The Refraction of Geometry:
Tristram Shandy
and
the Poetics of War, 1700–1800

Introduction

It begins with an accident in the archive. On a small table piled with heaps and stacks is a comprehensive library of war: treatises on fortification by Cataneo and Ramelli are crowded by the works of Stevin and Coehoorn, Sheeter and Pagan, Blondel and Vauban. Additional volumes on the theory of ballistics by Tartaglia, Torricelli, and Galileo are scattered among them. Together they form a small but comprehensive library of military thought from its early Italian origins in the fifteenth century to its Dutch and French developments in the sixteenth and seventeenth centuries—an archive of the science of war. But an inattentive movement makes the archive come tumbling down: a volume is knocked off the table; another follows. Eventually, the entire archive is abandoned.

The incident, which appears early in Laurence Sterne’s Tristram Shandy, is indicative of a larger shift within the intellectual history of war. Uncle Toby, obsessed with the science of fortification, has his difficulties navigating the complex military discourse, following the mathematics behind the trajectories of projectiles, and, in particular, making sense of the geometry and the variegated vocabulary of fortification. As if to mark the unwieldiness of the texts, the discourse itself has accrued such density that it has become unmanageable in its pure materiality: the archive is knocked to the ground. The falling books, following no calculated trajectory but the random course of the accidental, present...
a vivid image of the interrogation of the discourse on war in the middle of the eighteenth century. Tumbling to the floor, an entire discourse falls victim to an accident, to the very element that the treatises on fortification seek to exclude by the forms of geometry. The fictional scene thus sets the stage for an examination of the entanglement of literature, geometry, military theory, and the media of war in the eighteenth and early nineteenth century. In this essay, I relate these different fields to one another in order to make clear not only how the science of fortification came to inform literature and shape the cultural imagination of war but also to show how fiction serves as a gauge of a shift in the history of war media. It is thus a matter of delineating an intellectual history of war in the long eighteenth century within a composite and more complex field than any single discipline can encompass. This field comprises not only discursive forms but also various material forms. I will therefore discuss the treatises of Sébastien Le Prestre de Vauban in addition to Tristram Shandy and a literary forgery of the novel, but I will also relate these texts to maps, games, and three-dimensional models. The underlying premise of the essay, the premise that unites these disparate fields and objects, is that the conception of war is tied up with and expressed through the various aesthetic forms that have been developed to manage it. In other words, warfare is, among many other things, a matter of design. Attending to the operational logic of war games, the topographical image of military maps, and the structure of fictional, nonfictional, and forged texts, my essay sketches out a small chapter in the much larger history of the poetics of war. Tristram Shandy forms the focal point of the investigation, but before we return to Uncle Toby and the accident that sets everything in motion, let us take a closer look at the contents of the books he knocks to the ground.

**Graphics**

When Sébastien Le Prestre de Vauban published his *Nouveau Traité de Géométrie et Fortification* in 1695 it marked the apex of a development that had begun two hundred years earlier. With the importation of gunpowder into Europe, military architecture was restructured to counter the increased firepower of cannons. The high walls that had provided protection now became a liability, as they would easily crumble under their own weight. Verticality was therefore replaced by a horizontal design with protruding bastions. This directional shift paved the way for the construction of a carefully calculated geometrical space that was the product of the joint venture of science, architecture, and art. Albrecht Dürer’s treatise on fortification from 1527—*Etliche vnderricht zu befestigung der Stett, Schloß vnd flecken*—opens with an indication of the new importance of architectural forms:
Since today in our time many unheard-of things happen, it seems to me imperative to consider how a fortification should be built in which kings, princes, lords, and cities can defend themselves, not only such that a Christian will be protected from another Christian, but also such that the countries in the vicinity of the Turks will be secure from their violence and their projectiles. Therefore I have undertaken to show how such a structure is to be built.

The unheard and unexpected can be withstood by a building that transforms brute acts of violence into a geometrical design. The development of new architectural forms domesticates and brings under control the contingencies of warfare. The tactical worth of a fort, as the Italian mathematician and engineer Niccolò Tartaglia writes, is determined not by its mass, but “by the forms of its walls.” The perfection of forms constitutes the main objective of the subsequent treatises on fortification, and increasingly the geometrical basis comes to the fore. Vauban’s work from around 1700 presents the culmination of this development.

