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Dominant Battlespace Awareness IV

Napoleonic Warfare Information Requirements and the Value of Information

Collect

Command

Maneuver

Engage

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Options 001AB

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Dominant Battlespace Awareness
IV

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Agenda

- Napoleonic cases
- Conclusions regarding Napoleonic Warfare
- DBA/DBK Comparisons: Napoleonic Warfare and WWII
- Next steps

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Napoleonic Case Studies

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- **Austerlitz campaign**
  - French vs. Coalition of Austrians and Russians
    - 72,000 French vs. 90,000 Coalition
  - August 25 - December 2, 1805 (~3 months)
    - Most of the fighting occurred during two one-day battles
    - Ulm: October 16
    - Austerlitz: December 2 (Winter)
- **Jena-Auerstadt campaign**
  - French vs. Prussians with Saxon assistance
    - 193,000 French vs. 146,000 Prussians and Saxons
  - August 7 - October 14, 1806 (~2.5 months)
    - Both battles occurred on October 14
- **Waterloo campaign**
  - French vs. Coalition of Austrians, British, Prussians and Russians
    - 128,000 French vs. 235,000 Coalition (Anglo-Allied and Prussian)
  - March 13 - June 18 (3 months)
    - Major battles occurred June 15-18

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Austerlitz Campaign

- French
  - Timely and accurate information enabled the French to create local force advantages at both Ulm and Austerlitz
  - Well-crafted deception plan drew the enemy into disadvantageous battle
- Coalition
  - Inaccuracy of information drew them into a trap
    - Poor understanding of French locations
    - Poor understanding of French intent
  - Split command structure inhibited information flow; misunderstandings between the two coalition partners led to them operating on different calendars and created difficulties in communicating orders

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Russia and Austria formed the Third Coalition in August 1805 to put an end to Napoleon's ambitions in Europe and to restore France to its boundaries of 1791. Soon after the Coalitions' formation, the first contingent of Russian forces marched towards France on August 25. Meanwhile, implementing his 'divide and conquer' strategy, Napoleon left his camp in Boulogne on August 27 to attempt to prevent the Russian and Austrian forces from joining up. Assisted by a deception plan that made it appear his forces were still on the Channel, Napoleon crossed the Rhine before being detected. After some initial confusion as to the exact whereabouts of the Austrian forces, the French located, enveloped, and defeated the Austrians at Ulm on October 20. Joined by the remnants of the Austrian army, Russian commander Kutusov decided to retreat into Bavaria, joining up with other Russian forces en route and awaiting further reinforcements.

Upon reaching Brunn, Napoleon decided to provoke a fight with the Coalition forces before their reinforcements could arrive. On December 1, he withdrew from the Pratzen Heights, a position of extreme tactical importance. He also left his right flank seemingly vulnerable and acted agitated and nervous before Coalition messengers. The following day, December 2, from atop the Pratzen Heights the Coalition launched an attack against the apparently weak French right flank. Napoleon waited until the morning fog lifted to march his two hidden divisions out of the valley to retake the Pratzen Heights and encircle the enemy. By mid-afternoon, the French broke through the Coalition lines and forced them into a full retreat.

The French dominated the Austerlitz campaign. Not only was Napoleon's force in excellent condition, but his information gathering mechanisms performed extremely well. They gave him such high awareness of enemy positions and predispositions that he was able engage his enemies before they were able to join forces against him, deceive each of them into entering battle against him at a disadvantage, then envelop and destroy each of them despite their superior size.

French operations were enabled by the timely and accurate information they received. Knowledge of enemy force locations, gathered in advance of actual combat, allowed the French to create local force advantages at both Ulm and Austerlitz. Napoleon's deception plan first led the Austrians to believe he was still on the French coast awaiting an English attack while he was closing in on them at Ulm. His deception plan against the Russians convinced them to attack his right wing, which he had intentionally left weak so that he could draw them in and envelop them.

The Coalition suffered from inaccurate information regarding French force locations and intent. Their mechanisms for gathering information were far less capable and numerous than those of the French. Their inability to see through Napoleon's deception plans is evidence not only of mistaken preconceptions, but also that they did not sufficiently seek out the true state of the French forces. They were also encumbered by a split command structure that prevented the timely dissemination of information. This prevented them from joining their forces before the French attacked, and complicated their coordination of operations due to language difficulties.

Jena-Auerstadt

- French
  - Successful deception plan distracted Prussian attention from French avenue of approach
  - Failure to obtain accurate information at the critical time prevented the creation of a local force advantage (did not know where main Prussian army was)
    - Napoleon allowed his assumptions of enemy locations to guide him rather than seeking further information
  - Still had significant information advantage relative to the enemy
- Prussians
  - Prussians sought very little information; they were disoriented through most of the campaign and surprised by the French attack
  - Prussian leadership made several incorrect assumptions about Napoleon's likely course of action
  - Abysmal command and control structure made every decision difficult and delayed execution

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In September 1806, after a series of political incidents fomented by Napoleon at the expense of Prussia, the Prussians secretly decided on war against France, pressing the Saxons into joining their side. In response to the Prussian deployment, Napoleon mobilized the Grande Armee and deployed toward Saxony. From the outset of his operations, Napoleon initiated a deception campaign, 'noisily' mobilizing the army of the King of Holland. Due to this deception, the Prussians concentrated their attention on the north, while their forces, dispersed throughout the region, moved with no clear plan of action. At the beginning of Napoleon's eastward deployment, he did not know the locations of the Prussian forces, and used the information from his cavalry reports and contact with Prussian advance guards to eventually deduce the Prussians must be to the north. He swung his forces northwards, believing the Prussian main army to be at Jena, while dispatching two corps (Davout and Bernadotte) to the northeast to cut off the Prussian retreat once the Grande Armee had defeated them.

However, Napoleon did not know that the main Prussian force had begun to retreat toward the north, where he had sent Davout and Bernadotte. Davout found the main Prussian army at Auerstadt and managed to defeat them with a single corps while Napoleon defeated the Prussian rear guard at Jena. After the battle at Jena, Napoleon realized that he had not fought the entire Prussian army there, but did not learn of Davout's victory against the main Prussian force until the battle at Auerstadt was over.

In this campaign, Napoleon was unable to create a local force advantage because of his inaccurate information on the location of the main Prussian army the day before and

morning of the battle. Up until that time, his information-gathering mechanisms were performing well, with the cavalry screen determining the general location of the enemy force by process of elimination. He knew from pre-conflict studies that the Prussians would be deceived by an apparent attack from the north, which would prevent their forces from moving out aggressively to attack him. He also understood from intercepted mail that the enemy command HQ was in disarray. The critical failure occurred when Napoleon allowed his own assumptions regarding the enemy force locations and intent to override information gathering. The night before the battle at Jena, Napoleon viewed the enemy camp from the vantage point of a hill overlooking the future battlefield. He believed the enemy campfires he saw before him to constitute the main Prussian army, and called back his cavalry screen so that he would not alert the enemy to his presence. Thus, he had no way of gathering information on the movement of the main army, which was underway that very night.

Despite this failure, Napoleon still had a vast information advantage over the Prussians, which did much to help him win the war. The Prussian failures were many and serious. They were all but completely ignorant of the French locations, dispositions and intent throughout the campaign. The Prussian leadership had incorrectly assumed that Napoleon's forces would take up a defensive position in Austria and await the Prussian attack. By the time they realized their mistake, they were outflanked and had little choice but to retreat, but still had very little knowledge of actual French positions. Prussian understanding of French force locations was so poor that Hohenlohe, facing the main French army at Jena, assumed that he was being attacked by a small flank guard; meanwhile Brunswick, facing just Davout's corps at Auerstadt, assumed that he was facing the main French army. Brunswick's misperception cost the Prussians dearly; they operated cautiously and executed poorly. When Brunswick himself was mortally wounded on the battlefield, the Prussian command and control system died with him. Some units were still able to operate, though they could not coordinate their operations with those of other units. Other units stood idle, awaiting orders from Brusnwick. As a result, the Prussians were enveloped on both wings by a force half their size.

Command and control had been a problem for the Prussians throughout the campaign. Their system required consensus by a large committee (the Council of War), with the King (inexperienced in military matters) able to veto any decision. Debates were lengthy and decisions constantly changed. To make matters worse, they had adopted en route a new divisional command structure. Prior to this campaign, the Prussian army had operated with a main body, a rear guard and an advance guard. The divisional structure was supposed to make the army more flexible. However, the Prussians had never trained with this structure and had few officers capable of divisional command. This, too, greatly impeded their ability to execute orders.

Waterloo

- **French**
  - Incorporated a split command structure which led to critical command and control problems, preventing the orchestration of a coherent battle plan
  - Unable to create force advantage due to lack of information on change in enemy operations (Prussian's abandoning old LOCs) and Wellington's tactics
- **Coalition**
  - Unable to create a force advantage due to incorrect preconceptions (believed Napoleon could not mobilize quickly enough and would attack in the south) and lack of accurate information
  - Split command structure almost resulted in the Coalition forces being split and defeated separately
  - Victory in force-on-force engagement due to superior tactics

As part of the Seventh Coalition against France, the Anglo-Allied and Prussian forces concentrated in Belgium intending to advance into France and defeat Napoleon after his return from Elba. Napoleon decided to attack the Anglo-Allies and Prussians in Belgium and demand the support of the Belgian king, which would help him against the rest of the Coalition.

The Coalition did not believe Napoleon could mobilize quickly enough to attack them prior to the full coordinated advance of the Coalition forces in Belgium. Napoleon, however, did just that and was able to mass his forces and launch an attack that caught the Coalition by surprise. On 15 June, in the first major action of the campaign, the French right wing attacked and drove back the Prussians at Charleroi, and the lead elements of the left wing attacked the Anglo-Allies at Quatre-Bras. On 16 June, Grouchy's right wing again engaged the Prussians, this time at Ligny. At the same time Ney's left wing attacked the Anglo-Allies at Quatre-Bras. The Prussians broke at Ligny and retreated. At this time Wellington and Blucher realized that the French were attempting to divide and conquer the Coalition and decided that the Prussians should retreat to Wavre, a position parallel to Waterloo (where the Anglo-Allies would retreat) where the two forces could rejoin.

The French right wing then engaged the Prussians at Wavre and the main body engaged the Anglo-Allies at Waterloo. The Prussians, however, held off the French attack at Wavre and shifted their forces to rejoin the Anglo-Allies at Waterloo. The Anglo-Allies were beginning to give way to Napoleon's forces when the Prussian advance guard arrived on the field. Napoleon was informed that this force was larger than it really was and committed troops against them that could have finished off the Anglo-Allies. Additionally, orders for

assistance sent to Grouchy were received too late to have been useful. Napoleon was defeated by the Coalition on June 18. The French were unable to create a local force advantage to defeat their enemies due to Wellington's tactics and Napoleon's misconceptions regarding the Prussian's ability to reconstitute their forces, realign their lines of communication, and return to the battlefield. Equally important, the split command structure Napoleon created, wherein the wing commanders (Ney and Grouchy) were given complete control over actions involving their forces, greatly diminished the amount of information that Napoleon received regarding their actions. Both Ney and Grouchy failed to operate as Napoleon assumed they would and failed to report to him on their actions. Thus, Napoleon continued to make decisions as though his plan was being implemented as he intended even though it was not. This lack of information prevented him from focusing his forces where they were needed and led him to make poor command decisions.

The Coalition was also unable to create a local force advantage. They had incorrectly assumed that the French could not mobilize quickly enough to attack them in the north, and that thus they would have the initiative (until the French attack at Charleroi alerted them to their mistake). They employed a split command structure which had a very detrimental effect upon the dissemination of information and created misunderstanding between the forces as to how the Coalition intended to operate. However, they realized that Napoleon was attempting to divide and defeat them in detail after the French attack upon the Prussians at Ligny. As a result of this insight into the enemy intent, they realigned their forces and lines of communications so that they could not be divided. When Napoleon attacked at Wavre and Waterloo, he was unable to implement his strategy of the central position, and the battle devolved into a force-on-force engagement which the Coalition won due to Wellington's superior tactics and the Prussian's resiliance.

Wellington had trained his force in tactics designed to counter Napoleon's strengths. Since Napoleon relied on mass--in the form of columns and artillery--targeted at the critical point, Wellington sought to deny the French any lucrative target. Thus, Anglo-Allied forces used terrain to hide their troops (in such places as ditches or brush) or by forming them on the reverse sides of hills. In this way, they denied Napoleon the decisive engagement he sought.

Information as a Resource

- Napoleon understood the importance of information and designed his organization to take advantage of it
  - Multiple mechanisms
    - Spies
    - Engineer reconnaissance
    - Cavalry screen
    - Design of the corps
    - Central fusion center
- Creation of a local force advantage dependent upon effective C2
    - Enabled Napoleon to mass on the battlefield

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Napoleon viewed information as an essential military resource and went to great lengths to gather as much of it from as many sources as he could. His spies, organized under Fouche, constituted a national-level intelligence asset. They conducted pre-campaign analysis of potential enemies, kept him informed of attempts to form coalitions against him, and warned him of enemy force deployments. Engineer reconnaissance sent out to scout the land before his forces deployed, gave Napoleon information on logistics requirements, trafficability, and support requirements in the areas through which his army would move. This allowed him to maintain his velocity once on the march because he had his food supplies and routes mapped out in advance. His cavalry screen, moving far ahead of his columns, provided information on enemy force locations while masking his own movements. While the cavalry was unable to determine a comprehensive order of battle, it could demark the general areas in which the enemy was, and, equally important, was not. The flexibility of his corps allowed them to hide the size of his force by shifting divisions from one corps to another, preventing the enemy from gathering accurate information on his force dispositions. The army itself was divided into corps small enough to be highly mobile, yet strong enough to fight for 24 hours, giving reinforcements time to arrivd if enemy forces were encountered unexpectedly. Napoleon orchestrated his force movements such that the corps were within supporting distance (one day's march) of each other, and could thus respond in time to combat actions engaged in by any other corps--the famous directive to "march to the sound of the guns." A system of messengers

ran throughout the army, all feeding back to Napoleon, keeping track of the whereabouts of each corps and its situation. Napoleon's orders were sent out to the marshals via this same system. All the information gathered by these various mechanisms was channeled back to Napoleon himself, who would fuse and analyze it personally. This gave him the picture of the battlefield (situational awareness) that he needed to exploit the time and space factors to create local force advantages.

The command and control element within the Napoleonic system was as important as its information-gathering capabilities. The speed at which information could flow through the system allowed Napoleon a level of control no other force had at this time. His situational awareness was so high that he could risk massing his forces on the battlefield directly from the march. The forces of Napoleon's enemies had to deploy prior to reaching a battlefield, often taking a great deal of time to arrange their forces into attack formation. But because of Napoleon's command and control system, he could arrange his forces on the march, determining when and where they would arrive while they were still moving to contact. This allowed him to march his forces directly into battle, often splitting or enveloping his enemy before they were fully prepared to fight.

Importance of Organization

- **French organizational agility was enabled by information to create local force advantages**
  - During the Grande Armee period, Napoleon used information to great advantage -- in every case better than his enemies
    - After 1812, the Grande Armee deteriorated
- **Reliance created a vulnerability**
- **The enemies of France eventually adopted these organizational advantages or developed methods of countering them**
  - By Waterloo, the British were still superior tactically and the Prussians had improved while the French had declined; the gap had closed

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The organization of Napoleon's force, during its prime, was a major reason for his success. The corps concept gave him the mobility, flexibility, and speed to take the initiative, outmaneuver the enemy and strike decisively. This organizational structure often gave him time cycle advantages sufficient to allow him to respond quickly and prevail even when his information was poor, or when he made misjudgments. However, the information component to the corps organization was a vital enabling element of Napoleonic warfare. The benefits of mobility, flexibility, and speed cannot be utilized to their fullest extent without information, and it was the organization's inherent information-gathering capability (spies, engineer reconnaissance, cavalry screen, etc.) that allowed Napoleon to use these assets to create local force advantages and effect such decisive victories over his enemies.

However, this increased reliance on information also created a vulnerability. Without adequate information, the Grande Armee was reduced to the level of its enemies. These problems were in evidence in the Waterloo campaign. By this time, France's military had fallen into decline. The 1812 campaign had significantly degraded the force, and under the rule of the Bourbons the military had been treated with neglect. By 1814, the cavalry had been degraded in both size and quality, the corps suffered from a lack of training, and many of the soldiers were inexperienced. In addition, the best field commanders were no longer available, and Soult was acting as chief of staff (Berthier having recently died under questionable circumstances). This

combination left Napoleon with less effective information gathering mechanisms, a chief of staff who did not incorporate methods to insure information flow (the redundancy and feedback methods that Berthier had used), and field commanders (Ney and Grouchy) who were insufficiently attentive to the information-gathering mission and did not keep Napoleon sufficiently informed of the developments on their respective wings. This left the French army unable to operate as it had in previous campaigns, placing it on a par with its enemies.

Faced with Wellington's superior tactics and surprised by the Prussian's ability to realign their lines of communications, the French suffered defeat. Wellington had trained his force in tactics designed to counter Napoleon's strengths. Since Napoleon relied on mass--in the form of columns and artillery--targeted at the critical point, Wellington sought to deny the French any lucrative target. Thus, Anglo-Allied forces used terrain to hide their troops (in such places as ditches or brush) or by forming them on the reverse sides of hills. In this way, Wellington denied Napoleon the ability to wear down the British forces with his superior artillery. The Prussians had undergone a reorganization since their defeat at Jena-Auerstadt and had adopted a general staff structure. This centralized control allowed them to reconstitute their forces and realign their lines of communications after the French attack at Ligny, which caught Napoleon off guard. Napoleon did not realize they could do this, and his information-gathering mechanisms failed to report it to him. In the end, the tactics of the Anglo-Allies and the Prussian's ability to realign their lines of communications, combined with the failures of French information-gathering and command and control, resulted in Napoleon's failure to create a local force advantage, costing him the conflict.

Enemy Intent

- Inside sources were critical

- Napoleonic warfare: Spies, intercepted
  mail, deserters, logistics information

  - Important source of information on future force
    locations and dispositions

  - Best, sometimes only, trustworthy source on
    enemy intent

- Similar to WWII: ULTRA/MAGIC

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Napoleon exerted great effort in understanding the enemy's intent. However,
his ability to do so without inside sources was very limited.

Napoleon's greatest information on enemy intent came from spies, intercepted
mail, deserters, and theft of information on enemy logistics. Spies were
planted in foreign governments and militaries, and were able to report on the
enemy's deployments and concepts of operations. Other spies were able to
infiltrate behind enemy lines to locate the main army and general headquarters.
Sometimes the intelligence they gathered was sufficient to offer Napoleon an
assessment of likely enemy courses of actions and preconceptions before the
conflict began. Mail from the enemy leadership or other communications such
as orders could also reveal the enemy's intent. Deserters, too, could provide
important information from behind enemy lines. In addition, information was
stolen by spies from government offices, church archives, etc., regarding
supply lines, annual crop yields, weather conditions, and other logistical
information. Napoleon's enemies were bound to their supply lines for
survival, and could not operate far from them. Due to this dependence, the
development of intelligence on enemy supply lines indicated where the enemy
intended to operate. This information, however, was not public knowledge,
requiring Napoleon to acquire it by theft or espionage.

When Napoleon lacked these sources, he would attempt to deduce the enemy's
intent based on whatever other information he was able to gather. These
conclusions were often incorrect because he lacked the ability to perceive what

was occurring behind the forward line of troops.

In effect, these mechanisms were the equivalent of the ULTRA/MAGIC decryptions of the World War II era. They gave valuable insight into the intent and thought processes of the enemy, which was unattainable through other means.

Command and Control
- Poor information combined with poor command and control causes entropy which can result in cascading failures

Waterloo Campaign Example

In the case of the Waterloo campaign, Napoleon was receiving inadequate information regarding the actions and locations of his own forces. Ney on the left wing did not sufficiently reconnoiter the enemy positions at Quatre Bras (poor information). This caused him to be overly cautious, refraining from attack and allowing the Anglo-Allies to maintain and reinforce their position at Quatre Bras. Ney then failed to report his situation back to Napoleon (poor command and control). Napoleon assumed Quatre Bras had been taken (poor information), and proceeded with his strategy to divide the Coalition by striking the Prussian forces first. The Prussians fell back in retreat as a result of the attack. However, Grouchy, the right wing commander, did not maintain sufficient contact with the retreating Prussians, nor gain accurate information on the direction the bulk of their forces were retreating (poor information). He thought the Prussians were retreating along their national lines of communications, when in fact the main bulk of the force was realigning their lines to reconnect with the Anglo-Allies. Grouchy then reported back to Napoleon his incorrect assessment of Prussian actions and locations (bad information). Napoleon, in light of this information, believed that the Prussians were retreating away from the battlefield with Grouchy in hot pursuit (bad information). Napoleon then, believing the Prussians had been effectively dealt with, pulled forces away from the right wing and shifted his attack to focus on the Anglo-Allies, pursuing them north to Waterloo (poor command and control). The failure of Ney and Grouchy to fully execute Napoleon's intent caused his operations to fall short of his intended OPTEMPO. Their inadequate reports regarding their own actions and situations did not allow Napoleon to adjust his plans to fit the new realities on the battlefield. This led to Napoleon being unprepared for the return of the Prussians to the battlefield at Waterloo, and was surprised when they reemerged to strike his right flank.

Trends over time
- Same basic functions throughout time: collect, process, communicate, disseminate, execute
- These functions have gained automation
  - Increased complexity
  - Increased means of verifying information
  - Increased opportunity for failure
  - Increase vulnerabilities
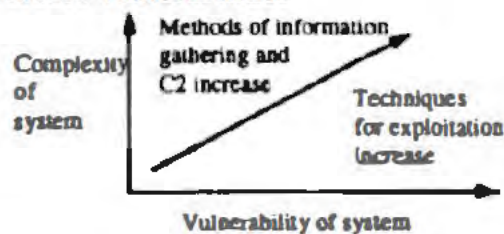
Military operations have required the same basic information-related functions throughout time. These are collection, processing, communication, dissemination and execution. However, the means by which these functions have been accomplished have changed dramatically, with significant implications for modern and future operations.

During the Napoleonic period, only simple methods were available for the completion of these tasks. Orders were conveyed by voice or on paper, cavalry officers relied on direct observation for reconnaissance, and horseback was the fastest means of communication. During the World War II era, automation multiplied the number of methods by which these tasks could be accomplished. This greatly increased the amount of information that could be collected, and the methods by which command and control could be exerted. At the same time, it also greatly increased the techniques by which these functions could be exploited. Thus, as the information systems became more complex, they also became more vulnerable. Additionally, whereas a simple system can suffer only minor degradation, an error within or a successful attack upon a complex system can result in cascading failures.

Consistent Themes between Napoleonic Warfare and WWII

- Timely and accurate information is required if the commander is to exploit the battlespace to create local force advantages

- The effect of split commands was detrimental to information distribution in both warfare eras

- The effect of commanders' preconceived cognitive constructs was similarly significant in both warfare eras

New Hypothesis: These hypotheses hold up through any warfare era

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The conclusions from this study of Napoleonic warfare support those that emerged from case studies of World War II battles. In both warfare eras, the evidence demonstrates that the presence of timely and accurate information allows commanders to gain maximum advantage from available forces by allowing them to create local force advantages. Commanders can also use their forces more efficiently since accurate information allows them to avoid redundant assignments and reduce the logistical requirements of any given mission while also reserving forces for other missions. By contrast, inaccurate information acts as a force reduction. In both warfare eras, acting on inaccurate information induced commanders into ill-advised actions. For example, in the Austerlitz campaign, Napoleon was able to use timely and accurate information to generate force advantages throughout the campaign. First, he was able to engage the opposing coalition before their forces could combine so that he could face the Austrian and Russian forces separately, thus making better use of his smaller forces. Second, at the battle of Austerlitz itself, he was able to use very timely and accurate information (and disinformation) to draw his enemy into a trap where his smaller force could envelop the Russians and force their capitulation. The information he possessed allowed him to shape the battlespace such that he could envelop the enemy force with his smaller force, a clear case of generating a local force advantage. The Jena-Auerstadt campaign offers an example where the lack of timely and accurate information prevented the creation of a local force advantage. Although Napoleon maintained timely and accurate information through most of the campaign, he was acting on inaccurate information the day of the battles at Jena and Auerstadt. His information up until that point was timely and accurate enough for him to deploy and move his forces to the battlefield, narrow in on the enemy, outflank him and attack at the most advantageous time and place. Napoleon

had the initiative and drove the battle. However, because of the critical misjudgment on his part (the inaccurate assessment that the Prussian main army was located at Jena when in fact it was moving toward Auerstadt) caused him to focus his main force against Hohenlohe's rear guard while sending only two corps to Auerstadt (which he assumed would act only to cut off the enemy retreat) to face the main Prussian army twice its size. Thus, the lack of information prevented Napoleon from creating a local force advantage. An example of a World War II case were timely and accurate information allowed for the creation of a local force advantage was the Battle of Midway, where American knowledge of Japanese plans allowed the US Navy to position its carriers to ambush the larger Japanese fleet.

The effect of commanders' preconceived cognitive constructs was similarly significant in both warfare eras. The case studies from both warfare eras provided numerous examples where certain commanders chose to interpret the information they received quite differently than might be reasonably expected, or to act on preconceptions as to how the battle would unfold. Similarly, it is clear that in addition to interpretation, the commanders of both warfare eras prioritized the information quite differently, based on the presence of certain identifiable pre-existing cognitive constructs. These constructs originate from a variety of experiences which help shape a commander's beliefs and priorities. Sometimes these preconceptions proved accurate, sometimes not, but they were prevalent throughout both warfare eras. In the case of Jena-Auerstadt, Napoleon had developed preconceptions as to the Prussian's likely course of action and capabilities based on studies he had conducted even before hostilities erupted. These studies indicated that a threat from King Louis of Holland would be considered credible by the Prussians (thus drawing Prussian attention away from a southern avenue of approach) and that a Prussian mobilization would be very slow. As Napoleon gathered further information on the Prussians (as his forces moved forward), he began to develop more specific assumptions: First, after the clashes at Hof and Saalfeld, he was convinced the Prussian main army was at Gera (based on his beliefs as to what their best strategy would be) and then again when he assumed the main Prussian force was at Jena (based on his visual observation of the enemy campfires and his opinion of the enemy's best strategy). During the Waterloo campaign, Napoleon again prioritized his information based on his preconceptions. He believed his tried-and-true central position strategy would allow him to divide and conquer the enemy forces. With this in mind, he sought only supporting information and rejected information to the contrary. He believed the Prussians would retreat along their national lines of communications in response to his attack because he thought they were incapable of re-establishing different lines of communication. This preconception was bolstered by Grouchy's report that this was in fact what the Prussians were doing (even though they were not). However, Napoleon then received information from his brother Jerome that indicated the Prussians were concentrating to attack Napoleon's flank in conjunction with the Anglo-Allied operations at Waterloo. He rejected this information because he did not believe the Prussians were capable of realigning their lines of communication. These examples are very similar to those examined in the World War II case studies, such as the situation at Falaise Gap. In that case, the Germans assumed the Allies had closed the gap and had them trapped, because that is what they would have done in a similar situation. The Allies thought the Germans were escaping the gap, because that is what they would have done in a similar situation.

The effect of split commands was detrimental to information distribution in both warfare eras. The case studies in both warfare eras demonstrated that that the way a force is organized can have a significant effect on how and when information is sent throughout the force. In both warfare eras, a traditional hierarchical structure with a single commander in charge was more effective in operationalizing its information than a structure with more than one commander. In both the Napoleonic era and during World War II, when information was not disseminated in a timely manner, or to the commanders who most needed it, the chances of a military defeat were increased. This defeat took many forms: a blunder into an enemy trap, missing a precious opportunity, or being outmaneuvered or overwhelmed by an unknown enemy force. For example, in the Coalition force Napoleon faced in the Austerlitz campaign, ultimate command was split between the Austrian and Russian emperors, though each used experienced field commanders (Gen. Mack for the Austrians, Gen. Kutuzov for the Russians). The split command caused serious problems in dissemination of information. First, the two armies were operating on different calendars (the Russian Gregorian calendar was two weeks behind that of the Austrians), and thus the Russians did not arrive when the Austrians thought they would. Second, the Russians were not notified of the degree of the Austrian defeat at Ulm until remnants of that army happened to reach the Russian forces as they deployed forward. Had the Russians known sooner of the Austrian debacle, they probably would not have moved as far westward (a move intended to support the Austrians) and would have instead forced the French to move to them, thus stretching still further the extended French lines of communications. There were also language problems between the two forces which affected their performance on the day of the battle. The actual battle plans were not solidified until late in the evening the night before, after which they had to be transcribed and delivered to the various commanders. This led to much confusion, and some unit commanders did not receive their orders until after the battle had begun. Another example is the French at Waterloo, where Napoleon created a split command structure, instructing his two wing commanders (Ney on the left and Grouchy on the right) that they had complete autonomy over their forces and could not be countermanded by anyone other than himself, and then only if he was actually present with them on the battlefield. This command structure had dire implications for the flow of information. At Quatre Bras, Ney did not move in force quickly enough to take the critical crossroads, despite Napoleon's intent that they be taken. Napoleon assumed they had been taken, and Ney neglected to report back to him that they had not. On the right wing, Grouchy was instructed to destroy the Prussian force, but did not press the attack when he saw them retreating. Napoleon believed Grouchy was pursuing the Prussians, and that he no longer had to worry about them reappearing on the battlefield. These problems are similar to those of split command structure during World War II, such as in the case of the Battle of Savo Island where it created such impediments to communications that MacArthur could not properly support Nimitz, the landing at the island was not properly supported by the carrier force, and warning of the attack was not passed on to other forces in the region once contact with the enemy was made.

The results of these cases studies leads us to offer a new hypothesis. We believe that the hypotheses we have developed can be applied to any warfare era in history and be supported equally well. They constitute universal laws of warfare that, with few exceptions, can be demonstrated by any historical case study and will continue to apply equally well into the future.
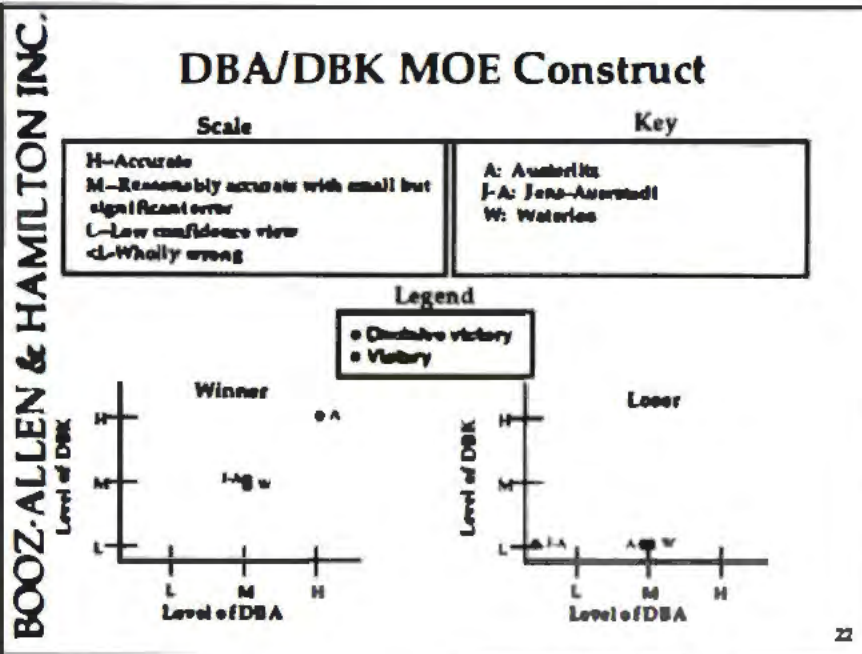
See attached paper.

DBA/DBK MOE Construct

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Value of Information

- In Napoleonic warfare, deception was the most critical form of information
  - Critical challenge: convince the enemy that they could win
    - In this era, the monarchy was the COG, and the army was its physical manifestation
    - The army could retreat and deny Napoleon his decisive victory
    - The deception plan was aimed at drawing the enemy into battle
- The deception plan was an integral part of the defeat mechanism
  - It was the means by which one could attach the enemy's strategic will
- The defeat mechanisms have changed over time
  - Napoleonic era target: The Army
  - WWII era target: The military leadership
  - Today: The populace

24

In this era of centralized monarchies, the monarch himself was the essence of the state, and his army was the physical manifestation of the monarch's power. This being the case, the defeat of the army equaled the defeat of the state. However, it also meant that if the army denied decisive engagement, the state could not be defeated. Napoleonic warfare relied upon quick decisive victories because without them the foraging French army would soon run out of supplies. Thus, the greatest challenge of Napoleonic warfare was to place the enemy in an untenable position but still convince them that they could win the war, thus enticing them into battle. For this, Napoleon relied upon carefully-crafted deception plans aimed at drawing the enemy army into battle. In this respect, "anti-information" was the most valuable information in this warfare era because it had the capacity to affect the enemy's strategic will, and thus their defeat mechanism.

These defeat mechanisms have changed over time. In World War II, the strategic will was no longer the army in the field, but the military leadership that made its decisions. Today, against democracies, the strategic will resides in the populace, which can determine whether a military action will be initiated or, once begun, will continue.

Dominant Battlespace Awareness
IV

Battle of Austerlitz
2 December, 1805

Information Requirements

IPR With LtCol Paul Selva

29 January, 1998

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DBA/DBK Definitions

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DBA

- A high level of awareness (90% visibility) of friendly and enemy forces, and the environment. DBA is fundamentally about location relative to enemy/ friendly locations

DBK

- High confidence in the future (95%), and an ability to act on it before the enemy can act. DBK enables commanders to predict with confidence where the enemy is going to be, and when they are going to be there. DBK is more subjective, relying heavily on the decision-maker and his/her confidence level

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Critical DBA/DBK Questions

- What were the sources/mechanisms of DBA and DBK?
- What were the Commanders' key information requirements?
  - Enemy OB
  - Enemy capability
  - Enemy intent
- What information was available to the commanders during the battle? Conversely, what information was not available? What information was critical but was not sought by the commander?
- What happened both tactically and strategically when those sources were denied?
- How perishable is the information from the different sources across the battles?

PROPRIETARY 3

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Historical Overview

- In 1801 & 1802 Napoleon had forced Austria, Russia, Naples, Portugal, Turkey, and England to sign peace treaties
- In 1802 he convinced the people of France to vote him Consul for Life, and on December 2, 1804, he crowned himself Emperor of the French
  - Life at home flourished, but relations with old coalition still tense
- In 1803 the peace with England was broken, and the British blockaded the French coast
  - French invasion force assembled at Boulogne
- Napoleon began to reassert his influence in Europe
  - Turned smaller states such as Bavaria and Wurttemberg into clients and potential allies, while annexing most of northern Italy
- Europe and Russia in particular felt threatened
  - Tsar Alexander pushed for and formed the 3rd Coalition of Russia, Austria, and England by August 9, 1805

PROPRIETARY 4

After approximately a decade of war, the people of France accepted and embraced the figure of Napoleon Bonaparte. He was a brilliant soldier, proving his abilities and assuring the peoples support by his success in forcing the enemies of the French republic to the table. In 1801 Austria, Naples, Portugal and Turkey all signed peace agreements with the French, to be followed in 1802 by the British.

Following this success, Napoleon was able to convince the people of France to vote him Consul for Life in 1802, and in 1804 he crowned himself Emperor of France.

Having firmly established himself as the head of the new France, Napoleon began to make many well needed internal reforms; reorganizing education, building infrastructure, and reviving industry. In addition to this however, he also began to reassert his power outside of the boundaries of France. In 1803 he occupied Hanover, putting French troops well within the German empire. This was obviously an affront to the German princes, as well as a concern to Prussia.

Napoleon's ambitions were a particular threat to Tsar Alexander of Russia as well. Napoleon was encroaching on his sphere of influence, and Alexander was determined to stop this. thus, in 1805. after significant negotiations Alexander was able to convince the British and the Austrians to join him in the 3rd Coalition against the French. Alexander led the effort to plan a military campaign, using the united forces of Austria and Russia to push France back to its boundaries of 1791 and free Napoleon's conquests from oppression.

Campaign Objectives

French

Overall Campaign:

- **Launch rapid preemptive strike through Germany to engage first the Austrians and then the Russians, preventing the two allied coalition armies from uniting**
  - 70,000 Austrians and 50,000 Russians initially committed to the campaign in the north, with almost unlimited supply of reserves in Russia. (A total of 200,000 French troops committed for the entire theater, less than 100,000 of which were available for Austerlitz.)

- **Complete the campaign before Prussians involvement**

- **Defeat the coalition**

Austerlitz:

- **Induce the Allies to attack the French on Napoleon's terms, allowing him to orchestrate the flow of the battle, ensuring success in spite of numerical inferiority**

PROPRIETARY 5

Through well-placed spies and a very efficient intelligence network, Napoleon was aware of the formation of the 3rd Coalition, as well as their plans to unite their armies in order to deal a devastating blow to the army of the French Empire.

Napoleon had initially had his newly created Grande Armee poised on the Channel coast at Boulogne, in preparation for an invasion of England. Upon learning of the plans of the continental allies to unite and attack the French, Napoleon changed his focus, developing a plan to frustrate the coalitions ambitions. (Some historians have argued that Napoleon had never actually intended to invade England, and that he was rather attempting to deceive Austria and Russia into thinking that his attention was focused on the imminent invasion, inviting them to take action.)

Napoleon knew that be had a much better chance of success of thoroughly defeating these armies if he moved quickly and was able to defeat them piecemeal. The Austrian army of 70,000 men was moving westward toward the French, while the first contingent of Russians, with 50,000 men, was marching from Poland. Napoleon, aware that the Russians would be longer in arriving than the Austrians believed (they were operating on calendars that were two weeks off), knew that if he could force march his army to the Rhine, he would be able to engage the Austrians before the powerful Russians reinforcements could arrive. He would first defeat the Austrians, and then move eastward to engage the closing Russian contingent.

In addition to the speed required to ensure the success of his plan to prevent the Coalition armies from uniting, Napoleon was also aware that he had precious little time before the Prussians, with their almost inexhaustible reserves of soldiers, entered the Coalition. He had been unsuccessful in brokering an agreement with them, and knew that it was only a matter of time before they joined forces with the Russians and Austrians.

After defeating the Austrians at Ulm, Napoleon and the Grande Armee (now numbering less than 100,000 troops--having dispersed half of of his force in an attempt to make sure that no other enemy forces were able to converge on the area) had chased the retreating Russian forces into Bavaria.

At this point, Napoleon and his army were far from home and in a very tenuous situation. Troops from all over Europe were converging on the area in an attempt to make sure that no other enemy forces were able to converge on the area) had chased the retreating Russian forces into Bavaria.

At this point, Napoleon and his army were far from home and in a very tenuous situation. Troops from all over Europe were converging on the area in an attempt to lend a hand to the Russians. Archduke Charles, well-respected and very powerful, was coming up from northern Italy where he had been sent at the beginning of the campaign with 90,000 troops to defend against a possible French attack in that area. (This was initially thought by the Austrians to be the most likely point of attack by the French.) Thus, Napoleon knew that in order for him to deal a decisive blow to the Coalition forces he had been following, he had to ensure athat they were enticed to engage the Grande Armee rather than waiting for these reinforcements to arrive. This was imperative as Napoleon already had a force ration disadvantage, with 70,000 troops at his disposal as opposed to the 90,000 available to the Coalition.

With this in mind, once at Austerlitz, Napoleon set about attemptimg to deceive the enemy into thinking that his was weaker than he actually was. His logic was that if he could deceive the enemy into believing that they had absolute superiority, they would take the offensive, expecting a speedy victory. In reality, though, his deception plan would have elicited a carefully orchestrated sequence of events desighed by the brilliant military mind of Naposeon. He would trick the Coalition to attack the French on Napoleon's terrns, allowing him to control the pace and flow of the battle, ensuring success in spite of numerical inferiority.

Campaign Objectives

Allied 3rd Coalition

Overall:

- Austrians and Russians to join forces to crush Napoleon's army and restore the peace and independence of European states
- Restore France to her boundaries of 1791
  - Return Savoy, Nice, and other conquered territories back to original ownership

Austerlitz:

- Destroy the weakened and far flung Grande Armee

PROPRIETARY 7

With the formation of the Third Coalition and the urgings of Russian Tsar Alexander, the Coalition decided to join forces and defeat the army of the French Empire. Napoleon had begun to overstep his boundaries, and was once again threatening the existence of the status quo of Europe. Tsar Alexander, imbued with a sense of messianic mission to defend Europe and return the French to their boundaries of 1791, had developed a grand strategy for defeating the Grande Armee. He envisioned a united force of 500,000 Austrian and Russian troops stretching from the Baltic to the southern Mediterranean, prepared to confront the French from any position.

At the actual Battle of Austerlitz, the objectives were to deal a devastating blow to the weakened and dispersed Grande Armee. Having retreated into Bavaria, Kutusov (Commander in Chief of the Russians forces) had lured Napoleon further and further away from home and safety, putting him in a very dangerous position. Tsar Alexander and the other decision makers at the battle had been taken in by Napoleon's deceptions, and believed that he was weak and timorous, preparing to fight a defensive battle or perhaps even retreat. With this impression, the Coalition felt that the time was ripe, regardless of the fact that their reinforcements had not yet arrived, to engage and defeat the weakened Grande Armee.

CONOPS

French

- **Deceive the enemy into initiating battle by creating the appearance of weakness while consolidating troop positions and bringing reserves within reach**
  - Deceive the Coalition that their occupation of the Pratzen Heights is a significant blunder on Napoleon's part
  - Make right end of the French line at Telnitz appear weak, inciting the enemy to attack at that point and commit the reserves
  - Conduct the attack and seize the initiative to break through at the vulnerable and weakened right flank (Pratzen Heights) of the Coalition forces
  - Envelop and crush the enemy

PROPRIETARY 8

At the Battle of Austerlitz, Napoleon had realized his weak and dangerous position. Rather than retreat, he developed a plan that would take advantage of his position and allow him to triumph in spite of his weakness. He would entice the enemy to engage him, however they would be engaging him on his terms, rather then their own, allowing Napoleon to orchestrate the flow of the battle.

His plan was to deceive the enemy into thinking that he was even weaker than he really was, encouraging the enemy to act before reinforcements could arrive in the area. The placement of his troops would direct the enemy's offensives, allowing Napoleon to commit the majority of his troops to breaking through the enemy's weakened flank and forcing them to surrender. To this end, Napoleon orchestrated the following series of maneuvers to entice the Coalition to action under his terms:

First, he pulled his forces off of the commanding Pratzen Heights a day or two before the battle. The Heights dominated the surrounding area, making them a coveted piece of land. Moving his forces off of the Heights and allowing the enemy to occupy them was designed to deceive the enemy into thinking that the Coalition was in an ideal position, and that Napoleon had made a huge blunder.

CONOPS

Coalition

- **Launch an attack on the Grande Armee from the commanding Pratzen Heights**
    - Consolidate forces on the Pratzen Heights, but at time of battle, send bulk of troops south towards Telnitz to hit the weakened French right
    - Cross the French lines of defense and sever their lines of communication with Vienna
    - Move north along the rear of the enemy positions, encircling the Grande Armee, and forcing it to surrender

PROPRIETARY

The Coalition CONOPS were developed as reconnaissance came in about the weakened state of the French forces. Noticing the apparent weakness of the French right flank, the Coalition plan focused on sending the bulk of their troops southward off of the Pratzen Heights towards the area of Telnitz, hitting the weak French right. Once across the French lines of defense, the goal was to turn north and sever the French lines of communication with Vienna. The troops would then move along the rear of the enemy positions, encircling the Grande Armee, and forcing it to surrender.

Overview of Forces

French

- **Commander in Chief - Emperor Napoleon**
- **Chief of Staff - Marshall Berthier**
    - Imperial Guard - Marshal Bessieres *(5,500 men and 24 guns)*
    - I Corps - Marshal Bernadotte *(13,000 men and 24 guns)*
    - III Corps - Marshal Davout *(3,800 men and 9 guns)*
    - IV Corps - Marshal Soult *(23,600 men and 35 guns)*
    - V Corps - Marshal Lannes *(12,700 men and 20 guns)*
    - Gr. Division - General Oudinot *(5,700 men)*
    - Cavalry Reserve - Marshal Murat *(7,400 men)*

(72,000 men and 112 artillery pieces)

PROPRIETARY 10

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Overview of Forces

Coalition

- **Tsar Alexander of Russia**
- **Hapsburg Emperor Francis II**
- **Commander in Chief - Infantry General Kutuzov**
- **Commander of Austrian Contingent - Lt Gen Liechtenstein**
  - Advance Guard - Lt Gen Kienmayer *(6,780 men & 12 heavy pieces)*
  - 1st Column - Lt Gen Dokhturov *(13,650 men & 40 light, 24 heavy)*
  - 2nd Column - Lt Gen Langeron *(11,700 men & 30 light pieces)*
  - 3rd Column - Lt Gen Prebyshevsky *(7,770 men & 30 light pieces)*
  - 4th Column - Lt Gen Miloradovich and Lt Gen Kollowrath
    (23,900 men & 52 light, 24 heavy pieces)
  - 5th Column - Lt Gen Liechtenstein *(5,375 men & 24 light pieces)*
  - Advance Guard - Lt Gen Bagration *(13,700 men & 42 pieces)*
  - Imperial Guard - Grand Duke Constantine *(10,530 men & 40 pieces)*

(90,000 men & 270 guns)

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Sequence of Events

French

27 Aug.:
G.A. begins march from Boulogne

25-30 Sept.:
G.A. crosses Rhine undetected

30 Oct.:
French begin to chase Russians

13 Nov.:
French take Vienna

20 Nov.:
Arrive in Brunn w/ 65,000 troops

21 Nov.:
March on to Austerlitz with portion of forces

1 Dec.:
French forces in position around Austerlitz

The March

5 Sept.:
Austrians begin march westward

25 Aug.:
Kutusov leaves Russia with 46,400 troops

25 Sept.:
Austrians reach Ulm

26 Oct.:
Russians begin organized withdrawal into Bavaria

20 Oct.:
Austrians surrender at Ulm

19 Nov.:
Kutusov meets up with 2nd half of Russian forces in Olmutz

18 Nov.:
Remnants of Austrian troops meet up with Kutusov (45,000 strong now)

27 Nov.:
March from Olmutz to Brunn

24 Nov.:
Coalition totals 90,000

1 Dec.:
Allies arrive on Pratzen Heights

Coalition

Following the formation of the Third Coalition on August 9, 1805, plans were set in motion for the united armies of Russia and Austria to move out and put an end to Napoleon's ambitions in Europe, restoring France to her boundaries prior to 1791. To that end, a contingent of Russian forces under the command of General Kutusov left from Poland with 46.400 troops on the 25th of August. Shortly thereafter, on the 27th of that month, the Grande Armee left its camp on the Channel coast at Boulogne and began its drive across Europe at a frantic pace to reach the Austrian army before it was able to meet up with the advancing Russians.

On the 25th of September, the Austrians reached Ulm in Bavaria, having decided to go ahead regardless of the fact that they had not yet met up with their Russian counterparts. Napoleon, having correctly predicted these actions weeks ahead of time, brought his troops undetected across the Danube in the early part of November. (He was aided in his knowledge of the future actions of the Austrians by information he had been receiving from his spy, Schulmeister, who had been insinuated into Austrian headquarters.) Having cut the Austrian lines of communications, the battle was essentially over before it began. Although initially a little confused, Napoleon surrounded the Austrians at Ulm and forced them to surrender on the 20th of October.

After dispersing forces to various areas to ensure that no enemy troops would be able to reach the area in time to reinforce these elements of the Coalition, Napoleon set out with just under 100,000 troops to pursue the Russians. After having learned of the defeat of the Austrians at Ulm, General Kutusov, Commander in Chief of the Russian forces, wanted to fall back to meet up with the additional Russian forces, decided to fall back to meet up with the additional Russian forces which he expected to arrive shortly. On the 26th of October, the Russians began an organized withdrawal back into Bavaria.
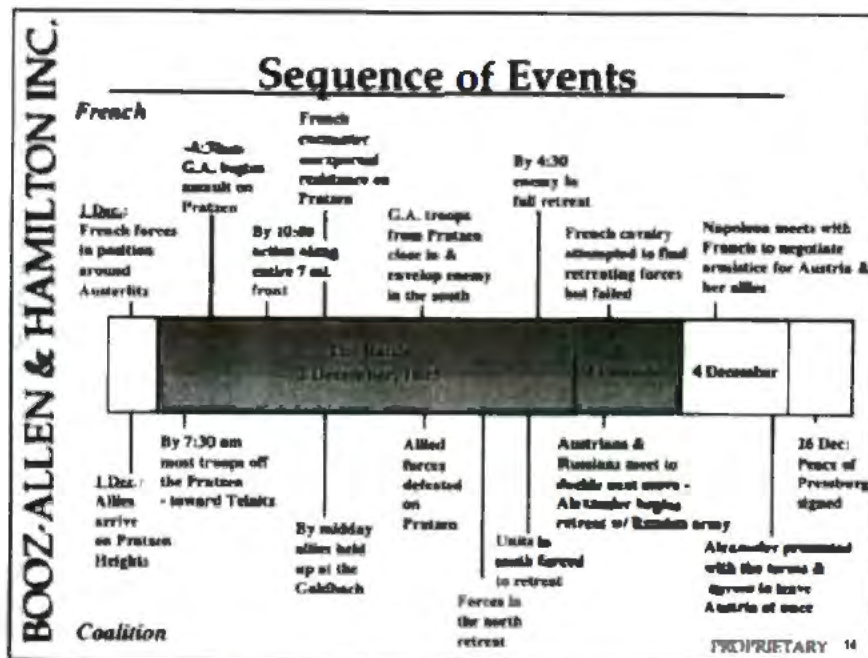
With only small skirmishes along the way, the pursuing Grande Armee took the city of Vienna on the 13th of November. Shortly thereafter, the remnants of the Austrian troops who had survived or escaped the Ulm debacle met up with Kutusov and the Russian troops. This brought the Coalition forces to 45,000 men. On the 19th of November, Kutusov and his forces met up wtih the second Russian contingent at Olmutz, and on the 24th of November the Russian Imperial Guard arrived—the Coalition forces now totaled 90,000 men.

