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Military Strategy

Captain A. J. Mahan, 1
Navy,

Six Lectures
on the
Military Strategy
of the
Campaign of 1796 in Italy.
An application to naval strategy.

Written at Annapolis, Md.,
about 1887.

This is the only copy located.
(W. M. L. L.)

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Contents: Lectures on Military Strategy
(6 lectures) Lecture #1

ARCHIVES OF NAVAL WAR COLLEGE
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Lecture No. 1.

INTRODUCTORY.

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of the red desk at the [unclear]

One of the first steps in imparting, or in acquiring, knowledge of any particular subject, is for the teacher to frame and the student to master accurate definitions of the terms, or words peculiar to the subject. Unless these terms, or words, have such fixed meanings and are mutually understood, wrong impressions are almost sure to be conveyed, and teacher and learner are in the position of men endeavoring to exchange ideas by means of a language which to one or the other is unfamiliar. I can remember the time when drills at the great guns were preceded by no systematic instruction in the nomenclature of the piece and its carriage. Of course, with the simple character of the weapons of those days, the guns' crews day by day picked up, as a child does, the meaning of words by constant repetition and familiar use. Nevertheless, there was a distinct loss of time from the failure to employ the more ^{logical} rational method of first imparting the names and terms to be used in the instruction.

By ^a the decision of the Board of the College, ^{for such a Board at that time existed} there ~~was~~ ^{was} been assigned to me ^{in 1892} as my particular branch, the treatment of Naval Strategy and Naval Tactics; with these is also associated, necessarily and formally, Naval History. I say necessarily, for Naval History is, in every age the handmaid of Naval Warfare. It contains the

records of naval experience, which upon careful study are found to verify and substantiate those general conclusions which are sometimes called the Rules, or Maxims, of the Art of War. These experiences of Naval War give the foundation, upon which alone, ⁱⁿ ~~at~~ all ages, a sound theory of War must be built. They serve also afterwards to illustrate those rules, or teachings, which I shall hereafter lay down more or less dogmatically. It is upon this ground that I justify the publication, by myself, of certain works upon Naval History, although that publication ^{was} ~~is~~ a departure from the sound general rule of the College, not to print its lectures. My own published works on Naval History are simply the lectures delivered here by me in previous years. They embody numerous illustrations, and are accompanied by critical analyses, which I must now use again, to support and elucidate the systematic teaching I propose to give. They are in truth foundations upon which my ^{intended} ~~coming~~ course ^{was} ~~is~~ erected; and, independently of other reasons for publication, the utility to ^{officers attending the College} ~~you~~ of having works with which the library has been purposely stocked, to refer to, exceeds in my opinion the harm done by parting with so much of our stock in trade.

Now name the books provided for reference

Before

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~~By~~ proceeding to the definition of general terms, or single words, there is one general idea concerning War upon which I wish you to start with accurate conceptions. War is frequently spoken of as a Science, The expression, closely considered and analyzed, is incorrect; and, like most mistaken phrases, it has far-reaching consequences, which may even result in a totally wrong and fatal bias to a man's military character. The Conduct of War, properly defined, is not a Science, but an Art. To us, who live in an age which prides itself above all others upon being scientific; to us, who, like all contemporaries, are inevitably and naturally affected by the spirit of the age, which we inhale as imperceptibly as we do the physical atmosphere surrounding us, it is important to keep this distinction steadily in view, otherwise we may start with a misconception, and, carrying it through ^a *investigation* our course, may be disappointed and injured by the failure to find, in our study, results of a kind which we at no time had a right to expect.

This idea, being really fundamental, must receive sufficient development ^{to} to ensure its being firmly grasped. Let us consider the distinction implied by the statement that the Conduct of War is an Art, and not a Science—that the expression "Art of War" is correct, while that of "Science of War" is incorrect—except when applied to such almost mechanical proceedings as the regular siege operations against a fortified place.

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What then is Art? and what is Science? using each word in the sense now attributed to it. What are the processes by which scientific men on the one hand, and Artists on the other, reach their respective results? Science, in our modern acceptance of the word, is built upon an extensive, and at the same time minute, observation of phenomena—of things which, as the word strictly signifies, can be seen with our eyes, or tested by our other senses—in the physical world around us. When these recorded observations are numerous enough, and are found to reproduce invariably the same sequences of cause and result, we have what is called a Natural Law, or a Law of Nature. Now, most of you doubtless know, yet it will do no harm to recall, that the word Law, when thus applied to the processes of Nature, is not strictly correct—any more than it is when used in the expression "International Law". The primary meaning of the word "Law" is a rule of action laid down by a superior—imposed by an external authority. This is not the case with International Law, for ^{no} nation recognizes ~~no~~ such ^{an} external superior. ^{Period} Similarly, in the eyes of pure Science, these so-called "Laws" of Nature are imposed by no external authority of which Science has cognizance. The Supreme Being, to whom theists ascribe the mode of Nature's operations, cannot be known by our senses. He is not among phenomena—things that do appear—and consequently concerning Him, or His existence, Science affirms nothing, for she knows nothing.

The so-called "Laws" of nature are simply the modes of action, the sequences of cause and effect which, having been by observation determined to obtain invariably, are for us as sure as though we knew their action to be imposed and maintained by an external, unchangeable, Almighty, authority. We can depend upon their action, and can base our own action upon them as certainly, nay, much more certainly than we can upon the most positive enactment of human authority. *Put not your trust in Princes or in any child of man is as true to the Student of Nature, as to the believer in God*

The character of these laws of Science, then—and it is upon this point that I wish to fix your attention—is their invariableness, their certainty, which to us is absolute. So great is our conviction of their invariableness, and our reliance upon their certainty, that if any marked interruption should take place in them, it would never occur to us to ascribe it to any irregularity in Nature's action, but simply to the fact that a cause had come into play of which we had hitherto been ignorant, but which we should hope to understand by further close observation.

So much for Science—for pure Science, if I may so call that part of the subject which is concerned only with observation and deduction, *induction — with* with the acquisition of knowledge through these means, — and with the enunciation of those processes which, for convenience sake, we will henceforth style without qualification *by my Collogium chairman* the "Laws" of Nature.

of Nature

We have further, however, the practical use of these laws for the furtherance of human purposes, a use which may not inaccurately be called Applied Science, and it is in this sense that the word "Science is frequently, and I am claiming ⁱⁿ⁻ accurately, applied to War.

For take the applications of the various sciences to our use—take Electricity in its applications to the telegraph, to lighting, to torpedo work—take the knowledge of materials, of the laws of strains and stresses, of equilibrium, applied by the builder in his work of constructing either buildings, or ships, or bridges—take Astronomy as applied to navigation—upon what in all these cases do we base the confidence with which we use our knowledge, and act upon the results? is it not upon the immutability of the ^{processes} actions which, in their aggregate, we call the laws of nature? Is not our reliance founded upon our experience of their changelessness? And when doubt enters—as indicated by the margin of safety allowed by the engineer or architect—is it not true that the doubt arises merely from the imperfection of our own processes, and not from any mistrust that Nature may swerve from her accustomed course?

The characteristic of Science, then, as applied to human action, is that it is based upon our experience of processes, which, however diverse in their modes of action, all agree in the one point of being ever the same—unchangeable as death. Human intelligence, in using them, can move neither to the right hand nor to the left of

the laws which govern their being and their action. Disregard these and they crush you. Whatever their origin-in relation to us they in their total~~ity~~ resemble a vast machine, which, however ^{ingenious or} powerful, is blind, purposeless, will-less, unrelenting.

Such is the ^{characteristic} ~~function~~ of Science in our modern sense of the term. Bound and swathed by the iron laws governing its materials, it is constrained in its applications also to an action which is forced, mechanical, soul-less. What, on the other hand, is the characteristic of Art, whether existing for itself alone, as in painting and sculpture, or whether it enters into the applications of Science, to bestow upon them some of its own beauty? What is the source whence Art springs? What does the Artist introduce into the work, the something ^{which} blind Nature cannot give, by which he renders it more convenient, more beautiful, more and more adapted to the uses for which it is intended? He brings into it Mind, the rational faculty, which, without disregarding the laws of nature-as indeed it cannot-yet moves among them with a freedom, an originality of conception, a fertility of device, which to them ^{themselves} are unknown. This distinction is essential, not factitious. Science is based upon the laws governing unintelligent matter; Art finds its seat in the mind, in that which differentiates man both from inorganic and from merely animated nature.

Let us illustrate by any of those arts to which the word

"Art" is more exclusively as well as more properly applied-Architecture-Painting-Sculpture.. In all these the mechanical action of the artist is conditioned indeed by the laws of nature, by the character of his materials. A plain, square house, utterly devoid of ornament or internal convenience, depends for its stability upon its conformity to natural laws, just as much-^{not} neither more ~~or~~ less-than does the most beautiful or the most skilfully contrived creation of the accomplished architect. The Painter and the sculptor, like-wise, in realizing their conceptions, must submit to the conditions- too often, alas, the limitations-imposed by the materials with which they work. These are the same for the veriest dauber as they are for a Raphael ; they are stamped and branded by that ^{stolid} ~~dead~~ immutability, of which Science boasts in the realm of Nature.

Yet how mightily does Art, the offspring of man's mind, akin to the divine source from which it springs, burst through these fetters. To realize it we must contrast the work produced by the artist with that of ~~one~~ to whom the special gift has been denied.

The materials are for both the same, whence the difference in the result? The knowledge of each may be the same, nay the knowledge naturally possessed by the artist may be less than that of his competitor. Each may conform to rule and technicality, yet in the work of one is recognized a something which the other lacks and which he may never have.

The something thus seen is the impress of mind, which however its results may be analyzed, itself escapes analysis. Of it may be said, as the Scripture says of the movements of the Divine Spirit, "we see its works but we cannot tell whence it cometh nor whither it goeth".

It is not however only in its completed action, nor yet only in the freedom of its movement, that the work of the Artist is seen to differ from the applications of Science. It is in its origin, in that strange mysterious movement preceding birth, which alike in the physical and in the mental realm we call "Conception!"

For take the finished work, the building, or the painting, or the sculptured figure, which, when seen, moves us not merely because we see it to be useful, but because it appeals to our emotions, elevates our feelings, or enobles our aspirations. Where did it begin, and what is the law of its being? We may not be able to trace it back into those hidden recesses of the ~~spirit~~ ^{the} being of man, where processes unseen save by the eye of God are at work - but this we surely may say: that there was a moment when thought in the Artist's brain quickened into idea, and that that idea there took to itself more and more of the man's mental substance, as the child in the womb takes to itself from the mother's substance, until in the artist's thought there existed his completed work, as really as the full grown man existed once in the unborn babe. Then, when the time is

full *Come*, and thought passes into act, and act leads on through hours of alternate inspiration and depression to the full fruition of the idea, is there not reflected the moment when a man is born into the world, as well as the after processes of his growth, through storm and sunshine, through prosperity and adversity, to perfect manhood.

Again, and lastly, how varying the result! And how varying the processes from Conception to Realization! It is a commonplace to remark on the infinite variety of the human face and form, the external characteristics which distinguish man from man, and the same difference is notoriously true of human temperaments, and experiences of the mind, as of the outer man. It is upon this last consideration that I wish most particularly to fasten your attention, for not only does it bring us round again to the point whence we started, closing the strain with the note with which it began, but it also is the most important of the features by which I seek to enforce upon your minds the distinction between Art and Science, which justifies, nay, necessitates, calling War in its highest manifestation ^{an} Art, and not a Science. We will not confuse ourselves by enquiring whether, tracing backward into the origin of all things, we may not find that Art and Science are ultimately one, but may accept the plain, practical differences which now force themselves upon our attention, and what do we find?

The Laws of Nature—and those, remember, are simply her methods of working, her operations, which Science makes her own, are stamped by unchangeableness, by monotony of cause and effect, unalterable by the will of man; the working of Art is distinguished by variety so great that infinite is hardly an exaggerated term by which to characterize it. Each production of Art, worthy of that name, has therefore the stamp of singularity—of originality, be it greater or less, and it springs as it were from no antecedent save the mind of man. It is, in short a creation—not merely an adaptation—realizing the distinctively Christian idea of Creation: "The things which we see were not made of things that do appear". The new thing, you will apprehend, is not the work itself, but the Artist's idea therein embodied, the soul which transpires through its material envelope; as God's thought shines through the natural creation.

I will not enlarge upon, though I must allude to, the vast variety of motives, conditions of its age or surroundings, which impel Art to its creations. For War these are found reproduced in the ~~the~~ variety and changes of weapons from age to age, in the varying character of the regions which are the scenes of war, in the temper and organization of the armies, in the complicated moral and political motives which affect the operations; for war, it must be remembered is simply a violent political movement, Having to deal

with such diverse conditions, War must frame conceptions equally diversified; so that every case is new, and every successful warlike conception, whatever its generic resemblance to others, is essentially a new creation.

There is one among the many complicated factors with which every general officer, who ought to be, in War an Artist, has to deal, upon which I wish for a time to arrest your attention. It was not mentioned in the list just run over, yet it is one that enters into and colors each and all; the most obstinate and refractory of the materials with which the Artist in War has to cope.

That element is Doubt--uncertainty. Doubt has a twofold operation. First, it introduces actually a number of unknown quantities into a War problem, giving it what Napoleon called a transcendental quality, resembling somewhat one of those algebraic cases where there are more unknown quantities than there are equations, or where a number of ^{ables} ~~variables~~ enter into a single mathematical expression. In this way Doubt induces many sources of error which may mar, and even render abortive, the conception of the ablest and most self-reliant of generals. Thus Napoleon, although in the end victorious, was at first beaten at Marengo, because, being uncertain as to the direction taken by his enemy in the endeavor to escape, and in order to intercept the retreat, he had so extended his lines, that at the point of conflict he was ^{error} ~~inferior~~ to the Austrians.

*Had I not better give a brief account of the war itself
preceded by one of the antecedent campaigns* 12

Had Desaix, who commanded one of his outstretched corps, served him as ill on that day as Grouchy did at Waterloo, the enemy would have broken through; and the campaign, so artistically brilliant in conception, and up to ~~that~~ moment in execution, would have failed of realization—would have been shattered, as the perfected labor of a sculptor might be by the accidental blow of a sledge hammer. The importance to a general officer, of accurate knowledge concerning all the elements of the problem before him is sufficiently understood, and is testified to by military and naval correspondence, as well by the elaborate means now provided for securing information. Few, however, pause to notice that, despite every effort, doubt remains; and that therefore the work of the general or admiral differs essentially from that of the Applier of Science, who recognizes doubt, not in the laws of nature by which he guides his calculations, but only in the processes of manufacture, the human element in his work, against whose errors he provides by a "margin of safety." The difficulties of the general are greater, more intricate, ~~more~~ ^{less} insoluble, and accordingly the faculty which grapples with them successfully is of a higher order—is Art, not Science.

In a second way Doubt affects the conceptions of a general officer, as well as his execution of his conceptions; namely, by the effect produced upon himself personally—a consideration total-

ly distinct from the errors into which the coolest judgement may be led, when reasoning from incorrect knowledge. This is what we commonly call moral effect. Napoleon's mistake at Marengo proceeded not from shaken nerves, or exaggerated apprehensions. It arose from inadequate information, and his reasonings thereon led him to a step which he knew to be risky to the verge of recklessness, which he could judge as accurately as any of his critics, but to which he was irresistibly impelled by his natural temper, ^{which,} ~~that~~ *to use what Nelson also called his own motto,* would have "all or nothing." He got all, by steadfastly pursuing an adequate strategic conception through every risk, trusting to his own powers and those of his officers to remedy any transient disaster. Unquestionably, he ^{on this occasion} carried riskiness beyond its justifiable limit; but it is more useful to us ordinary men to note that the failure, not only of ordinary, but of the most part of superior men as well, lies commonly in the opposite direction. "Every naval operation undertaken since I came to the head of the Government," said Napoleon keenly, "has failed, because my admirals see double; and have learned, from whom I know not, that War can be made without running risks." Yet his admirals were brave, not devoid of skill, scientific men according to the knowledge of their day. Nor was the trouble confined to his admirals—he found it necessary to caution his generals not to draw too heavily upon their imaginations in estimating the difficulties before them.* Don't make a

picture for yourself," was the pithy phrase in which he clothed this pregnant advice. Unquestionably, the power to stand thus unmoved before unknown dangers, and with steady hand to weigh uncertain conditions with the utmost accuracy, is born in its happy possessors. The greatest generals, like the greatest artists, are born, not made; but it by no means follows that among the great number of talented men the faculty may not be cultivated—improved—by efforts based upon reason and experience. I have been told by a gentleman to whom Sherman made the remark, that the latter said of Grant, "He is superior to me because I cannot get off my mind the anxiety concerning what the man on the other side of the hill may be plotting. It dont worry Grant." Yet all of you may remember Grant's vivid description of the apprehensions which beset him on his first expedition in independent command against the enemy. *He writes*

"I received orders to move against Col. Thomas Harris, who was said to be encamped at the little town of Florida, some twenty-five miles south of where we then were.

"At the time of which I now write we had no transportation, and the country about Salt River was sparsely settled, so that it took some days to collect teams and drivers enough to move the camp and garrison equipage of a regiment nearly a thousand strong, together with a weeks supply of provision and some ammunition. While preparations for the move were going on I felt quite comfort-

able; but when we got on the road and found every house deserted I was anything but easy. In the twenty-five miles we had to march we did not see a person, old or young, male or female, except two horsemen who were on a road that crossed ours. As soon as they saw us, they decamped as fast as their horses would carry them. We halted at night on the road and proceeded the next morning at an early hour. Harris had been encamped in a creek bottom for the sake of being near water. The hills on either side of the creek extend to a considerable height, possibly more than a hundred feet. As we approached the brow of the hill from which it was expected we could see Harris' camp, and possibly find his men ready formed to meet us, my heart kept getting higher and higher until it felt to me as though it was in my throat? I would have given anything then to have been back in Illinois, but I had not the moral courage to halt and consider what to do; I kept right on. When we reached a point from which the valley below was in full view I halted. The place where Harris had been encamped a few days before was still there and the marks of a recent encampment were plainly visible, but the troops were gone. My heart resumed its place. It occurred to me at once that Harris had been as much afraid of me as I had been of him. This was a view of the question I had never taken before; but it was one I never forgot afterwards. From that event to the close of the war, I never experienced trepidation upon confronting an

enemy, though I always felt more or less anxiety. I never forgot that he had as much reason to fear my forces as I had his. The lesson was valuable."

This was a case in which reason and experience, concurring with a temperament naturally cool, produced a marked effect upon the original disposition. Grant possibly, probably, fell short of genius; but this faculty of shaking off all merely imaginary causes of worry, enabling him to see things as in all reasonable probability they really were, must have conduced very largely to his great and deserved success. Its most striking manifestation, probably, was shown in the calm, well-weighed resolve, with which he decided to march by Vicksburg and come up upon its rear. As Sherman forcibly pointed out to him, in a memorandum drawn up with the express object of changing his purpose, he was violating, in the letter, the soundest and most universally acknowledged principles of warfare, by thus severing his communications and departing from his base. Grant replied that something must be done, and that to fall back to Memphis for a fresh start, as Sherman advised, would so discourage ~~our~~ ^{the Northern} people that they would abandon the struggle; but, while this was all true, the move he actually made with such brilliant success, was not a mere reckless doing something, no matter what. Surrounded as he was with doubt, and with imperfect information, he reasoned calmly that the country into which he was

Should also note the duty of the General to consider General condition of things in all quarters, including political

going produced in abundance almost everything that is meant by the word "communications," except ammunition. Of this he could take enough with him; and, as regarded his base, so long as the Navy held the river, he was never far from a base, upon which in case of reverse to retreat. We see then that in the midst of perplexities sufficiently grave, he did not increase his burden by those that were fanciful; he was able to see things as they were; and being practically of Napoleon's mind, though he may not then have recalled his words, that "war cannot be made without running risks," he was able to take one of the greatest responsibilities that a general has ever shouldered, not in the spirit of one who sees no risks, but of one who with steady judgement considers the advantage sought justified the risk incurred.

*Mention his advancing so as not a pt
contrary orders from Halleck*

The march through Georgia has received a picturesque notoriety, due perhaps mainly to the ease with which it was made, resembling rather a triumphal procession; but, so far as originality goes, the palm of cutting loose from a base is easily seen to be with Grant rather than Sherman. Grant did it before Sherman, and under circumstances of far greater risk. In fact, however, as regards our own war, the credit of originality in this line belongs rather to Farragut than to either of the generals. Let any one read the opinions of Porter and Farragut, ^{just before the taking of New Orleans,} with reference to the latter cutting loose from his base, ^{which was} the sea, and going above the forts

* Read these letters in appropriate context

and he will find, mutatis mutandis, an exact reproduction of the difference between Grant and Sherman. Porter's letter presents a graphic "picture," to use Napoleon's word, of all the evils that might follow such a departure from precedent. Farragut persists in his resolution because, dismissing from his mind all merely possible creations of the imagination, he looks at things as they are.

