

**German Army Command and Control in the Late Nineteenth and
Early Twentieth Centuries**

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Introduction

Studying German army command and control is complicated by two factors. First, historians tend to look at German practice for the whole period from about 1860 to 1945. What happened in the Wars of Unification or in the Second World War is assumed to be the same as what happened in the First World War. Practice from one period of the First World War is assumed to apply to the whole war. It is frequently assumed too that practice at one level of command applied to all levels. Second, at the end of the twentieth century the American and other armed forces drew heavily on what were perceived to be successful German command techniques, especially *Auftragstaktik* or mission command, to support modern doctrinal argument: has this distorted our view of what the Germans actually did?

This paper looks at the reality of German command and control from the Wars of Unification to the outbreak of the First World War. It takes one particular modern description of command and control as an illustration of the concepts as we now understand them. It then analyses German definitions of different command levels and their function in combat, their vocabulary of command and, related to this, the concept of mission command. This leads into a section on how Helmuth von Moltke the Elder and Alfred Graf von Schlieffen, the two dominant German military figures of the 1870-1914 period, thought about command. Much of this thinking was codified in instructions for senior commanders, which the paper describes in some detail. Finally it draws conclusions, including on how German concepts of command relate to modern ideas.

Definitions and concepts

In their book *Command and Control on the Western Front*, Dan Todman and Gary Sheffield define ‘command’ as what a commander does, and ‘control’ as how he does it. Examining control further, they refer to ‘the structures and systems, formal and informal, defined and less tangible, through which command is exercised’. They point out that command and control ‘are, of course, intimately related, and it is as well to accept that the boundary between the two is blurred so that they may

become indistinguishable'.¹ Martin van Creveld, on whom they were basing their definition, commented that the responsibilities of command were commonly divided into two parts:

First, command must arrange and co-ordinate everything an army needs to exist – its food supply, its sanitary service, its system of justice, and so on. Second, command enables the army to carry out its proper mission, which is to inflict the maximum amount of death and destruction on the enemy within the shortest possible period of time and at minimum loss to itself; to this part of command belong, for example, the gathering of intelligence and the planning and monitoring of operations.²

In his description of what command does, Creveld includes in its tasks: the gathering of information on the state of one's own forces as well as on the enemy; handling this information and producing an estimate of the situation from it; setting objectives and ways of achieving them; detailed planning and issuing of orders; and finally monitoring implementation of the orders.³

This paper looks at command and control at the higher levels of German military organisation as it would exist on mobilisation, in other words Armies, corps and divisions. These were what the Germans described as 'large formations' [*größere Verbände*].⁴ They also included in this description mixed brigades, and this gives the clue as to why they treated these formations as a separate concept. Brigades as such comprised units from only one arm of service; mixed brigades contained units from more than one arm. Manuals such as the *Exerzier-Reglement für die Infanterie* [Drill Regulations for the Infantry] gave instructions for units up to brigade level only. Above this was the level of higher command [*höhere Truppenführung*] handling the all-arms battle and covered by separate instructions.⁵

We can also see this distinction occurring in other ways. Official manuals frequently refer to 'smaller situations' and 'larger situations' [*kleinere and größere Verhältnisse*].⁶ The manuals

¹ Gary Sheffield and Dan Todman, eds, *Command and Control on the Western Front. The British Army's Experience 1914-18* (Staplehurst: Spellmount, 2004), 1.

² Martin van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 6.

³ *Ibid.*, 6-7.

⁴ Kriegsministerium, *Felddienst-Ordnung* (Berlin: E.S. Mittler, 1908), Anhang, 2. This paper uses 'Army' with a capital letter to refer to specific field formations such as First Army, and 'army' in lower case for generic organisations such as the German army. Army groups [*Heeresgruppen*] were a wartime innovation and are not considered here.

⁵ For a definition of *höhere Truppenführung*, see Hauptmann Immanuel, *Handbuch der Taktik* (Berlin: E.S. Mittler, 1905), 41-42.

⁶ See e.g. Kriegsministerium, *Exerzier-Reglement für die Infanterie. Vom 29. Mai 1906. Neuabdruck mit Einfügung der bis August 1909 ergangenen Änderungen (Deckblatt 1-78)* (Berlin: E.S. Mittler, 1909), 408 (hereafter,

do not define these terms, but it is clear they mean minor and major actions. More formally, a clash between opposing forces was described, in ascending order, as a *Kampf*, *Gefecht* or *Schlacht* depending on its scale. In particular, a *Schlacht* was ‘of decisive significance for the outcome of the war, the occupation of the theatre of war or the existence of an army’.⁷ Some military theorists defined different sizes of unit in terms of their ability to engage in different levels of combat. Thus all units from company to brigade were *Waffeneinheiten* [single-arms units]; divisions were *Gefechtseinheiten*; and corps *Schlachteinheiten*. The prolific military writer Albrecht von Boguslawski thought this was over-theoretical. In his more practical definition, a modern *Gefecht* would usually require co-operation between different arms; divisions must always be ready to fight quite a large *Gefecht* and also act independently; and a corps was big enough to be able to make or counter a powerful attack over a substantial period of time.⁸ This neatly incorporates the dividing line between brigade and higher level formations described above.

Views differed on how to categorise formations, and perhaps for this reason these terms were not carried over into official regulations. There was also disagreement about what the basic major formation should be. Commenting on the war of 1866, Moltke thought that the tactical unit of an army should be the formation which could independently sustain an engagement for several hours, in other words the division; a corps was so large that it could very rarely be used undivided, and when it was, it was not effective.⁹ Later on however, Schlieffen viewed corps as the basic unit of manoeuvre in a war of movement.¹⁰

Understanding the actual practice of command, and in particular the question of mission command, is not aided by the variety of vocabulary used to describe orders. The list – probably not exhaustive – includes *Anordnung*, *Befehl* (with sub-varieties such as *Operationsbefehl*, *Armeebefehl* and *Einzelbefehl*), *Bestimmung*, *Direktive*, *Instruktion*, *Kommando*, *Weisung* and

‘*Exerzier-Reglement*’). Arabic numerals in citations of official manuals such as the *Exerzier-Reglement* refer to the sections or clauses of the manual [*Ziffer*], not page numbers.