His Nouveau traité de Géométrie et Fortification begins with an elaborate explanation of geometry. The circle, the triangle, the square are defined along with various other figures. The treatise then proceeds with a series of exercises of increasing complexity in how to draw such geometrical figures: “Make a pyramid which has a parallelogram as a basis.” The second part of the treatise takes these shapes as the scientific basis for the architectural design, and gradually the fortification emerges out of these shapes. The process can be gleaned from development of the book’s images. The bare geometrical shapes in the first part of the treatise slowly morph into the fort in the second part (figs. 1–3). What the reader witnesses in the argumentative and pictorial sequence is the slow but pure birth of fortification out of the shapes of geometry. As seen in figure 2, the circle forms the geometrical basis within which all polygonal figures can be developed. In the treatise, the science of war develops within this limited, circumscribed space, a space that in principle can be constructed just as well on a symbolic plane as on an actual terrain. Vauban’s definition of the science of fortification thus falls into three parts that are all graphical: “l’ignographie,” which is the plan or representation of the length and breadth of a fort; “l’orthographie,” which is the profile or representation of a finished fort in three dimensions; and “la scenographie,” which is the fort seen in perspective. This graphic anchoring points to the central role played by the drawing of geometrical forms. A sheet of paper serves as the primary workspace of the engineer and on this abstract plane the architectural designs can be worked into an image of order. Warfare is thus concerned with the production and management of symbolic forms. As Vauban writes:

Take two gauges and run the parallels to the curtain wall, the sides, the face, the brisure & the tours creuses on the drawing, from the side toward the center of space, in


order to find out how to run the parallel to the tour creuse, place these two gauges in front: & then open the compass until the point where you have drawn your tour creuse, & trace from the same point, with the two gauges, a curved line, until it reaches the base of the brisure & of the face.9

In this way, the contingencies of warfare are transformed into the security of a symmetrical drawing. When the singularities of a specific terrain do not allow for such symmetry, one has to construct an “irregular fortification.” Vauban is the first to consistently adapt his projects to the accidents of the terrain at the concrete site.10 Yet such irregular forms, though often necessary, are regarded as inferior, and the goal is as far as possible to reduce irregular figures to a “regular fortification.”11 This regularization involved rebuilding the topography of the site, leveling or raising parts of the ground to approximate the ideal forms determined by geometry.12

With Vauban, however, this way of thinking about warfare comes to include not just the defensive fortifications but also the offensive works used in the attack of a fortress, that is, the entire field of war. As seen in figures 4 and 5, Vauban develops a new method of laying siege, namely, a system of parallel trenches.13 Running toward the center of the fort and supported by a demicircle of batteries, the offensive measures are cast in a form that matches that of the fortification. The lines of sight and the lines of fire drawn in the image run in both directions and connect the inner defensive geometry with the outer offensive geometry. Time is thereby spatialized and marked by the letter P, which indicates the location on the second line “where one could place the batteries, if it were necessary to change them.”14 Movement is only hypothetical and inscribed visually in space by a dotted line. The attack of the fort is thereby regarded as a shift from one graphical order to another, like the a temporal flip of a “Kippfigur” or “reversible figure.” Time thus consists of a number of snapshots, a series of distinct stages, and action entails following a pregiven sequence. Vauban lists the various stages along with an estimate of the number of days required for each one. From beginning to end, he calculates that the conquest of a fortified town takes forty-eight days.15 In the image, warfare is locked in a static order in which attack and defense are marked not by opposition but by complementarity.16 Within the graphic world of the treatise, the firepower of the artillery and the mines only once manages to destroy the crystalline order of forms that hold each other in check. Figure 6 shows the moments before, during, and after the explosion of a mine. This moment of disorder is the one exception to the pervasive control imposed by geometry, and, while the walls have been reduced to rubble, their original shape has been retained in the sketch as a ghost image of the underlying order.


L’esprit géométrique

Polygonal diagrams lie at the heart of the military discourse around 1700. But it also issues from the larger intellectual climate of the time. As Henry Guerlac has pointed out, the cult of reason and order in military thought may well be seen as the expression of a Cartesian epistemology, of what Blaise Pascal labeled the “geometrical spirit.” In his brief text from 1655, *De l’esprit géométrique*, Pascal outlines the basic principles of a method of reasoning that is capable of producing certainty, and these principles he finds in geometry: “I have chosen this science [geometry], because it is the only one that knows the true rules of reasoning.” Proceeding from clear definitions and using the rules of geometry one can build an unconquerable epistemic fortress, a well-protected certainty immune to the incursions of error and chance. Only a few years earlier, Thomas Hobbes had looked for a secure method for the establishment of commonwealths, and he found it in the rules of arithmetic and geometry, which, he claims, “is the Mother of all Naturall Science.” Subservient to “nothing but rigide Truth,” geometry, however, is conceived not just as the mother of knowledge but also as the mother of war. For the works of fortification are the direct issue of this science and are often confused with it. Examining the notion of power, Hobbes writes:

Arts of publique use, as Fortification, making of Engines, and other Instruments of War; because they conferre to Defence, and Victory, are Power: And though the true Mother of them, be Science, namely the Mathematiques; yet, because they are brought into the Light, by the hand of the Artificer, they be esteemed (the Midwife passing with the vulgar for the Mother,) as his issue.