Like Grant, he says something must be done, "or else," to use his own words, "we shall be again reduced to a blockading squadron."

Then he fixes his attention on the things that will certainly result from running by, viz: the cutting off the forts from the city, and the support that the fleet will be able to give our army, (under Butler), which can pass through the bayous to the river bank above the forts, and there besiege them, covered by the ships. He determines therefore, as did Grant, that the advantage justifies the risk, and he takes it.

This attitude towards doubt, this purely moral courage, is a point in which most commanders fail, and in which Farragut was conspicuously strong; "The officers say I don't believe anything," he writes on one occasion. "I certainly believe very little that comes in the shape of reports. They keep everybody stirred up. I mean to be whipped or whip my enemy, and not to be scared to death." And again, as to taking risks: "I calculate thus: the chances are that I shall lose some of my vessels by torpedoes or the guns of

the enemy, but with some of my fleet afloat I shall eventually be successful. I cannot lose all. I will attack, regardless of consequences, and never turn back." How well this temper of mind served him, and how ill making a picture of difficulties might have served him, was abundantly illustrated in the celebrated instance of the passage of the Mobile forts, to which it is not necessary further to allude.

I have dwelt largely upon this one element--this one decisive particular difficulty--Doubt, the existence of which imposes the supreme test upon commanders-in-chief; and the conquering of which, therefore, rather than any intellectual accomplishments, not only constitutes the great general, but raises truly great captains, as they are called, to the highest level of human achievement. In point of power, there are no men greater than great captains. There may very possibly be better men, but there are none so mighty. They are creators, artists--and artists in the highest and most difficult of all arts, *face to face not with inert unconscious nature, but that, too, they are - but yet more with active foes.*

The paralysis that falls upon men naturally able and brave, through the influence of doubt, of imagination, of rumor, would be incredible were it not so well and so often attested. The wretched little tug, that paraded in the early years of the Civil War as the Ram "Manassas",--a veritable ass in a lion's skin, so slow that a Confederate officer who served with her, in writing to me



likened her, when steaming against the Mississippi current, to a turtle asleep on the stream, gave rise to a panic that still remains one of the most humiliating incidents of our civil war. The men who yielded to that panic need not be assumed below the average in physical courage. They have had their prototypes in every war and every generation. "The men who ran like sheep at Bladensburg," as was justly remarked in my hearing ^{not long} ~~a few days~~ ago, "were the sons of the men who fought in the Revolution and the grandfathers of those whose bones are scattered far and wide, on the thousand battle-fields of the Civil War." Those who succumbed at the Passes did so because they had not prepared their minds, and were dominated by an imaginary terror produced by rumor. If one of us will imagine himself suddenly confronted, on the road from here to Newport, by a hungry lion just out of a menagerie, he will be better able to realize the feelings of those who believed themselves attacked by a vessel against which they had no power of resistance, and to meet which they had not prepared their minds.

But for one man who flinches into terror or into flight under the influence of imagination, of doubt, of false reports, there are ten who fall into the no less fatal error of hesitating to act--fearing to advance--not daring to take risks. From this result absolute inaction, paltry and indecisive movements, hesitation to seize the opportune moment, to take the offensive; such are

the ill-fledged brood that spring from Doubt in a cautious mind; and these, rather than the rare exhibitions of cowardice, are the symptoms which have excited the impatience and wrath of the masters of war in all generations. "Admiral Hotham," says Nelson, "has no head for enterprise---and is perfectly contented if each day pass without damage to our side." "To say how much we needed Lord Hood last week is to say 'will you have the whole French fleet or no battle' " "Your lordship will bear me out now" he writes to Lord Keith, "in saying that if Admiral Hotham had done his duty in 1795, not a French soldier could have marched along the Riviera of Genoa."

So of the Baltic expedition in 1801 when he was second in command, " Our fleet is now, after the Battle of Copenhagen and the consequent armistice with Denmark, free to act against Russia and Sweden which we would ^{not} have done, although Copenhagen had been burnt, because Sir Hyde Parker was determined not to have Denmark hostile in his rear." "The difficulty," he says again, "was to get our commander in-chief either to go past Cronenburg (by the Sound) or through the Belt, because what Sir Hyde Parker thought best, and what I believe was settled before I came on board the "London;" (Sir Hyde Parker's flag-ship---he is speaking of the Council of War) " was to stay in the Cattegat, and then wait the time when the whole Naval force of the Baltic might choose to come out and fight---a measure, in ~~my~~ opinion, disgraceful to our country." As Parker

hesitated, and took council, on every report of difficulty or danger, Nelson's one reply was, "Let us go by the Sound, by the Belt or anyhow, only lose not an hour;" or, as he said to Parker's flag-captain, when wrought beyond the point of endurance, "I don't care a d--n by which passage we go, so long as we fight them."

~~That~~ ^{this} it was that ^{led} the great Frenchman--Suffren--to stigmatize Tactics as the veil of timidity." ~~That~~ ^{is} it was that led Nelson into those hasty utterances which have so obscured the true lustre of his military genius, so that men will ~~have~~ ^{he} it that owed all his success, and avowed all his skill to be, in "going straight at them." After chafing over the lethargy and caution of Hotham in the Mediterranean, and the moral cowardice of Parker in the Baltic, he may be excused for misleading exclamations from which ^{his own reputation} he himself has suffered most. A like exasperation may also be pleaded in extenuation of Napoleon's ill-timed gibe: "The English will appear very small when France shall possess two or three Admirals willing to die." It was not lack of physical courage, and that of a high order, which troubled the French Admirals, and above all the unfortunate Villeneuve, whose shortcomings elicited the sneer. It was the conjuring-up of contingencies, by an ill-directed and extravagant action of the mind, which paralyzed their faculties. Thus Napoleon wrote to Villeneuve "Europe awaits in suspense the great event which is preparing. Everything is anticipated from your

courage and your skill. I trust that you have already sailed from Ferrol, and sweeping all before you, will enter the English Channel where we anxiously expect you. Head boldly for the enemy. If you appear here ^{three days} should you be here but twenty four hours, your mission will be fulfilled. Never did a squadron for a greater end run a few risks, never could my seamen and soldiers shed their blood for a more sublime or a nobler object." But the trumpet-toned message reached a man who saw, not the great issues of success, but only the risks of failure, and he ^{accordingly} drew his picture: "At sea I found the winds steady at N. E., ~~he had~~ sailed from Ferrol--"and having stood N. W. for two days without any appearance of change,"--imagine a seaman broken-up because a head wind lasts two days--"having no confidence in the armament, in the speed or in the maneuvering power of my fleet,"--although it had recently fought with tolerable credit--"considering also the junction of the enemies forces,"--of which he could have no knowledge, as it only occurred on the day he gave up, and was also immediately destroyed by the British Admiral Cornwallis, who divided the fleet again--"considering the knowledge he had of all my steps since I reached the Spanish coast; these circumstances left me no hope of being able to fulfill the great mission to which the fleet was destined. By striving longer against contrary winds I should experience inevitable separations and irreparable damages--the Spanish ship San Francisco had already

main
 carried away her topmast , "--one ship you will notice out of twenty nine. "Convinced that the state of things was essentially changed since His Majesty's orders were issued--that the enemy was now in a position to thwart his plans--and that the concentration of the hostile forces was more considerable than at any previous time--foreseeing in this state of things no chance of success, I determined, instead of going to the Channel, to come to Cadiz." No wonder Napoleon exclaimed in a transport of fury, "What a navy! What an admiral! What sacrifices in vain! What hopes destroyed!"

A recent critic has remarked--in my opinion very truthfully: "It may not unfairly be said that the mental processes of Villeneuve--disturbed at the Nile, further disarranged by the harassing pertinacity of Nelson in two crossings of the Atlantic, and altogether thrown out of working order by the belittled victory of Calder--governed the question of attempted invasion." It is this same blight which smites all the careful preparation, all the professional accomplishments, of many an able man, and leaves him like the barren fig tree with abundance of leaves and no fruit--lots of knowledge, no achievement. "No one," bitingly said Marshal~~X~~ Soult, whose own general-ship stood vindicated by the rude proof of war, "no one could better talk about the Art of War, nor better explain its principles than could Marmont. History shows how far ^{he} succeeded in applying them."

War after war, as they opened, have seen the advent of men whose reputation, justly earned by diligent painstaking effort at professional excellence, has been like the green fields at the opening of summer. A campaign or two passes, and it is gone, smitten like the same fields by drought and mildew. Our own war is too recent to name names; and the memory, of those at least who are elders among us, will render mention unnecessary. What smote them for the most part was doubt--hesitancy--inability to take risks. Of one such, a person who knew him well, who had formed for him the very highest anticipations, said afterwards to me: "His defects, though partly personal, are also the defects of his training. Belonging to the Corps he did--the Engineers, his habit of mind is to be sure of each step, to know before taking up his foot just when he is going to put it down--to take no risks." He was in short a military man of science, not a military artist. He would have certainties, not conceptions. His margin of safety was large, large enough to be the grave of his reputation. "I passed by, and lo! he was gone.

I looked for him, but his place could no more be found." Let us be warned by such, if we can. Nature is strong. It is hard for the man naturally cautious to take risks--hard for him to feel assured that to stand fast in a position of seeming security may be of all possible courses the riskiest. But, if Nature is strong, she may be modified, or even overcome, by the combined action of Reason and Will. Let us seek to do so.

* Must not be here June 4
 unless time allows to Robinson
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Lecture No 2

MONTENOTTI.

Before finally dismissing our present discussion of doubt as a military factor, I want to draw your attention to the strong determining influence which it has upon the comparative advantages of the Offensive and the Defensive--for it is really ^Ddoubt, uncertainty, that puts the Defensive into the position of recognized inferiority with which it has been stamped by the experience of the ages. And here let me animadvert upon the pitiful confusion of thought, with which so many of our (public) men class together political aggressiveness and military aggressiveness. "We do not want a navy for purposes of aggression"--very good so far--"but," it is added, "for the defense of our own shores." I have had an intelligent civilian say to me: "I suppose what we really want of a navy is simply to defend our ports." I tried to enlighten him, but soon saw I was only convincing him of my own folly. Certainly a blustering aggressiveness is as ^{unbecomming} disgusting in a nation as in an individual; but when the political movement has culminated into war, then we want a navy to be as aggressive as we can--and we want a navy for aggressive purposes too, and not merely for the defense of our own coasts, which is ^{nearly} ~~about~~ as bad as leaving them defenceless. Let us transfer the conditions to ourselves as individuals. We are none of us, I hope, bullies; we are not aggressive, but respect others as we expect respect from them. But if we are attacked, as may happen, will we say: "I will not be aggressive, I will defend myself as best

Robinson's address last of Saturday June 2

I may, I will stop his blows, but on no account will I strike back.

I will not even be so aggressive as to destroy the cudgel with which he is trying to beat out my brains, nor deprive him of the pistol with which he wishes to shoot me." Yet that is no caricature of the utterances of many public men, advocates too of the navy, who by a confusion of thought fail to see that the aggressiveness, which is wicked as a national policy, becomes a virtue, when the appeal to arms has been sounded.

The defensive is at an immense disadvantage as compared with the offensive--even granting equal forces--because it does not know where the blow is to fall--it is in doubt. The offensive has, or should have, a definite plan, upon which it acts with full knowledge and undisturbed by doubt, unless the defense, as it should, deranges the plan and hinders its execution by offensive movements. For these reasons, as before said,--the greater the doubt, the greater ^{being} the difficulty--a really skilful defensive is a more meritorious exhibition of capacity than the offensive, because its difficulties are greater*. But, that granted, what is the method prescribed for the defense by the great minds of the past.

Is it to await attack? Far, far otherwise. It is to pass wherever possible, and as often as possible, to the offensive. "Neither a river, nor any line whatsoever can be defended," writes ^{wrote to Napoleon} Napoleon to Bernadotte, "except it have points whence offensive operations may

* Instance see in the Wilderness, Bonaparte in 1796 and 1811 - Great skill but necessarily for the time was to command eye but only failure 28

be undertaken; for, when you simply defend yourself, you have run risks without any chance of making gains, but when you can combine defense with an offensive movement, you make the enemy run more risks than he causes to the ^{body} ~~corps (or body)~~ which he attacks. For these reasons he commands the Marshal to throw bridges at certain points and to hold the far side by bridge-heads; so that, if the enemy move, a counter attack can be made in one direction or another

When this letter was written, in March, 1807, the French army was reduced to inaction by the winter weather, after the bloody battle of Eylau in the previous January. It was in the heart of Poland, holding the line of the Vistula, simply on the defensive against the Russians on the eastern bank, and in a position more critical than Napoleon again encountered, until the disastrous invasion of Russia in 1812. Yet what is the sea but a frontier? and in what does the ocean differ from a river except that the farther bank is a thousand miles away? and what are your ports but the bridge-heads, ^r through which your ship may issue to make offensive movements against the enemy. If, however, you will stand simply on the defensive, and keep your ships in port, you receive such harm as the enemy can do you and expose him to none, besides leaving him untrammelled and fearless in any operations he may wish to undertake, if he realizes that your purpose is simply defensive. *

The superb campaign of Napoleon Bonaparte in Italy, in

1796, had more than one phase; and during one of these phases, and that ^{longer} ~~larger~~ than all the others, for it continued nine months out of the twelve, he was on the defensive, holding the line of the River Adige; and here he ^{carried out} ~~precisely realized~~ the instructions which ten years later he gave Bernadotte in the letter I have read you.

It is the singularly brilliant character, and decisive results, of the offensive movements he there carried out, which have concealed the fact that he was there on the defensive---exactly as the United States would be on the defensive, if at war with a Power of decisively greater naval strength and resources. The most brilliant of his battles during that period, though in themselves incidents of offensive movements undertaken by him, were really an element of the defense; by which he protected the conquests made in the six weeks during which he progressed from the Gulf of Genoa to the Adige.

^{the proposed passage}
Let us here ~~hurriedly pass~~ over the leading features of this celebrated campaign, for they are of so instructive a character as to give more and sounder ideas upon the Art of War than many a profound disquisition. In putting it before you, I shall to the utmost of my ability discard all superfluous details, and try to bring out in salient relief the decisive features. ←

The campaign divides, as I have said, into several phases, of which we will particularize three, as the principal ones. First,

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Bonaparte, awaiting only that forward movement of the enemy which shall reveal to him their general plan of action, assumes the offensive rapidly, forces the enemy upon the defensive, and following up blow with blow, one strategic manœuvre by another, wrests a peace from Sardinia and drives the Austrians back behind the Adige.

To this period belong the battles of Montenotte, Dego, and Millesimo, the passage of the Po, the bloody struggle over the bridge of Lodi, the driving of the British Navy from Leghorn. Second, arrived upon the Adige, Bonaparte found his forward progress arrested; partly by the great length of the line over which he had advanced from his first base, ^{which it was necessary to protect,} but chiefly by the fortress of Mantua, which was immediately in rear of his position upon the Adige, and would therefore flank and menace his line of communications if he advanced further. ^{i.e. he would by advancing have communications both longer and much more exposed} These considerations, with some others of less consequence, detained him upon the Adige from about June 1, 1796 to February 2, 1797 a period of full eight months--during which the Austrians equipped and sent against him no less than ^{four} ~~three~~ armies, each superior to his own, and each resting upon a mountainous and difficult country--the Tyrol--into which Napoleon could not then follow them. In each case, however, he did not await attack, he went out to meet it, and himself attacked the enemy, profiting by the mistakes to beat them in detail. To this period belong the famous victories of Lonato, Castiglione, Roveredo, Arcola, Rivoli,

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and a host of lesser combats, whose glories as offensive movements have, as I said before, hidden the fact that they were part of a great defensive campaign. Third, Mantua having fallen upon the second of February, 1797, Bonaparte, five weeks later, on the 10th. of March, assumed the offensive, advanced along the comparatively plain country at the head of the Adriatic, occupying Trieste on the one hand; and then, on the other, penetrated through the gorges of the Alps as far as Leoben; upon his arrival at which place on the 10th. of ~~April~~, Austria yielded and signed a suspension of hostilities, which later became a peace. This third period, from one to two months long, was accompanied by constant fighting, but signalized by no great battle.

stages
Such are the outlines of this ever renowned campaign.

You may perhaps have heard the story that Marmont, one of Bonapartes favorite aides-de-camp, and afterwards a Marshal of the Empire, on one occasion said to the Emperor, "No campaign you ever fought has surpassed your first in Italy." Napoleon, it is said, admitted the truth, accounting for it by the fact that he had then comparatively few pre-occupations, and could give his whole mind to the fighting; whereas in later years his numerous cares, political and others, claimed so much attention that he could not afford to take the needed time to supervise all the details of the military movements.

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It will therefore repay us to examine, somewhat more particularly, but still in outline only, each of the three phases of a whole which this great master of war pronounced to be one of his master-pieces. It will be as it were our first lesson, an elementary object lesson, embracing several of those principles which we must hereafter embody in our formal system of strategy.

At the beginning of the campaign, when Bonaparte arrived at his headquarters, at Nice, on the 27th. of March, 1796, the position of the opposing armies was as follows: the French forces were distributed along the Riviera of Genoa, from Nice as far as Savona, trenching there upon the territory of Genoa, then an independent republic, and claiming a neutrality which received slight respect from either side when their ⁱ temporary interests prompted them to disregard it. The French were on the southern side of the mountain ranges known as the Maritime Alps and the Apennines, but they had pushed their advanced posts towards the crests of the range, and detachments occupied the passes.

North of the mountains were the combined forces of the Austrians and Sardinians. It may be well here to explain why these Italians, coming mainly from Piedmont and now engaged in defending it, whose capital, Turin, was in Piedmont, were spoken of as Sardinians. By an arrangement dating back to the beginning of the 18th. century, the House of Savoy, ruling in Piedmont, had received the island of Sardinia and been conceded royal rank, with the title of

Kings of Sardinia. Hence their people were called generically Sardinians, and indeed it was as Sardinians that they took part in the Crimean war, only forty years ago. The father of the present King Humbert attained the title and power of King of Italy.

The Austrians possessed the northern part of Italy, styled in a general way Lombardy, with the duchies of Milan and Mantua. Hence arose their interest in the region in dispute, to which, as well as to the general war against France, was due their presence in force at this time. The line of these combined forces extended from Voltaggio on the east (their left) to the river Stura; X the important river Bormida being the point where the Austrians, who formed the allied left, touched the Sardinians, who had the right of the line.

As regards numbers the French were decidedly inferior, having but 42,000 to a total of 52,000 opposed to them. This numerical inferiority did not, however, by any means measure the whole of the disadvantage under which they lay. Their resources of all kinds were inferior to the enemy's. The country they occupied was poorer, less productive--it was harder to feed their troops; particularly as the British navy held the sea, impeding the communications by water, and the land roads to France were narrow and bad. The beautiful Corniche highway of the present day did not then exist. On the other hand, Piedmont and Lombardy were rich

and fruitful, so much so that Nelson spoke of them as a gold mine for the French; and you may remember that Bonaparte, in his proclamation to the army upon assuming command, said: "Soldiers, I will lead you into the most fertile plains in the world, where rich provinces and great cities will be in your power!" The military supplies of the French were also most inadequate. After their first burst of success, the general again addressed them with truth, as follows: "Destitute of every thing, you have met every demand upon you. You have won battles without cannon, passed rivers without bridges, made forced marches without shoes, bivouacked without brandy, and often without bread." The allies on the contrary were well supplied, for they had the treasury of Great Britain at their back, while France was bankrupt.

Surely in such a condition of inferiority, if ever a man might await on the defensive, Bonaparte might. But no! like Grant before Vicksburg, he knew that something must be done. For three years the French "Army of Italy", steeped in misery, had held what he vividly styled the "sterile rocks" of the Riviera. France herself, covered with reverses in the last campaign, exhausted by a government at first fierce and then incapable, was at her last gasp. A few months of the defensive would end in military death. *

Let me here read you what is said by the accomplished and standard military authority upon these wars, for I wish to

* * Recall here (1st Lecture) that Austrians in 1796 were in Rhine.

make one or two applications of his words to naval matters: "The French general had given too many proofs of genius for us to expect to see him methodically guarding the passes of the Apennines and of the Maritime Alps by a line of posts;" that is, by dividing his total force into detachments, stationed in each of the passes.

