THE CHALLENGE OF CREATING AN ADAPTIVE BUNDESWEHR

*This article examines the capacity of the* *German Army to establish key conditions for successful tactical- and operational-level adaptation, innovation and emulation. In doing so, it explores the factors which stimulate and block adaptation, innovation and emulation. The article points to the need for accounts of German foreign, defence and security policy to pay greater attention to the intra-organisational barriers to effective policy implementation. Finally, it highlights avenues for future empirical and theoretical research on military change, especially the need for greater understanding of the role of learning processes in linking military adaptation in the field to wider organisational learning.*

**Introduction: The Importance of Military Adaptation, Emulation and Innovation**

The *Bundeswehr* faces two challenges which enhance the imperative of quick and effective adaptation, innovation and emulation[[1]](#endnote-1) at the tactical and operational levels of conflict.[[2]](#endnote-2) First, Germany’s contemporary security environment is characterised by a wide-range of unpredictable threats and the *Bundeswehr* is likely to be deployed in a variety of operational scenarios over the next decade (DWP 2016, 33-44). Current operational commitments attest to this diversity of tasks. They include, among other missions, defence engagement and the training of foreign security forces in Afghanistan, Mali and Somalia, participation in counter-ISIS operations in Syria and Iraq, as well as a key role in NATO’s Very High-Readiness Joint Task Force (VJTF) (BMVg 2016).

Second, despite recent increases in the German defence budget, it is unlikely that the *Bundeswehr* will be ideally equipped or structured to meet future operational challenges.[[3]](#endnote-3) Since the end of the Cold War the German armed forces have been in a constant reform process, yet procurement and force structures have repeatedly been found wanting in the face of operational requirements (Anonynous 2010, 163-97; 2014; Interview 1; Focus 2016; Scheidges and Sigm 2010). Hence, theadaptive, innovative and emulative capacity of the *Bundeswehr* at the tactical and operational levels of conflict will be critical to Germany’s successful contribution to CSDP, NATO and UN operations.

An effective military should be capable of adaptation, innovation and emulation at two organisational levels. First, troops in the field – the level of individuals and deployed units (i.e. platoons, companies, battalions or brigades) – should be capable of adapting to circumstances on the ground. Second, the organisations and institutions of the *Bundeswehr* in Germany which provide support to deployed contingents should be ableto recalibrate activities such as training, doctrine, or procurement to the demands of emerging and ongoing operations and of emulating the best-practice of alliance partners. However, adaptation, innovation and emulation at these organisational levels has received little attention scholarship on German defence policy, which concentrates largely on military-strategic and political-strategic decision-making.[[4]](#endnote-4)

Drawing upon original empirical research and the academic literature on organisational learning, this article explores the capacity of the German Army – which has been at the forefront of post-Cold War expeditionary deployments – to foster the central organisational behaviours which facilitate effective adaptation, innovation and emulation at the tactical and operational levels of conflict. The article focuses, in particular, on the vitality of Army’s culture of experimentation and creativity, which, it argues, is critical in establishing the foundations for effective adaptation, innovation and emulation at the individual, group and organisational levels.

The article contributes to scholarship on German foreign policy by shedding new empirical light on the barriers to the effective implementation of foreign policy. The academic literature on German foreign, defence and security policy has focussed on the ‘top-down’ impact of values and norms as a key driver of foreign, defence and security policy outputs, or the inter-institutional impediments to policy implementation.[[5]](#endnote-5) By uncovering the organisational conditions which facilitate military learning, it also contributes to scholarship on the ‘Practice-Turn’ in International Relations, especially the ‘problem-solving’ stream.[[6]](#endnote-6)

The article begins by examining the insights of the academic literature on organisational learning about the key organisational features which encourage the development of a culture of experimentation and creativity. The next section briefly outlines the perspectives of a variety of political science and IR theoretical frameworks about the sources of adaptation, innovation and emulation within militaries. The article proceeds by examining the extent to which the German Army exhibits the key dimensions of a culture of experimentation and creativity. In doing so, it explores the insights that theory sheds on the variables which facilitate and impede the establishment of a culture of experimentation and creativity. The conclusions focus on the implications of the article for future empirical and theoretical research on German foreign, defence and security policy and the sources of military change.

**Experimentation and Creativity: The Foundation for Successful Adaptation, Innovation and Emulation**

In recent years the academic literature on the sources of military change has begun to address the factors which facilitate the adaptation of deployed units on the ground.[[7]](#endnote-7) However, it provides little detail about the variables which facilitate the transmission of tacit learning at the individual and group levels to wider organisational adaptation or innovation. As Zahra and George (2002, 190) highlight, the development of a culture of experimentation and creativity is a critical dimension of adaptation and a smooth transmission belt between adaptation, innovation and emulation. It is an especially important enabler of the transformation of knowledge: the ability of an organisation to effectively combine existing organisational knowledge with newly acquired knowledge from inter- or intra-organisational learning. Hence this section outlines five critical building blocks for a culture of experimentation and creativity within military organisations.