⁷ H. Frobenius, ed., *Militär-Lexikon. Handwörterbuch der Militärwissenschaften* (Berlin: Martin Oldenbourg, 1901), entry for *Gefecht*.

⁸ Major A. von Boguslawski, *Die Entwicklung der Taktik seit dem Kriege von 1870/71*, 3 vols, (Berlin and Leipzig: Luckhardt’sche Verlagshandlung, 1878), III, 68-69; Colonel Balck, *Tactics*, 2 vols, 4th edition, (trans. Walter Krueger) (Fort Leavenworth, KS: U.S. Cavalry Association, 1915), Vol. I, *Introduction and Formal Tactics of Infantry*, 33-34 sets out the definitions used by various writers, including Boguslawski.

⁹ Daniel J. Hughes, ed., *Moltke on the Art of War: Selected Writings* (Novato, CA: Presidio Press, 1993), 228 and 237-239; Großer Generalstab, ed., *Moltkes Militärische Werke*, 14 vols, (Berlin: E.S. Mittler, 1892-1912), Vol. 2, Part 2, 155.

¹⁰ Robert T. Foley, trans. and ed., *Alfred von Schlieffen’s Military Writings* (London: Frank Cass, 2003), xxiv.

Anweisung. In addition there were instructions such as *Erlasse*, *Verfügungen*, *Verordnungen* and *Vorschriften*. We tend to assume that each of these terms had a specific meaning. But this may not have been the case. General Sigismund von Schlichting, head of the committee which produced the 1888 infantry drill regulations, described a literary argument which later broke out over whether there was a difference between a *Befehl* [order] and an *Auftrag* [task or mission]; the new regulations usually used the former, but occasionally the latter. Schlichting commented that this probably happened only on stylistic grounds; it was certainly not for any deeper reasons, because both terms described what was tactically exactly the same concept. He added that apart from the regulation words of command, only two forms were recognised in which the will of a superior authority could be expressed – the *Befehl* and the *Direktive* [directive]; an *Auftrag* was always one or the other, and on the battlefield it was almost without exception a *Befehl*.¹¹

Whether Schlichting was right or not, the most basic of the terms listed above was clearly *Befehl*. This was defined as the expression of the authority to command [*Kommandogewalt*]. The higher the rank of the officer issuing the *Befehl* and the larger the unit covered by it, the more general it should be. Further down the chain of command, the *Befehl* became more definite [*bestimmter*] and also shorter, until finally it became a word of command [*Kommandowort*].¹² As for the distinction between *Befehle* and *Direktiven*, the 1908 Field Service Regulations [*Felddienst-Ordnung*] said:

Orders should particularly avoid detail when it cannot be excluded that the situation will change before the order can be carried out. Particular attention must be paid to this point during large-scale operations, especially as orders have to be given out covering a period of days. In such cases the commander's overall intention [*Gesamtabsicht*] comes to the fore; and his aim [*Zweck*] should be particularly stressed. The main points [*Gesichtspunkte*] for carrying out the forthcoming

¹¹ Sigismund von Schlichting, *Taktische und Strategische Grundsätze der Gegenwart*, 3 vols, 3rd edition, (Berlin: E.S. Mittler, 1898-1899), III, 220. Dirk W. Oetting, *Auftragstaktik: Geschichte und Gegenwart einer Führungskonzeption* (Frankfurt am Main and Bonn: Report Verlag GmbH, 1993), 17 accepts that formally speaking there were only these two forms of order. The use of different terms to describe the same order frequently occurs in the German official history of the First World War. To quote just one example, Erich von Falkenhayn's last order as Chief of the General Staff of the Field Army is described in the same paragraph as an *Anordnung*, *Befehl* and *Weisung*; in his memoirs, General der Infanterie Max von Gallwitz, also staff-trained, described this order as a *Weisung* and an *Erlaß*. See Reichsarchiv, *Der Weltkrieg 1914 bis 1918: Die militärischen Operationen zu Lande*, 14 vols, (Berlin: E.S. Mittler, 1925-1956), X: *Die Operationen des Jahres 1916 bis zum Wechsel in der Obersten Heeresleitung*, 422; Max von Gallwitz, *Erleben im Westen, 1916-1918* (Berlin: E.S. Mittler, 1932), 92.

¹² Georg von Alten, ed., *Handbuch für Heer und Flotte: Enzyklopädie der Kriegswissenschaften und verwandte Gebiete*, 8 vols, (Berlin, Leipzig, Wien, Stuttgart: Deutsches Verlagshaus Bong & Co., 1909-1912), entry for *Befehl*.

operations [*Kriegshandlung*] should be included, but the method of implementation omitted. In this way the *Befehl* is broadened into a *Direktive*.¹³

The relevance of the question ‘What is an order?’ becomes clear when we turn to one of the most important German command techniques, *Auftragstaktik* or mission command. It is not clear exactly when the word *Auftragstaktik* itself was coined.¹⁴ Contemporary terms which were used for the concept included *Auftragsverfahren* and *Gefechtsauftrag*; and modern scholars have used *direktive Befehlsführung*, *Weisungsführung*, *Weisungsführung* with a second ‘s’, *Führen durch Direktiven* and *Führung nach Direktive*.¹⁵ It is striking that none of these terms appear in important pre-war documents such as the 1906 Drill Regulations for the Infantry, the 1908 Field Service Regulations or the 1910 ‘Essentials of Higher Command’ [*Grundzüge der höheren Truppenführung*].¹⁶

This is certainly not to deny that the concept existed before the First World War. Robert M. Citino suggests that its kernel lies in the seventeenth century with Friedrich Wilhelm, the Great Elector, and that it was also evident in the battles of Frederick the Great.¹⁷ The Prussian army reformers of the early nineteenth century believed in according commanders independence as a way of making the best use of time, whose importance in military operations was already well understood.¹⁸ When the word *Auftragstaktik* emerged in the late 1880s, it was in the context of a debate about how to control tactical-level combat in the face of high-performance weaponry. The

¹³ *Felddienst-Ordnung*, 50.

¹⁴ Oetting, *Auftragstaktik*, 14.