On the 20th of November the Grande Armee arrived in Brunn (in the general vicinity of Olmutz) with a total of 65,000 troops. The next day Napoleon advanced a portion of the troops to the area of Austerlitz (he did not want to reveal the true strength of his forces). This was the beginning of Napoleon's attempt to deceive the Coalition into believeing that he was weaker than he actually was, and enticing them to battle.

Having received reports detailing the weakened state of Tsar Alexander and the others decided that they would launch an attack on the French. On the 27th of November, the Coalition troops began to march from Olmutz to Brunn.

Napoleon, pleased that the enemy had taken his bait, wanted to make sure that they would continue their advance and launch the campaign as soon as possible--before reinforcements arriced. To ensure this, on the 1st of December, Napoleon pulled his troops off of the Pratzen Heights. In doing so, he further enticed the enemy, allowing them to occupy the most easily defendable and therefore most strategically attractive position. He hoped to deceive them into thinking that he had made a terrible blinder, and that they were now in the truly superior position able to effectively defeat the French.

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Sequence of Events

French

1 Dec.: French forces in position around Austerlitz

[illegible] G.A. begins assault on Pratzen

By 10:00 action along entire 7 mi. front

French encounter unexpected resistance on Pratzen

G.A. troops from Pratzen close in & envelop enemy in the south

By 4:30 enemy in full retreat

French cavalry attempted to find retreating forces but failed

Napoleon meets with Francis to negotiate armistice for Austria & her allies

The Battle
2 December, 1805

3 December

4 December

1 Dec.: Allies arrive on Pratzen Heights

By 7:30 am most troops off the Pratzen - toward Telnitz

By midday allies held up at the Goldbach

Allied forces defeated on Pratzen

Forces in the north retreat

Units in south forced to retreat

Austrians & Russians meet to decide next move - Alexander begins retreat w/ Russian army

Alexander presented with the terms & agrees to leave Austria at once

26 Dec: Peace of Pressburg signed

Coalition

PROPRIETARY 14

Napoleon's deception scheme worked, and early in the morning of December 2nd, the Coalition forces launched their attack on Napoleon's apparently weak right flank around the village of Telnitz. Napoleon waited for the perfect moment to launch his counter-attack. As soon as the sun came up and the fog began to lift, Napoleon sent the two divisions that had been hidden in the fog of the valley up the Pratzen Heights. Encountering unexpected resistance, there was a tough fight, but the French forces ultimately prevailed. At the same time, the forces at the north end of the battlefield were also engaging one another. The Coalition forces managed to hold off Napoleon's troops for a few hours, but eventually ended up pulling back and retreating along the Olmutz road. By 4:30 in the afternoon, the French had broken through the Coalition lines and forced a full retreat.

The casualties for the French numbered approximately 1,700, with just under 7,000 wounded and 573 men taken prisoner. The Coalition had approximately 15,000 men killed or wounded. (11,000 of which were Russians.) 12,000 Coalition forces were taken prisoner.

Tsar Alexander left the area the day after the battle with the remainder of his able-bodied troops, heading back through Hungary and reached Russia within 10 days. Emperor Francis was left to meet with Napoleon on December 4, 1805 to negotiate peace terms for Austria. The armistice negotiated for the Austrians and their allies took effect on the next day.

Peace negotiations were scheduled to begin in Vienna at the end of the month, and on 26 December, the Peace of Pressburg was signed.

Sources & Mechanisms of DBA

Sources

- Identity, personality, and location of decision maker
- Friendly & enemy order of battle
- Friendly & enemy capability
- Location and status of friendly and enemy communication lines
- Enemy TTP & historical performance
- Logistical information (produce, population, roads)
- Weather

Mechanisms

- Spies
- Newspapers
- Reconnaissance missions
- Prisoners

PROPRIETARY 13

The following sources provided the information needed in order to achieve Dominant Battlespace Awareness during the general Campaign of 1805 as well as during the Battle of Austerlitz:

1) Identity, personality, and location of the decision makers.

2) The friendly and enemy order of battle.

3) Knowledge of friendly and enemy capability.

4) The knowledge of the location and status of friendly and enemy communications lines.

5) Enemy Tactics, Techniques, and Procedures (TTP) and historical performance.

6) Logistical information on the location of produce, the local population, as well as road networks was vital. The armies (especially Napoleon's) were very dependent upon the land, and were therefore unable to move forward until the logistical information could be determined.

7) Weather.

The following mechanisms were used by Napoleon and the Grande Armee as well as the Coalition to obtain the above mentioned pieces of information necessary for Dominant Battlespace Awareness:

1) Spies were the primary method used by commanders during this period to glean information about their enemy. In this study one case in particular stands out as most important. Prior to the campaign of 1805 Napoleon had insinuated a spy into the headquarters of the Austrian army. This spy, Schulmeister, was able to give Napoleon such good information on the future plans of the Austrian army and their allies that it has been said that it was almost as if Napoleon was sitting on their planning board. This information allowed Napoleon to create the plan for the preemptive strike of the Campaign of 1805 in detail, knowing from Schulmeister's information where and when to expect coalition forces.

Throughout the rest of the Campaign and during the actual battle of Austerlitz itself, spies were often used to gain information about the enemy, providing insight into the enemy order of battle, enemy capability, etc. Napoleon used spies during the last few days before the battle to ensure that he had and maintained Dominant Battlespace Awareness. In these cases, he sent representatives into the enemy camps under the guise of diplomacy in order to gauge the enemy morale as well as to verify numbers and positions.

2) Newspapers also provided Napoleon information on enemy troop sizes, location, and morale. The Coalition armies made very little attempt to control or subdue the press of the towns through which they traveled. This made it very easy for Napoleon to track the movement of enemy forces, as they were reported in the newspapers of the areas through which they traveled.

3) Reconnaissance missions were another way in which the commanders in this case were able to learn about the enemy order of battle and capability. In addition to this however, Napoleon also used these reconnaissance missions to collect logistical information such as the availability of produce and the road networks of the areas through which he was planning on traveling. This was especially important to the Grande Armee, as they were structured in such a way that they marched in smaller, divided groups and lived off of the land that they were traveling through. Baggage trains were no longer used, and the soldiers were expected to forage for their food along the way. This greatly increased the speed at which the army could travel, but also made such logistical details imperative for a commander before the troops could be sent out.

4) Once the battle had begun, commanders were able to maintain and update the information they needed to have in order to gain Dominant Battlespace Awareness by the information they received from captured prisoners. They provided information as to the enemy order of battle, their capabilities, locations and troop strengths.

Sources & Mechanisms of DBK

Sources

- Identity, personality, and location of decision maker
- Friendly & enemy capability
- Friendly & enemy intent
- Friendly & enemy morale
- Enemy TTP & historical performance
- Location and status of friendly and enemy communication lines

Mechanisms

- Commander's intuition
- Spies
- News
- Prisoners
- Previous engagements

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The following are sources of information a commander must have in order to have Dominant Battlespace Knowledge:

1) Identity, personality, and location of the enemies decision maker.

2) Capability of both friendly and enemy forces.

3) Friendly and enemy intent to determine or predict future enemy actions.

4) Friendly and enemy morale to determine what an enemy might be capable of doing in the future.

5) Enemy TTP and historical performance may be used to determine what they might do in similar future situations.

6) The location and status of friendly and enemy communications lines.

The following mechanisms were used by Napoleon and the Grande Armee as well as the Coalition to obtain the above mentioned pieces of information necessary for Dominant Battlespace Knowledge:

1) A commander's intuition developed through experience allows him to synthesize the information he is receiving and predict what the enemy in question will do in the future. This intuition aids a commander in analyzing the information currently obtainable, and using it to predict what to expect in the future.

Napoleon was a very intuitive commander, who through accurate information about the enemy and his own experiences as a commander, was able to predict with uncanny ability the actions of the Coalition armies in the Campaign on 1805. Prior to the campaign, Napoleon correctly guessed the speed by which the enemy troops were moving, where they were heading to, and what they would do when they got there. He was also able to correctly predict when the Russians would reach the area, and was therefore able to launch a successful preemptive strike, crushing the Austrians before the Russians arrived.

Napoleon's intuition was also essential during the actual Battle of Austerlitz itself as he was able to precisely orchestrate the flow of the battle, enticing the enemy into action on his own terms. Through deception techniques, Napoleon was essentially able to dictate the positions on the battlefield of *both* sides. He was successful in doing this because he was able to not only predict, but form the enemy intent.

2) Spies were another way in which commanders were able to gain the information necessary to obtain Dominant Battlespace Knowledge. As described previously, the spy Napoleon had in the Austrian headquarters was able to provide enough information for Napoleon to predict the future actions of the enemy.

3) Newspapers were once again important mechanisms for obtaining information, this time for the purpose of DBK. By not enforcing OPSEC measures, newspapers in the various towns reported news about the enemy that was available to anybody who read them. As previously stated, the Coalition forces apparently paid very little attention to this, allowing Napoleon to get information about the enemy capability, morale, and location on a regular basis. From these articles, he was able to determine the size of the army and therefore their future capabilities, the direction in which they were traveling, and other items of intelligence.

4) Prisoners were also a good way to get information about the capability and intent of the enemy, as well as a way to determine morale. With this information, a commander was aided in predicting the future actions of an enemy.

5) The actions of an enemy during previous engagements was also useful to a commander in predicting what the future course of enemy action might be.

Napoleon correctly guessed that the Austrians would be at Ulm during the initial stages of the campaign in part because be had had previous experience with the Austrians and knew that they would take advantage of the fortifications offered there. Knowing this, he sent his army to that location, and was able to surround and defeat the enemy.

(While it was not the case during the Battle of Austerlitz, Napoleon was finally defeated because of this particular mechanism. His enemy eventually learned his techniques, and was able to prepare for them. Napoleon unfortunately never caught on to this, and did not vary his techniques in time to save his army from destruction.)

Information -- Required

French

- Location, status & number of enemy units
  - Russians and Austrians
  - Austrian Archduke Charles (in the south)
- Location, status, and number of friendly units
- Most likely enemy course of action
- Likelihood of Prussians and others in area to enter war or join the Coalition

Coalition

- Location, status, number of enemy units
- Location, status, number of friendly units
- Most likely enemy course of action

PROPRIETARY 20

The commanders on both sides needed certain information during the Campaign as well as at the Battle of Austerlitz in order to enjoy success.

Napoleon needed to know the location, status, and number of enemy units. Of primary concern was the location of the Russian and Austrian forces throughout the campaign. In order for Napoleon's plan for a preemptive strike to be successful, it was imperative that he be able to engage the armies piecemeal, hitting first the Austrians and then the Russians. This would only be possible if Napoleon could reach the Austrian army before the Russians did. He succeeded in this because he *did* receive very clear information as to the location, status, and number of enemy units throughout the campaign and into the battle. (Napoleon actually kept a card index file on the location of all the enemy forces that he was aware of. This index file was updated every time he received new information about the location or size of these forces.)

In addition to knowledge about the Russians and Austrians in the area into which Napoleon was sending his forces, he also needed information on the other Coalition forces that were positioned throughout Europe--most importantly the forces of Archduke Charles further south in the area of Italy. Charles had been sent to Italy with 90,000 men in anticipation of the French attack coming in that area. Napoleon was aware of this, and needed to make sure at all stages during this campaign that he was fully updated on the location and status of these forces. He sent a portion of the men dedicated to the campaign to block the possible movement of this force northwards into the area in which he was operating.

Napoleon also had the challenge during this campaign of ensuring that he was always aware of the location and status of his own forces. With his new style of army, one that was subdivided, marching separately to their destination, this was not always apparent. It took a great deal of communications and foresight to ensure that the portions of the army always remained close enough that they could be called together to fight when the time came.

Napoleon also needed to know their most likely course of action. He needed to be able to predict with relative certainty what action they would take, allowing him to prepare his forces and either preempt the action or prepare to counter-attack.

One final and essential piece of information Napoleon needed was to know the likelihood that the Prussians or others would enter the war on the side of the Coalition. (This proved to be the one piece of information Napoleon needed that he was unable to maintain.) One of the driving factors of Napoleon's actions, and the quickness of his strike during the Campaign of 1805, was the possibility of the Prussians joining forces with the Austrians and Russians. Not knowing when they might decide to give up their neutrality, Napoleon planned to act before this could happen.

As for the Coalition, they too needed to know the location, status, and number of enemy units in order to succeed in their mission. Unfortunately, they were unable to obtain this information throughout the campaign, and both the Russians and Austrians were thoroughly defeated. Prior to the hostilities at Ulm, the Austrians were unaware that the Grande Armee was approaching--in fact, their intelligence was so poor and slow, that they had not received information that the French forces had left the coast until they were crossing the Rhine.

The Coalition forces were as badly informed during the actual Battle of Austerlitz as they had been during the previous weeks as to the location, status and number of enemy units. Napoleon had successfully deceived the Russians and Austrians into thinking that he had fewer forces than he actually did. He was able to hide two divisions in the valley from the Coalition until they marched up and took the Pratzen Heights. Napoleon had also deceived the Coalition into thinking that his troops were preparing to fight a defensive battle. All of these factors led the Coalition forces to attack under circumstances very unfavorable to them.

Because they were a coalition, it was also very important for them to know the location, status, and number of their own friendly units. Again, however, the allied forces were unsuccessful in accomplishing this. Prior to Ulm, because of a discrepancy in the calendars used, the Austrians believed that the Russians would reach their positions two weeks before it was actually possible. Because of this, the Austrians pushed ahead, making themselves vulnerable to attack by the Grande Armee. The French forces, because *they* knew that the Russians would not make it in time, were able to take advantage of this, and defeat the bulk of the Austrian army in the area.

The Coalition needed to know the most likely course of action of Napoleon and the Grande Armee. From the start, the Coalition forces were deceived by Napoleon--through various techniques, he convinced them that if there was to be a war, it would be in Italy. Thus, the Austrians sent Archduke Charles and a large number of forces (90,000) to the region around Italy, while sending Francis to Bavaria with 70,000 men. When Napoleon's troops reached Ulm, the Austrians were taken completely by surprise by the course he had taken. Because they assumed that Napoleon would not risk spoiling the neutrality of Prussia, they assumed that he would have to come through the Black Forest. Knowing this, Napoleon sent a light cavalry screen through the Forest to distract the Austrians, allowing for the element of surprise when the bulk of his forces came other directions.

Once at Austerlitz, the Coalition forces were again deceived by the French as to what their most likely course of action might be. By sending out signals that he was weaker than he actually was, Napoleon convinced the Coalition that he was preparing to fight a defensive battle, and perhaps even retreat. Thus, when Napoleon was counter-attacked, and eventually succeeded in forcing the enemy to surrender, the Coalition was taken completely by surprise.

Information -- Not Obtained

French

- True intent of the Prussians

Coalition

- Napoleon's true plans
- Capability of enemy
  - Actual troop size
  - Actual troop locations
  - Speed and mobility
- Morale of the enemy

PROPRIETARY 23

The one crucial piece of information that the French were not able to obtain was the true intentions of the Prussians. Fearful of the almost inexhaustible supply of troops available to both Russia and Prussia, Napoleon knew that he needed to defeat the current Coalition before its military capabilities were bolstered by the addition of the Prussian forces. This was a driving factor in Napoleon's plans for the Campaign of 1805, and is in large part responsible for his need to make sure the campaign was carried out swiftly and strongly.

The position of the Coalition during most of the Campaign of 1805 was fairly tenuous, as they were never aware of Napoleon's true plans. Both early on in the Campaign (prior to Ulm) and at the Battle of Austerlitz, Napoleon had deceived the Austrians and Russians, never allowing them to correctly determine his true intentions. Prior to Ulm, Napoleon had convinced the Austrians that if there was to be war, it would be in Italy. This led the Austrians to place their stronger forces too far south to be of use during the Battle of Austerlitz.

At the battle itself, once again, Napoleon deceived the enemy, preventing them from determining what his true plans were. By making his forces appear weaker than they actually were, and by sending signals to the Coalition that Napoleon himself was diffident and anxious, Napoleon made the allies believe that he was preparing to fight a defensive battle. Little did they know however, that Napoleon was actually going to orchestrate the battle on his own terms, enticing the enemy into a position which would allow Napoleon to launch a powerful counteroffensive and defeat the Coalition.

This deception by Napoleon also succeeded in denying to the enemy the true capabilities of the Grande Armee--they were unaware of the actual troop sizes, locations, and speed and mobility. In addition to this, Napoleon was able to deceive the Coalition into believing that morale was low, that the troops, and Napoleon himself were scared, and that they were not prepared to fight an offensive battle.

Information -- Timeliness

French

- Napoleon was aware of coalition plans to unite Austrian and Russians armies for decisive blow against his Grande Armee before he left the Channel
  - Well placed spies such as Schulmeister gave Napoleon such detailed information that it was almost as if he had the full enemy plan
- Constantly being updated on location, number, size, and morale of enemy troops
  - Spies
  - Newspapers
  - Prisoners captured during the battle

PROPRIETARY 34

Napoleon had very timely information about the enemy throughout the entire Campaign as well as during the Battle of Austerlitz. Prior to the troops leaving the Channel coast, Napoleon was aware of the plans of the Coalition to unite the Russian and Austrian armies for a decisive blow against the Grande Armee. His well-placed spy, Schulmeister, was able to provide Napoleon with very detailed and timely information regarding troop movements and future dispositions. This information allowed Napoleon to plan in detail his preemptive strike.

In addition to this, Napoleon was constantly being updated on the location, number, size and morale of the enemy troops. He had spies which were operating in the area that these troops were traveling through that reported back to him, in addition to the information he received from newspapers that were published in the towns that the Coalition forces were traveling through. These sources provided Napoleon with up-to-date information on the troops location, size and morale which he promptly used to update the index file that he kept to store all of the information that came to him. Once the battle of Austerlitz had started, Napoleon continued to update his information on the size and disposition of the enemy from information he was receiving from captured prisoners.

Information -- Timeliness

Coalition

- At beginning of the campaign coalition partners did not know Napoleon was on the way until be arrived
  - Ulm (Mack)
- Russians were unaware of the extent of damage to Austrian forces until they arrived in the area
  - If they had known earlier, the Russians may not have proceeded as far westward, and would not have been within range of the G.A.
- Coalition commanders did not receive their orders until the morning the battle of Austerlitz started - some not until after the battle began
  - Led to a great deal of confusion

PROPRIETARY 25

The Coalition was not as lucky as Napoleon was in getting information in a timely fashion. Actually throughout the Campaign, information timeliness was a major issue, greatly effecting the outcome of the campaign, assuring the defeat of both Coalition armies.

The most glaring example of the lack of timeliness of the receipt of information by the Coalition forces was prior to the start of hostilities. The Austrian forces, far to the west of their Russian counterparts, were taken by surprise by the arrival of the Grande Armee in their vicinity. The news of their departure from the Channel coast had only just been received, with the majority of the Grande Armee reaching them at approximately the same time. (The speed of the Grande Armee in moving across Europe had never before been rivaled.) The Austrians were therefore unable to prepare for Napoleon's arrival, and were taken by surprise when the French came from an unexpected direction.

The Russians too were plagued with not receiving information in a timely fashion. They were not aware of the debacle at Ulm, where the Austrians lost a majority of their forces, until after they arrived in the area. Without the Austrian soldiers to support them, the Russian commander, Kutusov, was not prepared to leave his forces vulnerable to the French, and was forced to withdraw into Bavaria. Had he learned of the defeat of the Austrians sooner, Kutusov may not have marched his soldiers as far forward as he did, allowing for a much greater distance between his forces and the pursuing French.

In addition to this, the Coalition commanders at Austerlitz did not receive their orders until the morning of the battle, and some not until after the battle had already begun. Because the plans were not solidified until late in the evening on the night before the battle, and they had to be transcribed and then passed around to the various commanders, the information was greatly delayed. There was little time to commit the detailed and confusing plans to memory, and there was not time for them to be copied. Thus, on the morning of the battle, there was a great deal of confusion on the battlefield, resulting in delays and mistakes.

Information – Accuracy

French

- Napoleon had accurate information on the plans of the coalition
- Napoleon received very detailed and accurate information on enemy troops from spies and newspapers (card index file)
  - Had very good idea of the number of forces they would be facing at Austerlitz

Coalition

- Napoleon led them to believe that their relinquishing of the Pratzen Heights was a blunder, and that the Coalition now truly did have the upper hand
- Napoleon led them to believe that the G.A. was a much weaker force than they actually were
  - Numbers as well as morale

PROPRIETARY 27

As mentioned before, Napoleon received very accurate and timely information regarding the plans of the Coalition from his spies. He received enough details to plan a very successful preemptive strike against the formidable Coalition force.

Throughout the campaign he was also receiving very detailed and accurate information on enemy troop size and locations from spies and newspapers in the areas through which the enemy was traveling. He used this information to update his card index file, which held all of the detailed information he received about the enemy forces. This accurate information put him in a decisively strong position, enabling him to know what his troops were up against and what they would be facing during the battle.

The Coalition forces did not receive accurate information--the deception campaign that Napoleon had launched proved successful.

At Austerlitz, the Coalition was completely taken in by Napoleon's deception campaign, and were not aware of the true size or disposition of the the French army until the battle began. Napoleon had allowed them to see only a portion of his troops, deceiving the Coalition into believing they had an almost 2:1 superiority in forces. It was not until the fog lifted and the troops hidden in the valley were sent forward that the Coalition began to suspect they had been wrong.

Napoleon was also able to lead the Coalition to believe that relinquishing the Pratzen Heights was a blunder, and that the Coalition truly had the upper hand. This in fact was not accurate, as Napoleon had carefully thought out his plan and was using this as a way to falsely convince the Coalition that they were numerically superior to the Grande Armée in order to entice them to launch an offensive.

In addition to this, Napoleon also led the Coalition to believe that the Grande Armee was a much smaller force than it really was. He hid a portion of the troops from view in the valley, and only moved in another portion (Davout's Corps) on the night before the battle. Thus the Coalition believed that they were fighting a much smaller enemy than they really were.

Elements of IW

OPSEC:

French

- Only two people knew of Napoleon's plan for the preemptive strike (main Campaign of 1805)

- Before the troops left the channel post offices were closed, newspapers were censored, borders were closed, and travelers were detained

- Napoleon placed light cavalry screens in advance of the Grande Armee

- Napoleon uncharacteristically told all of the troops on the night before the battle of Austerlitz what the plans were, which could have been dangerous

PROPRIETARY 29

Napoleon invested a good deal of energy into ensuring that good OPSEC was maintained throughout the Campaign of 1805.

During the planning phase of the Campaign, only two people knew of Napoleon's plans for the preemptive strike—Berthier, Napoleon's Minister of War and chief staff officer, and Daru, the LieutenantGeneral of the Army. The fact that Daru, such an important figure, was the one to take notes during this planning phase, demonstrates the absolute secrecy Napoleon held around these plans.

Prior to the beginning of the march from the Channel to the Rhine, Napoleon took every measure possible to ensure that the secret departure of the Grand Armee was not compromised. Before the troops left the Channel, post offices were closed, newspapers censored, borders closed and travelers detained. This, together with the speed in which the army was able to travel, is what allowed the Grande Armee to reach the Rhine without the Austrians being notified.

Napoleon also used a light cavalry screen in advance of the Grande Armee to ensure that they would be able to avoid any possible enemy outposts or reconnaissance missions.

The only occasion in which Napoleon veered from his policy of such strict OPSEC was on the night before the Battle of Austerlitz. On the eve of the Battle, having gathered the troops in an attempt to boost morale, he gave them all a brief outline of the flow he had set for the battle. This was very uncharacteristic of him, and could have proven disastrous if any of his forces were captured over night. Luckily, this did not happen, and the battle went almost precisely as planned.

Elements of IW (cont.).

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OPSEC:

Coalition

- Had a double agent in Austrian HQ's (Schulmeister) who told Napoleon of coalition plans
- Movement of troops very open, with no apparent caution or attempt to censor newspapers, etc.
- On numerous occasions, the coalition allowed representatives of Napoleon's into their camps for "negotiations", giving him vital information on enemy troop strength and morale

PROPRIETARY 30

The Coalition did not practice good OPSEC at all. A major blunder on the part of the Austrians was allowing the spy Schulmeister into their headquarters. They had actually believed that he was a double agent working for them, and did not know that he was providing Napoleon with information. It was not until halfway through the battle that Schulmeister was caught, and the leak stopped.

The Coalition also took none of the precautions that the French did in attempting to hide the movement of their forces. They were apparently unaware or did not realize the significance of the fact that the local papers were essentially providing Napoleon a paper trail of their every move.

The Coalition was also guilty of allowing emissaries of Napoleon into their camps under the guise of discussing possible armistices or other such diversions. These spies were tasked to collect all of the information they could on the size, location, and morale of the enemy troops. This information was then used by Napoleon to help him carefully plan the demise of his enemy.

Elements of IW (cont.)

PSYOP:

French

- Before Austerlitz, Napoleon appeared diffident and anxious, allowing the enemy to believe he was scared and preparing to fight a defensive battle, or even retreat
  - This behavior was part of the plan to get the coalition to attack when and where he wanted
- Bulletins of G.A. used to influence the people of Austria
  - Wrote flatteringly about revered Austrian history figures and depicted Austria's allies in a poor light

Coalition

- No PSYOP attempted by the Coalition

PROPRIETARY

Napoleon used psychological operations in addition to his deception campaign to entice the enemy into acting in conditions that were not as favorable they believed. In the days before the battle at Austerlitz, Napoleon appeared diffident and anxious, allowing the enemy to believe that he was scared and preparing to fight a defensive battle, or even retreat. In meetings that he agreed to with representatives of Tsar Alexander's under the guise of armistice negotiations, Napoleon allowed himself to appear nervous, scared and unconfident. He had not had a change of clothes in a number of days, and looked as if he was on the verge of collapsing. Under this impression, the allies felt that they were in the perfect position to launch an offensive and crush Napoleon and the Grande Armee.

Napoleon also used the bulletins of the Grande Armee to try to influence the people of Austria. He wrote flatteringly about Austrian historical figures, while at the same time depicting their allies in a poor light. This was an attempt to gain the support of the Austrian people whose towns his men were traveling through, and off whose land they had to live.

The Coalition made no attempts to employ anything resembling a psychological campaign or use any PSYOP elements to influence the Grande Armee or the local populace.

Elements of IW (cont.)

Deception:

French

- Prior to the campaign, through messages to Austrians, he convinced them that war would be in Italy
- Small amount of troops left at channel to light fires, etc. to fool the British into thinking they were still there
- Had people sent to do reconnaissance discuss the imminent invasion of England
- At Vienna, the French used deception (claiming a false armistice agreement) to gain access to the city
- At Austerlitz Napoleon made it appear that he was in a weaker position and more timid than he truly was
  - Abandoned Austerlitz and the Pratzen Heights
  - Denuded his right flank
  - Hid two divisions in the fog of the valley

PROPRIETARY 32

Much of Napoleon's success during the Campaign of 1805 in general and at the Battle Austerlitz was due to his excellent use of deception.

Prior to the campaign Napoleon was able to convince the enemy that the war would be fought much further south than he was actually planning. He had been sending messages to the Austrians that suggested that if there was to be a war, it would be in Italy. Thus, the Austrians were preparing for war in the south and sent their strongest and largest force, led by Archduke Charles, to Italy. A smaller force, under Archduke Francis, was sent to the region of Bavaria.

Once the troops had been committed to the campaign Napoleon kept up his use of deception by leaving a small number of troops at the Channel to make it appear as though the majority of the force was still there. This was both for the benefit of the Austrians and Russians as well as to deter any British forces from attempting to attack from the Channel.

In preparation for the march across Europe, Napoleon had men sent out to do reconnaissance missions to collect information on the land they would be passing through, noting the availability of crops as well as ascertaining the suitability of the road networks. Those that were sent out to do these missions were told to speak only of the imminent invasion of Britain, and to give no suggestions that the army would soon be passing through.

The French also used deception to gain access to the city of Vienna after the destruction of the Austrians at Ulm. Murat, after arriving at the city gates, lied to the soldiers there, telling them to let him and his men in, as an armistice had been signed. Although weary, the Austrians complied, allowing the French troops into the city. This proved to be a fatal and embarrassing judgment on the part of the Austrians.

The Battle of Austerlitz itself was won by Napoleon's skillful deception of the enemy, allowing him to entice them into action under false pretenses. Realizing that he was in a vulnerable position, far from home and isolated, Napoleon knew that he had to get the Coalition to act on *his* terms before reinforcements could arrive. To achieve this, Napoleon deceived the Austrians and Russians into believing that the Grande Armee was much weaker and smaller than they actually were by doing the following: 1) he abandoned the Pratzen Heights, allowing the Austrians and Russians to think that he had made a fatal blunder, and that they were now in a far superior position. 2) Once having ensured that the Coalition was going to take the bait and actually attack, Napoleon set about ensuring that they would attack when and where he wanted. As per his CONOPS, he denuded his right flank to entice the enemy to attack there, freeing up his other forces to attack the weakened and otherwise committed Coalition forces. 3) To achieve this, Napoleon hid two divisions in the floor of the valley, covered by fog. The Coalition had no idea that they were there, and thus were not hesitant to commit the bulk of their forces to the southern edge.

Elements of IW (cont.)

Deception:

Coalition

- Used same deception as the French had just days before (falsely claiming an armistice agreement was in place) to gain time to allow armies to escape from the pursuing forces of Napoleon

Physical Destruction & EW:

French

- N/A

Coalition

- N/A

PROPRIETARY 34

The only notable piece of deception used by the Coalition was the previously mentioned lie that the Russians essentially "stole" from the French, proving to be more embarrassing to the French that it had been initially to the Austrians. After fleeing from Austria and attempting to disengage themselves from the pursuing French, the Russians were desperate for a way to gain some time to break away from the French. They succeeded in doing this by claiming that an armistice had been signed and that the hostilities had to cease. They received acquiescence from the pursuing French, led by Marshal Murat, and subsequently escaped into Bavaria. This was a disaster in that the Russians gained the time needed to escape Napoleon's Grande Armee and meet up with the second half of the Russian forces, greatly increasing their strength.

The Impact of Command

Command Structure:

French

- Everything was centralized under Napoleon
  - Napoleon dictated all plans
  - All efforts coordinated by Napoleon
  - All intelligence information delivered directly to Napoleon
  - All orders, even during battle, came from Napoleon

Coalition

- Because a coalition, all planning difficult
- The authority of Kutusov usurped by Tsar Alexander and Emperor Francis
  - No formal leader and too many decision makers
- Conflict between "hawks" and "doves"
- Conflict between Austrians and Russians
  - Russians dominated, felt were only ones able to defeat G.A.   PROPRIETARY 33

There were huge differences between the command structures of the two forces, which were highly significant in determining the outcome of the war.

The French were fighting under a completely unified command. Not only was Napoleon the head of the military, he was also the Emperor. Thus, any decisions that were made were quickly and easily implemented.

Within the military leadership, everything was centralized under Napoleon. He dictated all plans, coordinated all efforts, and issued all orders.

Napoleon's vast intelligence machine was also all coordinated under him - ensuring that he was aware of every piece of intelligence his assets collected. He then fused and analyzed it, incorporating it into his plans.

The situation was much different for the Coalition. Upon arriving in Bavaria, Kutusov was met by both Tsar Alexander of Russia and Emperor Francis of Austria. These emperors essentially took all power from Kutusov, the experienced and knowledgeable soldier, and left him only room for blame in case of failure. Thus, the army assembled in the area of Austerlitz was left with no formal decision maker.

In addition to this confusion was added the fact that there were many conflicting points of view amongst the decision makers as to whether or not the offensive should be taken, or if the troops should be pulled back even further awaiting more reinforcements. Kutusov, the Commander in Chief of the Russian forces, was very strongly opposed to going on the offensive. After the decision had been made by Alexander to do so, Kutusov essentially opted out of the war and on the morning of the battle he was even reluctant to commit the troops under his control.

There was also a conflict between the Austrians and Russians. The Austrians, having been thoroughly defeated at the Battle of Ulm, were in a weakened position, and in desperate need of help from the Russians. The Russians therefore saw themselves as the saviors of the Austrians. This served to inflate the already large ego of Alexander, making compromise difficult. This is perhaps one the reasons that Emperor Francis was not willing or able to assert his influence during the days leading up to the battle.

The Impact of Personality

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French

- **Napoleon's desire to be recognized as a true emperor led him in his quest during this campaign**
  - A way to prove himself both to his own people and the Emperors of Russia and Prussia
- **Napoleon was able to inspire his troops even under the worst of circumstances**
  - His previously proven military abilities and his successes at home made him a hero to his men
- **Napoleon was untiring - required very little rest or sleep**
  - He was able to orchestrate all aspects of the battle, keeping reign on all details

PROPRIETARY 37

The personality of Napoleon obviously played a very large part in the Campaign of 1805 and at the Battle of Austerlitz.

As the newly, self-coronated Emperor of France, Napoleon still felt as though he needed validation, he needed to prove it to himself, his people, and to the other leaders, that he was a true emperor. He felt that a decisive battle against the two very strong and already legitimated Emperors represented in the Coalition, would help to achieve this validation. This was perhaps one of Napoleon's personal driving factors during the campaign of 1805. Napoleon had yet to fight a major battle against these forces, and was set on proving himself. This also explains why he was so determined to pursue the Russians, not being satisfied with forcing their retreat—he would not let them return home without a severe beating by *Emperor* Napoleon and his Grande Armee.

Through his successes on the battlefield, as well as his successes at home. Napoleon was already seen by his troops to be a hero and their ultimate leader. They believed that he was a 'heavenborn' leader, and were completely faithful to him. Because of this, he was able to inspire his troops even under the worst circumstances. He was able to push the soldiers far into enemy territory in the dead of winter in 1805, with the sheer brilliance of his personality as a leader. Even with the knowledge that they were far outnumbered, their faith in Napoleon as a leader led the men to battle and on to victory.

Another aspect of Napoleon's personality was his amazing ability to remember detailed facts. This ability allowed him to fuse all of the information he received with the benefit of very little staff. In addition to this, Napoleon was able to go without sleep - sometimes sleeping only a couple of hours a night. These two characteristics meant that Napoleon was in complete control at all times - the central decision maker and repository of information.

The Impact of Personality

Coalition

- **Tsar Alexander**
  - He had been the original instigator of the 3rd Coalition
  - He had a sense of "messianic mission" to free Europe from oppression
  - Anxious to defeat Napoleon
    - Francophobe
    - Spoiling for a fight
- **Emperor Francis was relatively uninvolved**
  - He had been hesitant from beginning of value of coalition
  - He deferred to Alexander - felt it was beneath him to oppose his will
- **Kutusov, Commander in Chief of the Russian army, was very hesitant and cautious**
  - Drew into himself and essentially opted out of the war

PROPRIETARY 11

There were three main personalities that were important on the side of the Coalition. The first and foremost was that of Tsar Alexander. Alexander had been the original instigator of the Third Coalition as he felt threatened by Napoleon's recent forays into Europe. He felt that his zone of influence was infringed upon and formed the coalition to throw the French back to their original boundaries of 1791. He had a sense of "messianic mission" to free Europe from oppression, returning them to independent states.

In addition to this, Alexander was a young man spoiling for a fight. He wanted the chance to deal a blow to the French, proving to himself and his people that he was more powerful than Napoleon. This may be why he refused to listen to the urgings of Kutusov and the others at Austerlitz who were recommending that they withdraw further into Bavaria and await reinforcements. Alexander, wanting a battle, was quick to embrace the information he was receiving as to the weakened status of the French.

Emperor Francis, while present at the battle, was actually relatively uninvolved in the entire affair. He had been hesitant from the beginning as to the value of the coalition, feeling neither of the allies could be trusted. In light of this, however, Francis deferred the decision making to Alexander, as he felt it was beneath him to oppose the will of the Tsar.

Kutusov, the Commander in Chief of the Russian army, was very hesitant and cautious as described previously. He felt that they were premature in going on the offensive, preferring instead to retreat further eastward, simultaneously moving the Coalition forces closer to the approaching reinforcements, and drawing the French further from home. When the Tsar ignored his reasoning and decided to take the offensive at Austerlitz, Kutusov withdrew into himself and essentially opted out of the war.

The Impact of Intangibles

Political/Strategic Considerations:

French

- The issue of whether/when the Prussians would enter the Coalition was one of the driving factors of the entire campaign
- Napoleon knew he had to entice the allies into battle before more reinforcements could arrive
- The situation at home was bad, especially monetarily
  - Napoleon knew he had to win a decisive battle

Coalition

- Elements of coalition decision making body were aware of importance of delaying action until reinforcing forces (Russians and Archduke Charles) could arrive

PROPRIETARY 39

One of the biggest strategic considerations for Napoleon was the issue of the Prussians entering the coalition. This was one of the driving factors of the campaign - Napoleon knew he needed to defeat the Coalition armies before Prussia joined them. He could not risk the cooperation of these huge forces against his Grande Armee, so he moved as quickly as possible to ensure that he defeated the Coalition before the Prussians could become involved.

Napoleon was aware also that at Austerlitz he had to get the Coalition forces to fight him instead of allowing them to wait for reinforcements to arrive. Napoleon was already at a force disadvantage and knew he stood no chance after the approaching Russian and Austrians arrived. To this end, Napoleon used every trick he knew to entice the allies into battle. He used deception and psychological operations to convince the Coalition that the Grande Armee was weaker than it really was and that the time was right to launch an offensive.

In addition to the considerations on the battlefield, Napoleon was also concerned about the situation at home. The empire was in dire straits financially, and Napoleon knew that he had to win a decisive battle and bring his army home to turn things around. This would convince the people at home of the worth of his forays into Europe, proving that they would profit by the annexation of territories.

For the Coalition the only real strategic consideration was the question of whether or not they should wait for reinforcements to arrive to ensure a swift and sure defeat of Napoleon and the Grande Armee. Many of the soldiers felt that the Coalition should wait, but they were overruled by the young and eager Tsar Alexander.

The Impact of Intangibles

Unit Morale:

French

- The troops thought of Napoleon as a "heavenborn" leader and had absolute faith in him
  - They were pleased and satisfied when Napoleon told them he would stay out of danger during the battle
- The French troops were fighting for a cause they believed in (a carry-over of revolutionary zeal)
  - Allowed Napoleon to disperse troops without fear of desertion

Coalition

- High morale and confidence prior to battle
  - Reconnaissance mission estimated French troops at 60,000 men vs. 90,000 for the Coalition
  - Napoleon's conduct indicated a timorous frame of mind

PROPRIETARY 40

The French morale was extremely high as the troops left the coast and began the long march into Europe. They were fighting for a cause that they believed in, and demonstrated some of the zeal that was left over from the Revolution. They were fighting for their great leader Napoleon and the French Empire.

As the march dragged on however, the troops began to lose their excitement and morale plummeted. The troops were exhausted, the weather was turning, and they were worn out.

Once at Austerlitz, the troops were once again rallied and morale soared. Napoleon had lifted their spirits with talk of success and promises of returning home victorious. The troops thought of Napoleon as a "heavenborn" leader, and had absolute faith in him. In fact, they were pleased on the night before the battle when Napoleon told them that he would stay out of the battle and out of danger if it looked as if they were winning. Only if the tides turned and the French were in trouble did Napoleon say he would endanger himself and join the fight. Such a selfless demonstration shows the absolute faith and confidence they had in their ruler to be happy to risk their lives to fight his battle, while he remained in safety.

One of the byproducts of this high morale was the ability of Napoleon to wage his new style of dispersed marching to lessen the burden on the army as whole. With soldiers who were excited and committed to the army, Napoleon did not have to worry about troops deserting if they were not in direct control and contact at all times. This was essential to the success of the campaign as Napoleon was able drive his troops across the continent more quickly than his enemy could ever have expected.

The soldiers of the Coalition also had a relatively high morale and confidence level, especially just prior to the battle. After having managed to escape from the pursuing French and having met up with the strong and fierce Russian army, the surviving Austrians were prepared to avenge their losses at Ulm. The Russians, having pulled back and placed themselves in what they thought was a superior position to the French, were also excited and prepared to fight.

With the reconnaissance missions returning with news that the French troops totaled approximately 60,000 men, the Coalition was very confident in their overwhelming superiority in numbers (90,000 men). They felt that they could quickly and easily run through an army so outnumbered and far from home.

In addition to this, they were also taken in by Napoleon's timorous attitude, and thought that the Emperor was frightened. He had made what they thought was a huge mistake by allowing the Coalition to occupy the Pratzen Heights, and was now in a position that was much more difficult to defend. His right flank was extremely weak, and indications pointed to the possibility that he was pulling back his forces and preparing to fight defensively.

With this information, the morale of the Coalition was high as they went into battle.

The Impact of Intangibles

Force Structure:

French

- Each corps completely capable of operating alone
  - "March dispersed, fight concentrated"
    - Traveled separately, making logistics much easier
    - Regrouped when necessary, forming cohesive army
  - Allowed for quick movement across the continent
- Army broken down into smaller pieces to allow commanders to exploit all opportunities offered by terrain and circumstance during a battle
  - Allowed for speed and sudden onslaughts
  - Attacks by dispersed snipers
  - Extended order of battle

PROPRIETARY 41

The structure of the forces had a huge impact on the success of the enemies facing each other. Napoleon, with his "modern" army, had in the end what proved to be the superior structure.

The Grande Armee was established in a such a way that each corps was completely capable of operating alone. They traveled separately, usually along parallel roads, ensuring a higher marching speed. They had no baggage carts or food carts to slow them down. This was possible because the army spread out and each group was able to forage off of the land around them. With no burdensome baggage trains to clog up the road systems, the Grande Armee was able to march at an unprecedented pace. It was due to this fact that the Grande Armee was able to reach the Rhine before the Austrians had even been alerted that they had left the coast; they were traveling as fast as the messengers.

With each corps traveling alone, it might seem that that would make Napoleon and his army less efficient when it came time to fight. This was not the case however, as Napoleon consciously ensured that when necessary, these corps could regroup quickly, forming a cohesive army. He was careful to keep the various corps within one day's march of each other. This ensured that they would be able to regroup when necessary, and also made it easy to communicate, which was extremely important to this type of army.

During the battle, these cohesive smaller fighting units, which were accustomed to operating on their own, also allowed the commanders to exploit opportunities offered by terrain and circumstances during the battle. They allowed for speed and maneuverability, introducing surprise into a battle. They also allowed for attacks by dispersed snipers as well as an extended order of battle.

The Impact of Intangibles (cont.)

Force Structure:

└Coalition

- **Both Austrian and Russian forces were regimental armies of the 18th century. Had no semi-permanent subdivisions**
  - Not as mobile
  - Unable to use advantages of terrain
  - Unable to disperse forces
- **No unit cohesion above the regimental level**
  - Generals rarely commanded same regiments from one day to the next
  - Much confusion and switching around
  - No loyalty

PROPRIETARY 43

In direct contrast to the French force structure, the forces of the Coalition, both the Austrians and Russians, were operating as regimental armies. (While change had been attempted in both, it had not yet been accepted.)

These regimental armies had no semi-permanant subdivisions like the French. This meant that they were not as mobilesincethe entire army, with tens of thousands of men, had to move and attempt to operate as one. This significantly reduced their ability to use the advantages of terrain - it was difficult to maneuver with an army of this size. Thus, being unable to disperse their forces, they were at a significant disadvantage relative to the Grande Armee which was able to quickly shift forces from one area to another when needed.

In addition to this, the armies of the Coalition had no unit cohesion above the regimental level. Generals rarely commanded the same regiments from one day to the next, and officers and their men never had a chance to get to know one another. This led to a great deal of confusion with the constant shifting around, and also ensured that there was very little loyalty between the leaders and the men.

Why Did the French Plan Succeed?

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- Napoleon's well placed spy network enabled him to act in an offensive manner, taking the initiative and controlling the pace of the battle
- Napoleon's previous experience with the coalition actors, coupled with the excellent intelligence he was receiving, as well as his superb intuitive abilities as a commander, allowed him to second guess the actions of the coalition
  - Lead to the virtual destruction of the Austrian army at Ulm
- Napoleon's foresight and ability to deceive the enemy into believing that his G.A. was weaker than actually was
  - Allowed him to entice the enemy into acting on terms favorable to him
- The structure and morale of the G.A. allowed Napoleon to maneuver his forces in a very efficient way
- Fighting a coalition with fragmented leadership PROPRIETARY 44

The French plan succeeded because of the following reasons:

1) Napoleon had a well placed spy network which provided him information in a timely fashion, enabling him to act offensively, taking the initiative and controlling the pace of the battle. The information that Napoleon was receiving from his spies, specifically Schulmeist er, prior to the start of the Campaign provided him with the information he needed in order to reach the Austrians before the Russians could arrive. This allowed him to follow his plan of defeating the enemy piecemeal, first the Austrians and then the Russians. Without this information, the two forces might have met up before Napoleon was able to reach them, forming a much larger and stronger force which Napoleon could not have defeated as easily.

2) In addition to the facts that he was receiving about the enemy from his spies, Napoleon was able to supplement this information with his own intuition. Combining his knowledge of the enemy from previous experience with the intelligence he was receiving, plus his own intuition, Napoleon was able to correctly second-guess the actions of the Coalition forces. This was one of the ways that Napoleon was able to locate the Austrians at Ulm - his intuition, coupled with facts he was receiving and his past experiences, told them that this is where the enemy would have chosen to make their base camp.

3) Napoleon's foresight of what it would take to win a battle, and his ability to make those things happen, also played a large part in the success of the French plan. Napoleon knew that if he was able to deceive the enemy into taking the offensive at Austerlitz under the terms he deemed favorable, he would have a very good chance of success. He knew what the disposition of not only his forces, but those of the enemy would have to be. This ability to predetermine what needed to be done, and make that happen, allowed him to entice the enemy into action of terms favorable to the Grande Armee and defeat the Coalition.

4) The structure and morale of the Grande Armee also allowed Napoleon to maneuver his troops much more efficiently than the Coalition. By dividing his troops into completely independent corps, Napoleon was able to march his army across Europe more quickly than the enemy had ever expected was possible. In addition to this, once at Austerlitz Napoleon was able to move his troops around on the battlefield in such a way that he was able to take advantage of terrain and other circumstances that his enemy was unable to.

5) Napoleon was fighting a Coalition with a fragmented leadership. The Austrians and Russians had communication problems which resulted in difficulty in combing their troops, which was directly responsible for the debacle at Ulm. At Austerlitz, the leadership became even more fragmented with the arrival of Tsar Alexander and Emperor Francis. General Kutusov, the Commander in Chief of the Russian contingent in Bavaria, was disregarded, and no formal decision making process was in place.

Why Didn't the Coalition Plan Succeed?

- **The coalition armies (Russians and Austrians) were not able to unite in time to overwhelm the G.A.**
  - Napoleon's intelligence allowed him to crush the Austrians at Ulm before the Russians could get there

- **Usurping of power by Alexander left Kutusov without a voice at Austerlitz**
  - A young, arrogant Tsar Alexander pushed on with the battle even though Kutusov was urging caution to wait for reinforcements

- **Inaccurate and untimely information as to the size and ability of the G.A. led the coalition to act in conditions not as favorable as they had been led to believe**
  - Never considered the French would recover from initial attack or be capable of taking the Pratzen Heights

- **Doctrine of armies was old fashioned and ill-prepared to deal with the mobile forces of the G.A.**
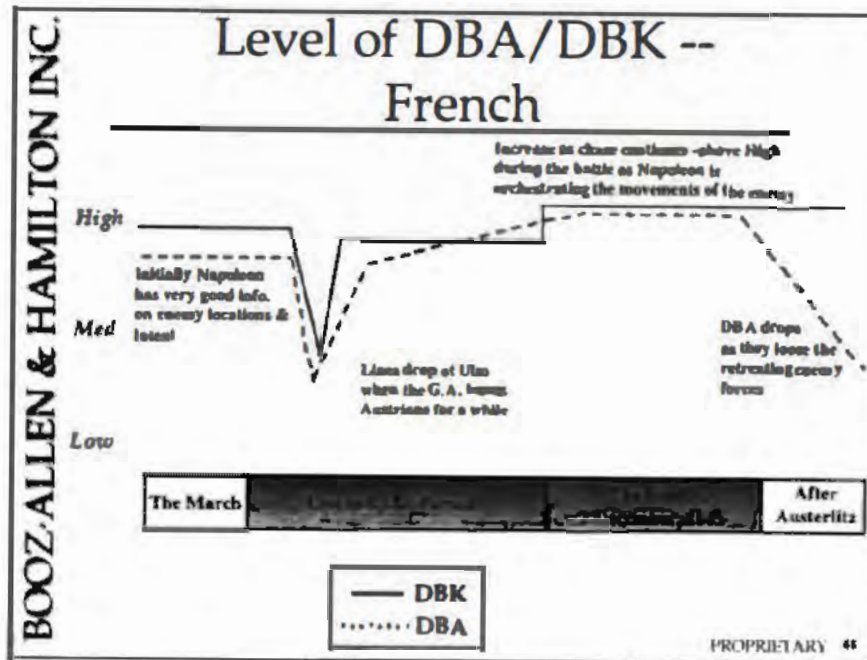
PROPRIETARY 46

The Coalition plan did not succeed for the following reasons:

1) The Russian and Austrian armies were not able to unite in time to overwhelm the Grande Armee, which was the original plan. Instead, Napoleon was able to gain enough information to know where both armies were, and was able to find and crush the Austrians at Ulm before the Russians were able to arrive.