First, it is crucial that the values of experimentation and creativity are embedded within an organisation’s strategy (Martins and Terblanche, 2003, 69; Pedler et al 1989, 4). Personnel should also develop of a clear understanding of these values and internalise them. Military organisations are traditionally associated with values such as discipline, obedience and loyalty (Kiszely 2013, 129). However, the ability of soldiers at lower-levels of command to think in critical manner and act independently is vital (Harkness and Hunzeker 2015, 6; Martins and Terblanche 2003, 69-70). Hence the application of mission command, which involves the delegation of a significant level of responsibility for decision-making to lower-levels of command, is essential (Dyson 2010, 31-54; Kiszely 2013, 129; Serena 2011, 17).

It is, therefore, crucial that officer education delivers a broad foundation for adaptation by exposing soldiers to the challenges of leadership across the range of possible conflict scenarios which they may face. Curriculum development should involve the input of individuals and organisations who are able to asses, as objectively as possible, the utility of courses in the context of contemporary and likely future challenges. Consequently, the role of external academics in the delivery and design of courses is imperative and reinforces the importance of involving internal military working groups and think-tanks in decision-making about curriculum design.

Second, an organisation should not only provide sufficient time for its personnel to be creative, but must also reward creativity through promotion processes (Edmonson 1999, 356; Martins and Terblanche 2003, 71-72). Hence it is important that operational tempo is managed as effectively as possible to ensure that troops have adequate time, during and after deployment, to reflect on the implications of their experiences for their areas of expertise (Pedler et al 1989, 7). Furthermore, the military’s promotion system must reward experimentation and risk-taking (Byrne and Bannister 2013, 83-84). Third, it is important that a military organisation facilitates feedback from personnel (Martins and Terblanche 2003, 72; Pedler et al 1989, 7). Deployed soldiers and officers should be encouraged to report both problems and successful instances of adaptation to their superiors on the ground and to Army/Joint Commands.

Fourth, inter-organisational learning is essential in providing the stimulus for exploring new knowledge (Ahuja and Lampert 2001, 526-37; Coticchia and Moro 2016, 710-12; Pedler et al 1989, 7). Key dimensions of inter-organisational learning include the use of defence attaches in embassies and liaison officers embedded within the warfare centres of alliance partners and transnational military networks, to gather best-practice. Crucially, formal think-tanks and working groups within a military also deliver a valuable opportunity to introduce fresh ideas, especially via inter-organisational learning (Jensen 2016, 214). The inclusion of liaison officers from alliance partners, as well as academic visitors within such think-tanks can enhance the quality of critical engagement with new ideas.

Finally, the free flow of knowledge from inter and intra-organisational learning, especially knowledge which challenges existing orthodoxies, will be stymied without the embeddedness of a learning culture within an organisation’s senior leadership (Edmonson 1999, 356). The role of leaders in undertaking activities such as the coaching, counselling and mentoring of subordinates is especially important in enabling the socialisation of tacit knowledge (Lis 2014, 62-3). The senior leadership should also show a commitment to open internal intellectual debate within the military about challenges at the tactical and operational levels and to constructive external criticism (Harkness and Hunzeker 2015, 7; Kiszely 2013, 129). This imperative reinforces the importance of military-wide publications as a means to facilitate free and critical internal debate, as well as engagement with academics and partners in the Comprehensive Approach (Ledwidge 2011, 251-55; Mackay 2013, 261).

**The Facilitators and Impediments to Adaptation, Innovation and Emulation**

The literature on the sources of military change offers a variety of perspectives on the factors which help to foster tactical and operational-level experimentation and creativity. Neorealism highlights the importance of identifying and implementing best-practice in military affairs (Resende-Santos 2007). It posits that when faced with a threatening security environment – and especially an immediate threat of defeat – militaries are more likely to adapt and to explore innovation and/or emulation (Waltz 1979, 127). While Neorealism sheds important light on the systemic dynamics underpinning adaptation, innovation and emulation, history provides numerous examples of states which have failed to follow the imperatives of the balance of threat in a timely manner (Dyson 2010, 119-20; Schweller, 2004). Hence, in order to understand the variables which affect the predisposition of a military to tactical and operational level experimentation and creativity, we must also address the impact of domestic-level variables endogenous and exogenous to the military. Three broad schools of thought exist about the nature of domestic-level variables in military change.