¹⁵ *Auftragsverfahren*: Hermann von Kuhl, *Der deutsche Generalstab in Vorbereitung und Durchführung des Weltkrieges*, 2nd edition, (Berlin: E.S. Mittler, 1920), 187. *Gefechtsauftrag*: William Balck, *Taktik*, 6 vols, (Berlin: Verlag von R. Eisenschmidt, 1897-1904), I, 213; Major von Tempelhoff, ‘Die Verbindung der Waffen durch die Kriegsgliederung’, *Militär-Wochenblatt*, 126 (26 April 1919), 2323-2326. *Direktive Befehlsführung*: Walter Goerlitz, *Der Deutsche Generalstab: Geschichte und Gestalt 1657-1945* (Frankfurt am Main: Verlag der Frankfurter Hefte, 1950), 100. *Weisungsführung*: David T. Zabecki, ed., *Chief of Staff. The Principal Officers Behind History’s Great Commanders*, 2 vols, (Annapolis, MD: Naval Institute Press, 2008), I, 11. *Weisungsführung* with no second ‘s’: Martin Samuels, *Command or Control? Command, Training and Tactics in the British and German Armies, 1888-1918* (London: Frank Cass & Co. Ltd, 1995), 287 fn. 25; this may be a misspelling, and in addition Samuels suggests that his source for it appeared to be retranslating *Führen durch Direktiven* into German. *Führen durch Direktiven*: Samuels, *Command or Control?*, 287; this may be a mistake for *Führung nach Direktive* (or vice versa). *Führung nach Direktive*: Samuels, *Command or Control?*, 10.

¹⁶ Kriegsministerium, *D.V.E. Nr.53. Grundzüge der höheren Truppenführung. Vom 1. Januar 1910* (Berlin: Reichsdruckerei, 1913).

¹⁷ Robert M. Citino, *The German Way of War: From the Thirty Years’ War to the Third Reich* (Lawrence, KS: University Press of Kansas, 2005), 32 and 62. Oetting, *Auftragstaktik*, Chapters 1-6 gives a detailed description of the development of *Auftragstaktik* from the eighteenth to the late nineteenth centuries. See also Franz Uhle-Wettler, ‘Auftragstaktik: Mission Orders and the German Experience’, in Richard D. Hooker, Jr, ed., *Maneuver Warfare: an Anthology* (Novato, CA: Presidio Press, 1993), especially 238-241.

¹⁸ Oetting, *Auftragstaktik*, 66.

chief proponent of *Auftragstaktik*, Schlichting, recommended that the commander should communicate his overall intent [*Absicht*] and allocate tasks [*Aufträge*] to his subordinates; but he should leave them to decide how to fulfil the tasks. This became the standard definition of *Auftragstaktik*. Adherents of the opposing view, *Normaltaktik*, favoured greater control over tactical formations, not least because of the need to co-ordinate the all-arms battle. Not surprisingly the 1888 Drill Regulations for the Infantry produced by Schlichting's committee duly stressed a less tightly controlled form of attack.¹⁹ By the late 1890s the debate had moved on and was now between *Auftragstaktik* and 'unified action' [*einheitliches Verfahren*]. Proponents of the latter believed that victory could only be gained by the simultaneous launching of adequate forces at the decisive point. They were concerned that the unified action necessary to achieve this would be sacrificed by the continuous assignment of individual tasks.²⁰

Note that these debates were not in themselves about what we see as the core of the mission command idea, the difference between issuing a general mission and a detailed order. When the noted tactical thinker William Balck described the *Auftragstaktik*/unified action debate, he summed up the advantages and disadvantages of each view without taking sides. But in explaining what *Befehle* were, he simply described them in a bracket as 'Orders give information of the situation and the intention of the commander, and assign tasks, but leave the recipient free to choose the method of carrying them out.'²¹ In other words, he saw no contradiction between a *Befehl* and *Auftragstaktik*; and *Auftragstaktik* was so natural that he did not think it necessary to explain it in any detail.

Nor is this surprising. By the time Balck was writing, official regulations routinely contained exhortations to allow freedom of action to subordinates. For instance, the introductory remarks written by the Kaiser for the 1908 Field Service Regulations stated: 'The latitude [*Spielraum*] allowed for the performance of duties in the field is intended to give scope for independent thought and activity by commanders. Superior officers are forbidden to issue orders restricting this latitude'. The Field Service Regulations also laid down that *Befehle* were to contain only what was needed for the subordinate to achieve the aim while acting independently.²² Hans

¹⁹ Antulio J. Echevarria II, *After Clausewitz: German Military Thinkers Before the Great War* (Lawrence, KS: University Press of Kansas, 2000), 32-42 gives a good account of this debate.

²⁰ Balck, *Tactics*, I, 401-407.

²¹ *Ibid.*, 41.

²² *Felddienst-Ordnung*, [no page reference] and 49.

von Zwehl, a retired corps commander, called this latitude ‘independence of command’ [*Selbständigkeit der Führung*], and described it in exactly the same terms as Balck had used for orders. Other terms to describe it included ‘initiative’ [*Initiative* and *Selbsttätigkeit*].²³ The 1906 infantry drill regulations repeatedly stressed the importance of all soldiers being able to think and act for themselves.²⁴

By the beginning of the First World War therefore, mission command was well established in the German army. Modern analysis suggests that three pre-conditions were seen at the time as necessary for its effective application. First, the commander allocating the mission must know and be able to express clearly what he wanted in order to engage the obedience of his subordinates. Second, they must be accorded sufficient freedom of action for ‘intelligent obedience’. This included the possibility of diverging from or even disobeying orders in certain circumstances.²⁵ The possibility of chaos implicit in this last point entailed a third and crucial pre-condition: applying mission command successfully depended on a common understanding of how to act, based on long-term education, careful training and constant practice.²⁶

Moltke the Elder and Schlieffen

Turning now to the implementation of command in reality, Moltke the Elder believed that the larger the main subordinate units, the more freedom must be left to them. Orders to higher headquarters such as Armies and from Armies to corps would normally be issued as *Direktiven* giving guidelines for the decisions which the recipient would need to take; from corps level down, orders were issued as *Befehle*.²⁷ In general a commander should not give more or more detailed orders than was absolutely necessary. It was essential that subordinate commands understood the aim of what was being ordered, so that they could still work towards achieving it even if

²³ Hans von Zwehl, *Generalstabdienst im Frieden und im Kriege* (Berlin: E.S. Mittler, 1923), 32; Oetting, *Auftragstaktik*, 14.