2) When Tsar Alexander usurped Kutusov's command, he left Kutusov without a voice at Austerlitz. Kutusov was hesitant to engage the French at Austerlitz, instead preferring to withdraw further into Bavaria, allowing the reinforcements to arrive, and at the same time drawing Napoleon and the Grande Armee further from home. Tsar Alexander was young and arrogant, anxious for a fight, and did not listen to Kutusov and his other supporters, instead opting to take the offensive at Austerlitz. He had allowed himself to be taken in by Napoleon's deception campaign, and was thoroughly defeated because of it.

3) Napoleon's deception campaign provided the Coalition with inaccurate and untimely information as to the size and ability of the Grande Armee and led the coalition to take the offensive at Austerlitz. They had been deceived into believing that they were in a far superior position compared to Napoleon and the Grande Armee having received reports that they outnumbered the enemy 90,000 to 60,000 men. They were also led by Napoleon to believe that he was weak and scared.

Thus, the Coalition never considered that the French would recover from the initial attack or be capable of taking the Pratzen Heights from them.

4) The old-fashioned regimental style of the armies of the Coalition was no match to the mobile and quick corps structure of the Grande Armee. They traveled and maneuvered in huge masses, making them slow and cumbersome, and unable to maneuver with any ease on the battlefield. They were unable to take advantage of terrain, and were not able to defend against the mobile corps that Napoleon sent against them.

Level of DBA/DBK -- French

Increase as closer continues -above High
during the battle as Napoleon is
orchestrating the movements of the enemy

High

Initially Napoleon
has very good info.
on enemy locations &
intent

Med

DBA drops
as they loose the
retreating enemy
forces

Lines drop at Ulm
when the G.A. keeps
Austrians for a while

Low

| The March | | After Austerlitz |

——— DBK

·······DBA

DBA:

The DBA line for the French was initially fairly high. Napoleon was receiving very
good information (from spies, newspapers, and reconnaissance missions) on the
locations of the enemy forces. He was able to update his card index file often,
allowing him to plan with precise detail his preemptive strike. It was not absolutely
high because the forces were constantly moving, and Napoleon was not able to
receive real-time information about the enemy.

```
ERROR: timeout
OFFENDING COMMAND: timeout

STACK:

-mark-
-savelevel-
```

The following mechanisms were used by Napoleon and the Grande Armee as well as the Coalition to obtain the above mentioned pieces of information necessary for Dominant Battlespace Awareness:

1) Spies were the primary method used by commanders during this period to glean information about their enemy. In this study one case in particular stands out as most important. Prior to the campaign of 1805 Napoleon had insinuated a spy into the headquarters of the Austrian army. This spy, Schulmeister, was able to give Napoleon such good information on the future plans of the Austrian army and their allies that it has been said that it was almost as if Napoleon was sitting on their planning board. This information allowed Napoleon to create the plan for the preemptive strike of the Campaign of 1805 in detail, knowing from Schulmeister's information where and when to expect coalition forces.

Throughout the rest of the Campaign and during the actual battle of Austerlitz itself, spies were often used to gain information about the enemy, providing insight into the enemy order of battle, enemy capability, etc. Napoleon used spies during the last few days before the battle to ensure that he had and maintained Dominant Battlespace Awareness. In these cases, he sent representatives into the enemy camps under the guise of diplomacy in order to gauge the enemy morale as well as to verify numbers and positions.

2) Newspapers also provided Napoleon information on enemy troop sizes, location, and morale. The Coalition armies made very little attempt to control or subdue the press of the towns through which they traveled. This made it very easy for Napoleon to track the movement of enemy forces, as they were reported in the newspapers of the areas through which they traveled.

3) Reconnaissance missions were another way in which the commanders in this case were able to learn about the enemy order of battle and capability. In addition to this however, Napoleon also used these reconnaissance missions to collect logistical information such as the availability of produce and the road networks of the areas through which he was planning on traveling. This was especially important to the Grande Armee, as they were structured in such a way that they marched in smaller, divided groups and lived off of the land that they were traveling through. Baggage trains were no longer used, and the soldiers were expected to forage for their food along the way. This greatly increased the speed at which the army could travel, but also made such logistical details imperative for a commander before the troops could be sent out.

4) Once the battle had begun, commanders were able to maintain and update the information they needed to have in order to gain Dominant Battlespace Awareness by the information they received from captured prisoners. They provided information as to the enemy order of battle, their capabilities, locations and troop strengths.

Sources & Mechanisms of DBK

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Sources

- Identity, personality, and location of decision maker
- Friendly & enemy capability
- Friendly & enemy intent
- Friendly & enemy morale
- Enemy TTP & historical performance
- Location and status of friendly and enemy communication lines

Mechanisms

- Commander's intuition
- Spies
- News
- Prisoners
- Previous engagements

PROPRIETARY 17

The following are sources of information a commander must have in order to have Dominant Battlespace Knowledge:

1) Identity, personality, and location of the enemies decision maker.

2) Capability of both friendly and enemy forces.

3) Friendly and enemy intent to determine or predict future enemy actions.

4) Friendly and enemy morale to determine what an enemy might be capable of doing in the future.

5) Enemy TTP and historical performance may be used to determine what they might do in similar future situations.

6) The location and status of friendly and enemy communications lines.

The following mechanisms were used by Napoleon and the Grande Armee as well as the Coalition to obtain the above mentioned pieces of information necessary for Dominant Battlespace Knowledge:

1) **A commander's intuition** developed through experience allows him to synthesize the information he is receiving and predict what the enemy in question will do in the future. This intuition aids a commander in analyzing the information currently obtainable, and using it to predict what to expect in the future.

Napoleon was a very intuitive commander, who through accurate information about the enemy and his own experiences as a commander, was able to predict with uncanny ability the actions of the Coalition armies in the Campaign on 1805. Prior to the campaign, Napoleon correctly guessed the speed by which the enemy troops were moving, where they were heading to, and what they would do when they got there. He was also able to correctly predict when the Russians would reach the area, and was therefore able to launch a successful preemptive strike, crushing the Austrians before the Russians arrived.

Napoleon's intuition was also essential during the actual Battle of Austerlitz itself as he was able to precisely orchestrate the flow of the battle, enticing the enemy into action on his own terms. Through deception techniques, Napoleon was essentially able to dictate the positions on the battlefield of *both* sides. He was successful in doing this because he was able to not only predict, but form the enemy intent.

2) **Spies** were another way in which commanders were able to gain the information necessary to obtain Dominant Battlespace Knowledge. As described previously, the spy Napoleon had in the Austrian headquarters was able to provide enough information for Napoleon to predict the future actions of the enemy.

3) **Newspapers** were once again important mechanisms for obtaining information, this time for the purpose of DBK. By not enforcing OPSEC measures, newspapers in the various towns reported news about the enemy that was available to anybody who read them. As previously stated, the Coalition forces apparently paid very little attention to this, allowing Napoleon to get information about the enemy capability, morale, and location on a regular basis. From these articles, he was able to determine the size of the army and therefore their future capabilities, the direction in which they were traveling, and other items of intelligence.

4) Prisoners were also a good way to get information about the capability and intent of the enemy, as well as a way to determine morale. With this information, a commander was aided in predicting the future actions of an enemy.

5) The actions of an enemy during previous engagements was also useful to a commander in predicting what the future course of enemy action might be.

Napoleon correctly guessed that the Austrians would be at Ulm during the initial stages of the campaign in part because he had had previous experience with the Austrians and knew that they would take advantage of the fortifications offered there. Knowing this, he sent his army to that location, and was able to surround and defeat the enemy.

(While it was not the case during the Battle of Austerlitz, Napoleon was finally defeated because of this particular mechanism. His enemy eventually learned his techniques, and was able to prepare for them. Napoleon unfortunately never caught on to this, and did not vary his techniques in time to save his army from destruction.)

Information -- Required

French

- **Location, status & number of enemy units**
  - Russians and Austrians
  - Austrian Archduke Charles (in the south)
- **Location, status, and number of friendly units**
- **Most likely enemy course of action**
- **Likelihood of Prussians and others in area to enter war or join the Coalition**

Coalition

- **Location, status, number of enemy units**
- **Location, status, number of friendly units**
- **Most likely enemy course of action**

PROPRIETARY   20

The commanders on both sides needed certain information during the Campaign as well as at the Battle of Austerlitz in order to enjoy success.

Napoleon needed to know the location, status, and number of enemy units. Of primary concern was the location of the Russian and Austrian forces throughout the campaign. In order for Napoleon's plan for a preemptive strike to be successful, it was imperative that he be able to engage the armies piecemeal, hitting first the Austrians and then the Russians. This would only be possible if Napoleon could reach the Austrian army before the Russians did. He succeeded in this because he *did* receive very clear information as to the location, status, and number of enemy units throughout the campaign and into the battle. (Napoleon actually kept a card index file on the location of all the enemy forces that he was aware of. This index file was updated every time he received new information about the location or size of these forces.)

In addition to knowledge about the Russians and Austrians in the area into which Napoleon was sending his forces, he also needed information on the other Coalition forces that were positioned throughout Europe--most importantly the forces of Archduke Charles further south in the area of Italy. Charles had been sent to Italy with 90,000 men in anticipation of the French attack coming in that area. Napoleon was aware of this, and needed to make sure at all stages during this campaign that he was fully updated on the location and status of these forces. He sent a portion of the men dedicated to the campaign to block the possible movement of this force northwards into the area in which he was operating.

Napoleon also had the challenge during this campaign of ensuring that he was always aware of the location and status of his own forces. With his new style of army, one that was subdivided, marching separately to their destination, this was not always apparent. It took a great deal of communications and foresight to ensure that the portions of the army always remained close enough that they could be called together to fight when the time came.

Napoleon also needed to know their most likely course of action. He needed to be able to predict with relative certainty what action they would take, allowing him to prepare his forces and either preempt the action or prepare to counter-attack.

One final and essential piece of information Napoleon needed was to know the likelihood that the Prussians or others would enter the war on the side of the Coalition. (This proved to be the one piece of information Napoleon needed that he was unable to maintain.) One of the driving factors of Napoleon's actions, and the quickness of his strike during the Campaign of 1805, was the possibility of the Prussians joining forces with the Austrians and Russians. Not knowing when they might decide to give up their neutrality, Napoleon planned to act before this could happen.

As for the Coalition, they too needed to know the location, status, and number of enemy units in order to succeed in their mission. Unfortunately, they were unable to obtain this information throughout the campaign, and both the Russians and Austrians were thoroughly defeated. Prior to the hostilities at Ulm, the Austrians were unaware that the Grande Armee was approaching--in fact, their intelligence was so poor and slow, that they had not received information that the French forces had left the coast until they were crossing the Rhine.

The Coalition forces were as badly informed during the actual Battle of Austerlitz as they had been during the previous weeks as to the location, status and number of enemy units. Napoleon had successfully deceived the Russians and Austrians into thinking that he had fewer forces than he actually did. He was able to hide two divisions in the valley from the Coalition until they marched up and took the Pratzen Heights. Napoleon had also deceived the Coalition into thinking that his troops were preparing to fight a defensive battle. All of these factors led the Coalition forces to attack under circumstances very unfavorable to them.

Because they were a coalition, it was also very important for them to know the location, status, and number of their own friendly units. Again, however, the allied forces were unsuccessful in accomplishing this. Prior to Ulm, because of a discrepancy in the calendars used, the Austrians believed that the Russians would reach their positions two weeks before it was actually possible. Because of this, the Austrians pushed ahead, making themselves vulnerable to attack by the Grande Armee. The French forces, because *they* knew that the Russians would not make it in time, were able to take advantage of this, and defeat the bulk of the Austrian army in the area.

The Coalition needed to know the most likely course of action of Napoleon and the Grande Armee. From the start, the Coalition forces were deceived by Napoleon--through various techniques, he convinced them that if there was to be a war, it would be in Italy. Thus, the Austrians sent Archduke Charles and a large number of forces (90,000) to the region around Italy, while sending Francis to Bavaria with 70,000 men. When Napoleon's troops reached Ulm, the Austrians were taken completely by surprise by the course he had taken. Because they assumed that Napoleon would not risk spoiling the neutrality of Prussia, they assumed that he would have to come through the Black Forest. Knowing this, Napoleon sent a light cavalry screen through the Forest to distract the Austrians, allowing for the element of surprise when the bulk of his forces came other directions.

Once at Austerlitz, the Coalition forces were again deceived by the French as to what their most likely course of action might be. By sending out signals that he was weaker than he actually was, Napoleon convinced the Coalition that he was preparing to fight a defensive battle, and perhaps even retreat. Thus, when Napoleon was counter-attacked, and eventually succeeded in forcing the enemy to surrender, the Coalition was taken completely by surprise.

Information -- Not Obtained

French

- True intent of the Prussians

Coalition

- Napoleon's true plans
- Capability of enemy
    - Actual troop size
    - Actual troop locations
    - Speed and mobility
- Morale of the enemy

The one crucial piece of information that the French were not able to obtain was the true intentions of the Prussians. Fearful of the almost inexhaustible supply of troops available to both Russia and Prussia, Napoleon knew that he needed to defeat the current Coalition before its military capabilities were bolstered by the addition of the Prussian forces. This was a driving factor in Napoleon's plans for the Campaign of 1805, and is in large part responsible for his need to make sure the campaign was carried out swiftly and strongly.

The position of the Coalition during most of the Campaign of 1805 was fairly tenuous, as they were never aware of Napoleon's true plans. Both early on in the Campaign (prior to Ulm) and at the Battle of Austerlitz, Napoleon had deceived the Austrians and Russians, never allowing them to correctly determine his true intentions. Prior to Ulm, Napoleon had convinced the Austrians that if there was to be war, it would be in Italy. This led the Austrians to place their stronger forces too far south to be of use during the Battle of Austerlitz.

At the battle itself, once again, Napoleon deceived the enemy, preventing them from determining what his true plans were. By making his forces appear weaker than they actually were, and by sending signals to the Coalition that Napoleon himself was diffident and anxious, Napoleon made the allies believe that he was preparing to fight a defensive battle. Little did they know however, that Napoleon was actually going to orchestrate the battle on his own terms, enticing the enemy into a position which would allow Napoleon to launch a powerful counteroffensive and defeat the Coalition.

This deception by Napoleon also succeeded in denying to the enemy the true capabilities of the Grande Armee--they were unaware of the actual troop sizes, locations, and speed and mobility. In addition to this, Napoleon was able to deceive the Coalition into believing that morale was low, that the troops, and Napoleon himself were scared, and that they were not prepared to fight an offensive battle.

Information -- Timeliness

French

- Napoleon was aware of coalition plans to unite Austrian and Russians armies for decisive blow against his Grande Armee before he left the Channel
  - Well placed spies such as Schulmeister gave Napoleon such detailed information that it was almost as if he had the full enemy plan
- Constantly being updated on location, number, size, and morale of enemy troops
  - Spies
  - Newspapers
  - Prisoners captured during the battle

Napoleon had very timely information about the enemy throughout the entire Campaign as well as during the Battle of Austerlitz. Prior to the troops leaving the Channel coast, Napoleon was aware of the plans of the Coalition to unite the Russian and Austrian armies for a decisive blow against the Grande Armee. His well-placed spy, Schulmeister, was able to provide Napoleon with very detailed and timely information regarding troop movements and future dispositions. This information allowed Napoleon to plan in detail his preemptive strike.

In addition to this, Napoleon was constantly being updated on the location, number, size and morale of the enemy troops. He bad spies which were operating in the area that these troops were traveling through that reported back to him, in addition to the information he received from newspapers that were published in the towns that the Coalition forces were traveling through. These sources provided Napoleon with up-to-date information on the troops location, size and morale which he promptly used to update the index file that he kept to store all of the information that came to him. Once the battle of Austerlitz had started, Napoleon continued to update his information on the size and disposition of the enemy from information he was receiving from captured prisoners.

Information -- Timeliness

Coalition

- At beginning of the campaign coalition partners did not know Napoleon was on the way until he arrived
  - Ulm (Mack)
- Russians were unaware of the extent of damage to Austrian forces until they arrived in the area
  - If they had known earlier, the Russians may not have proceeded as far westward, and would not have been within range of the G.A.
- Coalition commanders did not receive their orders until the morning the battle of Austeriitz started - some not until after the battle began
  - Led to a great deal of confusion

PROPRIETARY 25

The Coalition was not as lucky as Napoleon was in getting information in a timely fashion. Actually throughout the Campaign, information timeliness was a major issue, greatly effecting the outcome of the campaign, assuring the defeat of both Coalition armies.

The most glaring example of the lack of timeliness of the receipt of information by the Coalition forces was prior to the start of hostilities. The Austrian forces, far to the west of their Russian counterparts, were taken by surprise by the arrival of the Grande Armee in their vicinity. The news of their departure from the Channel coast had only just been received, with the majority of the Grande Armee reaching them at approximately the same time. (The speed of the Grande Armee in moving across Europe had never before been rivaled.) The Austrians were therefore unable to prepare for Napoleon's arrival, and were taken by surprise when the French came from an unexpected direction.

The Russians too were plagued with not receiving information in a timely fashion. They were not aware of the debacle at Ulm, where the Austrians lost a majority of their forces, until after they arrived in the area. Without the Austrian soldiers to support them, the Russian commander, Kutusov, was not prepared to leave his forces vulnerable to the French, and was forced to withdraw into Bavaria. Had he learned of the defeat of the Austrians sooner, Kutusov may not have marched his soldiers as far forward as he did, allowing for a much greater distance between his forces and the pursuing French.

In addition to this, the Coalition commanders at Austerlitz did not receive their orders until the morning of the battle, and some not until after the battle had already begun. Because the plans were not solidified until late in the evening on the night before the battle, and they had to be transcribed and then passed around to the various commanders, the information was greatly delayed. There was little time to commit the detailed and confusing plans to memory, and there was not time for them to be copied. Thus, on the morning of the battle, there was a great deal of confusion on the battlefield, resulting in delays and mistakes.

Information -- Accuracy

French

- Napoleon had accurate information on the plans of the coalition
- Napoleon received very detailed and accurate information on enemy troops from spies and newspapers (card index file)
  - Had very good idea of the number of forces they would be facing at Austerlitz

Coalition

- Napoleon led them to believe that their relinquishing of the Pratzen Heights was a blunder, and that the Coalition now truly did have the upper hand
- Napoleon led them to believe that the G.A. was a much weaker force than they actually were
  - Numbers as well as morale

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PROPRIETARY 17

As mentioned before, Napoleon received very accurate and timely information regarding the plans of the Coalition from his spies. He received enough details to plan a very successful preemptive strike against the formidable Coalition force.

Throughout the campaign he was also receiving very detailed and accurate information on enemy troop size and locations from spies and newspapers in the areas through which the enemy was traveling. He used this information to update his card index file, which held all of the detailed information he received about the enemy forces. This accurate information put him in a decisively strong position, enabling him to know what his troops were up against and what they would be facing during the battle.

The Coalition forces did not receive accurate information--the deception campaign that Napoleon had launched proved successful.

At Austerlitz, the Coalition was completely taken in by Napoleon's deception campaign, and were not aware of the true size or disposition of the the French army until the battle began. Napoleon had allowed them to see only a portion of his troops, deceiving the Coalition into believing they had an almost 2:1 superiority in forces. It was not until the fog lifted and the troops hidden in the valley were sent forward that the Coalition began to suspect they had been wrong.

Napoleon was also able to lead the Coalition to believe that relinquishing the Pratzen Heights was a blunder, and that the Coalition truly had the upper hand. This in fact was not accurate, as Napoleon had carefully thought out his plan and was using this as a way to falsely convince the Coalition that they were numerically superior to the Grande Armee in order to entice them to launch an offensive.

In addition to this, Napoleon also led the Coalition to believe that the Grande Armee was a much smaller force than it really was. He hid a portion of the troops from view in the valley, and only moved in another portion (Davout's Corps) on the night before the battle. Thus the Coalition believed that they were fighting a much smaller enemy than they really were.

Elements of IW

OPSEC:

French

- Only two people knew of Napoleon's plan for the preemptive strike (main Campaign of 1805)
- Before the troops left the channel post offices were closed, newspapers were censored, borders were closed, and travelers were detained
- Napoleon placed light cavalry screens in advance of the Grande Armee
- Napoleon uncharacteristically told all of the troops on the night before the battle of Austerlitz what the plans were, which could have been dangerous

PROPRIETARY 29

Napoleon invested a good deal of energy into ensuring that good OPSEC was maintained throughout the Campaign of 1805.

During the planning phase of the Campaign, only two people knew of Napoleon's plans for the preemptive strike--Berthier, Napoleon's Minister of War and chief staff officer, and Daru, the LieutenantGeneral of the Army. The fact that Daru, such an important figure, was the one to take notes during this planning phase, demonstrates the absolute secrecy Napoleon held around these plans.

Prior to the beginning of the march from the Channel to the Rhine, Napoleon took every measure possible to ensure that the secret departure of the Grand Armee was not compromised. Before the troops left the Channel, post offices were closed, newspapers censored, borders closed and travelers detained. This, together with the speed in which the army was able to travel, is what allowed the Grande Armee to reach the Rhine without the Austrians being notified.

Napoleon also used a light cavalry screen in advance of the Grande Armee to ensure that they would be able to avoid any possible enemy outposts or reconnaissance missions.

The only occasion in which Napoleon veered from his policy of such strict OPSEC was on the night before the Battle of Austerlitz. On the eve of the Battle, having gathered the troops in an attempt to boost morale, he gave them all a brief outline of the flow he had set for the battle. This was very uncharacteristic of him, and could have proven disastrous if any of his forces were captured over night. Luckily, this did not happen, and the battle went almost precisely as planned.

Elements of IW (cont.).

OPSEC:

Coalition

- Had a double agent in Austrian HQ's (Schulmeister) who told Napoleon of coalition plans

- Movement of troops very open, with no apparent caution or attempt to censor newspapers, etc.

- On numerous occasions, the coalition allowed representatives of Napoleon's into their camps for "negotiations", giving him vital information on enemy troop strength and morale

PROPRIETARY 30

The Coalition did not practice good OPSEC at all. A major blunder on the part of the Austrians was allowing the spy Schulmeister into their headquarters. They had actually believed that he was a double agent working for them, and did not know that he was providing Napoleon with information. It was not until halfway through the battle that Schulmeister was caught, and the leak stopped.

The Coalition also took none of the precautions that the French did in attempting to hide the movement of their forces. They were apparently unaware or did not realize the significance of the fact that the local papers were essentially providing Napoleon a paper trail of their every move.

The Coalition was also guilty of allowing emissaries of Napoleon into their camps under the guise of discussing possible armistices or other such diversions. These spies were tasked to collect all of the information they could on the size, location, and morale of the enemy troops. This information was then used by Napoleon to help him carefully plan the demise of his enemy.

Elements of IW (cont.)

PSYOP:

French

- Before Austerlitz, Napoleon appeared diffident and anxious, allowing the enemy to believe he was scared and preparing to fight a defensive battle, or even retreat
  - This behavior was part of the plan to get the coalition to attack when and where he wanted
- Bulletins of G.A. used to influence the people of Austria
  - Wrote flatteringly about revered Austrian history figures and depicted Austria's allies in a poor light

Coalition

- No PSYOP attempted by the Coalition

Napoleon used psychological operations in addition to his deception campaign to entice the enemy into acting in conditions that were not as favorable they believed. In the days before the battle at Austerlitz, Napoleon appeared diffident and anxious, allowing the enemy to believe that he was scared and preparing to fight a defensive battle, or even retreat. In meetings that he agreed to with representatives of Tsar Alexander's under the guise of armistice negotiations, Napoleon allowed himself to appear nervous, scared and unconfident. He had not had a change of clothes in a number of days, and looked as if he was on the verge of collapsing. Under this impression, the allies felt that they were in the perfect position to launch an offensive and crush Napoleon and the Grande Armee.

Napoleon also used the bulletins of the Grande Armee to try to influence the people of Austria. He wrote flatteringly about Austrian historical figures, while at the same time depicting their allies in a poor light. This was an attempt to gain the support of the Austrian people whose towns his men were traveling through, and off whose land they had to live.

The Coalition made no attempts to employ anything resembling a psychological campaign or use any PSYOP elements to influence the Grande Armee or the local populace.

Elements of IW (cont.)

Deception:

French

- Prior to the campaign, through messages to Austrians, he convinced them that war would be in Italy
- Small amount of troops left at channel to light fires, etc. to fool the British into thinking they were still there
- Had people sent to do reconnaissance discuss the imminent invasion of England
- At Vienna, the French used deception (claiming a false armistice agreement) to gain access to the city
- At Austerlitz Napoleon made it appear that he was in a weaker position and more timid than he truly was
  - Abandoned Austerlitz and the Pratzen Heights
  - Denuded his right flank
  - Hid two divisions in the fog of the valley

PROPRIETARY 32

Much of Napoleon's success during the Campaign of 1805 in general and at the Battle Austerlitz was due to his excellent use of deception.

Prior to the campaign Napoleon was able to convince the enemy that the war would be fought much further south than he was actually planning. He had been sending messages to the Austrians that suggested that if there was to be a war, it would be in Italy. Thus, the Austrians were preparing for war in the south and sent their strongest and largest force, led by Archduke Charles, to Italy. A smaller force, under Archduke Francis, was sent to the region of Bavaria.

Once the troops had been committed to the campaign Napoleon kept up his use of deception by leaving a small number of troops at the Channel to make it appear as though the majority of the force was still there. This was both for the benefit of the Austrians and Russians as well as to deter any British forces from attempting to attack from the Channel.

In preparation for the march across Europe, Napoleon had men sent out to do reconnaissance missions to collect information on the land they would be passing through, noting the availability of crops as well as ascertaining the suitability of the road networks. Those that were sent out to do these missions were told to speak only of the imminent invasion of Britain, and to give no suggestions that the army would soon be passing through.

The French also used deception to gain access to the city of Vienna after the destruction of the Austrians at Ulm. Murat, after arriving at the city gates, lied to the soldiers there, telling them to let him and his men in, as an armistice had been signed. Although weary, the Austrians complied, allowing the French troops into the city. This proved to be a fatal and embarrassing judgment on the part of the Austrians.

The Battle of Austerlitz itself was won by Napoleon's skillful deception of the enemy, allowing him to entice them into action under false pretenses. Realizing that he was in a vulnerable position, far from home and isolated, Napoleon knew that he had to get the Coalition to act on *his* terms before reinforcements could arrive. To achieve this, Napoleon deceived the Austrians and Russians into believing that the Grande Armee was much weaker and smaller than they actually were by doing the following: 1) he abandoned the Pratzen Heights, allowing the Austrians and Russians to think that he had made a fatal blunder, and that they were now in a far superior position. 2) Once having ensured that the Coalition was going to take the bait and actually attack, Napoleon set about ensuring that they would attack when and where he wanted. As per his CONOPS, be denuded his right flank to entice the enemy to attack there, freeing up his other forces to attack the weakened and otherwise committed Coalition forces. 3) To achieve this, Napoleon hid two divisions in the floor of the valley, covered by fog. The Coalition had no idea that they were there, and thus were not hesitant to commit the bulk of their forces to the southern edge.

Elements of IW (cont.)

Deception:

Coalition

- Used same deception as the French had just days before (falsely claiming an armistice agreement was in place) to gain time to allow armies to escape from the pursuing forces of Napoleon

Physical Destruction & EW:

French

- N/A

Coalition

- N/A

The only notable piece of deception used by the Coalition was the previously mentioned lie that the Russians essentially "stole" from the French, proving to be more embarrassing to the French that it had been initially to the Austrians. After fleeing from Austria and attempting to disengage themselves from the pursuing French, the Russians were desperate for a way to gain some time to break away from the French. They succeeded in doing this by claiming that an armistice had been signed and that the hostilities had to cease. They received acquiescence from the pursuing French, led by Marshal Murat, and subsequently escaped into Bavaria. This was a disaster in that the Russians gained the time needed to escape Napoleon's Grande Armee and meet up with the second half of the Russian forces, greatly increasing their strength.

The Impact of Command

Command Structure:

French

- Everything was centralized under Napoleon
  - Napoleon dictated all plans
  - All efforts coordinated by Napoleon
  - All intelligence information delivered directly to Napoleon
  - All orders, even during battle, came from Napoleon

Coalition

- Because a coalition, all planning difficult
- The authority of Kutusov usurped by Tsar Alexander and Emperor Francis
  - No formal leader and too many decision makers
- Conflict between "hawks" and "doves"
- Conflict between Austrians and Russians
  - Russians dominated, felt were only ones able to defeat G.A.

PROPRIETARY 33

There were huge differences between the command structures of the two forces, which were highly significant in determining the outcome of the war.

The French were fighting under a completely unified command. Not only was Napoleon the head of the military, he was also the Emperor. Thus, any decisions that were made were quickly and easily implemented.

Within the military leadership, everything was centralized under Napoleon. He dictated all plans, coordinated all efforts, and issued all orders.

Napoleon's vast intelligence machine was also all coordinated under him - ensuring that he was aware of every piece of intelligence his assets collected. He then fused and analyzed it, incorporating it into his plans.

The situation was much different for the Coalition. Upon arriving in Bavaria, Kutusov was met by both Tsar Alexander of Russia and Emperor Francis of Austria. These emperors essentially took all power from Kutusov, the experienced and knowledgeable soldier, and left him only room for blame in case of failure. Thus, the army assembled in the area of Austerlitz was left with no formal decision maker.

In addition to this confusion was added the fact that there were many conflicting points of view amongst the decision makers as to whether or not the offensive should be taken, or if the troops should be pulled back even further awaiting more reinforcements. Kutusov, the Commander in Chief of the Russian forces, was very strongly opposed to going on the offensive. After the decision had been made by Alexander to do so, Kutusov essentially opted out of the war and on the morning of the battle he was even reluctant to commit the troops under his control.

There was also a conflict between the Austrians and Russians. The Austrians, having been thoroughly defeated at the Battle of Ulm, were in a weakened position, and in desperate need of help from the Russians. The Russians therefore saw themselves as the saviors of the Austrians. This served to inflate the already large ego of Alexander, making compromise difficult. This is perhaps one the reasons that Emperor Francis was not willing or able to assert his influence during the days leading up to the battle.

The Impact of Personality

French

- **Napoleon's desire to be recognized as a true emperor led him in his quest during this campaign**
  - A way to prove himself both to his own people and the Emperors of Russia and Prussia
- **Napoleon was able to inspire his troops even under the worst of circumstances**
  - His previously proven military abilities and his successes at home made him a hero to his men
- **Napoleon was untiring - required very little rest or sleep**
  - He was able to orchestrate all aspects of the battle, keeping reign on all details

PROPRIETARY 37

The personality of Napoleon obviously played a very large part in the Campaign of 1805 and at the Battle of Austerlitz.

As the newly, self-coronated Emperor of France, Napoleon still felt as though he needed validation, he needed to prove it to himself, his people, and to the other leaders, that he was a true emperor. He felt that a decisive battle against the two very strong and already legitimated Emperors represented in the Coalition, would help to achieve this validation. This was perhaps one of Napoleon's personal driving factors during the campaign of 1805. Napoleon had yet to fight a major battle against these forces, and was set on proving himself. This also explains why he was so determined to pursue the Russians, not being satisfied with forcing their retreat--he would not let them return home without a severe beating by *Emperor* Napoleon and his Grande Armee.

Through his successes on the battlefield, as well as his successes at home, Napoleon was already seen by his troops to be a hero and their ultimate leader. They believed that he was a 'heavenborn' leader, and were completely faithful to him. Because of this, he was able to inspire his troops even under the worst circumstances. He was able to push the soldiers far into enemy territory in the dead of winter in 1805, with the sheer brilliance of his personality as a leader. Even with the knowledge that they were far outnumbered, their faith in Napoleon as a leader led the men to battle and on to victory.

Another aspect of Napoleon's personality was his amazing ability to remember detailed facts. This ability allowed him to fuse all of the information he received with the benefit of very little staff. In addition to this, Napoleon was able to go without sleep - sometimes sleeping only a couple of hours a night. These two characteristics meant that Napoleon was in complete control at all times - the central decision maker and repository of information.

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The Impact of Personality

Coalition

- **Tsar Alexander**
  - He had been the original instigator of the 3rd Coalition
  - He had a sense of "messianic mission" to free Europe from oppression
  - Anxious to defeat Napoleon
    - Francophobe
    - Spoiling for a fight
- **Emperor Francis was relatively uninvolved**
  - He had been hesitant from beginning of value of coalition
  - He deferred to Alexander - felt it was beneath him to oppose his will
- **Kutusov, Commander in Chief of the Russian army, was very hesitant and cautious**
  - Drew into himself and essentially opted out of the war

PROPRIETARY 30

There were three main personalities that were important on the side of the Coalition. The first and foremost was that of Tsar Alexander. Alexander had been the original instigator of the Third Coalition as he felt threatened by Napoleon's recent forays into Europe. He felt that his zone of influence was infringed upon and formed the coalition to throw the French back to their original boundaries of 1791. He had a sense of "messianic mission" to free Europe from oppression, returning them to independent states.

In addition to this, Alexander was a young man spoiling for a fight. He wanted the chance to deal a blow to the French, proving to himself and his people that he was more powerful than Napoleon. This may be why he refused to listen to the urgings of Kutusov and the others at Austerlitz who were recommending that they withdraw further into Bavaria and await reinforcements. Alexander, wanting a battle, was quick to embrace the information he was receiving as to the weakened status of the French.

Emperor Francis, while present at the battle, was actually relatively uninvolved in the entire affair. He had been hesitant from the beginning as to the value of the coalition, feeling neither of the allies could be trusted. In light of this, however, Francis deferred the decision making to Alexander, as he felt it was beneath him to oppose the will of the Tsar.

Kutusov, the Commander in Chief of the Russian army, was very hesitant and cautious as described previously. He felt that they were premature in going on the offensive, preferring instead to retreat further eastward, simultaneously moving the Coalition forces closer to the approaching reinforcements, and drawing the French further from home. When the Tsar ignored his reasoning and decided to take the offensive at Austerlitz, Kutusov withdrew into himself and essentially opted out of the war.

The Impact of Intangibles

Political/Strategic Considerations:

French

- The issue of whether/when the Prussians would enter the Coalition was one of the driving factors of the entire campaign

- Napoleon knew he had to entice the allies into battle before more reinforcements could arrive

- The situation at home was bad, especially monetarily
  - Napoleon knew he had to win a decisive battle

Coalition

- Elements of coalition decision making body were aware of importance of delaying action until reinforcing forces (Russians and Archduke Charles) could arrive

PROPRIETARY

One of the biggest strategic considerations for Napoleon was the issue of the Prussians entering the coalition. This was one of the driving factors of the campaign - Napoleon knew he needed to defeat the Coalition armies before Prussia joined them. He could not risk the cooperation of these huge forces against his Grande Armee, so he moved as quickly as possible to ensure that he defeated the Coalition before the Prussians could become involved.

Napoleon was aware also that at Austerlitz he had to get the Coalition forces to fight him instead of allowing them to wait for reinforcements to arrive. Napoleon was already at a force disadvantage and knew he stood no chance after the approaching Russian and Austrians arrived. To this end, Napoleon used every trick he knew to entice the allies into battle. He used deception and psychological operations to convince the Coalition that the Grande Armee was weaker than it really was and that the time was right to launch an offensive.

In addition to the considerations on the battlefield, Napoleon was also concerned about the situation at home. The empire was in dire straits financially, and Napoleon knew that he had to win a decisive battle and bring his army home to turn things around. This would convince the people at home of the worth of his forays into Europe, proving that they would profit by the annexation of territories.

For the Coalition the only real strategic consideration was the question of whether or not they should wait for reinforcements to arrive to ensure a swift and sure defeat of Napoleon and the Grande Armee. Many of the soldiers felt that the Coalition should wait, but they were overruled by the young and eager Tsar Alexander.

The Impact of Intangibles

Unit Morale:

French

- The troops thought of Napoleon as a "heavenborn" leader and had absolute faith in him
  - They were pleased and satisfied when Napoleon told them he would stay out of danger during the battle
- The French troops were fighting for a cause they believed in (a carry-over of revolutionary zeal)
  - Allowed Napoleon to disperse troops without fear of desertion

Coalition

- High morale and confidence prior to battle
  - Reconnaissance militias estimated French troops at 60,000 men vs. 90,000 for the Coalition
  - Napoleon's conduct indicated a timorous frame of mind

PROPRIETARY 40

The French morale was extremely high as the troops left the coast and began the long march into Europe. They were fighting for a cause that they believed in, and demonstrated some of the zeal that was left over from the Revolution. They were fighting for their great leader Napoleon and the French Empire.

As the march dragged on however, the troops began to lose their excitement and morale plummeted. The troops were exhausted, the weather was turning, and they were worn out.

Once at Austerlitz, the troops were once again rallied and morale soared. Napoleon had lifted their spirits with talk of success and promises of returning home victorious. The troops thought of Napoleon as a "heavenborn" leader, and had absolute faith in him. In fact, they were pleased on the night before the battle when Napoleon told them that he would stay out of the battle and out of danger if it looked as if they were winning. Only if the tides turned and the French were in trouble did Napoleon say he would endanger himself and join the fight. Such a selfless demonstration shows the absolute faith and confidence they had in their ruler to be happy to risk their lives to fight his battle, while he remained in safety.

One of the byproducts of this high morale was the ability of Napoleon to wage his new style of dispersed marching to lessen the burden on the army as whole. With soldiers who were excited and committed to the army, Napoleon did not have to worry about troops deserting if they were not in direct control and contact at all times. This was essential to the success of the campaign as Napoleon was able drive his troops across the continent more quickly than his enemy could ever have expected.

The soldiers of the Coalition also had a relatively high morale and confidence level, especially just prior to the battle. After having managed to escape from the pursuing French and having met up with the strong and fierce Russian army, the surviving Austrians were prepared to avenge their losses at Ulm. The Russians, having pulled back and placed themselves in what they thought was a superior position to the French, were also excited and prepared to fight.

With the reconnaissance missions returning with news that the French troops totaled approximately 60,000 men, the Coalition was very confident in their overwhelming superiority in numbers (90,000 men). They felt that they could quickly and easily run through an army so outnumbered and far from home.

In addition to this, they were also taken in by Napoleon's timorous attitude, and thought that the Emperor was frightened. He had made what they thought was a huge mistake by allowing the Coalition to occupy the Pratzen Heights, and was now in a position that was much more difficult to defend. His right flank was extremely weak, and indications pointed to the possibility that he was pulling back his forces and preparing to fight defensively.

With this information, the morale of the Coalition was high as they went into battle.

The Impact of Intangibles

Force Structure:

French

- Each corps completely capable of operating alone
  - "March dispersed, fight concentrated"
    - Traveled separately, making logistics much easier
    - Regrouped when necessary, forming cohesive army
  - Allowed for quick movement across the continent
- Army broken down into smaller pieces to allow commanders to exploit all opportunities offered by terrain and circumstance during a battle
  - Allowed for speed and sudden onslaughts
  - Attacks by dispersed snipers
  - Extended order of battle

PROPRIETARY 42

The structure of the forces had a huge impact on the success of the enemies facing each other. Napoleon, with his "modern" army, had in the end what proved to be the superior structure.

The Grande Armee was established in a such a way that each corps was completely capable of operating alone. They traveled separately, usually along parallel roads, ensuring a higher marching speed. They had no baggage carts or food carts to slow them down. This was possible because the army spread out and each group was able to forage off of the land around them. With no burdensome baggage trains to clog up the road systems, the Grande Armee was able to march at an unprecedented pace. It was due to this fact that the Grande Armee was able to reach the Rhine before the Austrians had even been alerted that they had left the coast; they were traveling as fast as the messengers.

With each corps traveling alone, it might seem that that would make Napoleon and his army less efficient when it came time to fight. This was not the case however, as Napoleon consciously ensured that when necessary, these corps could regroup quickly, forming a cohesive army. He was careful to keep the various corps within one day's march of each other. This ensured that they would be able to regroup when necessary, and also made it easy to communicate, which was extremely important to this type of army.

During the battle, these cohesive smaller fighting units, which were accustomed to operating on their own, also allowed the commanders to exploit opportunities offered by terrain and circumstances during the battle. They allowed for speed and maneuverability, introducing surprise into a battle. They also allowed for attacks by dispersed snipers as well as an extended order of battle.

The Impact of Intangibles (cont.)

Force Structure:

Coalition

- Both Austrian and Russian forces were regimental armies of the 18th century. Had no semi-permanant subdivisions
  - Not as mobile
  - Unable to use advantages of terrain
  - Unable to disperse forces
- No unit cohesion above the regimental level
  - Generals rarely commanded same regiments from one day to the next
  - Much confusion and switching around
  - No loyalty

PROPRIETARY 43

In direct contrast to the French force structure, the forces of the Coalition, both the Austrians and Russians, were operating as regimental armies. (While change had been attempted in both, it had not yet been accepted.)

These regimental armies had no semi-permanant subdivisions like the French. This meant that they were not as mobilesincethe entire army, with tens of thousands of men, had to move and attempt to operate as one. This significantly reduced their ability to use the advantages of terrain - it was difficult to maneuver with an army of this size. Thus, being unable to disperse their forces, they were at a significant disadvantage relative to the Grande Armee which was able to quickly shift forces from one area to another when needed.

In addition to this, the armies of the Coalition had no unit cohesion above the regimental level. Generals rarely commanded the same regiments from one day to the next, and officers and their men never had a chance to get to know one another. This led to a great deal of confusion with the constant shifting around, and also ensured that there was very little loyalty between the leaders and the men.

Why Did the French Plan Succeed?

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- Napoleon's well placed spy network enabled him to act in an offensive manner, taking the initiative and controlling the pace of the battle
- Napoleon's previous experience with the coalition actors, coupled with the excellent intelligence he was receiving, as well as his superb intuitive abilities as a commander, allowed him to second guess the actions of the coalition
    - Lead to the virtual destruction of the Austrian army at Ulm
- Napoleon's foresight and ability to deceive the enemy into believing that his G.A. was weaker than actually was
    - Allowed him to entice the enemy into acting on terms favorable to him
- The structure and morale of the G.A. allowed Napoleon to maneuver his forces in a very efficient way
- Fighting a coalition with fragmented leadership   PROPRIETARY 44

The French plan succeeded because of the following reasons:

1) Napoleon had a well placed spy network which provided him information in a timely fashion, enabling him to act offensively, taking the initiative and controlling the pace of the battle. The information that Napoleon was receiving from his spies, specifically Schulmeister, prior to the start of the Campaign provided him with the information he needed in order to reach the Austrians before the Russians could arrive. This allowed him to follow his plan of defeating the enemy piecemeal, first the Austrians and then the Russians. Without this information, the two forces might have met up before Napoleon was able to reach them, forming a much larger and stronger force which Napoleon could not have defeated as easily.

2) In addition to the facts that he was receiving about the enemy from his spies, Napoleon was able to supplement this information with his own intuition. Combining his knowledge of the enemy from previous experience with the intelligence he was receiving, plus his own intuition, Napoleon was able to correctly second-guess the actions of the Coalition forces. This was one of the ways that Napoleon was able to locate the Austrians at Ulm - his intuition, coupled with facts he was receiving and his past experiences, told them that this is where the enemy would have chosen to make their base camp.

3) Napoleon's foresight of what it would take to win a battle, and his ability to make those things happen, also played a large part in the success of the French plan. Napoleon knew that if he was able to deceive the enemy into taking the offensive at Austerlitz under the terms he deemed favorable, he would have a very good chance of success. He knew what the disposition of not only his forces, but those of the enemy would have to be. This ability to predetermine what needed to be done, and make that happen, allowed him to entice the enemy into action of terms favorable to the Grande Armee and defeat the Coalition.

4) The structure and morale of the Grande Armee also allowed Napoleon to maneuver his troops much more efficiently than the Coalition. By dividing his troops into completely independent corps, Napoleon was able to march his army across Europe more quickly than the enemy had ever expected was possible. In addition to this, once at Austerlitz Napoleon was able to move his troops around on the battlefield in such a way that he was able to take advantage of terrain and other circumstances that his enemy was unable to.

5) Napoleon was fighting a Coalition with a fragmented leadership. The Austrians and Russians had communication problems which resulted in difficulty in combing their troops, which was directly responsible for the debacle at Ulm. At Austerlitz, the leadership became even more fragmented with the arrival of Tsar Alexander and Emperor Francis. General Kutusov, the Commander in Chief of the Russian contingent in Bavaria, was disregarded, and no formal decision making process was in place.

Why Didn't the Coalition Plan Succeed?

- **The coalition armies (Russians and Austrians) were not able to unite in time to overwhelm the G.A.**
  - Napoleon's intelligence allowed him to crush the Austrians at Ulm before the Russians could get there
- **Usurping of power by Alexander left Kutusov without a voice at Austerlitz**
  - A young, arrogant Tsar Alexander pushed on with the battle even though Kutusov was urging caution to wait for reinforcements
- **Inaccurate and untimely information as to the size and ability of the G.A. led the coalition to act in conditions not as favorable as they had been led to believe**
  - Never considered the French would recover from initial attack or be capable of taking the Pratzen Heights
- **Doctrine of armies was old fashioned and ill-prepared to deal with the mobile forces of the G.A.**
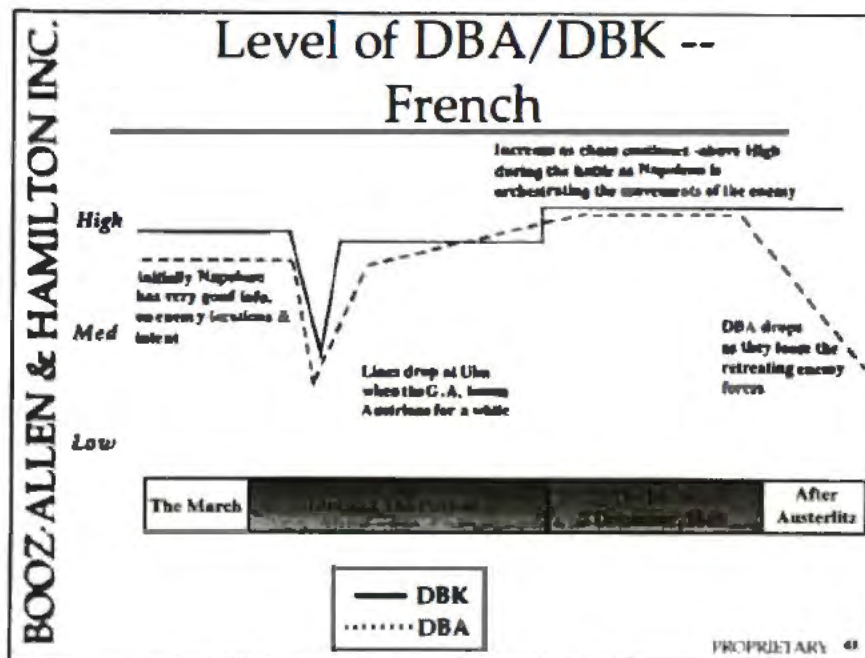
PROPRIETARY 44

The Coalition plan did not succeed for the following reasons:

1) The Russian and Austrian armies were not able to unite in time to overwhelm the Grande Armee, which was the original plan. Instead, Napoleon was able to gain enough information to know where both armies were, and was able to find and crush the Austrians at Ulm before the Russians were able to arrive.

2) When Tsar Alexander usurped Kutusov's command, he left Kutusov without a voice at Austerlitz. Kutusov was hesitant to engage the French at Austerlitz, instead preferring to withdraw further into Bavaria, allowing the reinforcements to arrive, and at the same time drawing Napoleon and the Grande Armee further from home. Tsar Alexander was young and arrogant, anxious for a fight, and did not listen to Kutusov and his other supporters, instead opting to take the offensive at Austerlitz. He had allowed himself to be taken in by Napoleon's deception campaign, and was thoroughly defeated because of it.

3) Napoleon's deception campaign provided the Coalition with inaccurate and untimely information as to the size and ability of the Grande Armee and led the coalition to take the offensive at Austerlitz. They had been deceived into believing that they were in a far superior position compared to Napoleon and the Grande Armee having received reports that they outnumbered the enemy 90,000 to 60,000 men. They were also led by Napoleon to believe that he was weak and scared.

Thus, the Coalition never considered that the French would recover from the initial attack or be capable of taking the Pratzen Heights from them.

4) The old-fashioned regimental style of the armies of the Coalition was no match to the mobile and quick corps structure of the Grande Armee. They traveled and maneuvered in huge masses, making them slow and cumbersome, and unable to maneuver with any ease on the battlefield. They were unable to take advantage of terrain, and were not able to defend against the mobile corps that Napoleon sent against them.

Level of DBA/DBK -- French

Increases to close continued -above High
during the battle as Napoleon is
orchestrating the movements of the enemy

High

Initially Napoleon
has very good info.
on enemy locations &
intent

Med

Lines drop at Ulm
when the G.A. looses
Austrians for a while

DBA drops
as they loose the
retreating enemy
forces

Low

| The March | | After Austerlitz |

—— DBK

········ DBA

PROPRIETARY

DBA:

The DBA line for the French was initially fairly high. Napoleon was receiving very good information (from spies, newspapers, and reconnaissance missions) on the locations of the enemy forces. He was able to update his card index file often, allowing him to plan with precise detail his preemptive strike. It was not absolutely high because the forces were constantly moving, and Napoleon was not able to receive real-time information about the enemy.

DBA dropped significantly just around the time of the battle of Ulm. This was because Napoleon misjudged the enemy reaction to the presence of the G.A. and thought that they would have headed southeast availing themselves of the river defenses nearby. This was not the case, as the enemy had not detected or pinpointed the location of the G.A., and they almost bypassed the Austrians completely.

DBA increased again at the time of the battle, when the Austrians were located and forced to surrender.

DBA rose steadily after this, as the G.A. was pursuing the Russians (and a small contingent of Austrians) as they were withdrawing into Bavaria in an attempt to meet up with reinforcements.

DBA climbed to above high at the Battle of Austerlitz as Napoleon was able to entice the Coalition forces into the positions he wanted, and encouraged them to launch an offensive when and where he had determined.

