Operational Art on The Italian Front During The Great War

A Monograph
by

Major Robert C. Todd
Aviation

School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

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Major Robert C. Todd

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Approved by:

Robert M. Epstein, Ph. D. — Monograph Director

COL James R. McDonough, MS — Director, School of Advanced Military Studies

Philip J. Brookes, Ph. D. — Director, Graduate Degree Program

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ABSTRACT

OPERATIONAL ART ON THE ITALIAN FRONT DURING THE GREAT WAR by MAJ Robert C. Todd, USA, 44 pages.

This monograph is a campaign analysis of the operations on the Italian Front during World War I. The focus of the monograph is to determine if operational art was practiced by the belligerents from the time of Italy's entry into the war in May of 1915 until the surrender of Austria-Hungary in November of 1918. Before beginning the campaign analysis, the paper examines the background to the war for Italy and Austria-Hungary, defines operational art, and establishes the criteria to be used to determine if operational art existed.

The paper identifies three battles, the Trentino offensive of 1916, the Battle of Caporetto in 1917, and the Battle of Vittorio-Veneto in 1918, as examples of operational art. However, only the Battle of Vittorio-Veneto achieved the end state that the operational artist wanted. Understanding why Vittorio-Veneto was a complete success for the Italians, and why the Trentino offensive and the Battle of Caporetto did not produce the end state that the Austrians sought, provides lessons for future practitioners of operational art.

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I. INTRODUCTION

> "Yes," said Gino, "But those were Frenchmen and you can work out military problems clearly when you are fighting in somebody else's country."[1]

It was a front where men struggled for footing and breath as they fought battles above the tree line where ice lay over the cold stone. On this front the artillery shells splintered the rock and sent the fragments hurtling outward like so many darts of death. The weather was blazing hot in the summer and bitter cold in the winter. This was the Italian Front of World War I.

Soldiers in the Italian theater of war grappled for over two years in endless battles of attrition along the Isonzo river. They captured peaks, lost them, retook them, and then lost them again. The front moved a grand total of a little over five miles to the east in what was attrition warfare taken to the extreme. Then, in the miserable weather of October, 1917, the Austro-Hungarians, reinforced by their German allies, broke through the Italian lines near the village of Caporetto. They routed the Second Italian army, and pushed the front seventy-five miles to the west. Then they were stopped. The Italians held the line, rebuilt, and defeated Austria-Hungary in the Battle of Vittorio-Veneto, which ended the war for Austria-Hungary.

This paper searches for operational art on the Italian Front. It concludes that there were examples of operational art, but that something less than operational art usually prevailed.

Searching for operational art on the Italian Front is worthwhile because of the seemingly impossible and extremely limited strategic and operational choices available to the combatants, particularly to Italy. Compounding these difficulties were the problems of joint and coalition warfare. The cooperation between allies, or even just between national services, was a stumbling block for operational art. Discovering where imaginative application of operational art was successful on such a difficult front has direct application to today's operational planners who may find themselves facing situations that will require imagination and vision beyond what was needed, but seldom found, on the Italian Front.

It takes vision to apply operational art successfully to conventional war. Consider the additional challenges involved in applying operational art to peacemaking, peacekeeping, counter-insurgency, refugee relief, narcotics interdiction, nation-building, and who knows how many other types of yet unconceived campaigns. Some of these new types of campaigns may depend on tactical engagements, battles, and major operations. Other campaigns may totally exclude the traditional application of military power, and some will include both combat and non-combat operations.[2]

Commanders and staff planners will need imagination to apply operational art to these new challenges. Those without it may do the same thing their Italian Front counterparts often did when they could not find a good solution—revert to what Liddel Hart called a lack of intelligence that leads nations to "batter their heads against the nearest wall."[3] But all was not stupidity on the Italian Front. There were three battles, the Austrian Trentino offensive (May, 1916), the Battle of Caporetto (October, 1917), and the Battle of Vittorio-Veneto (October, 1918), that can teach quite a bit about operational art. The first step in understanding the operational art lessons of the Italian Front is to establish a clear understanding of the nature of operational art.

II. DEFINING OPERATIONAL ART

The relationship of policy, strategy, operational art, tactics, and doctrine can be compared to building a bridge across a sandstone walled canyon. One can view one canyon wall as policy and the other as doctrine. Anchored to the policy wall is a buttress representing strategy. The tactical buttress is anchored to the doctrine wall. The span between the buttresses of tactics and strategy represents operational art.

The operational art span must be strong enough to carry the load of victory. Its strength depends upon the proper construction of a span that is supported by tactical and strategical buttresses that are: (1) firmly anchored to solid walls of policy and doctrine; (2) aligned with each other through a proper balance of ends, ways, and means. Since this paper focuses on operational art, let us turn our attention to the details of the operational art span.

Operational art became an official U.S. Army term with the publication of the 1986 version of FM 100-5, Operations. FM 100-5 defines operational art as:

> the employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations.[4]

Operational art is the link between tactics and strategy, but it is more than that; it must be robust enough to sustain victory. We could join the tactical and strategic buttresses with anything from a rope bridge to the proper span. Part of the challenge to an operational commander is knowing what type of bridge he needs to build. There may be times when the operational art span is more than what is needed. When a single explosive filled truck destroyed the Marine barracks in Lebanon (October 23,1983) there was an immediate link between tactics and strategy that was strong enough to achieve the limited aim of forcing U.S. withdrawal from Lebanon. The action was not operational art, but it did sustain victory.

Operational art may not always be the right span to join strategy and tactics, but once a commander chooses it he should beware of operations that may superficially appear to be operational art when they are actually something else. The most pernicious of these is grand tactics because it so closely resembles operational art.

Jomini gave us the term "grand tactics."[5] Jominian grand tactics consisted of the art of forming good combinations and setting the stage for battle. A key to understanding Jomini's definition is to remember that his grand tactics applied to a single battleground. It was not a method of moving forces within

a theater from one battleground to another, but one of setting pieces in place beforehand to gain an advantage once the tactical contest began. Because grand tactics are so similar to operational art there is a danger that the operational commander may pick up the packet of plans containing grand tactics, and use them instead of the packet containing operational art plans to build the span.

Using grand tactics instead of operational art was common during World War I. This happened because the mass armies of the early twentieth century allowed Jomini's battleground of grand tactics to expand and fill an entire theater. General Tanker H. Bliss, U.S. army Chief of Staff in 1917, and later a member of the Allied Supreme War Council, saw an impossibility for imaginative strategic combinations if the initial war plans did not produce strategic surprise. This was a result of the impossibility of maneuvering the huge mass armies to create new combinations. The opponents would take positions that could extend across the entire theater of war. At that point the "theater, which is the field of strategy, then becomes one great battle-ground, which is the field of grand tactics."[6] This phenomena, brought on by the static front and massed armies of World War I, gave new life to grand tactics, and for the most part put operational art in abeyance.

Because building the right type of operational art span is critical, the ability to recognize operational art is essential. The FM 100-5 definition is a good starting point, but is not enough to ensure that the span is truly operational art. We need criteria that allow the bridge builder to recognize operational art and that will help ensure the strength of the span.

Since simplicity often has a beauty of its own, why not start with the Soviet method for defining operational art? The Soviets had a simple method for drawing the line between tactics, operational art, and strategy. They divided the three levels according to the size of the formations conducting the operations. Strategy was activity on a theater scale. Tactics was up to division level. Operational art encompassed operations by formations between division and theater level. The Soviets

sub-divided operational art into operational-strategic, for activities by units toward the theater end of the spectrum, and operational-tactical for activities by units toward the divisional end.[7]

Using size to define operational art has two major flaws: (1) the capability of given levels of formations is no longer constant due to continually changing technology and tactical innovation;[8] (2) actions of an operational level formation may be identical with those of a tactical level formation, albeit on a massive scale.

For our purposes the Soviet criteria for operational art are not sufficient. They provide no guarantee for the strength of the span. We need criteria that: (1) differentiate between strategy, operational art, tactics, and grand tactics; (2) provide a basis both for historical analysis and operational planning; (3) apply to conventional and non-conventional campaigns; (4) are concise enough to be useful.

The criteria that meet these requirements can be stated as follows:

Operational art is characterized by simultaneous and/or sequential, engagements, battles, and major operations that:

-are conducted to achieve strategic aims;

-are distributed across the breadth of the theater of operations;

-are conducted by more than one independent force. These independent forces may be ground, air, or sea;

-have a cumulative effect on the enemy;

-form a coherent whole when orchestrated by a commander with operational vision.[9]

These criteria are useful for a variety of campaigns, including non-conventional ones, by applying imagination to the meaning of engagements, battles, and major operations.

Now that we have established the criteria for analysis, we can turn our attention to the area of the Italian Front. The analysis cannot start with the actual start of hostilities in 1915, because much of what happened grew out of events that took place before the war.

