949) on the other.

Over the nearly two years of DCDC's effort to "radically" recast Britain's military joint intelligence doctrine a very specific, recurrent and persistent challenge arose repeatedly when trying to map some of the more fundamental features of an intelligence ethos into a military, doctrinal framework. That challenge arose from a tension between the values and exigencies of military doctrine and those of intelligence-as-activity that amounted to a pervasive, fundamental *intelligence doctrine dilemma* in which the basic inclinations of military doctrine and intelligence professional practice

pulled in differing, even directly opposed, directions. British military theorist JCF Fuller famously and quotably warned during the interwar years that "the danger of a doctrine is that it is apt to ossify into dogma" (Fuller 1926 254). While there are certain defining, core features of intelligence-as-activity that may be largely compatible with the more abstract and conceptual end of the doctrinal spectrum, these features sit less well with the prescriptive, procedural view of doctrine that forever tempt it towards dogma. Indeed, it became increasingly apparent to the JDP 2-00 team that these tensions and temptations had been amongst the main problems that had dogged the two earlier iterations of Britain's joint intelligence doctrine in 1999 and 2003. CDI Peach's insistence on a radical rewrite was clear testimony to the very limited success with which the previous doctrines had met dealing with this problem. During the productions JDP 2-00 this dilemma amounted to a struggle for the soul of intelligence at the joint service level. As will become apparent, it remains far from clear that the 2011 doctrine met with any greater success than its predecessors, albeit, as we shall see, for reasons entirely different from the shortfalls of the earlier editions.

Essential Issues of Military Doctrine

In the 19th Century, Carl von Clausewitz noted that there was inevitably a tension between theory and practice in any field: "talent and genius operate outside the rules, and theory conflicts with practice" (1970 140). He argued that the lower the level of practice, the easier it was to set down rules of behaviour, and as one moved up levels of practice the theorist had to be more abstract and less *doctrinal* (1970 141). The first "field service regulations" intended to regulate low-level tactical behaviours appeared in the decades after Clausewitz's death, issued originally by the US Army in 1862 and the Prussian military in 1870, with most European armies having some sort of tactical regulation or proto-doctrine by the time of the First World War. It was only after the Great War that doctrine writing sought to tackle high-level concepts.

The word "doctrine" in the German usage (*lehre*) of Clausewitz or the inter-war German doctrinal masterpiece *Truppenführung* meant simply "the proper way to do things" (Condell and Zabecki, 2001 9). When the British first tried to articulate a top-level strategic doctrine in the late 1980's (they were last of the important states to do so) they chose the almost comically laconic "that which is taught" to define doctrine (Chief of the General Staff 1989 1). Fuller, however, had already more compellingly described doctrine decades before as "the central idea of an army" (1926 254). This substance of these ideas, less poetically expressed, has been rendered into NATO "doctrinese" as "fundamental principles by which military forces guide their actions in support of objectives" (NATO

Standardization Agency 2-D-9), a definition currently emulated almost verbatim in British doctrine (DCDC 2014 iii).

Doctrine, however, has a bad name, both inside the military and without. In normal parlance, to say something is inflexible and unthinking we say it is *doctrinaire*. To the British army definition of "that which is taught" comes the frequent repartee from young officers that it is rather "that what is unread"[2]: the last of the European armies to professionalise, the British army has a famous disdain for doctrine, traditionally preferring the "gifted amateur" concept of aristocratic officership (Harries-Jenkins 1975 487). Even after that amateurism was shown false by the World Wars, as late as the Malayan emergency the British General Staff's doctrinal thinking relied "on the notion that when it came to a crisis the British army would always be able to improvise a successful solution to any problem", and as one author wryly observed, "senior British officers credited themselves with a rare ability to do so" (French 2000 46-47). Doctrine was thought of as something which constrained the officers' freedom to improvise (Kiszely 2005 39). Swinging the other direction, or as causation behind this attitude, British military doctrine had often been constructed as "what to think" rather than as "how to think" (Kiszely 2005 39). And, of course, few discussions of doctrine proceed without at some point invoking Fuller's previously noted warning about ossification.

The aspiration of all doctrine writers is that, when written properly, doctrine is not a constraint on thinking. It should be a guide to action, not a set of hard and fast rules. As the *Truppenführung* said, echoing Clausewitz and in turn echoed in current British doctrine, "lessons in the conduct of war cannot be exhaustively compiled in the form of regulations. The principles enunciated must be applied in accordance with the situation" (Condell and Zabecki 2001 4). Doctrine should instead provide a common frame of reference across the military (Posen 1984 40). As another set of scholars has noted, doctrine is meant to link "theory, history, experimentation, and practice" (Grint and Jackson 2010 351). A simple expression, but this is an ambitious task for any book.