²⁴ See e.g. *Exerzier-Reglement*, 158, 210 and 251.

²⁵ *Exerzier-Reglement*, 304 described the circumstances in which it was the duty of the subordinate to change or not to carry out the orders.

²⁶ Oetting, *Auftragstaktik*, 18-19, quoting Otto von Moser, *Ausbildung und Führung des Bataillons im Gefecht. Gedanken und Vorschläge* (Berlin: E.S. Mittler, 1906); Uhle-Wettler, ‘Auftragstaktik’, 243.

²⁷ Hughes, *Moltke*, 230-231. Hughes comments that Moltke often referred to directives as *Weisungen*: *ibid.*, 181 fn. 19.

circumstances changed and required them to depart from the actual orders. Senior commanders must keep a clear overview of the whole situation rather than intervene in detail.²⁸

It has been suggested that Moltke issued such instructions as much because of the constraints he was under as because he believed them to be the best method of commanding. His authority was more limited than say Napoleon's or even Ludendorff's, given that the King was the commander-in-chief and the Army commanders were royal princes or extremely independent-minded generals like Karl von Steinmetz. Even the corps commanders were senior officers who sometimes acted like robber barons running their own fiefdoms. Such men were likely to do what they wanted anyway, and in granting them considerable latitude of action Moltke was recognising the inevitable.²⁹ In addition his system of deploying in breadth at the start of campaigns, combined with the difficulty of communications, meant that commanders and their staffs were often obliged to take decisions without consultation upwards.³⁰

Moltke himself acknowledged that there was truth in some of this. He commented for instance that reports from corps to Army on the day's events usually arrived later than the time when the orders from Army to corps for the next day had to be written; corps commanders therefore had to be allowed independence within the limits of their directives.³¹ But an even more compelling reason for delegating authority was the nature of war as Moltke saw it. He stressed its uncertainty; making and executing decisions quickly rather than long searches for ideal solutions; improvisation over doctrine; and the greater importance of the moral factor in war compared with peace.³² He commented that the lessons of strategy went little beyond the first essentials of common sense, and that war could not be conducted from a green table.³³ In any case, 'No plan of operations survives the first collision with the main body of the enemy'.³⁴ The commander-in-

²⁸ Großer Generalstab, *Moltkes Militärische Werke*, II, Part 2, 180.

²⁹ Gunther E. Rothenberg, 'Moltke, Schlieffen, and the Doctrine of Strategic Envelopment', in Peter Paret and others, eds, *Makers of Modern Strategy from Machiavelli to the Nuclear Age* (Princeton, NJ: Princeton University Press, 1986), 300-301; Arden Bucholz, *Moltke, Schlieffen and Prussian War Planning* (New York and Oxford: Berg, 1991), 54.

³⁰ Hughes, *Moltke*, 12; Hajo Holborn, 'The Prusso-German School: Moltke and the Rise of the General Staff', in Paret, *Makers of Modern Strategy*, 291.

³¹ Hughes, *Moltke*, 231.

³² *Ibid.*, 5. Moltke's points about the uncertainties and dangers of war were based on or at least very similar to Clausewitz: see *ibid.* and e.g. Citino, *German Way of War*, 145.

³³ Großer Generalstab, *Moltkes Militärische Werke*, II, 2, 172; this is from Moltke's *Verordnungen für die höheren Truppenführer* [Orders for Senior Commanders] and was repeated verbatim in *Grundzüge der höheren Truppenführung*, 5. Rothenberg, 'Moltke', 300.

³⁴ Hughes, *Moltke*, viii.

chief [*Feldherr*] must keep his objective firmly in mind, but he reached it via a series of decisions taken in situations which could not be foreseen.³⁵ Similarly on tactics, Moltke wrote that, ‘No two cases in war are ever exactly the same. So simply adopting forms [*Formen*] one has rehearsed is really not enough, and it must often be left to subordinate commanders to act according to their own judgement’.³⁶

On the relationship between tactics and strategy, he wrote:

In fact, strategy affords tactics the means for fighting and the probability of winning by the direction of armies and their meeting at the place of combat. On the other hand, strategy appropriates the success of every engagement and builds upon it. The demands of strategy grow silent in the face of a tactical victory and adapt themselves to the newly created situation. Strategy is a system of expedients... It is the art of acting under the pressure of the most difficult conditions.³⁷

So Moltke had positive as well as negative reasons for giving senior commanders independence of action. But following what was seen as excessive independence on some occasions in the 1866 campaign, he was also concerned that commanders must remain within the overall plan. He therefore stressed means of control as well as independence. The order of battle and chain of command must as far as possible be adhered to. The correct issuing of orders, whether *Befehle* or *Direktiven*, was vital, and practising this regularly was one of the most important preparations for war.³⁸ Commanders were to keep their superiors informed of developments; and on the assumption that in the heat of battle they might ‘forget’, Moltke recommended allocating liaison officers to their headquarters for as long as required.³⁹ He had already built up the general staff system as an important method of control before the Wars of Unification. He developed it still further afterwards, including by taking responsibility for the *Kriegsakademie*’s educational programme and securing the independence of the General Staff from the Ministry of War.⁴⁰

³⁵ *Ibid.*, 45.

³⁶ Großer Generalstab, *Moltkes Militärische Werke*, II, 2, 198 (*Verordnungen für die höheren Truppenführer*, X, A, 11).

³⁷ Hughes, *Moltke*, 47.

³⁸ Großer Generalstab, *Moltkes Militärische Werke*, II, 2, 178-179 (*Verordnungen für die höheren Truppenführer*, V, 8 and VI, 1-2); Hughes, *Moltke*, 231.

³⁹ Großer Generalstab, *Moltkes Militärische Werke*, II, 2, 181-182 (*Verordnungen für die höheren Truppenführer*, VI, 7 and 9).

⁴⁰ See Buchholz, *Moltke, Schlieffen*, 64-76 for the development of the General Staff under Moltke after 1870-71.