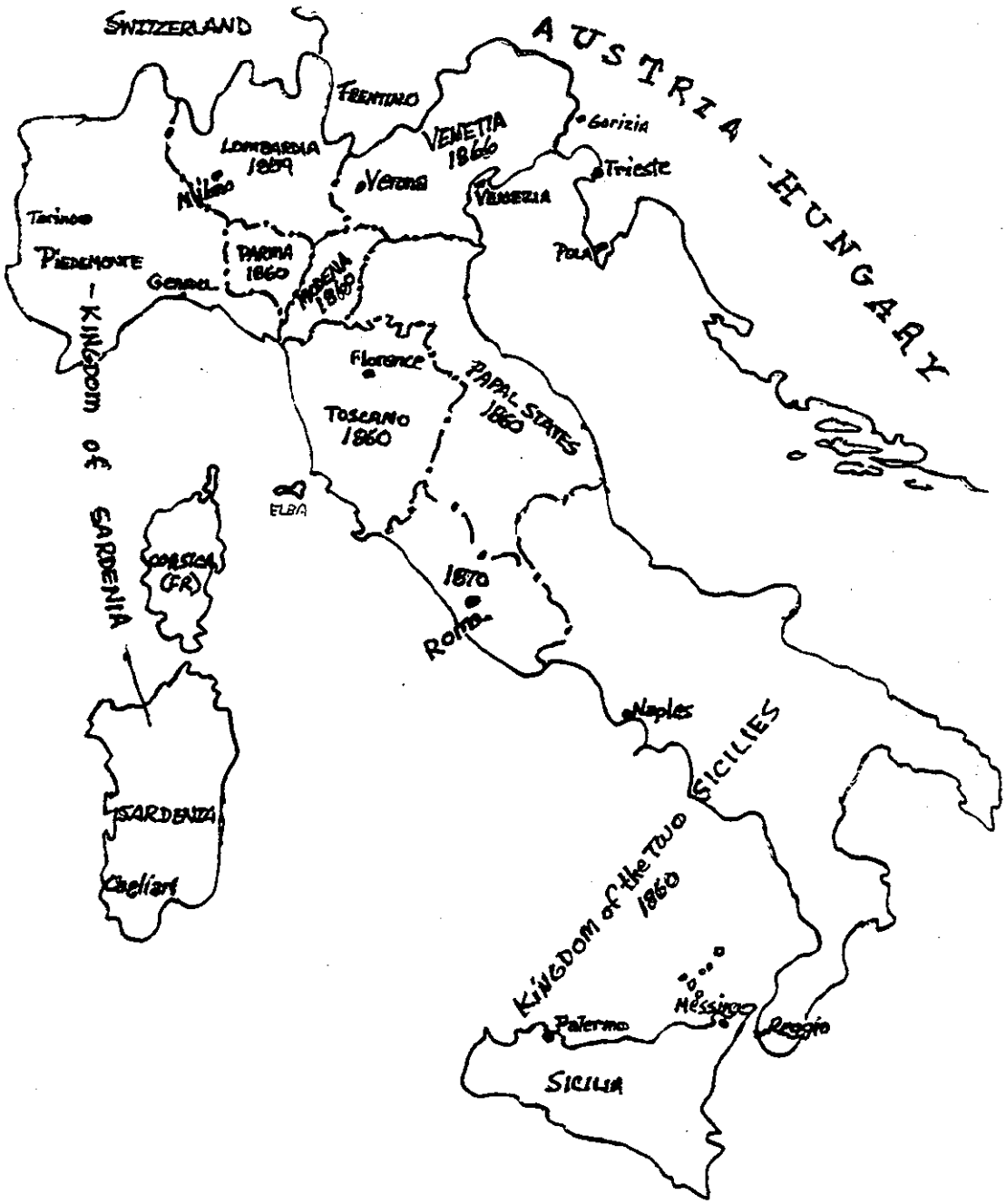
III. BACKGROUND TO WAR

Il Risorgimento (the reawakening) of 1859 marked the birth of the modern Italian state. The French defeated the Austrians and then gave the Kingdom of Italy the conquered regions. Garibaldi conquered the Bourbon kingdom of the two Sicilies (this kingdom included both the island of Sicily and most of the Italian peninsula south of Rome), and then willingly handed it over to King Victor Emmannuel II. When the first Italian parliament proclaimed the Kingdom of Italy in March of 1861 it included all present day Italy except the Rome region (occupied by the French), and the still Austrian provinces of Trentino, Venetia (the large province centered on Venice), and Trieste. Italy had the French to thank for a large portion of the country. Militarily the Italians had only defeated other Italians.

Italy allied herself with Prussia in the 1866 war between Austria and Prussia. Italy suffered defeats at the Austrians' hands on land at Custoza, and on sea during the Battle of Lissa. In spite of the humiliating defeats, the Italians got Venetia by the terms of the Treaty of Vienna. Once again, it was a foreign victory, not an Italian one.

Garibaldi attempted to take Rome from the French in 1867, but the French defeated him. The French finally left Rome in 1870, due to the Franco-Prussian War. Once the French left, the Italians successfully invaded the city. After the citizens of Rome voted to join Italy, the government moved the capital from Florence.

It took the Italians from 1859 until 1870 to complete the first part of the *Risorgimento*. The second part was still to come because Trentino and Trieste were still part of Austria. To Italians these areas became known as *Italia Irredenta* (unredeemed Italy).[10] There was frustration born of this first phase of the *Risorgimento*. Italian forces had only achieved victory against other Italians. All the victories against the Austrians were French or Prussian. Even the gaining of their



THE UNIFICATION OF ITALY

capital was due to Prussian victories against France. In 1870 Italy was a new nation without much faith in her tradition of arms, and with even less foreign respect for her military capabilities.

Italy tried to achieve great power status via the colonial route, but found frustration in this endeavor. France upstaged Italy when it grabbed the colony of Tunisia in 1881. Feeling threatened by the French, Italy joined an alliance with Germany and Austria-Hungary in 1882--an alliance that would still be in force at the start of World War I.

With Tunisia no longer a possibility Italy invaded Ethiopia in 1895. This adventure led to another Italian defeat at the Battle of Aduwa. The Italians were forced to recognize the independence of Ethiopia by treaty in 1896. They suffered further humiliation when a 1900 treaty reduced their holdings in the coastal area of Eritrea to only about eighty square miles.

Italy obtained Libya as a colony in 1912, after a war with Turkey. The Turks were unable to send forces to Libya because of Egyptian neutrality, but a small contingent of Turkish officers who managed to get to Libya and organize native Arab aid fought the Italian army to a standstill. The only positive military action was by the navy. The naval bombardment of the forts protecting the Dardanelles closed the straits. The closing of the straits caused the Young Turk led Ottoman government to fall because the Turks lost confidence in the ability of the government to protect the interests of Turkey and the empire.

By using an independent naval force Italy demonstrated effective use of operational art to accomplish strategic ends, but it was probably by accident. Italian forces operated across the breadth of the theater that stretched from Libya to the Dardanelles, and had used more than one independent force. The effect of the operations in Libya and the Mediterranean was cumulative on the Turks. There was no commander with operational vision on either side, but this time luck favored the Italians.

Italy displayed glimpses of operational art during the war with Turkey, but Italians found little pleasure in their army's performance. Most felt that the army took too long to gain victory.[11]

The last military action for the Italian army before World War I was when the government called out 100,000 soldiers in June of 1914 to put down workers' rebellions in northern Italy.

On the eve of World War I Italy was forty-four years old and had never won a real victory. She had received victor's spoils via treaties, but except for the Turkish War those spoils had always been won by someone else. The general Italian attitude toward their military was poor. Few politicians believed that the military could bring hostilities with another European state to a successful conclusion.[12] Former Italian premier Giolitti, speaking in 1915, captured the feelings of the Italian politicians toward their military when he remarked that "although the regular officers were as brave as any and technically prepared for war, 'the generals are worth little, they came up from the ranks at a time when families sent their most stupid sons into the army because they did not know what to do with them. '"[13]

The Austro-Hungarians did not question the efficiency of their military as did the Italians. The political leaders in Austria-Hungary felt that their army would prevail and by its victories solve the empire's financial problems, stifle internal dissent, and remove the threats to the borders.[14]

Austria may have had confidence in her armed forces but was not prepared for war with a major European power. Her military expenditures were only one-fourth of Russia's or Germany's, one-third those of Britain or France, and were even less than Italy's.[15] At the start of the war Austria planned on fighting Serbia. She did not dream when it all started that she would simultaneously fight Serbia, Russia, Italy, and Rumania.

On the eve of World War I, Italy, Austria-Hungary, and Germany were allies. When the Serbian crisis in the Balkans boiled over into war, the Italians invoked the clauses in their treaty with

Germany and Austria-Hungary that made it a defensive one that could not be used against Britain, declared neutrality, and set out to see who would give them the best deal.

From August 1914 until April 1915 the Italian foreign minister, Di San Giuliano, and his successor, Sidney Sonino, bargained with both sides.[16] Austria-Hungary agreed, under German pressure, to cede most of the Trentino to Italy after the war, but they could not match what the Entente was willing to give Italy. The generosity of Britain and France with Austrian territory knew no bounds. To this they added promises of territory on the Dalmatian coast, along with promises of imperial spoils. This attractive package more than matched Italy's irredentist goals.

IV. ANALYSIS OF THE ITALIAN FRONT

Italy ended its neutrality by signing the Treaty of London on April 26, 1915. The treaty stipulated that Italy would share in war indemnities, pressure the Pope not to initiate peace moves, and start hostilities within one month. The Allies promised Italy war loans, and strange as it might seem, protection from Austrian attack.[17]

A small group of men working in secret had brought Italy to war. Their war aim of acquiring territory was clear, but they did not know how to achieve that aim, or even if it was militarily possible. Prime minister Salandra gave the job of translating the national aim and his policy of *sacro egoismo* (sacred egoism) into a workable military strategy to General Luigi Cadorna.