"Rightly appreciating the advantages of an aggressive combined *(planned)* upon good principles," (this combination upon good principles is a very essential point to remember), "and convinced of the urgent necessity of striking a stunning blow at the very opening of the campaign, he resolved to take the initiative;" that is, the offensive. Now, how did he apply the principles of which Jomini here speaks? His reasoning was about like this: ~~He~~ had opposed to him the forces of a coalition, generally more or less **jealous** of one another; therefore, the point where they touched, but were separated by a rapid river, the Bormida, was probably their weak point; consequently, if they remained on the defensive, this would be the point to strike. If, on the other hand, they assumed the **offensive**, the probability from past experience was that the Austrians would cross the Apennines near Genoa, and advance along the Riviera against the French right---and this, I may remark in passing, was what actually occurred. In that case the allied centre would be weaker still, more separated, and remain the point for attack. If in the third alternative, the allies drew together toward their

Jugela

Indeeed he tried to induce them to do it by asking the Genoese permission to pass thro their city, and by pushing a brigade to Voltri. *Wm Ed.*

common centre, massing their forces to attack, here would be the point where the hardest fighting must be. "Thus," as Jomini sums it up, "under all hypotheses it was necessary to mass his forces towards Mount San Giacomo, between Altare and Montenotte, to be in a position to meet every emergency, and this was the course that Bonaparte adopted." (Jomini Vol. 8. p. 63).

Now I would like you to turn a little light from a naval stand-point upon this decision of the greatest of captains. You have here in Italy an inferior force—our own naval condition, though not so ^{gravely} ~~impotently~~ inferior as we are. Then you have between it and its field of action a number of passes, which on the one hand it is to defend, or through which on the other hand it is to issue. These correspond to our ports; points of great weakness, if undefended, and the issues through which the fleet must pass to the sea, its proper field of action.

Now, I ^{more than} remember several years ago, nearly ten years, I think, a paper by a naval officer of some considerable reputation, dealing with the question of coast defence of the United States.

How he calculated the total force which he thought necessary, I don't recall—nor is it here material; but the disposition he made of it was this: He distributed it with an impartiality really admirable among the different ports—~~one monitor~~ and so many torpedo boats to each, with perhaps a concession of two monitors to so im-

portant a place as New York. Of course, such an arrangement contemplated nothing but defense, pure and simple; for, granting that the enemy, admittedly superior, contents himself with masking the most of the ports with a force only equal to the one monitor each contains, there is no object for the monitor to leave the support of the fortifications to engage that equal force. The result at best is doubtful--and even if victorious, it is not to be expected that the victory will leave the monitor fit for immediate renewed service. People now-a-days dont fight for fighting's sake, but to accomplish something; fighting is a means to an end, and the less actual fighting you do to accomplish that end, the better fighter you are. "Two hundred years ago the great French admiral Tourville truly said: "A naval victory should cost as little as possible in blood, in wood, and in hemp;" from which it follows directly that a victory which is only a victory and accomplishes nothing is a dead waste of blood and material.

with truth
"The sterile glory," says the great military author Jomini, "the sterile glory of fighting battles for the mere pleasure of winning them."

If, instead of distributing his force, this [^]officer had *American* massed it in a single port, the result would be as follows, supposing of course the ports fortified: either the enemy must leave the other ports open for your use, or he must put before each of them a force which can scarcely be less than that required by the one monitor. If he then masks the several ports with small detachments, he does just what Bonaparte would have done, had he divided his

army among the passes of the Apennines. I am far from denying that the plan of the war, as for instance a blockade, may to some extent compel such a division; but I affirm that each one of those detachments is dreadfully jeopardized by the mere existence of the mass of hostile battle ships at a single point of the coast; for if that mass, or even a large fraction of it, escape—a contingency whose possibility naval history repeatedly exemplifies—any, and possibly every, one of them may be surprised and annihilated; while the surprising force has a refuge in the port for any one of its crippled ships.

Buller
I dwell upon this point again and again, for it is perhaps the most important and hardest to learn of all military lessons—Mass, and do not scatter. In the British naval manœuvres a few years ago, there was just such an experience; two ships left for the defence of a port (Liverpool, I think) gobbled by a superior enemy; but what impressed me even more was, that, some unprotected ports having been laid under contribution by the hostile squadron, a cry arose that this showed the necessity of increasing the navy, in order that every port might have one or two ships for its defence. It will be but little use to increase your navy, if that is the way you propose to use it.

This is not only a natural but a most insidious error; for, if I am right in the position here taken, which I hold to be

analogous to Bonaparte's action in 1796, I am also at variance with that very distinguished and accomplished officer, Admiral Colomb, of the British Navy. In his elaborate and extensive work entitled Naval Warfare, he discusses the operations of the French Revolutionary War--during which the French and Spaniards had their ships divided, for administrative emergencies, among their different ports--Toulon, Cartagena, Cadiz, Ferrol, Rochefort, Brest. Then, speaking of a particular occasion when the French succeeded in bringing forty ships of the line to Brest, he says (p. 172): "This combined return to Brest was clearly a false movement. The strength of the French strategic position consisted wholly in the division of the allied fleets in secure ports, whence, under direction from a central station, they could issue and strike in combination the isolated squadrons, which their presence in the different ports compelled us to keep in watch upon them. As soon as their fleet was concentrated in one port our danger had passed away, for we could concentrate too." The mistake made by Admiral Colomb--if it be a mistake, as I think--^{was} ~~is~~ in assuming the ease of forming a combination ^{at sea} and, after forming, striking an isolated detachment. If you don't mass your ships in one port at an early ~~date~~ period of the war, before the enemy has his grip on the coast, the combination becomes difficult and requires time. Suppose for instance that we had our fleet divided between New York, Boston, and the Chesapeake.

the enemy watching each port with a force superior to that inside, but ^{inferior} ~~inferior~~ to our total. We have first to ^{get} ~~put~~ out two or three detachments, then to combine them, and finally to fall on the isolated enemy. If ^{we} effect the combination, the enemy, if he knows his business, will have withdrawn from the several deserted ports and massed somewhere. But, if we have our navy already concentrated in one port, making of the others simply such nests of trouble ^{by concentrating in} as force the enemy to watch them, we have merely to run out the requisite force, without any need for a subsequent junction; and, if we move quickly, we want but six hours start to demolish a detachment which will have no warning of our escape.

Let us imagine Bonaparte in 1796 saying: "The strength of my strategic position consists in the manner I find my army disseminated at the moment of taking command. I thereby force the enemy to keep his disseminated. If I make the mistake of massing my troops, the enemy, as soon as he discovers it, will mass his also; and as he is the stronger, I shall be worse off than I was before."

The error would be ⁱⁿ ~~the~~ ignoring that the combination, or junction of his forces, is the most difficult part of the task of a general or admiral. Once get his forces together, he has them in shape for handling; and it is ⁱⁿ the fact that armies---and navies, too--- must scatter for subsistence, ^{or for maintenance,} and yet combine in order to fight, that ^{lies} ~~constitutes~~ the greatest strategic difficulty of generals, and

Taking voluntarily this extra strategic difficulty upon our
shoulders we subject ourselves justly to the fine sarcasm of
Jomini, speaking of an Austrian movement in this Italian Campaign.
"Behold," he says "the infinite pains taken to effect during the
operations the junction of two army Corps which could very
easily have been united before the operations began."

the overcoming this difficulty the greatest proof of skill. Napoleon once summed up the Art of War thus: "It lies in disseminating to subsist and concentrating to fight. I know no other." Simple in idea, but supremely difficult in execution, this maxim summarizes Strategy.

*It was owing to this that Nelson had only 27 ships at Trafalgar
Practice uponoulon*

But do not think, gentlemen, when I give you such an aphorism as this, even of the Great Captain himself, that I am presenting you with a boiled-down concentrated extract of the Art of War; much less that I ask your unreserved acceptance of any opinion of my own. Such a maxim as that of Napoleon, just quoted, abstains, for the sake of terseness, from mentioning those numerous and complicated considerations which make it so hard to translate precept into practice--considerations amongst which Doubt, uncertainty as to the facts, stands portentously prominent. Napoleon himself, as Emperor, though firmly seated in that central station of which Colomb speaks rather too glibly, found that it was far more easy to disseminate his fleet for its subsistence, than to concentrate it for battle. The work of combination overtasked even his ingenious mind and absolute authority. War is a tremendous game of skill and chance combined. The Artist, to recur to my definition, may form the noblest conception, his skill may be of the highest order, and yet the refractory and uncertain character of his materials may defy all his efforts, a chance slip of his

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instrument may destroy the work of months. So considered and so studied, the contest between two players, carefully followed, map in hand, as I am about to attempt for you, becomes of absorbing and deadly interest.

This has been a long digression, unquestionably--yet, if you can carefully recall our steps, we have really been viewing from several standpoints the single question of concentration versus dissemination, starting from the object lesson afforded us by Bonaparte, when, finding his troops disseminated along the Riviera, he proceeded to concentrate them near Savona preparatory to action.

Now, if concentration, massing your force, be best for you, it will also be best for you to force your enemy to the opposite course. This may be done by artifice, inducing him to scatter; as for instance, if France, when she took those forty ships to Brest, had left five in Toulon, Cadiz, and Rochefort respectively, with the object of inducing the British to watch each port with an equal or slightly superior force. Then, by evading the blockading fleet off Brest, which they were at times enabled to do, by weather or other circumstances, a squadron of any required size might descend upon these scattered detachments and wipe them out one by one. I will not now stop to talk about this, except to remark that unless you have somewhere, i. e. at Brest, a mass large enough to ^{over}empower the detachments, your little scheme loses much

* Bonny

of its virtue, and that in my opinion, pace Adm. Colomb, it is a poor resource to depend for your mass upon first getting two detachments out of two ports, and afterwards combining them. It is in the unexpected appearance, and in the rapid handling, of the mass you have concentrated, that much of its virtue lies. If Bonaparte, for instance, had formed his mass and waited, until the enemy finding out what he had done, formed another mass against it, he would have lost a great advantage. *This waiting the allies practised in 1800* This Colomb has in view when he speaks of massing the British fleet before Brest over against the hostile mass inside—but he forgets that the naval difficulty of getting your ships together from scattered ports, having to be done on the open sea, is what takes time—they save their time as compared with an army, by the rapidity with which they leave a port where they are already massed and reach another. In this an army is slow. As compared with ships an army combines easily, and afterwards moves slowly; the ships combine with difficulty and move rapidly; therefore, in order to save time, and ^{also} mistakes which may wreck everything—combine betimes.

A second and more satisfactory, because a more certain way of making your enemy scatter, is to force him to do so by your own measures, and this ^{was} the next step in Bonaparte's campaign of 1796. First, he massed his own army; next by rapid, skilful movements he separated the enemy and drove the two parts in different directions

so that they never again united.

The manner of execution was this: Bonaparte being prepared as we have seen, the first movement was made by the allies. The actual disposition of their troops was not quite that represented by the single line of regular width--it was even more faulty.

They had their heaviest masses at the two extremities of the line, so that ~~in~~ the centre constituted merely a weak curtain, to use Jomini's expression; a curtain^{too} that covered nothing, except so far as it imposed upon the enemy. Right opposite this curtain was Bonaparte's army massed in force.

The Sardinian general wished to draw the bulk of the allied forces towards their centre and to strike in mass against the French left; an excellent conception, for it at the same time concentrated their^{own} forces and struck at the enemy's communications, both fundamental principles of strategy; but the Austrian would not hear to it. He decided to cross the mountains to his left, by the pass called La Bochetta, near Genoa, in order to keep the French from that place and to get into communication with the English fleet. To do this he still further weakened his right, or the allied centre, and about the 9th. or 10th. of April he began pushing his troops across in heavy columns. At the same time his own centre began to move in support, but there was here the same difficulty that exists in getting ships together from two or more

ports--only much worse, because of the mountainous and difficult character of the region.

The first result of this movement was to separate the left wing of the allies from the centre even more than before, for the mountains were between them. Bonaparte was carefully watching, but would not interfere to stop a mis-step of the enemy so much to his advantage. As he said to his staff at Austerlitz nearly ten years later, when the enemy was making his fatal flank movement, weakening his centre to attack the French right: "Gentlemen, we must not interrupt the enemy when he is making a blunder, but has not completed it." Or as the Austrian Archduke Charles said to his lieutenant: "It doesn't matter if Moreau gets to Vienna, provided by so doing he allows me to beat the other French army under Jourdan, unsupported by himself." You have here, if you choose to tax your imagination, a striking and graphic picture of the game and the two players. The youthful general, barely twenty-seven, for the first time exercising high command in the field; ^{his piercing eye fixed} and ~~and~~ on the ~~other side the~~ aged Austrian, ^{his opponent,} eighty years old, with his honorable reputation on the point of being blasted.

As the latter advanced along the coast, he had reached Voltri, when he heard heavy firing in the direction of his centre.

That, coupled with the slight resistance offered to his advance told him that he had made a false move. He sought at once to repair

it, but war is unforgiving and his adversary was rapid as lighting.

He had given away the game. "The evil was already irremediable," says Jomini.

This is what happened. The French, on their ~~right~~ right and centre, fell back upon their central mass. At Monte Legino there was a severe and doubtful struggle, but the French held their ground till night, and were then re-inforced. The Austrians, having met little resistance, counted upon overwhelming the foe next day; but during the night and morning Bonaparte not only strengthened the centre but prepared dispositions on his left to turn the ^{Aust} enemy's right flank. These were concealed by a rainy, foggy day, and the renewal of the fighting on their front kept the Austrians' attention away from their right. Hence, when the struggle on the front was at its height, they suddenly found French troops breaking in on their side and rear, were forced to change front, and fall back to the eastward; thus opening and continually widening a gap, through which poured like a flood practically the whole French army concentrated in mass. You will understand that by that expression I dont mean packed like herrings, but so disposed that all parts were in mutual supporting distance, ready to move where needed.

Bonaparte did not surrender himself to the ^{engagement} ~~engagements~~ of victory. He pushed straight on unremittingly, giving the enemy no chance to recover and re-establish their affairs. I shall not of

course attempt to go through all the details of the fighting.

Suffice it to say that after six days constant struggle, keeping the enemy ever on the run, he had them so separated in space, so demoralized by defeat and confusion, and so weakened by losses that they were separated for good and all. They had lost 10,000 men, killed, wounded and prisoners.

Owing to the mountainous nature of the country and the way ~~of~~ the enemy had scattered his forces, these six days were marked by a great number of partial engagements at different points, which have given ^{rise} ~~use~~ to an impression that Bonaparte conducted a number of detached movements, with consummate skill; making them work together, much as a man might be imagined, however improbable the supposition, to drive six horses, and make them pull equally, without their being connected by a common harness. Jomini, however, points out that this was not so. Bonaparte's forces were kept together in one mass, which shot out detachments to the right or left as needed, but ever as a part of the one whole--resembling, instead of our six-horse simile, a man struggling in a fray, the whole of whose body lends its weight to his progress, as a single mass, while he shoots out his fists to the right or left, as required, and then draws them back to his body again. I beg here again to suggest you that my single mass of ships in one port corresponds to this conception--it sends out its detachments as

needed, but its aim is ever to recall them to the central mass.

The brunt of this fighting had fallen upon the Austrians; in fact the Sardinians, whose principal mass was on the right, had had little share, their attention being purposely occupied by movements prescribed by Bonaparte in their front.

Now, having been thus steadily beaten and driven for six days, the French general reasoned that they would need a few more to recover and reorganize; so he determined to utilize the time by attacking the Sardinians, forcing them apart from their allies, and compelling them to peace.

face to face, not with inert unconscious matter
though that, too, they are - but yet more
with active foes, perhaps their equal in
craft and strength, watching intently
to frustrate their most careful plans.

[Farrington p. 257]

CONFIDENTIAL

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Year

No.

Author: Mahan, Captain A. T. USN

Contents: Lectures on Military Strategy
(~~8~~ lectures) Lecture #3. Mondori, hodi, honato,
⁶ and Castiglione.

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U. S. NAVAL STATION, NEWPORT, R. I.

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To be returned

Lecture No. 3.

MONDOVI, LODI,
LONATO and CASTIGLIONE.

~~needed, but its aim is ever to recall them to the central mass.~~

Lecture III

Lecture IV 2 The brunt of this fighting had fallen upon the Austrians; in fact the Sardinians, whose principal mass was on the right, had had little share, their attention being purposely occupied by movements prescribed by Bonaparte in their front. Now, having been thus steadily beaten and driven for six days, the French general reasoned that they would need a few more to recover and reorganize; so he determined to utilize the time by attacking the Sardinians, forcing them apart from their allies, and compelling them to peace.

In giving this direction to his ^{next} effort Bonaparte disregarded the instructions of his government; but his reasons, apart from the political state of affairs---his military reasons, that is---were based upon a third principle of warfare, which now for a time dominates the course of the operations. This principle is the assuring of your own communications, which of course carries with it the converse of the proposition, viz: threatening or disturbing those of your enemy. This dictated Bonaparte's turning against the Sardinians---a clear headed, accurate, decision upon the facts immediately under his eyes; but it also lay at the root of the next grand step of the campaign, the superb conception of a genius, and executed with the delicate certainty of touch which characterizes an artist. To move against the Sardinians, because of their endangering his ^{own} communications, was, one may say, the practical common

sense act of a competent man of affairs, dealing with things as he finds them; but the method and manner of the blow at the Austrian communications was the creation of a master, who by the force of his genius brings into being things that did not exist—creates conditions that but for his initiative would not have obtained—; such also was his great conception at Arcola, six months later, which I shall bring before you in due course ~~of course~~ to-day or to-morrow, when the extremity of danger seemed only to fertilize his genius, and brought to birth a new creation of the utmost artistic merit.

The question of communications does not appeal as strongly to the naval mind ^{Soldier} as to the military. To the ~~latter~~ it presents itself not merely as a matter of daily sustenance, which it is, but also ^{as} a concrete and narrow question of controlling a particular geographical line, or perhaps two or three lines. We in the navy, on the contrary, are accustomed to have on board provisions for weeks; we do not expend ammunition at any such rate, in proportion to our carrying capacity, as an army does; and as for roads, if you put a ship on any point of the sea, and say that she depends on one port, or on two ports, for supplies, you can draw half a hundred lines by which she can go to the supplies or the supplies come to her. Nevertheless, the difference is at most one of degree, not of kind. Your half hundred roads may be open to you, but un-

luckily they all meet at the port; and if you are dependent upon one port, your enemy dont need to watch the roads elsewhere than there--and if you do have large supplies of food and ammunition, (though by no means so large as formerly), the question of coal consumption is pressing and tremendous--the greatest of all problems before the modern naval world--and the question of coal-renewal, pose it how you will, is simply a question of communications. Therefore the observing of Bonaparte's dealing with this question of communications, and its effect upon him, may repay our study.

You will observe that Piedmont is surrounded by mountains with difficult passes, and, being itself occupied by an army hostile to the French, the communications of the latter were confined by land to the narrow strip between the sea and the mountains. This line was long, narrow, and by bad roads; it had therefore almost every defect, but it was all the French had, except the coasting vessels of the Riviera, which were impeded by the British cruises. Now, in the relative positions occupied by Bonaparte's army, when massed, and ^{by} ~~of~~ the Sardinians, the latter were on the flank of this line of communication, and separated from it only by the difficulties of the mountains, and by a curtain of French troops, as thin as that opposed by the allies to Bonaparte's attack on their centre.

Omit
You see here again in the relative position of the oppo-

Cut out this page -
and substitute this :

" But Beau lieu repeated
suggestion to do this ;

So Bonaparte turned upon
the Savinian ———

Wm. L.

~~the~~ Collis

nents, how absurd it is to lay down rules for war--to think you can bring it under hard and fast dogmas like those of science. What was to prevent the Sardinians bursting through the curtain before them and laying a hold on Bonaparte's communications which would have forced that general to retrace his steps--and undergo all the moral disaster of a retreat, with perhaps the physical disaster of retreat cut off and supplies intercepted.

*Note
and the
M. Parker
heavy
in his
war*

Conquering soldiers must live--even though they be heroes; and although Bonaparte's force was superior to that of the Sardinians alone it was doubtless also in need of reorganization. What saved the game for the French was not the physical conditions of the problem, but the ignorance of the Sardinians^{*} general as to the conditions, his inferiority as an artist to Bonaparte, the moral force and audacity of the latter, and his firm grip--intuition, genius, instinct, call it what you will--his firm grip upon the principles of warfare, which revealed to him what to do and gave him the power to act with a celerity that made thought and act blend into a single process.