In the structures of fortification, the military engineers bring into the world and embody ideal forms of knowledge. Conversely, looking at a regular fortification one sees an image of the certainty that Hobbes is at pains to establish through the geometrical method. Against this background, one might read the treatises of Vauban as epistemic documents in which the visual images function at once as the implicit and explicit projection of a graphic epistemology. Here, in this discourse, warfare appears as the calculable product of a series of graphic operations, as the function of a fundamentally knowable and immutable geometrical order. Obviously, unpredictable events and chance occurrences would immediately arise in an actual siege, but they would appear as deviations from the theoretical foundation, not as an integral part of it. The graphic image had come to constitute the primary workspace of the engineers, and in this world of symbols, errors are errors of inscription and of calculation. As the authors of their symbolic world, the engineers carried the
full responsibility but also the full authority and control over their creations. With the spatialization of time, the condition of possibility for chance occurrences is eliminated, and instead time is replaced by the atemporal switch from one immutable order to the next. On paper at least, the state of war coincides with the two-dimensional order of geometry. More than anything, it is this epistemic claim that the images in Vauban’s treatises put on display.

Language, Maps, Models

When Uncle Toby knocks over the discourse on fortification, the accident is therefore not an accidental occurrence within the realm of the novel. Written between 1759 and 1767, *Tristram Shandy* operates within a double time scheme. When the first volume appeared in 1759, the English reading public found a fictional character poring over the treatises of Vauban around 1700. With Vauban’s death in 1707, however, the importance of siege warfare gradually began to decline. So when the discourse on fortification becomes the object of literary scrutiny around midcentury, it appears in the text as an *objet trouvé*, a curious and fascinating relic of an increasingly obsolete conception of war. From this distance, a distance that is compounded by the satirical stance of the novel, *Tristram Shandy* offers a careful, if irreverent, examination of the discourse on war—one that proceeds from an analysis of its media.

Uncharacteristically, the media investigation develops methodically. It begins with one medium and then moves to the next, from language to maps to models. The event that sets the critique in motion is Uncle Toby’s narrative of the events of the Siege of Namur in 1695, in which he participated, and by which he has since been partially incapacitated due to a wound in the groin. Attempting to describe the battle to his listeners in clear terms, he is thwarted by the language of fortification:

What rendered the account of this affair the more intricate to my uncle Toby, was this,—that in the attack of the counterscarp before the gate of St. Nicolas, extending itself from the bank of the *Maes*, quite up to the great water-stop;—the ground was cut and cross-cut with such a multitude of dykes, drains, rivulets, and sluices, on all sides,—and he would get so sadly bewildered and set fast amongst them, that frequently he could neither get backwards or forwards to save his life; and was oft times obliged to give up the attack upon that very account only.23

Toby’s confusion stems not from the fact that the attacking armies have been cut off from seeing each other’s operations, but from the fact that the siege works are transformed into a linguistic obstacle course. Scarp and counterscarp, ravelin and glacis become the elements of a verbal battle. Sterne superimposes the actual with the symbolic to the effect that Toby is literally stuck in
language. The transparency of the linguistic medium is given a material form that renders it opaque. It is in order to overcome the difficulties of describing space with language that Toby proceeds to another medium:

If he could purchase such a thing, and have it pasted down upon a board, as a large map of the fortifications of the town and citadel of Namur, with its environs, it might be a means of giving him ease...—so that he was pretty confident he could stick a pin upon the identical spot of ground where he was standing in when the stone struck him.24

In addition to Ephraim Chambers’s Cyclopædia, one of Sterne’s main sources on the Wars of the Spanish Succession is Nicolas Tindal’s The History of England, from which he borrows several passages verbatim.25 Accompanying Tindal’s text are a number of maps, among them the map shown in figure 7 of the fortifications of Namur. In spite of the highly irregular fortification, Toby manages to relate the events clearly after a few weeks’ intensive study of the map. Time and space are thus played out against each other: the sequential temporality of language against the static order of the map. Only with the aid of the latter, in which the representation has a material and visual foundation, does Toby master his subject. Tristram Shandy therefore appears to adopt the two-dimensional topographical basis inherent to the science of fortification: the map serves as a grounding not just for the architecture of war, but also for the discourse on its history. Yet, his success...
with the map instills a “desire of knowledge” in him and spurs him to go deeper into the scientific study of siege warfare. Here the map does not stand as the final grounding of knowledge. Rather, as the “sweet fountain of science,” it functions as a catalyst for further inquiry. Toby procures maps of virtually every fortified town in Italy and Flanders, and it is at this point that he collects his library of war: treatises on fortification by all the major engineers from the fifteenth to the eighteenth century, including those of Vauban, together “with almost as many more books of military architecture, as Don Quixote was found to have of chivalry, when the curate and barber invaded his library.” Instead of clarifying the geometry of fortification, however, the treatises only bring confusion, such that Toby’s attempts to follow the rules of pyroballogy result in his mistaking a parabola for a hyperbola, and so on. The graphic construction and management of space turns out not to solve the difficulties of the sequential medium. Instead of serving as the ground of truth, geometrical maps become a source of error and bewilderment to such a degree that the narrative breaks down. Tristram intervenes:

———stop! my dear uncle Toby,—stop!—go not one foot further into this thorny and bewilder’d track,—intricate are the steps! intricate are the mases [sic] of this labyrinth! intricate are the troubles which the pursuit of this bewitching phantom, knowledge, will bring upon thee.

In Sterne’s satire, the symmetrical figures of siege geometry are distorted into a labyrinth of knowledge. The novel thereby dismantles the graphic epistemology inherent to the discourse on fortification: visual order provides no epistemic grounding, it functions rather as an array of obstacles behind which knowledge disappears. Again, the efficacy of the medium is undermined by its own materiality. As Toby was lost in language, he is now lost in the materiality of a warped geometry.

Continuing its examination of the media space of war, however, the novel adds another dimension as it exchanges the two-dimensional map for a full-blown three-dimensional model. Toby’s right-hand man, Corporal Trim, suggests that instead of working with the graphic inscription on paper, they should go out into the country and build a fort in miniature using the ichnography of the map. For this purpose they settle on the bowling green next to the kitchen garden by Uncle Toby’s country house.

His way, which was the simplest one in the world, was this; as soon as ever a town was invested—(but sooner when the design was known) to take a plan of it, (let it be what town it would) and enlarge it upon a scale to the exact size of his bowling-green; upon the surface of which, by means of a large role of packthread, and a number of small piquets driven into the ground, at the several angles and redans, he transferred the lines from his paper; then taking the profile of the place, with its
works, to determine the depths and slopes of the ditches,—the talus of the glacis, and the precise height of the several banquets, parapets, &c.—he set the corporal to work——and sweetly went it on.³¹

The method of superimposing the geometrical schema onto the actual ground where a fort was to be built was part of the standard procedure of fortification as the intermediate step that effected the transition from the symbolic plan to its realization.³² Here, however, the final result of their efforts is a peculiar hybrid that fuses the symbolic with the real and conflates the model with its referent.

Building scale models of sieges was not Sterne’s invention. In 1668 Louis XIV’s minister of war, Louvois, ordered Vauban to construct a so-called plan-relief, and he thereby founded a collection that, with later additions, comprised about 260 models (fig. 8).³³ These plans-reliefs are three dimensional miniature models of various forts made of wood, papier mâché, pulverized sand, and colored silk. Almost all of them have been built to a scale of 1/600. Their purpose was instructional as well as tactical: they served as a preparation for the operations of a siege, although by the time Sterne was writing, they had gradually lost this function and had become objects of art to be displayed to foreign dignitaries. Between 1747 and 1750, for example, the engineer Larcher d’Aubencourt constructed a model measuring 7.76 by 6.50 meters of the fortifications of Namur as they appeared in the 1690s when they were built by Vauban and Menno van Coehoorn.³⁴ In this model as well, the separation of the space of the viewer from the space of the object is part of the raison d’être of the model: by scaling an object down to

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**Figure 8. Plan-relief at the Musée de l’armée. Photo by the author.**

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a representation, an outside space emerges, and it is only by standing outside the representation that an overview can be gained of the actual fort. The separation of actual space and represented space is the precondition for the efficacy of the model. On the bowling green, however, Toby becomes part of the model. So as not to get lost in the three-dimensional representation as well, he must therefore build the separation into the model in the form of a sentry box and an esplanade. He thereby inverts the rationale of symbolic management. The advantage of maps and plans-reliefs lies in the improved efficacy in an economy of effort: minimal symbolic exertions have great real-world effects. Toby, however, builds a representational hybrid in which the relation between the real and the symbolic has been inverted. His “model-cum-fort” lacks real-world effects. Instead, the model encroaches upon the real and transforms it into symbols, as when they prepare the offensive and lay down the siege lines:

My uncle Toby took the liberty of incroaching upon his kitchen garden, for the sake of enlarging his works on the bowling green, and for that reason generally ran his first and second parallels betwixt two rows of his cabbages and his collyflowers.