And writing such a book in practice is very difficult. The modern British military endeavours to have doctrine serve a set of purposes. First, to codify what the service perceives itself to be ("Who are we?"); to codify what its mission is ("What do we do?"), to describe how its mission is to be carried out ("How do we do that?"), and to bolster this with more corporate identity and best practice, by describing how the mission has been carried out in history ("How did we do that in the past?") (Grint and Jackson 2010 352). Of course, doctrine is not written from a blank slate—the culture of the military is forged over decades or even centuries; regiments and corps, as well as services, all view their tasks through a particular lens, a lens cast as much by budget battles as "the proper way to do things" configured by how they may always have been done. As Graham Allison has pointed out in

regard to formation of state policy, "where you stand depends on where you sit," (Allison 1969 711) and the various service branches, corps and regiments all wish at various points to underline their own unique positions within the firmament. So the "we" in the statements above is hardly unitary, and it is not so easy to rationally determine the benefit maximising solution to doctrinal questions.

What is more, the writers of doctrine exist with their own personal experiences in the military and on operations. For the UK Armed Forces in 2010, the dominant experience was the last seven years of war in Iraq and Afghanistan, wars which bore little resemblance to ones before and, even at the time, looked unlikely to resemble subsequent doctrine. This was especially true, from a Joint doctrine perspective, because both campaigns had little role for the Royal Navy. Indeed, even as the drafting and review process was drawing to a close in late 2011 the UK found itself deeply involved in far more "traditional" highly joint operations in Libya where the Navy played a central role during the so-called Arab spring. While the "logic" of war, as Clausewitz put it, does not change, its "grammar" does (1970 605). The military doctrine writers were steeped in the most recent grammar—the wars in Iraq and Afghanistan—and writing in such a way as to capture current appropriate doctrine for current and likely future conflicts, without immediately dating it with "Afghan grammar" which will date quickly, was likewise a key challenge. It was necessary, in the words of the time, to write about "a war not *the* war" (Arundell 2009). How war will evolve over the lifetime of the doctrine in unpredictable, and to get it wrong, to fail to allow in advances in technology or practice, risks compromising both the doctrine and the trust that members of the armed forces have in it generally. While officers often jest about not having read doctrine, the whole process of staff training in the Armed Forces—the role of the Joint Services Command and Staff College at Shrivenham—is the teaching of UK (and Allied) doctrine. If it is not consistent, applicable and relevant the root concept of "jointness" in the Armed forces is potentially at risk. The conservatism of armed forces in general and the searing experiences of current warfare make future-proofing doctrine a Sisyphean task.

Preventing "ossification" of doctrine is made more difficult because doctrine *is* what is taught. Avoiding doctrine becoming *doctrinaire* is therefore often beyond the gift of the doctrine writer. Britain's professional army puts its officers and NCOs through rigorous learning "gates" before promotion at each stage. Officers may swagger that they do not read doctrine, but they are certainly trained, taught and tested on it repeatedly through their careers. From Sandhurst, through the Military Knowledge Exams, Military Analysis Modules, to Intermediate and Advanced Command and Staff Courses (ICSC and ACSC), Britain's military officers are deeply imbued with its doctrine, from practices and procedures as an NCO or Junior Officer, through to principles and philosophy as a field

officer and general officer. Analogous doctrine-based training takes place within the Royal Air Force and Royal Navy at their facilities at Cranwell and Dartmouth respectively.

Matching the hierarchy of soldiers and officers is a hierarchy of doctrine: at the top of the pyramid sits *British Defence Doctrine,* the overarching *strategic* level document which provides the unified philosophy surrounding the use of armed force in support of Britain's national goals—this is what DCDC calls "Capstone" doctrine (DCDC 2018). Below it are the Joint Operations volumes (one of which is JDP 04, *Understanding* (DCDC 2016) as a "keystone" for JDP 2, *Intelligence*) which provide principles—as their classification suggests, these are at the operational level. Below these are the Army Field Manuals (and their Royal Air Force and Royal Navy equivalents) discussing *practices* (such as ones on ISTAR) and Land/Air/Sea component handbooks providing *procedures* (such as the roles of field intelligence group for the Army). While the ideal is that "the philosophy [capstone] and principles [keystones] guide the practices and procedures that are found in tactical field manuals and other subordinate doctrine" (Chief of the General Staff 2010 1) inevitably, as doctrine is disseminated down the chain to lower levels it loses coherence. It moves from being philosophical writing to more prosaic checklists for soldiers to learn and repeat on examination. No matter how well conceived, a checklist can never carry the full cognitive payload of a capstone doctrine manual—the doctrine writer, when writing capstone doctrine, is ultimately writing a template from which more dogmatic documents will descend.