Why

So Bonaparte turned upon the Sardinians

You have here in fact an instance of doubt in all its forms, ignorance,

moral bombing & controlling one ground and wooden under foot by the other

** It is hardly fair to lay the blame for this on Colli in view of what was said on page 45 of the last lecture. W.M.C.*

5-3
±

to destroy them before the Austrians could recover from their paralysis and cooperate with their allies. I shall not attempt to tell the story in detail - it was again a succession of detached engagements, depending all upon a concentrated ^{and central} mass wielded with Bonaparte's consummate energy: The result, favored by the inactivity of the Austrians, was that the Sardinians, driven to the wall, asked an armistice which Bonaparte granted upon condition of their placing in his hands the three fortresses of Coni, Alessandria and Tortona ^{the 3 black squares} - and sending envoys to Paris. This was followed by a treaty of peace signed at Paris on the 15th. of May, or just five weeks after the campaign opened. Bonaparte was thus freed from apprehensions as to his communications with France. <sup>Remove Sardinian from map
Place French marks on fortresses</sup>

It was the great merit of Bonaparte at this period of his life, with youthful vigor still unimpaired, that he lost no time in seizing advantages he had obtained. Never did he say to himself, in the words of Admiral Hotham, "We must be content now, we have done very well." Pausing only to establish his position and reorganize his troops, he turned at once upon the Austrians. Their general, Beaulieu, assumed that the French would advance against him, if at all, along the north side of the Po; an impression which Bonaparte was careful to foster by all his demonstrations. The river below Pavia becomes broad, deep and difficult to cross, in consequence of the accession of the mountain streams from the Alps, and the French were poorly provided with pontoons. It was a natural conclusion that they would cross well above Pavia, about Valenza; and Beaulieu, mis-

5

led by all his information, made his preparations to contest their advance by taking up his position along the River Cogna. Here it was that Bonaparte formed that fine conception of which I have spoken to you. ^{Reiterate - p 49} Realizing that each one of the streams to the north ^{that flow from Alps into Po} constituted a separate line of defense for the enemy, he saw that he would be committed to a series of front attacks, which, even if successful, would involve much loss of life, and would cause the Austrians, if beaten, to fall back straight along their line of communications and towards their base - the very easiest and safest of operations for a retreating army. He therefore determined to rout them in disorder, and possibly even ruin them altogether by getting in their rear, seizing, or at least dangerously threatening, their communications and their retreat. It may be said in passing that only his poverty of numbers, and of resources for bridge building, saved the enemy from destruction.

Amusing the Austrian general by front demonstrations, he formed a select corps to press along the south bank of the Po, preceding them by a small detachment of staff officers, who had orders to seize all boats and collect them at the point where he meant to cross his army (Piacenza). Moving stealthily and rapidly, the French advanced corps crossed on the 7th. of May; and as soon as it had established itself, the other corps, already so posted as to support it at once, broke camp and hurried to the spot. Dependent upon boats, however, through not having a bridge, the movement was so delayed as to prevent reaping its full fruit. You see, however, that

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-5-

as soon as the power to cross was assured, all the northern streams above the point of crossing became useless as defensive positions to the Austrians; to use the military expression, they were turned.

Beaulieu, as soon as he heard the news, saw that he had been outwitted, that his communications and retreat were endangered. He hurried troops to the spot to check the enemy's crossing and subsequent advance, and then with his whole army fell back to hold the line of the River Adda. Had Bonaparte's facilities for moving equalled his activity, it is doubtful if Beaulieu could have extricated himself; as it was, the French leader kept his enemy ever in confusion by the incessant attack and harassment to which he was subjected - and it was with this advantage that the line of the Adda was attacked and forced. On the 10th. of May, three days after the crossing began, the celebrated passage of the bridge at Lodi was effected. It is interesting to note that this took place just one month from the day, April 10, that Beaulieu began his movement to cross the Apennines into the Riviera.

29 55

Beaulieu now fell back to the Mincio, the next stream; and, as it was no longer possible to get in his rear, Bonaparte determined to desist for a moment from his pursuit, in order to establish and consolidate his authority in the region he had just conquered. Let me here draw your attention to what you might else overlook, that this great captain, though he had well settled rules and maxims, was no slave to them. He recognized that war was not a science, with hard and fast rules, but an Art, with principles of great elasticity. Jomini says of him that, whereas many generals think chiefly of positions, Bonaparte's great objective was always the enemy's organized forces - his army - and you see here, in the campaign I am narrating, the merciless, untiring energy with which he pressed upon the hostile army. Nevertheless, he knew when to abandon this pursuit; and in this case, seeing that, though he could drive the enemy, he could not intercept him, he decided it was more prudent to desist momentarily from the organized forces, and solidify the bases upon which his own army must rest.

This object secured, Bonaparte again turned upon the Austrian army. On the 30th. of May the French troops forced the passage of the Mincio. After this, they were manoeuvred so as to threaten the Austrian right, in which, if successful they would cut off the enemy's retreat into the Tyrol. Beaulieu therefore gave up the game. Having thrown some 10 or 12 thousand troops into the fortress of Mantua, he retreated with the rest of his army into the Tyrol, thus abandoning to the French all northern Italy as far as the River Adige.

This completed what I have spoken of as the first phase of the campaign. Its termination was marked definitively by Bonaparte's establishing his headquarters at Verona, a city bestriding the Adige and possessing three bridges by which an army could readily pass from one side to the other of that difficult stream; a circumstance which conferred the power of manoeuvring securely on either bank. This occupation took place June 3d., and from that time until the following February Bonaparte stood on the defensive; at first besieging Mantua under cover of his army on the Adige, but afterwards reduced by the exigencies of the campaign to simply blockading the place, which eventually yielded only to starvation.

It is ^{as} a brilliant example of an active defensive by an inferior force, intelligently and even magnificently handled, that I am about to present to you - in rather broad outline - the details of the eventful months from June 1796 to February 1797. In them, by a sublime exhibition of mental activity and of moral force, Bonaparte presented to the world a wonderful realization of those principles which he in after years laid down to his marshals, and which I quoted to you in the preceding lectures. The great lesson to be drawn from them, to my mind - and one even more applicable to the sea than to the land - is the absolute necessity of having a central mass, concentrated in a spot wisely selected, ^{central} ^{for its natural advantage} and thence wielded with vigor according to the opportunities of the campaign. For, let it be always remembered, the force that stands on the defensive plays not so much its own game as the game permitted to it by the errors of

its adversary. Nothing can compensate for inferiority of power except superiority of skill; and even the great Bonaparte owed his success at this time not merely to his own transcendant ability, but also, in great part, to the blundering of opponents who were capable soldiers but not instructed leaders; (the kind of men who in the Navy maintain that ALL we need is plenty of going to sea and of target practice, not considering, as a French Admiral phrased it, that many men go to sea much as a bale of goods does. They are in a ship for so long, and that is about the end of the matter.

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It is that which has preceded, we have

Those of you who were present yesterday, following the course of the lecture, had occasion to note that Bonaparte's first success, which led to all the others up to his reaching the Adige, was obtained by the skilful and vigorous handling of a central mass against two opponents in succession---by which means he annihilated the one (Sardinians) and then drove the other, become inferior to himself, to the Adige--- the Tyrol and Mantua, thus closing the 1st phase.

The same general principle underlies the entire management of the second phase of the campaign---June- Feb--- which we ^{now} begin today, and which will occupy this and the ^{next} ~~first~~ ^{period} tomorrow; ^{the} Battle of Rivoli ^{following the day after} the 2nd period.

I would wish that you might bear in mind this as the fundamental idea of the whole campaign, viz., the use of the central mass, judiciously and actively, against divided opponents.

I will, however, recall also the blow at the enemy's communications when he slipped to the Austrians' rear and crossed at Piacenza. It is a blow of the most fatal character when successful, but attended with far more risk, as you will see, than the handling of a central mass, because one's own communications are exposed.

Bonaparte recurred to it once in the period now before us at Arcola--- but he ran a tremendous risk, which was forced upon him by the well nigh desperate strait in which he then was.

I must mention that the Austrian General, Beaulieu, driven back by Bonaparte to the Tyrol, was relieved. He was succeeded by Wurmser, as the latter a few months later by Alvinzi.

These men were men of mature years, verging on old age. They were veterans of the drill ground, of the campaign, and of the battle field. (Seven Years War, Turks, &c, &c,.)

They had a vast amount of experience, commonly so called, had been present when many things were done. But they were not men of study or deep thought-- and one after the other they were beaten out of sight, by a youth of 27, who had never seen a campaign and only a little fighting.

After three veterans of this type had thus been hurled into disaster, the Austrian Government called upon another--a boy in his early twenties, to save the Empire. He, too, had had but little that we call experience; but he had studied and reflected. He had, a few months before, shown what he had learned in the campaign I described last Thursday, in which also was illustrated so signally the advantages of the

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central position and the central mass. He did not save the Empire, because the Government was too timid to allow him to persist in the concentration at which he aimed. Bonaparte, who had beaten the veterans, commended as absolutely correct the strategy of the inexperienced boy.

Call attention to Germany 1796.

At period of opening to day, French Armies were

Let us now examine Bonaparte's primary dispositions in taking up the line of the Adige--- the dispositions, I mean, by which he prepared himself for action, to meet any emergency brought upon him by the enemy. You will recognize that this primary occupation of the line is something clearly distinct from the subsequent operations, though it lay at the bottom of their success. Further, in following the story I bring before you, try and keep in your mind that the line of the Adige is analogous to the coast line behind which lies the weaker navy; and translate, as well as you can, the actions of Bonaparte, both in preparation and in the campaign, into examples for the admiral and the Government who controls or directs that weaker Navy.

First of all, there is the concentration of a mass of ~~tro~~ troops, the greater part of the disposable force, in a position wisely selected and preferably central. It may possibly happen that the best naval port may not be central, and that condition is not indispensable

~~insensible~~; only generally desirable. For his point of concentration Bonaparte chose Verona, and in its neighborhood massed the bulk of his army. Why? First, because the place being well fortified, and the river there well bridged, he had a secure outlet to the country beyond, (the sea for a navy), and also one to which return was easy and within whose walls safety lay. The parallelism to a fortified naval port of easy access is as near complete as is ever the case with conditions which are similar, but not identical.

Point

But this facility for advance and retreat did not exhaust the merits of Verona. The Austrian base of operations was some forty or fifty miles to the northward, in the Tyrol - a mountainous country, warmly attached to the House of Austria. Now, if you will fix your eyes on the map, following my words, you will see that from the Tyrol there issue two streams, the Adige and the Brenta, the sources of the latter being severed from the course of the former (pointing) by a ridge not over ten miles wide. Being thus separated, however, the two, like the Danube and the Rhine, take divergent directions for a time, skirting the two sides of a broad, hilly and roadless district, which stretches northward from Verona, and whose southern slopes fall to the plain just in front of the city. Now the military importance of these two streams was not chiefly as water courses, but as indicating the valleys whose comparative broadness gave the best marching roadways. In short, from the topographical features I have shown you, there are two principal roads by which Bonaparte could advance toward the Tyrol, or the Austrians descend

from there to attack him, and these roads were both easily accessible from Verona.

Verona, therefore, had an analogy to a sea port with two different exits, a circumstance of which the advantage for war is generally recognized. If you take New York, for example, you will see that it has two approaches from widely divergent points - viz; Sandy Hook and Montauk; and that Long Island fulfils the office of the hilly district north of Verona, which in Bonaparte's time was impracticable for large military bodies. The advantages, however, of a seaport under such conditions to the party in possession are vastly greater than those of a land post - Verona, for instance - for two reasons. First, the navy possesses far greater mobility, and can therefore issue by one passage or the other with far greater rapidity; and, secondly, pursuit is much more difficult, owing to the immensity of the ocean field and the difficulty of gaining information. For all that, the same advantages, though in a less degree, pertained to Verona and to all similarly situated places - places where highways converge. In the first place, it was absolutely necessary for the Austrians to watch one road with a larger or smaller force, while they made their main advance by the other; just as it would be absolutely essential to an enemy acting against New York, to watch both entrances; and in the second place, there is always the temptation, under such conditions, to divide a force into two fragments, each of such size as to be individually less than the enemy, who stands watching at the point where the roads meet. This

you will find was exactly what the Austrians did, their total force not being as large as double that of Bonaparte; and if you will transfer similar relations of force to New York - e.g.: that twelve ships inside are opposed to eighteen outside - Montauk & Sandy Hook being a hundred miles apart, you will recognize the perplexity of the enemy's admiral, who feels both points must be watched, yet can not put before each a force equal to the defense. I will leave you to infer from Bonaparte's example what such an admiral's course should be.

On shore, a force that can move against an enemy in two directions, as Bonaparte from Verona, protects itself best against the enemy's advance from one quarter, by threatening him with serious injury in the other quarter. * Thus, ^{Napoleon} ~~Bonaparte~~ ^{in 1812} ~~[many years later]~~ instructed Marshal Marmont in Spain, where the French, though they had just lost Ciudad Rodrigo, still held Salamanca and Badajoz; but, on account of the Russian expedition, were standing on the defensive. "Your position," he says, "is clear and simple, it does not demand brilliant combinations. Distribute your army in such wise that in four marches all your force can be concentrated about Salamanca; have your headquarters at that point, and issue your orders and make your dispositions so that the enemy may be convinced that you are all ready to take the offensive thence. Keep up continual attacks upon his advanced posts. In such a position you are master of all the movements of the English. If Lord Wellington moves against Badajoz, let him go; unite your army at once and march straight

Almeida

10

against ~~Aliverda~~ - be persuaded that Wellington will very quickly return to you. But he is too clever to commit such a fault, if you are standing in the state of preparation which I direct." And later on he repeats the same directions, adding, "You will realize, Marshal, that by following these instructions, and introducing into their execution all possible rapidity, you will hold the enemy in check. London itself will tremble at the expectation of seeing Portugal invaded." (Corr. de Nap. Vol. 23, p. 233). Yet all these measures for offense were taken as part of a defensive system, for in the same letter he says: "The new dispositions of the Emperor have obliged him to renounce for this year the expedition against Portugal; on account of the turn taken by the general affairs of Europe," - that is, on account of the impending war with Russia. You see here [again] that his prescription for defense is, 1 Concentrate 2 Attack; and Badajoz and Salamanca fill exactly the same roll as the bridges he ordered Bernadotte to build over the Vistula, in 1807. Again I beg you gentlemen to think how far these general principles, illustrated by the specific application at the Vistula and on the Portuguese frontier, may be applied to the handling of a weaker navy whose coast line is menaced. "The true way of defending Ciudad Rodrigo," says Napier the celebrated historian of the Peninsular War, "was by external operations;" and he proceeds to quote with emphatic approval those words of the Emperor I have just read to you. ^{Wish} *Would that time permitted me to adduce some further instances from the great operations of land warfare, further to demonstrate

the immense effect of an offensive blow, skilfully aimed by the weaker party.

But I must hurry on. It is easy to infer from the above what was likely to be Bonaparte's course from a central position like Verona. Menaced by an enemy much superior to himself in numbers, he rallied to his support all the resources of his skill and genius. Pressing the siege of Mantua, as far as his limited power went, he distributed the rest of his army with reference to Verona; just as he ordered Marmont, in the passage I have read you, to distribute his, in Spain, so that in four marches all could be assembled — concentrated ~~at~~ at Salamanca. Fifteen thousand men were either at Verona itself or in the valley of the Adige, east of the Lake of Garda. Five thousand were at Legnago, thirty miles away on the lower Adige, not more than two ordinary marches distant. At Mantua the siege and covering corps amounted to 15.000; the distance from Verona again being but two marches, as was also the distance from Mantua to Legnago. Finally, the most distant of his divisions - barring those occupied in holding the conquered countries, which were not available for field operations - was at Salo, on the west shore of the Lake of Garda. It was distant, at most, three marches from Verona, and numbered 4500. Its presence there was rendered necessary by the fact that there was a third practicable road, west of Garda, which may be considered a subdivision of the road by the valley of the Adige. ^{roads} Now of these three, the central one, though difficult in some respects, was the most important; because it avoided the pas-

sage of the lower Adige in the face of an army resting, as Bonaparte's did, upon Verona and Legnago. It gave the Austrians the advantage of a flank attack, instead of a front attack; and it was, moreover, the most direct and feasible highway from their base to Mantua, the relief of which was their first concern. For these reasons Bonaparte there assembled the mass of his active force; the two other divisions being within easy reach at Legnago and Salo, as was also the Corps at Mantua. The whole numbered 42,000 men of all arms. The

Austrians had organized 60,000 in the Tyrol, fifty miles distant.

50 per cent greater
Also New Corps Leghorn, Rome
New Wurmser detached

Now, as I said to you before, the existence of two or more approaches not only facilitates the movements of the defense, it also constitutes a serious temptation to the attacking party to divide his force - a temptation which, if yielded to, becomes an advantage to the defense. This was what the Austrians did. Beginning the movement on the 29th. of July, their new general, whose name was Wurmser, made by way of the Brenta a demonstration, or diversion, against Legnago, to deceive Bonaparte as to his real purpose. Such a movement is perfectly proper and wise, upon the condition that you do not embark in it so many men as to weaken your main effort, and yet do send so many as to alarm the enemy seriously; and this is just the sort of thing needed in defending a coast-line. You want a concentrated mass at your principal port; but, in order to embarrass the enemy, and to induce him to divide his force, you want also to threaten him, his commerce or his other interests, by movements in many other ports, thus inducing him to divide his force, while you, by

apportionment
~~13~~ 65

the careful ~~appointment~~ of your own, have always in hand the great mass of your navy, for some big operation.

The demonstration along the Brenta and in front of Verona may therefore be justified, provided the force so employed was duly proportioned to its part in the general plan. I find no precise statement of its numbers, nor does it play any part in the story. In the descent by the Lake of Garda, however, Wurmser fell into the snare of men who wish to do two things at a time, with force scant or inadequate. His disposable force being nearly half as large again as that of Bonaparte, he ^{Wurmser} thus exposed himself to be beaten in detail; and that, although he had the advantage of a partial surprise, the French general not expecting him to move so soon.

Wurmser, in attempting these two things, lost sight of what more and more becomes to my mind a cardinal principle of warfare, viz: that to beat the enemy's army, which, by scraping together every available man, would be only two-thirds his own force, would accomplish all objects at once. The two things he wanted to do were, 1, to advance to Mantua and relieve it, and, 2, at the same time to seize and intercept the communications of the French army which were through Brescia and Milan, and through Cremona and Pavia, with western Italy. Both objects, you see, were good; but it was their duplex character which misled him, and kept him from seeing that they would be unified by the simple resource of attacking the French army with his own massed.

What he did was this: He advanced in person upon the high road

to Mantua on the east side of the Lake of Garda, with from 38 to 40 thousand men - barely equal to the French force; while along the west side of the Lake he sent one of his generals, with a force I calculate to have been between 15 and 20 thousand. Both roads led through a very difficult country, and being from 30 to 35 miles apart, separated by lake and mountains, the campaign opened with the Austrians, of their own free will, and without any necessity, placing these two great bodies so that they could not act in mutual support, until they united at the foot of the lake, if the French general permitted this.

Of course Bonaparte was not the man to permit it. To understand his action, you will remember what I have said as to the distribution of his troops; and further, please note that from the foot of the Lake issues the River Mincio, a stream which thus prolongs, though to a less extent, the obstacle constituted by the Lake itself. By seizing that line and massing his army there, Bonaparte not only practised concentration, but secured the further advantage of utilizing this obstacle to prolong the separation of the enemy's two bodies, the union of which would be fatal to his inferior force.

Consider here, gentlemen, the advantage of a mind prepared by study and reflection. How many campaigns might some men have made, how much ~~was~~ service (so-called) and how much ~~target~~ ^{drill} practice might they have had, and yet failed miserably to grapple with the situation which was successfully met by this young Corsican - who now held chief command for the first time, and who three years before

had never smelt gunpowder burned in anger. It was not in long so-called "active" service - not in that which corresponds to so-called experience, ~~at sea and target practice,~~ that he learned his lesson.

By his own account it was in the study - in thought - in reflection. Genius doubtless he was; yet has he pithily said, speaking of that inspiration which is the outcome of genius, "On the field of battle the happiest inspiration is often ~~but~~ a recollection." Opposed to this thoughtful, studious youth of twenty-seven was a veteran of sixty, gray haired, gallant, of good reputation, as are many of us, with ~~more than a score of campaigns behind him,~~ *the experience of which profits him nothing* ~~Well, another great cap-~~ ~~tain, Frederic the Great, has said that an animal of a certain kind might make fifty campaigns and yet remain, as he began - what, I will not say.~~

Wurmser had two objects - but how many cares rested on Bonaparte's shoulders. He was a hundred miles distant from his nearest friendly base in the Riviera; between it and him lay a country in smothered hostility, awaiting but the semblance of a reverse to rise, as it had once already risen against him. Besides this, scanty resources, an army inferior by half, the all important siege of Mantua to sustain, the dangers from Southern Italy, and those from the British fleet in the Mediterranean, which had already captured part of his siege train. Yet through all this maze of difficulty, where the Austrian saw double, he saw but one thing and did it. The Austrian army had divided itself - it must never be allowed to re-unite, unbeaten. It is not only in moral or spiritual conduct that the Bib-

lical saying is true: "The single eye is full of light."