General Cadorna had started on this translation when he rewrote the war plans in December of 1914. Italy had always planned a defensive war against Austria, but would now wage an offensive one. It would be offensive because Cadorna felt Italy had to defeat Austria-Hungary decisively enough to persuade her to give up parts of her empire. Cadorna saw Vienna as the only objective significant enough to cause the Austrians to lose the

will to fight. His plan was to strike toward Ljubljana, the capital of Slovenia, and once on the Ljubljana plain to turn north toward Vienna.[18] He assumed that the Austrians would not be able to reinforce the defensible terrain along the line formed by the Julian and Carnic Alps because of concentric actions by allies, particularly Russia.

Cadorna's fixation on the geographical point of Vienna, something that was probably never realistically attainable, effectively closed off Italy's other options to win the war. By focusing on the defeat of the Austrians in the field Cadorna ignored the lessons of Italian history that clearly favored other options over a decisive defeat of Austria on the battlefield.

Except for the Ethiopia fiasco, Italy had reached her aims without decisive victories, and even in spite of defeats on the battlefield. Whatever the Italian failings on the field of battle, her success in war settlements was outstanding. By fixing on an independent defeat of Austria on the battlefield Italy closed off what historically had been her most successful option; let your allies win it for you. In fairness to Cadorna the same factors arguing against pursuing a decisive battlefield defeat of Austria were the same ones arguing for it. The frustrations going back to 1859 demanded a decisive military victory over Austria.

The desire for a decisive Italian defeat of Austria meant that Italy would pursue an independent course during the war. She would neither receive or give much support in the way of troops or materiel. A total of six British and French divisions, plus 3,000 Americans, would eventually fight in Italy, but only after Italy was on the brink of total military disaster late in 1917. Italy's contributions to other fronts consisted of two large divisions sent to France late in the war.[19]

Cadorna's fixation on a battlefield defeat of Austria-Hungary closed the door not only on combined operations, but on joint operations between the army and the navy against targets along the Adriatic as well. This type of operation had succeeded in the 1911-1912 war against Turkey, but was eclipsed by Cadorna's driving urge to inflict a decisive defeat against Austria-Hungary in battle.

Italy would eventually mount a successful joint operation near the end of the war, but in 1915 the army and the navy were incapable of joint operations. There was no operational doctrine for navy or ground operations,[20] and it only follows that there was no joint doctrine either. The Italian fleet remained ineffective throughout the war, caught up in a Mahanian "fleet in being," mentality that paralyzed it because of the risk inherent when operating in the constrained Adriatic.

While Italy wrestled with the problems of working independently, Austria-Hungary wrestled with the problems of working with an ally. The Austro-Hungarian German alliance was an old one, dating back to 1882, and had included Italy until April, 1915. However, the age of the alliance did not mean that Austria-Hungary and Germany had developed an effective method of combined command or planning. Before the war, Moltke of the German General Staff welcomed Baron Conrad von Hotzendorf's, the Austrian Chief of Staff, (hereafter referred to as Conrad) initiative for increased staff contacts, but these efforts did not clarify mutual obligations or remove confusion.[21] Although they jointly recognized the need for coordinated operations, neither Conrad or Moltke did anything to strengthen combined planning.[22]

In spite of these prewar difficulties, when Italy entered the war Austria-Hungary had over ten months of experience in working with her German ally under wartime conditions. There were still many problems, but Austria-Hungary would practice a form of coalition warfare while Italy operated independently of her allies. Italian operations would often be hampered by concentric and parallel allied operations that would not happen as expected.

Italy declared war on May 23, 1915 against Austria-Hungary, but not against Germany. Cadorna's plan depended on speed, surprise, and the front staying mobile. Unfortunately for the Italians, the declaration of war before mobilization was complete alerted the Austrians. Even though the Austrians had started to reinforce the Italian Front as early as April, 1915, by May they still had only 100,000 troops to Italy's 875,000. To compensate

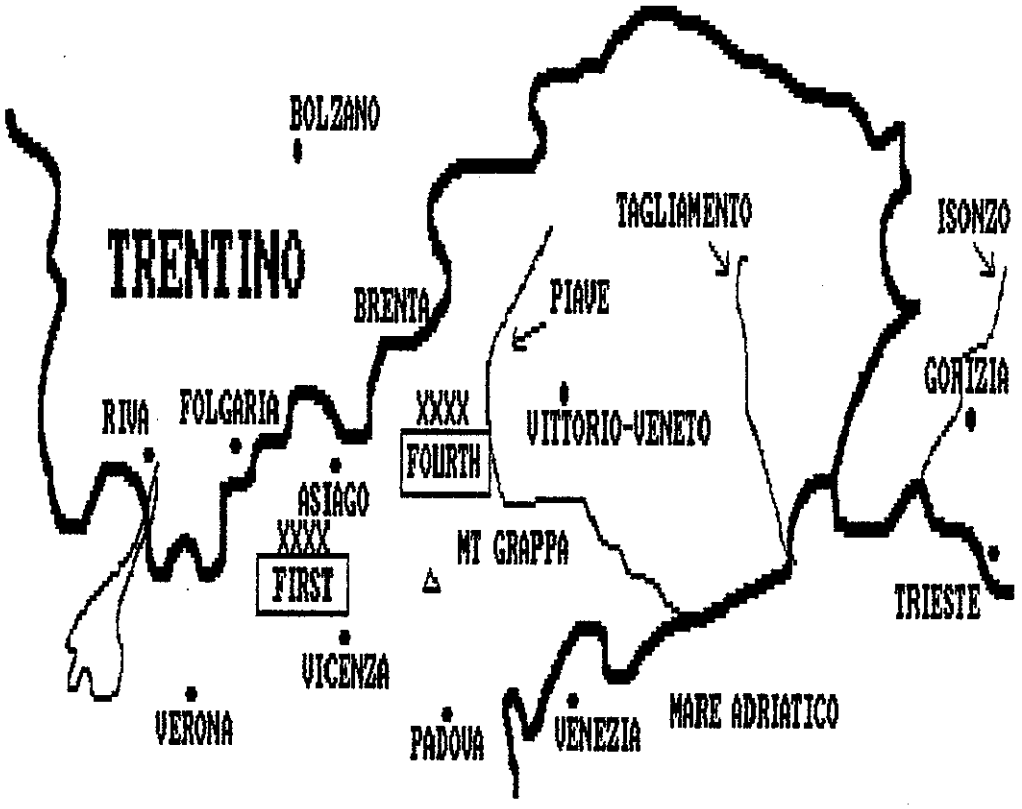
for this disadvantage Archduke Eugene, the Austrian commander for the Italian theater, used his geographical advantage of holding the higher terrain to compensate for his smaller number of troops.[23]

Cadorna's plan was to defend in the Trentino while attacking toward the Ljubljana plain, but the first Italian offensive action took place in the Trentino. The Italian First Army attacked the Southern sector toward Adige while the Fourth Army attacked toward Brenta in the Southeast. The Italian soldiers willingly pressed the attacks, but were hampered by ineffective artillery fire and general ineptness. The Austrians watched, undoubtedly with amusement, as brass bands advanced with the attackers.[24] The Austrians fell back to their fortified positions and held. Try as they might, the Italians could not dislodge them.[25]

While the First and Fourth Armies were experiencing the difficulties of fighting an uphill battle in the Trentino, the Italian Second and Third Armies moved toward the Giulian Alps. For the first two to three days their advances were unopposed, but their slow movement gave the Austrians time to reinforce the front with forces from the Serbian and Russian fronts.[26] The Austrian forces fell back from an indefensible line along the Judrio River to an excellent defensive line along the Isonzo. Italian attempts to force a bridgehead at Gorizia failed, setting the stage for a static front and attrition warfare.

The Isonzo front stretched along incredibly difficult terrain. Peaks towered 600 meters over the valley floors. The eastern end of the line was anchored on the sea. The western end of the line rested in mountainous terrain. Cadorna's plan did not anticipate a static front along this line, primarily because he counted on allied action to prevent the Austrians from reinforcing the front quickly enough to prevent a breakout onto the Ljubljana plain; this did not happen. Russia was unable to launch simultaneous offensive operations because it was tied down by the Central Powers Gorlice-Tarnow offensive. Serbia could have done something, but literally let the Austrian troops march under her guns on their way to the Isonzo front.[27] Another reason the plan failed was the slow-motion advance of the Italian corps

INITIAL OPERATIONS IN THE TRENTINO-MAY, JUNE 1915



commanders. The slow advances let the Austrians seize key positions that the Italians should have taken without loss.[26]

Cadorna's initial plan failed, and unfortunately for 600,000 sons of Italy who would lose their lives in the next three and one-half years, he showed no flexibility in seeking alternative means for victory. The Italians and Austro-Hungarians were faced off along the Isonzo, and the stage was set for some of the worst attrition warfare of the war.