DBA dropped sharply after the battle as Napoleon's forces were unable to locate and stop the retreating allied forces.
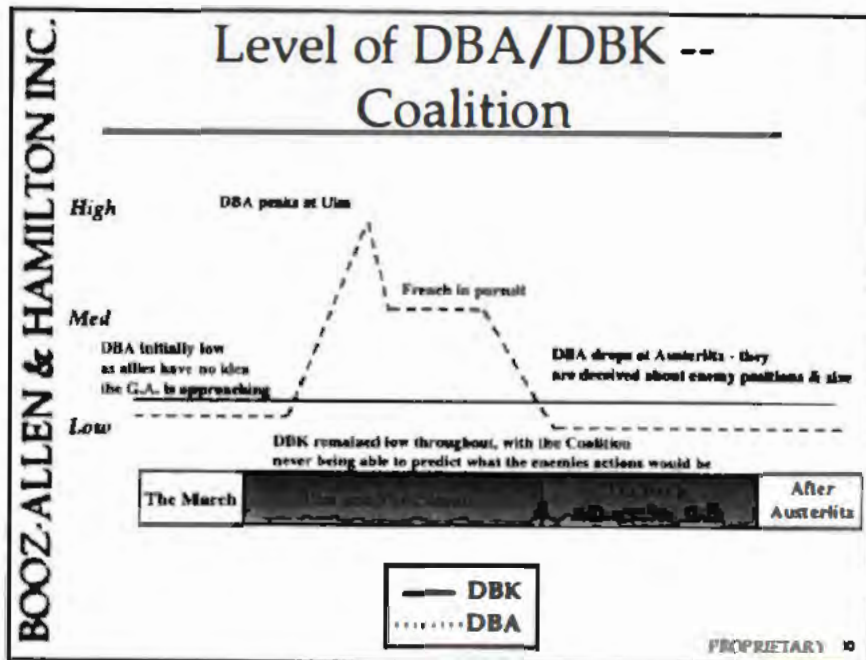
DBK:

DBK followed almost the same pattern as the DBA line. It was initially high, as Napoleon was aware of the majority of the plans of the Coalition due to the information he was receiving from his spy in the Austrian headquarters, Schulmeister.

DBK dropped at Ulm, as Napoleon had guessed incorrectly the Austrian's actions. He assumed the they would have already withdrawn southeast toward more defensible river lines, maneuvered his forces accordingly. The Austrians had not detected his forces therefore remaining at Ulm, which caused the Grande Armee to march past them. Napoleon quickly realized his mistake, doubled back to Ulm, and surrounded the enemy, forcing them to surrender.

DBK rose again after the battle at Ulm, and remained high up until the Battle of Austerlitz. Napoleon and the Grande Armee were pursuing the French and the surviving Austrians eastward - knowing that they were withdrawing in order to attempt to meet up with reinforcements.

During the actual battle at Austerlitz, DBK rose to above high. when it climbs above high. Napoleon was successful in orchestrating the movements of the battle, therefore *predetermining* what the future actions of the enemy were to be.

Level of DBA/DBK -- Coalition

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High — DBA peaks at Ulm

Med — French in pursuit

DBA initially low as allies have no idea the G.A. is approaching

DBA drops at Austerlitz - they are deceived about enemy positions & size

Low — DBK remained low throughout, with the Coalition never being able to predict what the enemies actions would be

| The March | | | After Austerlitz |

— DBK
······ DBA

PROPRIETARY 10

DBA:

DBA was initially low as the allies had been deceived by Napoleon into believing that if there was going to be a war on the continent, it would be in Italy. In addition to this, they assumed that if he did come through the north, that he would not risk the neutrality of Prussia, and would therefore be arriving through the Black Forest. Once the campaign had started, Francis and his forces were unaware that the G.A. had left the channel until they reached the Rhine - they were traveling as fast as the messengers. When they did begin hearing reports that the G.A. was in the vicinity, the Austrians still did not know exactly where they were, and believed reports that the G.A. was actually heading back to France because of domestic problems. All of these assumptions proved false, leading to the destruction of the Austrians who lost approximately 60,000 men at the battle of Ulm.

DBA increased after the battle of Ulm as the Coalition forces, mainly Russians with a few surviving Austrians, were being pursued across the continent as they attempted to withdraw and meet up with reinforcements which were expected shortly.

DBA dropped again in the days shortly before the battle as the Coalition did not know exactly where the French troops were, and had no clear idea of the size of their forces.

DBA for the Coalition bottomed out during the battle of Austerlitz. They were never able to know the true location or size of the Grande Armee because they had been completely taken in by Napoleon's deceptions.

DBK:

DBK was low and remained low throughout the entire time period examined. Initially, the Coalition was deceived as to where the battle on the continent would most likely occur. Napoleon had led the enemy to believe that if there were to be a war on the continent, it would be in Italy. After Napoleon's Grande Armee had been committed to the northern sector, the Austrians were unaware that they were coming until it was too late.

DBK remained low after this, as the Coalition forces were never able to predict what the French plan was.

DBK was low during the Battle at Austerlitz as well, as once again Napoleon had deceived the enemy, making them believe that he was weak and unwilling or unable to counterattack the strong Coalition offensive.

DBA Conclusions

- Timely and accurate information on enemy troop size and locations allowed Napoleon to use his military genius to defeat a more sizable enemy
  - Allowed him to plan with great detail the preemptive strike on the Austrians at Ulm before the Russians could arrive in the theater
  - Allowed him to orchestrate the movements and phases of the Battle of Austerlitz, enticing the enemy to attack under conditions favorable to Napoleon
- Bad communications between the Austrians and Russians led to the ultimate demise of the two armies
  - The Austrians and Russians weren't using the same calendar which meant that the Russians would not arrive until two weeks after the Austrians had expected them

PROPRIETARY 52

1) The timely and accurate information that Napoleon received on enemy troop size and location through much of the Campaign and during the Battle of Austerlitz, enabled him to defeat a more sizable enemy on a battlefield far from home.

Prior to the Campaign and during the early stages of the march across the continent, Napoleon received good enough information about enemy troop dispositions that he was able to reach the Austrian army before the Russians arrived. This allowed him to carry out his plan as he had intended, striking at the Coalition piecemeal, defeating first one and then the other. After defeating the Austrians at Ulm, Napoleon began the pursuit of the withdrawing Russians.

Having followed the Russians into Bavaria, Napoleon was once again able to use the information that he was receiving to carry-out his plans. He was able to orchestrate the movements of the Battle of Austerlitz, enticing the enemy to attack under conditions that were favorable to Napoleon and the Grande Armee.

2) The bad communications between the Austrians and the Russians led to the ultimate demise of the two armies. In the early stages of the campaign, the Russian and Austrian armies were prevented from uniting as their plans dictated, as they were operating on different calendars, which were off by about two weeks. This discrepancy meant that the two forces were unaware of where each other was, and when they could be expected to meet. Because of this, the Austrians moved to the forward position at Ulm, expecting the Russians in a matter of days. This however was impossible, because Napoleon's Grande Armee arrived first and thoroughly defeated the Austrian forces.

DBA Conclusions

- For the majority of the Campaign of 1805 the coalition partners were unaware of the location of the G.A. This prevented them from gaining the initiative, and actually, opened them to a surprise attack in Ulm, and led them to be completely taken in by Napoleons deception at Austerlitz
  - The Austrians did not know the G.A. had left the coast until they arrived at the Rhine
  - The coalition forces were unaware of the true location or size of the G.A. on the eve of the Battle of Austerlitz (in particular the location of Davout)

3) For the majority of the Campaign of 1805 the coalition partners were unaware of the location of the Grande Armee. The Austrians did not know that the Grande Armee had even left the coast and was moving in their direction until the enemy forces crossed the Rhine. This prevented them from gaining the initiative, and opened them to a surprise attack at Ulm.

Once at Austerlitz, the Coalition was taken in by Napoleon's deception campaign, and were unaware of the true location or even size of Napoleon's army. Napoleon's campaign worked so well that he was able to entice the enemy to attack on *his* terms, having convinced the Coalition that they were in a far superior position than they really were.

DBK Conclusions

- Napoleon, through the accurate information he was receiving on enemy troops, his past experiences with the enemy, and his superior military/strategic mind, was able to predict and guide the movements of the enemy forces
  - Knew the Russians were too far behind, and the Austrians would have to wait for them to arrive
  - Knew the Austrians would hold-up at Ulm, taking advantage of the castle
  - Napoleon knew that he could entice the enemy into battle at Austerlitz and lead it to move in the manner which suited him best

PROPRIETARY 54

1) Through the accurate information that Napoleon was receiving from his spy in the Austrian headquarters, Napoleon knew the approximate locations of both the Russian and Austrian forces. He was able to combine this knowledge with the knowledge he had gained from his past experiences as well as his own intuitive abilities to correctly predict the movements of the enemy forces. Knowing that the Russians were further behind than the Austrians believed they were, and knowing that the Austrians would gravitate to the defenses offered at Ulm, allowed Napoleon to locate and strike at the Austrian army before the Russians could arrive.

Napoleon also knew at Austerlitz that he could entice the enemy into battle, and was successful in leading them to maneuver in the manner which best suited his plans. He deceived the enemy into thinking that they were in a superior position, and that the time was right for them to launch an offensive. Thus, he was able to predict/orchestrate the launching of the offensive. He was also able to orchestrate the positioning of the enemy forces, and therefore their lines of attack, by deploying his forces in such as a way as to make any other option unattractive.

DBK Conclusions (cont.)

- **Neither of the coalition partners were able to predict the actions of Napoleon and the G.A., being taken in by his various psychological operations and deception plans. This ultimately led to the demise of the Austrians at Ulm and the Russians at Austerlitz**
  - Chose to believe false rumors that were being spread as to the movements of the G.A.
  - At Ulm, the Austrians were expecting that if the G.A. did come through the area they would come through the Black forest. Napoleon knew this, so took another route, and was able to sneak past and surprise the enemy
    - The coalition partners never believed that Napoleon would violate the neutrality of Prussia, leaving the Black Forest as the only possible route
  - At Austerlitz, they were completely taken in by Napoleons ruse of weakness, and thought he was preparing to fight a defensive battle, or possibly even retreat. This led them to decide to take the offensive as they thought he was a weak and easy target

PROPRIETARY 35

The deception techniques that Napoleon used throughout the Campaign of 1805 and the Battle of Austerlitz were central in the success of Napoleon and the Grand Armee. These deceptions prevented the coalition partners from being able to predict the actions of Napoleon and the Grande Armee, denying them the ability to truly determine the future plans or capabilities of their enemy.

In the early days of the campaign, the Austrians did not know that the Grande Armee had left the coast and was marching in their direction. Once they began to receive reports that Napoleon and his troops were in the area, they did not think that he was coming to attack them. Rather, they chose to believe rumors that were circulating that there were problems at home that needed attention, and that Napoleon was simply leading his army back to France.

At Ulm, the Austrians had been expecting that if the Grande Armee did come through their area, they would come through the Black Forest. (They did not think that Napoleon would risk violating the neutrality of Prussia, leaving the Black forest as the only possible route they could take.) Realizing this, Napoleon sent a light cavalry screen into the Forest to distract the Austrians, while sending the rest of his army around, allowing them to surprise the Austrians at Ulm.

At Austerlitz, the Austrians were completely taken in by Napoleon's ruse of weakness, and were never aware that he was actually controlling the pace of the battle and dictating the disposition of the Coalitions forces. They were led to believe that he was preparing to fight a defensive battle, or possibly even retreat, and did not think that he would be able to launch a counteroffensive.

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Dominant Battlespace Awareness IV

Jena-Auerstadt Campaign Case Study
October 1806

Information Requirements
IPR With LtCol Paul Selva
2 March 1998

The views, opinions, and/or findings contained in this report (briefing) are those of the authors and should not be construed as an official Department of Defense position, policy, or decision.

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Option 001AB

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DBA/DBK Definitions

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DBA

- A high level of awareness (90% visibility) of friendly and enemy forces, and the environment. DBA is fundamentally about location relative to enemy/friendly locations

DBK

- High confidence in the future (95%), and an ability to act on it before the enemy can act. DBK enables commanders to predict with confidence where the enemy is going to be, and when they are going to be there. DBK is more subjective, relying heavily on the decision-maker and his/her confidence level

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Critical DBA/DBK Questions

- What were the sources/mechanisms of DBA and DBK?
- What were the Commanders' key information requirements?
  - Enemy O B
  - Enemy capability
  - Enemy intent
- What information was available to the commanders during the battle? Conversely, what information was not available? What information was critical but was not sought by the commander?
- What happened both tactically and strategically when those sources were denied?
- How perishable is the information from the different sources across the battles

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Historical Overview

- Prussia had intended to join with the Third Coalition against Napoleon, but made its decision too late
- Napoleon forced a treaty of "friendship" between France and Prussia
  - Handover of choice Prussian territories
  - All existing Prussian diplomatic relations declared void; replaced by unilateral and exclusive treaty with France
  - Forced embargo of Great Britain by Prussia
  - Napoleon promised the Hanover region to Prussia (it formerly belonged to Great Britain)
- Napoleon offered Great Britain the Hanover region
  - Prussia enraged
- In response, Prussia secretly passed a declaration of war against France

PROPRIETARY

Hostilities between France and Prussia had been narrowly avoided during France's war with Austria in 1805. In addition to encroaching on Germanic territories, France had marched a corps through Prussian territory in violation of its sovereignty. Prussia had decided on casting its lot with the Third Coalition, but moved too slow; the declaration of war was not delivered before the Coalition defeats at Ulm and Austerlitz.

Napoleon, well aware of Prussia's decision, wanted to send a clear signal to Prussia's King Frederick William III (whom Napoleon held in contempt), that Prussia was to bow to France's will. Accordingly, he strong-armed Prussia into signing a treaty of "friendship" with France, the terms of which were anything but friendly: Prussia was forced to hand over key territories; all existing Prussian diplomatic relations were declared void and replaced by a unilateral and exclusive treaty with France; and Prussia was forced to adopt any economic measures against England the French pressed upon them. In return for these sacrifices, Napoleon promised to Prussia the territory of Hanover.

In June 1806, Napoleon, in an attempt to ease relations with Great Britain, offered to return Hanover to King George III. Great Britain was unmoved by the overture, but Prussia was enraged and secretly decided on war against France on August 7, 1806. Before engaging against France, the Prussians crossed the Saxon border and pressed the somewhat reluctant Saxons into joining them under threat of attack.

Campaign Objectives

French

- **Retain French holdings of Germanic territory**
- **Destroy Prussia's ability to threaten French interests**
- **"They need a lesson"**

Napoleon was surprised at Prussia's decision to use force against France, viewing it as impudence and idiocy. Although this was a war he wished to avoid, once the decision to fight was made, his objectives were ambitious. He sought to retain the Germanic lands he possessed, destroy Prussia's ability to threaten French interests by completely destroying its military, and teach their leadership a lesson on how be expected them to behave.

Campaign Objectives

Prussians

- Drive the French from Germanic soil
- Avenge the humiliation of French diplomacy

Saxon

- Fight alongside the Prussians

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The Prussians sought to remedy the injustices inflicted upon them by French diplomacy by regaining the territories and powers ceded to France under the terms of the friendship treaty.

The Saxons had no campaign objectives. They had been forced into fighting on behalf of the Prussians under the treat of attack. They grudgingly did as they were told, though their motivation was low.

The Jena Campaign
Disposition of Forces on 6 October 1806

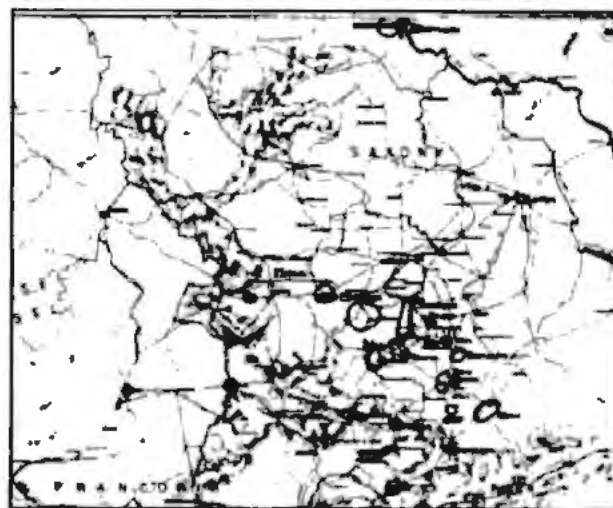This page intentionally left blank.
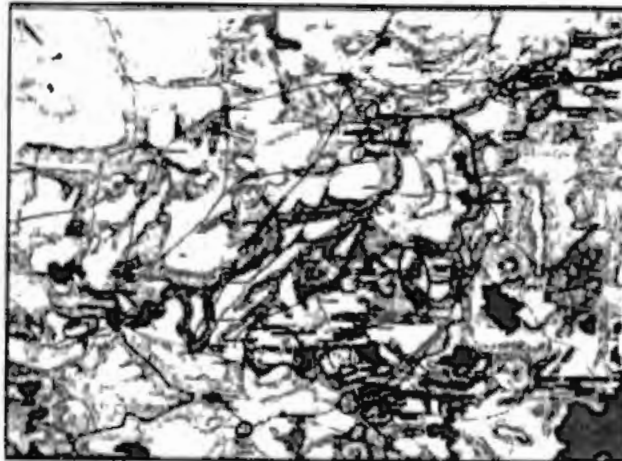
The Jena Campaign
Disposition of Forces on 10 October 1806

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The Jena Campaign
Disposition of Forces on 13 October 1806

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CONOPS

French

- Gather intelligence while deploying
- Rapid three column approach screened by cavalry
- Strategic envelopment around the Prussian and Saxon left flank down the valleys of the Saale and the Elster, then cutting their communications with Berlin and Dresden
- Deception plan: Feign movement from the northern route
- Engage the Prussians before their Russian allies could arrive to support
- Contingency planning:
    - Three column advance allowed Napoleon to strike no matter which advance the Prussians made (south-west to cut off his communications, or south-east to join forces with the Austrians, or head-on)
    - Guarding communications and acting as general reserve, Napoleon created the VIII Corps of two divisions stationed at Frankfurt

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Napoleon at first had no idea of the course of action the Prussians would take, so his CONOPS was designed for maximum flexibility. He organized his corps to move forward in three columns behind a cavalry screen, each within supporting range of the others. His communications with the Rhine were defended by the VIII Corps under Mortier at Frankfurt. If the Prussians were to advance south-westward to threaten his line of communications, he could strike at their left flank with superior force. If they were to invade Bavaria to join forces with the Austrians, he could attack their right flank and drive them into Bohemia. If they were to remain in place, he could quickly close in on them and outflank them through the Saale River valley, thus cutting their communications with Berlin and Dresden. In any case, speed was essential because Napoleon wanted to engage them in decisive battle before their Russian ally could reach the theater to support them.

The Prussian army was well-known to be extremely sensitive about its communications (its dependence on magazines of supply was severe), and was far less mobile than the French. The move up the Prussian left flank would thus not only cut their lines of communication, but also turn the flank and expose the enemy rear.

To deceive the Prussians as to his line of approach, Napoleon instructed his brother, Louis Napoleon, King of Holland, to mobilize all his troops and mass near Wessel, to make the Prussians believe Napoleon intended to attack across the northern end of the Thuringian Forest, while his forces actually moved across the southern end.

CONOPS

Prussians

- **Still not settled at the time Napoleon first engaged their forces**
    - **Hohenlohe and Brunswick could not agree, King and his courtiers were also weighing in**
        - Hohenlohe decided (on his own initiative) to push part of his army south-westward from Jena toward the River Saale
        - Brunswick and Ruchel remained stationary on the northern slopes of the Thuringian Forest
        - Thus, forces divided, not supporting each other, dispersed over a 60-mile front
- **Upon indications of Napoleon's advance (the defeat of Prussian advance guard), decision to retreat to Magdeburg and the Elbe valley**
    - **Hohenlohe to act as rear guard at Jena**

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At no time during the campaign did the Prussians have a solidified, coherent plan of attack. The Duke of Brunswick, who was charged with command over all the Prussian forces (though in practice he could not exercise this authority), did not even propose a coherent plan until September 25, at which time Prussian forces had advanced to positions northeast of the Thuringian Forest. Campaign planning in the Prussian army consisted of almost endless discussions and debates, with the King soliciting every opinion, including those of officers who were supposed to be Brunswick's subordinates. The decisions made, when consensus could be achieved, were compromises fashioned from several different plans, leaving each commander believing that their plan was the one adopted. This led to great confusion.

Eventually, a compromise version of Brunswick's plan was adopted, but was such that it allowed Hohenlohe to interpret it as an affirmation of his own plan, and he moved his forces in accordance with this supposition, out of range of support. The war council then reverted to Brunswick's original plan, and Hohenlohe was called upon to return. At this time, however, evidence, in the form of a defeat to Hohenlohe's advance guard (commanded by Tauentzien), alerted Brunswick that French forces were already threatening to outflank him on the left, Brunswick determined that his plan, so recently approved, was now obsolete. He then developed a plan to strike at where he guessed Napoleon's left flank would be as he approached, and began to move his forces accordingly.

However, this redeployment did not go smoothly. Brunswick's original plan was being distributed to the division commanders, which caused great confusion. It was at this time, on October 10, that word reached Brunswick that another of his advance guards (Prince Louis Ferdinand) had just been decisively defeated by Napoleon's fast approaching forces. Brunswick immediately decided upon retreat to Magdeburg and the Elbe valley, leaving Hohenlohe's force near Jena as a rear guard to cover the move of the main body.

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Overview of Forces--French

- **Right: Soult (IV), Ney (VI) and Bavarians: 59,000**
  - Bayreuth-Munchberg-Hof
- **Center: Bernadotte (I), Davout (III), Guard: 75,600**
  - Bamberg-Kronach-Lobenstein
- **Left: Lannes (V), Augereau (VIII): 38,000**
  - Schweinfurt-Coburg-Neustadt
- **All preceded by Murat's six cavalry divisions: 20,000**

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Overview of Forces--Prussian

- **Right: Ruchel's army (3 divisions)**
  - 28,500
- **Center: Brunswick's army (6 divisions)**
  - 60,750
- **Left: Hohenlohe's army (5 divisions)**
  - 42,000
- **Reserve: Wurttemherg**
  - 15,000

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Sequence of Events
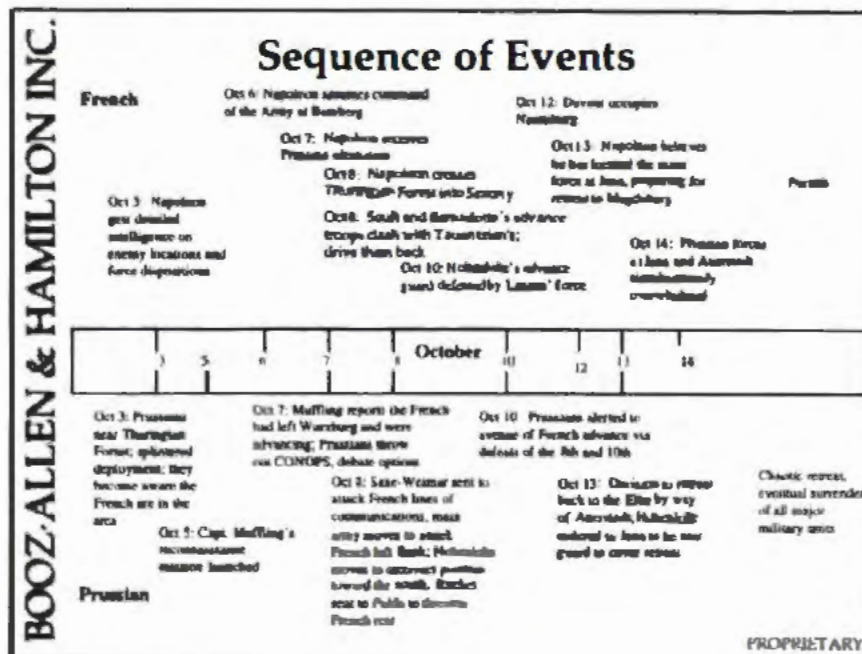
French

Prussian

PROPRIETARY
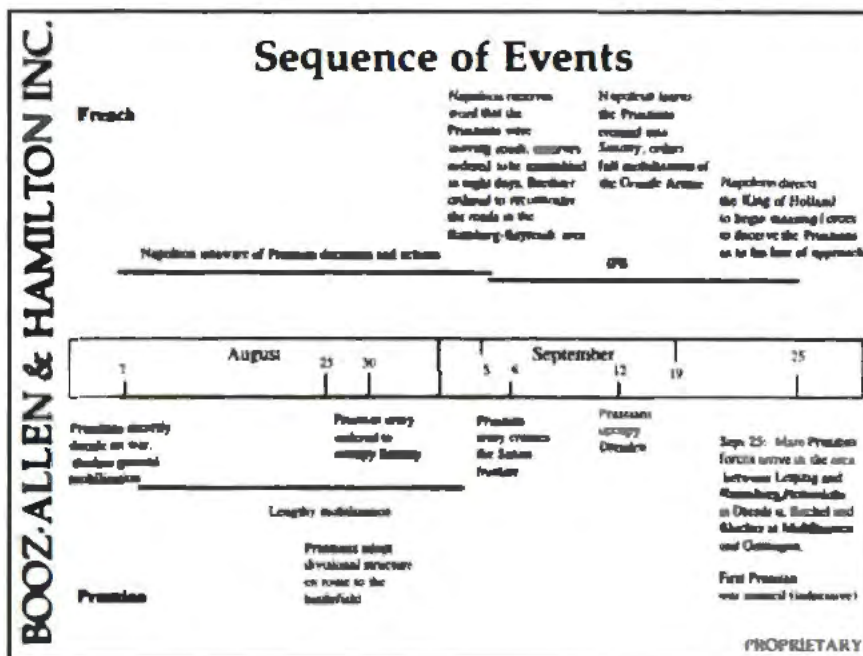
The Prussians had secretly decided on war on August 7, 1806, but mobilized slowly. En route to the battlefield, the Prussians adopted a divisional structure. This was the first time the Prussians had used such a structure, and had never even trained with it. It was not until September 12 that the Prussians were able to move across the Saxon border to press the Saxon troops there into service against the French. Napoleon was unaware of the Prussian decision for war when it was made, and it was not until September 5 that he received intelligence that the Prussian Army was moving south to the frontier. At first, he suspected this was the first move by a new coalition formed against him, and sought more information while calling up his forces. He also began to reconnoiter the terrain in the area in question. When Prussia crossed over into Saxony, he did not hesitate, calling up a full mobilization of the Grande Armee and preparing to meet it en route to take command. He quickly surmised the situation, and determined his best approach was a move across the southern end of the Thuringian Forest into Saxony, followed by a rapid thrust towards Berlin. Napoleon directed his brother, King Louis of Holland, to order a full mobilization and create every appearance of forming an attacking force so that the Prussians would believe Napoleon's plan was to cross the northern end of the Thuringian Forest.

While Napoleon marched, the Prussians debated. It was not until September 25 that Brunswick finally submitted his plan of operations. His intention was to advance south-west from Eisenach towards Fulda and Wurzburg in order to

threaten the French line of communications. After much debate among his staff, subordinates, the King, and the King's staff, Brunswick's plan was approved by the Council of War. By this time, he had moved his force from its original locations around Berlin and Magdeburg to a preliminary concentration area between Leipzig and Naumburg; Hohenlohe had moved to Dresden; Ruchel and Blucher were stationed at Muhlhausen and Gottingen, respectively. Brunswick's plan was adopted with the following modifications: Brunswick's army, which was concentrating on the line Eisenach-Gotha-Erfurt, was to advance south-west, its left flank covered by Hohenlohe's army, which would block the exits from the Thuringian Forest. Accordingly, Hohenlohe's advanced guard, commanded by Prince Louis Ferdinand of Prussia, advanced southward from Jena to Saalfeld, while Tauentzien's Saxon division was pushed out to Hof.

Sequence of Events

French

Oct 6: Napoleon assumes command of the Army of Bamberg

Oct 7: Napoleon receives Prussian ultimatum

Oct 8: Napoleon crosses Thuringian Forest into Saxony

Oct 3: Napoleon grew detailed intelligence on enemy locations and force dispositions

Oct 9: Soult and Bernadotte's advance troops clash with Tauentzien's; drive them back

Oct 10: Hohenlohe's advance guard defeated by Lannes' force

Oct 12: Davout occupies Naumburg

Oct 13: Napoleon believes he has located the main force at Jena, preparing for retreat to Magdeburg

Oct 14: Prussian forces at Jena and Auerstadt simultaneously overwhelmed

Prussia

October | 3 | 5 | 6 | 7 | 8 | | 10 | 12 | 13 | 14 |

Oct 3: Prussians near Thuringian Forest; uplanned deployment; they become aware the French are in the area

Oct 5: Capt. Muffling's reconnaissance mission launched

Oct 7: Muffling reports the French had left Wurzburg and were advancing; Prussians throw out CONOPS, debate options

Oct 8: Saxe-Weimar sent to attack French lines of communications, main army moves to attack French left flank; Hohenlohe moves to intercept position toward the south, Blucher sent to Halle to discover French rest

Oct 10: Prussians alerted to advance of French advance via defeats of the 9th and 10th

Oct 13: Divisions to retreat back to the Elbe by way of Auerstadt, Hohenlohe ordered to Jena to be rear guard to cover retreat

Chaotic retreat, eventual surrender of all major military units

Prussian

PROPRIETARY

Napoleon's reconnaissance officers provided him with a significant amount of information on enemy force locations just before he took personal command of the Grande Armee on October 6. On October 7, Napoleon received an ultimatum from the Prussians, sent October 1, demanding all French troops be removed from German territory. After deciding that his original approach was for the most part sound, and under the cover of the deception campaign underway to the north, Napoleon began his movement through the southern end of the Thuringian Forest. Meanwhile, the Prussians had been moving in the direction of the Thuringian Forest from the other side, near Weimar and Erfurt, and were told that French forces were operating in the area. This came as a great shock to the Prussians, who had no idea that the French had even been mobilized. In response to these reports, they sent a reconnaissance force under Captain Muffling to search out the region on the western side of the Thuringian Forest. He reported back on the 7th that the French had left Wurzburg and were advancing through the southern end of the Thuringian Forest; this approach clearly constituted their main force, as they were no longer even protecting their lines of communications. Brunswick was dismayed, considering his prior plan now obsolete, and debate renewed as to what the Prussians should do. Eventually, Brunswick ordered the army to mass to the west of the Saale near Erfurt to threaten Napoleon's (assumed) left flank. A small force under Saxe-Weimar was to cross the northern end of the Thuringian Forest, as Captain Muffling had, to try to threaten French communications. Hohenlohe was to take up position on the left bank of the

Saale. Ruchel was to move to Fulda to threaten the French rear. The reserve, under the Duke of Wurttemberg, was ordered up to Halle from Magdeburg, ready to rejoin Brunswick at either Leipzig or Naumburg if need arose. Hohenlohe, who had argued against Brunswick's original plan, now interpreted his orders as he thought best; as implicitly approving his desire to advance Tauentzien's Saxon divisions towards Auma and Schleiz and a further force to Saalfeld under the command of Prince Louis Ferdinand (Consequently, these troops were placed directly in the path of the approaching Grande Armee).

The first major clash came at Hof on October 8, when Soult's vanguard encountered Tauentzien's Saxons and drove them 20 miles northward to Schleiz, where they ran into Bernadotte's advance guard and were further beaten. The second clash came on October 10, when Prince Ferdinand ran into the French left column, headed by Lannes' advance guard, where his forces were crushed and he himself killed by Lannes' larger force. The defeat of Prince Louis and Tauentzien's division left the whole region east of the Saale open to Napoleon's advance. Napoleon now feared the leading elements of his left column would be attacked by the enemy the next day, and warned Lannes to be ready for battle at Saalfeld, ordering him to await Augereau before engaging. French headquarters, however, were still ignorant of the detailed enemy positions.

The news of these defeats reached Brunswick's headquarters and was the cause of much concern. Brunswick realized his left flank was exposed to Napoleon's force, and soon his rear would be as well. He decided on an immediate retreat to Magdeburg and the Elbe valley in order to cover his communications with Berlin. Ruchel's corps on the right flank was ordered back to Weimar, where the bulk of the army was concentrated on the 11th, while Hohenlohe was ordered to assemble his divisions on the plateau west of Jena in order to protect the left flank.

Napoleon's intention was to close on Jena with IV, V, VI and VII Corps, cross the Saale and on the 16th attack the main Prussian army, which he believed to be concentrated between Weimar and Erfurt. Meanwhile, Murat, Bernadotte (I) and Davout (III) were to seize the Saale crossings at Dornburg and Kosen (west of Naumburg) in order to cut the enemy's line of retreat to Leipzig or the Elbe valley.

Since the battle of the 10th, the Prussian advance guard had been falling back to the line of the River Saale. Hohenlohe passed through Kahla on the 11th, and on to Jena, which he was evacuating on the 12th when they spotted Lannes' corps to the south. Fredrick William and Brunswick meanwhile were advancing on Weimar to maintain their links with the Elbe. A council of war on the 13th decided in favor of a retreat to Leipzig by way of Auerstadt, the Kosen Pass, Freiburg and Merseburg, assimilating the reserve at Halle en route and safeguarding their lines of communication with the Elbe. Few suggested facing Napoleon by this point. Brunswick desired to avoid large-scale action at any cost. Hohenlohe was instructed to occupy Capellendorf (halfway between Jena and Weimar) to provide a protective flank for the main force, with Ruchel maintaining a supporting position at Weimar, until the main body was clear of Auerstadt. Thereafter, they were to form the rear guard and fall back north.

On the 13th, Lannes moved onto the Landgrafenberg overlooking Jena and had driven an enemy force of about 12,000 in the direction of Weimar. Local intelligence indicated a force of 20,000 to 25,000 men was encamped three miles west of Jena on the Weimar road. Napoleon joined Lannes later that day, and they both surveyed the situation from the height of the Landgrafenberg. This position was in fact only held by Hohenlohe's advanced guard, consisting of Tauentzien's Saxon division (which had been badly mauled at Hof and Schleiz during the French advance). Seeing the enemy campfires, Napoleon was convinced he was facing the main Prussian army. By this date however, the Prussian main force (60,000), marching north-east from Erfurt and Weimar, had reached Eckartsberga, 14 miles north of Jena, and were nearing contact with Davout's forces. Hohenlohe was similarly misguided, believing that he faced only the French flank guard covering the continued advance of the main French army heading northward toward Leipzig and Dresden. He had no idea the main French army was massing before him.

Napoleon thought the forces he faced might attack him the next day, and the other corps had not yet reached Jena, so he at once pushed his Imperial Guard to support Lannes. During the night of 13/14 October the Saale valley and the plateau west of it were covered in mist. This was fortunate for the French, because Ney, Soult and Augereau were moving up the narrow, winding tracks leading up from Jena to the plateau above. Meanwhile, Davout had received orders from Berthier informing him that Napoleon had located the Prussian army near Jena, and would attack on the 14th. Davout's III Corps was to move from Naumburg to Apolda to envelop the enemy's left flank, and Bernadotte was instructed to accompany him if he wasn't already positioned in Dornburg. Berthier had omitted to send a separate order to Bernadotte. When Davout delivered the order to Bernadotte (who was co-located with Davout), Bernadotte rejected the idea of marching together, on the grounds that his first orders were to march to Dornburg, where he then went and stayed for the duration of the battles.

In the early hours of October 14, he ordered Augereau (VII) to command the left wing, Lannes (V) to set up his artillery firing lines to the right of Augereau, the Guard placed on the ridge, Suchet divisional artillery to bombard the village of Closewitz on their right flank and to take it immediately after the bombardment. Ney (VI) was to ascend at daybreak and advance on the right of Lannes the moment Closewitz was captured and deploy his troops from there. Soult (IV) was to deploy from the track they had reconnoitered on the right and remain in in touch there to form the right wing. The light cavalry was under divisional control, but the heavy cavalry was to take up position on the plateau and act as a reserve behind the Guard, to be employed as circumstances dictated. The key was to deploy on the level ground, then adjust based on the positions and strengths of the enemy to drive them out of the positions Napoleon wanted. The French army had marched so fast to this point, that they had no maps of the area. All the orders were designed around topographical features that Napoleon had seen while he

surveyed the enemy positions; there had been no time for detailed reconnaissance or for locating the enemy's flanks.

The battlefield on the morning of the 14th was at first shrouded in fog, which hampered Napoleon's final reconnaissance and delayed some of his preparatory moves. On the other hand, even though he had packed 40,000 men onto the narrow platform of the Landgrafenberg less than half a cannon-shot away from the enemy, the Prussians were completely unaware of their presence.

In the morning, Lannes (V) and the Guard took Closewitz and Lutzeroda. Hohenlohe reacted slowly, believing at first this was a minor skirmish with the French flank guard. It was only after repeated pleas for help from Tauentzien that he realized the magnitude of the attack. But it was too late. Having secured an entry-point onto the battlefield, Napoleon poured his corps onto the battlefield against the dispersed and outnumbered Prussians. By mid-afternoon, it had become a rout, with Murat's cavalry pursuing the defeated troops as they fled.

Napoleon thought that he had defeated the whole Prussian army. However, in the early morning of the 14th, as Napoleon's forces were launching their attack in the vicinity of Jena, the Prussian main army resumed its retreat through Eckartsberga and Auerstadt heading for Naumburg. Schmettau's and Blucher's divisions formed the advanced guard. As the morning mist lifted, the Prussian vanguard ran into the head of a French column (Davout's III Corps) near the village of Hassenhausen (four miles north-east of Auerstadt), and heavy firing broke out.

Davout had marched from Naumburg as instructed. Due to the dense fog, he had little idea how many Prussians he would encounter, but was aware that troop movements of some magnitude were proceeding to the west, and Prussian POWs revealed that they belonged to Brunswick's main body. Late on the 13th, Brunswick had bivouacked his men near Auerstadt because the fog made the narrow roads difficult to traverse. At this time, a Prussian cavalry patrol brought in some French POWs who revealed that Davout's forward elements were already in control of the Kosen defile. Brunswick did not launch an early morning attack, however, because he believed Napoleon himself was in Naumburg, and instead ordered his troops to move west of Hassenhaussen, where Schmettau's cavalry and infantry could cover the move. The fog had not lifted by the morning of the 14th. Davout's troops moved out at 0400, and were well on their way through Hassenhaussen when his cavalry screen suddenly ran into four squadrons and a battery of Prussians near the hamlet of Poppel (0700). Thus warned, Davout at once seized Hassenhausen. The French took the precaution of forming into defensive squares before continuing the march. Blucher, with a cuirassier squadron and two dragoon squadrons went to scout the Kosen pass. There he met Scharnhorst outside the village of Hassenhaussen about three kilometers from Kosen. Scharnhorst was unable to provide firm information--the mist was still too thick, but a thin line of Prussian infantry scouts had already

clashed with Davout's leading units. Unknown to Blucher and Scharnhorst, by 0800 Davout's three divisions were deploying on the plain before Hassenhaussen and more French were crossing the Saale. Beyond Hassenhaussen the fog briefly lifted, revealing to the French the Prussian cavalry about 1,000 yards away; the French (Davout's lead division under Gudin) immediately opened fire, driving the Prussians back. The Prussians converge to counterattack, greatly outnumbering the French advance guard, but through poor coordination (including continued debates and disagreement in Brunswick's headquarters, leading to delays in reinforcements) bungled the attack, giving time for French reinforcements to arrive. The Prussians, by virtue of their mass, were getting the best of the French, but Davout was personally orchestrating the defenses, throwing his reserve into the gaps as they formed until he had no reserve left. However, amid the battle, Brunswick fell mortally wounded, and Schmettau was killed. Brunswick and Scharnhorst had not developed a good working relationship (Brunswick saw Shornhorst as a troublemaker) and tended to avoid each other. When Brunswick was killed, Shornhorst was at another area of the battlefield and unaware that this event had taken place. The King of Prussia arrived on the scene, but neither appointed a new commander nor assumed genuine control himself (his advisor, Marshall Mollendorf, had been taken captive). Chaos spread through the ranks, and no one knew who was in command. Prussian units operated on the decisions of their officers, charging, advancing or falling back without any coordinated objectives. Many units did not move, their officers unwilling to act without direct orders. Despite outnumbering the French forces by roughly two-to-one, the Prussians failed to make any headway, and soon found themselves outflanked on both sides by the French. King Frederick William then ordered an immediate withdrawal. He intended to rejoin Hohenlohe and Ruchel, whose forces he believed to be still intact; he was completely ignorant of the events at Jena. His retreating troops fell back only to encounter the thousands of fleeing soldiers from the Jena battlefield, who were being cut down by Murat's cavalry. Murat continued the pursuit until late in the day. Napoleon, however, delayed issuing orders for the general pursuit until 0500 the next day (the 15th). This was partly due to the weariness of his troops, but also because he did not know what had happened to Davout and Bernadotte, and still operated under the belief that large bodies of Prussians remained operational in the area. Murat was still pursuing, but the majority of the remains of the enemy force was given an opportunity to escape. Upon receiving proof that the main army had been defeated at Auerstadt rather than Jena, and reports from Murat's cavalry regarding the direction of the fleeing remnants of the Prussian army, Napoleon issued his orders for the pursuit of those forces and the occupation of Berlin.

Sources & Mechanisms of DBA
French

Sources
- Identity, personality, and location of decision maker
- Friendly & enemy order of battle
- Friendly & enemy capability
- Location and status of friendly and enemy LOCs
- Geography
- Enemy TTP & historical performance

Mechanisms
- Reconnaissance missions
  - Engineers (long range logistics reconnaissance prior to campaign)
  - Cavalry
- Spies
- Commander's visual observations
- Indigenous informants (paid cash)
- POWs
- Contact with the enemy

Napoleon employed several mechanisms to attain DBA, all of which he cross-checked against each other for accuracy.

Napoleon's reconnaissance missions generally consisted of two types: Engineer officers sent to survey the roads, bridges and towns in the areas through which the Grande Armee intended to pass, and the cavalry screen which preceded the columns far in advance, which looked for enemy forces, questioned indigenous people, seized and read through mail, and looked for any other indication of enemy activity. In the case of Jena-Auerstadt, both of these types of reconnaissance were vital, although they were imperfect. The region was one in which French forces had never fought, so determinations regarding the terrain were the first matter to which Napoleon attended. The logistical information these missions gathered was essential to the movement of the Grande Armee. As luck had it, one of the engineers sent forward to conduct this reconnaissance encountered the enemy troops. Passing himself off as a Saxon officer, be was able to tour the Prussian camp, locate Brunswick's' headquarters, and acquire several detailed maps, all of which he presented to Napoleon on October 3, well in advance of the battle.

While it should be noted that the French cavalry often did not gather all the information needed (indeed, the first two engagements with Prussian troops--at Hof on the 8th and Saalfeld on the 10th—occurred without any prior information from the cavalry), they were often able to locate enemy forces or, just as important, determine where the enemy was not (as in the case when Napoleon

guessed the Prussians were concentrating around Gera, when in fact they were still in Erfurt and preparing to retreat).

Napoleon also liked to use spies, positioning them deep in the enemy's territory or at key chokepoints to monitor whether the enemy passed by. In several cases, this offered important information. However, sometimes the information spies obtained was obsolete by the time it reached Napoleon because they did not have at their disposal a rapid means of transmission.

Napoleon also relied upon his personal observations, sometimes weighing this information heavier than information he received from other sources. It was his own view of the battlefield from the heights of the Landgrafenberg that convinced him that he faced the main Prussian force. He was so convinced of this that he pulled his cavalry back (preventing them from verifying or disproving his assumption) so that he could achieve complete surprise in his attack the next morning. Even after the battle, upon receiving a report from Davout that the main force had actually been defeated at Auerstadt and not Jena, Napoleon still refused to believe it. It was not until the afternoon that the evidence became overwhelming and he had to admit that he was mistaken.

Every unit within the French military was capable of producing information, and each was charged with the responsibility of reporting any significant information directly and quickly to the Emperor. Each of the corps commanders was given large sums of money with which to buy information from local inhabitants. Enemy POWs and deserters could also provide important information, and the reports from interrogations were similarly reported to the Emperor. Because of the way the army was organized, each unit being self-sustaining and within timely distance to support each other, contact with the enemy also constituted useful information. On the Prussian side, contact often meant that it was too late to use the information--the organization was simply unable to respond quickly enough. But the French forces were sufficiently flexible and mobile that "marching to the sound of the guns" was actually a workable and effective system. In practice, each unit of the army was a tentacle that could gather information and draw it in to where it could be processed and applied.

Sources & Mechanisms of DBK
French

Sources
- Identity, personality, and location of decision maker
- Friendly & enemy capability
- Friendly & enemy intent
- Friendly & enemy morale
- Enemy TTP & historical performance
- Location and status of friendly and enemy LOCs

Mechanisms
- Pre-conflict studies
- Diplomatic officials (French ambassador to Berlin)
- Intercepted mail (via cavalry)
- Spies
- POWs/deserters
- Commander's intuition
- Commander's knowledge of enemy leadership

PROPRIETARY

Napoleon developed his DBK using a variety of mechanisms. The French ambassador to Berlin was the first to indicate that Prussian troops were on the move, offering strategic information that indicted Prussia intention for war. However, long before the Prussians mobilized, Napoleon had studied the Prussian military and leadership to determine how they were likely to perform. The results of the studies indicated that a Prussian mobilization would be very slow, that the presence of a potential threat from King Louis of Holland would inhibit their advance, and that the Prussians were likely to stand on the defensive behind the Elbe River. All but this last estimate proved correct, and the other two sufficed to make the third less meaningful. Napoleon had also studied the personality of the Prussian leadership, and consequently had a very low opinion of them. He knew their political leadership was indecisive and that their military leadership was unable to adapt to new methods of warfare.

The cavalry also acquired information relevant to DBK. In perhaps the most important piece of information Napoleon received during the whole campaign, the cavalry seized Prussian mail that indicated the Prussian leadership was unable to come to an agreement on their CONOPS, their morale was low, and the headquarters was in a state of chaos. This told Napoleon that the Prussian leadership had not yet determined its own intent, and that the time to strike was before this intent crystallized. Napoleon often used intercepted mail to help determine the enemy's locations and intent, at times ordering the cavalry to seize the post office in an area where he was focusing his attention.

Napoleon also used information from spies to gain DBK. In early September, before he had even begun mobilization, he sent intelligence officers to Dresden and Berlin to ascertain the meaning of the Prussian force movements and concentrations. As mentioned in the discussion of DBA, one of the engineer officers sent to reconnoiter the roads and bridges in the projected theater was able to infiltrate the enemy camp posing as a Saxon officer. He was able to locate Brunswick's headquarters, thus signaling to Napoleon where the main Prussian thrust would be.

As with the attainment of DBA, every unit within the French military was capable of producing information that could contribute to DBK. Interrogations of enemy POWs and deserters, the locations of contacts with the enemy, information from the local populace across the theater, all could be synthesized by Napoleon to help determine the enemy's intentions.

Sources & Mechanisms of DBA Prussian

Sources
- Identity, personality, and location of decision maker
- Friendly & enemy order of battle
- Friendly & enemy capability
- Location and status of friendly and enemy LOCs
- Geography
- Enemy TTP & historical performance

Mechanisms
- Capt. Muffling's reconnaissance mission (Oct. 5 - 7)
- POWs
- Cavalry (close in)
- Contact with the enemy

PROPRIETARY

The Prussians were much less attentive to the importance of gathering information than the French, using fewer mechanisms and making less use of these mechanisms.

The Prussians and the French used cavalry differently while on the march. The French used it in a wide and far-ranging screen to gather information while en route to the theater. The Prussians used it for direct defense of the columns. The unit performing the vanguard was also to provide detachments to patrol the sides of the column. In this capacity, the vanguard marched a mere 1000 paces in front of the army. Side patrols sent off flankers to scout out the immediate terrain, constantly maintaining contact with their parent body. Reconnaissance patrols, when directed, were carried out by separate bodies of cavalry, and would reconnoiter specific areas as directed by the commander. Once the column had reached its destination, cavalry would provide patrols in the area, but would remain close enough to support the infantry should combat actions occur. One exception to this was Captain Muffling's reconnaissance mission, conducted when the Prussians realized they were greatly mistaken in their assumptions of French intentions and locations on October 5. At first, four such reconnaissance teams were to be sent out, but the King felt this was too great a risk, and so reduced it to one, that which was commanded by Muffling. Muffling traveled deep into the French rear, discovering that the French had left those positions, had traveled

far to the northwest, and would soon threaten the Prussian left flank. He discovered the French were not even defending their lines of communications. This was the single most important piece of intelligence the Prussians received during the whole campaign, and caused them to reorient their forces (albeit ineffectively), to attempt to strike at the French flank, and contributed to their decision to retreat.

Enemy POWs sometimes offered a good source of information for the Prussians. In the case of Auerstadt, Prussian patrols captured some French soldiers in the area, who confessed they were part of a corps located just to the east (Davout's). This information was less useful than might be assumed, because the Prussians could not be shaken from the belief that this force was the French main body and was commanded by Napoleon himself. Had they known they faced a force half their size, they might have employed their force more aggressively to overwhelm it.

Contact with the enemy, unfortunately for the Prussians, was one of their primary means of gathering information. It was the defeats of the advance guards at Hof and Saalfeld that convinced the Prussians that they had been outflanked and would have to retreat. The Prussians lacked the flexibility and mobility the French had, and thus when contact with the enemy was made, they were unable to use this information to move other forces forward in time to support the unit engaged in combat. Thus, the information they received from contact usually cost them serious losses to the unit engaged, and never gave them information in time to exploit it. Further, because their DBA was so low, contact with the enemy could never be placed within the context of the position of the whole enemy force. Thus, when Hohenlohe engaged Lannes' advance guard at Jena on the 13th, he assumed it was just a flank guard for the main French army, which he thought was proceeding northeastward. In fact, it was the leading edge of the French attack, which had swung several corps directly at him by the next day. If Hohenlohe were able to place the contact with the enemy on the 13th into the context of the locations of the French army as a whole, it is likely he would have acted much differently in the next day's battle.