First, the organisational politics model posits that militaries, as organisations which must perform complex tasks and coordinate the actions a large number of individuals, are bound by standard operating routines which lead to a tendency to promote the status quo (Allison 1971, 67-68). The approach also emphasises the impact of individuals and socio-psychological factors on decision-making (Posen 1984, 42). Posen’s (1984) analysis of doctrinal change in Britain and France in the inter-war era forms the more prominent account of the impact of organisational politics on military change. He finds that experimentation and creativity do not come from the military itself. Rather Posen (1984) posits that civilian intervention, combined with the threat of defeat, forms the key variable in understanding the readiness to consider new operating concepts and doctrine.

The second approach to the sources of military change is the bureaucratic politics model, which posits that military organisations are characterised by a high-level of disagreement within and between the individual services and their specialised branches, who are focused on maximising their budget share and autonomy (Allison 1971, 323-24; Rosen 1988; 1991). Military policy is largely the result of the bargaining processes between the services and/or their specialised branches, who compete over contrasting visions of doctrine and operational concepts which will maximise their organisation’s budget share and autonomy (Welch 1992, 117-18).

This approach has been applied, most notably, by Rosen (1988; 1991), who argues that military change is dependent upon the role of respected senior officers in developing and implementing a plan to gain control of their service and create greater space for experimentation. However, the bureaucratic politics model is pessimistic about the propensity of the military leadership to facilitate a persistent culture of experimentation and creativity. The development of a culture of experimentation and creativity that welcomes a wide-range of views and constructively critical debate about existing orthodoxies poses a potential threat to autonomy and budget share. Hence, experimentation and creativity is likely to be confined only to debates relevant to the new, emerging orthodoxy.

The academic literature on the role of culture in military change provides insight into the role of cultural factors both within and outside the military. Scholarship on strategic culture points to the impact of societally-embedded understandings about the appropriate role of force as a tool of foreign policy and about the role of the military professional (Bloomfield 2012; Gray 1999; Johnston 1995). These deeply-rooted values and norms can have an importantimpact on a culture of experimentation and creativity by determining the kind of learning that is deemed acceptable by society and its political leadership. The literature on organisational culture, on the other hand, draws attention to the impact of the specific cultural features of the individual services and their specialised branches (King 2010; Long 2016). It also provides an opportunity to explore the impact of culture, especially organisationally-embedded understandings of the role of the military professional, on the ‘vertical’ and ‘horizontal’ flow of knowledge within a military (De Long and Fahey 2000, 117-18).

The following section analyses the development of a culture of experimentation and creativity within the German Army during the post-Cold War era. In doing so, it also examines the variables which have supported, or undermined, the establishment of the key enablers of tactical- and operational-level experimentation and creativity.

**Evaluating the German Army’s Culture of Experimentation and Creativity**

During the post-Cold War era, the Army has faced growing operational pressures. In 1994, following the German Federal Constitutional Court’s ruling permitting ‘out of area’ operations, 1,700 German troops were deployed in NATO and UN operations (Wiesner 2018). The number of deployed *Bundeswehr* personnel reached a peak in 2004, when some 8,970 troops were deployed in NATO, EU and UN missions and, in 2014, this number stood at 5,331 (Wiesner 2018). While the majority of these military operations have been at the lower-end of the conflict spectrum, German participation in ISAF did involve sustained high-intensity combat in the Kundus region, during German leadership of Regional Command North (2006-14). The following section will highlight that, as increasing operational pressures fostered some improvements in the *Bundeswehr’s* culture of experimentation and creativity. Nevertheless, a number of domestic-level variables, including bureaucratic politics as well as strategic and organisational culture have conspired to restrict the *Bundeswehr’s* ability to adapt, innovate and emulate.

*The embeddedness of experimentation and creativity in doctrine: strategic culture and the challenge of bridging education and practice*

The values of experimentation and creativity at the tactical and operational levels are deeply- embedded within German military doctrine. The principle of mission command was developed during the era of the Prussian General Staff and remains firmly rooted within Army doctrine (Dyson 2010, 251). Experimentation, creativity, autonomy and flexibility are given further institutional support through the principle of ‘Inner Leadership’. Developed in the immediate aftermath of WW2 by Colonel Wolf Graf von Baudissin, the principle complements mission command by emphasising the responsibility of soldiers to consider the ethical and moral implications of orders from superiors (Naumann 2011, 214). Both mission command and inner leadership stress the importance of shared responsibility for tactical, operational and strategic level outcomes between command levels and point to the centrality of developing trust across the military hierarchy.[[8]](#endnote-8)

The principle of mission command receives significant attention in the training and education of German soldiers (Interview 2). However, the application of mission command in the field has been undermined by German strategic culture, which has, in turn, exerted important effects on the *Bundeswehr’s* organisational culture. During the post-Cold War era, German strategic culture has been characterised by a deeply-rooted reticence to use force as a tool of foreign policy (Dalgaard-Nielsen 2006; Hilpert 2014; Longhurst 2003). Successive defence ministers have sought out roles as ‘normative entrepreneurs’ to expand the range of circumstances under which the expeditionary deployment of the *Bundeswehr* is deemed acceptable by public opinion (Dyson 2007; Longhurst 2003; Hilpert 2014).