Paradox or Oxymoron?

Compared with the evolution of military doctrine, bodies of formally constituted professional practice have taken shape comparatively recently within the intelligence sphere. At the national level in most English speaking countries the "career analyst" is a relatively recent phenomenon. The idea of a codified professional intelligence practice has long had doubters on both sides of the Atlantic (Marrin 2011 36), but the fundamental suspicion of any intelligence counterpart to doctrine was articulated crisply by British Cabinet Secretary Sir Burke Trend in a warning to Prime Minister Harold Wilson that "The CIA is a very large collection of 'experts' … who will at a moment's notice produce an intelligence appreciation … which is 'technically' impeccable but may be politically irrelevant or misleading" (Trend 1967). Although the idea of professional analysts can probably be traced to the very origins of the Central Intelligence Agency (CIA) and its Office of Reports and Estimates (Darling 1990) systematic efforts to codify analytic competencies took on a particularly coherent form in the United States intelligence community as part of what became known as the

"analytic tradecraft" movement. Originally championed by Douglas MacEachin, then-Deputy Director for Intelligence at CIA, the idea of "analytic tradecraft" was to capture a growing corpus of diverse analytic tools and techniques that could become a regularized professional practice equivalent to human intelligence tradecraft boasted by the Agency's other main center of institutional gravity, the Directorate of Operations (MacEachin 1995, Marrin 2011 28-31).

The suspicion of codified procedures is not merely a matter of institutional inertia in the intelligence field. Rather, it reflects a long-standing and pervasive concern that emphasizing formal rationality and procedural compliance may distract from substantive thoroughness and accuracy. This has always been particularly acute in the sphere of assessed or "finished" intelligence production. Finished intelligence production appears in NATO doctrine somewhat idiosyncratically under the umbrella term "processing". The term covers a very wide range of different functions and subsumes what in US intelligence parlance are the two distinct functions of "processing" and "analysis". In American usage, "processing" denotes "Conversion of large amounts of data … to a form suitable for the production of finished intelligence" including "translations, decryption, and interpretation" while "analysis" refers to "integration, evaluation and analysis of all available data" (Office of the Director of Central Intelligence n.d. [c.1994] 1). This distinction is not entirely peculiar to US thinking and in 2004 Lord Butler found it necessary to draw an analogous albeit slightly arcane distinction between intelligence analysis, in which "the factual materials inside the intelligence report is examined in its own right" and assessment where one "makes choices" in pooling intelligence from various source to try and identify whether it fits "an established pattern, or extends the picture in the expected way". He did note, however, that "[a]ssessment may be conducted separately from analysis or as an almost parallel process in the mind of the analyst" (Butler 2004 10). One can see how such concurrence serves as the basis for treating analysis and assessment under a common umbrella notion of "processing". Intelligence processing in NATO doctrinal terms therefore entails a wide range of functions, including collating reporting, integrating or synthesizing the reporting from across the range of collection disciplines and potentially multiple sources within those disciplines to generate a net judgement, and then articulating that judgement.

Intelligence assessment has a particular significance in the problem of doctrine partially, but indirectly because of the widespread and long-standing consensus that it is analysis and assessment – processing – that is the aspect of intelligence where "intelligence failure"[3] is most likely to occur. In a 1989 overview of points of potential failure in the intelligence process by Bruce Berkowitz and Allan Goodman they identified seventeen potential points of potential failure in assessment compared with a dozen for collection, four at the level of direction and only one in dissemination.

(Berkowitz and Goodman 1989 195-202). This was echoed a few years later by former JIC and GCHQ official Michael Herman. Using the term in its wider sense, he argued in 1996 that 'the weak link in the process is intelligence *analysis*, rather than the collection of evidence' (Herman 1996 227, emphasis added). Indeed, the lion's share of intelligence failures that have been documented in the intelligence literature and assorted official post-mortems have been "processing" failures. Even a cursory examination of the literature on assessment failure gives a clear impression that assessment failure is fundamentally a question of intellectual failure largely driven by various cognitive and social-psychological "analytic pitfalls".