Sources & Mechanisms of DBK Prussian

Sources
- Identity, personality, and location of decision maker
- Friendly & enemy capability
- Friendly & enemy intent
- Friendly & enemy morale
- Enemy TTP & historical performance
- Location and status of friendly and enemy LOCs

Mechanisms
- Guesswork (very poor assumptions)
- Muffling's reconnaissance mission
- Contact with the enemy

PROPRIETARY

Prussian DBK was never high during the campaign of Jena-Auerstadt, and they did very little to remedy that problem. From the very beginning, they grossly misjudged Napoleon's likely actions and intentions, believing that he would take up a defensive position and await attack behind the Upper or Franconian Saale, or upon the Main. At the time, Napoleon's forces were spread out over a wide area of German territory so as to overawe Austria; the Prussians thought that Napoleon's fear of an Austrian uprising would keep him pinned in this disposition, thus making him an inviting target to an attack aimed at defeat in detail. While Napoleon was concerned that Austria might rise up and join a coalition with Prussia, he knew this could not happen if Prussia was defeated quickly. Thus, his CONOPS became one of quick and decisive attack, the exact opposite of Prussian assumptions.

As mentioned in the discussion of DBA, Captain Muffling's reconnaissance mission uncovered the most significant information the Prussians were to gain about French locations and dispositions. This was also the most significant information they gathered on French intentions. Based on Muffling's report, they realized the French were on the attack, and moving rapidly to outflank them. This information was interpreted in conjunction with the defeats at Hof and Saalfeld (contact with the enemy), to verify that the French CONOPS was a deep strike around their flanks and against their rear, cutting their communications with Berlin. However, with only this information to go on, they again made an incorrect assumption, that being that Napoleon would

continue along his current line of advance to cut them far to the rear. What Napoleon actually did, upon learning that the Prussian main force was located at Erfurt, was to swing his forces 90 degrees to the left while sending two corps to cut off the likely line of Prussian retreat through Auerstadt, so as to engage and envelope the Prussians at Jena. However, at the same time that Napoleon made this decision, the Prussian's decided they should retreat to Magdeburg via Auerstadt, and were attempting to do so when the French attacked them at both at Jena and Auerstadt.

Contact with the enemy was also used to gather information on enemy intent, though it was not very effective either. The clashes at Hof and Saafeld gave the Prussians the incorrect impression that Napoleon would continue in the direction of Leipzig. Napoleon, of course, soon recieved reports that there were no Prussian troops in that direction, and realized they were located near Erfurt and Jena. The Prussians again made contact with the enemy at Jena, but again misread French intent, believing the force they faced to be only a flank guard rather than the main concentration of enemy forces.

Information -- Required

French

- Location, status & number of enemy units
- Location, status, and number of friendly units
- Most likely enemy course of action
- Information on terrain

Prussian

- Location, status, number of enemy units
- Location, status, number of friendly units
- Most likely enemy course of action

The information requirements for this campaign may seem obvious, but only the French side paid much attention to them. Napoleon knew what he needed-- to ascertain the size of the forces against him and their locations, determine how the opposing commanders intended to employ those forces, and move his forces in concert against them across unfamiliar and often difficult terrain. He exhausted great efforts to locate the enemy units (although ultimately he failed to understand their true dispositions), and specifically directed his cavalry screen to seek out information on their intentions (by seizing mail, interrogating the local populace, and taking enemy prisoners). To facilitate his movement over the unfamiliar terrain, he sent engineer officers to reconnoiter the likely avenues of approach and to report to him on the ability of the areas in question to furnish the supply requirements of his army. With a few exceptions (such as that of Bernadotte on October 14), Napoleon knew and could keep track of his own force locations via the command and control system he had developed which kept information flowing between the various elements of his force and fed back to himself at the center.

The Prussians did very little to satisfy their information requirements. They never had a good idea of the enemy force locations or dispositions, and were very much mistaken regarding Napoleon's intent. They were not even able to keep track of their own force dispositions due to a cumbersome command and control system and unclear delineations of authority.

Information -- Not Sought/Not Obtained

French

- Confirmation that the force at Jena was in fact the main body
- Prussian force movements on the 13th

Prussian

- Almost everything

The only information the French did not seek or obtain regarded the Prussian force movements of October 13 and 14. Napoleon had paid intense attention to gaining all possible relevant information on the Prussian forces up until the time he became convinced that he had located the main Prussian force and understood its intentions. All the information he had gathered to that point indicated that Prussian forces were concentrating in the Jena-Erfurt area, and he assumed that meant this was the position from which they intended to strike. What he did not understand was that the concentration was temporary--a method for moving Hohenlohe's force into a positions where it could be the rear guard while the main force retreated. Believing that he had the element of surprise and not wanting to lose it, Napoleon ordered the cavalry to forego its usual reconnaissance so that French preparations would not be detected. While he massed his forces near Jena for the attack, the Prussian main army withdrew to Auerstadt. In effect, Napoleon could not at that time obtain information beyond the forward line of the enemy troops.

The Prussian army sought so little information that it is not useful to attempt to list their oversights here. Suffice it to say, they based their plans upon misguided assumptions (that Napoleon would maintain a defensive posture in Austria) that they never sought to confirm, and what little information they did gather was only sufficient to alert them that they had fallen into an untenable situation and their best option was to flee.

Information -- Timeliness

French

- Knowledge of Prussian decision for war was not timely, but did not matter due to Prussia's slow mobilization
- French information up until October 13 was relatively timely
  - Advance reconnaissance, cavalry screen, intercepted mail, reports from spies all arrived prior to engagement with plenty of time to help direct French force movement
  - Cavalry screen failed to locate some Prussian forces in a timely manner (Hof, Saalfeld)

PROPRIETARY

The timeliness of French information gathering was was usually very good. This was due to the high priority Napoleon place upon information gathering, and the ingenious organization of the Grande Armee, which was designed to absorb information and transmit it quickly to Napoleon. Napoleon had begun gathering critical logistics information even when he thought that it was unlikely the Prussians would pursue war. Once mobilized, the cavalry screen went to work gathering information throughout the theater and rapidly reporting it to Napoleon. Each corps would also act as an information gatherer, and each element of information that came in either confirmed the reports of the prior information or added detail or correction. At the center of it all, Napoleon cataloged and analyzed each piece, gaining an increasingly improving picture of the battlefield. Due to a strong command and control system, his orders could be transmitted to his field commanders in a timely manner. The whole system worked to provide information quickly and act on it in a timely manner.

It is important to note, however, that this does not imply Napoleon received all the information he needed, just that the information that was gathered was transmitted to him rapidly. For example, the cavalry did not locate the Prussian forces at Hof and Saalfeld before before the French corps encountered them.

Information--Timeliness

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Prussian

- Lack of timely information was a constant problem
  - The only information that was close to timely was Captain Muffling's reconnaissance report
    - Even this could only be used to react, not to be proactive
  - Information on French force movements did not reach the Prussians until October 7, by which time the French were already outflanking them
  - The Prussians never understood French intent
  - Even after the simultaneous defeats at Jena and Auerstadt, each Prussian force was unaware the other had been engaged and believed they could fall back on the other for support

Prussian information was not only scarce, it lacked the timeliness needed to make it militarily useful. Most of their information was attained by contact with the enemy, which came at a heavy price and too late to take greatest advantage of it. Contact with the enemy at Hof and Saalfeld alerted the Prussians that the French were outflanking them, at which time it was too late to turn that information to their advantage in the form of an attack. The best they could manage was a desperate attempt at retreat, which also failed because they lacked information on French force positions until contact with the enemy was again made (this time with Davout's force near Auerstadt).

The only instance of significant information being delivered in a timely manner to the Prussians was Captain Muffling's reconnaissance in the French rear, and this too came at a time when hope was just about lost. However, this information was so limited that it was only timely enough to indicate to the Prussians that they were already in serious trouble.

Information -- Accuracy

French

- Much French information was accurate
- French cavalry sometimes overestimated the size of enemy forces they encountered
- Napoleon's assumptions were often inaccurate:
  - His belief of the 10th that the Prussians were at Gera
  - His belief that the main force was at Jena on the 13/14th

Prussian

- They fell for Napoleon's northern route deception
- They consistently misinterpreted Napoleon's intent
- The information provided by Captain Muffling was accurate, but limited in scope

PROPRIETARY

For the most part, the information in Napoleon's possession had a high degree of accuracy. The organization of the Grande Armee had a build-in method of verifying intelligence in that information regarding enemy locations and movements could be independently collected from many elements within the army. The cavalry would send in the initial reports, which would later be confirmed, clarified or disproved by the columns following in their wake. The columns themselves marched in segments a half-day to a day behind each other, which provided for constant reviews of the territory they passed through.

Another reason for the high degree of accuracy was that Napoleon and his commanders knew where to look for information. Spies had been planted throughout the theater and could report their findings to the cavalry, who could then relay it to Napoleon. They also knew to intercept the mail, literally going through every mailbox and post office they encountered as they moved. They also questioned the local populace; to encourage them to provide this information, Napoleon had given his commanders large sums of money with which to pay these informants.

There were times when information was inaccurate—local populations sometimes lied, and rumors were often wrong. It is also important to note that the cavalry screen as a method of gathering information on the enemy order of battle was limited to probing its leading edge, and using that partial information to judge its size. These estimates were prone to errors. It also made information on force movements beyond the leading edge very difficult

to obtain, which is why the Prussians were able to move the main body of their force without the French knowing. Thus there were many cases where the cavalry overestimated the size of forces they encountered, or did not gather information on movements within the enemy mass. However, because there were so many sources of information, and because it all flowed back to Napoleon for analysis and synthesis, the end result was usually accurate. Where the system collapsed, during the critical day before the battle, was when Napoleon relied upon his own sense of the battlefield and his personal estimation of the enemy's intentions.

The Prussians, as has been mentioned, had very little information. Added to that problem, much of what they had was incorrect. They had relied upon an number of faulty assumptions (including a terribly misguided estimate of Napoleon's likely course of action, and a grossly overinflated view of their own military prowess) to guide them up until the battle was almost upon them, and then did very little to fix the problem. Napoleon's deception plan (the false army based in Holland) served to further misguide them. While the emergency reconnaissance mission undertaken by Captain Muffling did uncover important information that was accurate, it was not complete. Muffling accurately reported that the French forces had moved through the Thuringian Forest and were no longer defending their lines of communications far to the rear, but that was not sufficient to guide an effective Prussian attack. It was merely enough for them to make additional incorrect assumptions. Had they launched more reconnaissance missions as was first suggested, they might have uncovered more useful information. Even while the battle was underway, the Prussian commanders continued to make poor judgments based on incomplete information. At Jena, Hohenlohe remained convinced until it was too late that he only faced a flank guard and not the main French army. At Auerstadt, Brunswick and King Frederick William III were so convinced that they faced the main French army, with Napoleon himself orchestrating the action, that they did not dare to use their two-to-one force advantage to overwhelm their enemy.

Elements of IW--French

OPSEC

- Napoleon took great care to keep his actions secret
  - Pre-war: Ordered HUMINT to be discreet
  - When his personal horses and field glasses were called for, the official explanation was he was going hunting
  - Development of operational/strategic plans conducted by him alone; often military orders were not revealed until they were to be executed
    - He repeatedly told his marshals that only he knew the whole plan
- Cavalry was used to mask movements
- Deployment onto the Landgrafenberg done in silence during the night

• PSYOPS

- None

Napoleon placed a high value on OPSEC. Even before his forces were called up, he told his reconnaissance officers to hide the true intent of their activities. When he ordered his personal horses to be brought from the stables so that he could join the Grande Armee already underway, he spread the rumor that he was merely going hunting. With his cavalry preceding the columns, he could move without exposing his units to enemy observation, avoiding any actions that might alert them to his intentions. Once he had decided upon Jena as the battlefield for his attack, he pulled the cavalry back so that the enemy would not become aware of his preparations. He also moved his forces up in the dead of night under strict orders of silence, personally overseeing the movement of the heavy guns up narrow defiles to the heights of the Landgrafenberg. Finally, he alone was privy to his plans for battle up until the evening before the conflict itself.

Elements of IW--French (cont)

- **Deception**
  - False army taking northern route from Holland
    - Louis Napoleon's "army"
    - Deceptive patrols around the Fulda area to maintain northern route perception
  - Fortification of Wurzburg to make the Prussians think Napoleon was acting defensively
- **Physical Destruction**
  - Death of Brunswick (unplanned)

PROPRIETARY

Napoleon placed great importance on deception as well, and was very attentive to making sure his artifice would not be discovered until it was too late. To deceive the Prussians as to his likely avenue of approach, Napoleon directed his brother, King Louis of Holland, to noisily call up the reserves in his area and give every appearance that the attack was to come from this direction. In implementing this plan, Napoleon utilized studies he had conducted prior to the war that indicated the Prussians would consider this a likely avenue of approach. He reinforced this misconception in their minds by sending cavalry patrols to the northern end of the Thuringian Forest to give the appearance that they were there preceding the Grande Armee. Napoleon also ordered the fortification of Wurzburg even after he had left that town far behind so that Prussian spies would believe that he was still there and intended to pursue a defensive approach, awaiting the Prussian attack.

The only identifiable case of physical destruction in an Information Warfare context is that of the death of Brunswick on the battlefield at Auerstadt, and that event was very likely unplanned or done without an understanding of the effect it would have on Prussian command and control. There is no data to support the assertion that Brunswick's death (by a bullet through the head) was an attempt to destroy the Prussian's ability to command their forces, but it certainly did have that effect.

Elements of IW--Prussian

- **OPSEC**
  - Only case of good OPSEC: Decision to go to war was made in secret
  - Generally, very poor
    - French ambassador knew the Prussian forces were deployed
    - French engineer allowed to roam through the Prussian camp, identifying the HQs
    - Mail intercepted with highly sensitive information
- **PSYOPS**
  - None
- **Deception**
  - Prussian ambassador lied about Prussian intentions
- **Physical Destruction**
  - None

PROPRIETARY

Prussian OPSEC was poor. While the decision to go to war with France was reached with admirable secrecy, the deployment of her forces (once mobilization finally got underway) was apparent even to the French ambassador in Berlin. While deployed, their security was sadly lax, as evidenced by the French engineer officer who, wearing his own French officer's uniform, was able to pass himself off as a Saxon officer and tour through the camp of the Prussian main army, noting its condition, size and the location of Brunswick's headquarters. The Prussian leadership was also careless enough to discuss the chaotic, fractured and irresolute nature of their own command headquarters in the open mail, which French forces had no difficulty in seizing.

The only attempt at deception undertaken by the Prussians was to have their ambassador to Paris lie about Prussian intentions. This, of course, had little effect in light of all the information to the contrary at Napoleon's disposal.

The Impact of Command--French

Command Structure

- **Centralized planning, decentralized execution**
  - **Enabled by organization of French forces**
  - **All information flowed to Napoleon, where it was analyzed and synthesized**
  - **Generation of orders designed for ease of command**
    - **Napoleon's sleeping habits**
    - **Berthier's methods**

PROPRIETARY

The Napoleonic command and control system was an excellent example of centralized planning with decentralized execution. All operational-level planning was done by Napoleon himself, while the execution of the orders he sent to his marshals was their own responsibility. This system was enabled by the corps organization, which divided the army into units small enough to be highly mobile, yet strong enough to fight until reinforcements arrived if enemy forces were enountered unexpectedly. The movement of the army was orchestrated such that all corps were within a half-day to a day's march from each other, and could thus respond quickly to combat actions engaged in by any other corps—the famous directive to "march to the sound of the guns." A system of messangers ran throughout the army, all feeding back to Napoleon, keeping track of the whereabouts of each corps and their situations. Napoleon's orders were sent out to the marshals via this same system.

The system Napoleon used to generate orders was also designed to make command efficient. Napoleon himself slept from 2000 to midnight each night specifically to make the command and control system its most efficient. There were very few combat actions after dark, so Napoleon could rest assured that his attention would not be required. As he slept, the latest information from each of his corps and the cavalry screen would be delivered to his command center, ready for him when he awoke at midnight. He would then sift through this information and determine his orders for the next day. The orders would

then be sent out in time to be read by his marshals before dawn, and the corps could begin their next actions at first light.

All of Napoleon's orders were transcribed by his chief of staff, Marshall Berthier, who had developed methods such as sending several runners with the same message by different routes so as to assure that at least one delivered it successfully. Berthier's transcriptions also made it easier for the marshall's to understand the orders, because they were all written in the same manner each time, rather than in the different styles that would naturally come into play if a number of different people were writing them.

The Impact of Command—Prussia

Command Structure

- Administrative confusion, both prior to and during war
- Brunswick was placed in command, but the Council of War and the King and his entourage stifled his ability to command
  - Prevented unified leadership; endless debates, decisions made by committee (when they could reach agreement)
  - Encouraged insubordination among subordinates
- New command structure
  - Divisional structure adopted en route to theater
  - Lack of training in this structure led to serious problems
  - When Brunswick is mortally wounded on the field, command reverted to the inexperienced King; no military second-in-command

PROPRIETARY

The Prussian command and control structure was a nightmare. Over the years before Jena-Auerstadt, control of the military had become a cumbersome and redundant bureaucracy with entangled lines of authority and responsibility (this was the primary reason why the mobilization moved so slowly). While the King was in name the highest authority on military matters, advice and direction was intended to come from the Council of War, a body of esteemed military men, many of whom were retired commanders. The Council was based on collegiality and thus required consensus for decisions. In practice, it often looked more like a debating society than a command center. As a result, administrative confusion reigned.

The battlefield command structure was sadly similar. The Duke of Brunswick had been named overall commander of all fielded forces, but he was also the commander of the main body of the army. Hohenlohe and Ruchel were supposed to be subordinate to Brunswick, but in practice they often acted independently and had no qualms about undercutting Brunswick in the Council of War. King Frederick William III himself, along with all of his personal advisors, arrived at Brunswick's headquarters shortly after the Prussian forces were underway. His presence served to complete the destruction of Brunswick's authority, because he demanded final say on all important matters. This situation was made worse by the fact that the King had very little military experience and thus sought advice from literally every Prussian military man of any reputation. The result was to make the Council of War,

already an ineffective command instrument, even worse. Debates were lengthy, with many competing plans put forward. The King's indecisiveness, along with the requirement for consensus, ensured that when a decision was finally made, it was in the form of a compromise. Further, even these compromise decisions did not last long, as the debates would continue and additional plans or changes to the plan would be put forward, each one given equal consideration by the King, no matter how foolish they were.

Prior to the adoption of the divisional structure, the Prussians had operated with a main army, a rear guard, and an advance guard. Scharnhorst was the primary agitator for the divisional structure, and finally won approval for it from the King after the march was underway. Apparently, he believed that he, as chief of staff to Brunswick, would be able to manage this new structure despite the fact that the army had never trained with it and lacked officers with experience commanding bodies as large as divisions. However, Brunswick did not like Scharnhorst, viewing him as a troublemaker, and did not listen to his advice or use his services. Indeed, the two got along so poorly that when Brunswick fell mortally wounded on the field at Auerstadt, Sharnhorst was at another part of the battlefield and had no idea what had happened.

Because the subordinate commanders were involved in the debates that generated the final compromise plans, and occasionally they would interpret the compromises as tacit acceptance of their own intentions. This was particularly true of Hohenlohe, who moved his forces out of supporting position of the main army as the French were advancing, which was part of the reason for the defeats of the 8th and 10th of October.

In addition, the orders were often poorly distributed. Thus, orders were slow in arriving, while plans were constantly changing. This meant there were times when orders for one plan would be in distribution at the same time that a new plan would be adopted. The orders themselves were cumbersome. Because Brunswick had no corps staff, nor even a complete organization by divisions, he often had to write his orders in minute details, describing exactly which battalions and squadrons were to take which positions or outposts. These orders took a long time to write, a long time to distribute, and a long time to read--by which time they were often obsolete.

The impact on the Prussian forces was significant. As the plans changed, marches and countermarches were ordered. The men became exhausted and morale suffered.

The Impact of Personality

French
- Napoleon had a brilliant military mind and was a dynamic, imaginative and tireless leader
- Davout as a commander was close to Napoleon's equal
- Berthier was an excellent Chief of Staff

Prussian
- King Frederick William III: terribly indecisive, could not make up his mind until someone forced his hand
- Queen Luise of Prussia: Very anti-French, goaded the King into war
- Brunswick and his colleagues were very conservative military commanders; still clinging to the outdated Frederican methods, not energetic

PROPRIETARY

French

Napoleon's personality affected every battle he commanded. He possessed a mind that could absorb and retain incredible amounts of information and understand its military significance. He could work long hours under extreme conditions and still require only a few hours of sleep a night. He was able to focus on his objectives and never lose sight of them. He was a dynamic leader whose men were loyal to him and would follow him anywhere. His command was unquestioned. Of equal significance in the case of Auerstadt, Marshall Davout was a brilliant commander as well, and his use of his forces on the battlefield there showed him to be as able as Napoleon himself.

Berthier had developed a communications system that employed redundancy (multiple messangers) and feedback (reciepts from the commanders) that greatly enhanced French command and control. He was also uniquely talented at translating Napoleon's intent into orders the field commanders could easily understand.

Prussian

King Frederick William III was not much of a military leader. His interests in the military prior to the conflict revolved mostly around the appearance of their uniforms and the quality of their parade drilling. As a commander, he was inexperienced and indecisive. By undermining Brunswick, his presence on the battlefield destroyed any chance at effective command and control.

Queen Luise had a significant role in pushing the Prussians into war against the French. She hated the French and formed the center of the anti-French circle within the Prussian court. Her influence over the King was instrumental in convincing him to declare war.

Brunswick and his fellow Prussian military commanders were highly conservative, holding complete faith that warfare would not change from the methods used by Frederick the Great. They were almost uniformly unimaginative, and had no understanding of the capabilities of Napoleon's army.

The Impact of Intangibles--French

Political/Strategic Considerations

- Napoleon's military was designed to defeat enemies that used the established methods of warfare of the Ancien Regime, of which Prussia was the standard-bearer

Weather

- Fog on the morning of the battle masked the first French concentration on the battlefield of Jena

Unit Morale

- Very high
  - Faith in their commander
  - Recent victories at Ulm and Austerlitz
  - Majority of French soldiers had battlefield experience

PROPRIETARY

Political/Strategic considerations:

The changes in warfare incorporated in Napoleon's military organization, operational approaches and tactics were designed to defeat an established military approach perfected by Frederick the Great and still typified by the Prussian army of 1806. The design of the corps to be self-sustaining until it could be reinforced, the speed at which the corps was able to move, the use of foraging for supply instead of heavy supply trains, the heavy use of skirmishers, the development of mobile artillery and the wide-ranging cavalry screen were all intended to out-maneuver and break down the slow, heavy, concentrated units that had previously dominated the battlefield.

Weather

The battlefield of Jena was shrouded in fog on the night of October 13/14, and remained so until the late morning of the 14th. Napoleon took advantage of this natural cover to mask his efforts to move his forces onto the heights of the Landgrafenberg.

Unit Morale

French morale was very high leading up to and through the battle. French soldiers had strong faith in their commander, and were bolstered by their victories at Ulm and Austerlitz. Most of them had significant battlefield experience.

The Impact of Intangibles--Prussian

Political/Strategic Considerations

- Desire among Prussian leadership for war against France was at fever pitch; they bolted into war without waiting for Russia to mobilize
- Prussian Army was in decline
  - Extensive use of foreign nationals made force less reliable
  - Emphasis on parade and ceremonial drill made soldiers and commanders poorly trained for actual combat
- Prussians were still clinging to the old style of warfare
  - Napoleon's revolutionary changes in warfare were specifically designed to overthrow the military system the Prussians had created
- The Prussians were outnumbered

Political/Strategic considerations:

The desire for war against France among an influential majority of the Prussian court and military leadership was very strong. They had been denied the opportunity to fight on the side of the Third Coalition in 1805, and since then Napoleon's treatment of Prussia had only become worse. Oddly, this was also the case among those who were considered "reformers" (Scharnhorst, Gneisenau, etc), who knew the limitations of the Prussian army and should have known they were no match for the French.

The Prussian army was in serious decline. Prussian policy, even during Frederick the Great, held that a citizen's greatest value is as an economic tool, not a military tool. Thus, the military had a heavy contingent of foreign nationals (mercenaries), and the Prussian citizens in the ranks often had limited training so they could spend maximum time at their jobs. What training they did have focused mostly on parade drill, which had little relevance to actual warfare. Military exercises were scripted (the King's side always won), which also had the effect of dulling the minds of the officers, who never actually had to come up with a winning plan. The upper echelons of command were populated with officers who had fought with Frederick the Great and considered his methods the equivalent of gospel. They did not believe that the methods of warfare could change, and few understood the impact of the changes the French had implemented, despite the fact that they were designed to defeat an enemy using the methods the Prussians employed.

The Prussian forces were also outnumbered by the French. However, the French superiority in numbers was not used to much advantage because of Napoleon's mistaken assumptions regarding the Prussian force locations on the night before the battle.

Impact of Intangibles--Prussian (cont)

Weather
- Morning fog hid French concentrations at Jena

Unit Morale
- Gross overconfidence as to their own capabilities prior to the battle; shaken morale after the first clashes; complete collapse into panic after defeats
  - Saxon morale was particularly low

Napoleon's reputation
- At Auerstadt, the Prussian belief that they were facing Napoleon himself deeply frightened the commanders

PROPRIETARY

Weather:

Fog hid the French force concentrations at Jena on the 13/14th.

Unit Morale:

Marching into battle, the Prussians believed they were invincible. The legacy of Frederick the Great convinced them they they possessed the greatest military in existence, and that defeating the French would be a simple matter. Morale began to slip when food, firewood and other supplies were inadequate due to the bureaucratic confusion that entangled them as they moved. Then, with the sudden defeats at Hof and Saalfeld, morale dropped very low, both among the rank and file and within the leadership, because the aura of invincibility had been shattered. Morale among the Saxon units dropped the most because it was Saxon forces that suffered the worst blows in these engagements, and they began to feel like they were being used as cannon-fodder. Although most units fought bravely, there were isolated cases of units abandoning their positions at the mere rumor of an impending French attack.

Napoleon's Reputation:

The Prussian belief in their own invincibility was shattered before the actual battles of October 14. By the time of the conflict at Auerstadt, the Prussian commanders were very intimidated by the prospect of facing Napoleon, and this had a serious impact on their ability to make battlefield decisions. They knew they were out-classed, and this inhibited decisionmaking.

Why Did the French Plan Succeed?

- Mobility, flexibility and speed of French forces (significant cycle time advantage)
- Superior command and control
- Napoleon's emphasis on information
- Both Napoleon and Davout's great personal abilities as battlefield commanders

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The primary strength Napoleon enjoyed was the organization of his forces. The corps concept gave him the mobility, flexibility, and speed to take the initiative, outmaneuver the enemy and strike decisively. While the velocities of the French and Prussian forces varied throughout the campaign, Napoleon could acheive a 3:1 time cycle advantage over the Prussians when he moved his forces at maximum speed. This organizational structure even enabled him to prevail when his information was poor, or when he made misjudgments. However, the information component to the corps organization should not be overlooked. Mobility, flexibility, and speed are wasted without information, and it was the organization's inherent information-gathering capability that allowed Napoleon to use these assets to greatest benefit. The best example of this was when Napoleon discovered that the Prussians were not concentrating on Gera, and thus must still have been at Erfurt. Napoleon was able to quickly swing his entire army 90 degrees to the left and engage the enemy in just a couple of day's time.

Napoleon's command and control system was far superior to that of the Prussians. As discussed on the Command and Control slide, French command and control was an excellent example of centralized planning and decentralized execution, with strong internal communications and a method of producing uniformity in orders.

Although Napoleon missed the critical Prussian force movements of October 13/14, his emphasis on information was instrumental in enabling his victory.

Without it, his methods of warfare would not have worked. Information in the form of advance reconnaissance told him the best routes to take to the theater, enabling the speed he needed to surprise and outflank the enemy. It also told him whether the regions through which the army would pass had supplies sufficient to support his troops, thus allowing him to move without cumbersome supply trains. His cavalry screen, moving far ahead of his columns, provided information on enemy force locations. While the cavalry was unable to determine a comprehensive order of battle, it could demark the general areas in which the enemy was, and, equally important, was not. This gave Napoleon the information needed to develop a general CONOPS for enveloping or outflanking his enemy.

And, of course, French victory also owed much the the personal abilities of both Napoleon and Davout, who's command on the battlefields of Jena and Auerstadt were exemplary.

Why Didn't the Prussian Plan Succeed?

- They never had a workable plan in place
- They were all but oblivious to their enemy's intentions, movements, locations, etc.
- They were on the wrong side of the changes in warfare
- They had a split command structure and poor communications system
- They had allowed their military to fall into decline

Despite the fact that they provoked this war and rushed into it without waiting for their Russian allies, the Prussians were never ready to fight the French. They deployed without a plan, and spent most of their time debating action instead of taking it. The only time they achieved complete consensus on what they should do was when they realized the French were in the process of outflanking them and their only hope was to retreat as quickly as possible. The chances for victory under such circumstances are slim at best.

The Prussians all but ignored the need for information on French force locations and movements. In the case of Jena, this gave Napoleon the ability to take the initiative; allowed him the opportunity to concentrate his forces on the heights overlooking Jena; and led them to respond far too slowly to the attack on October 14. Had Hohenlohe understood that Napoleon's forces were moving to concentrate against him on the 13th, he could have used his vastly superior numbers to drive Lannes from the Landgrafenberg, thus denying Napoleon his entryway onto the battlefield. Had he made the same realization on the morning of the 14th, he could have employed his forces in mass rather than piecemeal and dispersed, and called for support from Ruchel much earlier than he did. He undoubtedly would have fared better. At Auerstadt, the case is even more compelling. Had the Prussians understood they were facing battle the next day, they would probably have taken the Kosen Pass, key to their retreat, the evening of the 13th. When the battle came, Brunswick and

King Frederick William assumed they were facing the bulk of the French army with Napoleon himself commanding. Had they known they faced a force only half their own size, they probably would have used their force advantage to overwhelm the enemy. They also would have been able to surmise that, after several hours of fighting, the enemy was using all the forces at its disposal and thus lacked any reserves. By concentrating on one point at the battlefield with superior force at such a time, breaking through the enemy lines and scattering them would have been a viable option. The fact that they were outflanked on both sides by a force half their size and never achieved a breakthrough is shocking.
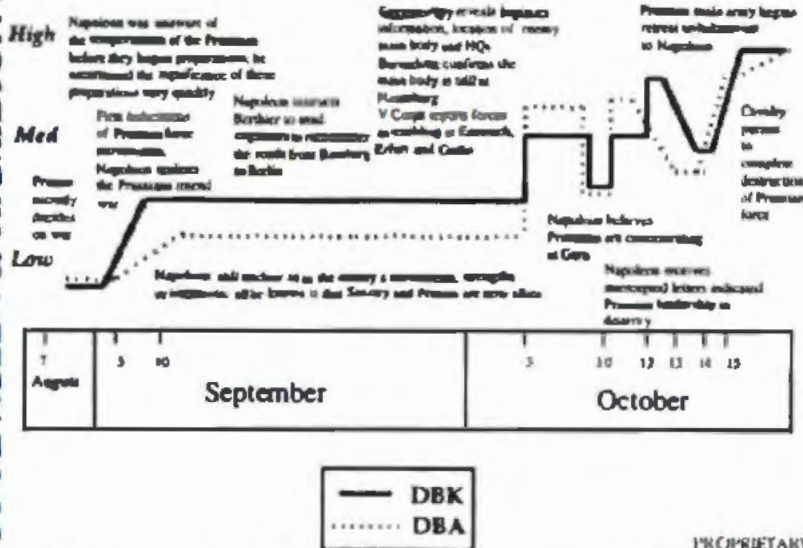
As was described elsewhere, Prussian command and control was a disaster. Command authority was dispersed between the Council of War, the King, and Brunswick, with subordinate commanders who occasionally made command decisions contrary to their orders. War planning resembled a debating society, and decisions were constantly changed. The divisional structure they adopted en route to the theater was untested, and they lacked officers of sufficient calibre to perform the duties of a divisional commander. Their system of sending orders was cumbersome to the point where the orders were often obsolete by the time they reached the officers who were supposed to carry them out.

The Prussians were on the wrong side of revolutionary changes that Napoleon had made to warfare. As a consequence, their movements were slow, their officers lacked initiative, their organization was poor and inflexible, and their command and control was cumbersome. The result was an army that was unable to use its forces efficiently or effectively.

On top of all the other problems, the Prussians had allowed their military to decline. Its muskets were the oldest in Europe, its training was poor and did not prepare its troops for actual combat, and its officers were unimaginative and unenergetic.

Level of DBA/DBK--French

High

Med

Low

7
August

5   10

September

5

10 12 13 14 15

October

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——— DBK
········ DBA
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PROPRIETARY

Napoleon's DBA and DBK start out very low because he was unaware of the Prussian decision for war, made in secret on August 7, 1806. It increased on September 5 when Napoleon received reports from his ambassador in Berlin that the Prussian army was moving south to the frontier.

All through September, Napoleon was completely unaware of the enemy's plan of operations and force locations (although he had deployed assets that would later provide significant information to him). However, Napoleon's planning for war with Prussia was assisted by several studies he had done prior to these events. These studies indicated the Prussian Army would mobilize slowly, and that a threat from King Louis in Holland to the Prussian flank would inhibit a rapid Prussian advance. He thus instructed King Louis to give the appearance of preparing for war along the northern route through the Thuringian Forest, while Napoleon prepared to move through the southern route. This pre-conflict information boosted his understanding of the likely enemy courses of action, thus elevating his DBK.

On October 3, Napoleon interviewed the engineer officers he had Berthier send to reconnoiter the roads in the projected theater of war. In addition to the information they were sent to collect, one of the engineers had passed himself off as a Saxon officer and was able to enter the Prussian camp and observe its forces and the location of its headquarters, including those of Brunswick himself. This information provided Napoleon with excellent information on Prussian force locations, and, because it identified Brunswick's headquarters,
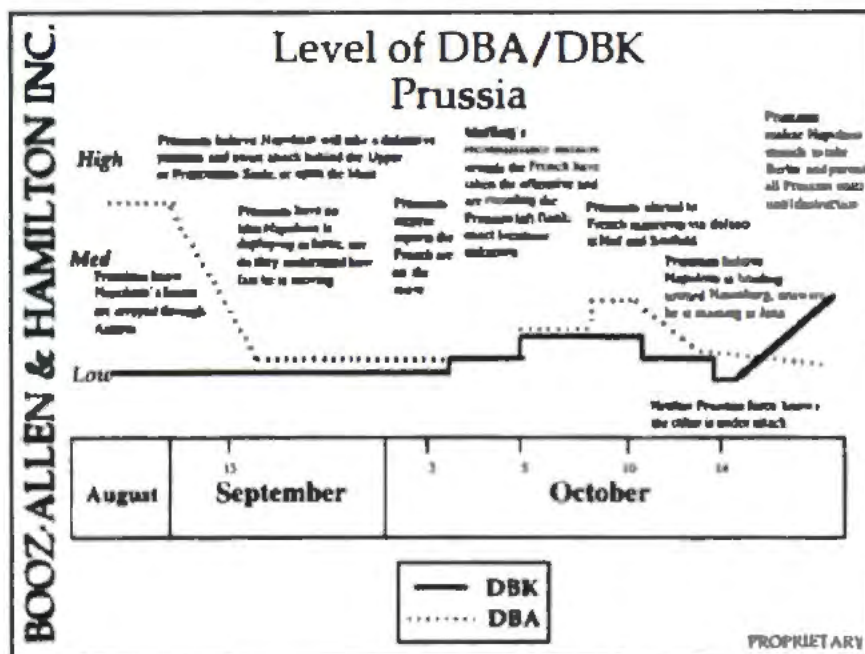
indicated the main line of advance of the Prussian forces. This implied that the Prussians' intent was to deploy in the direction of the Thuringian Forest rather than await a French attack near Berlin or Leipzig. Napoleon cross-checked the information from the engineer with intelligence gathered by reconnaissance forces sent by Bernadotte and Lannes' corps, thus confirming the facts. This gave Napoleon an increase in DBK and the highest level of DBA he had throughout the campaign.

Napoleon's understanding of the Prussians' force locations and intentions decreases on the 10th because the engagements at Hof and Saalfeld on the 8th and 10th made Napoleon believe that he had engaged the advance guard protecting the main body, which would place that body somewhere near Gera. In actuality, the forces engaged at Hof and Saalfeld were Hohenlohe's advance guard, and were only there because Hohenlohe was out of position. Accordingly, Napoleon directed his forces to move on Gera, but the cavalry screen soon reported finding no Prussian troops in the area. Napoleon then deduced this meant the Prussians must be concentrating at Erfurt and Weimar, and thus his DBA and DBK rose again.

Napoleon's DBK hit its highest point when he intercepted letters from the Prussian leadership that indicated the Council of War was endlessly debating plans and options, unable to agree on anything, and morale was low. Better than giving him enemy intent, this told Napoleon that the enemy was unable to determine its own intent. This compelled Napoleon to attack as soon as possible.

Both DBA and DBK drop over October 13 and 14, because it is at this time that the Prussian leadership finally agrees that its best option is to retreat, and begins moving its forces accordingly. Napoleon is unaware of this decision, believing that he is facing the main force at Jena. It is not until the afternoon of the 14th that he receives reports that the main battle occurred 14 miles north at Auerstadt. After some struggle against this notion, Napoleon realizes the real state of events and orders the pursuit. At this time, DBA and DBK are quite high; Murat's cavalry and Bernadotte's corps are giving chase to the most significant (semi-organized) Prussian forces as they flee.

Level of DBA/DBK
Prussia

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High

Med

Low

August	September	October

—— DBK
········ DBA

PROPRIETARY

Prussian DBA was high at the outset of the campaign (when they had made their secret decision on war against French), because it was well known that Napoleon's forces were distributed throughout Austria. However, their DBA soon decreased to low because they had no idea that Napoleon had discerned their intentions and was rapidly moving against them. Prussian DBK began low and stayed low until early October because they were grossly mistaken about Napoleon's intentions. They believed he would take up a defensive position in Austria, awaiting the Prussian attack. He did exactly the opposite, moving quickly to seek out and destroy the Prussian forces.

The Prussians' first indications that the French were on the move occurred when they neared Erfurt and Weimar. Quite surprised by the news, and still completely ignorant of the French force locations, the Prussians dispatched a reconnaissance force under the command of Captain Muffling to reconnoiter the area east of Frankfurt, which was where the Prussians had assumed the French would be. Muffling's report of October 5 shocked them: The French were no longer defending their lines of communications, had proceeded across the Thuringian Forest and were now threatening to outflank the Prussian left wing. This report constituted the biggest jump in Prussian DBK of the entire campaign. The Prussians now believed Napoleon's intent was to cut their lines of communications far to the rear. Prussian DBA rose somewhat due to Muffling's report, but not significantly because, while they now knew where the French forces were not, they still did not have actual locations or

disposition.

Prussian DBA finally rose to its highest point (mid-way between low and medium) with the defeats at Hof and Saalfeld. These clashes indicated where some of the French forces were located. DBK remained the same because the contact with the enemy reinforced the Prussians' belief about Napoleon's intentions, that being to cut them off at Naumburg. They were completely unaware that three days later he was massing his forces at Jena, preparing to attack. They were aware that French forces were on the Landgrafenberg overlooking Jena (Lannes' advance guard and driven a Prussian force of 12,000 out of Jena on the morning of the 13th), but assumed that it was a flank guard. Meanwhile, the Prussian main army began its retreat north.

On the evening of the 13th, the Prussians captured French patrols that confessed to being part of a major French force in Naumburg. When the battle began the next morning, Brunswick assumed he was facing the main French force with Napoleon in command. Action at Jena had broken out at the same time, with Hohenlohe believing it was a minor attack conducted by a French flank guard. It was not until he had suffered serious losses by deploying his forces piecemeal that he realized be faced a major force, and called for assistance from Ruchel, whose army was sitting idle to the west. By this time, it was too late. The combined misconceptions of these two commanders resulted in very low DBA and DBK at the most critical time in the campaign. When the Prussian lines broke in both Jena and Auerstadt, the Prussian forces fell back on each other for support, not understanding that the other had already been defeated. The result was mass panic. DBA and DBK did not rise until the Prussians were in full flight with the French close on their heels. At that time DBA and DBK were quite clear: The French were right behind and outflanking them, and their intent was to take Berlin and completely destroy the Prussian forces.

DBA Conclusions

- **The commander's preconceptions drive information gathering and analysis**
- **DBA was greatly limited by the mechanisms which could produce it**
- **The value of information collected by contact with the enemy was different for the French and the Prussians**

PROPRIETARY

Commander's preconceptions: Napoleon's preconceptions drove the intelligence-gathering requirements. In the beginning of the campaign, Napoleon had formed only the most basic impression as to what the Prussians were likely to do. As such, he was open to any information that could be provided to him. As the campaign neared its close, and Napoleon convinced himself that he knew what the Prussians were doing, he stopped seeking information to verify his assumptions. Brunswick and the rest of the Prussian leadership showed this trait as well. In their case, however, they began the campaign with a set of assumptions regarding Napoleon's likely course of action, and then did not seek out information to confirm or disprove those assumptions. When information arrived demonstrating just how wrong they were, they then developed another assumption (that Napoleon would continue on a straight line of advance) and analyzed any further information they received through the perspective of that assumption.

DBA mechanism limitations: While many mechanisms were used to gather information on enemy force locations and dispostions, the information they produced was perishable (movement of enemy troops could make it obsolete), and the most time-sensitive method of collecting information on enemy force locations--the cavalry screen--lacked the depth to see beyond the forward line of troops.

Contact with the enemy: Both sides gathered information from contact with the enemy. However, this information was of much greater value to the French because their corps structure was designed to respond to it. Not only was it able to transmit the information quickly through the system of messangers, but the flexibility of its forces to move to the place of contact quickly. If no messangers were sent, the corps conunanders still had their orders to "march to the sound of the guns," which made contact with the enemy an inherent information mechanism. For the Prussians, the information was of little use because they could not respond to it quickly enough. Its value was only as an indication that they were in serious trouble.

DBK Conclusions

- Commanders had a tendency to engage in mirror-imaging
- Inside sources were the most reliable/only reliable method of gaining high DBK
- Limited information on enemy force dispositions made it difficult to deduce enemy intent

Mirror-imaging: Both sides assessed the information and drew conclusions about their enemy's likely course of action based upon what they themselves would do. Napoleon twice made this mistake, first on the 10th and then on the 13/14th. On the 10th, after encountering Prussian forces at Hof and Saafeld, Napoleon assumed these were advance guards and that the enemy was concentrating directly behind them around Gera. This made sense to Napoleon, because he would have used advance guards in this way to warn him of the approach of the enemy. He made this same mistake at Jena (after learning that the Prussians were not at Gera), assuming that the force movements and concentrations evident among the Prussians meant they were concentrating to attack. Again, this is what Napoleon would have done; retreat (the acutal Prussian intent) was not an option he would have considered under these circumstances. Ironically, it was Napoleon's superior information and military genious that led him to make these mistakes. In making these determinations, he was ascribing to the enemy a degree of knowlege and intelligence that they did not possess. In acting foolishly, they managed to foil his attempts to understand them.

The Prussians also engaged in mirror-imaging, and their inferior information and abilities were reflected in the assumptions they made regarding likely French actions. The defeats at Hof and Saafeld convinced them that Napoleon was heading toward Leipzig (which lay directly ahead along the Hof-Saafeld line) because that is what they would have done. They did not understand the flexibility of the French military, and that it could pivot quickly and attack in a completely different direction. They also likely underestimated Napoleon's information-gathering capability and did not realize he would find out the Prussians were not at Gera long before his main forces would arrive there.

Inside sources: Napoleon's greatest information on enemy intent came from: 1) the French ambassador to Berlin, who found out the Prussians were mobilizing; 2) the engineer officer who, being mistaken for a Saxon officer, was allowed to tour the Prussian camp and locate the Prussian HQ; and 3) the intercepted Prussian mail that indicated chaos and indecision in the Prussian command staff. All of these mechanisms reported from inside the enemy camp, to some degree.

DBA/DBK mutually limiting: As mentioned on the preceding DBA slide, there were important limitations inherent in the mechanisms used to produce DBA. While many mechanisms were used to gather information on enemy force locations and dispostions, the information they produced was perishable (movement of enemy troops could make it obsolete), and the most time-sensitive method of collecting information on enemy force locations--the French cavalry screen--lacked the depth to see beyond the forward line of troops. Thus, when the cavalry screen located the forward line of enemy forces, they were unable to see beyond that line to understand the force dispositions there. Because of this, obtaining the full enemy order of battle was very unlikely, unless provided by a reliable inside source. Thus, it was very difficult to accurately understand the enemy intentions based on what was understood of enemy force locations. Twice Napoleon attempted to deduce enemy intent from what he knew of Prussian force dispositions--first on the 10th when the clashes at Hof and Saalfeld led him to believe that the Prussians were concentrating around Gera, and again on the 13/14th when he believed they were concentrating at Jena. In both cases he was mistaken because he could not see beyond the forward line of enemy troops.

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PROPRIETARY

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The Jena Campaign

Disposition of Forces on 6 October 1806

The Jena Campaign

Disposition of Forces on 10 October 1806

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The Jena Campaign

Disposition of Forces on 13 October 1806

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Dominant Battlespace Awareness
IV

Waterloo Campaign
15-18 June 1815

Information Requirements
IPR With LtCol Paul Selva
2 March 1998

Contract Number: DASW01-96-D0043
Delivery Order 34
Option 691AB

PROPRIETARY 1

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DBA/DBK Definitions

DBA

- A high level of awareness (90% visibility) of friendly and enemy forces, and the environment. DBA is fundamentally about location relative to enemy/friendly locations

DBK

- High confidence in the future (95%), and an ability to act on it before the enemy can act. DBK enables commanders to predict with confidence where the enemy is going to be, and when they are going to be there. DBK is more subjective, relying heavily on the decision-maker and his/her confidence level

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PROPRIETARY   2

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Critical DBA/DBK Questions

- What were the sources/mechanisms of DBA and DBK?

- What were the Commanders' key information requirements?
  - EnemyOB
  - Enemy capability
  - Enemy intent

- What information was available to the commanders during the battle? Conversely, what information was not available? What information was critical but was not sought by the commander?

- What happened both tactically and strategically when those sources were denied?

- How perishable is the information from the different sources across the battles?

PROPRIETARY   3

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Historical Overview

Napoleon's return - 1 March - On the first of March, 1815, Napoleon Bonaparte returned to France from his brief exile on the island of Elba

Europe's and Britain's response - March - Europe responded by convening the Congress of Vienna with the purpose of establishing the Seventh Coalition of Allied Armies; headed by Prince Schwarzenberg of Prussia

Napoleon's efforts to rebuild France and regain his throne - Napoleon's march to Paris met with little resistance. As Napoleon moved toward Paris, he began planning, and issuing orders to re-establish his regime

Coalition movements - Coalition forces concentrated in two areas beyond the French frontier, according to Schwarzenberg's two front strategy

Napoleon vs. the Coalition - The Waterloo Campaign - After repeated attempts by Napoleon to sue for peace between his France and Europe, the recourse remaining for "L' Emperor" was to fight the Coalition in a decisive battle

PROPRIETARY   4

On 1 March 1815, Napoleon Bonaparte returned to France from his brief exile on the island of Elba. He landed with 1000 of his Old Guard and proceeded north, toward Paris. His return can be attributed to the Allied inability to abide by the terms of the treaty of 1814 - the enforcement of the Bourbon payments to Napoleon and the Bourbon seizure of much of his estate.

Europe responded by convening the Congress of Vienna with the purpose of establishing the Seventh Coalition of Allied Armies, headed by Prince Schwarzenberg of Prussia. The new Coalition consisted of the Anglo-Allied Armies, the Prussian Army, the Russian Army, and the Austrian Army. Its sole purpose was to remove, by force, Napoleon from France. Despite the Congresses' inability to decide what to do with France upon the removal of Napoleon, Britain had established a policy of the re-statement of the Bourbon Monarchy.

Napoleon's march toward Paris met little resistance. As he moved toward Paris, Royalist forces attempted to block his movements by force, only to be swayed at the last moment, often by the Emperor himself. As Napoleon moved toward Paris, he began planning, and issuing orders to re-establish his regime. Upon reaching Paris, Napoleon struck a deal with reluctant Bonapartists within the government, and established himself as King of France with a political body sharing power with him (a quasi-Republic/Monarchy).

Coalition forces concentrated in two areas beyond the French frontier, according to Schwarzenberg's two front strategy. The Prussian and Anglo-Allied forces concentrated and assemble in Belgium, while the Russian and Austrian forces concentrated on the Rhine. Coalition force concentrations were watched closely by Napoleon through a "spy" network of local inhabitants throughout Europe and Belgium who were sympathetic to the nationalistic cause and Napoleon himself.

After repeated attempts by Napoleon to sue for peace between his France and Europe, the recourse remaining for "L' Emperor" was to fight the Coalition in a decisive battle and win a political prize. The result would be a lasting peace that would return him to the Imperial Throne of France. Napoleon made the decision to initiate an offensive strike at his two most threatening enemies, the Prussians and the Anglo-Allies in Belgium. He developed his plan of attack under his "Waterloo Campaign" and began concentrating in northern France in May.