However, the core executive and Parliamentary Defence Committee, which enjoys significant powers over tactical level issues such as rules of engagement, remain wary of being perceived by the German public to have lost control over military activity. Hence, senior commanders in post-Cold War operations have tended to adopt a very hierarchical approach to command and control (Interviews 3, 4). Senior officers’ fear of stepping out of line with the often unrealistic expectations of the political leadership of the Federal Defence Ministry (BMVg) and Parliament has stymied the willingness of individuals and units on the ground to experiment with new approaches at the tactical level (Interviews 3, 4). This problem has been especially prevalent in more controversial *Bundeswehr* deployments, such as ISAF. Hence despite the growing threat of defeat in Kundus after 2006, German strategic culture placed limitations on the application of mission command (Interview 5). As the following sub-section highlights, mission command has also been undermined by deficits in officer education.

*The failure of officer education to deliver an adaptive foundation: the impact of organisational culture and bureaucratic politics*

Curriculum design in German officer education has struggled to provide officers with a sufficient foundation for the range of operational challenges that they have faced during the post-Cold War era. During the Cold War Army officer education placed emphasis upon the development of officers’ ability to undertake high-intensity manoeuver warfare (Sangar 2014). However, during the 1990s and early 2000s, education and foundational training began to focus more intensively on the conduct of stabilisation operations in permissive environments (Interview 6). Rather than provide a basis for a broad range of possible operational scenarios across the conflict spectrum, education and training was increasingly tailored to the operational scenarios that the *Bundeswehr* encountered in the Balkans during 1990s peacekeeping operations (Interview 6). As a consequence, many younger German officers lack the intellectual basis to undertake operational design for high-intensity manoeuver warfare and are struggling with the demands of preparing for German involvement in the VJTF (Interview 6).

The BLS (intermediate staff course) and LGAN (general staff course) at the *Bundeswehr* Leadership Academy are also undermined by the ability of the upper echelons of the military hierarchy to exert excessive influence over curriculum design (Interviews 7, 8). Unlike many of its NATO counterparts, such as the British Joint Services Command and Staff College, the Leadership Academy does not include the systematic participation of external academics in curriculum design and delivery. This lack of external input was, to an extent, compensated for by the role of the Working Group on Joint and Combined Operations (AG JACOP) which was situated alongside the Leadership Academy and acted as an important catalyst for inter-organisational learning (Interview 9).

Established in 1996 and dissolved in 2013, the AG JACOP was an internal doctrinal think-tank. Its role was to take responsibility for developing higher-level tactical Army doctrine and to represent the Army in debates about joint doctrine. It acted as a home for allied liaison officers who would comment on draft German doctrine (Dyson 2012, 39-40). AG JACOP also enjoyed a rich network of contacts within the warfare development centres of NATO member states (Dyson 2012, 39-40; Interview 9). It undertook activities to promote debate about the development of tactical and operational level thinking within the *Bundeswehr* (Interview 9).

AG JACOP played an important role in improving the relevance of officer education during ISAF. As the security situation in northern Afghanistan deteriorated following 2006, the political sensitivities of German strategic culture precluded an open recognition by policy makers that German soldiers were facing an insurgency. The development of an explicit German Counterinsurgency (COIN) doctrine was opposed by the political leadership of the BMVg and military hierarchy (Dyson 2012). The unwillingness of the core executive and Parliament to recognise the changing nature of the deployment persisted until the appointment of Karl-Theodor zu Guttenberg in 2009 and the appointment of General Bruno Kasdorf as Army Chief of Staff in September 2012 (Interview 9). Hence it took until 2013 – only months before the withdrawal of German troops – for commanders to be issued with COIN guidance.

However, despite the opposition of many senior officers to COIN, education began to integrate key COIN principles from 2009 onwards. The adaptation of education was, in large part, a result of the bi-monthly seminars that AG JACOP organised with personnel involved in curriculum development at the Officer Training Academy in Dresden and on the BLS and LGAN (Interview 9). These meetings provided an opportunity to disseminate key ideas from alliance partner COIN doctrines and working papers, helping curriculum development keep pace with the challenges soldiers were facing in the field (Interview 9).

AG JACOP’s exposure to inter-organisational learning also improved the working group’s own culture of experimentation and creativity. This openness to new thinking helped AG JACOP to act as an intellectual motor for new tactical and operational concepts. Yet, it was a motor that struggled to achieve traction more widely within the armed forces, due to the impact of the *Bundeswehr’s ‘*layered’ organisational culture (Sangar 2014, 232).