During Alfred Graf von Schlieffen's period as *Chef des Generalstabes der Armee* (1891-1905), the continued expansion of the size of armies and development of modern weapons further complicated the task of command and control.⁴¹ Although accepting much of Moltke's thinking on command, Schlieffen did not agree with his view of strategy as a series of expedients or that the supreme commander could direct rather than command.⁴² Schlieffen's dominating idea came to be the total battle [*Gesamtschlacht*], in which the supreme commander [*Feldherr*] would weld together victories obtained by the individual Armies and corps in their separate battles [*Teilschlachten*] to achieve overall victory. He would achieve this by controlling their activities more closely than Moltke. In particular he would set their objectives, though he would then allow them to fight the battles as they wanted. Originally at least he professed many of the same beliefs as Moltke, such as that uncertainty about the enemy should be accepted as the normal condition in war; that intelligence would often arrive late; and that therefore orders would be overtaken by events.⁴³ Like Moltke he accepted that part of the answer was to give subordinates independence to control their own operations. But this meant they had to understand their commander's intentions:

The commanding general must ensure that his decision falls within the sense of the supreme commander's intentions. Accordingly, he must take great pains to keep up to date on the picture of the larger operation [*Gesamtoperation*], and he must take great pains to understand the supreme commander's ideas.⁴⁴

The goal was for 'the army commanders to make as their own the plan of the highest commander, and that *one* idea...run through the entire army'.⁴⁵ Schlieffen frequently emphasised the need for subordinate commanders to find out their superior's intention and to comply with it. This was a rebalancing of Moltke's approach away from independence and towards control. The result was reflected lower down the military hierarchy in a passage emphasised by the 1906 infantry drill regulations: 'The independence of subordinate commanders must not degenerate into

⁴¹ Moltke's successor as Chief of the General Staff of the Army, Alfred von Waldersee, made a major impact in many areas of the armed forces but did not contribute much original thinking to the question of command and control, and is therefore not considered in this paper.

⁴² Rothenberg, 'Moltke', 314.

⁴³ Foley, *Schlieffen*, 48, 80 and 185.

⁴⁴ *Ibid.*, 10, 24 and fn. 14.

⁴⁵ *Ibid.*, 10, quoting Schlieffen's critique of the 1904 General Staff Ride.

capriciousness [*Willkür*]. Independent activity operating within the correct limits is the basis of the great successes in war'.⁴⁶

One of Schlieffen's problems in planning the *Gesamtschlacht* was the German military tradition of aggressive operational manoeuvre by commanders in almost all circumstances. Forcing battle in this way had worked well enough in the seventeenth and eighteenth centuries, but had become increasingly dangerous in the nineteenth.⁴⁷ Schlieffen was worried that in the twentieth century Army commanders brought up on this tradition would engage in a 'wild chase after the *Pour le Mérite*', which would be disastrous for co-ordination of the *Gesamtschlacht*.⁴⁸

Hence his desire to increase control of subordinate commanders. An important mechanism for this, as with Moltke, was the general staff system. Schlieffen put great effort into training general staff officers in his ideas. Over the years hundreds of them served under him.⁴⁹ By this period, if not earlier, a senior staff officer such as a corps chief of staff had important rights as well as responsibilities towards his commander. The commander took decisions and was responsible for them. The chief of staff was not only fully responsible for the advice he gave his commander, he was also jointly responsible for the commander's decisions.⁵⁰ If he and the commander disagreed, he had the unwritten right to have his view formally recorded. However he was then faithfully to carry out his commander's orders.⁵¹ The position of the general staff officer was also strengthened by his dual reporting channel to his general staff superiors as well as to his commander, the so-called 'general staff official channel' [*Generalstabsdienstweg*].⁵²

But aspects of the German military system conspired against Schlieffen. There was a general lack of co-ordination at the highest level, exacerbated by the Kaiser's 'often whimsical and usually ill-informed opinions'. He actively encouraged the already existing division between the command and administrative structures in the army. Authority was split between the General

⁴⁶ *Exerzier-Reglement*, 276.

⁴⁷ Citino, *German Way of War*, 190, 307 and 309.

⁴⁸ Goerlitz, *Deutsche Generalstab*, 221. The *Pour le Mérite* was the highest Prussian decoration in war.

⁴⁹ Foley, *Schlieffen*, xxvii.

⁵⁰ Hermann Cron, *Geschichte des deutschen Heeres im Weltkriege 1914-1918* (Berlin: Siegmund, 1937), 72.

⁵¹ Militärgeschichtliches Forschungsamt der Bundeswehr, ed., *Die Generalstäbe in Deutschland 1871-1945: Aufgaben in der Armee und Stellung im Staate* (Stuttgart: Deutsche Verlags-Anstalt, 1962), 53.

⁵² Christian E.O. Millotat, *Das preußisch-deutsche Generalstabssystem: Wurzeln – Entwicklung – Fortwirken* (Zurich: vdf Hochschulverlag, 2000), 59 says that this system was formally introduced in 1821, but dated back to Gneisenau and the Napoleonic Wars.

Staff, Ministry of War and Military Cabinet.⁵³ Importantly for this paper, whereas the General Staff handled operations, the Ministry of War was in charge of the doctrine and training standards of the army, with the exception of the General Staff. In addition, Schlieffen's attempts to limit the traditional operational independence of Army and corps commanders not surprisingly ran into opposition from some of the senior officers who held these posts in peacetime or could expect to do so in war.⁵⁴ In particular they criticised his approach as mechanistic, a damning indictment in the German army.⁵⁵

After he retired Schlieffen wrote in visionary terms about the calm and efficiency with which a future commander would direct battles, using modern communications techniques to control his armies from far behind the lines.⁵⁶ The failure of his successor, Helmuth von Moltke the Younger, and Supreme Army Command [OHL, *Oberste Heeresleitung*] to coordinate operations properly in August-September 1914 shows how far this vision was from reality.

'Essentials of Higher Command'

Although no single document set out the German army's thinking on command and control at this level, the best overall guide is the manual 'Essentials of Higher Command'. This was first issued in 1910 and reprinted at least once, in 1913. The next section of the paper looks at its genesis and then analyses it in some detail to provide an overview of German thinking at the start of the First World War.