Campaign Objectives

French:

- Napoleon employs his 'Central Position' strategy on a grand scale, across political and military objectives
  - Military objective - *divide the Coalition*:
    - Strike the more threatening of the Coalition (Prussian and Anglo-Allied) forces prior to the arrival of the Russian and Austrian Armies
  - Politico-military objectives - *divide the Coalition*:
    - Defeat Anglo-Allied and Prussian forces to fragment Coalition solidarity as was done several times earlier in Napoleonic Wars
      - Take Brussels, thereby forcing the Belgian King to make a decision in France's favor
      - Raise French popular support by defeating the Coalition

Europe established the Seventh Coalition with the objective to remove Napoleon from France. Despite Napoleon's attempts at offering Europe peace, the Coalition was determined upon his demise: Napoleon would have to defeat the Coalition forces on the battlefield with a weak France, and a stronger and determined Europe. He chose to utilize his "Central Position" strategy on a grand scale, dividing the Coalition politically and militarily. Napoleon's applied his central position strategy frequently at the operational level. The strategy utilized three positions, the Right Wing, Center, and Left Wing. Upon attack, the two Wings engage the enemy and attempt to split the enemy's force at the center. Napoleon's Center would then support one of the Wings, crushing that division of the enemy. The other Wing, holding the other half of the enemy, would then receive support from the Center to defeat the remaining portion of the enemy's army.

Napoleon developed his campaign utilizing his excellent intelligence - generated by French spies and sympathizers - on the dispositions of the Coalition forces. The crux of his campaign lay in defeating the Coalition forces piecemeal. Napoleon chose to surprise, attack, and defeat the Prussian and Anglo-Allied forces in Belgium before turning and facing the on-coming Russian and Austrian forces.

Militarily, Napoleon felt that he must attack the most threatening of the Coalition forces first. The most threatening of these, the Prussian and British, were situated across the French frontier, in Belgium. Their forces concentrated in the countryside south and south east of Brussels.

Attacking into Belgium would present a challenge to Napoleon's political regime as it was war again, on foreign soil. In order to alleviate many of these internal political hurdles, Napoleon determined that his campaign into Belgium must inevitably include the capture of Brussels. This would force the Belgian King to make a decision to France's favor. The Belgian government was given a choice: resist the French, be executed, and have Belgium be annexed by France; or capitulate, thereby saving their country and removing their forces from the Coalition. This political shift also brought with it large numbers of Dutch who were sympathetic to Napoleon's cause.

Napoleon believed that a triumph in Belgium would bring renewed public support in Paris and the rest of France.

CONOPS

French:

- 'Success = Surprise + Security'
  - *Protect* the French frontier with regional Armies in fortifications (total combat personnel: 104,800 (not included National Guard))
  - *Attack* Anglo-Allied and Prussian Armies with the Armee du Nord (total combat personnel: 128,000),
    - CONOP was a variation of the 'Central Position'
      - Defeat Prussians and Anglo-Allied forces, then turn to defeat the Russians and Austrians (who were being held by French fortifications)
    - Napoleon decreed: '...for this campaign I have adapted the following general principal - to divide my army into 2 wings and a reserve. The Guard will form the Reserve, and I shall bring it into action on either wing just as the actual circumstances may dictate. Also, according to circumstances, I shall draw troops from one wing to strengthen my reserve' - Hamilton-Williams

Napoleon's concept of operation can be summarized as an application of his "Central Position" strategy, with the following operational application: "Success = Surprise + Security".

"Security" constituted ensuring that Napoleon's forces could not only maintain a defensive line against the approaching Coalition forces, but also maintain classic operational security measures. OPSEC measures were necessary to conceal his offensive preparations underway in the north of France, and to maintain order within France. This included defeating any Royalist uprisings which might ensue prior to and during the conflict. Standing regular forces set for this duty were scattered throughout France in garrisoned fortifications and numbered approximately 104,800 personnel.

However, France, through its new found nationalistic fervor, was able to raise a localized National Guard. This "Guard" could muster approximately 400,000 troops. A portion of these troops had been alerted to active status, and in the northerly regions of France, they had secretly replaced the troops Napoleon was to employ in the Armee du Nord.

"Surprise" was Napoleon's commonly employed, and frequently effective, tactic of secretly maneuvering his numerically inferior offensive force into striking position, surprising and attacking the enemy at its central position, and finally defeating the divided army piecemeal. His strategy required extensive use of intelligence techniques (information/data gathering networks), OPSEC, and Deception.

Napoleon's operational considerations to attack the Coalition Prussian and Anglo-Allied armies is here paraphrased from the description by Waterloo historian Ernst Henderson : In order to understand the operations that culminated in the battle of Waterloo it is important to understand the relative positions of the roads and towns at which the fighting occurred. Two roads ran from Charleroi near the Belgian frontier that defined the Anglo-Allied and Prussian LOCs. The first ran north from Charleroi through Quatre-Bras and Waterloo and ended in Brussels. The second ran northeast from Charleroi, passing near Ligny and ended at an intersection east of Sombreffe. This intersection was with a road that ran east-west from Nivelles through Quatre Bras and Sombreffe to Namur and Liege. The Charleroi-Brussels road formed the line of communication for Wellington's army. The Charleroi-Sombreffe-Liege road formed the line of communication for Blucher's army. The armies could communicate with each other along the Quatre-Bras- Sombreffe road. In other words Charleroi was the apex of a triangle of which the line between Quatre Bras and a point a little east of Sombreffe formed the base.

By attacking Charleroi, Napoleon struck at the strongest point of Coalition resistance. Napoleon counted on secrecy and the swiftness of his forces inorder to achieve success with this strategy.

Overview of Forces

- French Army (as of 14 June 1815)
  - L' Armee du Nord, CINC, King of France, Napoleon Bonaparte
    - Center - Napoleon with his Chief of Staff, FM Soult
      - Imperial Guard (Guard Corps) - Mortier, Drouot
      - Reserve - VI Corps - Lobau
    - Left Wing - Ney
      - I Corps - D'Erlon
      - II Corps - Reille
    - Right Wing - Grouchy
      - Reserve Cavalry - Grouchy
      - III Corps - Vandamme
      - IV Corps - Gerard

        (Total: 128,000 men, 366 guns)

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Campaign Objectives

Coalition:

- The Seventh Coalition's objective: remove Napoleon from Europe and France once and for all
  - Mass Anglo-Allied, Prussian, Russian, and Austrian Forces along the French frontier
  - Commence a two front offensive into France towards Paris
- British objectives included the Coalition objective as well as their own secret objectives:
  - Maintain a defensive stance in Belgium, defending Brussels, Antwerp, and Ostend (their primary lines of communication)
  - Restore the Bourbon Monarchy as soon as Napoleon was defeated/destroyed

Prince Schwarzenberg, the Supreme Allied Commander, was commissioned by the Congress of Vienna to utilize the Anglo-Allied, Prussian, Russian, and Austrian Armies in a combined effort to remove Napoleon from Europe once and for all. The Prince determined that the most effective way to accomplish this was through a "concerted advance on the broadest possible front to bring the full weight of the Allied forces to bear simultaneously against Napoleon".

Schwarzenberg based his decision on:

• Many European Generals feared Napoleon's exceptional generalship. Thus, a quick war, with forces significantly favoring the Coalition in shear number, would 'bury' his superior Generalship.

•Forces massed would inevitably avoid heavy casualties on the Coalition side by giving Coalition forces more frontal firepower.

•The Congress of Vienna found it difficult to decide what form of government should be re-instated after Napoleon's demise. The British Government, however, had established quite clear objectives from the outset, which they kept close to vest. The British Army commander, the Duke of Wellington, was aware of these secret objectives and followed them during the campaign. Simply put, these secret objectives were to:

1) Restore the Bourbon Monarchy as soon as Napoleon was defeated or destroyed

2) Maintain a defensive stance in Belgium, defending Brussels, Antwerp, and Ostend.

3) Interestingly enough, the last objective was to maintain their lines of communication with Britain, including maintaining a British controlled port on the European continent.

CONOPS

Coalition

- Original plan:
  - Hold and concentrate along French frontier
  - Attack on two fronts across the frontier on/about 21 July
    - Anglo-Allied and Prussian Armies attack from Belgium; drive toward Paris
    - Russian and Austrian Armies attack from Germany; drive toward Paris

- Upon French attack, new plans evolved between Wellington and Blucher during the conflict:
  - Defensive measures against French at Ligny and Quatre-Bras
  - Withdrawal, Re-organization, and Concentration at Wavre and south of Waterloo (determined Napoleon's strategy)
  - Hold (Anglo-Allied) and Attack (Prussian) at Waterloo

PROPRIETARY   12

The Coalition Campaign Plan had not been fully developed once France attacked on the 15th of June. Previously, Prince Schwarzenberg and Coalition Generals had developed the overall plan of campaign which constituted two general fronts with four Coalition armies advancing simultaneously into France toward Paris. In preparation for this offensive, Coalition forces were required to concentrate around predetermined positions in Belgium (Anglo-Allied and Prussian forces) and along the Rhine (Russian and Austrian forces). Only after all of the Coalition forces had arrived would their respective commanders meet and design their operational plan of entry into France.

Coalition force commanders did not hold the same expectations as to the initiation of offensive operations. This was due to varying degrees of readiness combined with "self-importance", a desire to serve one's king and country faster and better than the rest. However, despite a split coalition and alternate military objectives they came together with one single political objective, the defeat of Napoleon once and for all.

Coalition forces concentrated near the French frontier in preparation for their attack, and took up and prepared for defensive operations. The two forces that had reached the Frontier by June were the Prussian and Anglo-Allied forces. Each force, while maintaining a communication link with each other as well as with their homelands, took up markedly different defensive stances. The belief held by a majority of senior officers was that, if Napoleon were to attack, it would be in the south of France, as he had done in 1814. This led to complacency and non-alert status' among many units. Wellington's stance had shifted by June due to various sources of information. He expected a French attack in the north, against his forces in Mons (the Anglo-Allied right - away from the Prussians).

The Prussians also adopted Wellington's view that there could be an attack on their forces would come from the north of France. Their fears, combined with increasing reports of French movements, were fulfilled. When the French attack came on 15 June, the Prussians had already begun to concentrate and prepare defensive measures. However, Anglo-Allied forces were not ready due to Wellington's expectations on an attack on Mons.

It was not until the attacks at Ligny and Quatre-Bras that Napoleon's intent to divide the Armies was clearly understood. Blucher and Wellington knew what they then had to do. They had to fall back and concentrate on one position. Wellington's forces would fall back on the regions just south of Waterloo, an area he knew was well suited for defensive operations. Blucher's forces would fall back to a position parallel to Waterloo, at Wavre. His forces concentrated there, re-established his LOCs, and then marched to concentrate with the Anglo-Allied forces being attacked by Napoleon.

Overview of Forces

- The 7th Coalition Armies (as of 14 June 1815)
  - Supreme Allied Commander - Prince Schwarzenberg of Austria
  - Anglo-Allied Army - Wellington with his Chief of Staff, De Lancey
    - I Corps - Prince of Orange (Dutch)
    - II Corps - Hill (British)
    - Cavalry Corps - Uxbridge (British)
    - General Reserve - Wellington (British)
    - Garrisons - Wellington (British)

      (Total: 107,000 men, 216 guns)
  - Prussian Army - Blucher with his Chief of Staff, Gneisenau
    - I Corps - Ziethen
    - II Corps - Pirch I
    - III Corps - Thielmann
    - IV Corps - Bulow
    - Garrisons - Blucher

      (Total: 128,000 men, 312 guns)
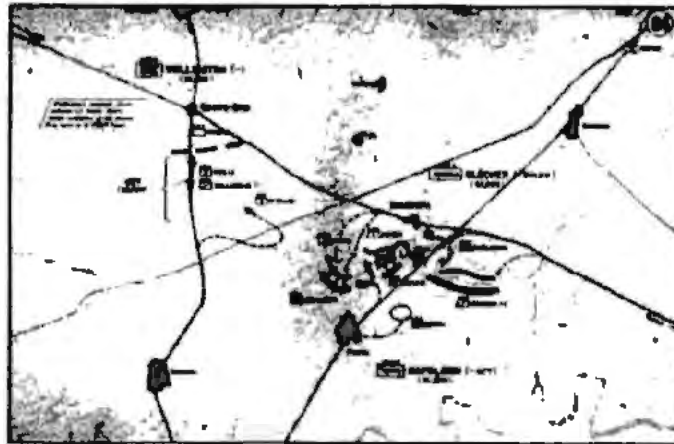
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The Waterloo Campaign
Disposition of Forces on 1 June 1815

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The Waterloo Campaign
Quatre Bras and Ligny on 16 June 1815

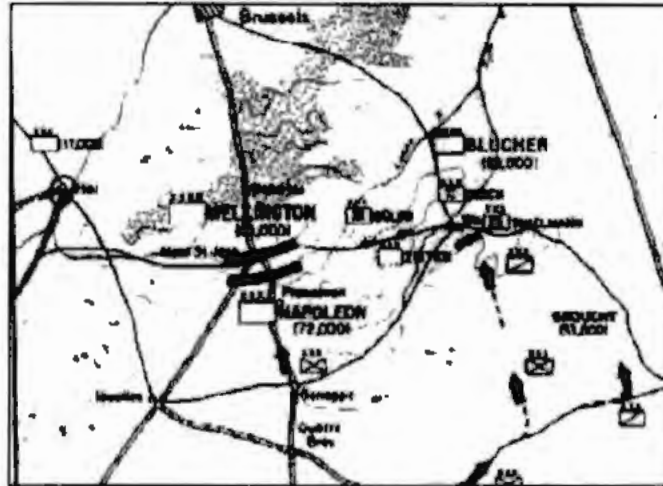BOOZ·ALLEN & HAMILTON INC.

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The Waterloo Campaign
Waterloo and Wavre on 18 June 1815

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Sequence of Events

French

Napoleon gathers intelligence on enemy dispositions and AOR

Napoleon's Armee du Nord moves northward and concentrates on the French and Belgian border; French forces began to adhere to Napoleon's deceptive movement plans

Desertion of French Drum Major to the Prussians alerts Gneisenau of the possibility of a French attack. Gneisenau orders a partial concentration of Prussian forces toward Sombreffe (Ligny)

Wellington receives dispatch from the British command in Mons concerning French Army movements toward the Prussian positions; the message does not bear the name of Wellington's intelligence officer; Wellington dismisses the information as more of the same false information

Coalition forces receiving information on French military activity

Coalition

PROPRIETARY   18

6-14 June: Offensive Movements

By 6 June, French forces moved northward to concentrate on positions south of the Belgian border. As his forces began to move, Napoleon ordered an engineering survey (for information on physical geography, supply provisions, enemy LOCs, as well as deception) and cavalry reconnaissance missions (for information on enemy force dispositions and LOCs, as well as deception) to be performed in the regions surrounding Brussels and Waterloo.

Shortly thereafter, Coalition forces begin receiving information on French military activity. The Coalition becomes inundated with information gathered through numerous sources and mechanisms. However, much of this information is false due to the fact that it had been provided by Napoleonic sympathizers, 'con-men' (those who provided fake information on the French for the money the Coalition was offering), and local inhabitants (who had been misinformed by French engineers and cavalry).

By 12 June, while Napoleon's Armee du Nord moved northward and concentrated on the French and Belgian border, additional French forces began to adhere to Napoleon's deceptive movement plans. These plans included a feint towards Mons conducted by forces in the French fortifications.

Sequence of Events (2)
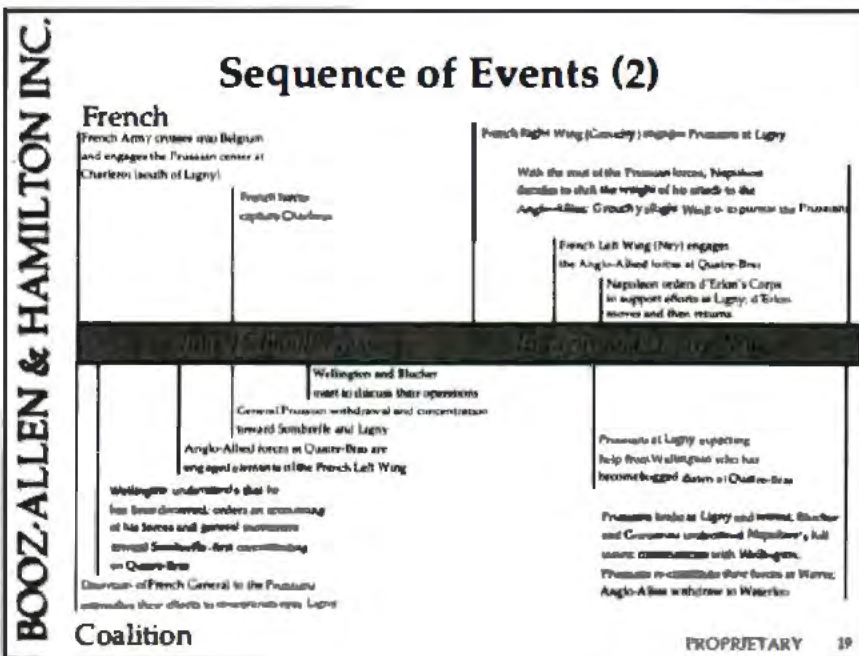
On the night of the 12th/13th of June, the desertion of a French Drum Major to the Prussians alerted Gneisenau of the possibility of a French attack. Gneisenau orders a partial concentration of Prussian forces toward Sombreffe (Ligny). Despite the indicator of a closing French Corps, Wellington and Blucher were still somewhat convinced that Napoleon's real strike was not coming. From Wellington's perspective, if a French attack were to occur in the north, would most likely be against his Anglo-Allied forces at Mons. This was more of a threat to the British LOCs and Brussels.

On 14 June, Wellington received a dispatch from the British commander in Mons (south and west of Brussels) concerning French Army movements toward the Prussian positions. Because the message does not bear the name of Wellington's trusted intelligence officer (Col. Grant), Wellington dismisses the information as more of the same false information he and his staff had been receiving for some time. That evening, Wellington issued no movement orders to his Army, despite the fact that his Coalition partners were beginning to concentrate and prepare for action against the French. Wellington still believed that if an attack in the north were to occur, it would be against him, and in Mons.

Sequence of Events (3)

French

Coalition

PROPRIETARY   20
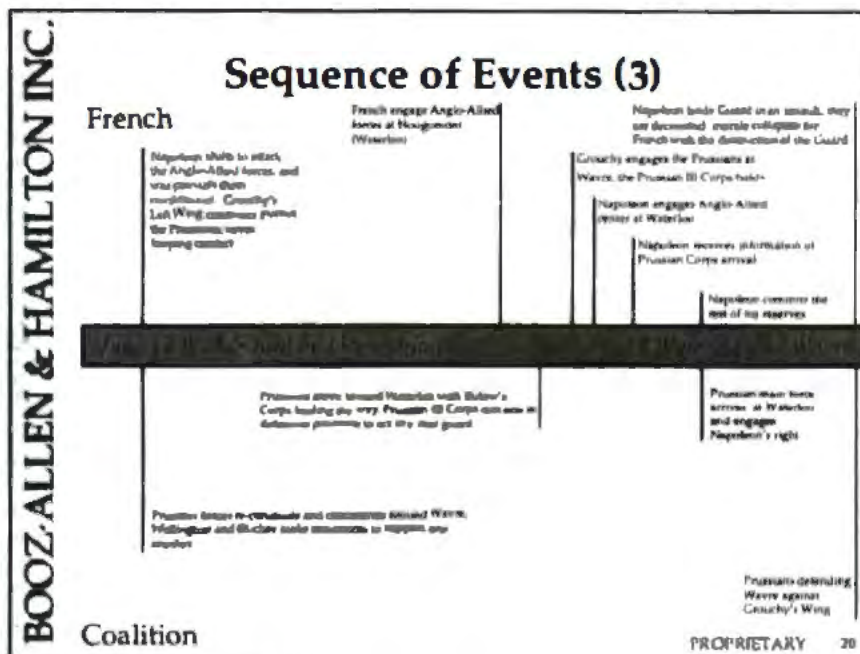
15-18 June: Engagement and Defeat

At 3:30 am on 15 June, the French Army crossed the Franco-Belgian frontier and moved forward to engage the Prussian center at Charleroi (south of Ligny). Napoleon intended to hit there first to begin to move the Prussians away from the army border with the Anglo-Allies.

As the French Right Wing approached, within sight of the Prussians, the commander of the lead French Right Wing division (General deBourmont) ordered his unit to halt (to allow the rest of the French forces to catch up and concentrate). He continued across and deserted to the Prussians. This desertion General deBourmont gave hard evidence that a French attack was eminent (a French general with his orders and the general OB for the whole Armee du Nord). It also significantly affected the morale of the French who had been under his command. The desertion of the French General caused the Prussians to intensify their efforts to concentrate near Ligny.

In the early hours of 15 June, the British commander from Mons (in Brussels for a Ball which he attended with Wellington) communicated to Wellington that the information about Napoleon's attack had been from Col. Grant. Once he put the information together with the information from the French deserter, Wellington understood that he had been deceived. Wellington ordered an recall of his forces and began a general movement toward Sombreffe, with the first concentration to occur at Quatre-Bras.

Later that day, the French Right Wing engaged the Prussians at Charleroi causing a general Prussian withdrawal and concentration toward Sombreffe and Ligny. French forces capture Charleroi and Napoleon makes it his Center and HQ.

Near the same time of the attack at Charleroi, the Anglo-Allied forces at Quatre-Bras are engaged by the lead elements of the French Left Wing. These minimal Anglo-Allied forces hold off the French and await support.

While Prussian forces and Anglo-Allied forces were engaged by the French Wings, Wellington and Blucher met to discuss their operations. Wellington assured Blucher and Gneisenau that he will come to their assistance at Ligny on the 16th (he makes his decision based upon the inaccurate information provided him on his force dispositions by his Junior Staff Officers). Wellington's provision is that he will assist the Prussians so long as he can without dividing all of his forces. Aside from operating under this personal strategy, Wellington had to mind his country's orders by not allowing Brussels to fall and taking with it the British LOCs.

Early on the 16th, the French Right Wing (Grouchy) engaged the Prussians in the region around Ligny. The fighting was quite fierce; villages were taken and retaken.

Much later that day, the French Left Wing (Ney) engaged the Anglo-Allied forces at Quatre-Bras. The Anglo-Allied forces opposing Ney had concentrated at Quatre-Bras prior to the French attack because Ney had been hesitant to proceed with his operations. Because of his delay, force ratios equalized. Ney's forces became heavily engaged.

Meanwhile, the Prussians at Ligny expected help from Wellington which did not materialize. Wellington's predisposition to never divide his force meant that he would fight at Quatre-Bras before sending help to the Prussians.

As Napoleon's full force began to fall on the Prussians, he demanded the assistance he had been expecting from the Left Wing (Ney). Napoleon then sent an order directly to d'Erlon (of the Left Wing) ordering him to maneuver and support efforts against the Prussians. D'Erlon moved his Corps from the Left Wing toward Ligny, but when in sight of the battlefield, d'Erlon received an order from Ney demanding that he return. D'Erlon then moved his Corps back to the Left Wing.

Without the support of their Coalition partners, the Prussians broke at Ligny and fell into a full retreat. What happened next the French did not expect. Based upon their experiences at Jena-Auerstadt (1806), the Prussians instituted a new command and control system that allowed for the efficient reorganization and reconstitution of forces. This new system allowed Blucher and Gneisenau to regain control of most of their forces and direct their retreat. The French expected the Prussians to rout; the new system not only prevented a rout from occurring, but also allowed the French to "see" the Prussians rout. As they withdrew, Blucher and Gneisenau communicated with Wellington. Coalition commanders now understood that Napoleon was attempting to divide their armies and defeat them separately. It was decided that the Prussians were to reform and concentrate toward a position parallel with an Anglo-Allied position. The Anglo-Allied forces would concentrate south of Waterloo, while the Prussians would concentrate near Wavre. Both armies would reconstitute, and establish new inter-army and national LOCs.

Having seen the "rout" of the Prussian forces, Napoleon decided to shift the weight of his attack to the Anglo-Allies. Grouchy's Right Wing was left to "pursue" the Prussians and remain a "knife in Blucher's back" - meaning, Grouchy was not to let Blucher stop running.

By days' end, the Anglo-Allied forces at Quatre-Bras ceased fighting and withdrew to positions a few miles south of Waterloo.

For the entire day of the 17th, Prussian forces re-constituted and concentrated around Wavre. While this is on-going, Wellington and Blucher made assurances to support one another and defeat Napoleon. They decided that on the 18th, Blucher's force would move from Wavre and concentrate on the Waterloo region with the rest of the Anglo-Allied forces. They correctly surmised that Napoleon would pursue and attack the retreating Anglo-Allied forces. In moving Blucher's forces west, the Prussians would be in an excellent position to fall on Napoleon's right. In their assurances, Blucher promised his whole army. However, Wellington only requested one division.

As the Coalition commanders had correctly assessed, Napoleon had shifted his weight to attack the Anglo-Allied forces and was pursuing the northbound Anglo-Allied army. Rearguard Anglo-Allied forces, combined with mud from the foul weather, prevented the French from maintaining contact with their retreating foe. Meanwhile, Grouchy's Right Wing continued to slowly "pursue" the Prussians, never keeping contact.

At 11 am on the 18th of June, the French engaged Anglo-Allied forces at Hougomont (Waterloo).

Shortly thereafter, the Prussians moved toward Waterloo with Bulow's Corps leading the way while the Prussian III Corps remained in defensive positions to act as a rear guard and hold Grouchy's forces at Wavre.

Grouchy engaged the Prussians at Wavre; the Prussian III Corps holds.

By midday, French forces have engaged the Anglo-Allied center. The situation was quite desperate for the Anglo-Allied forces. Their lines were beginning to show strain. It is at this moment that Napoleon received information of a Prussian Corps approaching. In fact, it is only the lead elements of Bulow's Corps, the main body of which would not be in the area for another four hours. Based upon this information, Napoleon commits enough forces to defend against a Corps. Concerned that the Prussians were not being held by Grouchy, Napoleon sent a letter to Grouchy requesting his assistance. Grouchy received this letter too late to have been of assistance.

By mid afternoon, the full weight of the Prussians arrive and Napoleon commits the rest of his reserves. An effective combined offensive is no longer possible. Napoleon ordered Ney to lead cavalry charges on Anglo-Allied defensive squares without the support of cannon, causing heavy casualties. Finally, Napoleon led his own Guard in an assault only to have them decimated. French forces gave way with the destruction of the Guard units; morale collapsed and a rout ensued.

Meanwhile, fighting at Wavre continued with the Prussians defending every inch of Wavre against Grouchy's Wing.

Sources and Mechanisms of DBA - French

Sources
- Identity, personality, and location of decision makers
- Friendly and enemy order of battle
- Friendly and enemy capability
- Enemy TTP and historical performance
- Location and status of friendly and enemy communication lines
- Physical Geography of AOR

Mechanisms
- Commander's Observations
- Spies
  - Napoleonic sympathizers
- Reconnaissance Missions
  - Cavalry and Engineers
- POWs
- Local Inhabitants and Merchants
- Contact with the enemy

PROPRIETARY   23

The following sources and mechanisms were used to provide Napoleon with situational awareness (SA):

• It was important for the commanders to know the identity, personality, and location of the decision makers. Understanding this provided insight into the behavior of the enemy force and allow appropriate action to be taken.

• The friendly and enemy order of battle was necessary. This would allow friendly commanders to understand enemy vulnerabilities (e.g., what sort of supplies will they require; what kind of friendly forces could be used to great effect against theirs; etc.).

• Knowledge of friendly and enemy capability was also important. This allowed friendly commanders to understand enemy vulnerabilities (i.e. what sort of supplies will they require; how far their rifles shoot relative to friendly rifles; etc.).

• The knowledge of the location and status of friendly and enemy communications lines was also crucial. Again, this would allow friendly commanders to understand enemy vulnerabilities (e.g., where to intercept enemy command communications; where to intercept supply; most likely course of withdrawal).

• Enemy Tactics, Techniques, and Procedures (TTP) and historical performance is important for commanders to know. Understanding how the enemy's forces will behave operationally, as well as insight into the habits of enemy commanders, allows friendly commanders to maneuver into positions which will give them a potential advantage.

• Physical geography and logistical information on the location of produce, the local population, as well as road networks was also vital during this time period. The armies of that period were very dependent upon the land, and were therefore unable to move forward until the logistical information could be determined.

• Weather was also a factor. Though the means for advanced detection did not exist, knowing generally the regions' weather for a particular season could be crucial to all operations (i.e. growing seasons, daylight hours, rainfall, etc.)

The following mechanisms were used by the French to obtain the information required to initiate Napoleon's campaign:

Commander's Observations - French commanders personally inspected the battlefield. Commanders spent a great deal of time roaming up and down along friendly lines, watching their own units' progress, viewing the enemy through field glasses, speaking with local units' commanders regarding the status of the operation, etc.. During these excursions, Napoleon frequently would involve himself in local operations: dramatically raising morale.

Spies - Spies and informants were both used during and prior to the Waterloo Campaign. The French had numerous sympathizers both within Belgium and within the Anglo-Allied forces that provided OB information. This allowed Napoleon to develop a fairly accurate picture of the Coalition force structure and strength prior to the engagement.

Reconnaissance missions - were another way in which the commanders were able to learn about the enemy order of battle and capability. Napoleon also used these reconnaissance missions to collect: logistical information such as the availability of food stuffs, the transportation networks of the areas through which he was planning on traveling, and on the enemy dispositions.

POWs - provided information as to the enemy order of battle, their capabilities, locations, and troop strengths. During this campaign, it was fairly common to have prisoners shift sides during interrogation and join up with their captors' service.

Local inhabitants and merchants - French forces gathered information from the local inhabitants and merchants to ascertain disposition information on the adversary's forces. The French were able to glean much about the Coalition dispositions through patrols inquiring with local inhabitants and indicators such as Coalition provisions receipts which had been given to local merchants to purchase supplies as Coalition forces had moved through an area.

Contact with the enemy - Contact with the enemy force allowed local commanders to gather first hand information on the enemy's situation. They were able to move this data on to general HQ to provide the overall commander with an accurate estimate of the enemy's capabilities, strength, and location.

Sources and Mechanisms of DBA - Coalition

Sources
- Identity, personality, and location of decision makers
- Friendly and enemy order of battle
- Friendly and enemy capability
- Enemy TTP and historical performance
- Location and status of friendly and enemy communication lines
- Physical Geography of AOR

Mechanisms
- Commander's Observations
- Spies
  - Royalists
- Reconnaissance Missions
- POWs
- Local Inhabitants and Merchants
- Contact with the enemy

PROPRIETARY   25

The following sources and mechanisms were used to provide Coalition commanders with SA:

• It was important for the commanders to know the identity, personality, and location of the decision makers.   Understanding this provided insight into the behavior of the enemy force and allow appropriate action to be taken.

• The friendly and enemy order of battle was necessary. This allowed friendly commanders to understand enemy vulnerabilities (e.g., what sort of supplies will they require; what kind of friendly forces could be used to great effect against theirs; etc.).

• Knowledge of friendly and enemy capability was also important. This allowed friendly commanders to understand enemy vulnerabilities (i.e. what sort of supplies will they require; how far their rifles shoot relative to friendly rifles; etc.).

• The knowledge of the location and status of friendly and enemy communications lines was also crucial. Again, this would allow friendly commanders to understand enemy vulnerabilities (e.g., where to intercept enemy command communications; where to intercept supply; most likely course of withdrawal).

• Enemy Tactics, Techniques, and Procedures (TTP) and historical performance is important for commanders to know. Understanding how the enemy's forces will behave operationally, as well as insight into the habits of enemy commanders, allows friendly commanders to maneuver into positions which will give them a potential advantage.

• Physical geography and logistical information on the location of produce, the local population, as well as road networks was also vital during this time period. The armies of that period were very dependent upon the land, and were therefore unable to move forward until the logistical information could be determined.

• Weather was also a factor. Though the means for advanced detection did not exist, knowing generally the regions' weather for a particular season could be crucial to all operations (i.e. growing seasons, daylight hours, rainfall, etc.)

The following mechanisms were used the Coalition to obtain information required to initiate their campaign against Napoleon:

Commander's Observations - Coalition commanders personally inspected the battlefield. Commanders spent a great deal of time roaming up and down along friendly lines, watching their own units' progress, viewing the enemy through field glasses, and speaking with local units' commanders regarding the status of the operation. Commanders' personalities played a great role in how often, and how involved, commanders would take these inspections. Blucher and Wellington both spent time with and without their command staffs, riding and witnessing the events unfold. During these excursions, Blucher would involve himself in local operations, dramatically raising morale.

Spies - Spies and informants were used both prior to and during the Waterloo Campaign. For the Coalition, Royalist informants within the French government provided standing forces numbers and figures, but were frequently unable to provide information on French force dispositions. For this, the Coalition (Anglo-Allies only) relied upon Wellington's Col. Grant, who was sent behind the lines to learn of Napoleon's movements.

Reconnaissance missions - were another way in which the commanders were able to learn about the enemy order of battle and capability.

POWs - Once the battle had begun, commanders were able to update the information they sought by receiving new data from captured prisoners. POWs provided information as to the enemy order of battle, their capabilities, locations, and troop strengths. During this campaign, it was fairly common to have prisoners shift sides during interrogation and join up with their captors' service.

Local inhabitants and merchants - Coalition forces gathered information from the local inhabitants and merchants to ascertain disposition information on the adversary's forces. Coalition forces in Belgium (Anglo-Allied in particular) offered money to those who had information pertaining to the French army. This proved ineffective as many of those who brought in information were 'con-men' seeking money for false information. In addition, French sympathizers brought in deliberate misinformation. The operational result of the false information were tired troops (from being placed on alert) and commanders who no longer believed information on the movements of the French forces.

Contact with the enemy - Contact with the enemy force allowed local commanders to gather first hand information on the enemy's situation. They were able to move this data on to general HQ to provide the overall commander with an accurate estimate of the enemy's capabilities, strength, and location.

Sources and Mechanisms of DBK - French

Sources
- Identity, personality, and location of decision makers
- Friendly and enemy order of battle
- Friendly and enemy capability
- Enemy TTP and historical performance
- Location and status of friendly and enemy communication lines

Mechanisms
- Commanders' Intuition and Experience
- Spies
  - Napoleonic Sympathizers
- Reconnaissance Missions
- POWs
- Local Inhabitants and Merchants

PROPRIETARY   27

The following sources and mechanisms were used to provide Napoleon with the enemy's intent:

•It was important for the commanders to know the identity, personality, and location of the decision makers. Understanding this provided insight into the behavior of the enemy force and allow appropriate action to be taken.

• The friendly and enemy order of battle was necessary. This would allow friendly commanders to understand enemy vulnerabilities (e.g., what sort of supplies will they require; what kind of friendly forces could be used to great effect against theirs; etc.).

• Knowledge of friendly and enemy capability was also important. This allowed friendly commanders to understand enemy vulnerabilities (i.e.. what sort of supplies will they require; how far their rifles shoot relative to friendly rifles; etc.).

• The knowledge of the location and status of friendly and enemy communications lines was also crucial. Again, this would allow friendly commanders to understand enemy vulnerabilities (e.g., where to intercept enemy command communications; where to intercept supply; most likely course of withdrawal).

• Enemy Tactics, Techniques, and Procedures (TTP) and historical performance is important for commanders to know. Understanding how the enemy's forces will behave operationally, as well as insight into the habits of enemy commanders, allows friendly commanders to maneuver into positions which will give them a potential advantage.

The following mechanisms were used by the French to determine the Coalitions intent:

A commander's intuition developed through experience allows him to synthesize the information he is receiving and predict what the enemy in question will do in the future. This intuition combined with the knowledge of the actions of an enemy during previous engagements is also useful to a commander in predicting what the future course of enemy action. Napoleon had prior experience fighting against both Coalition commanders (Wellington and Blucher). Given this experience, plus the information gathered through spies and reconnaissance, Napoleon believed the two forces would not coordinate their actions. This would give Napoleon the opportunity to defeat each force, Anglo-Allied and Prussian, in detail.

Spies - Spies and informants were both used during and prior to the Waterloo Campaign. The French had numerous sympathizers both within Belgium and within the Anglo-Allied forces that provided OB information. This allowed Napoleon to develop a fairly accurate picture of the Coalition force structure and strength prior to the engagement.

Reconnaissance missions - were another way in which the commanders were able to learn about the enemy order of battle and capability. Napoleon also used these reconnaissance missions to collect: logistical information such as the availability of food stuffs, the transportation networks of the areas through which he was planning on traveling, and on the enemy dispositions.

POWs - provided information as to the enemy order of battle, their capabilities, locations, and troop strengths. During this campaign, it was fairly common to have prisoners shift sides during interrogation and join up with their captors' service.

Local inhabitants and merchants - French forces gathered information from the local inhabitants and merchants to ascertain disposition information on the adversary's forces. The French were able to glean much about the Coalition dispositions through patrols inquiring with local inhabitants and indicators such as Coalition provisions receipts which had been given to local merchants to purchase supplies as Coalition forces had moved through an area.

Sources and Mechanisms of DBK - Coalition

Sources
- Identity, personality, and location of decision makers
- Friendly and enemy order of battle
- Friendly and enemy capability
- Enemy TTP and historical performance
- Location and status of friendly and enemy communication lines

Mechanisms
- Commanders' Intuition and Experience
- Spies
- Reconnaissance Missions
- POWs
- Local Inhabitants and Merchants

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PROPRIETARY   29

The following sources and mechanisms were used to provide Coalition commanders with the enemy's intent :

•It was important for the commanders to know the identity, personality, and location of the decision makers.   Understanding this provided insight into the behavior of the enemy force and allow appropriate action to be taken.

• The friendly and enemy order of battle was necessary. This would allow friendly commanders to understand enemy vulnerabilities (e.g., what sort of supplies will they require; what kind of friendly forces could be used to great effect against theirs; etc.).

• Knowledge of friendly and enemy capability was also important. This allowed friendly commanders to understand enemy vulnerabilities (i.e.. what sort of supplies will they require; how far their rifles shoot relative to friendly rifles; etc.).

• The knowledge of the location and status of friendly and enemy communications lines was also crucial. Again, this would allow friendly commanders to understand enemy vulnerabilities (e.g., where to intercept enemy command communications; where to intercept supply; most likely course of withdrawal).

• Enemy Tactics, Techniques, and Procedures (TTP) and historical performance is important for commanders to know. Understanding how the enemy's forces will behave operationally, as well as insight into the habits of enemy commanders, allows friendly commanders to maneuver into positions which will give them a potential advantage.

The following mechanisms were used by the Coalition to determine Napoleon's intent:

A commander's intuition developed through experience allows him to synthesize the information he is receiving and predict what the enemy in question will do in the future. This intuition combined with the knowledge of the actions of an enemy during previous engagements is also useful to a commander in predicting what the future course of enemy action. Blucher and Wellington had experienced Napoleon's strategies. As the French opened the campaign with attacks on Quatre-Bras and Ligny, the Coalition commanders recognized Napoleon's strategy and therefore his intent. This allowed the Coalition to change their strategy and consolidate their forces at Waterloo. Napoleon did not realize that the Coalition knew his intent, and suffered the loss of his army as a result.

Spies - Spies and informants were used both prior to and during the Waterloo Campaign. For the Coalition, Royalist informants within the French government provided standing forces numbers and figures, but were frequently unable to provide information on French force dispositions. For this, the Coalition (Anglo-Allies only) relied upon Wellington's Col. Grant, who was sent behind the lines to learn of Napoleon's movements.

Reconnaissance missions - were another way in which the commanders were able to learn about the enemy order of battle and capability. The Prussians infrequently utilized engineers or cavalry for long range reconnaissance during the Waterloo campaign. However, the Anglo-Allied forces did employ engineers prior to the campaign to gather geographic data on the region, including defense estimates (they did not use cavalry in the same long range manor as the French).

POWs - Once the battle had begun, commanders were able to update the information they sought by receiving new data from captured prisoners. POWs provided information as to the enemy order of battle, their capabilities, locations, and troop strengths. During this campaign, it was fairly common to have prisoners shift sides during interrogation and join up with their captors' service.

Local inhabitants and merchants - Coalition forces gathered information from the local inhabitants and merchants to ascertain disposition information on the adversary's forces. Coalition forces in Belgium (Anglo-Allied in particular) offered money to those who had information pertaining to the French army. This proved ineffective as many of those who brought in information were 'con-men' seeking money for false information. In addition, French sympathizers brought in deliberate misinformation. The operational result of the false information were tired troops (from being placed on alert) and commanders who no longer believed information on the movements of the French forces.

Information -- Required

French:

- Location, status and number of enemy units
- Location, status, and number of friendly units
- Most likely course of enemy action (e.g. intent)
- Physical Geography

Coalition:

- Location, status and number of enemy units
- Location, status, and number of friendly units
- Most likely course of enemy action (e.g. intent)
- Physical Geography

PROPRIETARY   31

For either side to effectively mount their operations during the Waterloo Campaign, the commanders required the following information:

Location, status and number of enemy units - (addressed in 'Sources and Mechanisms of DBA')

Location, status, and number of friendly units - (addressed in 'Sources and Mechanisms of DBA')

Most likely course of enemy action - Based upon the actions of the Congress of Vienna, Napoleon clearly understood that the enemy course of action was to attack France. "When" and "how" were questions to consider, but Napoleon ignored those questions; it only made sense to strike first, when the enemy was weakest. His immediate opponents would be the Anglo-Allied and Prussian forces massing in Belgium. He needed to understand their commanders' intent.

Napoleon judged from experience how Wellington and Blucher would act. He knew Blucher was compulsive and preferred to take the offensive; Wellington was more inclined to take defensive stand and was more conservative in his movements. He also knew that Wellington's forces were comprised of Dutch and Belgian troops whose loyalty to the Coalition would be questionable. This would dictate that Wellington would behave with extreme caution, and would likely be the weaker of the two. Thus, Blucher's forces would be attacked first.

Napoleon also needed to know how Belgium would react. Napoleon believed that the Belgian King would have no choice but to concede to Napoleon's demand: either Belgium would fight for the French or not at all. He believed that once Belgium was out of the way, other nations might follow suit, removing their support from the Coalition.

Napoleon was also concerned with the behavior of the French populous and government. There remained a great deal of pro-Royalist sentiment within both the government and the population . Parts of France were in open rebellion. Napoleon felt that the decisive victory in Belgium, and the resulting peace, would win over those opponents to his side. This would increase his overall support, and help place him onto the Imperial Throne.

The Coalition force commanders expected to mount an offensive by the end of June or July. If Napoleon were to attack, many of those commanders assumed be would attack from the south of France as he had done in 1814. Wellington and Blucher, concentrating their forces across the French frontier in Belgium, began to consider a French attack on their stationary positions. Wellington's fear was reinforced as information trickled in that French forces were moving south and west of his position, threatening the Belgian city of Mons. Whether or not Napoleon was with these forces was unknown. It is assumed that Wellington may have considered this effort a feint from the real effort in the south of France. Neither Wellington nor Blucher had extensive intelligence gathering methods across the border in France. Wellington had but one source be trusted, while Blucher had none. By the time Napoleon was smashing into the Prussians at Ligny, Wellington and Blucher realized what the French were trying to accomplish: divide the armies and defeat them piecemeal. Falling back allowed the Coalition forces to re-concentrate and combine.

Physical Geography - Before driving into Belgium, Napoleon required information on the lay of the land, its bridges, streams, rivers, towns, and food supplies inorder to successfully perform his operation. On the Emperor's orders, a survey was done of the regions surrounding Belgium and Waterloo.

Knowing the lay of the land was as important to the Coalition commanders as it was to the French. Prior to and during their concentration Coalition commanders acquired a good understanding of the region. The British forces understood the terrain better than the rest of the Coalition. After Napoleon was defeated in 1814, the British sent engineers along with Wellington to the Brussels region to survey the area for a possible defensive operation, that of protecting Belgium from a French attack. Wellington identified numerous places where to make defensive stands, including the regions south of Waterloo such as the chateau of Hougomont, and the town of Mont. St. Jean. The idea of defending forward along the border, and then falling back to pre-surveyed defensive positions, is one that Wellington likely considered prior to 1815.

Information -- Not Sought/Not Attainable

French:

- Napoleon assumed that Ney had taken Quatre-Bras and did not seek verification that this had actually occurred
- Ney sent limited reconnaissance forces forward to Quatre-Bras; Ney did not seek a complete picture of the enemy situation and so stalled his operations
- Napoleon and his staff overlooked certain critical pieces of information:
  - The nature of the new Prussian command staff
  - The capacity for the Prussians to form new LOCs

Coalition:

- No allied patrols were sent into French territory (no verification on quality of information)

PROPRIETARY   13

The French overlooked several critical pieces of information:

First, Napoleon assumed that Ney had taken Quatre-Bras and did not seek verification that this had actually occurred. Napoleon did communicate orders to Ney, both verbally and via messenger. Ney, however, was unable to carry out Napoleon's orders according to Napoleon's expectations. One could reasonably argue that Ney's superiors, Napoleon and his Chief of Staff, could have provided more detail in those order. Ney, in turn, did not request the overall campaign objectives. The resultant lack of clarity was seen in Ney's seemingly sluggish attack on Quatre-Bras and Napoleon's unrealistic demand of assistance from him during the battle at Ligny.

Second, Ney sent limited reconnaissance forces forward to Quatre-Bras; Ney did not seek a complete picture of the enemy situation and so stalled his operations. During his attack on Quatre-Bras, Ney halted his operation due to reports from advanced units that they were receiving heavy fire. Ney assumed a larger force was before him. To confirm this, Ney sent only one infantry brigade forward to assist the cavalry in determining the enemy's composition. When those units became further bogged down, Ney halted the movement of his forces for the reminder of the day, even though there were many more hours of light left. He also did not send additional forces to assist those in contact at Quatre-Bras.

And third, Napoleon and his staff overlooked certain critical pieces of information.
Information dealing with the new Prussian command structure was overlooked. Napoleon and his staff did not realize the ability of the Prussians to re-constitute retreating forces and establish new LOCs. This proved critical as Napoleon assumed from past experience that once the Prussian units were broken, they would not only retreat along their original LOCs, but would be unable to re-constitute their forces for some time. This turned out not to be the case.

The Coalition failed to collect much of the information they required at the outset of the battle. While they had a large amount of information regarding French forces, much of it was inaccurate or intentionally misleading. As a result, they disregarded the accurate reports of Col. Grant, who had been sent behind French lines to collect information on the enemy order of battle. The great failure here was that the Coalition made no attempt to verify the incoming information inorder to determine what was accurate and what was not.

No allied patrols were sent into French territory. This despite a constant flow of intelligence indicating French troop movements near the border. Senior Allied Commanders rejected the idea of a French offensive in the north in June , and they did not seek to confirm this information (especially the Prussians) via the use of cavalry patrols into French territory.

Information -- Timeliness

French:

- Difficult travel conditions, the result of a significant amount of rainfall on the 16th and 17th of June, caused delays in communications reporting the movements of the Prussian forces massing at, and moving from, Wavre to Waterloo

Coalition:

- The Coalition was unaware of the impending French attack, thus, all of their information until the battle was untimely

When information did flow, it frequently moved well. In planning future operations, commanders included not only how long it would take for combat or logistical units to move from point A to point B, but also how long it would take the orders to get to the appropriate units. For the French, information flowed well with an important exception. This exception - the late arrival of information- relied upon a number of variables such as weather, road conditions, and local combat. Notable examples of important information which were late:

A significant amount of rainfall on the 16th/17th of June caused delays in communications reporting the movements of the Prussian forces massing at, and moving from Wavre to Waterloo. There were a number of examples of messengers whose horses became stuck in the mud. For one reason or another, the mud variable was not added into message routing times.

As for the Coalition, it was unaware of the impending French attack, thus, all of their information until the battle was untimely. Even the most critical pieces of information regarding the French attack, such as Col. Grant's message and the two French desertions, arrived as the French were approaching and attacking. The Coalition required more time in order to use the information effectively in preparation and maneuver.

Information Accuracy - French

- The inaccurate visual sighting of d'Erlon's Corps on the horizon combined with the expectations of both French and Prussian commanders, led both French and Prussian forces to act as if they each had a new Corps
- Napoleon had an inaccurate report as to the entire disposition of Bulow's forces causing him to commit forces he needed elsewhere
- Napoleon and Grouchy did not maintain consistent contact with the retreating Prussians and were unable to maintain an accurate picture of Prussian dispositions

PROPRIETARY   36

French information was quite accurate, but there are some notable exceptions:

The appearance of d'Erlon's Corps on the horizon, the inaccurate visual sighting, and the expectations of both French and Prussian commanders led both French and Prussian forces to act as if they each had a new Corps. During the attack on Ligny, d'Erlon's Corps arrived late and in the wrong place, which caused both the French and Prussians to initially think it was a Prussian unit. This caused both the French and the Prussians to make offensive moves which they presumed they could afford, having just acquired "extra" forces. In reality, neither force obtained the extra boost of reserves as d'Erlon's Corps would subsequently march away, headed back toward Ney.

Napoleon had an inaccurate report as to the entire disposition of Bulow's forces causing him to commit forces he had need for elsewhere. Napoleon only knew that Bulow had arrived and thus assumed that this meant all of his forces. In reality, only advanced units of Bulow's forces had arrived and assembled for battle, while the main part of Bulow's force would arrive much later. Therefore, Napoleon committed forces to take on an entire Corps four hours before he needed to.

Napoleon and Grouchy did not maintain consistent contact with the retreating Prussians and were unable to maintain an accurate picture of Prussian dispositions. In their withdrawal from Ligny, the Prussian forces were able to outpace their French pursuer, Grouchy. This effectively reduced the ability for the French to maintain a thorough understanding of Prussian dispositions. Ultimately, this allowed the Prussians to reconstitute most of their force unbeknownst to the French. The French relied upon cavalry reports, which said the Prussians were retreating to the area where the French had assumed they would retreat to. In fact, some Prussians forces moved to where the French had expected them to. When the French cavalry looked, they saw what they expected, but did not see what really happened.