Divided though Wurmser's army was, each part was ^{superior} a surprise to the french division first encountered. Massena on the east side of the lake was driven back six or eight miles, the division at Salo some ten or twelve. The ground was disputed, of course; but it was plain the enemy was in overpowering force.

As I said before, the Austrian advance anticipated Bonaparte's expectation. He called a council of war. To me there is something touching in the incident; this "boy", as Wurmser called him, who afterwards developed a degree of self-confidence and self-assertion that transcended arrogance, had not yet attained absolute self-reliance. Despite the flush of his earlier successes, the shadow of failure was darkening around him, and he was shaken from the firm centre of his soul; as the greatest of ^{the British} Indian heroes, Clive, recoiled for a moment before the dread hazard of Plassey. Yet, though shaken, he drew strength from the clearness and tenacity of his convictions. As a man of high moral principle sees the path of duty clear amid the bewildering appeals of interest or passion, so the man of high military principle may see the path of conduct clear, amidst the agonizing perplexities of such a ^{moment} ~~movement~~. For agonizing is not too strong a word. Verona must be abandoned, the line of the Adige must be abandoned, the siege of Mantua must be raised, abandoning the siege train to the enemy, the whole army, by its various detachments, must retire, must retreat, from its present positions, in order that, united in the valley of the Mincio, it may pre-

sent a compact, concentrated, and intelligent resistance to the union of the Austrian forces.

Nor could a moment be lost. "The Philistines be upon thee, Samson!" "A few hours delay," says Jomini, "would have given time for the two Austrian columns to envelop the French army, and force it to fight them both upon the same field of battle." Not for that had Bonaparte decided his game. The line of the Mincio ^{the central position} is rapidly assumed by the hurried simultaneous marches of all the corps; but it is held by only a part of the French, in order to check ^{them} the advance of Wurmser himself, if he attempts to join his subordinate to the westward. He must be stopped there long enough to allow his subordinate to be beaten by the superior force which Bonaparte hurries back, past the Mincio, to meet Quasdanovich at Lonato.

It is not to discuss the tactics of the battle field that I am here before you - much less when here again, as in the opening of the campaign, we chiefly find a succession of partial combats, depending upon a central mass, rather than a pitched battle between two armies. The two combats known by the name of Lonato, fought upon the 31st. of July and the 3d. of August, stand conspicuous from their surroundings. The name Lonato sums up the series of contests by which Wurmser's lieutenant was first checked, then resumed his attack, and finally, confronted by forces larger and more skilfully handled than his own, was driven back to the north of Garda, in a state of exhaustion which left him useless for his Chief's support in the later struggle at Castiglione.

Meanwhile, Wurmser himself had marched triumphant and unresisted to the gates of Mantua - captured the French siege train and released the garrison. He then, on the first of August, took his position along the Mincio, expecting to hear of French disasters at the hands of Quasdanovich. Vain and short was his triumph. That night he learned that his lieutenant had been beaten all along the line, and next day, August 2, he himself advanced. The moral weakness of one French general allowed him to cross the lower Mincio more easily than he should, and so imperilled Bonaparte's success. What then did that great leader do? *Did not divide, attempting to do two things at once.* Cautioning his forces before Wurmser to use every resource to delay the latter's approach, he redoubled his efforts against the western army, with the result that on August 3 it was again decisively beaten at Lonato, and on the 4th., as I said before, retired to Riva - at the north end of Garda. ~~During~~ During the hours that Lonato was being won, the French corps at Castiglione succeeded in holding Wurmser fully in check, leaving Bonaparte free to rout the other Austrians. More it could not do, being by much inferior to the enemy immediately in its front. But, says the accomplished historian Jomini, "these two combats upon this day, those of Lonato and Castiglione, assured the success of the whole operation, and the consequences were of the most important. The Austrians there lost three thousand killed, wounded, or prisoners, besides 20 guns."

As the result of Quasdanovich being driven out of the region of the campaign, as well as of Wurmser's other faulty dispositions,

but all proceeding from the original mistake of dividing on the two sides of Lake Garda, the Austrian general could only bring to the battle of Castiglione, on August 5, 25,000 out of the 60,000 men with which he began his movement. To these, Bonaparte, again hurrying together all his scattered detachments, which he was well able to do because they were not scattered unduly, nor divided by enemy's forces, could now oppose superior numbers. So, although the battle was gallantly contested, it ended in the retreat of Wurmser, who was himself nearly taken prisoner. The Austrians on this day again lost 3,000 men and 20 guns; but, says Jomini again, "the importance of the day is not to be measured by the casualties. It was decisive of the conquest of Italy, and entailed all the disasters by which Wurmser's army was soon after overwhelmed."

The following day, August 6, Bonaparte again attacked the enemy, menacing their right; and Wurmser, seeing his communications with the Tyrol endangered, threw up the game. *just as Beaulieu had done two months before* Into Mantua he sent 15,000 troops, relieving the old garrison, and with the remainder of his army retreated to the Tyrol. On August 7 the French resumed the positions whence they had been driven nine days before.

The result drawn by the Austrians, from a movement begun with such odds in their favor was therefore simply the relief of Mantua, which had now a fresh garrison and was revictualled. The French siege train was also lost, and Bonaparte was thus limited to blockading the town. Yet, when you compare this advantage with the fact that 60,000 men had not only allowed 42,000 to slip through their

fingers, but had been everywhere worsted by them, and had finally left them in full control of the country in dispute, you see that a reprieve only, not a deliverance, had been effected for Mantua. Had Wurmser never approached the latter, but so acted as to smash Bonaparte's army, the place would by that alone have been delivered for good and all. This is a powerful illustration of the general rule, which I never weary of urging, that the proper objective of military effort, whether on sea or land, is the enemy's organized force - his navy or his army. True, Bonaparte, who habitually followed this rule says somewhere that "war is a business of positions;" but he does not by that mean that war is carried on chiefly by capturing ^{or holding} fortresses. What he means by the expression ^{in part at least,} is, that by taking suitable positions you add to your numerical force the strength that comes from the positions occupied, as, for instance, the line of the Mincio, which I have just explained to you, gave him peculiar advantages for holding in check one enemy's army while he was beating the other;

or again he means, as in the dispositions prescribed to Marmont at Salamanca that the game of war is played by the skilful choice of positions so disposed as to ~~of~~ secure mutual support

End June 6

CONFIDENTIAL

Year

No.

Author: Mahan, Captain A. T. U.S.N.

Contents: Lectures on Military Strategy
(Lectures) Lecture #4. Bassano

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U. S. NAVAL STATION, NEWPORT, R. I.

The only copy existent (May, 1911)

To be returned

LECTURE 4.

BASSANO.

Be...
June 7.

Lecture #5

McK...
23-84

I had got thus far one day, and was expecting on the next to enter at once upon the succeeding phase of the campaign; in which Bonaparte, without awaiting the enemy's advance, boldly assumed the offensive, moved against him up the valley of the Adige and drove the fraction of the again divided Austrians into the Tyrol with heavy loss. Here, however, an incident occurred to divert me momentarily. I called that evening at the quarters of one of my associates here, who said to me, "I see in the last Army and Navy Gazette they are challenging your position, that one heavy ship has the advantage over several small ones, even when the aggregate force of the latter is considerably greater than that of the single enemy." My statement to that effect occurs in my last work on Sea Power, as a comment upon the engagement, on May 28, 1794, between the Révolutionnaire of 110 guns and six British seventy-fours, which severally or collectively engaged her. It occurred to me that this suggested one of those close analogies which it is ever the duty of a military instructor to bring before his hearers - for there is no more useful lesson in the Art of War than that of the identity of the principles which make themselves felt throughout, and are applicable to cases seemingly most diverse. In this connection I am moved to tell you an experience of my own last year. I propounded to the officers then in attendance upon the course a problem of naval warfare, to which written solutions were required. Of those returned some were excellent, some indifferent; but among them there was one hopelessly poor, which concluded with the words: "I consider this

* Since the opinion expressed is ~~not~~ dead

question more fitted for the consideration of admirals and senior officers of the Navy than for that of junior officers, whose opinion in case of war would not be asked." * It is of course obvious that neither had the opinion of this gentleman as to the suitability of the problem been asked, although he was thus forward to give it; but independent of the fact that you all, I presume, look forward to reaching positions of high responsibility, for which you would like to prepare now, when your faculties are in their prime, it is necessary to observe that the principles of warfare will apply to the command of a corporal's guard, or of a couple of launches, as truly as to the major operations of a campaign. I do not say the results will be of as much consequence, but that the principles are the same. A most interesting remark was made to me by another officer, of very different calibre from the one just mentioned. "Did it ever occur to you," he said to me, "that that old Roman legend of the combat between the three Horatii and the three Curiatii gave an excellent illustration of the principles of war?" "No," I replied; "in what way do you mean?" He said: "The story is that after the first encounter only one of the Horatii survived, but he was unhurt; while the three Curiatii all were alive and capable of fighting, but all wounded. What then did the Horatius do? Noticing that his opponents had different degrees of strength, he forbore attacking them as they stood, and retreated. They pursued; but as they did so their differing strength caused them to separate. When sufficiently apart, the Horatius turned upon them, attacked first one, then the

~~25~~ 75

second, finally the third; and, being a whole man against three cripples, he overcame individually those whom collectively he could not have beaten." Thus stated, the lesson is of course obvious; and not only that, but you have, reduced to the smallest possible scale, the application of the great principles which carried Napoleon Bonaparte from major^{of} artillery in 1793 to the control of the European continent in 1803.

But not only to these greatest and smallest of events are the same principles found upon analysis to apply - like the great world of nature, which reveals the same story to the telescope and to the microscope; they come in also in an intermediate case, like that of my opinion above quoted, upon the contest between the 110-gun ship and the seventy-fours - in a problem of Tactics, such as the latter was, as well as in a great strategic operation like the several phases of Bonaparte's Italian campaign. For, when you boil it down, what was the distinguishing feature of that naval, partial action? Accepting as actual the nominal force of the combatants was it not this: That a single central mass of 110 guns under one head was opposed by an aggregate of 444 dispersed in six detachments, under six different leaders, which almost necessarily approached by different paths, and could rarely be in action together? Was it not in short, another case of concentration opposed to dispersion? I must of course, guard myself from being understood to say that no number of inferior vessels can aggregate a power sufficient to pull down one of - say - 50 percent greater force than their own. I never

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said, for instance, that six seventy-fours might not in the end whip the one of 110 guns. My statement was carefully weighed. I said: The concentration upon the Révolutionnaire served to bring out vividly the advantage, which should never be forgotten, of one heavy ship over several smaller, even though the force of the latter may in the aggregate be much superior." I may be free to believe that 110 guns could have fairly beaten twice 74, (148), when they so long held their own against six times 74. *Orisnt at Nile 3, 745*

After the battle of Trafalgar, when Nelson's flag ship, the Victory, reached Portsmouth bearing the dead body of the hero, there went on board ^{after} a frigate captain, a great favorite of Nelson's, named William Parker, who as Sir William Parker was the most distinguished admiral Great Britain produced between the Napoleonic and Crimean wars, and whose life was so prolonged that he remained for some years to be styled "the last of Nelson's captains." Walking on the poop of the Victory with her captain, Sir Thomas Hardy, who had fought at Nelson's side at the Nile, at Copenhagen, and at Trafalgar - and who, therefore, even by our advocates of experience, ^{only} may be conceded to have had opportunities for learning, Hardy, fresh from the great battle, said to him: "Parker, you and Capel have often talked of your attacking a French line-of-battle ship with two frigates. Now, after what I have seen at Trafalgar, I am satisfied it would be mere *Nelson to Gore* folly, and ought never to succeed." I have somewhere seen, but have not been able again to lay my hand upon, a similar remark by Lord Howe whom Nelson called "the first and greatest sea officer the

has world ever produced." Howe was above all a practical tactician, a good sea officer in all respects but with tactics as his forte. He spoke with contemptuous indifference, the nearest approach he ever made to ridicule, of those who reckon the validity of two enemies by simply adding up the number of guns each has, without reference to the class of vessel and manner of distribution.

Before quitting this particular matter, I wish to caution you that the general statement of the superiority of a single large ship over a certain number of smaller ones refers to the case of vessels substantially of the same general character or type. I am not prepared to commit myself yet to a definite opinion as to the comparative power of vessels of essentially different types, as the modern battle ship and the modern torpedo vessels. I have upon this opinions, but they are not to my mind sufficiently settled for enunciation. Moreover, I must also caution you that abstract general maxims of war, however sound or generally held, are always liable to qualification when applied to particular, concrete, cases; because as I have so strongly urged, War is not a Science, but an Art, and its rules are therefore always susceptible of great modification by special circumstances. The man who thinks that in a Rule of War he has a mathematical formula is sadly mistaken; yet that the Rules are most valuable remains true.

Wurmser retreated into the Tyrol on the 7th of August. Though worsted in every direction, the very superiority of his numbers at the beginning of the operation left him still with a very respectable force, to which also reinforcements were sent. Jomini estimates the Austrian army in the Tyrol ^{three weeks later, or} about September 1st as being 46,000. To these Bonaparte could oppose 35,000. I do not reckon the Austrian garrison in Mantua, nor the French corps blockading the place. These may be set one against the other, and the above numbers considered to represent the army for active operations in the field.

Bonaparte was in no position to await quietly the issue of events. The dangers I have before mentioned to you as threatening him from Naples, and from Southern Italy generally, still existed, and were powerfully seconded by the British fleet, which did not evacuate the Mediterranean until two months later. Accurately to view the situation of the French general, we must regard him as standing on the defensive along the Adige, blockading also Mantua, and threatened also by 20,000 men in Southern Italy, as well as by 46,000 Austrians in the Tyrol.

He felt it, therefore, urgently necessary to neutralize the latter by driving them back into the Tyrol. It was to be hoped that by so doing the pressure of the French army in Germany, which had then advanced abreast of the Tyrol, might force the enemy to leave that region; in which case Bonaparte would be free to act at his pleasure in Italy, and perhaps even to seize Trieste, a port of great consequence to the Austrians. But while I thus give you the par-

ticular reasons which led him to make this movement, that upon which I wish to fasten your attention, as a great military lesson, is that, being on the defensive, he assumed the offensive and did not wait to be attacked.

The line by which he must necessarily advance was that east of the Adige which led direct to Trent, the capital of the Tyrol. This was the great highroad to Mantua. By a very singular and very fortunate circumstance, at the very same moment that he began his movement, the Austrians also began theirs; repeating the precise error, though in a different form, that had marked their first advance. Leaving 20,000 men under a General Davidovich to hold the passes of the Tyrol, and to advance, if opportunity offered, down the east of Lake Garda, Wurmser took 26,000 himself and moved by the valley of the Brenta, intending to reach Mantua by way of Legnago. You will notice that each of these diversions was considerably smaller than Bonaparte's 35,000. You will also please observe that the Austrians were led into this fatal division by having two objects, that most common of snares for the feet of commanders-in-chief. As before, they wanted to relieve Mantua - for that they apportioned 26,000 men. They wished also to threaten the French rear, in case the French army advanced towards Bassano to impede their movement by the Brenta - to that they assigned the 20,000; and they so moved the two as to allow Bonaparte a chance to get between them with a force superior to either. Now mark what followed.

Bonaparte, not awaiting attack, advanced on the 3d of September

with 33,000 men. These were moved somewhat as the Austrians moved theirs in July; that is to say, 11,000 moved along the west of Garda, and the other 22,000 along the east; 13,000 of the latter following the highway and 9,000 keeping on the crest of these mountains (Mozzare) which, however, they soon found impracticable. "Ah!" I hear some one say - "Here is the same mistake that the Austrians made committed by the illustrious Bonaparte." Not so; it was, superficially, the same disposition of force, but by no means the same mistake; and I gladly pause to explain this, because I think there is not greater danger than that of construing the general principles of war into hard and fast rules - to look upon them as rules with no exceptions, qualified by no consideration of circumstances. Of all dangerous and impracticable *men, the worst* is the one who is a slave to a good habit - in irons to a good rule. There is some hope - not much, I own - of convincing a man *who is clearly wrong* in his views; but a man who has got hold of a sound principle, and has not breadth enough to recognize exceptions, there is more hope of a fool than of him. In war, nothing is more ruinous than blind adherence to rule, without first considering the qualifying circumstances.

What, then, was the difference in conditions which justified Bonaparte, at this critical moment, in disregarding for a while the sound general rule of keeping his corps in easy supporting distance, and in separating them after a fashion which seems so closely to resemble the mistake of the enemy two months before. Jomini himself, who harps upon les principes - the principles - until one is weary

of the word, justifies the step upon the ground of the particular conditions. "In any other circumstances," he says, "this division would have been a grave fault."

Now, in the first place, time was pressing. To draw back the western corps to the foot of the lake, as he had drawn back his separated corps to the Mincio in July, would have lost time that could not then be afforded; and therefore, though seemingly safer, according to principle, would be really more dangerous. Secondly, the 20,000 Austrians holding the road to the Tyrol had been so divided, that they occupied positions well separated on either side of the Adige, so that actually the French corps on either side was likely to encounter a force inferior to itself individually; and thirdly, what really and absolutely differentiates this case of the advance north from that of the Austrians to the south, was that when they moved against Bonaparte he had a plain country in which to manoeuvre, and in it a central position, the Mincio, both strong and easily attained by all his corps; whereas the Austrians, if forced back into the Tyrol, entered a region increasingly difficult, and in which, if once severed, as they probably would be, concentration would be hopeless. To these circumstances which altered the case, may be added the extraordinary faculty possessed by Bonaparte for so timing the movements of his division, that he materially facilitated a junction which was actually made in 36 hours, though long before that time the two were in supporting touch.

You will not have found this digression useless, if you carry from it, 1, the firm impression that war has great and well established principles; and, 2 that those principles are not hard and fast rules, but vary in their application.

In this place again, I shall not delay upon the details of operations which extended over nine days, with constant combats, but no pitched battle. In two days, on September 5, Bonaparte was in Trent, having, with superior forces driven Davidovich back beyond that point. There he learned that Wurmser was at Bassano. You see at a glance the advantage of the central position, held by a concentrated force superior to either enemy. Bonaparte, however, felt that if Davidovich were left in the position he now occupied, he might, by resuming his advance down the Adige, seriously molest himself in his operation against Wurmser. Therefore, eager though he was to get at the Commander-in-chief, he delayed yet a day to drive the subordinate further up into the Tyrol; just as, you may recall, at Lonato he delayed a day in turning upon Wurmser after defeating Quasdanovich, in order to drive the latter north of Lake Garda. Having forced Davidovich well back into the mountains, and so secured the time he felt to be necessary, Bonaparte, on September 6, turned down the valley of the Brenta in rapid pursuit of Wurmser. The Austrian marshal, calculating upon a deliberation on the part of his enemy similar to the leisurely system of the 18th century, in which he had grown up, ^{still} was on that day at Bassano, expecting to march undisturbed upon Mantua. On the 7th his rear guard was brought to action at

Primolano, its position forced, its retreat cut off, and itself compelled to surrender. The next day the posts between that point and Bassano were successively carried, and the French troops, continuing their untiring march, entered Bassano itself at the charge, capturing 2000 men, 30 cannon, two full pontoon trains and a great quantity of equipments; while the left of the Austrian army was cut off from the main body, and only escaped by a hurried flight to the eastward, where it was lost for the further purposes of the campaign. On the evening of that day Wurmser was in full and rapid retreat upon Mantua, having with him but 14,000 out of the 26,000 with which he entered Bassano. It was only by the mistake of one of Bonaparte's subordinates, for which the French chieftain never forgave him, that the Austrian marshal escaped being surrounded. He succeeded in reaching Mantua, but with further losses on the way, so that he actually entered the city on September 12, with only 10,000 of the 26,000 with which he began his movement nine days before.

The particular interest attaching to this short operation is that in it alone, ^{the second} among the four successive contests with Austrian armies attempting to relieve Mantua, did Bonaparte take the initiative himself. Prompt as he was to resort to offensive movements, his strength was not sufficient to venture upon opening a campaign except upon this particular occasion. On the other three he waited first for the enemy to show his hand - open out his plan; then, when

the mistake became obvious, but not before, he promptly took the offensive basing his own action every time upon the blunder which the

Austrians made on each successive occasion, of dividing their forces into two parts out of reach of mutual support. In this case, however, he was drawn to his action by the danger threatening him from Southern Italy - especially from the Kingdom of Naples, which could put 30,000 soldiers into the field. Knowing the timid subservient policy of that Court, he felt that by beating the Austrians in the Tyrol, he would paralyze its action; and his course here, which may be called political rather than military, was actually the same as in the other purely military operations. A central position and celerity of movement were used to beat two enemies in detail - the one by physical defeat, the other by moral collapse.