Clausewitz warned that "separate campaigns in war must be viewed as linked engagements, each leading to the next. When this is not the thought process geographical points are viewed as having value in themselves."[29] Cadorna's original goal was to break through to Ljubljana--not because Ljubljana had intrinsic value, but because it would set the stage for continuing the drive on Vienna. When the Austrians stopped him at the Isonzo, Cadorna seemed to forget his original plan altogether, and focused on capturing the geographical point of Gorizia. The problem was that Gorizia was not a key to anything else.

Ironically, Cadorna's original plan met four of the five criteria for operational art. The planned campaign to take Vienna would have: (1) achieved strategic aims; (2) been distributed across the theater of operations with the offensive in the east and a holding action in Trentino; (3) used more than one independent force (the First and Fourth armies in Trentino and the Second and Third in the east); (4) had the potential for a cumulative effect on the enemy both from combat actions that would have directly affected the Austrian forces, and from the loss of territory that provided troops and economic resources to the empire.

What was missing was the fifth criteria; forming a coherent whole when orchestrated by a commander with operational vision. Cadorna did not really orchestrate the initial operations beyond mobilization. He did nothing to push for a rapid advance by his corps commanders, and in the end the operations did not form a coherent whole.

FROM: Thomas E. Greiss, ed. Atlas for the Great War. The West Point Military History Series. Wayne, NJ: Avery Publishing Group Inc., 1986.

The original plan lost whatever potential it had as a vehicle for operational art at the Isonzo. From the sea to the peaks the front was now just one battleground, and grand tactics, not operational art, were the order of the day.

The actions in the Italian theater after the fronts stabilized can be divided into six periods. The first period was from June 1915, when the Italians launched their offensive known as the First Battle of the Isonzo until the end of the Fourth Battle of the Isonzo in December, 1915. The second period was from the Fifth Battle of the Isonzo in March, 1916 until the end of the Austrian Trentino offensive in June of 1916. The third period opened with the Sixth Battle of the Isonzo (also known as the Battle of Gorizia) in August of 1916, and continued through the Eleventh Battle of the Isonzo (or Battle of Bainsizza), which ended in September, 1917. The fourth period began with the Battle of Caporetto, lasting from 24 October 1917 until November 11, 1917. The period of the war that was directly influenced by Caporetto extends until the beginning of the fifth period in June of 1918. The fifth period was the last Austrian offensive of the war, the Piave offensive in June of 1918. The final period of the war was the Battle of Vittorio-Veneto in October and November of 1918.

The first four battles of the Isonzo were battles of attrition, devoid of operational art. The Italians did not have enough artillery to create breaches in the Austrian wire. When the massed infantry surged forward they tangled on the wire and became easy prey for the Austrian artillery and machine guns. Italy was practicing what they called *Logoramento,* or war of exhaustion, against Austria.

The problem with this Italian version of a war of exhaustion was that it thought nothing of asking the people to sacrifice their sons, but would not ask them to make economic sacrifices. The realities of Italian politics for a war of exhaustion meant that the politicians wanted the army to produce results to gain public support, but were unwilling to provide the means if it involved economic sacrifice. Italy had entered the war of her own volition, it was in effect an "optional war" for her, and

governments fighting optional wars have a harder time maintaining public support than governments fighting wars their publics view as unavoidable. The government would not call up another class of conscripts to fill the ranks, or provide the arms and ammunition the troops at the front desperately needed. As an example, the Italian production of shells during the first period of the war was only 23,000 a day when the requirement was 50,000.[30]

The winter of 1916 was more of a fight against the elements than a fight between opposing forces. While the troops fought to survive the cold the Italian government did make some improvements in the army's capabilities by calling up the class of 1898 and increasing artillery shell production. Unfortunately there was no improvement in the stymied thinking of the Italian *Comando Supremo* to match the improved Italian efforts in the means of war. Spring of 1916 found Cadorna as much of an attritionist as when he started the First Battle of the Isonzo.

The second period of the war opened with the Fifth Battle of the Isonzo in March of 1916. Cadorna launched this battle in response to French requests for help with Verdun. It matched the pattern of the first four battles; heavy casualties for both sides with no significant shift in lines. It also illustrated the problem with disjointed coalition warfare. The Italians suffered many casualties to honor the French request, yet the Fifth Battle of the Isonzo had no bearing on Verdun. German troops were not fighting on the Italian Front, and there was little likelihood that Austrian forces would transfer to France.[31]

While his forces were stopping the Italian offensive of the Fifth Battle of the Isonzo, Conrad, the Austrian chief of staff, decided it was time to take the initiative. He had always considered a massive attack from the Trentino as the way to defeat Italy.[32] His plan called for two armies to sweep down from Lavarone-Folgaria to capture the rail center at Padova, and envelop the Italian forces along the Isonzo. This was an ambitious plan. Padova was over forty-five miles away; a significant distance for a front where the lines had not perceptibly shifted in a year of war.

Conrad's German allies disapproved of this plan, and did not provide any of the troops he requested. In spite of this, Conrad decided to pursue the offensive on his own. He transferred troops from the Isonzo and Russian fronts to the Trentino, forming them into the 11th Army with Archduke Eugene in command.[33] The thirteen divisions he took from the Eastern Front were the best Austrian units available. The weakening of the Austro-Hungarian forces in the east would result in success for the Russian Brusilov offensive that would begin shortly after Conrad launched his Trentino offensive.

The movement of fifteen divisions was hard to disguise. Cadorna knew an attack was coming and ordered the First Army Commander, General Brusato, to prepare. Brusato ignored the order. Why bother troops with preparing defensive positions in depth in a quiet area? Because of Brusato's attitude the Austrians achieved surprise when they attacked on May 15, 1916.

The Austrians surprised the Italians, but the friction of the difficult terrain in the Trentino and the arrival of Italian reinforcements from the Isonzo front slowed the offense. The advance may have been hampered, but the Austrians took Asiago by the end of May, and were still advancing at the start of June. Cadorna asked the Russians to help with an offensive in Galicia. The Russians responded with what became known as the Brusilov offensive.

By mid-June the Austrians were to Arsiero. They were nearly out of the mountains, but still over thirty miles from Padova. The Italians began to mount successful counterattacks, and held the Austrian offensive. Coupled with the Russian pressure it was enough to make Conrad stop the offensive. The Italians had held the offensive, but they owed a debt to the Russians for stopping it.[34]

The failure of the Trentino offensive was a major blow to Austrian morale. As Hindenburg put it, "the disillusion experienced through the failure of the offensive against Italy, which had been heralded with such exaggerated promises was profound."[35]

This offensive met most of the criteria for operational art. It had a strategic aim that could have put Italy out of the war. The actions were distributed across the theater of operations with a holding action along the Isonzo and an offensive in the Trentino. The actions were conducted by more than one independent force with the 11th Army operating in the Trentino while other Austrian forces held the Isonzo. The offensive would have had a cumulative effect on the Italians by cutting their lines of support to the Isonzo front and isolating the forces in the east. The campaign was well on its way to forming a coherent whole when Conrad stopped the offensive.

Conrad was disgraced by the failure of the Trentino offensive and the success of the Russian Brusilov offensive. This brings us to an important philosophical point; can operational art exist even if not successful? There are probably examples of operational art where the operation failed even when all the criteria were met. However, most of the time when operational art was needed, but the operation failed, it was because not all of the criteria were met. When the criteria are not met there is no operational art. For the Austrians during the Trentino offensive the criteria of a commander with operational vision was missing.

Conrad had a weakness of not seeing his own false assumptions.[36] He was familiar with the Trentino, but forgot about the snow. This oversight led to a postponement of the attack and a loss of total surprise. Only the obliging stupidity of General Brusato let the Austrians achieve any surprise at all. Archduke Charles went so far as accusing Conrad of developing an operational plan that ignored terrain.[37] The most significant failure of Conrad's operational vision was his inability to foresee a Russian offensive if he weakened the Eastern Front, for it was the Russian offensive that prevented the Austrians from reinforcing their success.

Conrad came close to successfully practicing operational art during the Trentino offensive. Unfortunately his lack of operational vision did not let him comprehend all the linkages of his actions.

When the Trentino offensive dropped off in June of 1916, Cadorna saw an opportunity for another offensive along the Isonzo. He used his advantage of interior lines (100 miles from the Trentino to the Isonzo for the Italians versus 200 for the Austrians) to move units back to the Isonzo to launch the Sixth Battle of the Isonzo, or Battle of Gorizia.

The Italians rapidly moved 30,000 troops, 57,000 horses and mules, and 9,810 trucks to the Isonzo front in eight days.[38] This rapid movement let them surprise the Austrians. After fifteen months of trying the Italians finally captured Gorizia.

The victory was significant for Italian morale,[39]but operationally meaningless. There were no objectives beyond Gorizia. The front had moved three miles to the east, but was static again.

After the victory at Gorizia, the Italians went back to beating their heads against the wall in an attempt to penetrate toward Trieste. The Seventh, Eighth, Ninth, and Tenth Battles of the Isonzo were repeats of the earlier Isonzo battles of attrition. The Eleventh Battle of the Isonzo, or Battle of Bainsizza, which ended on September 15, 1917, came close to producing the Austrian exhaustion the Italians sought.

The Eleventh Battle of the Isonzo may have been just another in a string of Cadorna's attritionist activities, but it set into motion actions by the Germans and Austrians that produced one of the most spectacular tactical victories of the war.