'Essentials of Higher Command' was the third edition of the manual on high command. The first was the elder Moltke's 'Orders for Senior Commanders of 24 June 1869' [*Verordnungen für die höheren Truppenführer vom 24. Juni 1869*], the edition in force at the time of the Franco-Prussian War. A second edition, 'Instructions for Senior Commanders' [*Instruktion für die*

⁵³ See the clear account of these divisions in Annika Mombauer, *Helmuth von Moltke and the Origins of the First World War* (Cambridge: Cambridge University Press, 2001), 18-20.

⁵⁴ Foley, *Schlieffen*, 186-187 and 189-190; Rothenberg, 'Moltke', 314-315. Rothenberg emphasises what he sees as Schlieffen's pre-planning and centralisation of command: 'Moltke', 314. In contrast, Daniel J. Hughes believes that Schlieffen allowed more freedom than this implies to subordinate commanders: Daniel J. Hughes, 'Schlichting, Schlieffen, and the Prussian Theory of War in 1914', *Journal of Military History*, Vol. 59, No. 2 (April 1995), 257-277, especially 274-275.

⁵⁵ Cf. *Grundzüge der höheren Truppenführung*, 9: 'Formulas fail'; and from the First World War, Crown Prince Rupprecht's statement criticising Ludendorff's defensive tactics in late 1917: 'There is no panacea, and a formula is damaging': Kronprinz Rupprecht von Bayern, *Mein Kriegstagebuch* (ed. Eugen von Frauenholz), 3 vols, (München: Deutscher National Verlag A.G., 1929), II, 270 (diary entry for 9 October 1917).

⁵⁶ Buchholz, *Moltke, Schlieffen*, 320.

höheren Truppenführer], was published in 1885, still in Moltke's time as *Chef des Generalstabes*. In 1900 this was taken off the list of secret publications and issued at a lower classification, presumably to make it more easily available to officers.⁵⁷ The 1910 edition, 'Essentials of Higher Command', was the version in effect at the time of the First World War. As a sign of the reverence with which the elder Moltke was still regarded and the continuity of thought on this subject, 'Essentials of Higher Command' carried a notice that the sections of the 1885 'Instructions' which had been written by Moltke himself had as far as possible been retained in their original wording.

The core thesis of 'Essentials of Higher Command' is that decisive battle [*Schlacht*] is the most important means of achieving the main aims of war. It follows that victory in this battle is the main operational objective.⁵⁸ 'Essentials of Higher Command' is a mixture of practical instructions on the mobile operations which the army will conduct in order to fulfil this objective, commentary on the resulting pressures and problems of war, and guidance on how to deal with them. It also includes instructions on what we would now think of as control rather than command, though it does not draw this distinction.

The practical instructions on mobile operations form the largest part of the manual. The army should advance in separate formations but concentrate in time for battle, ideally against the flanks as well as front of the enemy.⁵⁹ Formations must be deployed on the basis of the *Schwerpunkt* [point of main effort]: one should be as strong as possible at the point where the decision is sought, and economise on troops elsewhere.⁶⁰ There is no general answer on whether to act defensively or offensively, but as a rule it is better to take the initiative. Any defensive should be linked with subsequent offensive action.⁶¹ Lasting success only occurs when the enemy is completely cut off from his rearward communications, i.e. by outflanking or encirclement. The enemy must be pinned frontally while this is going on.⁶² There are no general rules for conducting the battle, least of all for the attack. But the enemy is only broken by fire superiority, and every effort by commanders must be directed at achieving this.⁶³ Victory must be converted into

⁵⁷ Kriegsministerium, *Armee-Verordnungs-Blatt. Vierunddreißigster Jahrgang. 1900* (Berlin: Reichsdruckerei, 1900), 11 September 1900, Nr. 248, 'Druckvorschriften', transferring a number of secret manuals to the series *Nur für den Dienstgebrauch* [For service use only]. See Buchholz, *Moltke, Schlieffen*, 238 for details of the classification system.

⁵⁸ *Grundzüge der höheren Truppenführung*, 7 and 11.

⁵⁹ *Ibid.*, 6 and 29.

⁶⁰ *Ibid.*, 28.

⁶¹ *Ibid.*, 18 and 33-34.

⁶² *Ibid.*, 19 and 26.

⁶³ *Ibid.*, 25.

annihilation of the enemy by pursuit.⁶⁴ ‘Essentials of Higher Command’ also gives extensive instructions on reconnaissance and covering forces, and on the conduct of marches. Commanders must be involved in ensuring the effectiveness of the logistics and medical services, both of which are extremely important.⁶⁵

In terms of the pressures to which commanders are subjected, ‘Essentials of Higher Command’ emphasises that despite best efforts no form of peacetime training can replicate the stress and responsibility of war. Unlike in peace, the moral element is crucial in war. Commanders must take their decisions in circumstances where information is always imperfect, there is a great deal of uncertainty and the situation changes the whole time.⁶⁶ Great success in war cannot be achieved without taking great risks.⁶⁷ ‘Essentials of Higher Command’ gives advice on how to command effectively in spite of these difficulties. The first duty of the commander is to command and not let things drift.⁶⁸ Taking a definite decision and sticking to it is the best guarantee of success. In the midst of the great uncertainty of war, at least the commander’s own decision [*der eigene Entschluß*] must be certain. Because the situation changes constantly, there can be no fixed pattern [*Schema*] of how to act: the commander needs to assess each situation and then do the simplest thing.⁶⁹ A commander should be with the vanguard during the advance; but during the battle he should be further back where he can have calm for taking decisions and good communications above, below and sideways.⁷⁰

‘Essentials of Higher Command’ attempts to strike a balance between independence of action and obeying the orders of the supreme commander. ‘Only the ability and familiarity of commanders of all levels in taking independent action [*selbständigem Handeln*] makes it possible to move great masses and get them to co-operate even in difficult situations’. This must be practised in peace by allowing everyone the greatest independence. Subordinates would then understand how to act as their superior intended even when his will could not be expressly stated.⁷¹ But the co-ordination [*Einheitlichkeit*] of operations is of decisive importance. Army commanders

⁶⁴ Ibid., 40-43.