Analytic pitfalls come in a variety of forms, largely divisible into a diverse litany of cognitive biases, more rarely self-serving bias on the part of the institution issuing an assessment, and also process or organizational failures where institutional processes have either not been properly implemented or have erected procedural barriers to effective and comprehensive exploitation of the information held by a government or intelligence community (Betts 2007). Common cognitive biases include the frequently cited "groupthink" where an unchallenged orthodoxy shapes judgements, anchoring bias in which one clings to a particular hypothesis or item of reporting to the point of overlooking or inadequately considering additional information; giving undue weight to reporting because it is vivid, recent, readily accessible or confirming a preferred view already held (Heuer 1999). In what Betts argues are best understood as "dilemmas" rather than failures as such (2007 12-13). The "solution" to one bias or institutional dysfunction can create another. And so, for example, avoiding the orthodoxies of '"groupthink" by encouraging alternative or competitive assessments leads all too easily to "analysis paralysis", the inability to choose between equally credible and adamant alternatives, which leads in turn to decision-makers favoring the vividly vociferous or merely the confirmatory. Likewise, the alternative to narrowly assuming an adversary thinks as one does oneself—mirror-imaging—may be attempts to characterize the other that amount to caricature and stereotyping.

What the various cognitive biases, and other sources of analytic failure, share is a failure to escape established patterns of thought that limit the range of alternatives that can, and should, be considered. What is less widely appreciated is the degree to which analytic effort runs through all of the other main functions of intelligence, carrying with it the same risks of failure that affect finished intelligence production.

Intelligence collection – especially covert collection – is probably that aspect of the intelligence process furthest removed from what H. Bradford Westerfield once described as the "ivory bunkers" (1997a, 1997b) of intelligence assessment. The so-called "raw intelligence" generated by collection

operations is generally referred to in doctrinal terms as "data" or "information" and requires analysis and assessment – processing – to actually constitute "intelligence" as such (see, e.g Davies 2012 64). However, collection operations such intercepting signals, taking photographs, meeting agents—all occupy the tip of a more complex intellectual iceberg. This is because virtually all resulting data requires intensive *analytical* effort to confirm reliability and to extract from it meaning and content. For communication intelligence, intercept is just the beginning with a plurality of different analytical functions needed to interpret communications networks (formerly known as traffic analysis)[4] breaking enciphered communications through cryptanalysis, and then translating and interpreting often incomplete and context-contingent messages (where one frequently has no access to the embedding context). Much the same can be said of imagery and geospatial intelligence and the role and challenges to imagery analysis in trying to penetrate efforts at concealment or misdirection (see, e.g. Oxlee 1997 137-175). Indeed, imagery analysis is particularly notable for its susceptibility to cognitive biases of expectation and confirmation (Pirolli *et al* 2012). And, of course, human agents may not always know the significance of items they observe such as uniform markings or formations of specific vehicles but which can mean a great deal to the HUMINT operator or collator. Indeed, just evaluating the reliability of a source and the credibility of their reporting entails critical scrutiny and collation with additional sources that constitutes a very real analytic activity (Butler 2004 9-10) which may be as subject to analytic pitfalls as any strategic assessment (Moore 2006 20-22). As William Burrows has noted of one cautionary Cold War incident "however good the raw intelligence, it is still subject to interpretation by people who are susceptible to making erroneous conclusions" (Burrows 1988 286).

Analytic effort is also interwoven into the moments where intelligence interfaces with its intended end-users – policy-makers and operational commanders. In theory, requirements and priorities (R&P) are identified by and laid upon intelligence agencies by policy- and decision-making intelligence consumers.[5] As a number of commentators have complained, this is alarmingly difficult because policy consumers struggle with what is, essentially, an assortment of challenging *analytical* activities. They struggle to think beyond short term needs and urgencies, and are notoriously poor at articulating what they *don't* know and *do* need to know.[6] Direction, therefore, rests upon demanding analytical efforts at introspection, informational self-audit and open-minded forward thinking – the latter often depending on the very specialized strategic assessment activity of horizon scanning (see, e.g. Gustafson 2010). When consumer disengagement or incomprehension forces the tasking process onto agency managers then they find themselves with the unenviable job of assessing consumers (Hulnick 2006 959-960) – politicians or combat soldiers who may have very different interests and professional cultures from intelligence professionals – almost as they might

their intelligence targets. At the other end of the process, crafting nuanced assessment judgements into forms that may be communicated to those consumers introduces its own volatility into those judgements. Whether the problem is choosing between different expressions of estimative probability (Kent 1964) or putatively "sugar-coating" findings to ensure consumer receptiveness (Pillar 2006 22-23), dissemination often entails its own analytical effort with all of the associated risks implied.