The Italians lost 160,000 to a loss of 100,000 for Austria during the Eleventh Battle of the Isonzo; all for an advance of ten kilometers.[40] The advance came perilously close to penetrating the last Austrian positions. The attack weakened Austria enough for Lundendorff to write that "it became necessary to decide for the attack on Italy in order to prevent the collapse of Austria-Hungary."[41]

For their part, the Austro-Hungarians wanted to continue to fight Italy on their own. Emperor Charles proposed that an offensive against Italy be done with Austro-Hungarian troops. He asked Germany for the loan of heavy artillery and for relief of

Austro-Hungarian forces on the Eastern Front. Lundendorff, Chief of the German General Staff, did not favor a purely Austro-Hungarian offense. His opposition stemmed from a lack of confidence in Austrian fighting ability, and concern that an Austrian victory against Italy might permit Austria-Hungary to make a separate peace and leave the alliance. His proposal was for a joint offensive with a quick push from the Isonzo River to the Tagliamento River, a distance of about thirty miles. He would provide six divisions for the offensive.[42]

The best chance of success would be to pick out a weak spot on the line that might permit strategic exploitation of a breakthrough. The choice of the weakly defended portion of the Italian defense near the village of Caporetto brought the principle of the line of least tactical resistance to the Italian Front for the first time.[43] Something other than attrition warfare was about to be sprung on the Italians.

Lundendorff's plan for the German-Austrian attack was to use the new infiltration, or Hutier tactics, to break through the Italian lines. These tactics, and more importantly, their development, are a valuable lesson from this theater of war. They illustrate (in the words of Lundendorff) "that tactics have to be considered before purely strategical objects which it is futile to pursue unless tactical success is possible."[44] In other words an operational or strategic plan is only as good as the probability that those "up at the sharp end"[45]can successfully carry out the plan. By improving their tactical capability through the development of new tactics the Germans restored the option of distributed operations across the breadth of the theater of operations to the commander, and reopened the possibilities for operational art.

Caporetto was not the first battle where infiltration tactics were used. The basic principles of what would become the German infiltration tactics were first used by General Brusilov of the Russian army in the summer of 1916 as a way to overcome an artillery shortage.[46]

Brusilov's infiltration tactics were the result of one commander attempting to overcome what he viewed as a short term problem. German development of similar tactics was more methodical. The German General Staff studied Somme, Verdun, and the Brusilov offensive. They concluded that the best way to overcome the impassable ground created by the artillery barrages was not to create the impassable ground in the first place. The attacker's difficulty in traversing the difficult terrain created by the artillery barrage had meant that the defender's reserves, who were moving forward over unbroken ground, could reinforce the front before the attacker could create an exploitable breakthrough. When they finished their analysis they created a tactical system very similar to Brusilov's. The difference was that the Germans knew why the tactics worked and would incorporate them throughout the army. What had been a serendipitous event for Brusilov would become German tactical doctrine.

Hutier tactics were characterized by the last minute approach of highly trained and briefed troops. This last minute approach restored surprise by dispensing with the huge massing of troops behind the front well in advance of an attack. The attacks opened with brief, intense, and accurate artillery bombardments on key positions. These short bombardments neutralized key points but did not create the morass of pulverized ground that the huge bombardments did. The initial artillery preparation was followed with attacks by specially trained *Sturmtruppen* (storm troops) using the new air-cooled machine gun, grenades, flame-throwers, and conventional weapons to penetrate weak places in the enemy line. The *Sturmtruppen* bypassed areas of heavy resistance (hence the term infiltration tactics). Their goal was to create a gap that could be exploited by the regular infantry, who would deal with the bypassed areas as required. The critical element of these tactics was to create a gap faster than the enemy could reinforce against it. Artillery would assist in slowing reinforcements by hammering all approaches into the area that the reinforcing units might use.[47]

General Oscar von Hutier gave his name to the tactics, not because he created them, but because he was the first German commander to employ them successfully. The Russians experienced what it was like to be on the receiving end of these new tactics in September, 1917 at the Battle of Riga, Latvia. The Germans broke the Russian lines, captured Riga within two days, and found the whole Baltic coast open to them. Hutier had proven that the new tactics worked.

There was a marked contrast between the Italian and German systems for developing tactical doctrine. The German system was methodical and provided a mechanism for disseminating new tactical developments throughout the army. The Italian system could best be characterized as every commander for himself.

The Italian General Staff was more concerned with active operations than with any long term analysis or tactical developments. General Cadorna's system was for him and his personal assistant, Colonel Bencivenga, to select items they thought interesting, and send them out to the field.[48] The individual commanders would then pick what they liked. This system provided no effective way of disseminating lessons learned since there was never any real analysis done.

Not all Italian commanders were lacking in vision or tactical innovation. Capello, commander of the Second Italian Army, had a good concept for defense in-depth. Badoglio, Capello's chief of staff, developed a plan to break up attacks with artillery and hidden machine gun fire.[49] Unfortunately, these ideas were not disseminated, and remained paper tigers. The lack of a system for distributing lessons learned was a serious handicap that was made worse by Cadorna's command style.

Cadorna warned commanders not to push beyond a point of culmination in their attacks, but then punished those who did not show exemplary aggressiveness.[50] He directed how the front should be held, but remained far from it. The in-depth defenses envisioned by Capello and Badoglio could not be used because Cadorna believed in a massed forward defense. The sad fact was that as long as Cadorna was in charge there would be no return of operational art on the Italian side; he simply never showed any evidence of operational vision after his initial plan failed.

The Italian *Logarmento* had come close to success in the Eleventh Battle of the Isonzo. The problem was that the Italians were only slightly less exhausted than the Austrians. Some Italian units had been in the front lines for over seventeen months without relief. The hardships of the front, combined with the horrendous casualties, had disheartened the Italian soldiers. The Austro-German forces would exploit this, and other weaknesses, during the Battle of Caporetto.

The Germans created the Fourteenth Army under General Otto von Below specifically for the coming Caporetto offensive. Von Below organized his army into four assault groups to cover the twenty mile wide sector chosen for the attack. The Austro-Hungarian Tenth Army was in the Carnic alps, and the First and Second Isonzo Armies were to the south on the Carso plateau. The Eleventh Army, under Conrad was still in the Trentino. The plan was for the Fourteenth Army to attack while the Tenth, First, and Second Armies supported with limited demonstrations. Conrad's mission was to keep Italian forces in the Trentino tied down.

If the Clausewitzian concept of friction can be thought of as the unexpected working against you, then luck must be a form of positive friction where the unexpected works for you. The opening phase of the Battle of Caporetto would find luck on the Austro-German side, and much friction for the Italians.

The attack started on October 24, 1917. The weather was perfect for infiltration with fog in the valleys and a light drizzle to conceal the movement of the German *Sturmtruppen*. The Germans opened with a six hour bombardment that used poison gas. The gas bombardment took advantage of the inferior Italian gas masks that provided only about thirty minutes of protection. The *Sturmtruppen* did their job well. They rapidly penetrated the Italian line, bypassed points they could not overcome, and opened the gaps for the infantry that followed close behind.

In the center of the assault General Freiherr von Stein's three divisions tore through the Italian Second Army defenses. Stein used the Twelfth German Division to wheel north behind the

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Italian Forty-sixth and Forty-third Divisions, and then had it wheel north again into the rear of the Italian Nineteenth Division while the Fiftieth Austrian division attacked from the front. The Nineteenth Division was destroyed, creating a huge gap in the Italian defense. The Twelfth Division then turned west again and penetrated to a depth of fifteen miles. The Italian IV Corps of the Second Army would not recover from the blow for the duration of the battle.[51] The other units of Von Below's Fourteenth Army enjoyed similar success.

The German attack quickly destroyed Italian battlefield communications, and with them, command and control. There was no way for the Italian command to orchestrate a defense, or even an orderly withdrawal. The tired and demoralized Italian troops of the Second Army were soon running, some literally for home. The rout of the Second Army meant that the Italian Third Army to the south had to withdraw to keep from being encircled. Italian forces in the Carnic were cut off as the Austro-German advance moved west.

By the end of the first week of the battle the Austrians and Germans were to the Tagliamento. The Italians tried to make a stand along the Tagliamento on November 2, 1917 but failed when Krauss gained a bridgehead across the river.[52] The Tagliamento had been Lundendorff's original planned limit of advance, but he chose to let the offensive continue under its own momentum. The pursuit of the Italian forces continued to the Piave. The momentum of the attack was gradually wearing down. Starving Austrian troops often were more interested in gorging themselves on the chickens and other food stuffs they found in the Italian depots than they were on pursuing Italians.[53] The advance had to contend with a road network blocked by retreating Italian troops and vehicles as the attack continued westward.

Throughout the early part of the Caporetto battle the Italians succeeded in holding Conrad in the Trentino. By the time Lundendorff decided to reinforce the Trentino to take advantage of the Caporetto success, it was too late. The poor rail net

hampered the movement of forces. When the reinforcing forces reached the Trentino it was no longer a salient threatening the rear of the Italian forces as it had done for so long.[54]

The Italian forces rallied and held behind the historically defensible line of the Piave. The Germans and Austrians captured over 250,000 prisoners. The Italians lost 40,000 killed or wounded and over 2,500 artillery pieces.[55] Caporetto was a brilliant tactical victory. The problem was that it put the Italians on the defensive line they had planned to use for the defense of Italy until Cadorna changed his plans in 1914. The Italians were now fighting in their own country, and no longer had the Trentino standing as a knife at their back. The stunning Austro-German success awakened the allies to the need for better cooperation. Six British and French divisions were sent to Italy where they played a minor part in holding the Piave. The allies also formed a Supreme War Council to coordinate their activities. This was not the full answer to their problems, but it was at least a start. Caporetto was a great victory for the empire, but it was a pyrrhic one, for it was their last great victory, and it was not the last battle of the war. The battle was a spectacular tactical success, but not a decisive success. Italy was not out of the war, but would use the defense along the Piave as a shield behind which she would rebuild her shattered forces and emerge even stronger than she was at the beginning of Caporetto.