The model either subsumes the real under its symbolic representation or it directly transforms the real into a representation, as when Trim turns a pair of jackboots into a couple of mortars. Something between an actual fort and a miniature, the bowling green is a hybrid in which symbolic inscription is pushed beyond its symbolic limit and into the real, while, conversely, the real is annexed by the model. In Sterne’s media satire, the symbolic, in the progression from language to maps to models, becomes increasingly material and finally makes it halfway into the world of actuality whereby it loses the epistemic virtues that provided the rationale for the symbolic inscription to begin with. The primacy of Vauban’s graphics is thus driven ad absurdum in an excessive symbolic growth.

The inversion of the economy of effort entails a reversal of direction in the exchange between the symbolic and the real. Toby procured the map of Namur as an explanatory aid, but, with the construction of the hybrid, he and Trim intend to model the various sieges taking place on the Continent at the time: “We might begin the campaign, continued Trim, on the very day that his Majesty and the Allies take the field, and demolish ’em town by town as fast as——.” Relying on newspaper reports for information, the hybrid is turned into a simulation of actual warfare that takes place almost in real time—“they went on, during the whole siege, step by step with the allies.” They further add to the fortifications “a little model town” in which each house is independent, so they can reorganize it into any structure necessary: “The town was a perfect Proteus——It was Landen, and Trerebach, and Santvliet, and Druse, and Hagenau,—and then it was Ostend and Menin, and Aeth
As a simulating device the model is highly sophisticated. Once assembled, Vauban’s *plans-reliefs* have no independent and mobile parts. On the small space of the bowling green, however, Toby and Trim can simulate every siege in Europe.

Yet, the apparent economy of their device is undermined by its relation to actual warfare and the reversal of cause and effect. Toby and Trim operate post hoc in a historical mode, not propter hoc in a tactical mode. No longer a tool for the planning and management of warfare, the simulation is directly dependent on the wars themselves, and every move in the simulation is determined by the engagements in the actual siege. Instead of producing real effects, the simulation becomes an effect of the real. It is therefore in complete accordance with this inverted logic of symbolic management that the conclusion of the Spanish War of Succession with the Peace of Utrecht in 1713 brings Toby’s simulated warfare to an end.

When Sterne brings the discourse of fortification into his novel, the purpose is evidently a satirical one, but the literary refraction of this discourse should be taken seriously as a critical reflection on the discourse on war.

With the elimination of the standard rationale of symbolic management, the tactical purposelessness of the situation puts on display the medium itself. Toby’s efforts can be regarded as an extreme version of psychologist Kurt Lewin’s claim that if you truly want to understand something, you should try to change it. Stripping it of all real effects, Sterne drives the primacy of the medium ad absurdum and shows war as a pure media construct, a parallel world enclosed unto itself. Toby’s model becomes emblematic of the problem that haunts all attempts to speak about warfare, namely, that in speaking, in writing, in playing, the complex object itself is absent. The state of war must first be built. Its elements and the operational logic that ties the elements together must be produced from scratch and modeled, whether this modeling takes place with the aid of paper, lumber, maps, jackboots, or texts. In each case, war therefore appears as a second-order phenomenon, as the concrete constellation and interaction of material or discursive forms. Yet, at the same time, it is through such a model that Toby seeks to reconstruct actual experience. Not only must the state of war be generated artificially; it must also be generated in such a way that it can be imparted to an individual. Walking around inside the model, Toby is an emblem of later high-tech attempts to create the experience of the state of war artificially through immersion in a simulation, be it a computer game or flight simulator. In this case we, the readers, remain safely at a satirical distance outside the model, but Toby is increasingly locked inside it. Trading an actual marriage for a simulated war, Toby becomes a permanent fixture of the model. In the inversion of the real and the invented, Sterne’s fiction displays the power of simulations to create a complete
ersatz, a full-scale parallel world whose reality effects can compete with and even trump the real.

Toby’s obsession with his model is not without a certain ambiguity. For, as several scholars have pointed out, it leads to a desire for renewed warfare. Whether this is meant as an ironic critique of British participation in the Seven Years’ War or, rather, as propaganda for it, I shall leave aside. At a more general level, however, Toby’s obsession testifies to the ambiguously hypnotic power of war media. There is a certain strain within media studies that seems, like Toby, to be so enamored of military media that it forgets their ultimate purpose as engines of war. While the purpose of several war simulations is to bring the individual into the midst of the invented world, for the study of the state of war one would do well to keep the ambiguity of Toby’s obsession in mind and remain at some distance instead of walking around inside them hypnotized.