Thus analysis suffuses virtually the entire intelligence process. Consequently there is a premium throughout the intelligence process on challenging assumptions, flexible reading of evidence and otherwise stepping outside conventional habits of thought and practice, in other words "thinking outside the box". Stephen Marrin has suggested that "analytic tradecraft has become, in essence, analytic doctrine" (Marrin 2011 30). However, as the authors of CIA's 2009 analytic tradecraft primer assert, the purpose of the techniques it covered is to "explore and challenge … analytical arguments and mind-sets" (Central Intelligence Agency 2009 5). This is hardly "doctrine" in sense employed by *Truppenführung* or DCDC. In a sense, this kind of thought is also of a different order from the usual tension between military doctrine's implicit comfort zone of practical prescriptions and more abstract conceptual frameworks at higher doctrinal levels. The analytic agility so essential to intelligence is just as vital at the working level collection and assessment coal-faces as at higher managerial and inter-agency organizational altitudes.

The function of doctrine is to provide a suite of mental models, to establish patterns and habits of both thought and practice and to articulate and inculcate not merely that which is said but that which is *believed*. Therefore doctrine is, in many respects, a box for thinking in. This creates the peculiar and difficult situation that an intelligence doctrine is a doctrine that aspires to be, and purports to be what might be described as a regularized framework for thinking about thinking outside one's own regularized frameworks. Therefore *intelligence doctrine has the self-contradictory task of trying to provide an intellectual box for thinking outside the box*. The result is a dilemma that has always dogged the very concept of an "intelligence *doctrine*" from its inception. It is, however, a dilemma that acquires a new urgency in a 21st Century strategic environment of agile, volatile and highly interconnected threats and challenges where there is a greater premium "out of the box" thinking than at any point since the evolution of the modern intelligence organization.

Principles vs Procedures

If the fundamental, endemic hazard of all doctrine writing is that doctrine may ossify into dogma, for higher level doctrine one of the specific risks must surely be principles ossifying into procedure. In an account of the deliberation and debates that surrounded the concept of the so-called intelligence cycle during the production of JDP 2-00, Davies, Gustafson and Rigden have argued that disputants in this long-running debate could be readily grouped into two camps. At the heart of their difference was a clash of expectations between those who looked to the intelligence cycle as a taxonomical or heuristic framework, and those seeking prescriptive procedures or institutionally descriptive fidelity. The former they labelled the "conceptualists", and the latter "proceduralists" (Davies *et* al 2013 60-62). In fact this division of views permeated just about every aspect of the discussion and development of the 2011 joint intelligence doctrine.

Indeed, intelligence doctrine itself has often seemed unable to make up its mind about what role it was supposed to play in the principle/procedure matter. For example, the 1999 first edition of the doctrine included sample pro formas for both a Joint Intelligence Estimate (JDCC 1999 1B-1-1B-5) and an intelligence collection plan (JDCC 1999 2A-1). The 2003 second edition added not only an even more elaborate (2-page fold-out) ISR Collection Plan (JDCC 2003 4B-1) and a seven page "Example of an Intelligence Input Into the Joint Estimate" with bullet points indicating the kinds of items that ought to be included in each cell of the table(JDCC 2003 2A-1 – 2A-7) but also step-by-step procedures (on additional fold-outs) for ISR management, a detailed ISR "order cycle" and a joint task force HQ campaign planning cycle (JDCC 2003 4C-1, 4D-1). The content of these sample documents were highly prescriptive as well as "time-bounded" in the sense that their indicative content was clearly geared to a range of contexts and even technical presuppositions that would prove rapidly overtaken by events in the subsequent decade. Thus the 1999 edition's sample joint intelligence input provided for politic, economic and social conditions only so far as they concerned "effect on adversary capabilities" and "effect on own force capabilities" (JDCC 1999 1B-1 – 1B-3) with no reference to non-belligerent third parties such as local populations or international- and non-governmental organizations. All of these had, in fact, figured significantly during the Balkan campaigns that had set the context for the first edition. And, of course, they would feature even more significantly in Iraq and Afghanistan as initially expeditionary campaigns settled down into long-running counter-insurgencies.