When the Italians were fighting along the Isonzo the paucity of rail lines in the northeastern part of the country made logistics difficult. Behind the Piave the Italians had a well developed rail network. Their new position was one that the French had successfully used in the past to defend northern Italy. Once the Italians were on the Piave any time not used for further attacks by the Austrians and Germans was time the Italians used to rebuild their forces. The Piave would become a perfect illustration of Clausewitz's statement that "time which is allowed to pass unused accumulates to the credit of the defender."[56]

Did the Germans and Austrians practice operational art during the Battle of Caporetto? According to the criteria we have used for analysis the answer appears to be yes. Let us consider the criteria in turn.

Caporetto's strategic aim was to prevent the collapse of Austria-Hungary. Regardless of the long term consequences of the battle, it did remove the immediate threat of a Twelfth Italian offensive along the Isonzo.

Hutier tactics restored the operational commander's capacity to conduct distributed operations. The Austrians and Germans effectively employed the tactics to penetrate the Italian defensives and conduct a pursuit across the entire breadth of the theater.

The Germans effectively organized more than one independent force by forming the Fourteenth Army for the main attack and assigning responsibilities to the Eleventh Army in the Trentino, to the Tenth in the Carnic, and to the First and Second Isonzo Armies in the southern sector of the theater. Not only did the Germans organize more than one independent force they effectively weighted the main effort with the most capable forces, and used lower quality forces where they could still be effective.

Everything that happened in Caporetto had a cumulative effect on the Italians. As the Fourteenth Army advanced it not only routed the Italian Second Army but cut off forces facing the Austrian Tenth Army. Italian forces on the flanks of the routed Second Army had to withdraw to avoid encirclement.

Lundendorff and Von Below both seemed to have a clear vision of how to orchestrate the operation. From the initial attack until the Tagliamento they were working from a plan, after that they let the pursuit roll along under its own momentum. Still, it was a brilliant effort, and can rightly be called operational art.

So what was wrong with this example of operational art? If it was so great why did it in reality set Austria up for decisive defeat at Vittorio-Veneto, approximately one year later? What we see here is an example of a brilliant tactical success that eventually led to strategic disaster. We need to return to the

criteria to find a weakness. If this was operational art, as we have already determined, then why was the bridge not strong enough to bear the load needed for victory?

Recall that the buttresses of tactics and strategy were critical for the construction of the bridge. The Hutier tactics were firmly anchored in German doctrine and were clearly successful. We can eliminate the tactical buttress as the source of weakness. What of the strategic buttress?

Lundendorff committed German divisions to the Italian Front because he thought that Austria-Hungary was on the verge of collapse after the Eleventh Battle of the Isonzo. The strategic aim during the planning for Caporetto was to remove the immediate threat of another Italian offensive. During the planning phase the strategic buttress appears to have been aligned with the tactical means available. It was anchored to the Austrian policy of keeping the empire together, and to the German aim of maintaining the alliance.

Moltke said that, "no plan of operations can look with any certainty beyond the first meeting with the major forces of the enemy."[57] Usually this statement conjures up the thought of the commander reacting to difficulty, or to modifying his plan when things go wrong. At Caporetto Moltke's statement held true because things went too well. The Hutier tactics worked better than expected. The lead German elements got to the Taglimento, which was as far as Lundendorff ever dreamed of going, and made a successful bridgehead. Lundendorff was faced with dealing with the uncertainty of spectacular success.

When the Germans and their Austro-Hungarian allies reached the Tagliamento the original strategic aim of protecting Austria-Hungary from collapse was accomplished. At the Tagliamento the German-Austrian strategic buttress appears to have lost its anchor. If the purpose of the pursuit past the Tagliamento was to knock Italy out of the war, then Lundendorff should have seriously considered the means available before he let the offensive just roll along under its own momentum.

A bold strike by Conrad's Eleventh Army out of the Trentino to cut off the retreating Italian forces while simultaneously creating an anvil for the hammer of Von Below's Fourteenth Army, probably would have destroyed the Italian capacity to continue the war. But Lundendorff did not plan his initial dispositions for this plan. By the time he tried to move forces to the Trentino the sparse rail network meant that the transfer was too slow. The Italians had time to get across the Piave before a strike out of the Trentino could cut them off. Lundendorff had fulfilled Moltke's statement that "an error in the original concentration of armies can hardly be corrected during the whole course of a campaign."[58]

Lundendorff's other option was to reinforce the Fourteenth Army so that adequate force would be available, after the pursuit, to force the Piave crossings before the Italians could create a credible defense. Whether Lundendorff could have moved forces into the theater in time to prevent the Italians from holding the Piave line is pure conjecture because no additional forces were sent to the Italian theater until Austria transferred Eastern Front forces to Italy after Russia capitulated in March of 1918.

The strategic buttress for Caporetto started shifting on the canyon wall once the Germans crossed the Tagliamento. The operation started with a good balance of ways, ends, and means. The Hutier tactics (the ways), and the forces available (the means) created a tactical buttress that aligned well with the strategic buttress (the ends) of preventing an Austro-Hungarian collapse. At the Tagliamento the alignment began to shift. It was almost as if the strategic buttress were moving during the course of building the operational span.

Lundendorff, according to Liddell Hart, made the error of "not cutting your coat according to your cloth."[59] He did not accurately estimate the prospects for success. When success came he allowed the strategic aims to shift without a proportionate increase in means.

And so the "miracle of Caporetto" ground to a halt along the Piave with a purged Italy ready to defend, and a still tired Austria stopped on the eastern bank. The operational art span was not at fault; the strategic buttress was.

December of 1917 saw the end of actions directly associated with Caporetto. The Italians, bolstered by six British and French divisions, enjoyed interior lines. The troops had food to eat, and the Italian populace, startled into reality by Caporetto, was finally a nation at arms.

Things were not as good for the Austrian soldier. He may have had high morale after the Caporetto victory, but he was hungry. Austria-Hungary was slowly disintegrating. There were severe food shortages at home and on the front. After Caporetto horses began to disappear from artillery units.[60] The Austrian response was predictable; seek another victory to solve the troubles at home, and perhaps end the war.

After the signing of the Treaty of Brest-Litovsk in March of 1918 formally ended the war in the east, Austria-Hungary was free to deploy the bulk of fifty-three divisions, plus ten in reserve, against Italy. The force was not as formidable as numbers would indicate. These were hollow divisions without supplies. The supply situation was bad enough that the Austrians formed special units to distribute the materiel they hoped to capture.[61]

Austria wanted another offensive, and the Germans were pushing them to launch one. The Austrians would try another offensive, but from where? The Austrian commanders, Conrad in the Trentino, and Boroevic on the Piave, could not agree on a strategic plan. Conrad wanted to strike from the Trentino onto the Venetian plain. Boroevic favored a defense, but suggested a frontal attack across the Piave. Emperor Charles, a would-be strategist, resolved the dispute by dividing the forces between Conrad and Boroevic so that neither had enough strength for a successful offensive.[62]

The Austrians launched the Piave offensive in June of 1918. It was the Italians' turn to spring something other than attrition warfare on the Austrians.

The Italians knew that the attack was coming, and this time they did something about it. Artillery barrages rained down on the Austrian assembly areas, and Entente aircraft destroyed the Austrian pontoon bridges on the Piave. General Diaz, who had replaced Cadorna after Caporetto, had restructured the Italian defense into one that was flexible and had depth. The in-depth defense let the Italian reserves respond to what few penetrations the Austrians made along the Piave. While Diaz's defense stopped Boroevic's forces along the Piave, Conrad's forces from the Trentino were stopped by an effective British and French defense.[63]

The Austrian army that attempted the Piave offensive was the same one that succeeded so brilliantly at Caporetto. Even with the Germans gone one would think some of the knowledge from the victory would have carried forward. By dividing their forces between the Trentino and the Piave they did not create a clear main effort as they had at Caporetto. The Italians seemed to have learned far more from Caporetto than the Austrians did, but perhaps everyone learns more from their defeats than they do from their victories.

The Piave offensive only had a pseudo-strategic aim. By hoping that a successful offensive would solve troubles at home, the Austrians wasted the very army they would need for internal security to hold the empire together. Defeat during the Battle of the Piave sealed the fate of the Hapsburg dynasty. The Austrians resorted to a grand tactical type of frontal assault along the Piave when they should have refined the operational art of Caporetto. The operation did not have a cumulative effect of the enemy and was not orchestrated. Emperor Charles ensured a cacophony instead of a symphony by dividing the forces so that neither was strong enough to prevail.