**Circles and Lines: The Narrative Architecture of *Tristram Shandy***

If *Tristram Shandy* sheds light on the construction of war within the discourse on fortification, it also enlists this discourse in a larger effort to reconfigure the traditional plot structure of the novel. Contrary to a conventional schema that proceeds sequentially from kernel to kernel by some degree of narrative necessity, *Tristram Shandy* develops a poetics of contingency that makes chance its organizational principle. Turning a basic tenet of Aristotle’s *Poetics* on its head, Tristram’s father, Walter Shandy, states that “La Vraisemblance...n’est pas toujours du Coté de la Verité,” thus providing a gloss on and a justification for the series of improbable freak accidents that determine the movement of the text. In this way, the novel forms the exterior to the science of fortification. For where the military discourse sought to exclude chance, *Tristram Shandy* turns it into a productive principle, as inscribed in the fortuitous name that provides the title of the novel. This is evident not only at the level of the story, but also at the metalevel, where the novel reflects on its own poetics.

The self-reflection proceeds from a series of geometrical figures. The first one is the most perfect figure of Euclidian geometry: the circle. Recounting the circumstances surrounding his own birth, Tristram introduces the midwife, whose fame extends to the “very out-edge and circumference of that circle of importance, of which kind every soul living, whether he has a shirt to his back or no,—has one surrounding him.” In the present case the space thus outlined “would be understood to mean no more of it, than a small circle described upon the circle of the great world, of four *English*
miles diameter, or thereabouts.” Centered in the village in which Tristram is born and including the whole parish, the circle circumscribes the outer edge of the world of the novel. As the engineer in the science of fortification proceeded from the circle, which embraces all regular polygons, so Sterne, in the construction of his text, traces the birth of Tristram and the origin of the novel back to this foundational figure. The link between the science of fortification and the poetics of the novel is further marked by the narrator’s promise to include a map of the circle of events—a map that has already been drawn but is still in the hands of the engraver. This map, on which “all this will be more exactly delineated and explain’d,” is to serve as a “key” to the novel—any difficulties of comprehension due to dark or unclear textual passages can be resolved by recourse to the map. Sterne thus seemingly adopts not only the mathematical foundation of the science of fortification but also the primacy of the graphic inscription. Like the fort itself, the novel grows out of the geometrical map.

And yet, within the perfect circle, the novel draws a highly irregular narrative geometry. Immediately after circumscribing the space of events, the narrator proceeds to the problem of the line:

Could a historiographer drive on his history, as a muleteer drives on his mule,—straight forward;—for instance, from Rome all the way to Loretto, without ever once turning his head aside either to the right hand or to the left,—he might venture to foretell you to an hour when he should get to his journey’s end;——but the thing is, morally speaking, impossible: For, if he is a man of the least spirit, he will have fifty deviations from a straight line to make with this or that party as he goes along, which he can no ways avoid. In this passage and throughout the novel, the graphical space of the text is peppered with hyphens and dashes—straight lines—but they do not connect to form a linear development. Rather, they are repeatedly broken off as the text turns now to the right, now to the left. A metacommentary on the novel itself, Sterne outlines the shape of the narrative architecture that is about to be built. The straight line is here replaced by a series of desultory and digressive lines. When the map of the circle of the fictional boundaries eventually appears, it is inserted directly into the text toward the end of the sixth volume. As the two inscriptions at the bottom of figure 9 indicate, Tristram has both “designed” and “carved” this map, which omits all topographical information and depicts instead the peculiar winding path of the narrative in the first four volumes. Within the circle emerges not the regular geometry of fortification, but instead a series of zigzagging figures, the warped geometry of a narrative moving in random saccadic jerks. As an itinerary map, it narrativizes geometry and twists the discourse on fortification out of shape in a détournement of the figures upon which it is grounded.
The space within the circle here becomes the site for the incalculable, contingent movement of a narrative that cannot be contained. For another figure, this one of the fifth chapter, appears below a new paragraph literally off the map. As Toby inverts the raison d’être of the plan-relief, Sterne thus inverts the epistemology of the science of fortification, fashioning contingency out of order using the selfsame book, Elements by Euclid, that the writers on fortification used, but to contrary effect. In a sermon entitled “Time and Chance,” Sterne writes that “time and chance,—apt seasons and fit conjunctures have the greatest sway, in the turns and disposals of men’s fortunes.” The two elements that the graphic world of Vauban’s treatises excluded in the timeless progression from one spatial order to the next are here adopted as the engine of narrative development. Appropriating the imagery of the science of fortification, Tristram Shandy reinjects time and chance into its static graphics and transforms the esprit géométrique into a celebration of the productive potential of contingency. The discourse on war thus comes to shape the poetics of the novel both at the level of content and at the metalevel. In its parodic exploration of the science of fortification, Tristram Shandy is shaped into its negative image.