The 2003 model estimate proved even narrower, directing the J2 cell's into two highly structured parallel blocks on "Own Forces" and "Adversary" with "demographic factors" including "ethnic, religious and cultural considerations" appearing only as a subordinate bullet point in the latter (JDCC 2003 2A-4). Of course, the inventive intelligence officer might well find ways to "draft around" the

pro formas to capture items of importance for which boxes did not appear. But in operations already *in medias reis* with the increasing tempo increasingly characteristic of 21st century, the temptation to complete paperwork in an attentive but fundamentally tick-box fashion would turn gaps of documentary omission into errors of analytical commission. In many respects, therefore doctrines themselves set the stage for Michael Flynn's scathing appreciation of the quality of intelligence available to him and fellow commanders in Afghanistan (Flynn *et al* 2010 esp. 7-10).

 At the same time, the authors of the earlier intelligence doctrines made rhetorical efforts to try and distance themselves from the prescriptive clockwork of ossified proceduralism. One of the most long-contested yet somehow indispensable components of intelligence doctrine is the so-called "intelligence cycle". Much has been written about how the "direct-collect-process-disseminate" sequence of that cycle (sometimes referred to as the "ISTAR chain"(House of Commons Select Committee on Defence 2010 7-11) is an artificially rigid representation of the actual intelligence process. Indeed, one UK intelligence corps practitioner, Geraint Evans, has complained in the pages of this journal that the intelligence cycle engenders a rigid sequential series of steps (Evans 2009 28). Evans is hardly alone in decrying the rigidity and in accuracy of the "int cycle" (Davies *et al* 2013 61-62). And yet, *both* the first *and* second editions of the UK's intelligence doctrine went to some efforts to try and discourage a prescriptive reading of the content. The 1999 version warned its readers that the cycle's "tasks are discrete, but as information begins to flow... they will overlap and coincide so that they are being conducted concurrently and continuously rather than sequentially" (JDCC 1999 2-1). In 2003 this phrasing was repeated verbatim and even on the same page (JDCC 2003 2-1). The fact that Evans made his comments in 2009 is a good indication that this message had not been effectively received by readers of either doctrine.

Radically Rewriting?

From the outset, the JDP 2-00 drafting team chose to make the entire doctrine as explicitly and overtly conceptual and *not* procedural as possible. Pro formas were eschewed in their entirety with such detailed guidance to be relegated to a series of subordinate doctrine manuals covering requirements and priorities, counter-intelligence), human intelligence, signals intelligence, geospatial and imagery intelligence, material and personnel exploitation, measurement and signal intelligence, open source intelligence, all source intelligence and "cultural capability" (DCDC 2011 v). Most of these were to be "protectively marked" with security caveats – which had the side-effect of making it possible to publish the main UK intelligence as unclassified for the first time. When laying

down fundamentals of intelligence, earlier doctrines had emphasized the role and responsibility of intelligence in a command staff and provided some basic taxonomical concepts. (JDCC 1999 1-2 – 1-4; 2003 1-2 – 1-8). By contrast, the 3rd Edition front-loaded a discussion of analytic principles and pitfalls (including a vignette, or brief side-narrative, on "mirror imaging") in its equivalent chapter on the "Fundamentals of Intelligence" (DCDC 2011 2-2 – 2-3). This was followed by a section on "agility" concerned largely with flexibility and adaptability that actually ran before the standard exigencies of timeliness, security and so forth (DCDC 2011 2-4 – 2-5). Commanders and intelligence personnel to take an "adaptive approach" to the intelligence work, even illustrating the notion with a slightly surreal analogy with a jazz band. Thus, it is explained "the adaptive approach requires a flexible and more open system, where agencies work together in a way that "resembles jazz musicians improvising on a theme" to focus their efforts at the point of need (DCDC 2011 1-6)."[7] It would be hard to get further from dogmatic prescriptive procedure than a jazz band riffing.

This effort to develop a self-consciously conceptual, even abstract, encapsulation of intelligence practice was probably at its clearest in the (qualified) abandonment of the traditional intelligence cycle in favour of the "core functions of intelligence." In opening the intelligence cycle discussion the new doctrine warned that "the word *process* has connotations of working by rote without imagination, which is unacceptable in the contemporary operating environment", and yet the aversion of such rigidity should "not negate the requirement for a disciplined and systematic approach." Insofar as there was an intelligence "process" at all, "[i]magination and a spirit of collaboration are critical to success during the intelligence process" (DCDC 2011 3-1). This, like the jazz metaphor, was hardly typical doctrinal language.