During ISAF the Army was characterised by three competing visions of the role of the military professional.[[9]](#endnote-9) Soldiers trained during the Cold War, the so-called ‘Training Generation’, understood their role as the application of high-intensity force in state-on-state warfare (Seiffert 2014, 329-32). The Stabilisation Generation emerged during the 1990s following *Bundeswehr* deployments in the former-Yugoslavia. It was highly-reticent to use high-intensity force focused on the provision of security within a highly-permissive environment (Interview 3). Finally, following the deterioration of the security situation in Kundus from 2006 it is also possible to identify the emergence of ‘*Generation Einsatz*’ (the Deployment Generation) (Seiffert 2014, 329-32). Some members *Generation Einsatz* display a broader understanding of the role of the military professional and accept the need for the *Bundeswehr* to take an active role in economic and political development in conflict scenarios such as COIN (Interview 7). However, many are distinguishable from the Training Generation and Stabilisation Generation only by their readiness to use high-intensity force, accept casualties and a high-level of personal risk (Interview 7).

This layered organisational culture created a very difficult environment for AG JACOP to advocate new ideas. It also placed limits on its own internal culture of experimentation and creativity. Some of the senior members of AG JACOP were members of the ‘Training Generation’ and were therefore not willing to promote thinking about COIN, which threatened to shift the role of the military professional toward development tasks (Interview 9).

These different understandings of military professionalism are reinforced by their embeddedness within the organisational culture of sub-branches of the armed forces. For example, paratroopers rely on a military tradition of high-intensity conflict, such as the 1941 Battle of Crete, which is highly-resistant to change (Interview 8). As a consequence, paratroopers deployed in ISAF often adopted a highly-offensive approach which often proved counterproductive by failing to gain the support of the local-population (Interviews 7, 8).

However, changes to the progression of officer education in 2006 have gradually begun to reduce the impact of specialised sub-branches on officers’ professional identity. Between 1985 and 2006 an officer would be placed with his battalion from the beginning of his training and education, with specialised sub-branch training schools taking a key role (Interview 8). An officer would spend six years in education and training from entry into the armed forces, to the completion of university studies. Hence, upon completion of his education, an officer developed a very distinct sub-branch identity (Interview 8).

As the post-Cold War era progressed and the *Bundeswehr* entered into a constant reform process in the context of a shifting international security environment, it became increasingly difficult to determine personnel requirements six years in advance. Consequently, in 2006, officers were only informed of their final ‘cap badge’ after four years of education (Interview 8). The effect of these changes on the organisational culture of specialised sub-branches is now beginning to be felt and includes a weaker sense of sub-branch identity. Officers are no longer inculcated in the tradition of a sub-branch from the early stages of their career. Hence, younger officers now graduating at the level of major increasingly have a more open-minded understanding of the role of the military professional (Interview 8).

However, these changes to officer identity are coincidental and are not part of a systematic attempt to improve the Army’s culture of experimentation and creativity. Despite the flaws of the AG JACOP, its 2013 abolition and the relocation of its doctrinal responsibilities to the Army Office in Cologne has removed an important source of disruptive thought within officer education. The lack of intellectual checks and balances in officer education has allowed the BLS and LGAN to be unduly influenced by organisational culture.

For example, in 2015 the new Army Chief-of-Staff Lieutenant-General Joerg Vollmer decreed that officer education, in the context of the threat posed by Russia to the Eastern members of NATO, should focus almost exclusively on high-intensity warfare. He expressed the view that soldiers who are trained for high-intensity warfare should easily be capable of ‘stepping down’ to stabilisation and COIN, thereby displaying a very limited grasp of the complex skills necessary for such operations (Interviews 7, 8). As a consequence, education now contains a much reduced focus on stabilisation and delivers minimal understanding of COIN (Interviews 7, 8). Such dogmatism in curriculum development runs the risk that hard-won lessons learned during post-Cold War stabilisation and COIN operations will be forgotten.

Lieutenant-General Vollmer’s decision to place high-intensity warfare at the centre of officer education is rooted in his understanding of the professional role conception of the soldier which derives from his experiences of Cold War training and officer education (Interviews 5, 7, 8). However, the role of bureaucratic politics must also be recognised: a professional role conception rooted in ‘traditional’ soldiering and territorial/alliance defence necessitates significant financial investment in procurement and personnel numbers.

*Establishing time and reward for experimentation and creativity*

Officer training and education emphasises the importance of commanders and subordinates taking the time to discuss areas of activity which went well or badly on operation (Interview 2). Despite the high operational tempo for units on the ground during ISAF, this approach was generally implemented very well. Combined leader and force pre-deployment training helped to establish a strong degree of trust between officers and their subordinates at the company level (Interviews 7, 8). Company commanders also played an important role in mentoring and counselling subordinates, which fostered the willingness to share information and knowledge at the company level (Interviews 7, 8).