After the Piave defeat desertions and mutinies in the Austro-Hungarian forces increased. By July of 1918, fifty-seven Austro-Hungarian divisions, with the combat equivalency of only thirty-seven, faced seventy Italian and allied divisions.[64] Time was still accumulating on the credit side for the Italians. Every

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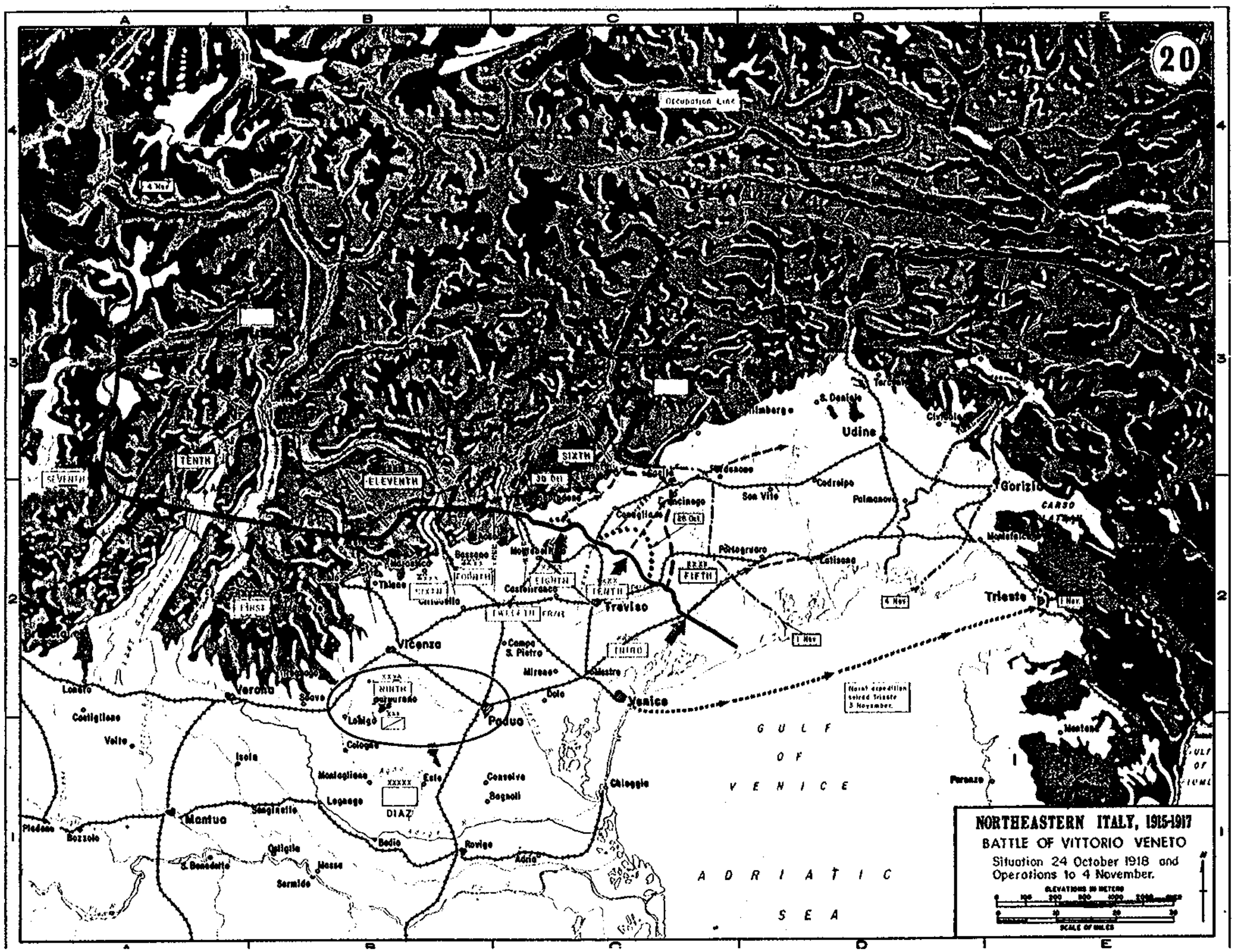

day that passed after the Battle of the Piave was another day of starving and suffering for the Austrian forces at the front, and another day of unrest and political disintegration for the empire. Italy took advantage of the weakened, but not beaten, enemy by launching the Battle of Vittorio-Veneto in October, 1918.

Vittorio-Veneto looms large in the Italian national psyche, as well it should. It was a decisive battle that defeated Austria-Hungary, and redeemed *Italia Irredenta*. It is also the most (only?) significant victory by the Italian army in the history of the nation, before or after.

General Diaz corrected the poor "lessons learned" system of General Cadorna with a system that analyzed information at the *Comando Supremo* level and distributed it to the army. The first fruit of this new system was a detailed analysis of the Battle of the Piave issued to the field in July of 1918.[65] The lessons learned during the Battle of the Piave would be put to use during Vittorio-Veneto.

The Battle of Vittorio-Veneto started on October 24, 1918 with attacks across the breadth of the theater of operations from the Trentino to the sea. The Austrians repulsed the initial Italian Fourth Army attacks along the Grappa, and sent some of their best units to the area. Diaz was not like Cadorna; he had the vision to see how actions linked together. The attack of the Fourth Army was drawing in the Austrian reserves, just as Diaz wanted.

On 26 October Diaz committed everything he had across the Piave. The Piave is a river with a strong current, and was in flood. Many of the bridges were swept away by the current, but by evening the Italian Eighth, Twelfth, and Tenth Armies had established some small bridgeheads. Air resupply replenished the forces in the bridgeheads when the bridges were destroyed. The Italian breakthrough started when the XVIIIth Army Corps, which had been in reserve, crossed the Piave on the Tenth Army bridge during the night of 27-28 October, and attacked along the boundary between the Fifth and Sixth Austrian armies. The Austrian Sixth

Army commander, facing a threat to his lines of communication, ordered a retreat to the second defensive line. The order for the retreat was the beginning of the end for the Austrians.

The fighting along the Grappa was still intense, but the Austrians were approaching exhaustion. Along the Piave the Italians were starting to pour across. By 1 November the Battle became an Italian race for territory. A naval expedition seized Trieste on 3 November. On 4 November, Italy and Austria-Hungary signed an armistice.

The Italian victory of Vittorio-Veneto owed much to the exhausted state of Austria-Hungary, but only after Italian forces had broken the front line defenses of the Austrian army. The rear elements of the Austrian army, particularly some of the reserve divisions of the Sixth Army, had refused to fight even before the breakthrough of the XVIIIth Army Corps. When the XVIIIth Army Corps broke through the Austrian defenses they capitalized on the demoralized state of forces in the Austrian rear, clearly validating Clausewitz's statement that "a threat to the rear can, therefore, make a defeat more probable, as well as more decisive."[66]

The threat to the Sixth Army's rear was one piece of a mosaic of operational art that General Diaz used at Vittorio-Veneto. Vittorio-Veneto meets all the criteria for operational art and the finished span was strong enough to sustain victory.

The strategic aim of Vittorio-Veneto was the defeat of the Austrian army, which in turn would end the war. Diaz believed that if the Italians could break through the Austrian defenses the demoralized army would not withstand the defeat; he was right.[67] The difference in the way Diaz pursued the strategic aim in contrast to Lundendorff or Cadorna, was that he committed the forces appropriate to the task. Diaz accepted a great deal of risk at Vittorio-Veneto by committing everything Italy had to the attack. The class of 1900 had already been called up; there were literally no reserves left.

Diaz had done much to improve the tactical buttress with an improved "lessons learned" program. The Italians were fighting as a combined arms team for the first time in the war. Artillery fire was observed and accurate. Cavalry exploited gaps created by the infantry. Air support kept the offensive going by resupplying the bridgeheads. The tactical and strategic buttresses were aligned and anchored; what was left to do was build the operational span.

The Italians conducted actions across the breadth of the theater of operations during Vittorio-Veneto. By distributing their operations they put the Austrians on the horns of a dilemma. When the Austrians mistakenly identified the Grappa as the main attack for the theater, the die was cast for successful operations on the Piave.

Vittorio-Veneto saw several independent Italian forces used to achieve success. The actions by the Fourth Army on the Grappa set the stage for the successful operations by the Tenth, Twelfth, and Eighth armies. Toward the end of the battle an independent naval force seized Trieste.

These independent actions had a cumulative effect on the Austrian army. The actions on the Grappa created exhaustion in the defending Austrian Sixth Army. When the Italians began crossing the Piave in force the Austrian Sixth Army had lost over forty percent of its effectiveness.[68] It could do nothing to help reinforce against the Italian breakthroughs. The use of cavalry to pursue retreating Austrian forces created additional terror for the demoralized Austrian rear.

The actions of Vittorio-Veneto formed a coherent whole under Diaz's leadership. By risking all for victory he ensured adequate force to cross the Piave and break the Austrian defense. He also understood that once he opened the offensive he had to keep the initiative and not allow the Austrians to concentrate against his concentration. Once the attack started he kept pressing it, in spite of the unfavorable conditions on the Piave. By continuing to apply pressure with the Fourth Army he denied the Austrians the opportunity to shift and concentrate against the penetrations along the Piave.

V. CONCLUSIONS

The Italian Front produced only three examples of operational art, and of the three only Vittorio-Veneto can be considered completely successful. Operational art was not the strong suit of this front; attrition was.