At its simplest, the idea behind the core functions paradigm was to try to get away from representations of direction, collection, processing and dissemination as a series of steps in either a linear chain or what Michael Herman has described as a "cybernetic feedback cycle" (Herman 1996 293). The goal was to represent the intelligence process as a network of parallel functions in which all four 'core functions' interact with one another continuously and largely in real time. The traditional sequence thus became just one case amidst a larger number of possible intelligence dynamics. To avoid traditionalists feeling that their concerns had been ignored, the final published version explicitly showed the familiar cycle marked out amongst the various alternative connections. And, unsurprisingly, a version of the caveat from the 1999 edition to the effect that the functions overlap, coincide and run "concurrently rather than sequentially" was repeated yet again. At the centre, literally and figuratively, of the new model was "continuous review and evaluation" (DCDC 2011 3-4 – 3-5).

To reinforce the message that the core functions was intended as a conceptual rather than prescriptive notion, the paradigm was explicitly presented as an application of "process theory". Although extensively but heuristically used in the study of management and leadership, process theory has its roots in theoretical biology as an attempt to describe the dynamics and stability of living systems.[8] The core functions were mapped onto a description and diagram of process theory (DCDC 2011 3-2) in which direction served as the input, collection and processing as "transformation" with dissemination as the "output" and subsequent action of operational elements to effect or "outcome" of the process. (DCDC 2011 3-4). The intended message was that while the core functions described in essence what intelligence did, they were not intended to detail exactly how intelligence is to be done.

The JDP 2-00 drafting team further tried to encourage out-of-the-box thinking by situating the conventional DCPD framework and "core functions" paradigm along aside related or alternative doctrinal concepts of the intelligence process. And so an alternative version of the intelligence cycle drawn from a (still classified) Defence Intelligence Assessment Staff (DIAS) guide to professional practice amongst DIAS analysts was offered as well as the "core functions".[9] This version entails an eight-step intelligence cycle in which "processing" is broken out into "collation, evaluation, analysis, integration, interpretation", significantly outnumbering the remaining dissemination, direction and collection – the latter of which traditionally draws the lion's share of funding and attention (House of Commons Select Committee on Defence 2009 11). To help further locate the intelligence function and its support to joint action, the reader was provided with a vignette on the operational (rather than intelligence) concept of "F3EA" or "Find-Fix-Finish-Exploit-Analyse". Here the doctrine stressed the role of intelligence in "fixing" the target, exploiting the results of action taken against the target through opportunities such "interrogation or document examination" and the almost purely intelligence function of the "fusion" or exploitable information generated by an operation "with existing intelligence" (DCDC 2011 4-7).

To a very real degree, therefore, the new intelligence doctrine not merely sought to encourage and demonstrate agile and imaginative thinking but required and even expected it of the reader. The result was a far more complex and deeper text than is typical of any sphere of doctrinal thinking and writing. This in turn has to raise questions about the degree to which the intent to advocate and encourage flexible thinking may have had the unintended consequence of creating a less readable, accessible and comprehensible body of guidance – and whether that may have served to undermine the doctrine's own intended outcomes.

Prospects and Options

Since JDP 2-00 *Understanding and Intelligence Support to Joint Operations* was issued in autumn of 2011, Sir Stuart Peach has gone on to be Chief of Joint Force Command and then Chief of Defence Staff. It is far from clear, however, that the radically re-written joint intelligence doctrine that he sponsored has fared as impressively, or is likely to. As noted, the current third edition intentionally and systematically came down on the agility and out-of-the-box side of the intelligence doctrine dilemma. While it became the basis of UK joint service intelligence training and practice, and garnered substantial international interest, much of its innovative content may well have proven a conceptual bridge too far.

Shortly after the completion of JDP 2-00, NATO set about revising its Allied Joint Intelligence Doctrine (AJP 2) as well. Although the UK possessed the most recent intelligence doctrine in the Alliance, Germany was awarded the lead on AJP 2 via the Concepts and Development Branch of its Strategic Reconnaissance Command (NATO Standardization Office, hereafter NSO, 2016 1-4). Within a year, however, NATO had called on the services of a uniformed member of DCDC's JDP 2-00 drafting team to help craft AJP 2-00. The goal was now to base the new NATO doctrine on the recent British work. The resulting document drew extensively on JDP 2-00, with common chapter and section headings, and even extensive tracts of text replicated almost verbatim.