**Toward Topography**

During the course of the eighteenth century a gradual shift in the praxis of war took place. After about two centuries of continuous development,
siese warfare entered a period of slow decline when new developments in the art of war relegated it to a secondary role. As the offensive firepower grew, an “interminable succession of sieges” gradually gave way to open battle between two or more mobile armies. Since armies at this time were still professional, however, the great financial losses one could expect to incur in a battle made the wars of the eighteenth century tactical games of maneuvering. In 1757, only two years before Sterne published the first volume of the novel, Frederick II of Prussia had with great skill outmaneuvered the Austrian enemy at the Battle of Leuthen during the Seven Years’ War. As Sterne was writing, the bounded, static art of war was giving way to a more mobile one. When, therefore, Toby is compared to Don Quixote, the tertium comparationis between the science of fortification and Cervantes is more than the disjunction between the symbolic and the real caused by an excessive reading of books. At a deeper level, it is the disjunction between two ways of organizing knowledge. Michel Foucault, in The Order of Things, famously reads Don Quixote as an epistemic dinosaur, as the belated embodiment of an order of knowledge whose grounding lies in a system of resemblance that has been replaced by a system of representation. Roaming La Mancha, Don Quixote operates with a theory of knowledge that no longer applies. In similar fashion, a hundred years later on the bowling green, Toby is playing out a military discourse that is growing obsolete. The closed static spatial organization of siege warfare was being supplanted by an unbounded open spatial organization in which the traversal of space, not its geometrical ordering, was the key element. This was evident in midcentury when Sterne’s novel was being published, but an early indication of this shift is visible already at the beginning of the century when the novel is set. In the Wars of the Spanish Succession (1701–1713), the Duke of Marlborough employed a maneuvering strategy that prefigured that of Frederick II and, later, the vast expansion of military space by Napoleon. At one point Trim mistakes “geography” for “chronology,” and Toby proceeds to clarify:

What business, added the corporal triumphantly, has a soldier, an’ please your honour, to know any thing at all of geography?

——Thou would’st have said chronology, Trim, said my uncle Toby; for as for geography, ’tis of absolute use to him; he must be acquainted intimately with every country and its boundaries where his profession carries him; he should know every town and city, and village and hamlet, with the canals, the roads, and hollow ways which lead up to them; there is not a river or a rivulet he passes, Trim, but he should be able at first sight to tell thee what is its name—in what mountains it takes its rise—what is its course—how far it is navigable—where fordable—where not; he should know the fertility of every valley, as well as the hind who ploughs it; and be able to describe, or, if it is required, to give thee an exact map of all the plains and defiles, the forts, the acclivities, the woods and morasses, thro’ and by
which his army is to march; he should know their produce, their plants, their minerals, their waters, their animals, their seasons, their climates, their heats and cold, their inhabitants, their customs, their language, their policy, and even their religion.

Is it else to be conceived, corporal, continued my uncle Toby, rising up in his sentry-box, as he began to warm in this part of his discourse—how Marlborough could have marched his army from the banks of the Maes to Belburg; from Belburg to Kerpenord—(here the corporal could sit no longer) from Kerpenord, Trim, to Kalsaken; from Kalsaken to Newdorf; from Newdorf to Landenbourg; from Landenbourg to Mildenheim; from Mildenheim to Elchingen; from Elchingen to Gingen; from Gingen to Balmerchoffen; from Balmerchoffen to Skellenburg, where he broke in upon the enemy’s works; forced his passage over the Danube, cross’d the Lech—pushed on his troops into the heart of the empire, marching at the head of them through Friburg, Hokenwert, and Schonevelt, to the plains of Blenheim and Hochstett?—Great as he was, corporal, he could not have advanced a step, or made one single day’s march without the aids of Geography.

With the focus on mobile rather than siege warfare, Toby’s description of Marlborough’s movements displays the beginnings of a shift in the military discourse from a geometrically ordered space to a space that is conceived geographically and topographically. Instead of the knowledge of geometry required by the science of fortification, knowledge of the terrain became the main condition of warfare. As Toby points out, this change also implicates the media of spatial inscription. The map is transformed from a clean sheet on which geometrical forms could be drawn into a topographical design. The background of the siege map, which in Vauban’s treatises serves mainly as a flat surface that makes inscriptions possible, becomes on the topographical map the essential element. Not until Napoleon’s “grandes opérations” would this development of strategy and media reach a complete breakthrough, but already here space was becoming vectorial, made up of obstacles and networks of passageways. Where, in Foucault’s analysis, the shift from one order of knowledge is conceived as a radical break, thus making Don Quixote’s battle with the windmills incomprehensible to all but himself, the change in spatial order is more gradual. Neither the Duke of Marlborough, nor Frederick II, nor Napoleon was a stranger to sieges, but in each case their efficiency waned as the firepower of the artillery increased. The shift was gradual, and the two spatial orders would exist side by side, but, as Carl von Clausewitz would later write, “the geometrical principle” was no longer decisive. Of the two, mobile warfare and its topographical inscription were in the ascendancy. The quixotic element in Toby’s military efforts therefore consists not only in the disjuncture between the symbolic and the real, but also in the fact that he is operating with a spatial order that was losing its hold by the time Sterne was writing. The geometrical principle, which at once organizes his novel and is critically refracted by it, would
eventually recede into the background and give way to topography as the organizing principle of war. This new principle also manifests itself across the fields of literature, military theory, and the media of war, and, curiously, it can again be gleaned from Tristram Shandy. For in the immediate aftermath of the Napoleonic Wars a forged continuation of the novel was published in France.