Crucially, since 2006 the *Bundeswehr* Operations Command (the organisation mandated with developing and supporting joint deployments) has developed a formal ‘lessons-learned process’ (LL) (Interview 5). Its establishment and development was driven by the threat of defeat in Kundus and recognition within the military of the need to speed up the transmission belt between adaptation in the field and changes to the activities of the institutional Army (Interview 5). Supported by a cross-service IT system and substantial LL branches within the services, LL is dedicated to identifying and disseminating emerging best-practices in the field and to assessing and addressing the implications of operational experiences for the activities of the institutional Army. It has established a rich set of tools for acquiring knowledge from units in the field, managing knowledge and disseminating knowledge (Interview 5).[[10]](#endnote-10) In short, the establishment and development of LL reflects the insights of neo-realism: that militaries under intense operational pressure will seek to improve their capacity to identify and implement military best-practice. However, the ability of LL to enhance military effectiveness has been reduced by a variety of domestic-level variables, both endogenous and exogenous to the military.

For example, from 2010 onwards, each contingent deployed overseas participated in a two-day Mission Exploitation Symposium (MXS) organised by the Army Lessons Branch. Yet, the lack of support from the senior leadership for a culture of experimentation and creativity undermined the ability of the MXS to act as a forum for communicating new ideas. While MXS have been very successful in providing opportunities to communicate successful adaptation and innovation at the lower-tactical levels, such as TTP or changes to procurement, they have been less successful in tackling higher-tactical and operational level problems (Interview 5). For example, during ISAF, issues such as the utility of operational design, the overall balance of kinetic/non-kinetic activities in training and higher-tactical and COIN doctrine development, were not openly discussed at the MXS (Interview 5). This relative silence about higher-tactical and operational level issues was especially surprising given that many officers had been learning a great deal about COIN from working with US troops in Kundus (Interviews 7, 8).

The impact of strategic and organisational culture on senior officer’s conception of their professional role undoubtedly played an important contributory role in undermining their receptiveness to higher-tactical and operational level change. However, they have combined with the socio-psychological variables identified by organisational politics model to create an environment which stymies open debate about tactical and operational level concepts. Senior officers’ fear of a loss of personal reputation in front of their civilian and military superiors does not permit the open constructive criticism of areas of activity which fall within their competence (Interviews 5, 11).

Such defensive reasoning has been reinforced by promotion processes which tend to reward officers who support the status quo (Interview 10). For example, prominent and vocal members of *Generation Einsatz* who have sought to promote broader societal debate about civil-military relations in Germany following the experience of ISAF are largely viewed as troublemakers by the Army hierarchy and their career progression has suffered (Interviews 7, 8). Hence a culture of blame characterised by a fear of being seen to make mistakes is prevalent within the military hierarchy (Colonel and above) (Interviews 3, 5, 11).

The culture of blame is reflected in the failure of key *Bundeswehr* publications to tackle contentious issues arising from operational experiences*.* The Security Policy Reader provides opportunities for external academics to reflect on broader trends in international security and the Military History Journal of the *Bundeswehr* Centre for Military History and the Social Sciences (ZMSBw) offers interesting analysis of historical events. The academic rigour of these two publications is high. However, they do not reflect on the implications of their historical or contemporary trends for current higher-tactical and operational-level concepts, training, education or doctrine (Sangar 2014, 195). Critical engagement with *Bundeswehr* and Army practice can be found within officer’s dissertations on the General Staff Course. Yet, only a limited number of dissertations reflect on the implications of history, or experiences of alliance partners for contemporary operations (Sangar 2014, 195). In addition, once published they gather dust at the Leadership Academy and are not disseminated more widely within the *Bundeswehr* (Interview 7).

*Inter-organisational learning*

Following the abolition of AG JACOP in 2013 formal responsibility for tactical doctrine development was passed to the Army Concepts and Capabilities Development Centre, while the *Bundeswehr* Office for Defence Planning has become the lead organisation for developing operational and joint doctrine. Both organisations enjoy an intensive exchange of ideas about doctrine with alliance partners, not least as they are presently in the process of ‘critical downloading’ of NATO doctrine across all areas of Army activity, in order to enhance inter-operability alliance partners (Interviews 9, 12). German doctrine writers from both organisations are undertaking scrutiny of NATO and *Bundeswehr* doctrine. Where necessary, they are adding caveats for domestic use, or ideally ‘uploading’ these caveats to NATO doctrine via NATO working groups (Interviews 9, 12).