In truth, Bonaparte in this second of the four series of operations, may be said to have abandoned the advantage conferred by his central position at Verona, and so disregarded his own maxim - "that war is a business of positions." In doing this you will note that, by advancing away up into the Tyrol, forsaking his central position, he gave Wurmser the opportunity of getting to Mantua with his whole force - 26,000 men; which, if united without loss to the garrison of 10 or 12,000 would have been a very ugly foe for him to tackle. Besides this, the French corps blockading Mantua might have been gobbled. Wurmser moved very slowly; Bonaparte very rapidly; and so the latter was able to get upon his enemy's tracks, drive, harass and cut him up - but this could not have been done had the Austrian moved rapidly, even though less so than the French. But what I want you specially to note is that the great captain, who laid down the

rule that "War is a business of positions," did not hesitate to abandon a most advantageous position at the call of a great emergency - trusting to other principles of warfare to work results which would justify his departure from rules. Great men do not put themselves in double irons with rules; and all maxims of war are to be regarded not as absolute, but as of general application, subject to be modified by special cases.

There can of course be no doubt, from the whole tenor of Bonaparte's life and actions, that he would in all these operations in Italy, in 1796, have vastly preferred to take the initiative; not to wait for the enemy to act, but to act first himself. His correspondence at this time, in fact, reveals him burning with desire to attempt the great enterprises with which his brain was teeming. But, being with inferior force, he was compelled for the most part to be governed by his sound maxim, that "War is a business of positions" and to hold on to his commanding position on the Adige and at Verona, in order thereby to increase his strength and so in some measure supply his inferiority in numbers. *End 1st Period June 7*

from one point of view it seems scarcely worth while to carry you through the remainder of this campaign; which for the most part simply presents new applications of the same old truths. Nevertheless there is a degree of interest in following so renowned a work of so great a master of the Art which will I think carry you pleasantly with me; and on the other hand, though land fighting is not our profession, the lessons of this period involve not only general

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Author: Mahan, Capt. A. T. U.S.N.

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U. S. NAVAL STATION, NEWPORT, R. I.

The only copy extant, (May, 1911)

To be returned

Lecture No. 5,

ARCOLA.

Arcola.

From one point of view it seems scarcely worth while to carry you through the remainder of this campaign; which, for the most part, simply represents new applications of the same old truths. Nevertheless, there is a degree of interest in following so renowned a work of so great a master of the Art which ~~I think every~~ ^{will}, I think, carry you pleasantly with me; and, on the other hand, though land fighting is not our profession, the lessons of this period involve not only general

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principles applicable alike to sea and land, but also, in my judgment, very sound and striking analogies to conditions of maritime warfare. Their assimilation by naval officers will therefore, I think, be not merely of curious interest but of practical benefit, and especially if the Navy to which they belong is likely to play the part of the inferior force, charged with the defense of a coast line. Moreover, as I have elsewhere had occasion to observe, the works of a great artist do not merely supply models for a copyist; on the contrary, that is far from being their chief service. By familiarity with the master-pieces of such an one you become imbued with his spirit, enlightened by his intelligence, enkindled by the fire that burns in him; and, thus quickened, you may rise from the mere copyist to be yourself an artist, a creator — rise above slavery to precedents, up to ^{be a master} the mastery of principles. For this reason great land campaigns are so fruitful to the sea strategist, and I have no hesitation in saying that, if I have been able to contribute anything to the Art of Naval War, I owe such ability to the critical study of military warfare.

III
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For these reasons I shall, without further apology, take up and briefly treat the two next descents of the Austrians from the Tyrol, and conclude with a short description of the celebrated battle of Rivoli, in which the crushing defeat of the Austrians finally sealed the triumph of Bonaparte.

Wurmser being now locked up in Mantua, it became necessary for the Austrians to seek another commander in the field, and they found

a General

him in ~~one~~ Alvinzi, of whose military character Jomini speaks thus: "The reputation acquired by Alvinzi in 1794 and 1795, perhaps even more than his seniority of rank, caused the choice to fall upon him. This general had ripened under a long experience," [you are meeting again your man of much experience at sea, and much target practice], "but, being no more initiated than were his predecessors into the great secrets of the Art of War, he could oppose to the genius which commands victory only the will to conquer, together with a valor that rendered the strife bloody and the fall honorable." To him was given a chief of staff, Colonel Weyrother, who is described as "an accomplished officer, but too much in love himself with false maxims to make his chief renounce the former mistakes." Weyrother in this case laid out for the campaign a course of action, precisely analogous, in principle, to the plan with which nearly ten years later he succeeded in losing the Battle of Austerlitz.

The Austrians, whatever their errors in the particular operations, had now for the general course of the war concentrated their efforts upon a single object, the redemption of Italy and relief of Mantua. Reinforcements therefore poured rapidly into the Army in the Tyrol, partly of veterans released from the army in Germany by the recent Austrian successes there, and partly of newer troops drawn from the interior. The French government, on the contrary, clung obstinately to the plan, as fatal to statesmanship as to arms, of doing at once several things, to no one of which could they appor- tion adequate forces. Nothing but Bonaparte's sublime genius saved

the campaign in Italy, and but for his success there the French cause must have collapsed everywhere. Nevertheless, though their campaign in Germany had by this time ended in disaster, and Bonaparte was imploring for more men, the Directory chose this ^{moment} ~~time~~ to divert 18,000 to the invasion of Ireland -- a corps which in his hands would have made Italy absolutely secure. On the other hand there was some amelioration to his general position, due however, wholly to his own energy and success. Naples had sued for peace, which was signed on the 10th of October, relieving the French general from a heavy anxiety; Spain had declared war against England; and the British fleet had been ordered to abandon Corsica and evacuate the Mediterranean. This left Bonaparte, not indeed wholly free from all outer cares, but still with less of embarrassments, to await the movement of the Austrians, which he decided to do under the same general dispositions as before. There was not now in October the necessity of checking them at the beginning, in order to impose a stop upon the menaces of Naples.

By the middle of October Alvinzi had ⁴⁵⁻⁵⁰ 45,000 men under his command. Bonaparte owing to the weakness of his government in undertaking so many schemes and dividing among them their available force, had but ⁴² ~~38~~,000, and with these he not only had to meet Alvinzi, but also to blockade Mantua -- the garrison of which, after Wurmser's entrance, could not be less than 15 to 20,000. ~~Jomini estimates the odds to have been, French 41,000, Austrians 60,000.~~

~~To meet this gathering storm Bonaparte's preparations were --~~

Tomini justly says: By his success in reaching
Mantua and throwing himself into it, Wurmser
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To meet this gathering storm, Bonaparte's preparations were

9000	before Mantua,	
8000	at Verona,	
9500	" Bassano,	
10500	in the Valley of the Adige,	
4500	centrally stationed behind Verona at Villa-	Francia
41000		

Arcole Opuntia

Bonaparte	41.500	
Mantua	9.000	Mention June
Upper Adige	10.000	11.30
Verona	8.000	
Bass.	9.500	
Risone	4.500	

Austria 60,000

Vij:

Mantua	17,000
Alvengi	30,000
David	15,000

9000 before Mantua, 8000 at Verona, 9500 at Bassano, 10,500 in the valley of Adige. A reserve of 4500 was centrally stationed behind Verona, at Villa Franca, whence it could readily move to any quarter requiring strengthening. Jomini invites attention justly to the skill of these dispositions. They were taken not with a view of fighting in scattered detachments just where they stood -- a course utterly ruinous. Disseminated for the purpose of subsistence, and in order to watch the possible advances of the enemy, they were yet so placed that a short march of any two towards each other would unite them, and the whole force could be rapidly concentrated by the simultaneous movements of the different parts. Here again you catch a glimpse of Bonaparte's meaning, when he said "War is a business of positions."

Now consider the Austrian plan. The Austrians had 50,000 men, part in the Tyrol behind Trent, and part to the eastward in Friuli. Quite independent of their power to unite these combatants within the limits of the Austrian Empire, wholly out of Bonaparte's reach, they could, if they chose, make their junction by the Valley of the Brenta. Instead of this, they decided that Alvinzi with 30,000 should move by Bassano upon Verona, and Davidovich with 15,000 to 20,000 by the Valley of the Adige. These two corps would unite on the lower Adige, thence force their way together to Mantua, where their junction, after deducting probable losses, would raise the force under Wurmser to 60,000 fighting men. It was à propos of this complicated arrangement that Jomini says: "What infinite pains

to unite two corps on the lower Adige that could without the least difficulty have been brought together before the campaign began."

However, Alvinzi, being more distant than Davidovich, started on the first of November and on the 4th approached ^{the} Brenta. Bonaparte, upon being informed of this movement, ordered ^{the} the Corps at Bassano to fall back, and that at Verona to advance, by which simple movements he had 18,000 men united at Montebello. Nevertheless, the odds were still too great and although, as was his custom, he attacked (on the 6th of November) and with so much vigor that he for the moment repelled the enemy, and stopped his advance, the French general felt that it was unsafe to remain with inferior forces, so far from the division at Trent. He therefore drew back towards the common centre at Verona, where he would also have within call, if absolutely needed, the division blockading Mantua. Observe again, how war is a question of positions. It may be well also to make the same remark with regard to the essentially erroneous positions of the Austrian army as a whole; that is, that there should be ^{have} one corps in the upper Adige, and another on the lower Brenta, both directed upon Verona. From the nature of the case, blows delivered by two such bodies, tho' directed upon a common object, could not be simultaneous; and it would ^{be} as vain to expect ~~as great a result~~ from such successive blows ^{a blow equal to that} ~~as from that~~ delivered ~~so~~ by the whole army, as it would be to expect that two eight-inch shells striking at intervals, would have the same penetrative effect as one 12-inch delivered upon the same armor.

It was upon the 7th of November that Bonaparte fell back upon Verona. Meantime his subordinates in the upper valley of the Adige, Vaubois, had also been meeting with reverses. Bonaparte's instructions to that officer had been to assume the offensive, attacking the enemy to the northward of that point where the valley of the Brenta communicates with the valley of the Adige. The valley of the Brenta was the surest and shortest line of communication between the two positions, in which Alvinzi had seen fit to put the two divisions of his army; and, if Vaubois should be able to hold the defiles north of that point for any length of time, it would by so much delay any support between the two. Vaubois made the attack as directed, but was unsuccessful; and in his consequent retreat fell back to a point called Calliano, south of the valley of the Brenta, which thereby remained uncovered and so frustrated Bonaparte's object. The matter was of less importance in this respect, as the idea of so using the valley of the Brenta was not entertained by Alvinzi at this time; but still it was a reverse, and the more to be regretted because, upon the same day that Bonaparte retired to Verona, Vaubois was in turn attacked at Calliano, and after an obstinate struggle had again to retire upon La Corona and Rivoli. He arrived there on the 8th of the month; Alvinzi meanwhile following Bonaparte to Montebello and villa Nova, reaching the latter place on the 11th. Here he decided to wait for further news from Davidovich, the Austrian commander opposed to Vaubois; and I hope you will note how this delay illustrates the remark upon successive blows which I

have just made. Whatever the result of any reverse upon either of the French corps, it had a certain time in which to recover, while ^{its} his opponent was informing himself what was happening on the other theatre of the campaign. The interior position of the French made their communications quicker; and the disadvantage of the Austrians was the greater, because the commander-in-chief could not correct the mistakes or delays of his subordinate. In this particular case Davidovich arrived before Rivoli on the 10th of the month, and there waited till the 16th without attacking. What an inestimable ^{advantage} to yield to a man like Bonaparte! and what a serious risk and injury to the Austrians! Yet, although the chief fault is that of Davidovich, we should profit but ill by the lesson if we did not trace it back to the fundamental error of attempting operations so far out of mutual support.

Bonaparte, of course, did not allow such a period to pass in inactivity; but he was very sorely pressed. Skill may prevail against numbers; but it is a sore struggle always against that **P**rovidence which ^{is on the side of} ~~is on the side of~~ fights always with the strongest battallions. A letter of ^{D's} ~~his~~ which I will shortly read to you vividly portrays the exhausting anxiety, almost touching despair, which then overwhelmed him. But he had long ere this, young as he was, learned the lesson he so hardly taught his subordinates in after years, and which so few in our day appreciate, that war cannot be made without running risks; and that in desperate emergencies only desperate energy, and a willingness to take great risks, can wring safety out of danger.

"As well lose Italy by a defeat as by a retreat," is the terse but accurate phrase in which Jomini summarizes the decision reached by Bonaparte. But with ^{the} strategic advantage of position he already possessed ⁱⁿ virtue of his interior positions ^{there} seemed little room for strategy, in the strict sense of that word, to be brought into play; and he resolved, therefore, again to try the fortunes of battle with Alvinzi's corps. He advanced again from Verona to Caldiero on the 11th, and on the 12th fought another battle, which remained indecisive and in the evening he again retreated to Verona. The position was now indeed disquieting. Vaubois was far from secure at Rivoli, and ^{in fact} ~~indeed~~ nothing saved him there but the unaccountable inaction of Davidovich; and it was even to be feared that Alvinzi might, by sheer force of numbers, pass over the Adige and effect his junction with his lieutenant. The time had come when it was necessary either to gather the French forces together, abandon the hardly won line of the Adige, and begin a retreat towards France ^{the} end of which, owing to the political conditions of the times, could not be foreseen — or else to take one of those sublime resolutions ^{by} which alone, at such a critical moment, deliverance can be effected; at the cost, however, of risks such as only the most resolute can take. (Here read Bonaparte's letter to the Directory, ^{Nov. 14. Day of march to Arcole} Page 173. Note)

After three murderous combats, in which his combinations had been foiled, as well by local conditions as by superior numbers, Bonaparte saw now approaching the fatal moment when the three bodies of his enemies, Alvinzi, Davidovich, and the garrison at Mantua, would be

Note.

It is not clear what book Captain Mahan refers to as "page 173, note."

"Napoleon's Correspondence" contains no letter to the Directory of date November 14.

Date of Napoleon's letter referred to is probably November 13, 1796.

Full letter in French (Nov.13) is found page 107 Correspondence de Napoléon, letter no.1182.

The following extract in English is found on page 358 of Dodge's Napoleon, vol.1.

From Dodge's Napoleon, (Great Captains series), page 358:

After Caldiero, November 13, 1776, Bonaparte, who keenly felt his defeat, wrote the Directory:-

"The wounded are the élite of the army. All our superior officers, and our best generals, are hors de combat. . . The Army of Italy, reduced to a handful of men, is exhausted. The heroes of Lodi, of Millesimo of Castiglione, of Bassano, have died for the fatherland or are in the hospital. There is naught left but their reputation and their pride. Joubert, Lannes, Lanusse, Victor, Murat, Chabot, Dupuy, Rampon, Pijon, Chabran, St.Hilaire are wounded, as well as Mesnard. . . We are abandoned at the end of Italy. . . . I have lost in this war few men, but they are all men d'élite, impossible to replace. The brave who remain see inevitable death, in the midst of continual risks and with forces too small. Perhaps the hour of brave Augereau, of intrepid Massena, of Berthier, my own, is ready to strike. The, then, what shall become of these brave men ? This idea holds me back; I no longer dare brave a death which would be a subject of discouragement and misfortune for those who are the object of my sollicitude."

united. Fortunately for him, the movements of his three enemies were concentric, as yet out mutual support, directed upon the central position he himself held, and therefore still laboring under great disadvantages for making felt the superiority of their numbers. Fortunately also, both Alvinzi and Davidovich chose this moment for deliberation; and Alvinzi did not purpose to advance until Davidovich had carried the position at Rivoli. It was under these conditions that Bonaparte not only formed, but carried into execution, the daring but most hazardous plan by which, at this nadir of his fortunes in Italy, he turned destruction aside. On the 14th of November he crossed the Adige to its west bank, passing through Verona to do so; and it is interesting to note the coincidence of time, in that, on that same day, Alvinzi, having apparently decided to wait no longer for Davidovich, again advanced toward Verona; his purpose being to assault it the following night, that of the 15th to the 16th, with twelve battallions, about nine thousand men — the scaling ladders being already prepared. The movement might have been crowned with success, had he persisted; for it was an essential part of Bonaparte's plan to reduce the garrison of Verona to three thousand men in order to increase adequately the force he took with him for his projected operations. This was a part of the risk, the tremendous but inevitable risk, that he undertook. But Alvinzi, who had delayed too long at a time when it was essential to keep a sustained pressure upon the enemy, only played into his hands by this advance, which lengthened his line of communications; for the gist of Bonaparte's

the Adige lower down, at Ronco, and coming up in Alvinzi's rear. On the 15th Bonaparte crossed at Ronco; and at the moment when Alvinzi was expecting that he would that night assail and carry Verona, word was brought to him that the enemy was falling upon his communications, and threatening his depots and parks of artillery. Had he been a greater man, he might have reasoned, as Bonaparte doubtless would in a like case, that if the blow to his communications were serious, the garrison of Verona must be largely reduced; but as it was, he at once conceived for his communications that anxiety which their importance justly demands, but concerning which it is safe to say that a great general must be able to weigh, not only the general but, the momentary importance — there are times when even the communications must for the moment be risked. Had Alvinzi with his superior numbers struck at once across the Adige, the position at Rivoli must at once have been abandoned, Bonaparte's own move upon this communication would have been fruitless, the two Austrian corps would have been united, Bonaparte separated from Vaubois, and as a consequence thereof the fall of Verona and the relief of Mantua would have been practically simultaneous. Just the reverse of this happened. As soon as Alvinzi became convinced that the attack in his rear was real, not a feint, he abandoned the his projected attack upon Verona and turned all his attention to the saving of his communications. In short he yielded, as Bonaparte had more than expected, to that fear about his communications which is so decisive with mediocre generals; but let us all beware of censuring the inability

of an average man to rise above the endowments which nature has given him. Let any one of us endeavour to realize what it is to be threatened with the loss of all one's resources by a single blow. How would you or I feel at the sudden news of an impending disaster which would tomorrow leave us penniless? Yet that is the position of a general whose communications are ~~roughly~~ cut. Why did Melas, after the battle of Marengo, sign an armistice which abandoned all Italy to the French? Simply because Bonaparte had then placed himself securely across his line of communications, had cut off all his resources, just as Alvinzi now expected that his own were about to be cut off. The same reason entailed the surrender of Forts Jackson and St. Philip after Farragut's fleet had passed them. "This project," says Jomini, "was indeed audacious, but in order to extricate oneself from a difficult position, it is necessary to know how to take timely risks." This was just the difference between Bonaparte and Alvinzi; between the man of genius and reflection, and the routine man of large experience. *How much greater was Alvinzi's experience than Bonaparte's!* The step was, moreover, in Jomini's opinion, the only one that offered any promise of success. As to this I myself express no opinion, and am certainly not prepared to suggest an alternative.

Bonaparte's movement entailed three days of extremely hard fighting. This was due in part, and chiefly, to the character of the country, which I will briefly *describe* discuss in a few moments; but more particularly to the fact that he hoped for a surprise, and in this was foiled by one or two unexpected obstacles, which he could scarce-

ly have foreseen, but which constituted just one of those chances to which, to use his own expression, something must always be left. He had expected that his movement would be so unforeseen, and at the same time so rapid, and ^{so} hidden from the enemy, as to gain him a clear twenty-four hours for its execution. Although in the large strategic sense he was on the defensive, the particular movement was offensive; and the country was particularly unfavorable for offensive operations, a fact of which the Austrians had had experience two months later in the Rivoli campaign. It was a plain region of marsh and rice field, communication through which was only by narrow dykes which did not permit of deployment; in which ^{only} the heads of columns ~~only~~ came into operation, except at certain points, the tenure of which by the defence, which was now the role of the Austrians, effectually prevented ^{an assailant's deploying}. Time being of such pressing importance Bonaparte took the shortest route, which was by the west, or right, bank of one of the streams which flowed through the region, a tributary to the Adige. This stream, though narrow, was unfordable near its point of junction; and as the column advanced along it, it found itself confronted by an Austrian detachment, strongly posted at the head of the dyke in the village of Arcola, which has given its name to the battle. Notwithstanding the imminent necessity for speedy ^{column} success, the French hurled itself in vain, in repeated attacks, against this paltry yet insurmountable obstacle. All the commanding officers, including the generals, pressed to the front to encourage their men; and finally Bonaparte himself ran to the ^{spot} front using

every exhortation to stimulate the ardor of his soldiers. All was in vain. One of his favorite aid-de-camps was killed at his side, and in one of the furious charges in which the opponents swayed back and forth upon the causeway, the conqueror of Italy was passed by the enemy's columns by over 50 paces, being for the moment practically in their hands, a position from which he was ^{soon} ~~immediately~~ relieved by a charge from his own men. But Arcola remained untaken; as fatal an obstacle to the success of that day as the little fortress of Acre, by its sturdy resistance, proved to his Syrian expedition. At nightfall the army retired again across the Adige, resting upon its arms on the west bank; but, although the operations against Alvinzi's communications had failed, Verona had been saved, for the projected attack was abandoned. ~~No~~

Notwithstanding the experiences of the first day, Bonaparte decided to resume his attack on the 16th by the same lines; a decision which has been much criticised and apparently justly. He experienced another day of desperate and ineffectual fighting; and at night fall again withdrew to the west bank of the river. The following day, evidently convinced of his mistake, he provided the means for crossing the little stream of which I have spoken; and *then*, drawing to him the French forces from Legnago, he combined against the Austrian left, an operation which was decisive of the fortunes of the day. By night-fall of the 17th Alvinzi was forced from his positions, and in despair ^{of success,} after these three days of hard fighting, retreated the following day towards the Brenta. Italy was again

saved.