⁶⁵ Ibid., Sections V and VI for reconnaissance, covering and marches; VIII for logistics, especially 105-106 and 111; IX for medical services, especially 121.

⁶⁶ Ibid., 1 and 3.

⁶⁷ Ibid., 29.

⁶⁸ Ibid., 57.

⁶⁹ Ibid., 3 and 9.

⁷⁰ Ibid., 17 and 76.

⁷¹ Ibid., 9.

must take steps to ensure that they are aware of the intentions of the high command and that these are implemented. The difficulty of controlling modern mass armies can only be overcome if Army commanders remain permanently aware of belonging to a whole. Corps commanders too should not let unified control [*einheitliche Leitung*] of their corps escape from their hands.⁷² Commanders must maintain a clear overview and not continually intervene personally.⁷³ Orders should be limited to the minimum necessary. When units enter battle they must be in no doubt how the commander intends to fight it. The aim of the operation must be communicated so that subordinate commanders and units can still pursue it even if circumstances require them to depart from the actual orders.⁷⁴

‘Essentials of Higher Command’ has less to say about what we would now call control, which it does not distinguish from command. It insists more than once that the order of battle must be adhered to except in special circumstances. This is so as not to disturb the chain of command [*Befehlsverhältnisse*], which must also be adhered to in passing orders.⁷⁵ Good communications are important, and commanders should choose their location to facilitate them.⁷⁶ Detailed advice is given on the issuing of orders. Army commanders may issue *Direktiven* covering several days when not in contact with the enemy; but for the battle they must express their will sharply through *Befehle* allocating definite tasks [*Aufgaben*]. Commanders should be kept informed of each others’ tasks in order to be able to act in the context of the overall plan [*um im Rahmen des Ganzen handeln zu können*].⁷⁷ Accurate reporting is essential; one way of ensuring this is for the high command to assign liaison officers to subordinate headquarters to guarantee the flow of information.⁷⁸ At the end of the battle, general staff officers must be in a position to report accurately on both own and enemy forces, as the C-in-C will have to take far-reaching decisions very quickly.⁷⁹

‘Essentials of Higher Command’ was issued over four years after Schlieffen retired. It is therefore an amalgam of the views of the elder Moltke, which are strongly reflected or even copied verbatim, as well as Schlieffen and we may presume of the younger Moltke. Its emphasis on the primacy of battle and of annihilating the enemy shows the continuities from Clausewitz to

⁷² Ibid., 12, 17 and 85.

⁷³ Ibid., 53.

⁷⁴ Ibid., 55-57.

⁷⁵ Ibid., 50, 52 and 93.

⁷⁶ Ibid., 51 and 54.

⁷⁷ Ibid., 56-58.

⁷⁸ Ibid., 59-61.

⁷⁹ Ibid., 38.

Schlieffen. 41 years separated it from the original 1869 edition, and not surprisingly attempts to strike a balance between the different views it incorporated were not fully successful. It is generally positive about modern developments such as machine guns, airships (it does not mention aircraft) and telephones. It covers defensive actions, and, following the Russo-Japanese War, it allows for the possibility of battles lasting many days. But, with the advantages of hindsight at least, its focus on the practice and practicalities of mobile war, and especially of encounter battles, reads like a manual for 1866-1870. We would not necessarily expect it to cover trench warfare, but it is striking that it has nothing to say about attacking prepared enemy positions or breakthrough attacks, even though these possibilities were well-known to theorists.⁸⁰

In terms of concepts which are seen as traditional German military practices, 'Essentials of Higher Command' deals in some detail with 'unifying the ununifiable', i.e. setting out the balance between a subordinate commander's right to independence and duty to follow his superior's intentions.⁸¹ It says surprisingly little about the importance of the *Schwerpunkt*. And it ignores completely the special position of staff officers as partners of their commanders; *Vollmacht*, the granting of plenipotentiary powers; and *Dienststellung vor Dienstgrad*, the idea that job function outweighed formal rank.⁸² It also omits all reference to the charismatic side of leadership.

Conclusions

Throughout the period covered by this paper, the Germans were wrestling with the question how to control mass armies in an era of modern weaponry. In at least three respects, Schlieffen and the younger Moltke faced substantially different and more difficult problems to those of the Wars of Unification. First, the combination of probable enemies meant that, unlike in 1864-1871, in crude terms the Germans would be outnumbered, with all the implications that would have for achieving victory on the battlefield. Second, the same combination of enemies meant that they would face at least a two-front war, greatly complicating the central command task. And third, the size and technological sophistication of armies had developed dramatically since the French surrender in

⁸⁰ See e.g. Hughes, 'Schlichting', 271-273.

⁸¹ The phrase 'unifying the ununifiable' is from a section heading '*Die Vereinigung des Unvereinbaren*' in Oetting, *Auftragstaktik*, Chapter 1. As already mentioned, *Grundzüge der höheren Truppenführung* uses none of the terms we associate with mission command to discuss the concept.

⁸² See Samuels, *Command or Control?*, 8-10 for a discussion of the importance of the *Schwerpunkt*; he quotes the Militärgeschichtliches Forschungsamt der Bundeswehr (MGFA) as stating that it was central to German military thought by the 1870s, but not defined in a military context till the 1920s. For the other three concepts, see the clear, concise description in Zabecki, *Chief of Staff*, I, 9-13.

1871. German officers traditionally saw war as an art not a science, but the need for a scientific approach to it was continuously increasing.⁸³ Theorists and practitioners were well aware of these changes, and had some success in integrating them into doctrine at least.⁸⁴ But in overall terms the Germans were approaching the question of command and control in the early twentieth century with the same conceptual tools they had used 40 years earlier.