Inter-organisational learning also takes place through a number of informal and formal networks at the Army working level. Allied liaison officers are present across a variety of areas of tactical and operational level activity and form important conduits for new ideas from alliance partners. German liaison officers overseas have also acted as a vital means to investigate emerging best-practice in Army activity at the tactical and operational levels and to arrange visits to discuss specific areas of activity (Interview 13). Furthermore, German staff officers often attend NATO and alliance partner (especially US) workshops in their field of expertise. In addition, the LL process has acted as a catalyst for inter-organisational learning through its engagement with German and allied liaison officers and the attendance of LL staff officers at US and NATO LL conferences and workshops (Interview 13).

However, the ability of Army personnel to make full use of inter-organisational learning opportunities is limited, first of all, by time-constraints. The capacity of staff officers, both within and outside the formal LL process, to follow up issues they encounter is constrained by the number of competing demands on their time (Interviews 13, 14). Furthermore, the rotation of staff officers between positions every two to three years limits their ability to initiate and see-through changes within their areas of activity (Interview 14).

Finally, many staff officers and company commanders returned from ISAF with new ideas for areas of activity where they had held responsibility and sought to pursue improvements (Interviews 6, 7, 8). However, on numerous occasions they found their initiatives frustrated by superiors for spurious reasons. When new ideas challenge strategic culture, organisational culture, or pose a threat to the reputation of senior officers, they are often ignored, or at worst, wilfully blocked. Recent examples of areas of activity where these variables have blocked innovation include the updating of training for intelligence officers and the guidelines for the training of foreign security forces (Interviews 5, 6, 11).

**Conclusions: The Need to Further Explore the Transmission Belt Linking Adaptation, Innovation and Emulation**

This article has demonstrated that the mounting caseload of post-Cold War expeditionary operations and in particular, the threat of defeat during ISAF, led to the adoption of some areas of best-practice in experimentation and creativity, especially at the tactical level. However, the article has also highlighted a number of continued deficiencies in experimentation and creativity, in particular at the higher-tactical and operational levels. These deficits derive form a wide-range of variables, including strategic culture, organisational culture, organisational politics and bureaucratic politics.[[11]](#endnote-11) Variables endogenous to the military therefore exert an important impact on the effective implementation of foreign policy goals. The literature on German foreign, defence and security policy has tended to focus on the impact of norms and values embedded at the political-strategic level and adopts a largely ‘top-down’ approach to understanding policy change and foreign policy outputs.[[12]](#endnote-12) Hence the article points to the broader need fora shift in studies of German foreign, defence and security policy toward approaches which open up the ‘black box’ of policy implementation.

If Germany is to realise its ambitions of playing a more active role in international security, the failure to learn and adapt at the tactical and operational levels of military activity will need to be urgently addressed. This requirement throws into sharp relief the broader need further research on the sources of military learning. The academic literature on defence and military change has long-focused on military innovation and emulation as a ‘top-down’ process led by military and civilian hierarchies (Catignani 2012, 516; Grissom 2006, 908). It is only beginning to explore the dynamics which the affect the ability of defence establishments and militaries to adapt, innovate and emulate from the ‘bottom-up’ (Dyson, 2019; Catignani 2014; Coticchia and Moro 2016; Farrell 2010; Foley et al 2011; Marcus 2015). However, further research is required to understand the transmission belt that links adaptation in the field and wider organisational adaptation, innovation and emulation.

In particular, scholarship is necessary to investigate the role and potential of LL, which have proliferated within NATO states from the early 2000s in the context of developments in information technology and conceptual advances in organisational learning arising from the corporate world. Further empirical light urgently needs to be shed on the organisational activities and processes which support intra- and inter-organisational military learning.[[13]](#endnote-13) Such research will complement the rapidly-growing academic literature on organisational learning and LL in other public sector organisations, especially those involved in highly-dynamic environments, for example, police forces, fire and rescue services and health services (Garlatti et al 2014; Piening 2013, 210).

Moreover, theoretical investigation is required into the variables which facilitate and impede the establishment and development of effective military learning processes, both during times of conflict and peace (Downie 1998, 243; Catignani 2014, 60). This research should focus, in particular, on civil-military relations in defence planning and the extent to which the emergence of the behaviours which facilitate ‘bottom-up’ adaptation is in itself a result of ‘top-down’ leadership by civilian or military hierarchies.

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**Interviews**

Interview 1: One interview partner, former Lessons Learned Staff Officer, Cologne, 28 June 2016.

Interview 2: One interview partner, Army Training Command, Leipzig, 15 April 2016.

Interview 3: One interview partner, *Bundeswehr* Operations Command, Operations Coordination Group Afghanistan, Potsdam, 3 June 2016.

Interview 4: One interview partner, former Lessons Learned Staff Officer, Cologne, 28 June 2016.

Interview 5: Two interview partners, Army Command, Department for Deployment, Military Intelligence and Training, Sub-Department Deployment, Lessons Learned Branch, Strausberg, 2 February 2016.

Interview 6: One interview partner, former Lessons Learned Staff Officer, Veitshoechheim Barracks, Wuerzberg, 11 July 2016.