Information Accuracy - Coalition

- Misinformation via French deception and from con-men created an inaccurate, and confusing, situation for Wellington and Blucher

- Wellington's intelligence operative's message was misinterpreted by Wellington as being false since his operative's trusted name was not on the message

- The appearance on the horizon of d'Erlon's French Corps, combined with the Prussian expectation for assistance, caused them to misidentify the 'unidentified' force as Anglo-Allied

PROPRIETARY   37

There were significant problems with the accuracy of information within the Coalition:

First, misinformation due to French deception and from con-men created an inaccurate, and confusing, enemy situation for Wellington and Blucher

Three things created an inaccurate battlefield picture for Wellington and Blucher: 1) Weeks of stand-ups and false alarms caused by French patrols, which were picked up in Belgium, detained, and returned to the French Frontier; 2) numerous false reports by people seeking rewards for bad information; and 3) "official" French false information disseminated through Belgian sympathizers and the detained French patrols. The Prussians attained a more accurate picture of the enemy situation through the desertion of a French Drum Major two days before the fighting, and from information conveyed by a second French deserter, General deBourmont on the first day of fighting. Through this information they realized that they were under attack by the full weight of Napoleon's forces. For the Anglo-Allied forces, despite warning signs from the Prussians that an attack was imminent, the Anglo-Allies only realized what happened after a message from Wellington's intelligence officer, Col. Grant.

Second, Wellington's intelligence operative's message was misidentified by Wellington as being false because his operative's trusted name was not on the message. Col. Grant's message to Wellington was initially misidentified by the British commander who received it. That commander then transmitted some of the information to Wellington without Col. Grant's name. The commander then resent the information after learning of the importance of the source. Wellington, upon learning that this information came from Grant determined that he had been deceived. Wellington admitted that he had been "humbugged".

Third, the appearance on the horizon of d'Erlon's French Corps, combined with the Prussian expectation for assistance, caused them to misidentify the "unidentified" force as Anglo-Allied. During the attack on Ligny, d'Erlon's Corps arrived late in the wrong place, which caused the French and Prussians to initially think it was a Prussian unit. This, in turn, caused the French to limit their attack against the Prussians, in order to create a reserve in case the new formation attacked. However, it was soon determined by the French that the unidentified force was d'Erlon's Corps, which had arrived in an unexpected position. As for the Prussians, the force was assumed to be Anglo-Allied. As a result, the Prussians launched a counter-attack, which they could not afford. In reality, neither force obtained the extra boost of reserves as d'Erlon's Corps subsequently marched away, headed back towards Ney.

Elements of IW - French

- OPSEC
  - Napoleon generally practiced excellent operations security prior to the engagement;
    - Halted all mail, trade, etc., with foreign nations
    - Ordered his cavalry reconnaissance units not to divulge their true commanding unit dispositions - only to give false information away
    - Utilized the terrain to mask the massing of the French Armee du Nord
  - OPSEC failure: entering the engagement, despite great cautions, two defections gave away the French right wing CONOPS and general orders and OB

PROPRIETARY   39

Operations security (OPSEC) measures practiced by the French were generally excellent and often fully integrated with deception measures. Napoleon himself organized all OPSEC and deception measures and frequently included it within his general campaign orders. At times, he specifically ordered certain units to perform or refrain from certain actions in order to enhance intelligence gathering, OPSEC, and deception. The best examples of Napoleon's OPSEC measures for the Waterloo Campaign occurred immediately prior to the battle:

Halting all mail, trade, etc., with foreign nations. Napoleon ordered that all French borders be closed to mail, fishing and trade. He sought to stop the flow of information which might be used to effect his operations. This meant stopping the standard methods of communication between nations, making it nearly impossible for rumors to travel abroad and for foreign spies to communicate with their countries, assuming there were foreign spies on French territory. In hindsight, these measures were quite effective as even the French Royalists found it difficult to coordinate with the Coalition.

Ordering his cavalry reconnaissance units not to divulge their true commanding unit dispositions - only to give false information away. In the days leading up to Waterloo, Napoleon specifically ordered his cavalry to provide him with intelligence in the areas his forces were to move into. These cavalry units were to inquire with the local inhabitants of the dispositions of enemy forces and not to divulge any information about Napoleon's dispositions. The only information they were allowed to divulge were false unit dispositions.

Utilizing the terrain to mask the massing of the French Armee du Nord. Napoleon's deception operations depended on good OPSEC. He concealed the movements and concentration of his Armee du Nord by marching or encamping his forces according to the geography of the landscape. His forces would remain in gullies, marched along rivers, and so forth, in order to keep his operations a secret and take the advantage of surprise.

Napoleon's OPSEC measures failed due to the desertions of two soldiers from the Armee du Nord. The first, a Drum Major, deserted and defected on the night of 12/13 June. The second, a General from the Right Wing, defected on the day of the attack (15 June) and brought with him the general OB and orders, as well as the specific orders for the Right Wing.

Elements of IW - French

- PSYOP
  - French used two sources to influence foreign audiences
    - 'Con-men', those who provided fake information on the French for the money the Coalition was offering
    - Local inhabitants who had been misinformed by French engineers and cavalry
- Deception
  - French efforts were extraordinary and often well integrated with their OPSEC
    - Strategic use of feints: Wellington was 'humbugged'
    - Use of cavalry as reconnaissance screen and deceptive covering
    - Standing forces replaced by National Guard in their fortifications so as to conceal the fact that the regulars had left

Much of the French's efforts for deception were extraordinary and often well integrated with their OPSEC:

Strategic use of feints: Wellington was "humbugged". During Napoleon's movement north, he ordered the French forces in fortifications and garrisoned towns to the west of his AOR to mobilize and create as much activity as possible, to include marching toward the Belgian border. This deception helped to convince the Coalition forces that Napoleon was about to attack along Wellington's right flank. Napoleon hoped that this would at least keep the Anglo-Allied forces off guard and, at best, force them to fall back on their lines of communication in preparation for defense, toward the sea and away from the Prussians.

Ordering his cavalry reconnaissance units not to divulge their true commanding unit dispositions. In the days leading up to Waterloo, Napoleon specifically ordered his cavalry to provide him with intelligence in the areas his forces were to move into. These cavalry units were to inquire with the local inhabitants of the dispositions of enemy forces and not to divulge any information about Napoleon's dispositions. The only information they were allowed to divulge were false unit dispositions.

Calling up the National Guard to fill the empty forts after the newly raised standing forces had moved away (it appeared as if they'd never left). This deception added to Napoleon's OPSEC, as Coalition spies or Royalists were unable to glean much information from "immobile" troops.

Elements of IW - French

- Physical Destruction
  - Wellington was sighted reviewing his lines by the French command staff; French artillery batteries were ordered to open fire on his position (to no avail)
  - French skirmishers would (given the choice between soldier and officer) target Anglo-Allied officers and messengers
- EW
  - N/A

Though physical destruction within the context of IW did not occur, a kind of quasi-physical destruction in the targeting and shooting of ranking officers did occur with some frequency:

Wellington was sighted reviewing his lines by the French command staff, at which time the French artillery batteries were ordered to open fire on his position (to no avail). Though a limited occurrence, it is interesting to note that the French would take the opportunity to corrupt and degrade the performance of the enemy through the death of one of their commanders.

French skirmishers would (given the choice between soldier and officer) target Anglo-Allied officers and messengers. French skirmishers were instructed to target officers and messengers first, rather than the ordinary Coalition soldier. From the vantage point of the Coalition officers, this appeared dishonorable. From the vantage point of the Coalition messenger, this was a normal hazard.

Elements of IW - Coalition

- OPSEC
  - It was no secret that Coalition forces were massing in Belgium
    - Foreign forces massing on Belgian soil where many Belgian and Allies still held an allegiance to Napoleon
  - Coalition orders were often openly discussed
    - Inn-keeper overhearing Anglo-Allied junior officers discussing Coalition efforts to mass near Waterloo
  - Wellington's Secret orders were made known to no one, causing his Coalition partners confusion
    - No help at Ligny - Prussians
    - Advancing into France - Prussians upset at Wellington's slow progress and halt

PROPRIETARY

Compared to the French, the Coalition had a much more difficult time maintaining effective operations security measures. Those OPSEC measures which did exist, such as Wellington's secret orders, were so secure that they were detrimental to the Coalition operations and unity. Important OPSEC (non-)events were:

It was no secret that Coalition forces were massing. It was exceedingly difficult for the Coalition forces of the Prussian and Anglo-Allied armies to institute any OPSEC measures of effectiveness as they were massing on foreign soil, in a country where many of its inhabitant still felt an allegiance or sympathy for the Napoleonic French. Indeed, much of Napoleon's initial intelligence on the Prussians and Anglo-Allies came from Belgian spies.

Coalition orders were often openly discussed. Despite Wellington's personal orders given to him by the British government, much of what was said by senior officers to their junior officers was not kept under tight control. An example of this involved an inn-keeper who overheard Anglo-Allied junior officers discussing Coalition efforts to mass near Waterloo. This discussion revealed that the British force would be supported by the Prussians in an combined offensive against Napoleon. Of note, this inn-keeper passed this information to the next inhabitant of his inn, Jerome Bonaparte. In turn, Jerome, transmitted this information to Napoleon, who rejected this information as false, preventing this poor OPSEC from having any repercussions.

Wellington's Secret orders were made known to no one, causing his Coalition partners confusion. These orders were for Wellington to, at all times, defend and protect Brussels, Antwerp, and Ostend from French capture. These orders affected Wellington's operations in two ways; one, they would limit his ability to advance into France; and two, combined with his personal belief that he should never divide his force, it would limit his ability to provide support to the Prussians. Not being aware of these limitations placed upon him by his government, the Prussians found Wellington unhelpful to the extreme, both at Ligny (where they required his help) and during the advance into France (where he moved with no great speed).

Elements of IW - Coalition

- PSYOP
  - N/A
- Deception
  - Prussians:
    - 'Non-deception' - at Ligny, some of the Prussian forces were positioned on the forward side of hill/slope - "We want to see our enemies..."
    - Quasi-deception - movements toward Waterloo were 'concealed' by the remainder of one Prussian Corps in Wavre
  - Anglo-Allied: practiced operational defensive hiding tactics
    - Usage of natural and man made obstacles to hide forces (tall corn, hedge rows, houses) - Ney knew Wellington used these tactics from experience fighting him in Spain

PROPRIETARY   45

Effective acts of deception varied between the Coalition partners. The Prussians and the Anglo-Allies maintained differing viewpoints on the subject and thus had a lower overall effect compared to the French:

Prussians: The Prussians at Waterloo appeared not to practice deliberate deception. There are, however, two notes worth mentioning:

The Prussians seemingly practiced the opposite of deception at Ligny. Some of the Prussian forces were positioned on the forward, versus the reverse and concealing, side of a hill or slope. Asked why they would position their forces as such, Gneisenau commented "We want to see our enemies..." They were able to clearly see the French cannon fire upon them.

Slightly better deception was practiced by the Prussians when a corps remained in Wavre and "concealed" the main Prussian army's movements toward Waterloo. Whether the Prussian commanders knew this was the case is undetermined.

Anglo-Allied: Unlike their Coalition partners, the Anglo-Allied forces had a commander, Wellington, who was well practiced in the art of operational defensive hiding tactics. Wellington was known - and respected - by a number of French officers for just this fact. The Duke ordered his forces to make use of natural and man made obstacles in order to conceal themselves prior to a localized attack. These defensive measures took full advantage of tall corn, hedge rows, and chateaus. He used these tactics in Spain, against the commander whom he faced at Waterloo, Ney. Indeed, it has been suggested that Ney's hesitation on advancing on Quatre-Bras came from his fear of Wellington's concealment tactics.

Elements of IW - Coalition

- Physical Destruction
  - Infrequent shooting of French messengers and officers
- EW
  - N/A

Coalition use of physical destruction for IW was not an outright command decision by any of the Coalition commanders. Instead, infrequent shooting of French messengers and officers occurred from the ranks if those messengers or officers were sighted. This resembled the French skirmishers' targeting and shooting of messengers or officers.

The Impact of Command - French

- Command and Control
  - Command Structure
    - The real command situation
      - Napoleon, as CINC and NCA, could overrule any order given by any of his personnel; however, Napoleon gave strict orders that his Wing commanders were not to be countermanded unless Napoleon was physically there himself
  - Communications
    - Napoleon's orders were dispatched through his Chief-of-Staff, Soult
      - Lacked trained/experienced staff officers, including the Chief of Staff himself
      - Lacked robust communications methods
      - Lacked the ability to concisely 'capture' Napoleon's orders and ideas for transmittal to his obedient wing commanders

PROPRIETARY   47

Two facets of French C2 are of interest: the command structure and communications:

The French command structure had both a formal and informal system. The formal system was established by French TTP dating back to Napoleon's earliest conquests, and had changed little since then. The French made no attempt to change their formal system to account for changes in enemy command systems, such as the Prussians. Relative to the Coalition forces' command structures, the French system was more efficient than the Anglo-Allied system. It was, however, less efficient than that system incorporated by the Prussians, which had been developed after the fiascoes of Jena-Auerstadt. At Waterloo, the official chain of command included Napoleon (CINC and King of France), Soult (Chief of Staff), Ney (Left Wing Commander), Grouchy (Right Wing Commander), and the various commanders of the Corps, divisions, and Guard under their appropriate wings.

During the Waterloo Campaign, Napoleon ordered that no one could countermand his Wing commanders' orders; only Napoleon himself could, and he was to be physically present in order to do so.

Napoleon's orders were dispatched through his Chief-of-Staff, Soult. Soult had only been made Chief of Staff by Napoleon a few days prior to the Waterloo Campaign. Soult had proven himself an able field officer. However, he had not been trained in, and had very little experience in, the intricacies of being a staff officer. Soult lacked what his predecessor, Berthier, who had died a few days prior to Waterloo under mysterious circumstances, had possessed and mastered.

Soult and his staff lacked robust communications methods with which the HQ could communicate with the subordinate commanders. This simple system was hardly more than what the Coalition was utilizing for their communications, and a great deal less than the system Berthier had developed. Soult's system lacked two key features of Bertheir's communication system: message receipt verification and multiple message routing.

Message receipt verification allowed messengers to request a written account, a signature, by the receiver of the order. The receipt was then recorded by the originating command post, enabling them to time their future operations with greater effectiveness, knowing that at such a time and place, their subordinate commanders were beginning their operations.

Receipt verification also allowed the messenger to bring back, in a timely fashion, the current friendly and enemy dispositions determined by the receiving commander. The process also acted as a measure of OPSEC, demanding timeliness and accountability on the parts of the message bearer and recipient.

There was a deficiency in multiple message routing, without which, messengers became single points of communications failure. This did occur in a number of instances during Waterloo, for reasons varying from perilous travel too close to the enemy lines (permitting capture or death) to singular messengers taking far too long to make the journey. Without doubling, or even tripling, the message routing across different routes, orders were not guaranteed to arrive, nor then would the operations be guaranteed to be undertaken in time.

Personally, Soult lacked the ability to concisely 'capture' Napoleon's orders and ideas for transmittal to his obedient wing commanders. Understanding Napoleon demanded a certain finesse, patience, and experience. Berthier had developed this ability over years of continuous work with Napoleon in the capacity of a staff officer.

The Impact of Command - French

- Command and Control
  - Communication Problems
    - Marshal Ney did not seek explicit instructions for his operations and overall employment during his assault on Quatre-Bras
    - Right Wing commanders did not seek confirmation of Grouchy's promotion and therefore did not commence operations by his orders
    - Soult and his staff sent messengers who frequently did not seek receipts upon delivery of orders, leaving Napoleon and his staff with an inaccurate picture of the battle
    - Napoleon's message to Ney at Quatre-Bras requesting his support at Ligny and emphasizing the urgency and its importance reached Ney too late for him to have altered his operations
    - Napoleon's message to Grouchy ordering him to prevent the Prussians from attacking Napoleon's right flank was changed to order Grouchy to move to Napoleon's right flank and beat the Prussians. This revised order never reached Grouchy in time for it to make a difference

PROPRIETARY   65

A number of communication problems plagued the French during this campaign:

Ney did not seek explicit instructions for his operations and overall employment during his assault on Quatre-Bras. Napoleon, however, assumed that Ney had taken Quatre-Bras and did not seek verification that this had actually occurred. Napoleon did communicate orders to Ney, both verbally and via messenger. Ney, however, was unable to carry out Napoleon's orders according to Napoleon's expectations. One could reasonably argue that Ney's superiors, Napoleon and his Chief of Staff, could have provided more detail in those order. Ney, in turn, did not request the overall campaign objectives. The resultant lack of clarity was seen in Ney's seemingly sluggish attack on Quatre-Bras and Napoleon's unrealistic demand of assistance from him during the battle at Ligny.

The Right Wing commanders did not seek confirmation of Grouchy's promotion and therefore did not commence operations by his orders. During the initial French attack near Ligny, Napoleon gave Grouchy the command of the Right Wing. When Grouchy returned from meeting with Napoleon and issued orders to the Right Wing commanders, they refused to accept his new rank, as they had not been informed by Napoleon of this change. Additionally, the commanders did not seek out this information from Napoleon. Finally, Napoleon himself rode to the Right Wing to see what was delaying the operations. Only then was Napoleon able to convince the Right Wing commanders of Grouchy's new position.

Soult and his staff sent messengers who frequently did not seek receipts upon delivery of orders (no verification), causing an inaccurate picture of the battle to be developed by Napoleon and his staff (Napoleon assumed his orders were delivered and carried out). Though Soult did not order his message-bearers to request receipts upon delivery of orders, receipts which also included disposition updates, the messengers themselves may have been at fault as this was the common practice under the former French Chief of Staff, Berthier. Either way, neither Soult nor the messenger sought confirmation of orders delivered.

Napoleon's message to Ney requesting his support and emphasizi g its urgency and its importa ce reached Ney to late for him to have altered his operatio s. This request was sent out by Napoleon after he felt too much time had passed since he issued his original order requesting support from Ney. Napoleon was unaware that Ney's forces were already heavily engaged at Quatre-Bras.

Napoleon's message to Grouchy ordering him to prevent the Prussians from attacking Napoleon's right flank was changed to order Grouchy to move to Napoleon's right flank and beat the Prussians. This revised order did not reach Grouchy in time for it to have made a difference; Napoleon was defeated before Grouchy even received it.

The Impact of Command - French

Personalities

- Napoleon:
  - Highly suspicious of Royalists amongst his Marshals and troops
  - Older age, illnesses and exhaustion catching up
  - Egocentric
- Ney: Left Wing Commander and considered 'the bravest of brave;' Ney's allegiance, his generalship, and his health were highly suspect, to both historians and Napoleon

PROPRIETARY   51

The personalities of the major figures within the French command are of significance:

Napoleon: A complex and emotional genius with extraordinary energy. Many historians, however, suspect there are a number of personal reasons for Napoleon's failure in the Waterloo Campaign:

• His suspicions that there might be Royalists among his Marshals and troops, and among his government officials in Paris was a major distraction from his duties at Waterloo. Indeed, it influenced his decisions as to whom he would promote or include in his military's ranks. This preoccupation was unavoidable as Napoleon played both the role of military CINC and political head of state.

• Napoleon's older age, illnesses, and exhaustion were catching up with him. Sleep depravation at Waterloo, combined with years of torturous wear, drained him. This may have had an effect on his decision making processes.

• The Emperor was extremely egocentric; some suggest that at Waterloo he had sought to make everyone believe he could do the impossible -- win an unwinnable battle with less than perfect commanders.

Ney: Indirectly chosen by Napoleon to replace Mortier as the Left Wing Commander, Ney was considered "the bravest of the brave" by his troops and fellow commanders. Ney was considered an excellent tactical commander, though less so an operational commander. However, Ney's actions during Waterloo were questionable: specifically, his allegiance was uncertain (he had remained a General under the Bourbons), and his generalship was marred by instances of inaction. His health, too, was poor.

The Impact of Command -French

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Personalities

- Grouchy: Right Wing Commander and known to be a superior cavalry commander; young and inexperienced, his promotion offended many French senior officers who would come under his command after his promotion by Napoleon

- Soult: Napoleon's Chief of Staff was a superior field commander but a poor Chief of Staff; though he was widely disliked, Soult was selected to replace Napoleon's former COS, Berthier

Grouchy: Chosen by Napoleon and field-promoted to Right Wing Commander, Grouchy was known to be a superior cavalry commander. However, his youth and inexperience offended many French senior officers of the right wing, who later needed to be convinced by Napoleon of Grouchy's new rank before acting upon any of his orders.

Soult: Selected by Napoleon to replace Berthier as his Chief of Staff. Soult, though considered a superior field commander, was widely disliked and proved himself a poor Chief of Staff. Soult was known to be able to correctly visualize Napoleon's concept of operations during many other operations. Napoleon had likely expected that he would be able to communicate these ideas to others as Berthier had done. This would not to prove to be the case.

The Impact of Command - Coalition

- Command and Control
  - Command Structure
    - Liaison between Coalition partners
      - Communication
        - Liaisons established with each Army HQ had to deal with differing methods, language, and diplomacy
    - Anglo-Allied and Prussian command structures
      - Differing commands with differing unit structure; Anglo-Allied had to deal with this internally too
      - Differing levels of nobility and rank

PROPRIETARY   53

The Coalition command structure consisted of a liaison between Coalition partners and the individual Anglo-Allied and Prussian command structures. One can easily imagine how problems might occur within such a structure.

The liaison between Coalition partners was the sole method of communication between the them. The individual Coalition force commanders were not responsible for inter-army communications - the liaisons were. Liaisons were established with each army HQ. They included both a British Colonel, stationed permanently at the Prussian HQ, and the Prussian General Muffling, who was stationed with Wellington and went wherever he did. Muffling was, in essence, the lead liaison and coordinated many of the communications between the Army staffs. He also served as primary translator.

All liaisons had to overcome differing methods of command, different personalities, numerous languages (oddly enough, the most prevalent first or second language across all nationalities was French), and diplomacy. To deal with all of this, and provide accurate disposition information between the armies, was quite difficult.

The two CINCs within the Coalition were Blucher (Prussian) and Wellington (Anglo-Allied). The Anglo-Allied and Prussian command structures possessed differing command systems and differing unit structures. This at times became a problem for the partners, and also was a problem for the Anglo-Allied army itself as it was essentially a small coalition of allied forces, each with their own command structures and unit structures.

The Anglo-Allied command structure was cumbersome, due to numerous complexities, including:

• **Differing levels of nobility and rank:** One might find a Colonel who was also a Lord, and in that event, the communiqué or dispatch frequently had to address this title with the appropriate diction. This would prove troublesome as "formalities" would take up a good portion of the communication itself, and niceties could often override necessities, thus failing to convey any message.

• **Differing uniforms and languages:** The common language of many of the Anglo-Allied Army was French. Additionally, many of the uniforms were similar to their French counterparts, especially cavalry uniforms. This caused fratricide in a number of instances. Another difficulty was that while many soldiers in Wellington's Army spoke German or Dutch, Wellington did not. He had to rely on translators, such as his Prussian liaison, Muffling.

• **Chain of command:** Units under Wellington had their own chain of command held over from historical noble control of certain units. This caused a problem as commanders would have to translate the "foreign" orders to match their TTP.

• **The Dutch:** All orders regarding the dispositions and command of the Dutch had to pass through the Prince of Orange first. In addition, Wellington could not replace Dutch officers without the Dutch King's consent.

• **Supply and readiness:** Additional difficulties included maintaining supply for so many different types of weapons, while different methods of training resulted in different levels of readiness and effectiveness.

The Prussian command structure was arguably the most efficient and advanced on the battlefield in the Waterloo period. It had developed after the Prussian defeat at Jena-Auerstadt and featured a decentralized command structure (Corps could operate autonomously) with a General Staff. During battle, the commander (Blucher) would have tactical control while the Chief of Staff (Gneisenau) could overrule the order if he perceived them to be contrary to the orders of the King. Gneisenau never had to use this power during Waterloo as the relationship between Blucher and Gneisenau was well established and professional.

The Prussian Army itself was organized into a HQ and four army corps, but no divisions. Each corps was composed of four infantry brigades, each about the same size as a French infantry division. Two or three brigades of cavalry were attached to each Corps, along with six to eleven batteries of artillery and a company of pioneers.

Impact of Command - Coalition

- Command and Control
  - Command Problems
    - Blucher and Gneisenau expected Wellington's assistance at Ligny, but did not continue to encourage Wellington's help
    - Blucher and Gneisenau failed to immediately notify Wellington of their army's initial movements to concentrate around Sombreffe. Their delay was compounded by cumbersome communication lines and methods
    - Wellington did not know his initial OB was incorrect; he assumed the information given him was correct

PROPRIETARY   55

Blucher and Gneisenau expected Wellington's assistance at Ligny, but did not continue to encourage Wellington's help. The Prussian commanders developed an expectation, based upon the translations of the liaison (via Muffling) of Wellington's pledge of Anglo-Allied assistance, and when they should expect it. The Prussian commanders waited throughout the day, right up until they were being beaten back by the French, for Anglo-Allied assistance. Never once did they send a messenger to emphasize their need for this assistance.

Blucher and Gneisenau failed to immediately notify Wellington of their army's initial movements to concentrate around Sombreffe. Their delay was compounded by cumbersome communication lines and methods. Upon receiving information of an impending French attack, Blucher and Gneisenau developed a plan of concentration for defensive/offensive operations against the on-coming French, around the town of Sombreffe. They were slow in sending their initial designs and movement orders to their Coalition partner, Wellington, and the messenger traveling to Wellington took a great deal of time, due to weather and other events. In total, from the time the decision was made to concentrate, orders were written, and the messenger had made the three hour ride between the armies, ten hours had elapsed before Wellington's staff were aware of the Prussian's intentions.

Wellington did not know his initial OB was incorrect; he assumed the information given him was correct. In order to assure his Prussian partners that they would receive Anglo-Allied assistance after the initial French attack, Wellington ordered his staff officers to perform the necessary functions in determining when and where his forces would be at a specific time. In performing this task, the junior staff officers misidentified units and miscalculated the movements. Wellington assumed this information was correct and did not double check the calculations and friendly force dispositions. This was despite the fact that double-checking calculations had been his common practice during his Peninsular campaign. As a result, his Prussian allies expected assistance which never came.

The Impact of Command - Coalition

Personalities

- Wellington: CINC for all Anglo-Allied forces in Belgium and an experienced general, noble, and politician; preferred defensive tactics and refused to divide his forces

- Blucher: CINC for all Prussian forces in Belgium and perhaps the one general whom Napoleon considered a threat, but predictable; tended to be reactionary and offensively minded

- Gneisenau: Chief of Staff for Prussian forces, essentially shared command with Blucher of the Prussian forces; disliked Wellington

- Muffling: Prussian liaison to Anglo-Allied HQ and Wellington; considered diplomacy his primary duty

PROPRIETARY 57

The personalities of the Coalition senior commanders' played a significant role:

Wellington: CINC for all Anglo-Allied forces in Belgium and an experienced general, noble, and politician. Wellington was respected for his unusual defensive tactics (his preferred approach to military operations) by those French generals who had fought him in Spain, including Ney. Wellington's tactics frequently sought concealment at the tactical level. He would place his units individually in fields, houses, and other cover, in order to give them the greatest cover from observation and enemy fire. Despite the fear and respect many French generals held for Wellington, Napoleon thought very little of Wellington.

Blucher: CINC for all Prussian forces in Belgium and perhaps the one general whom Napoleon considered a threat. His greatest flaw was that he was quite predictable: he tended to be reactionary and offensively minded. Prince Blucher was better as an operational Hussar (cavalry) commander - charging into anything - than an overall Army commander. For operational planning he relied heavily on Gneisenau, his Chief of Staff. He was loved by his troops and the people of Prussia, as well as other countries, including England, where Oxford University donned him an doctorate.

Gneisenau: Chief of Staff for Prussian forces, and essentially shared command with Blucher. Though an able commander himself, Gneisenau was best as Chief of Staff, and worked well with Blucher. However, Gneisenau greatly distrusted their Coalition partner, Wellington. This was significant considering it is typically the Chief of Staff's responsibility to communicate with one's ally. For example, in a number of instances such as informing Wellington of the French attack on Ligny, and the planned movement of the farthest Prussian force from Wavre to Waterloo first, Gneisenau's actions appeared designed to "hurt" Wellington.

Muffling: Prussian liaison to Anglo-Allied HQ and Wellington. Muffling was required to perform as diplomat, scribe, translator, and communiqué director between both armies - a demanding task. Muffling's performance is often criticized for being indirect. However, one may attribute this to his overall concern in acting the diplomat, not offending either side's Generals and Nobility. In his memoirs, Muffling has admitted to performing numerous translations so as to not to offend Coalition commanders.

The Impact of Intangibles

- **Political/Strategic Considerations**
  - French
    - Brussels: Napoleon's one and only chance to regain the Imperial Throne and a key to his strategic 'central position' strategy
  - Coalition
    - Objective was to defeat Napoleon once and for all
    - British sought to defend Brussels, Antwerp, and Ostend from the French
    - British sought to restore Bourbon Monarchy
      - Lord Castlereagh (British) and Prince Metternich (Austria)

PROPRIETARY   59

Political/Strategic considerations influencing Napoleon at Waterloo evolved from a variety of factors which Napoleon believed all had but one solution: in order to defeat the Coalition, he needed to divide it politically and militarily. His military decision to focus on the Prussians and Anglo-Allied forces involved a political and military key, which was the city of Brussels. Brussels was Napoleon's one and only chance to regain the Imperial Throne. The capture of that city would resolve the following: the French and European populations demand for peace, and the resolution to Napoleon's favor of question of Bonapartists vs. Bourbonists rule. Capturing Brussels, in Napoleon's mind, would require the Belgian King to remove his troops from Anglo-Allied command, thereby weakening the Coalition forces and allowing Napoleon to win a decisive victory before the rest of the Coalition could arrive. The remainder of the Coalition would then see Napoleon as too strong to fight, and would sue for peace. If not, he could quickly destroy the rest of the Russian and Austrian forces as he would have already delivered a decisive victory against the Prussians and Anglo-Allies. By achieving international peace, Napoleon would return to France a victor. This would also resolve the Bonapartists vs. Bourbonists issue, placing him again on the French Imperial Throne and allowing him to exile those within the government who opposed him.

Political/Strategic Considerations for the Coalition were as complex as France's. However, most European governments agreed on the need to defeat Napoleon once and for all and remove him from power in France, either returning him to a more distant exile, or by other, more permanent means. Beyond Napoleon, decisions on the new, or old, face of Europe, would be left to the diplomats in Vienna. One government, the British, established its own strategic objectives prior to the battles around Waterloo. Their objectives had been conveyed in secret to Wellington. Therefore, Wellington, as a participant in the Coalition, had to abide by the Coalition objective as well as his government's. Accordingly, Wellington was to defend Brussels, Antwerp, and Ostend from the French, where these towns represented political objectives, LOCs, and footholds on the European continent for the British, defeat Napoleon, and restore the Bourbon Monarchy.

This last objective, in principal, was one which the British government sought outright. Indeed, the British government, pressured by Lord Castlereagh, had itself taken up the Bourbon government's policy to consider Napoleon only as a rebellious General of the Revolution. This made, in their eyes, Napoleon an outlaw and punishable by execution.

The Austrian position on Napoleon, driven by Prince Metternich was not nearly as strong. Indeed, they had seen fit to choose the non-aggressive Prince Schwarzenberg as Supreme Allied Commander. Metternich sought a France controlled by Napoleon for two reasons: first, Napoleon represented and could maintain a stable and unified France (vs. the Bourbon regime) and second, Napoleon's first son was grandson to the Austrian Emperor, Francis.

The Impact of Intangibles

- Weather
  - 15 June - clear
  - 16 June - hot and rain at the end of the day, becoming heavy in the evening
  - 17 June - cold morning, mud
  - 18 June - cold morning, mud
- Fog of War
  - Smoke of Guns
    - Extensive cannon fire and rifle/musket volleys literally fogged the battlefield
  - Uniforms and spoken word
    - Most common language of many of the Anglo-Allied Army happened to be French, combined with uniforms which were often quite similar (cavalry), caused fratricide in a number of instances

PROPRIETARY   61

The poor weather which occurred at Waterloo did indeed play a role.

Rain, and the resulting mud, wore down the troops' and horses' stamina, adding to the overall exhaustion already created by war. All operations, from communication messengers to combined offensives were slowed, which resulted in a reduced OPTEMPO. While these weather conditions affected both sides at Waterloo, it had a greater effect on the French who were undertaking more elaborate military actions (i.e., offensive operations) than the Coalition and thus were more dependent on communications.

Although the weather did play a role, it can hardly be said that it won or lost the war for either side.

In both a literal and figurative sense, the fog of war was prevalent at Waterloo:

The smoke of guns caused by extensive cannon fire and fire from thousands of black powder muskets, rifles, and carbines, created a thick fog. Though this fog would dissipate, it hampered immediate, visual information gathering. At the same time, from the commander's vantage point, this smoke signaled fighting.

Adding to the actual fog was the "fog of war" resulting from confusion over similar uniforms and dissimilar languages. The lingua franca of many of the Anglo-Allied Army was French. This, combined with Anglo-Allied cavalry uniforms which were often quite similar to French cavalry, caused fratricide in a number of instances. This kind of confusion occurred with Anglo-Allied infantry units as well.

The Impact of Intangibles

- **Unit Morale**
  - French
    - Generally good due to nationalistic fervor and idolatry of Napoleon, despite the suspicious atmosphere revolving around Royalist sentiment:
      - Morale collapses with the:
        - Destruction of Old Guard units
        - Arrival of Prussian forces at Waterloo
      - French forces flee onslaught of Prussians

PROPRIETARY   62

The unit morale for the French dunng Waterloo was generally good due to the nationalistic fervor of the troops and their idolatry of Napoleon. This existed despite the suspicious atmosphere revolving around Royalist sentiment. Indeed, it has been argued that Napoleon's army at Waterloo much resembled the French forces of the revolution many years before. The make-up of the army consisted of men who volunteered to serve France and Napoleon, as well as those who had remained in the armed services after having served under the Royalist. The result was an Army which fought well, using the driving energies of its soldiers. Unit morale collapsed with the arrival of Prussian forces at Waterloo and the final destruction of various Old Guard units, resulting in the disorganization of French forces.

The Impact of Intangibles

- Unit Morale
  - Coalition
    - Anglo-Allied
      - Initial– tired - weeks of stand-ups and false alarms
      - Final - tired - but morale increased with the final collapse of the French
    - Prussians
      - Initial- high - after Ligny, low - poor conditions from 17th on; Bulow's forces move first to Waterloo because they've fought the least (his Corps is less tired and has the highest morale)
      - Final - high - route of French forces at raises Prussian morale to high; Prussian forces are in a frenzy to kill French

PROPRIETARY   63

Unit morale levels for the Coalition vary from army to army, but they were similar. As the Prussians were fleeing after Ligny, the Anglo-Allies were retreating. As the Anglo-Allies were holding at Waterloo, the Prussians were attacking. In the end, they beat the French together.

Overall, their initial morale levels may have been medium to low. Both Anglo-Allied and Prussian forces were tired from weeks of stand-ups from false alarms. However tired they were on the first few days, by the end their morale increased with the final collapse of the French. The Prussians' morale was especially high on the last day as they pressed their attack with a frenzy of killing, whereas the Anglo-Allies were somewhat tired from fighting the French all that day and held back.

Why Didn't the French Plan Succeed?

- Command problems
  - Personalities:
    - Napoleon:
      - Preconceived notions vs. reality
      - Poor selection of command staff
      - No variation on old strategy ('central position')
      - Political focus
    - Ney:
      - Only effective when overseen by Napoleon
      - Lacked initiative in the beginning of the operation
    - Grouchy:
      - Inexperienced and misunderstood orders
      - Lacked initiative during the end of the operation

The French did not succeed at defeating the Coalition due to numerous problems within their own command and control system. This included problems ranging from the personalities of the commanders themselves to communication methods which affected the French command decision making processes.

Command problems

Although there were problems with the lower level commanders within the rank and file of the French system, the personalities of the three major commanders at Waterloo had a profound affect on the outcome of the battle.

Napoleon:

• Developed and maintained preconceived notions as to the whereabouts and the objectives of both Ney's Left Wing and Grouchy's Right Wing, the result of which was his development of orders and plans which could never be realistically achieved by the commanders he had selected.

• Did not develop a variation to his familiar "central position" strategy, the result of which was an adversary who developed a realistic picture of what Napoleon intended to do: divide the Coalition armies down their boundary and send them reeling back along their LOCs.

• Maintained a political focus while CINC of an operation. This was inevitable as Napoleon's goals included his re-establishment on the imperial throne. During his campaign, when he should have been dedicating all his energies to the battles, he spent a good deal of time focusing on political events in Paris. Indeed, his targeting of Brussels itself was political.

Why Didn't the French Plan Succeed?

- Communications problems
  - Lacked robust communications method (Soult and Staff)
  - Lacked trained staff personnel (Soult and Staff)
- The result was delays in operations, confusion, and ultimately, a lack of cohesion
  - Decreasing OPTEMPO and ceded initiative
  - Decreasing unit cohesion
  - Raised entropy

PROPRIETARY   65

• Selected commanders who may not have been the best for their posts. Napoleon's best Marshall, Davout, remained in Paris rather than in command of Napoleon's Wings. Another fine Field Marshall, Soult, was removed from the field and placed at Napoleon's side to act in a position he had little experience in performing, that of Chief of Staff. The commander's he had selected had their own problems (discussed below), the most significant of these were their apparent inability to act as independent commands. They only worked well when Napoleon was at hand.

Ney:

• Historians mark Ney with a list of problems including his health - he apparently was suffering from "shell shock" - and his loyalty, as he had served the Bourbon's between 1814 and Napoleon's return.

• As mentioned above, Ney apparently was only effective when overseen by Napoleon. During the initial phases of the Waterloo campaign, Ney's actions appeared sluggish. However, when Napoleon was present, after shifting the French forces' weight from Ligny, Ney's performance appeared to improve.

Grouchy:

• Grouchy's actions - or inactions - were likely due to inexperience and misunderstanding. Among Right Wing commanders, Grouchy was the most inexperienced combined arms commander of all. His promotion so offended and astounded the Right Wing commanders as they would not initially accept it, which created a delay in the operations' early moments.

• Like Ney, Grouchy lacked initiative. When given the opportunity to totally destroy the Prussians, Grouchy's forces moved seemingly without drive. Though his orders may have been clear, Grouchy did not seek the initiative and let the Prussians out-pace him.

Communications problems. The personality and the experiences of Soult played a important role in the development of communication problems experienced by the French at Waterloo. These problems were due, in part, to an insufficiently robust communication system – which used single (vs. triple) messenger routes and had no verification measures established to ensure that field commanders had received their orders. The command staff and Chief of Staff lacked training in their field. Soult's staff had not operated in such a capacity, nor had Soult gained significant experience acting as a Chief of Staff.

The result was delays in operations, confusion, and ultimately, a lack of cohesion. Decreasing OPTEMPO ceded the initiative to the Coalition, with the resulting decrease in unit cohesion. The failures continued to occur, but with each individual failure hidden. The combined effects, however, resulted in defeat for the French.

Why Did the Coalition Plan Succeed?

- It was less that the Coalition won than the French lost
- Coalition commanders developed an understanding of Napoleon's intent and strategy:
  - Blucher and Wellington came together at Waterloo; they concentrated their forces and divided Napoleon's
- New Prussian command structure allowed for speedier reconstitution and reorganization
- Coalition force concentration shortened communication lines, decreased confusion, increased morale
  - Increasing OPTEMPO and gaining initiative
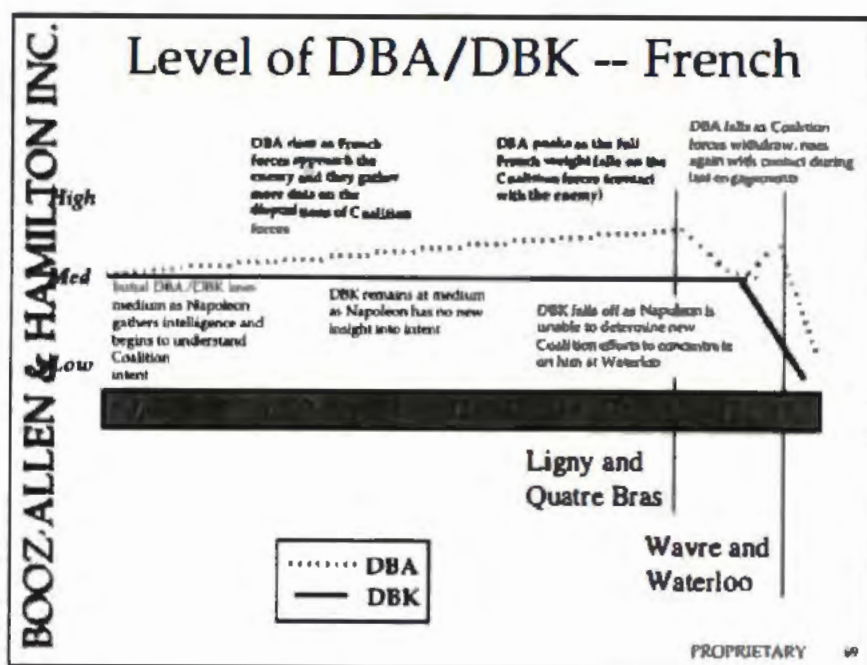 - Increasing unit cohesion

PROPRIETARY   67

It was less that the Coalition won than the French lost. The problems within the French C2 structure - command personalities and communication errors - slowed the French OPTEMPO enough that the Coalition commanders developed an understanding of Napoleon's intent and strategy. His actions and their experience allowed Blucher and Wellington to identify Napoleon's classic "central position" strategy. They determined that Napoleon was seeking to break their inter-army LOCs, divide their two armies at their overlapping boundaries, and send them reeling back along their national LOCs. To counter this, their armies needed to concentrate. Wellington's forces remained immobile in defensive positions and held Napoleon, while Blucher's re-established new inter-army LOCs (well away from combat), then re-constituted and concentrated at a point parallel with Wellington - the town of Wavre. From Wavre, the Prussians moved west and crushed Napoleon with the help of the defending Anglo-Allied army.

Critical in achieving this was the ability of the new Prussian command structure to allow for speedier reconstitution and reorganization. Without this ability, Prussian assistance to the Anglo-Allied defense would not have come and the Anglo-Allies would have been defeated. This highly efficient and effective command structure had been devised in response to the fiasco of the Jena-Auerstadt campaign where the Prussian command structure had not been capable of re-constituting their forces after Napoleon's attack. The new Prussian army command structure as well as corps command structures maintained a chief of staff assisted by a number of auxiliary staff services, and every brigade and reserve cavalry command of each army corps had trained general staff officers. Additionally, the army headquarters amounted to only 58 officers, and the Chief of Staff was aided by only six officers. At the corps level the staff consisted of perhaps twenty officers, and at the "brigade" level only five. All of the staff personnel, at all levels, were obliged to undergo a uniform course of staff training. This meant

they all understood the new operating requirements of the chief of staff function within the army. They were taught logistics, movement, supply, all the modern theories of tactics, strategy, and planning, and to use maps in the way Napoleon did. This training was eventually extended down to regimental staff level, producing in the army a large body of staff officers skilled in the application of a Corps system modeled after the French. Every staff officer in the Prussian army was assigned specific duties, but also understood his function in relation to the army as a whole.

As a result, after Ligny, it took but five hours for the command staff to begin setting up new operations.

Coalition force concentration shortened communication lines, decreased confusion, and increased morale. This increased OPTEMPO as it took less time to communicate accurate information, and increased unit cohesion through greater awareness and higher morale.

Level of DBA/DBK -- French

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High

DBA rises as French forces approach the enemy and they gather more data on the dispositions of Coalition forces

DBA peaks as the full French weight falls on the Coalition forces (contact with the enemy)

DBA falls as Coalition forces withdraw, rises again with contact during last engagements

Med

Initial DBA/DBK lines medium as Napoleon gathers intelligence and begins to understand Coalition intent

DBK remains at medium as Napoleon has no new insight into intent

DBK falls off as Napoleon is unable to determine new Coalition efforts to concentrate on him at Waterloo

Low

Ligny and Quatre Bras

Wavre and Waterloo

·········· DBA
———— DBK

PROPRIETARY 69

Initial DBA/DBK lines are medium as Napoleon gathers intelligence and begins to understand Coalition intent. For DBA, Napoleon was able to gather intelligence on both the physical geography and much of the disposition of Coalition forces. However, DBA is not perfect as reports on enemy dispositions are of varying degrees of accuracy and frequency. For DBK, Napoleon's intuitive understanding of the commanders he faces, the tactics they will use, and the likely overall Coalition operation to be mounted against him, sets his DBK at medium (he does not know for certain what they intend to do).
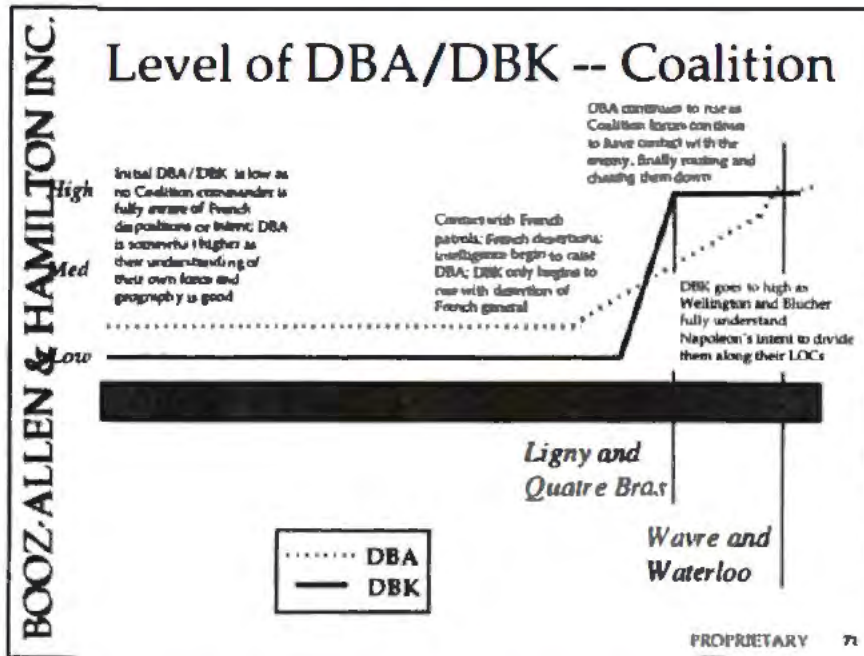
DBA rises as French forces approach the enemy and they gather more data on the dispositions of Coalition forces. The increasing activity of French cavalry patrols as the French forces approach the Coalition forces raises the accuracy and frequency of reports concerning Coalition force dispositions.

DBK remains at medium as Napoleon has no new insight into intent. Napoleon's DBK will remain at this level which was established at the outset of the campaign as he gleaned no new information on the intent of his adversaries.

DBA peaks as the full French weight falls on the Coalition forces (contact with the enemy). Through all sources and mechanisms for DBA (including visual), contact with the enemy moved DBA to near high, but remained hampered by imperfect awareness of Ney's position at Quatre-Bras. After combat occurred for a time, DBA fell off through the "fog of war" and as Coalition forces moved away from Ligny and Quatre-Bras.

DBK falls off as Napoleon is unable to determine new Coalition efforts to concentrate on him at Waterloo. Napoleon looses all DBK as he is no longer aware of the exact intent of the Coalition forces. In particular, he is unable to comprehend that the Prussian forces have not fallen back along their national LOCs, that they have established new LOCs with their Anglo-Allied partners, and that they intend to concentrate on him with the Anglo-Allies.

DBA falls as Coalition forces withdraw and rises again with contact during last engagements. Again, physical contact with the enemy at Waterloo and Wavre raises DBA (though imperfect awareness of Grouchy's forces at Wavre keeps it from rising higher), and finally falls off as the French are defeated.

Level of DBA/DBK -- Coalition

Initial DBA/DBK is low as no Coalition commander is fully aware of French dispositions or intent; DBA is somewhat higher as their understanding of their own force and geography is good.

Contact with French patrols; French desertions; intelligence begin to raise DBA; DBK only begins to rise with desertion of French general

DBA continues to rise as Coalition forces continue to have contact with the enemy, finally routing and chasing them down

DBK goes to high as Wellington and Blucher fully understand Napoleon's intent to divide them along their LOCs

Ligny and Quatre Bras

Wavre and Waterloo

.... DBA

——— DBK

PROPRIETARY 72

Initial DBA/DBK is low as no Coalition commander is fully aware of French dispositions or intent; DBA is somewhat higher as their understanding of their own force and geography is good. For DBA, despite having a tremendous influx of information on the dispositions of French force from both political and local sources, the Coalition commanders were unable to determine which information was correct and which was false. However, Coalition knowledge of their immediate physical geography is good. For these reasons, DBA remains a bit above low. DBK is low because the Coalition was unable to determine the up-coming events.

Contact with French patrols, French desertions, and other intelligence begin to raise DBA; DBK only begins to rise with the desertion of a French general. Immediately prior (within a couple days) to the campaign, DBA rose as new information regarding French activity arrived and continued to rise as contact was made with the enemy (does not spike as they were putting the pieces of the picture together regarding the disposition of French forces). DBK began to rise with the desertion of a French general just prior to the battle at Ligny. He brought with him excellent information, but still did not give all the information needed for high knowledge.

DBA continues to rise as Coalition forces continue to have contact with the enemy, finally routing and chasing them down. The more time given to fighting the enemy, the more information the Coalition commanders were able to collect regarding the dispositions of enemy forces. DBA peaked during Waterloo and Wavre, when the Coalition had attained the upper hand. **DBK goes to high as Wellington and Blucher fully understand Napoleon's intent to divide them along their LOCs.** With the information provided them by the desertion of a French general, plus the increasing DBA, and the combined experiences and intuition of the Coalition commanders relating to Napoleon's tactics, DBK achieved its highest level toward the end of the intense fighting at Ligny.