One of the main tools they used was mission command. Modern doctrine tends to see mission command as the best approach to command, and this has perhaps distorted our assessment of its historical application. But Schlieffen was clearly right to worry about a repeat of Steinmetz's conduct at Spicheren in the age of the million-man army, and his corps commander critics were not obviously justified in their desire to preserve their previous independence.⁸⁵ There were also other potential problems with mission command in a modern war. As we have seen, finding the correct balance between independence and obedience depended on a common understanding of how to act; this in turn was based on long-term education, careful training and constant practice. Would this be possible in a war-time army with its rapid promotions and reliance on reserve or *Landwehr* officers?⁸⁶ As the proponents of unified action asked, how would mission command affect the co-ordination of the all-arms battle? A further question was the effect modern communications such as the telephone would have on mission command. Would they facilitate command by enabling commanders to share their thinking, as described in 'Essentials of Higher Command', or would excessive use infringe on the autonomy of subordinate commanders, as feared by the Field Service Regulations?⁸⁷

Modern communications were in fact regarded as an important method for the command and control of a mass army – hence Schlieffen's vision of the future commander sitting in his headquarters calmly controlling events from afar. But the reality of poor communications and

⁸³ War as an art: Moltke the Elder in Hughes, *Moltke*, 174-175. The military use of railways as an example and metaphor of the technocratic approach now needed: Buchholz, *Moltke, Schlieffen*, 316. Citino, *German Way of War*, 193 gives an example from 1899 of the technicalities officers now had to cope with.

⁸⁴ See Echevarria, *After Clausewitz*, 213-228 for a summary, especially 218-220 for the problems of translating correct doctrine into practice.

⁸⁵ Citino, *German Way of War*, 176-178. Some writers have seen Moltke the Elder's command system as an abdication of responsibility: Rothenberg, 'Moltke', 300-301 quotes J.F.C. Fuller to this effect.

⁸⁶ Balck, *Tactics*, I, 402. The term '*Landwehr*' is usually not translated; the *Landwehr* comprised older officers and men whose active military service was some years in the past.

⁸⁷ *Grundzüge der höheren Truppenführung*, 17; *Felddienst-Ordnung*, 47. General Friedrich von Bernhardt was one of those who thought that new technical means would make co-operation between formations easier but would not replace the need for independent action: Oetting, *Auftragstaktik*, 136, quoting Bernhardt's book *Vom heutigen Kriege*, 2 vols, (Berlin: E.S. Mittler, 1912).

resulting lack of co-ordination played a major role in the failure of the German plan in 1914. Nor was this just hindsight: Schlieffen himself had commented in 1901 on the fallibility of communications.⁸⁸ There was also a potential further concern with the most traditional control mechanism, the general staff. In keeping with the ideal of quick, mobile wars, German preference was for small staffs.⁸⁹ There was a question though whether these would be able to cope with the demands of modern war, especially if staff officers needed to be reallocated in appreciable numbers to the new formations raised on mobilisation. True, a growing proportion of senior commanders had received staff training, and this could be expected to ease the overall burden in headquarters. But what would happen if the war was not quick, and the supply of trained staff officers dried up?

Our assessment of German thinking on command and control before 1914 is of course heavily influenced by our knowledge of what happened afterwards. The course of the First World War makes many of the precepts of a manual like ‘Essentials of Higher Command’ seem naively out of date. But it is striking that a later generation of German military thinkers adopted and adapted the same ideas to successfully solve the problems of the ‘Blitzkrieg’ era.

Even more striking is the extent to which German thinking on command and control before the First World War foreshadows the elements in modern definitions such as those by Sheffield, Todman and Creveld set out at the start of this paper. Many of the ideas in modern manuals on command and control could have come from Moltke. The US *Field Manual No. 6-0: Mission Command: Command and Control of Army Forces* of 2003 is an example. ‘Battle is chaotic—unexpected problems occur. The most important factor contributing to this chaos is the actions of enemies actively trying to accomplish their missions by defeating friendly forces’. ‘Military operations are struggles between independent human wills’.⁹⁰ German officers would presumably have agreed that ‘Command is mostly art but some science. Control is how commanders execute command. It is mostly science but also art’.⁹¹ They would have approved of the quote from Clausewitz used to back up the point that ‘The defining problem of command and control is the need to deal with uncertainty, another dimension that makes C2 [command and control] more art

⁸⁸ Citino, *German Way of War*, 207, quoting Schlieffen’s 1901 Tactical-Strategic Problems.

⁸⁹ Samuels, *Command or Control?*, 16 quotes General Paul Bronsart von Schellendorff, *The Duties of the General Staff* on this.

⁹⁰ Headquarters, Department of the Army, *Field Manual No. 6-0: Mission Command: Command and Control of Army Forces* (Washington: Department of the Army, 2003), 1-39 and 1-43.

⁹¹ *Ibid.*, 1-6.

than science'.⁹² Schlieffen would have agreed that effective command and control 'integrates the efforts of subordinate and supporting forces, causing separate activities to achieve coordinated effects'.⁹³ The similarities continue. FM 6-0 favours mission command or decentralisation as the 'doctrinal solution to uncertainty and increased tempo'.⁹⁴ But this depends on there being a high enough level of training and of trust between the superior and subordinate commanders; so in certain circumstances 'detailed command' may be needed.⁹⁵ FM 6-0 realises that modern communications afford commanders the opportunity of intervening inappropriately at any level, but is confident that they will in fact 'substantially enable mission command'.⁹⁶

There are of course also differences, one of the obvious ones being the radically different approaches to theorising about command and control. As we have seen, the Germans stressed practical solutions to practical problems rather than theoretical definitions and formalistic doctrine. To them *Führung* or *Truppenführung* was one concept and not the two, command and control, of which we now speak. By contrast, FM 6-0 is a detailed explanation of the theory of command and control, carefully defining each concept and argument it uses; this explains its nearly 35,000 word length. A further important point of difference concerns the scope of military operations covered by the manuals. Like its predecessors, 'Essentials of Higher Command' insists on the primacy of battle and annihilating the enemy. By contrast FM 6-0 takes a wider view of the employment of military force in order to cover different types of activity such as 'stability operations'.⁹⁷

And finally a major difference is apparent from the second sentence of FM 6-0's Chapter 1: the commander is said to use his authority not just to accomplish the mission, which is traditional enough, but also to see to the health and welfare of subordinates.⁹⁸ Moltke and Schlieffen would be turning in their graves.

⁹² Ibid., 1-41.

⁹³ Ibid., 1-5.

⁹⁴ Ibid., 2-81.

⁹⁵ Ibid., 1-61ff.

⁹⁶ Ibid., 1-81ff.

⁹⁷ Ibid., Introduction, xiii.

⁹⁸ Ibid., unnumbered first paragraph.

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