NATO doctrine must, however, work to something of a lowest common denominator of professional practice and tolerance for innovation and transformation amongst the 28 NATO member states and their armed forces. It must, therefore, take shape within a more intellectually conservative climate which leads, in turn, to more conservative doctrinal thinking. Consequently, most of the "radical" aspects of the British doctrine did not survive the transition. No comparable significance is given to analytic competencies, methods and hazards in the NATO doctrine. This is true even of the chapter on intelligence processing which is much more reminiscent of British doctrine of more than a decade ago. A few, cursory references to agility and collaborative adaptability appear as little more than afterthoughts (NSO 2016 2-3, 3-3). AJP 2 clings to an unreformed version of the traditional intelligence cycle with only the core functions reduced to "core stages" in that cycle (NSO 2016 4-1). Admittedly AJP 2 carries over the repeated warnings from older British doctrine that the components of the intelligence cycle constitute "a complex set of activities comprised of many cycles operating at different levels and speeds" which are "often conducted concurrently, rather than sequentially" (NSO 2016 4-1). It hardly seems likely that this afterthought of a caveat will be any more effective now than it has been in the past. Indeed, so mechanistic is AJP 2 that an entire chapter (NSO 2016 5-1 – 5-6) is given over purely to the bureaucratic niceties of Intelligence

Requirements and Collection Management (IR&CM). In short, NATO intelligence doctrine has firmly retreated to the myopic doctrinal comfort zone of prescription and procedure. In part, this reflects the limitations of allied joint doctrine but it is also an indication of the degree to which JDP 2-00's changes have moved it to the very fringes of the pale of doctrinal thinking on intelligence in a wider context.

Despite efforts to adapt, innovate and radically rethink ways out of the intelligence doctrine dilemma, the experience of JDP 2-00 offers little cause for confidence that the tensions between military doctrine and the ethos of intelligence have been significantly resolved. NATO's recent intelligence doctrine shows how little traction has been achieved in trying to move the balance more towards the values and interests of the intelligence profession in the wider Western defence world. Producing the 3rd Edition of the UK's joint intelligence doctrine was also a labour- and time-intensive exercise that was a challenge to sustain even prior to the intense austerity-induced cutbacks of Britain's 2010 Strategic Defence and Security Review. JDP 2-00 is now six years old and that austerity has continued. A new round of revision and updating is more than due after a half decade where the pace of change in intelligence has, if anything, accelerated. The need for continued innovation has not abated, yet the resources for such progress are more pressed than ever. The intelligence doctrine dilemma can only become a more significant concern and challenge for Britain's defence and military intelligence institutions in coming years.

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[1] Conversation with DCDC officials, November 2009.

[2] Conversation, JSCSC Shrivenham, Intermediate Command and Staff Course, November 2010.

[3] The concept of intelligence failure is, of course, a contested one but we shall use it in its broadest, conventional sense (as distinct e.g. from policy failure). See, e.g. Jervis, (2010 2-3), Betts (2007 187) and Dahl, (2013 20).

[4] Traffic analysis (TA) was a principal communications intelligence sub-discipline during the Second World War. Because of the broadening of materials covered under the idea of 'communications data' and emergence of network modelling tools such as i2 and Palantir and which can process a wide range of information besides traffic data (such as physical movements, institutional links and financial transactions) during the 1990s TA has been largely subsumed under methods like network and link analysis.

[5] In defence and military intelligence, the distinction between these two is signal – national intelligence chiefly serves politicians who make policy but defence and military intelligence largely serves Service commanders who implement policy decided by politicians but do not *make* it.

[6] See variously, Michael Herman *Intelligence Power in Peace and War* (Cambridge: Cambridge University Press, 1996) p.289; Loch Johnson (ed), *Strategic Intelligence: Understanding the Hidden Side of Government*, *Vol II* (Westport CT: Praeger, 2007), p. 275; John A. Gentry, "Intelligence Failure Reframed", *Political Science Quarterly*, Vol. 123, No. 2 (Summer, 2008), pp. 251-254;

[7] The jazz metaphor was attributed in a footnote on the same page to 'US Marine Corps Pamphlet *Countering Irregular Threats – a Comprehensive Approach* June 2006'.

[8] Typically attributed to Robert Rosen who articulated the approach during the late 1970s and early 1980s (1978, 1985). Atypically for the drafting practice displayed elsewhere in the document, the 3rd edition did not reference any sources for its use of process theory.

[9] *Principles of Defence Intelligence Assessment* or PODIA remains protectively marked although it is referenced in the Cabinet Office 'Jack Report', parts of which were declassified in 2010, see unpublished MA dissertation by Paul Brelsford (2010).