Cadorna's initial war plan had possibilities of becoming operational art, but he never orchestrated it into a coherent whole. The stillborn plan set the stage for bloody battles of attrition which proved that when you beat your head against the wall it hurts, even if you do dent the wall.

Conrad's offensive in the Trentino produced a glimmer of operational art. Unfortunately for Conrad, he did not consider the potential Russian response when he weakened his lines in the east by transferring forces to the Trentino. The Russian Brusilov offensive, coupled with strong Italian resistance, meant that the Austrians could not reinforce the Trentino offensive. Even so, the Austrians still came close to breaking out of the mountains and onto the Venetian plain. With a little better orchestration, and German support, it might have produced victory.

Caporetto is one of the most ironic battles in history because it was a tactical success, but a strategic failure. Lundendorff and Von Below created what should have been a masterpiece of operational art. They took advantage of a good system for tactical development and lessons learned to restore mobility to the static front. The downfall of Caporetto was when the strategic aim shifted during the battle. Failure to anticipate success may be as dangerous as not anticipating where a plan can fail. Once the means were no longer aligned with the ends the operation was in trouble.

By the time of the Battle of the Piave the Italians had learned some lessons about operational art. Benito Mussolini, writing in the September 12, 1918 edition of *Popolo d'Italia* pointed out that four years of war had shown the futility of tactical success that did not alter the strategic situation.[68] Diaz's improved defense, and his lessons learned system, set the stage for Vittorio-Veneto.

Vittorio-Veneto clearly demonstrates what operational art can do when there is a firm strategic buttress, and a properly constructed span. The contribution of Vittorio-Veneto to allied victory is underrated.

The Austrian army was defeated in the field. There was no doubt in the mind of Austria-Hungary that she was defeated. Lundendorff wrote in a letter to Count Lerchenfeld that at "Vittorio-Veneto Austria did not lose a battle, but a war, and herself, bringing Germany down in the ruins with her . . . if Austria had not collapsed, we could still have gained time and resisted without difficulty during the whole winter."[70]

There is a certain timeless quality about the nature of war in northern Italy. The alps will never be good armored terrain. The infiltration tactics of World War I closely mirror those infantry forces would use if called upon to fight in the same terrain today. Air mobility would add new dimensions, but an Italian *Alpino* (mountain troop) of World War I could probably quickly integrate into the *Alpini* of today. This means that the lessons from the Italian Front of World War I retain their relevance.

The Italian Front proved that a static front can become dynamic through the application of operational art. It also demonstrated that restoring mobility depended on developing sound tactical techniques, and that the key to developing these techniques was an effective system for analyzing and disseminating information. The Germans had a system in place before the war with their General Staff. Caporetto was the vindication of their system. The Italians did not create a system for analyzing and disseminating lessons learned until the summer of 1918, but it paid tremendous dividends at Vittorio-Veneto.

Lastly, the Italian Front teaches that operational art relies on strong tactical and strategic buttresses, along with a span that meets all the criteria for operational art. When ends, ways, and means, get out of alignment, even the best operational art span will not be strong enough to sustain victory. Caporetto was an example of the consequences of letting the strategic and tactical buttresses get out of alignment.

The Italian Front is an often forgotten theater of World War I, but one that has rich lessons in operational art once they are separated from the endless string of attrition that was the predominant characteristic of the Italian Front during the Great War.

ENDNOTES

[1]Ernest Hemmingway, A Farewell to Arms. (New York: Charles Scribner's Sons, 1957), p. 176.

[2]Lieutenant Colonel James M. Dubik, "A Guide to the Study of Operational Art and Campaign Design." (Unpublished manuscript. School of Advanced Military Studies, United States Army Command and General Staff College, Fort Leavenworth, KS, 1991), p. 5.

[3]Liddel Hart, Strategy. 1967. (New York: Meridian, 1991), p. 325.

[4]U.S. Army, FM 100-5, Operations. (Washington, DC: Department of the Army, 1986), p. 10.

[5]Antoine Henri Jomini, "Summary of the Art of War," ed. Brig Gen J. D. Hittle, Roots of Modern Strategy Book 2. (Harrisburg, PA: Stackpole Books, 1987), p. 494.

[6]Tasker H. Bliss, draft of article, Jan 1923 quoted in: Russell F. Weigley, Eisenhower's Lieutenants. (Bloominton, IN: Indiana University Press, 1981), p. 5.

[7]Christopher Donnelly, Red Banner: The Soviet Military System in Peace and War. (Couldston, Surrey: Jane's Information Group, 1988), p. 214.

[8]Richard E. Simpkin, Race to the Swift: Thoughts on Twenty-First Century Warfare. (London: Brassey's Defence Publishers, 1985), p. 24.

[9]Dubik, p. 5.

[10]James L. Stokesbury, A Short History of World War I. (New York: William Morrow and Co., 1981), p. 105.

[11]John Gooch, "Italy during the First World War." Military Effectiveness, vol I: The First World War. (ed. Allan R. Millett and Williamson Murray, (Boston: Mershon Center, 1988), p. 158.

[12]Gooch, p. 158.

[13]Gooch, p. 159.

[14]Stokesbury, p. 25.

[15]Gunther E. Rothenberg, The Army of Franz Joseph. (West Lafayette, IN: Purdue University Press, 1976), p. 172.

[16]Gooch, p. 158.

[17]Stokesbury, p. 106.

[18]Gooch, p. 166.

[19]Mario Carraciolo, Italy in the World War. trans. Modadore. (Rome: Edizioni Roma, 1936) p. 260.

[20]Gooch, p. 170, 173.

[21]Gunther E. Rothenberg, "Moltke, Schlieffen, and the Doctrine of Strategic Envelopment." Makers of Modern Strategy: From Machiavelli to the Nuclear Age. ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), p. 321.

[22]Rothenberg, The Army of Franz Joseph., p. 173.

[23]Stokesbury, p. 108.

[24]Rothenberg, The Army of Franz Joseph., p. 189.

[25]Stokesbury, p. 108.

[26]Carraciolo, p. 56.

[27]Carraciolo p. 22.

[28]Gooch, p. 166.

[29]Carl von Clausewitz, On War. ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1984), p. 182.

[30]Carracciolo, p. 75.

[31]Caracciolo p. 94.

[32]Rothenberg, The Army of Franz Joseph., p. 194.

[33]Stokesbury, p. 157.

[34]Hart, The Real War., p. 202.

[35]Caraciollo, p. 104.

[36]Rothenberg, The Army of Franz Joseph., p. 194.

[37]Rothenberg, The Army of Franz Joseph., p. 194.

[38]Caraciollo, p. 107.

[39]Caracciolo, p. 113.

[40]Caracciolo, p. 134.

[41]Hart, The Real War., p. 304.

[42]Rothenberg, The Army of Franz Joseph., p. 206.

[43]Liddel Hart, Strategy. 1967 (New York: Meridian, 1991), p. 175.

[44]Quoted in Hart, Strategy., p. 190.

[45]Stokesbury, p. 160.

[46]When the Italians asked the Russians for help during the 1916 Austrian Trentino offensive, Brusilov was the only Russian general willing to consider the Italian calls for assistance. He knew that he had materiel shortages, particularly in artillery, but sought a tactical solution to them. To compensate for his lack of artillery he used bombardments on specific strongpoints, followed by specially trained troops that would open the way for the infantry. Brusilov's tactics worked well in his sector. Unfortunately for the Russian offensive, adjacent Russian commanders did not conduct their supporting attacks. More significantly, Brusilov did not really understand why his tactics had worked so well. When the attacking Russians should have stopped and regrouped to use the infiltration techniques to penetrate subsequent defensive positions, they just kept on going. Furthermore, once Brusilov's artillery shortage was made up he discarded his new tactics.

[47]Larry H. Addington, The Patterns of War Since the Eigtheenth Century. (Bloominton, IN: Indiana University Press, 1084), p. 149.

[48]Gooch, p. 172.

[49]Gooch, p. 171.

[50]Gooch, P. 171.

[51]Cyril Falls, The Battle of Caporetto. (Philadelphia: J.B. Lippincott Co. 1966), p. 37.

[52]Rothenberg, The Army of Franz Joseph., p. 207.

[53]Hart, The Real War., p. 363.

[54]Hart, Strategy., p. 176.

[55]Stokesbury, p 247.

[56]Clausewitz, p. 357.

[57]Hajo Holborn, "The Prusso-German School : Moltke and the Rise of the General Staff." Makers of Modern Strategy: From Machiavelli to the Nuclear Age. ed. Peter Paret. (Princeton, NJ: Princeton University Press, 1986), p. 289.

[58]Holborn, p. 289.

[59]Hart, Strategy., p. 175.

[60]Rothenberg, The Army of Franz Joseph., p. 210-212.

[61]Rothenberg, The Army of Franz Joseph., p. 213.

[62]Rothenberg, The Army of Franz Joseph., p. 213.

[63]Rothenberg, The Army of Franz Joseph., p. 213.

[64]Rothenberg, The Army of Franz Joseph., p. 214.

[65]Gooch, p. 172.

[66]Clausewitz, p. 233.

[67]Caracciolo, p 209.

[68]Caracciolo, p, 213.

[69]Quoted in Caracciolo, p. 197.

[70]Quoted in Caracciolo, p. 258.

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