On the second day of Arcola, November 16th, Davidovich at last moved against Vaubois, who on the following day, November 17, abandoned Rivoli and again retreated to the southward; this retreat thus coinciding with the discomfiture of Alvinzi, which made the failure of Vaubois and the success of Davidovich alike a matter of ^{small} ~~no~~ concern to either party. ^{Indeed,} ~~On the contrary,~~ Davidovich's success, by inducing him to advance at the very moment that Alvinzi was retreating from their proposed point of meeting, only tended to put him in greater peril. The untiring Bonaparte turned at once upon him, and only a hasty retreat to the Tyrol saved that corps d'armée. This ended the campaign of Arcola, the Austrian army now going into cantonments to reorganize for their next campaign, which proved also to be their last in Italy during this war. Before finally quitting this campaign, let us note first the serious and decisive effect produced by Davidovich's inaction, extending from November 10 to 16. Since on this latter date Vaubois, having had so much time for preparation, only stood out for one day, he probably could have resisted for a less time, if assailed at once. Whatever the reasons of the Austrian commander, the disastrous effects of delay are sufficiently evident and should be well laid to heart. It may be assumed as a general maxim that delay is all to the advantage of the defence, which on this occasion was the part played by the French in general and by Vaubois in particular. (Cite instances, Nelson at Copenhagen, Hotham in the Mediterranean, Saumarez in the Baltic).

But, however censurable such a fault of execution, of detail, we shall be very remiss if we do not go back of it to the fundamental mistake of conception, without which the particular error could not have occurred. There is, I admit, a danger of becoming wearisome in recurring so often to the same admonition; but I will couch the lesson again in the words of an acknowledged expert. "Finally, underlying all the faults of execution, the primary cause of the Austrian disasters was the lack of concert between corps, starting from different bases to march upon a central point, already occupied by an enemy superior to either corps;" or, in other words, we have here another illustration of the grave danger of a concentric movement, where the point of concentration is either in the power of the enemy, or can be occupied by him before concentration is effected. A still more striking illustration of the same truths will next be afforded by the campaign of Rivoli, and by the final battle of that campaign, which will be the subject of our next lecture.

In the campaign of Arcola, Bonaparte, by immense activity and by assuming a tremendous risk, favored moreover by the blunders and weaknesses of his antagonist, saved Italy to the French against overwhelming odds. But though he had escaped, as it were, by the skin of his teeth, and had reaped a great reward of purely personal glory, his position, tho' for the moment saved, was in the general no less precarious than before. His losses in men, owing to the character of the operations and the necessarily tremendous exposure they had undergone, was even greater than that of the enemy; and yet the Directory, notwithstanding the narrow margin by which they had escaped, and which Bonaparte strongly impressed upon them, instead of immediately reinforcing him, continued that blind policy of attempting to do several things at once, that had already entailed disaster in Germany and had come within an ace of causing ruin in Italy. So far from increasing Bonaparte's army, they sent him barely enough men to replace those just lost, men necessarily of quality inferior to the tried veterans that had won the battle of Arcola. At this very moment ~~they were sending~~ ^{starting for} to Ireland, on a chance of effective diversion, 18,000 men whose presence in Italy would have secured Bonaparte's position. At the same time the political condition in Italy was such as to threaten irreparable disaster, did but a slight reverse befall the arms of France in that quarter. How nearly not only a slight reverse, but a crushing disaster, had been undergone, you now know; and also that only Bonaparte's quick decision and gigantic energy had redeemed a situation otherwise hopeless. It can

not be too clearly, nor too emphatically, stated that not the French Republic, not the French government, not the French nation, but Bonaparte, Bonaparte only and Bonaparte alone, saved Italy in 1796, and with Italy France. It was not the virtue of republican institutions, but the genius and energy of one great man, that changed the current of affairs.

While the French government was thus idly trifling with so serious a situation, the Austrians were straining every nerve to put again into the field a new army. A period of two months elapsed between the battle of Arcola and the next campaign — that of Rivoli. Here I may mention, in passing, was the precise period in which the British fleet was evacuating the Mediterranean, to which it did not return for a period of eighteen months — not till long after the fate of Italy had been decided, and Bonaparte was on the point of sailing for Egypt. This time of respite was passed by Bonaparte not only in reorganizing his army, but also in changing and settling the political status of the peninsula, upon lines already determined, which would conduce to the security of his own position. He was thus employed, and at the moment was in Bologna, when the next Austrian movements were reported to him; movements which initiated the short campaign of a week, which bears the name of Rivoli and was decisive of the ^{ultimate} ~~final~~ issue. *End June 7* ~~—————~~ *Begin June 8*

For this final trial of the hazard of war, Alvinzi found himself at the head of 45,000 men. The immediate objective of the campaign, as of the entire series which we have been following, was the

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Lecture 6.

RIVOLI.

VI.

Second attempt of Alvinzi, and the Battle of Rivoli.

For this final trial of the hazard of war, Alvinzi found himself at the head of 45,000 men. The immediate objective of the campaign, as of the entire series which we have been following, was the

relief of the fortress of Mantua, in which 15,000 combatants were still shut up, and upon whose tenure depended the fate of the war — a signal illustration of the value of fortifications, for, it was impossible for Bonaparte to advance, or to do more than hold where he was, so long as that fortress stood; while on the other hand, its relief could only be effected by such a blow to himself as would entail the evacuation of the valley of the Po. This being the objective, and the garrison within being ^{Capote} ~~able~~, if adequately approached, of assisting the general movement, it would seem clear that the great effort of the Austrians should have taken such a direction that, when they came into collision with the French, the point of collision should be as near as possible to Mantua itself. This would indicate that the main effort should ~~be delayed~~ have been made by the lower Adige; and that, instructed by the disasters of the last campaign, the whole body of the Austrians should have taken that direction, leaving in the upper Adige only a sufficient number to prevent an advance of the French in that quarter; instead of so large a division, a full third of their whole force, as they had done in the Arcola campaign. Instead, however, of adopting this plan, Alvinzi reverted to one identical in principle with that of Arcola. The main body, of some 30,000 men, was to proceed down the upper valley of the Adige, where the resistance of the French would be powerfully assisted by the accidents of the ground, which afforded at least two extremely strong positions for defence. While this movement under Alvinzi himself was taking place, a secondary corps of 9 or 10,000, un-

der General Provera, was to cross the lower Adige, in the neighborhood of Legnago and move towards Mantua. This ~~was~~ movement seems to have contemplated a double object, somewhat as ^{an} unskilful player at billiards takes his chance of two balls, hoping to scratch a ~~ca-~~ron on one or the other. Provera was to relieve Mantua, if possible, and ^{it} was also hoped ^{he} would be a diversion to Bonaparte; as if it had not already been sufficiently proved that Bonaparte was not to be diverted from pursuing a single object by the divergent attraction of two objects. As a diversion to Bonaparte, Provera's division was altogether too strong; for it was impossible to induce Bonaparte to devote to any such secondary object a force that would cripple ^{him} ~~his measures~~ at the strategic centre of the situation. As a movement for the relief of Mantua, it was in itself too weak; for even did it succeed in entering the place, the accession of strength would not be great enough to permit freedom of movement to a garrison already too numerous for the supplies the place contained. Lastly, Provera's advance was useless for this reason: that if Alvinzi succeeded in forcing his way through ^{against B's resistance,} ~~to the rear of Verona,~~ Mantua would thereby be relieved, and he was much more likely to effect this with Provera at his side than with Provera detached at such a distance.

To provide against the expected advance of the Austrians, Bonaparte's arrangements were exactly the same as when awaiting their previous advance. The strategic centre ^{with 9,000} was at Verona, 10,000 men in the upper Adige (Vaubois relieved), 4000 at the foot of Lake Garda, 105

and 8000 between Verona and Legnago. These were the arrangements when on the 7th of January, 1797, the Austrian movement began. Provera advanced from Padua towards Legnago on the 8th, and on the 10th Alvinzi himself reached Alla. That same day Bonaparte was at Bologna and received the intimation of the movement. He at once started for Verona, where he arrived on the 12th. There he heard ~~of~~ only of Provera's advance and various accessory demonstrations on the lower Adige, the object of all which was to delude him as to Alvinzi's real objective; namely, the corps in the upper Adige. Alvinzi's hope was to detain Bonaparte and all possible reinforcements ~~at~~ about Verona, for a long enough time to allow him to demolish that upper corps. The expectation was delusive, for, not only was Bonaparte a man difficult to deceive, but his various corps were so skillfully stationed, from the strategic point of view, that it was quite impossible to overwhelm one before it should receive support, unless by the impossible blundering of some of the subordinate French generals. All which goes to show that upon the whole it is better to rely upon superior numbers to overcome your enemy than upon powerful diversions to mislead him. Bonaparte, knowing how adequately his divisions were stationed for mutual support, took no decisive movement until the plan of the enemy should become more apparent. The temporary provisions, easily taken, to meet the Austrian demonstrations on the lower Adige were of course made; but the division central at Verona did not budge because of the affairs about Legnago. Bonaparte kept it fast till the following day, when the news

January 13 105

Baths of Rivoli

Bonaparte 22.000. Vis:

Garda 2.000

Ostona 2.000

San Marco 1.000

{ Centin 10.000

{ Rempres 3.000

Peschiera 4.000

Battal of Rivoli

Alonzi 28.000

1	4.000
2	5.000
3	5.000
4	4.000
5	7.000
6	3.000

Tombert	Ferrara	2.000
	Corona	8.000

Battal. Bonaparte 22.000

~~Center and right~~

received caused him to dispatch it, with full confidence, to the upper Adige, where 24 hrs later it played a decisive part in the celebrated battle of RIVOLI, fought January 14th - 1797

before A. Vincent

Columbus in

March 1797 by G. G. G.

Battle of Rivoli

I have not heretofore attempted to give you any detailed description of the different battles, the occurrence of which I have had occasion in the course of the two campaigns with which I have dealt; but the battle of Rivoli, at which we have now arrived, possesses as a ^{special} ~~particular~~ interest, not merely because in itself the greatest and most decisive of all fought by Bonaparte in his first Italian Campaign, ^{that was then crowned with final success,} but because of its particular tactical features. In it you will find illustrated on the field of battle, that is to say in Tactics, the same general principle that has so far occurred such conspicuous illustration ^{in the strategy} of the Campaign, viz: The ^{placing} handling of a central mass, ^{concentrated,} in such wise as to beat, in detail, several hostile detachments, each inferior to the said central mass, though in the aggregate possessed of a superiority to it that should have been decisive. This principle is really as fruitful

in naval warfare as in military, and several instances of its application at sea might now be quoted, if necessary; but, ^{time} though the principle is the same, the methods of application will not be so, owing to the differences of conditions. Land battles, depending largely for their issue upon peculiarities of the ground, cannot serve as precedents for naval warfare; but, for the matter of that, one land battle is, and can be, only partly a precedent to be followed in any other, for in no two cases will conditions be identical: and also, from age to age, the changes of weapons changes tactical methods & precedents. In the illustration afforded by the battle of Rivedale, as in the previous course of the campaign, fix your attention as closely as possible upon the principles involved: $\frac{1}{2}$ the advantage of a central position, $\frac{2}{3}$ of inferior line, $\frac{3}{4}$ of force massed against force disseminated.

It will be necessary first to make acquaintance with the ground when the battle was fought, and when occurred the preliminary, or simultaneous, movements which preceded and accompanied the main action. We will do this by means of the prepared plan, in which you will recognize a small part of the general region depicted upon the large maps, whereby the campaign was here followed.

This scene of battle is bounded on the east by the River Adige, on the west by the Lake of Garda. Between the two there runs, north and south, a mountain chain, in places steep and even precipitous. The main chain, called Monte Baldo ^{lies} near the Lake; but, near the northern limit of the plan, sends off, as you see, a spur called Monte Mafzone, which runs close to the Adige, the walls near the river being in places so steep as to be well nigh inaccessible. Between Baldo

The latter cannot well be separated from its antecedents and
its consequences, without in some degree impairing the
force of the lessons involved

and Magione, at the north, there is a narrow defile, easily
 held by a small force against an ~~ex~~ much larger. Through it
 passed a somewhat difficult road, from Ferrara to Rivoli,
 commanded, a little south of Ferrara, by a strong position
 known as La Corona. South of the latter the valley between
 Monte Baldo and Magione broadens, and descends to a
 meadow bottom.

~~front~~ indicated by the course of the mountain torrent
 (Tasso) which ^{turns and} runs, as you see, from east to west.
 South of the ^{bed} torrent the ground again rises to ^a the plateau,
 upon ^{where} ^{stands} which the town of Rivoli, before and around which
 the battle was fought. This plateau is from two to three
 miles north and south, by $1\frac{1}{2}$ east to west; and ~~as~~
~~you will observe~~, is broken ^{in places} by wooded hills, between
 two of which, ^{Tiffaro and Pipolo,} the main road from Ferrara continues on
 south of Rivoli. The Tasso, you will further remark,
 winds round the plateau; its course designating a reach
 of meadow land now a ^{Par} wide. Besides the ^{main} road
 from Ferrara to Rivoli already mentioned, there are
 several others, less practicable, through the mountains.

Of these the most important are designated laid down, including the main road, and are marked, from West to East, 1, 2, 3, 4+5, according to the Austrian columns that respectively used them in their advance southward. Moreover, throughout I speak of these columns by these numbers, instead of by the names of their commanders. It should be mentioned that all these roads, except that used by 4+5 along the valley of the Adige, were difficult for artillery. The columns using them had only mountain guns; the ^{field} artillery and most of the Cavalry went by the Adige. Besides these

The ^{details} ~~features~~ thus far ~~described~~ ^{given} are important — some more, some less — but were not crucial to the issue of the battle. The crucial, decisive feature was this: that the road 4 and 5, by which ^{was to ascend} approached so important a fraction of Alving's army, ^{his} ^{artillery and cavalry} reaches the plateau of Rivoli through a very narrow and ^{somewhat} winding ~~road~~ pass, commanded by the precipitous southern extremity of Mt. Magnone. The possession of the latter ^{ridge, called San Marco} by the ^{Embruy}, would separate the ~~two~~ columns on either side, and not

only so, but would permit the enemy seriously to molest
 the ascent. The approach by this road was further covered
 by a ~~battery~~^{redoubt}, which, when the battle began was in the
 hands of the French. This narrow pass and the ~~height~~^{ridge} of
 San Marco were therefore the key of the ~~issue~~ situation,
 upon ~~whose~~^{the} tenure ~~the~~^{of which} ~~issue~~ turned the junction of the
 Austrian forces and consequently the issue of the battle.

Big Map
 As has already been said, ~~the~~ Möring's move-
 ment began on the 7th of January. ~~On the 12th~~ On
 the 10th he arrived at Alla. Hoping that Bonaparte
 was ignorant of his general plan, and that he had only
 to do with the French corps, (Toussaint's), of 10,000 men,
 in the valley of the ^{upper} Adige, he thought to surround
 it and by cutting off its retreat to capture the
 whole. Col. 1 was therefore ordered to advance by the
 road west of Monte Bardo, while ~~the~~ 2 and 3 were to
 attack in front. 4 and 5 were to advance along the
 west bank of the Adige to act as circumstances
 might demand. ~~Indeed~~ The French were in position
 at La Corona, their advance guard at
~~the~~ Ferrara. Cols. 2 and 3 attacked on the 12th,

roads west of the Adige, there was another marked
6, running along its east bank, and followed by
a column 6, which had but a minor and acces-
sory part in the operations.

but they were in number only a little in excess of the French
and, besides, 2 had orders not to press its ~~attack~~ ^{assault} until
assured that 1 had got sufficiently far & head off a retreat.

The attack therefore lacked coherence, and failed; the oppo-
sing forces each bivouacked in their positions; but the
French Commander learning during the night that Col. 1

had got in view of his left flank, decamped so quietly
as entirely to elude pursuit. ^{Returning about 5 miles, he on} ~~the~~ ^{the} 13th ~~he~~ had

taken position on the plateau of Rivoli, occupying the
advanced northern positions of the plateau. Here he

waited all day for news from Bonaparte, & whom
of course he had not word of the Austrian advance

and apparent force; but at 10 that night, ^{13th}

not hearing from Bonaparte, and fearing to be over-
whelmed, he decided to retreat ^{farther} south, ~~where orders~~ ^{and the}

troops were actually on the march, when orders
came to hold fast, that the Commander in
Chief was on the way with reinforcements. ^{7a 7b 7c} ~~Sober~~

While Alvinzi was making these dispositions, and initiating his movement against the French corps on the upper Adige, let us pause to consider the reasoning of his adversary upon the information he received, and the consequent measures taken by him; for it will serve to illustrate the danger of relying upon a diversion, such as that of Provera upon the lower Adige, ^{whereby} ~~when~~ a corps so important, numbering nine or ten thousand men, is placed where it can by no means support the main effort of the armies, ^{and} with the sole purpose of attempting to deceive an adversary, whose insight may be greater than you suppose. For, as it failed to divert Bonaparte, the sole result of Provera's movement was to weaken by so much the army of Alvinzi on the day of battle. ~~On the 10th of January, when Bonaparte received the news of the Austrian movements, he was at Bologna, endeavoring to settle the political affairs upon whose course much of his operations depended. He left there at once for Verona, pausing for a moment before Mantua, to give necessary instructions to the blockading corps at that point.~~ ^{Bonaparte} ~~On the 12th he arrived at Verona, and on that day or the next he had information both of Provera's movement and of the retreat of the French corps in the upper Adige from La Corona to Rivoli. The commander of the latter, Joubert, was a man in the prime of life, in whom Bonaparte had the utmost and well-grounded confidence. The mere fact, therefore, of his abandoning so strong a position, after a short resistance, when he had 10,000 men under him, was sufficient to prove to so clear a head as Bonaparte's that the great bulk of the Austrian forces was in the upper Adige; and that,~~ ^{as has been said}

in sending Provera by the lower Adige, with a force whose size, though not yet accurately known, was evidently larger than a mere diversion should have warranted, Alvinzi had simply fallen again into the old error of attempting to do two things at once, with the result that he ~~simply~~ ^{again} was moving upon exterior lines, leaving his vigilant opponent the advantage of the interior position which he had already shown himself so skilful in using. In fact, the conception of this campaign is identical in method with that of the previous one of Arcola. Only the direction of the major and minor efforts were reversed. In the Arcola campaign the main attack was by the lower Adige, the secondary by the valley of the upper river. In the one now under consideration, on the contrary, the main direction came from the north. The latter seems even more faulty than the former, although the underlying conception was the same. For an advance in force by the lower Adige at least approached Mantua more closely; whereas to adventure a force like Provera's, too large for a mere diversion, yet inadequate to a powerful offensive operation, into a country which, as Arcola had proved, favors defensive operations rather than offensive, was to court the disaster which in fact overwhelmed Provera. "The principle which condemns the use made of Provera's corps," says Jomini, "is applicable to all diversions made by a weak force."