DBA Conclusions

- Commanders' expectations drive intelligence gathering
  - Wellington and Blucher did not expect a French attack in the north, therefore their intelligence gathering efforts were minimal
  - After Prussians were driven back from Ligny, the French commanders expected them to retreat along their pre-determined LOCs, thus, they looked there to see a retreating force (found some retreating but missed the main force)
- Understanding friendly and enemy force dispositions are equally important when maintaining a high OPTEMPO and unit cohesion
  - Napoleon's expectations were nearly never met throughout the campaign; nor did he seek to confirm them
    - Ney was unable to take Quatre-Bras according to Napoleon's expectations; did not inform, nor did Napoleon seek
    - Grouchy was meandering when Napoleon expected him to be holding the Prussians; did not inform, nor did Napoleon seek

PROPRIETARY   72

Commanders' expectations drive intelligence gathering. When commanders expect something to occur or do not believe it will occur, they will direct their resources accordingly. This includes directing information gathering methods and systems. Waterloo examples of this are:

• Wellington and Blucher did not expect a French attack in the north, therefore their intelligence gathering efforts were minimal. For the Prussians, aside from the cavalry which rode with their Corps, their intelligence gathering methods were practically non-existent. The Prussians had to rely on their partner's intelligence gathering for any information concerning the strategic movement of French forces. Anglo-Allied information gathering was mediocre. Their efforts included gathering information from locals who were often wrong, and did not include sending out cavalry patrols into French territory to determine if the local inhabitants' information was correct or not. Their efforts included but one intelligence officer sent behind French lines to ascertain French dispositions and Napoleon's intent. Even then, Wellington was concerned that Napoleon, if he were to attack in the north of France into Belgium, would go straight for Mons to move in behind Wellington's LOCs to the sea. Wellington, therefore, had the intelligence officer focus on this region.

• After the Prussians were driven back from Ligny, the French commanders expected them to retreat along their pre-determined LOCs. Thus, they looked there to see a retreating force and found some retreating, but missed the main force. Napoleon and his plan intended that the fleeing Prussians would retreat along his national LOCs. He did not consider Blucher and Gneisenau pursuing a different COA and retreating along a different route and establishing new LOCs. When the Prussians retreated, reconnaissance was focused on the region where they expected the Prussians to be. Therefore, they saw few Prussians, and those they saw were not yet in communication with their command. This fulfilled French expectations.

Understanding friendly and enemy force dispositions are equally important when maintaining a high OPTEMPO and unit cohesion. Napoleon knew where to initially strike the Coalition, he had a fairly accurate picture of the enemy situation. However, his ability to carry out his operations the way he had planned became severely limited as his picture of his own forces began to deteriorate. Without accurate and timely information on one's own forces, it is unlikely that friendly forces will be able to maintain effectiveness in speed, maneuverability, and punch (OPTEMPO and cohesion). Waterloo provides us with excellent examples of this:

Napoleon's expectations were never met throughout the campaign, nor did he seek to confirm them. Numerous examples throughout the campaign abound on this point. The two best examples are of Ney's forces at Quatre-Bras during Napoleon and Grouchy's attack at Ligny, and Grouchy's forces nearing Wavre during Napoleon and Ney's attack at Waterloo. Ney was unable to take Quatre-Bras according to Napoleon's preconceived notions of just how long it should take to capture the town and the lateral road to Ligny. Napoleon expected the operation to take a relatively short time, and, upon its completion, Ney could then send forces over to him at Ligny. Neither Ney nor Napoleon communicated to the other regarding the status of the operation at Quatre-Bras. Napoleon had assumed that Ney had performed his mission and was being negligent in his duties to send reinforcements at Ligny.

Later, after Ligny, Grouchy was meandering when Napoleon expected him to be holding the Prussians. Grouchy did not inform Napoleon of his dispositions and Napoleon did not seek the information. As a result, Napoleon could not plan accurately. Thus, the real OPTEMPO and cohesion was quite different from what Napoleon expected.

DBK Conclusions

- Experience and commanders' intuition matter
  - Despite the fact that Wellington and Blucher were initially caught totally off guard, they soon recognized from experience what Napoleon was attempting to do; they were able to maneuver forces to them to counter his actions
- Variance in operational strategy is an important aspect of OPSEC in blocking the enemy's ability to determine operational intent
  - Napoleon maintained few basic strategies which he had applied for most of his campaigns. His classic, 'central position,' strategy failed once the other side had the time and experience to recognize what he was doing - even with minimal intelligence

PROPRIETARY   74

Experience and commanders' intuition matter. Commander's can be most effective when determining enemy intent if they can combine experience with increasing or high DBA. The dispositions of enemy forces analyzed by the commander, then matched with their experiences can often perform just as well when determining an enemy's intent as receiving intelligence. A terrific example of this during Waterloo was when Wellington and Blucher, despite the fact that they were initially caught off guard, recognized from experience what Napoleon was attempting to do: Napoleon's classic "central position" strategy was being applied to split the two Coalition forces apart at their boundary. As a result of determining Napoleon's intent, Wellington and Blucher were able to effectively maneuver forces to counter his actions.

Variance in operational strategy is an important aspect of OPSEC in blocking the enemy's ability to determine operational intent. Learning is often done through repetition. A commander not modifying his operational strategy will, over time, teach the enemy his tactics. If the enemy is reasonably intelligent, he will be able to identify the various components of the strategy simply by examining force dispositions at some point in time, find the vulnerabilities, and counter the actions of the enemy. Napoleon maintained few basic strategies which he had applied for most of his campaigns. His classic "central position" strategy failed once the other side had the time and experience to recognize what he was doing - even with minimal intelligence.

Commanders must be willing to accept information contrary to their expectations. If commanders do not maintain a certain degree of open-mindedness, they may reject accurate information that does not agree with their preconceived notions. Napoleon expected the Prussians to fall back along their LOCs after being defeated at Ligny. They did not, instead concentrating on him at Waterloo. Napoleon was given information to the effect that the Prussians were seeking to reorganize at Wavre and then concentrate on him at Waterloo with the Anglo-Allies. Napoleon rejected this information because it ran counter to his preconceived beliefs regarding the battle.

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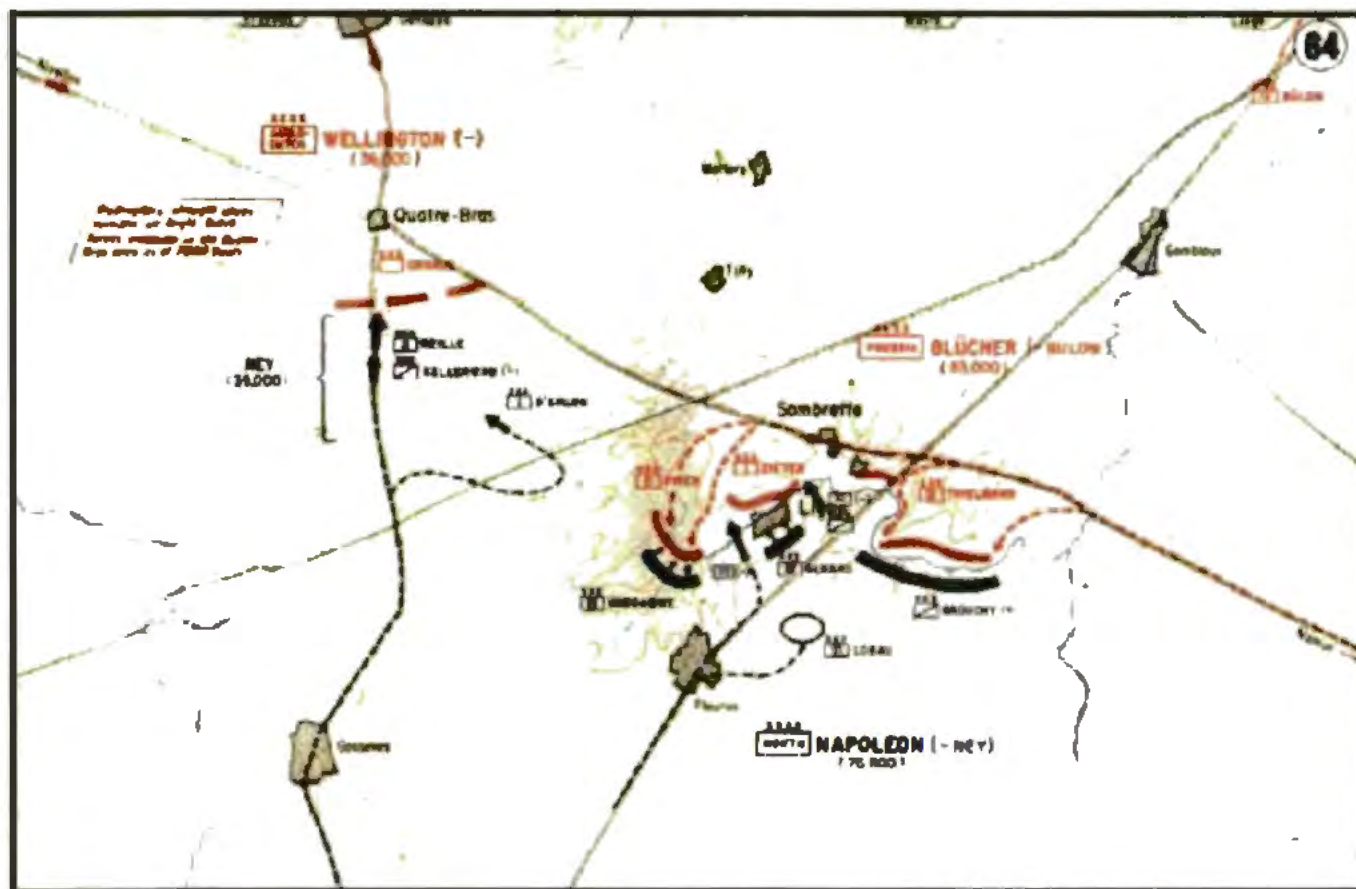
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The Waterloo Campaign
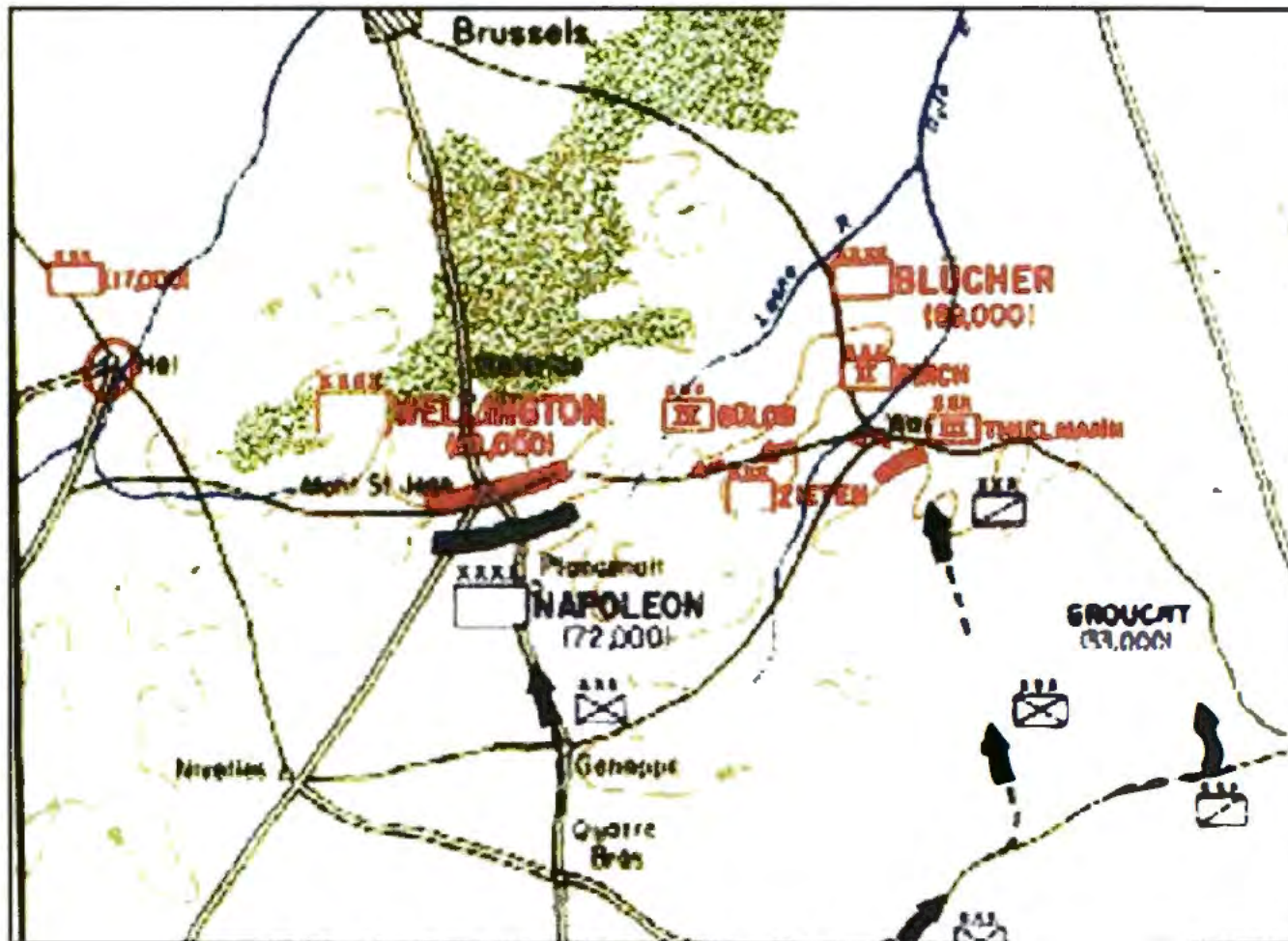## Disposition of Forces on 1 June 1815
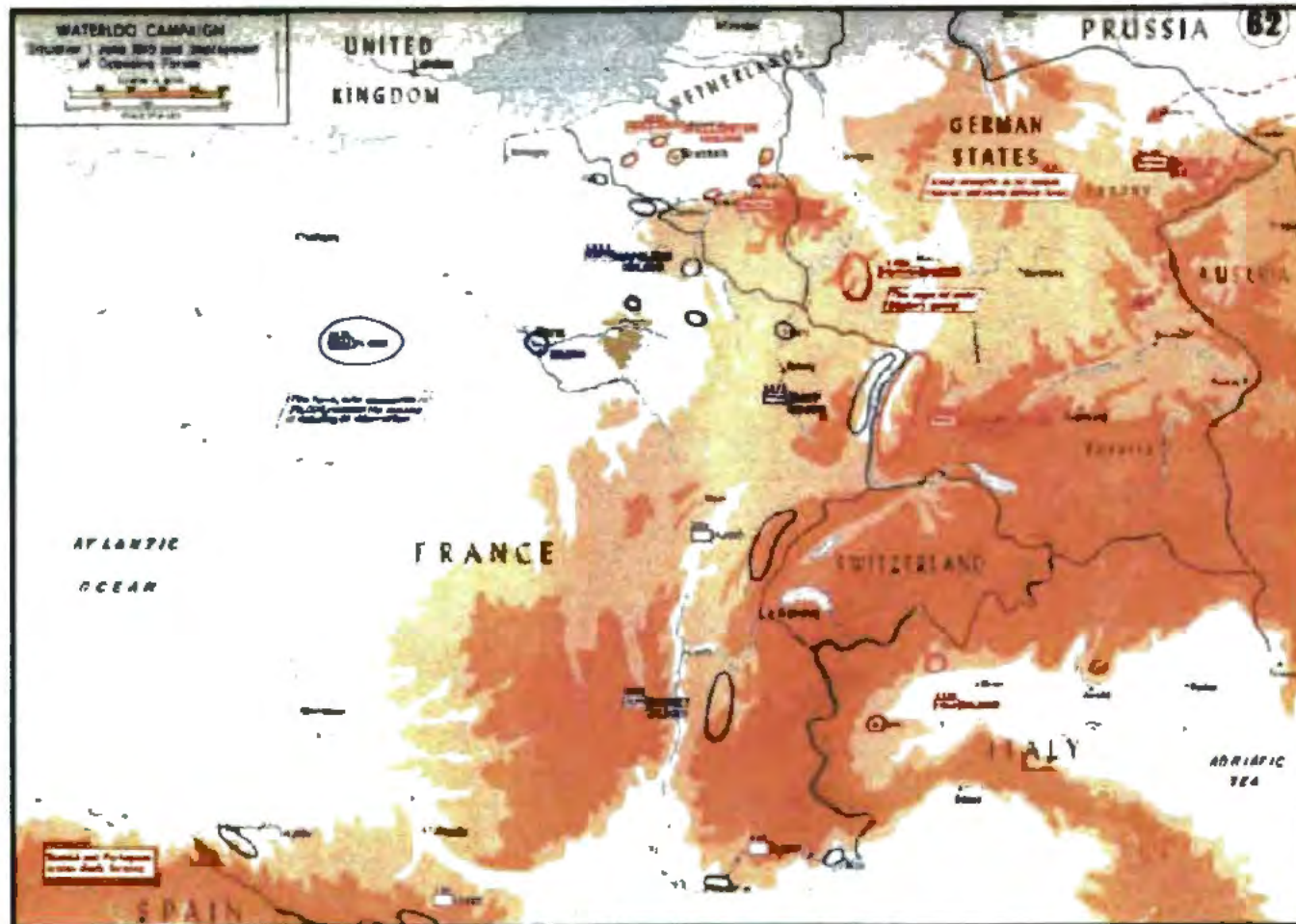
The Waterloo Campaign
Quatre Bras and Ligny on 16 June 1815

The Waterloo Campaign
Waterloo and Wavre on 18 June 1815

ANNEX

Dominant Battlespace Awareness IV
Napoleonic Warfare Information Requirements and the Value of Information

The following annex discusses the three campaigns that were analyzed as part of the research methodology. The three campaigns were (1) Austerlitz, 1805; (2) Jena-Auerstadt, 1806; (3) Waterloo, 1815. These three campaigns are divided into six case studies. Each study analyzed both French and Opponent's information requirements.

The hypotheses developed to support the overall study conclusions were:

1. Situational awareness (the types and quantity of information available) impacts the commander's ability to gain, maintain, or negate the initiative.
2. Timely information drives the decision cycle and alters the OPTEMPO.
3. Accurate and timely information allows the commander to manipulate and exploit the battlespace (force, space, time) to create force advantages.
4. Commander's prioritization of the sources and mechanisms of information, based upon their past experiences, personality, and doctrine, affects a battle's decisions and outcomes.
5. Split command structures reduce the dissemination of information.

The following pages document why the Napoleonic campaigns examined, support or do not support each hypothesis.

HYPOTHESES

The hypotheses isolate various information elements to determine if, for example, accuracy of information is more important than timeliness, or simply to determine whether some information is more valuable then other information elements. In analyzing this process, the quantity, quality, and timeliness of the information available to the respective commanders was categorized separately. These issues correspond to the first three hypotheses and can largely be answered with a 'yes/no' answer: Did the commander have enough information? If so, was it timely? If so, was it accurate? The fourth and fifth hypotheses assess how the commanders perceived the information and then disseminated and executed the resulting orders. When taken in the aggregate, these hypotheses depict the effect of the information in a given battle and lend insight toward the battle's outcome.

The accompanying chart depicts whether of not the three chosen Napoleonic Warfare battles support the various hypotheses, or whether they do not apply. For example, when a case is said to support the hypothesis, it should not be translated as 100% agreement. Instead, it should be interpreted that the relationship between the battle's critical decisions, the commanders who made them, and the information they required is largely consistent with the tenor of the hypothesis.

There are two distinct types of cases that support a hypothesis. The first type is relatively straightforward in that it coincides with the hypothesis as it is written (depicted as ■). The other illustrates examples that support the hypothesis by proving that the converse of the hypothesis is also true (depicted as a ■). For example, the Prussians lacked sufficient information to engage the enemy under any circumstances except when they were under unexpected attack (i.e., defensive); thus supporting the converse argument in hypothesis one.

Cases that do not support the hypothesis (depicted as a ●) can have minor agreements with the argument but are considered overall as running contrary to the hypothesis.

Finally, those cases that are assessed as neutral imply that the character of the engagement does not lend itself to a legitimate finding, in one direction or the other, with specific respect to that battle. For example, any battle assessed in hypothesis five that did not include a split command structure was neutral (depicted as a ▲).

DBA IV Hypotheses & Case Studies

French :Opponent

Hypotheses / Case Studies	Ho_1 Situational awareness allows commanders to manipulate any or all 3 elements of battlespace (space, time, mass)		Ho_2 Timely information allows for changes in OPTEMPO		Ho_3 Timely and accurate information allows for the creation of a force multiplier		Ho_4 Commanders prioritize information through pre-existing cognitive constructs		Ho_5 Split command structures reduce the dissemination of information	
Austerlitz campaign	■	■	■	■	■	■	△	■	△	■
Jena-Auerstadt campaign	■	■	■	■	■	■	■	■	△	■
Waterloo campaign	■	■	■	■	■	■	■	■	■	■

■ Supports the hypothesis in the positive
■ Supports the hypothesis in the converse
● Refutes the hypothesis
△ Neutral regarding the hypothesis

(1) Situational awareness (the types and quantity of information available) impacts the commander's ability to gain, maintain, or negate the initiative.

The term situational awareness (SA) for the purpose of this study represents the full complement of information the commander has regarding both friendly and enemy forces at the critical decision points. To that end, we must note that our use of SA does not place any qualifiers on the timeliness, quality, or accuracy of the information. SA simply connotes that the commanders had sufficient information to conduct a military action.

In this analytic effort, SA incorporated the categories of information that comprise:
> Who: Number of units, unit designation, unit performance history, identity of commander, nature of command structure.
> What: Status, readiness, and capability of units.
> Where: Location of friendly and enemy units, supply lines and key logistics nodes, direction of approach.
> When: All related time data concerning timelines or upcoming operations.
> How: Doctrine, method of advance
> Why: Intent.

To claim situational awareness, a commander requires sufficient data to be able to take the initiative or blunt the enemy's initiative. The information requirements to accomplish this will vary depending upon the circumstances of each battle, but it typically requires information from the majority of the categories, if not all six. For example, simply knowing which enemy unit is heading to a theater is inadequate if one cannot anticipate when they will arrive, where they are going, or what operations they will undertake upon arrival. However, there are cases where just one or two pieces of information amount to a sufficient level of awareness to act decisively. For example, when information lends insight on the enemy's intent and the circumstances make his battlespace objectives obvious, this enables the commander to take action to contest the operation.

Cases that would support this hypothesis include those where a commander has situational awareness and is able to order and execute a response, whether it is a movement of forces to defend against an enemy movement or simply generating a higher alert status. Conversely, the hypotheses implies that a commander without situational awareness, even the limited definition used in this study, will not be capable of acting in a meaningful way until a minimum level of situational awareness is achieved. The two circumstances under which this hypotheses would be refuted are rare but do have historical precedent. They are: a commander who has situational awareness and is unable or unwilling to act, and a commander without the requisite level of situational awareness who nonetheless conducts military operations.

Case Studies -- Support

Austerlitz
French --Support: Napoleon had high situational awareness and was able to initiate his attacks and manipulate the elements of the battlespace to conduct military action. From the outset of the campaign, Napoleon was receiving highly detailed information from his spy service, which included Schulmeister in the Austrian headquarters. In addition, such sources as the newspapers in the region (which reported on the Austrian force movements) and the French cavalry screen (which helped locate enemy forces) provided continuous updates on enemy force locations. This allowed Napoleon to plan and execute strategies that took advantage of enemy force dispositions.

Austerlitz

Coalition--Support: At both Ulm and Austerlitz, the Coalition had sufficient situational awareness to conduct military actions. At Ulm, they had information on the French avenue of advance, some information on French force dispositions, had intercepted some of the French battle orders, and had gained some information from contact with the enemy. With this, they developed an interpretation of French intent. This put them in a position where they felt they could engage the enemy (in this case, ordering an attack against Napoleons lines of communications). At Austerlitz, the Coalition believed it had all the information it needed to take the initiative and attack Napoleon's weak right wing.

Jena-Auerstadt

French--Support: Napoleon had good situational awareness and was able to initiate his attacks and manipulate the elements of the battlespace to conduct military action. Before the conflict began, he had conducted analyses of the enemy's likely CONOPS and deployability. His reconnaissance missions, both by engineers and his cavalry screen, provided him with information on the best approaches to the theater and the movements of the enemy's forces. Intercepted mail gave him insights into the confusion that embroiled the enemy's leadership, and his personal observations guided him to attack at Jena.

Jena-Auerstadt

Prussians--Support in the Converse: The Prussians lacked sufficient information to engage the enemy under any circumstances except when they were under unexpected attack (i.e., defensive). Although they were moving their forces, they were doing so without information on the enemy and without an overall operational plan. When they received information (Muffling's reconnaissance mission and the defeats at Hof and Saalfeld) that French force movements had already made that plan obsolete, they decided upon retreat. The information received, however, was too vague to constitute situational awareness because it did not provide information fulfilling the categories that compose situational awareness. When the Prussians were unexpectedly attacked on October 14, they had no idea of the size of the forces they faced or who was in command.

Waterloo

French --Support: The French had sufficient information to initiate military operations. Napoleon's cavalry screen, reconnaissance engineers, spies and local inhabitants provided him with information on the enemy's force dispositions, their commanders, and the locations of their lines of communications. This information, combined with his understanding of the enemy commanders' style of warfare, was sufficient to guide Napoleon's course of action.

Waterloo

Coalition--Support:: The Coalition ultimately gathered sufficient information to conduct military operations. In the early phases of the campaign, it was ignorant of the enemy force dispositions and intent. However, through two desertions (one of which provided them with the right wing CONOPS), the information from Wellington's spy (Col. Grant), and contact with the enemy, they were able to develop a picture of the battlefield and French intent. Based upon this information, they concentrated their forces to counter Napoleon's plan to divide the Coalition.

(II) Timely information drives the decision cycle and alters the OPTEMPO.

When commanders possess timely information, they are able to alter the pace of battle. With superior information gathering and processing networks, commanders can operate within the enemy's OODA loop[1] and gain a time advantage – in Major Robert Leonhard's phrase, commanders are able to turn the time flank.[2] Operations of this sort effectively preempt enemy actions, and allow commanders to thwart enemy operations before they become a threat. In addition, this sort of information dominance means that one can initiate and execute actions before the other side can respond.

A supporting case would feature a commander who uses timely information to successfully adjust their OPTEMPO. Conversely, this hypothesis is confirmed when commanders with poor information move slowly and hesitantly, or when they are forced to make rash decisions in response to a series of enemy moves they did not anticipate. The hypothesis is refuted when commanders are able and willing to make bold and rapid decisions despite a lack of timely information, or when commanders hesitate despite timely evidence of exploitable enemy weaknesses.

Case Studies -- Support

Austerlitz
French--Support:: Napoleon received very timely information throughout the campaign, and he changed his OPTEMPO based on this information. As soon as he gained information that the Austrians and Russians were forming a coalition against him, he deployed his forces against the Austrians at such a rapid rate that he outpaced the messengers the Austrian spies had sent to warn their leaders. While he did not know the full enemy force dispositions as he approached the Austrians, he did gather that information en route and was able to adjust his plans and OPTEMPO to corner and envelop Gen. Mack and force his surrender. At Austerlitz, his information on the enemy force dispositions and his understanding of the enemy's likely course of action was very high. He was able to draw the Coalition into a trap, increasing his OPTEMPO to strike them at the most advantageous time.

Austerlitz
Coalition--Support:: The Coalition had information timely enough to change their OPTEMPO. At Ulm, they knew of the French advance via their cavalry screen to the north, had intercepted Ney's orders, and were aware of the locations of the French lines of communications. Based on this, they increased their OPTEMPO by ordering an attack to the north to cut off those communications. However, at this time, reports of the defeat of d'Aspre force indicated their situation was more dire than they had thought. Based on this information, OPTEMPO was again changed; part of the force escaped to the north, while Mack fortified Ulm to fight the French as they approached.
At Austerlitz, the Coalition used timely information to temper their OPTEMPO. They had witnessed Napoleon's apparent fear of them and his apparent intent to remain on the defensive, and knew that his right wing was weak. Based on this information, they increased their OPTEMPO by launching the attack, moving their forces from the Pratzen Heights against the right wing near Telnitz.

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[1] Col Boyd, USAF, (Ret)

[2] MAJ Robert Leonhard, USA, Fighting By Minutes, Praeger: Westport, Connecticut, 1994

Jena-Auerstadt
French--Support: Timely information allowed Napoleon increase his OPTEMPO at critical times during the campaign. Timely information on the locations of the enemy main forces (via a reconnaissance officer who had spied behind enemy lines) allowed Napoleon's forces to quickly move through the rugged terrain of the Thuringian Forest with little risk of enemy attack. He was then able to utilize information from his cavalry screen, indigenous informants, and intercepted mail to quickly close in on the enemy. His personal observations of the battlefield at Jena led him to mass his forces there and launch the attack.

Jena-Auerstadt
Prussians--Support in the Converse: The Prussians lacked timely information about the enemy force dispositions. This led them to have too high an OPTEMPO at certain times and too low an OPTEMPO at other times. In many instances, they increased or decreased their OPTEMPO based on constantly changing orders from the Council of War, which was making decisions despite having no information on enemy locations. Most of the campaign was a series of movements without any strategic or operational direction. Capt. Muffling's reconnaissance mission eventually alerted the Prussians to the danger they faced, and it was based upon this information and the losses at Hof and Saalfeld that the order to retreat was given. However, this information was not at all timely, the OPTEMPO of the rear guard assigned to protect the retreat was not at all ready for the battle they would face, and the retreat of the main army was directed into the guns of Davout's force. Thus, this case should be considered to prove the hypothesis in the converse. The Prussians had untimely information which caused them to move slowly and hesitantly (at times erratically), and forced them into battle in response to enemy actions they did not anticipate.

Waterloo
French--Support in the Converse: During the movement to battle, French OPTEMPO was determined by the timely information Napoleon received. Once the battle was underway, Napoleon received infrequent reports regarding the actions of his wing commanders. Ney did not take Quatre Bras as expected, and Grouchy did not pursue the Prussians as expected. However, because Napoleon was not aware of these developments (did not receive timely information regarding them) he was unable to increase French OPTEMPO accordingly, instead pursuing his preconceived plan as he had constructed it in his mind, rather than how it was developing in the field.

Waterloo
Coalition--Support. Once the battle had begun, timely information allowed them to increase their OPTEMPO to their advantage. The timely information from the two desertions, Wellington's spy and contact with the enemy allowed the Coalition to defend against the French attack, perform a strategic withdrawal, and concentrate their forces against Napoleon.

(III) Accurate and timely information allows the commander to manipulate and exploit the battlespace (force, time, space) to create force advantages.

Building upon the second hypothesis, the presence of timely *and accurate* information allows commanders to gain maximum advantage from available forces. Commanders can also use their forces more efficiently since accurate information allows them to avoid redundant assignments and reduce the logistical requirements of any given mission while also reserving forces for other missions.

Supporting cases for this hypothesis feature instances where command decisions make use of information to achieve a force advantage. Examples of this would be deliberately targeting a perceived weak point in the enemy lines, maneuvering to catch an opponent off guard, or concentrating forces against critical nodes. This hypothesis also implies that operations designed with good information available will be economical, assigning only as many forces as necessarily, but avoiding overkill. The hypothesis is supported in the converse when poor information leads commanders to attack strong positions or misallocate forces.

By contrast, inaccurate information acts as a force divider. Acting on inaccurate information can induce commanders into a number of ill-advised actions like attacking an enemy force where it is the strongest or best defended, or wasting valuable time and resources against non-critical targets. In addition, when commanders have inaccurate information, they are more likely to either over-allocate or under-allocate resources for a specific task. They are more prone to assign either too many or too few units to any given task leading to adverse force ratios somewhere in the battlespace.

Case Studies – Support

Austerlitz
French--Support in the Converse: Napoleon was able to use timely and accurate information to create force multiplier throughout the campaign. First, he was able to engage the opposing coalition before their forces could combine so that he could face the Austrian and Russian forces separately, thus making better use of his smaller forces. Second, at the battle of Austerlitz, he was able to use very timely and accurate information to draw his enemy into a trap where his smaller force could envelop the Russians and force their capitulation. He had learned of the enemy force dispositions during "negotiations" with them that were actually just excuses for his officers to reconnoiter the enemy rear. Napoleon also knew his deception campaign had had the intended effect when he observed the enemy forces marching from the Pratzen Heights to attack his intentionally weakened right wing. This information, which was both very timely and accurate, allowed him to mold the battlespace such that he could envelop the enemy force with his smaller force, a clear case of a force multiplier.

Austerlitz
Prussians--Support: Inaccurate information, based on Napoleon's deception, let the coalition forces to squander their advantage in numbers. They fell for Napoleon's trap, abandoning the strategic Pratzen Heights to attack the French right wing. They did not know that Davout was advancing to bolster the weak wing, nor that Soult's two divisions were in position to retake the Pratzen Heights. This led them to move their forces into a highly vulnerable position where their advantage in numbers was wasted, and the smaller French force was able to envelop and defeat them.

Jena-Auerstadt

French--Support in the Converse: Although Napoleon maintained timely and accurate information through most of the campaign, he was acting on inaccurate information the day of the battles at Jena and Auerstadt, and thus was unable to create a force multiplier. His information up until that point was timely and accurate enough for him to deploy and move his forces to the battlefield, narrow in on the enemy, outflank him and attack at the most advantageous time and place. Napoleon had the initiative and drove the battle. However, because of the critical misjudgment on his part (the inaccurate assessment that the Prussian main army was located at Jena when in fact it was moving toward Auerstadt) caused him to focus his main force against Hohenlohe's rear guard while sending only two corps to Auerstadt (which he assumed would act only to cut off the enemy retreat) to face the main Prussian army twice its size. This was not an efficient use of the forces available, and thus cannot be considered a force multiplier.

Jena-Auerstadt

Prussians--Support in the Converse: The lack of timely and accurate information prevented the Prussian from creating a force multiplier. Because they did not know, at any point during the campaign, the accurate locations or the intent of the enemy, they were unable to deploy their forces effectively. Before contact with the French, the Prussian forces were dispersed over a wide front and not within supporting distance of each other. Two of their advance guards were destroyed by the French without any Prussian units being able to come to their assistance. When the decision was made to retreat, they did not realize Napoleon's advance over the Landgrafenberg offered them their best opportunity to deal him a defeat. And the battles occurred on the 14th, the rear guard did not realize it was facing the French main army, while the main army did not realize it was facing a flank guard. In neither case were the Prussians able to use their forces effectively to create a force multiplier.

Waterloo

French--Support in the Converse: Inaccurate and untimely information, primarily due to breakdowns in command and control, ultimately caused Napoleon to allocate his forces ineffectively so that he could not create a force advantage. Although the French were able to create a force multiplier in their attack at Charleroi, their momentum was soon dissipated. In the opening phase of Quatre Bras, the lack of accurate and timely information left Marshal Ney to make his own determinations about whether or not to attack. This was not Napoleon's intent. Napoleon wanted Ney to take the crossroads; Ney held back instead, and did not seek out information on his own regarding the true enemy force dispositions. Because of this lack of information, the opportunity to use a local force advantage was squandered. When Napoleon shifted his weight to focus on the Anglo-Allies, his lack of information again led to similar results. Marshal Grouchy, the right wing commander, believed the Prussian forces were retreating along their national lines of communications, as expected. Because he believed that they were doing this, he did not seek out further information on Prussian force movements. This inaccurate information led him to be complacent, and he did not pursue the Prussians as Napoleon had expected. These two breakdowns in information timelines and accuracy, due primarily to failures in command and control, led to poor tactical executions which prevented the create of a French force multiplier, ceding the battle to the coalition.

Waterloo

Coalition--Support in the Converse: The lack of timely and accurate information prevented the Coalition from creating a force multiplier. At the beginning of the campaign, the coalition forces knew very little about the enemy force locations, and were dispersed. Wellington was almost completely ignorant of the French force locations and intent, as demonstrated by the fact that he and his officers were at a ball the evening of the first French attack at Charleroi. The Prussians were equally surprised by the French attack.

While the Coalition's situational awareness improved somewhat over the course of the campaign, at no point were they able to create a significant force advantage. The battle at Waterloo developed as a simple force-on-force contest, which Wellington won due to superior tactical methods.

(IV)   Commander's prioritization of the sources and mechanisms of information, based upon their past experiences, personality, and doctrine, affects a battle's decisions and outcomes.

Rather than assessing the various qualities of the critical information, this hypothesis seeks to assess how commanders prioritize the sources and mechanisms through which the information flows to them. The case studies provided numerous examples where certain commanders chose to interpret the information they received quite differently than might be reasonably expected. Similarly, it became clear that in addition to interpretation, the commanders prioritized the information quite differently, based on the presence of certain identifiable pre-existing cognitive constructs. These constructs originate from a variety of experiences which help shape a commander's beliefs and priorities.

The first contributing factor to these pre-existing cognitive constructs is the doctrine to which the commander is committed to carrying out. A force's doctrine predetermines the conduct of certain missions. Typically, the doctrine is in place and well understood by the commanders of those particular units well in advance of the start of hostilities. Doctrine also informs what kind of information is most critical to that unit's ability to operate at maximum effectiveness, and which sources are the most reliable or capable of providing the ideal types of that information.

Another contributing factor to a pre-existing weighting of these information sources and mechanisms is a commander's previous experiences. If a particular source has consistently provided information that has had a positive effect on the outcome of the battle, the commander will grow to trust that source. Similarly, if a commander consistently was misled by a particular source or mechanism, he will over time choose to ignore or at the least place the information at a very low priority. Past experience from personal contact with the enemy also influences prioritization. This can apply to a number of different variables that we use to judge an enemy's intentions. For example, there may be an enemy commander whose tendencies, no matter their specifics, become known and therefore can help predict his next move. Such observations can also hold for the nature of the enemy as a whole, in that their doctrine, strategic and operational objectives, and tactical proclivities can be understood as patterns begin to emerge over the course of the conflict. For instance, the Japanese penchant for launching complex pincer operations became so well known that US commanders began to expect them even when there was evidence that they were not being attempted.

The final major factor in the prioritization of information is the personality of the commanders themselves, a factor that will continue to play an integral part in the processing of information as long as humans remain a part of to the decision loop. This factor has the odd distinction of being the hardest point to assess yet the easiest to recognize. History is replete with examples of generals making the right decision without anything resembling situational awareness, instead acting appropriately through the power of their own military genius.

Case Studies – Support

Austerlitz
Coalition-Support: The coalition commanders at Austerlitz interpreted the information they gathered through the preconceptions they had developed about Napoleon's likely course of action. They believed Napoleon was concentrating in the north, expecting the coalition attack there, and neglecting his right flank. Napoleon fed this misconception by appearing frightened and weak, and by retreating from the Pratzen Heights. This convinced the

coalition leaders that they were right in their preconceptions, and led them to act accordingly.

It should be noted this was not the case at Ulm; Mack believed that the French would come through the Black Forest, but kept seeking information on other possible avenues of approach (via light cavalry arrayed to the north).

Jena-Auerstadt

French --Support: Napoleon had developed preconceptions as to the Prussian's likely course of action and capabilities even before hostilities erupted. He had conducted studies which indicated that a threat from King Louis of Holland would be considered credible by the Prussians (thus drawing their attention away from a southern avenue of approach) and that a Prussian mobilization would be very slow. As Napoleon gathered further information on the Prussians (as his forces moved forward), he began to develop more specific preconceptions. First, after the clashes at Hof and Saalfeld, he was convinced the Prussian main army was at Gera (based on his beliefs as to what their best strategy would be) and then again when he assumed the main Prussian force was at Jena (based on his visual observation of the enemy campfires and his opinion of the enemy's best strategy).

Jena-Auerstadt

Prussians--Support: From the outset, the Prussians held preconceived notions of what Napoleon would do. At first, they assumed he would remain stationary and dispersed in Austria. When it became clear (due to Muffling's reconnaissance mission and the defeats at Hof and Saalfeld) that Napoleon had deployed to the theater and was moving along the Prussian left flank, the Prussians assumed he would continue on a straight line of advance toward Leipzig. They held this preconception until after their defeats at Jena and Auerstadt.

Waterloo

French --Support: Napoleon prioritized his information based on his preconceptions. He believed his tried-and-true central position strategy would allow him to divide and conquer the enemy forces. With this in mind, he sought only supporting information and rejected information to the contrary. He believed the Prussians would retreat along their national lines of communications in response to his attack because he thought they were incapable of re-establishing different lines of communication. This preconception was bolstered by Grouchy's report that this was in fact what the Prussians were doing (even though they were not). However, Napoleon then received information from his brother Jerome that indicated the Prussians were concentrating to attack Napoleon's flank in conjunction with the Anglo-Allied operations at Waterloo. He rejected this information because he did not believe the Prussians were capable of realigning their lines of communication

Waterloo

Coalition--Support in the Converse: Preconceived cognitive constructs played a significant role in the Coalition's actions in the Waterloo campaign. The Coalition did not believe the French would attack in the north of France, instead believing the attack would be in the south (if at all). This was because they did not believe the French could mobilize as quickly as they did, and in fact believed that they (the Coalition) would have the initiative in the battle and be able to attack first. Due to this preconception, they sought very little information that might have disproved these ideas. Preconceived cognitive constructs also played a major role late in the campaign. After the initial French attack which sent the Prussians into retreat, Blucher insisted that his General Staff create new lines of communication (in contravention of their normal operating procedure of falling back on their national lines of communication) so that the Prussian force could reconnect with the Anglo-Allies. Blucher had given Wellington his word that the Prussians would support the

Anglo-Allies, and it was this determined mindset that brought the Prussians back to the field of battle at Waterloo.

Case Studies – Neutral

Austerlitz

French --Neutral: There is no indication that Napoleon accepted or rejected certain elements of information based upon a preconception.

(V) Split command structures reduce the dissemination of information.

The final hypothesis in this study shifts the primary focus away from individual commanders to the effects of an organizational structure on the dissemination of information. The hypothesis implies that the way a force is organized can have a significant bearing on how and when information is sent throughout the force. Furthermore, it posits that a traditional hierarchical structure with a single commander in charge will be more effective in operationalizing its information than will a structure with more than one commander. This holds true even if both cases involve the same forces, performing the same mission type, and even the same personnel in the command positions.

One potential problem with a split command structure is that formal mechanisms for communications are typically absent when more than one command structure is involved in an operation. Because such forces rarely train or operate together, there tends to be a lack of recognized methods for communicating. Another set of problems which arises in the absence of formal hierarchical relationships is the impact of situations involving personal dislike or service prejudices. Simply put, if commanders are not compelled to communicate with each other, then in some cases they can choose not to take the initiative and share information with a rival.

The implications of this hypothesis are thus fairly clear. When information is not disseminated in a timely manner, or to the commanders who most need it, the chances of a military defeat are increased. This defeat can take many forms: a blunder into an enemy trap, missing a precious opportunity, or being outmaneuvered or overwhelmed by an unknown enemy force.

Case Studies – Support

Austerlitz
Coalition —Support: Ultimate command was split between the Austrian and Russian emperors, though each used experienced field commanders (Gen. Mack for the Austrians, Gen. Kutuzov for the Russians). The split command caused serious problems in dissemination of information. First, the two armies were operating on different calendars (the Russian Gregorian calendar was two weeks behind that of the Austrians), and thus the Russians did not arrive when the Austrians thought they would. Second, the Russians were not notified of the degree of the Austrian defeat at Ulm until remnants of that army happened to reach the Russian forces as they deployed forward. Had the Russians known sooner of the Austrian debacle, they probably would not have moved as far westward (a move intended to support the Austrians) and would have instead forced the French to move to them, and thus stretching still further the extended French lines of communications. There were also language problems between the two forces which affected their performance on the day of the battle. The actual battle plans were not solidified until late in the evening the night before, after which they had to be transcribed and delivered to the various commanders. This led to much confusion, and some unit commanders did not receive their orders until after the battle had begun.

Jena-Auerstadt
Prussians—Support: The Prussian command structure was a split command in that it operated by consensus with several centers of authority. Brunswick was in formal command of the entire force and the main body of the army, but had to gain approval from the Council of War. The Council of War was a committee that operated by consensus and had no qualms about contradicting Brunswick. Brunswick's subordinate commanders sat on the Council of War, giving them the opportunity (which they often took) to undercut

their commander. Added to the mix, the King himself and his entourage was on the field of battle. The King's entourage often weighed in on decisions, despite the fact that they had no experience or expertise in military matters, and the King reserved the right to veto any decision or action. The confusion that resulted from this arrangement greatly inhibited the flow of information. First, the requirement for consensus in the Council of War made all decision making very slow, and no decision was guaranteed final. Old debates were constantly being reopened, and plans were often changed. This meant that orders and counter orders were flowing simultaneously through the command and control system, creating a great deal of confusion. There were also problems with subordinate commanders operating on the belief that the compromises made to Brunswick's plan constituted tacit approval of the their own plans, which they would then implement. This would place them out of position. In addition, the orders themselves were cumbersome. Because Brunswick had no corps staff, nor even a complete organization by divisions, he often had to write his orders in minute details, describing exactly which battalions and squadrons were to take which positions or outposts. These orders took a long time to write, a long time to distribute, and a long time to read--by which time they were often obsolete.

Waterloo

French--Support: For the Waterloo campaign, Napoleon created a split command structure, instructing his two wing commanders (Ney on the left and Grouchy on the right) that they had complete autonomy over their forces and could not be countermanded by anyone other than himself, and then only if he was actually present with them on the battlefield. This command structure had dire implications for the flow of information. At Quatre Bras, Ney did not move in force to take the critical crossroads, despite Napoleon's intent that they be taken. Napoleon assumed they had been taken, and Ney neglected to report back to him that they had not. On the right wing, Grouchy was instructed to destroy the Prussian force, but did not press the attack when he saw them retreating. Napoleon believed Grouchy was pursuing the Prussians, and that he no longer had to worry about them reappearing on the battlefield.

Waterloo

Coalition--Support: The Coalition's split command structure at Waterloo resulted in a reduction in the dissemination of information, causing delays in their defensive operations. The coalition was composed of Russian, Austrian, Prussians, and Anglo-Allied forces. The Supreme Allied commander (Schwarzenberg) was physically located with the Austrians on the Rhine because they thought this was where the French attack (if any) would occur. He was not located where Prussians and Anglo-Allies were located, which was where the action was. Thus, he did not give a single command during the entire battle (or even knew it was happening). In effect, this left Wellington and Blucher in acting control. Neither was subordinated to each other, and each commanded forces from different nations with distinct command structures. This caused several information dissemination problems.

First, the Prussians did not know that Wellington had separate political orders that impacted on his operational concept: he was instructed to defend at all cost his lines of communications, which included Brussels, Antwerp and Ostend. This led him to act defensively, which was out of step with what the Prussians expected, leading to misunderstandings while the Prussians were engaged at Ligny. Second, the split command required communications between the two forces to be conducted through liaisons that could cross the language barrier. This not only slowed the dissemination of information, it also caused problems in that the liaison officers sometimes felt the need to act as diplomats, toning down the sharpness of the wording of the communications so as not to

insult the other coalition partner. This often had the effect of downplaying the urgency of some requests.

Case Studies – Neutral

Austerlitz
French —Neutral: There was no split command. Command was centralized under Napoleon.

Jena-Auerstadt
French —Neutral: There was no split command. Command was centralized under Napoleon.

BATTLE OUTCOMES

For the purposes of this study, the following definitions for coding battle outcomes were used:

    (1) Decisive victory: An outcome that entails the complete destruction of the enemy's fielded force.

    (2) Victory: An outcome that entails the defeat of the enemy's fielded force.

    (3) Decisive defeat: An outcome in which the fielded forces are completely destroyed

    (4) Defeat: An outcome where fielded forces have been forced into retreat but still maintain some organization

Austerlitz
At the battles of Ulm and Austerlitz, the French were able to achieve a decisive victory and the Coalition experienced a decisive defeat. The Austrian forces at Ulm and the Russian and Austrian forces at Austerlitz were each enveloped and forced to surrender. This resulted in the cessation of Austria as an independent state, becoming dominated by the French Empire.

Jena-Auerstadt
The battles of Jena and Auerstadt presented another French decisive victory and Coalition decisive defeat. The Prussian forces were routed and pursued until they were totally destroyed. The Prussian monarchy was driven into exhile, leaving Prussia dominated by the French Empire.

Waterloo
The combined battles of the Waterloo campaign proved a defeat for the French and a victory for the Coalition. This was not a decisive victory for the Coalition because they failed to press their advantage and acheive the complete distruction of the French forces.

DEFINITIONS

Dominant Battlespace Awareness

A high level of awareness (~90% visibility) of friendly and enemy forces, and the environment. DBA is fundamentally about location relative to enemy/friendly locations.

Key Terms: Location, Present tense

MOEs:

- <u>Who</u>: Number of units, unit designation, unit performance history, command structure
- <u>What</u>: Status, readiness, and capability of units
- <u>Where</u>: Location of friendly and enemy units
- <u>When</u>: All related time data
- <u>How</u>: Doctrine, method of advance

Dominant Battlespace Knowledge

High confidence in the future (~95%), and an ability to act on it before the enemy can act. DBK enables commanders to predict with confidence where the enemy is going to be, and when they are going to be there. DBK is more subjective, relying heavily on the decision-maker and his/her confidence level.

Key Terms: Intent, location, environment, Future tense

MOEs:

- <u>Who</u>: Identity of commander, unit designation, unit performance history, command structure
- <u>What</u>: Status, readiness, and capability of units
- <u>Where</u>: Location of friendly and enemy units, supply lines and key logistics nodes
- <u>When</u>: All related time data
- <u>How</u>: Doctrine, method of advance
- <u>Why</u>: Intent

Decisive victory

An outcome that entails the complete destruction of the enemy's fielded force.

Victory

An outcome that entails the defeat of the enemy's fielded force.

Decisive defeat

An outcome in which the fielded forces are completely destroyed

Defeat

An outcome where fielded forces have been forced into retreat but still maintain some organization

SCALE

High -- Achieves the definition
Medium -- Broadly meets the definition but is either missing or mistaken on one key piece or aspect of information
Low -- Still understand major characteristics of the battlespace but lacking or misunderstanding several pieces of critical information

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