Interview 7: Two interview partners, junior officers (Company Commander level) deployed during ISAF, Leadership Academy, Hamburg, 19 October 2016.

Interview 8: One interview partner, former Company Commander, Task Force Kundus, Leadership Academy, Hamburg, 15 August 2017.

Interview 9: One interview partner, *Bundeswehr* Office for Defence Planning, Department for Interoperability, Koepenick, 4 May 2016.

Interview 10: Email correspondence with interview partner, Army Command, Department for Deployment, Military Intelligence and Training, Sub-Department Deployment, Lessons Learned Branch, Strausberg, 2 November 2017.

Interview 11: One interview partner, Army Command, Department for Deployment, Military Intelligence and Training, Sub-Department Deployment, Lessons Learned Branch, Strausberg, 19 April 2016.

Interview 12: Four interview partners, Office for Army Development, Department 1 (2) Leadership Principles, Cologne, 27 April 2016.

Interview 13: One interview partner, *Bundeswehr* Operations Command, Division J357, Department for Lessons Learned, Potsdam, 13 April 2016.

Interview 14: Two interview partners, *Bundeswehr* Office for Defence Planning, Department for Interoperability, Koepenick, 4 May 2016.

**Abbreviations**

AG JACOP Working Group on Joint and Combined Operations

BLS Intermediate Staff Course

BMVg Federal German Ministry of Defence

COIN Counterinsurgency

ISAF International Security Assistance Force

LGAN General Staff Course

LL Lessons-learned process

MXS Mission Exploitation Symposium

VJTF NATO Very High-Readiness Joint Task Force

ZMSBw *Bundeswehr* Centre for Military History and the Social Sciences

1. Adaptation and innovation exist on a continuum, from small-scale alterations to tactics, techniques and procedures, through to far-reaching change to an area or areas of military activity that is formally codified in new organisational structures, doctrine or technology (Farrell 2010, 569). [↑](#endnote-ref-1)
2. The tactical level of conflict refers to the individual battles and engagements in the field; the operational level of conflict refers to activities which relate to the overall planning and design of a military campaign or operations, while the strategic level of conflict addresses the distribution of national resources to achieve political goals and strategic objectives. [↑](#endnote-ref-2)
3. In 2015 the decision was taken to increase the German defence budget by 6.2 percent by 2020 (Reuters 2015). [↑](#endnote-ref-3)
4. See, for example, Dalgaard Nielsen 2006; Longhurst 2003 and Hilpert 2014. Exceptions include Muench (2015), Sangar (2014) and Wiesner (2013a, 2013b). [↑](#endnote-ref-4)
5. On German defence and security policy see, for example, Chappell 2012, Dalgaard Nielsen (2006), Longhurst (2003), Hilpert (2014), Crawford and Olsen (2017, 601). On the inter-institutional impediments to effective foreign policy implementation, see Bulmer and Paterson (2013, 1397-1400). [↑](#endnote-ref-5)
6. As Bueger and Gadiner (2014, 5) note, the problem-solving stream of the practice-turn in IR, seeks to ‘…get closer to the actions and lifeworlds of the practitioners who do international relations, to produce knowledge which is of relevance beyond the immediate group of peers and might even address societal concerns or

contribute to crafting better policies’. On the problem solving stream, see also Cornut (2015, 18-19). [↑](#endnote-ref-6)
7. See, for example, the scholarship of Catignani (2012); Dyson (2012); Farrell (2010), Farrell et al (2013); Serena (2011). [↑](#endnote-ref-7)
8. Inner leadership: Leadership Development and Civic Education’, Federal Ministry of Defence, 28 January 2008, pt.613 [↑](#endnote-ref-8)
9. For further detail on the *Bundeswehr’s* organisational culture and its impact on individual, group and organisational learning at the tactical and operational levels, see Dyson (2019). [↑](#endnote-ref-9)
10. For further detail on the establishment, development and performance of the German LL process please see Dyson (2019). [↑](#endnote-ref-10)
11. The article points to the potential theoretical purchase of Neoclassical Realism, which posits that while the threat of defeat is a key driver of the adoption of successful military best-practice, domestic level variables endogenous and exogenous to the military play an intervening role in slowing this adoption (DysonDyson 2010). They may also exert a longer-term effect on defence and security policy, in which case one should expect to see a state losing relative power (so called ‘system punishment) (Rathburn 2008, 311). [↑](#endnote-ref-11)
12. Such accounts include the scholarship of Chappell (2012), Crawford and Olsen (2017), Dalgaard Nielsen (2006), Longhurst (2003) and Hilpert (2014). [↑](#endnote-ref-12)
13. For a more in-depth investigation of this research agenda, see Dyson (2019). [↑](#endnote-ref-13)