Bonaparte having, therefore, decided that the strength of the Austrian demonstration was against his left, decided to carry to that point all the force available to him, for which his interior

position gave him ample facilities. As for ^{the division of} Provera, he gave such instructions to Augereau, and left with him such force as would prevent Provera reaching Mantua too soon, but would not arrest his advance towards that point. His aim was to ^{permit} ~~allow~~ that hostile corps to advance so far as would facilitate its destruction, delaying it simply, ^{so as} to allow him to deal effectually with the main body under Alvinzi and then to return in time to complete its overthrow. He drew 7500 men from the division about Verona, ^{Here on big map} leaving only 1500 for the defence of the city, and ordered also the ⁴⁵⁰⁰ 4000 stationed at the foot of the Lake Garda to march as rapidly as possible towards the scene of action at Rivoli. ^{With} ~~So~~ these 12,000 reinforcements, added to the corps of Joubert, he would have an aggregate of some 22,000 men; — strengthened, however, by the advantages of a well chosen position — to cope with the 28,000 of Alvinzi. Under these conditions the odds would not be so great but that he might hope, by his greater quickness and his indisputable genius, to gain the advantage over an enemy, of whose faulty combinations in the opening of the game he already had an inkling.

accord with B's message, received at 9. ^{R. &} will recall about midnight of 13-12, accordingly took position ^{at Rivoli} again, but somewhat more retired - the main body in front of Rivoli, with advance guards covering ^{the} approaches (4 & 5) ~~by~~ from the Adige, and ^{the} forward ^{the} ~~the~~ ^{the} ~~the~~ ^{the} plateau. The road covering the road ascending from the Adige was also held, but not the ridge of San Marco, which was momentarily occupied by the Austrians, but not in the force its importance demanded.

Napoleon arrived on the spot on the night of ^{soon after his message, but far} the 13-14, ~~but he~~ ahead of his reinforcements. Without waiting for these, as soon as he learned how the troops were posted, he ordered an immediate advance & retake San Marco, and the positions held the previous day, ^(which had been already in part occupied by the enemy) this was done and by daylight the French ^{again} held the positions before described, including San Marco, but the enemy contested this advance, and so the battle was beginning.

Moruzi, during the same night ^{had} made the following disposition of his forces. Col. 1 was again to continue its ^{ex-centric} hazardous course to reach the French rear at Rivoli, as had the day before been attempted at Corona. Col. 4 countermarched on its road, and retrograded to Belluno, where it crossed the mountains, and joined 2 and 3. These

these corps may therefore be considered the Austrian
 Centre, 1 being its ^{right} ~~left~~ detached practically out of reach
 Column ~~5~~ ^{formed} 5 the ~~left~~, whose support ^{to centre} was intended and essential
 The extending of that support, ^{however,} depended upon the control
 of San Marco and the pass at Osteria. To the first
 point at which the Centre and 5 could meet was on
 the plateau of Rivieri. It was a mistake, doubtless
 to attempt a concentration so close to the enemy's
 front; but had Alvingzi moved on that night (13-14),
 before the battle, with the promptitude and energy
 shown by Bonaparte ^{at the same instant,} he could probably have ef-
 fected his purpose before the arrival of the ^{French} rein-
 forcements. But he did not do so, partly from
 the national slowness, partly from the wish to give
 Col. 1 time to get to the French rear. Although
 he realized the French were being reinforced, he did not
 know that Bonaparte had divined that the great
 mass of the Austrians were in the valley of the ^{upper} Adige.

of support itself, and unasked to second the main attack,
Except in so far as it diverted the attention of Bonaparte,
a man not easily diverted, ^{thus} from the key of a situation

he recognized that
 that the movement of Provera, on the lower Adige was
 of secondary importance, and that consequently,
 faithful to his rule not to ~~waste~~ further strength by
 doing two things at once, he had concentrated every
 available man upon the approaching struggle at
 Rivoli. In short, Alvingzi was ignorant of the
 force he was about to engage; but, realizing that it
 was greater than the day before, he did order 4
 to advance upon San Marco. In consequence of
 this order, ^{and of Bonaparte's,} when day broke the fighting was general
 along the line, where the Austrian center was.

Reinforcement to 12,000 - but not here
 Bonaparte now took the following decision.

A corps of 2000 ^{taken from the reinforcing column} strong was sent to Garda, to
 act on the flank of 1, and so delay its advance.
 One of similar strength occupied the adjacent, and
 neighboring ground, to resist Col. 5. Bonaparte
 considered that these two would ^{retard} occupy the
 two flank columns of the enemy long enough to

allow him to ~~drive~~ ^{drive} the center back, and put it out of the fighting; which done, the flank columns could be readily handled. But, being so far inferior no time could be lost. The French pushed their advance down into the valley of the Tasso and fought their way nearly to the villages on the far side; but here the contest was severe, and swayed backward & forward in alternate charges; which on their retreat the French began to be pushed back from the important crest of San Marco. At this time - nearly ten A. M. - a corps of their reinforcements arrived, and entering rapidly into action succeeded in restoring the day, which had begun to turn against the French, a part of whom had even broken in disorder. So far they had succeeded, however, in leading back the Austrian center from the ground where it could ^{deploy before, and so} cover the entrance of 5 through the defile

and the open ground of Rivoli

Mountain, however, affairs had become pressing upon the two flanks. Col. 1 was already ~~near~~ ^{at} Pezzeno - nearly abreast; that was, after the French left ^{was} pushing ^{towards Affi;} & its mark; and 5 had come to blows with the Corps depending the depth which, ~~was~~ after a most obstinate resistance, was ~~beginning~~ beginning to yield. If it had been, besides the weight of Column 5, the fire of a battery established ^{by Col. 6} on the East bank of the Adige, in support of the Column of attack. Under this combination of ~~fire~~ ^{forces}, the demi-brigade was driven out of the redoubt, and the head of the Austrian Column, ⁵ began to issue upon the plateau.

Bonaparte was now almost surrounded, but preserved his coolness, and ^{with it a} keen appreciation of the facts and possibilities of the situation. Directoris

Divide 22,000 men

4,000 from S. of Garda, not yet up

2,000 at Garda

2,000 at Osteria

14,000 to oppose Aust. Centre of
which \$2,000 to begin, and 4,000
to come up

10,000 in bodies of 3,000

1500	} 3000
1500	

which, though undoubtedly serious, was still
far from irretrievable.

were met & the brigade charged with harassing Col. 1, to take
 Curran's new dispositions, by which its opponents' march might
 be yet further retarded, ^{another brigade} beyond that the French Council. in Chief dis-
 missed that force from his mind; but Col. 5 demanded his
 instant attention. The recent charge of the French reserve upon
 the enemy's center had gained for him a few moments of in-
 valuable time. The light infantry of the center, numbering some
 4000 men, was ordered to change front rapidly to its right, &
 march towards the defile, and support the corps depending it,
 which was now falling back foot by foot. At the same
 time, the cavalry available was ordered to charge. These
 movements, under Bonaparte's handling, brought upon the
 head of the enemy's column, of which not more than a
 thousand men were yet clear of the defile, a shock that
 was practically simultaneous on all sides. The light in-
 fantry attacked their right flank, the cavalry charged
 them in front, while the division heretofore alone opposed
 to them, and which had been yielding ground, rallied, and
 assailed them on the left. The onset was more than
 the Austrians could resist. Outnumbered, surrounded

and a new brigade of reinforcements arriving was sent
to hold Mt. Tiffano in rear of the French left, thus further
strengthened against being turned;

on all sides ^{except their rear} ~~but behind~~, and overwhelmed, they were forced
back upon the rear of their column in a disorder, which
was rapidly propagated thence throughout the entire Col-
umn, and became the more inexplicable, because the roadway
was not only itself narrow, but so cramped by the surrounding
ground as to allow no freedom of manœuvre. Several
Cassons exploding added to the confusion. There was no
resource but to fall back and abandon the concentration
before Rivoli upon which depended the success of
Alvinzi's plan. For the French the battle was won.
Col. 5 retreated to Rivolta

Thus Alvinzi's plan, depending upon the concentric movement of several columns upon a single decisive point, was frustrated by an overwhelming disaster befalling one of those columns. It was no longer possible for him, although his army was greater than that of Bonaparte, to oppose to the latter even equal numbers upon the plateau of Rivoli. I will venture to remind you that this successful result of Bonaparte's tactics is identical in principle, with that which I have pointed out as the crucial characteristic of ~~that~~ the strategy which is identified with the name of Lord St. Vincent, in the naval wars of the Napoleonic period. I said there "The great merit of St. Vincent's strategy was that it minimized the evil resulting from a single British admiral's mis-step. To the success of the French scheme it was necessary that, not only one but, all their detached efforts should succeed. The strength of the British strategy lay not in hermetically sealing any one port, but in effectually preventing a great ^m combination from all the ports." To apply that to the instance of Rivoli: "To the success of Alvinzi's scheme it was necessary that, not only one but, all his separate columns should succeed in reaching the plateau of Rivoli, and uniting their efforts there. The strength of Bonaparte's strategy, and of his tactics in the battle, lay not in preventing the advance of ^{all} the enemy's columns along the roads they had chosen, but in effectually preventing a great combination by them all in such position that he should have a superior force to fight." It is, I think, doubly instructive to note the identity of principles ⁱⁿ ~~on to~~ cases so diverse

de la guerre
and in the different fields of Tactics & Strategy.

as are presented by the conditions of land and naval warfare, It is not by a slavish attempt to follow any man's precedents, but by a firm grasp of the living principle that underlies all correct practice, that officers can fit themselves for dealing with the problems of warfare

Alvinzi's plan failed, partly by the difficulties of the enterprise itself, undertaken upon the lines which he followed, partly, and yet more, through the skill with which his opponent made use of those difficulties, and, by his own sagacious measures, converted difficulties into impossibilities. It should be borne in mind, however, that not only Bonaparte's skill but Alvinzi's errors alike conduced to the result; by which I mean you to note, that it is not only by following a plan of one's own, however excellent, but by diligent watching the adversary's movements, and taking advantage of his mistakes, that success is to be attained. Further, you should always keep in view so to play upon an enemy's hopes and fears by your movements as to induce him to make errors by which you may profit. (Quote Jomini's notes, Page 280).

To return to the course of the battle. While column 5 was being routed as has been described, the French centre and right, which had been weakened in order to strengthen the attack upon 5, were being forced back by the Austrians; so that when the discomfiture was completed, columns 3 & 4 of the Austrians had advanced a considerable distance. But this temporary success was only apparent, and indeed but conduced to their final disaster. Column 2 was

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held in check throughout by the French left, under Masséna, and the
 rout of 5 left them equally unsupported upon the other ^{left} flank. Con-
 sequently, when the troops which had been concentrated ⁱⁿ ~~upon~~ 5 were
^{thick} released by its retreat, and turned upon 3 & 4, the latter were not
 only overpowered but outflanked. Thus checked in what seemed a
 victorious advance, and forced to change from advance to retreat,
 these columns became demoralized; a result which was increased by
 many of them being new troops; and, being vigorously pressed by the
 French, their retrograde movement was not stopped until they reached
 the villages on the far side of the Tasso. A thousand prisoners
 were ^{here} taken by the French. Column 2 of the Austrians, on their right,
 so far from helping the other two by a vigorous diversion, also
 yielded ground and retired with them.

^{There now followed}
~~See now~~ a further result of attempting combined action by con-
 centric effort directed upon a point too near the enemy; and I will
 here remark that, in my opinion, this is really the argument which
 decides the question between one big ship and several smaller ones
 whose aggregate force is equal, or even a little superior to that of
 big ship. The efforts of such small ships against the big one are
 concentric efforts, and share the difficulty which wrecks most con-
 centric efforts of that kind, namely, the difficulty of making them
 simultaneous, and not mutually injurious. It is one thing to com-
 bine your forces on a point where you have good reason to think the
 enemy will not be until the concentration is effected; it is quite
 another thing to try the same when there is a possibility that he

may get there first, or before either one of your concentra^t_{ing} forces. It is a question of time, in which the calculation must not be too close. Such combinations therefore are perfectly proper in strategy, provided the point of concentration is well chosen; but in tactics, where the concentration is attempted on the battle field, the risk is much greater. Of this you have already had an instance in the battle under consideration, four columns, namely, 2, 3, 4 & 5 having been attempted to be brought by concentric movement to a single limited area. The result so far has been that first 5, and then 2, 3 & 4 have been overwhelmingly beaten by an inferior enemy. The fate of column 1 is a further illustration. This you will remember had been ordered to march round the French left flank, to gain the rear and to intercept the expected retreat — a proceeding which somewhat reminds one of the old proverb to catch your hare before cooking it. Bonaparte, as you know, contented himself with assigning a very inferior force simply to delay this column, whose too speedy approach would have been inconvenient. In a word he postponed the time of its concentration sufficiently, not only to prevent its effecting anything, but to insure its sharing the general disaster.

As Provera was allowed to march to his discomfiture ^{on the lower Adige}, as the Archduke readily acquiesced in Moreau's advance, in the campaign you have recently heard, knowing that advance but increased his risks, so Column 1 of the Austrians at the battle of Rivoli was indulged by Bonaparte in the pleasure of a triumphant advance to a point where its destruction was assured. Having reached Mt. Pipolo, the other

columns being now hors de combat, it met with a determined resistance which ended in its retreat and disorganization with the loss of the greater part of it taken prisoners. Column 1, as a fighting organization, was, to use our slang expression, wiped out; a result which was accelerated by the appearance of the French force from the foot of the Lake of Garda, which appeared upon the scene at this stage of the battle.

The battle now having been won, and all the results obtained that were offered to him by the Austrians themselves, Bonaparte now in turn assumed the offensive; according to his usual wont not to allow any respite to a demoralized enemy. Column 1 being annihilated, and Column 5 having retreated far beyond the field of battle, 2, 3, & 4 alone remained, shaken in morale and inferior in numbers, to confront the French army, which had moreover just received the important reinforcement from Peschiera, just mentioned. The enemy's flanks being unprotected, by the disappearance of the flanking columns, a front attack was ordered and at the same time columns were pushed along the slopes of Montebaldo and Magnone in order to reach and seize the narrow defile at La Corona and Ferrara, thus cutting off the principal and most practicable line of retreat. You may be inclined to see here a repetition, by Bonaparte, of the error made by Alvinzi in sending his columns 1 & 5 by divergent routes, with the intention of intercepting the French retreat by Column 1. But you must remember that it is a very different thing thus to aim at the retreat of a demoralized and inferior enemy, and ^{To} attempting to cut

off one who in a strong position, and as yet unshaken, awaits attack. Moreover, the flanking columns thus sent forward by Bonaparte would not be separated by any impassable obstacles from the main body, as it pursued the Austrian retreat.

Just as this forward movement was about to take place under his own directions, Bonaparte received word of Provera's advance towards Mantua. This advance, of course, he expected; but now the word received showed that the Austrian had got as far as it was prudent to permit him to advance. The force left to the southward, under the general command of Augereau, was sufficient to impede this advance, but not wholly to arrest it; as in the case of the advance of Column 1 at Rivoli, it was desirable to permit him to advance, but not to reach Mantua, not to effect a junction with Wurmser either in the field or in the city, not to permit him to throw ~~provisions~~ supplies into the place, nor on the other hand to enable any part of the garrison, in excess of the absolute requirements of defence, to withdraw -- the effect of which would be to prolong the resistance of the place, whose fall depended upon starvation. Bonaparte, now learning that Provera had advanced full half way from the Adige to Mantua, and was still advancing, felt the necessity, already anticipated, of at once reinforcing the corps opposed to his movement. The night of the 15th of January was now approaching. Without an instant's hesitation, he issued orders that ⁵⁵ Magena's corps, which had marched all the previous night from Verona to Rivoli, and had fought all that day in the battle just won, should start immediately for a

Villa Franca. "This countermarch," says Jomini, "had in it something imposing. Although overwhelmed with fatigue, the brave soldiers of Mad⁵⁵ena, impatient for action, flew gaily to meet new dangers. It was little to them to have brought back 5000 prisoners: upon their foreheads, already brilliant with glory, shone already the expectation of their next triumph."

This movement against Provera, as the most important, claim Bonaparte's own attention. He confided therefore to Joubert the task of completing Alvinzi's ruin. He left with him his own corps, together with the 4000 that had just come from Peschiera; and, judging that the Austrian columns were so shaken as to be unable to resist even the diminished force under Joubert, he directed the latter to carry out, in the main details, the same plan that he had already proposed for the undiminished force. This done, and having sent out the instructions to the various corps about Mantua, by which he hoped to enclose as in a net Provera's forces, he departed. It will not be necessary to enter into the details of Joubert's proceedings. Suffice it to say that, attacking the Austrians with his main body, the resistance opposed by these so delayed their retreat, as to enable the flanking columns to intercept and hold the difficult pass thro' which they had to ~~retreat~~ ^{fall back}. The retreat was made precipitately.

"The ensemble and precision of the different movements of the French ^{cut} through Alvinzi's centre into the greatest disorder. One part, seeking to gain the Rivalta road, threw themselves over the rocks and cliffs which skirt the valley of the Adige; the greater part sought

to escape by the defile, but that was impossible. The key to it was in the power of the French, and it became a real chasm in which horse and foot hurled themselves headlong. About 5000 men laid down their arms and surrendered at discretion." This raised to ten or twelve thousand the number actually taken from Alvinzi's own force, without taking count of the slain. For the purposes of war, that army was for the time annihilated.

I do not intend to follow minutely the operations attending the surrender of Provera. To surround and capture with 17,000 men a force of seven or eight thousand, demands indeed skill, precision, untiring diligence, rapidity and precision of movement. All these things Bonaparte possessed in the highest degree, and he was admirably seconded by the intelligence of his officers and the zeal of his soldiers. "Never," says Jomini, "did a party of hunters display greater skill and activity, in tracking and bringing to bay a wild beast, than was shown by the French officers and soldiers in driving Provera to his ruin." The essential point for us to remark ^{is} ~~was~~ the cardinal mistake of Alvinzi in thus risking, upon a secondary and excentric movement, a force too small to support itself, yet too large not to be a serious loss to the main body of the army. As a diversion, the movement of Provera was made in too great force; as an independent movement the force was too small for its purpose; and further, the total force under Alvinzi's command, tho' greatly superior to that of Bonaparte, was in no way sufficient to undertake two practically independent movements, out of mutual support, on ex-

terior lines, against an alert enemy holding an interior position. Strategically, the independent ^{advances} ~~movements~~ of Alvinzi and Provera reproduced in principle the precise faults which characterized the tactics of the battle of Rivoli. Not only so, but it was the same fault that ran through the whole Austrian practice during the Italian campaign; faults which alone made it possible, even for a Bonaparte, to wring success out of the immense odds that confronted him. Recall, that when Bonaparte took command of the Army of Italy, he found an inferior, destitute, and demoralized ~~army~~ ^{body of troops} on the rocky slopes of the ^{Alps and} Apennines. He had against him, as allies more or less of Austria, all northern Italy, the general feeling of the governing classes in Italy, the malevolent neutrality of the Pope and of Naples, the British fleet present in the Mediterranean under one of the greatest admirals Great Britain has ever known, the islands of Corsica and Elba being in possession of the English. ^{Besides} ~~Beside~~ this allied strength, Austria, ^{in addition to} ~~besides~~ the force opposed to him at the opening of the campaign, had at her disposal resources which enabled her to send into the field four successive armies, each superior to Bonaparte, independent of the ^{garrison} ~~possession~~ of Mantua, ^{which} ~~whose~~ garrison required the attention of a large part of his force. Over all these difficulties he triumphed, thro' the skilful use of a central mass against divergent efforts of the enemy. Nor let yourselves think that the task was a light one, because of the blaze of glory which now and forever attends its accomplishment. His correspondence shows that the great general, so far from dancing airily from victo-

ry to victory, as we are prone to conceive him from the apparent ease of his triumphs, felt himself pressed out of measure, despairing even of saving his army from the numbers which threatened to overwhelm him.

The remnant of Provera's force, numbering now 6000 men, surrendered on the 16th of January. A rear guard of 1200 or 1500 had before been cut off by Augereau. A sortie attempted by Wurmser from Mantua failed. The loss of Provera's corps raised to 18.000 men the total prisoners taken from Alvinzi's army of not over 45.000. All the artillery, moreover, was taken. The fate of Italy was decided.

The last hope of relieving Mantua had disappeared. It was impossible for the heroic garrison to hold out until another army could be raised. A fortnight later Wurmser, who had thrown himself into the place the preceding July, capitulated. More than half the garrison were then in the hospital. 13.000 men here surrendered.

Bonaparte's hands were now free to invade Austria itself; and, by one of the curious ironies of fate, the Directory, which had so long left him to struggle against almost hopeless odds, now increased his army to 70.000 men. Nothing succeeds like success. In the month of March he commenced his advance to the eastward and northward, through Friuli and the Carinthian mountains towards Vienna. The Archduke Charles was recalled from the Rhine to take the command against him. With a skill second only to Bonaparte himself, he retreated gradually, drawing towards his point of retreat the other Austrian forces in Germany. He was determined not to fight

Except so far as the ^{is} general Public Opinion of the civilized world may be considered a superior authority - and it certainly is, though abstract, an authority very great and far-reaching - there is no superior ^{by law} to constrain the action of a State.