Bernard de Montbrison: Author of Tristram Shandy

In 1818 a rather peculiar document appeared in Paris: Le Jeu de la guerre de terre et de mer, et les derniers chapitres de Tristram Shandy, trouvés dans les papiers d'Yorick avec figures [War game on land and at sea, and the last chapters of Tristram Shandy, found among Yorick’s papers with illustrations]. Among the numerous continuations, imitations, and forgeries that had flooded the book market upon the publication of the first volume of Tristram Shandy, this belated work stands out.59 The alleged editor and, we must assume, actual author, was a man by the name of Louis-Simon-Joseph Bernard de Montbrison. A year his senior, Montbrison attended the Ecole militaire de Paris with the young Napoleon in 1782, and he later served as the first rector of the Académie de Strasbourg from 1810 to 1818.60 Osten-sibly the editor of a manuscript from the 1760s, Montbrison presents a work that straddles two eras in the history of war. As a revision of Sterne’s text from the perspective of the Napoleonic Wars, the Jeu de la guerre performs a kind of deviating repetition not unlike the one famously described by Jorge Luis Borges in Pierre Menard, Author of the Quixote, in which the rewriting of Cervantes’s novel centuries later is deemed to be infinitely richer than the original, because the changed historical context adds to the text multiple layers of significance. While Montbrison performs not a literal transcription of Tristram Shandy but an updated continuation, the text is at once the same and entirely different. In the integration of the identical and the foreign, in the merging of the discourse on war from the eighteenth century with that of the early nineteenth century, the text reveals the shift in the conception of war that appears around 1800. Let us take a closer look at this complex document.

As the title indicates, the manuscript consists of a war game and Montbrison’s translation of the last few chapters of Tristram Shandy found among the papers of Yorick that have made it to Paris through a series of highly improbable events. Complementing these fragments are a collection of four maps in color and an excerpt of a treatise or “dissertation” by Tristram’s father. All the fragments are occupied with a “military subject,” namely, the
invention of the topographical war game. As Montbrison points out in the introduction and in various footnotes to the actual manuscript, the inventor of this game is none other than Uncle Toby: “It is unquestionable, according to this authentic manuscript, that the invention of the war game on the model of chess belongs entirely to uncle Toby.” It is the invention of this game that is described in the last chapters. For the adventure on the bowling green is cut short by a disastrous winter: “An exorbitant snowfall, followed by a rapid thaw destroyed the lawn, filled up the ditches, and it became impossible for the captain to find the least trace of the beloved and fateful St. Nicolas bastion, nor of any of the other bastions.” Further afflicted by a bout of sciatica that turns into a permanent state of pain, Toby has to abandon his sieges entirely. But this provides the impetus for the invention of the war game. At first he seizes a chessboard, but when he sees the isomorphous order of the two-dimensional grid, he notices the discrepancy between the ludic space and the one he recalls from his own campaigns. The game of chess would become a far better simulation if it were to include mountains, hills, rivers, and oceans, so Toby instantly “invent[s] a chess game that can be applied to all the operations of military art.”

In a parody of Genesis, Toby proceeds to create the world of the game in seven days, including oceans, pontoons to cross the rivers, army corps, munitions, and so on. The result is “an exact map of the theater of war. A large river, which traversed it, several flowing streams, forests, green hills transformed it into the very image of a romantic landscape. But all this natural beauty was destined to become inundated with blood.” In the first game played on this topographical map, Toby and Trim simulate a siege and thus remain beholden to the nature of war in the eighteenth century. But Walter Shandy is quick to realize the revolution in military thought wrought by Toby’s invention. In a treatise on the war game entitled “On the Spirit of War and of Captain Toby’s Game” he gives a brief overview of the history of chess and continues: “Finally my brother Toby appeared; and as the first person in Europe he substituted the level and uniform terrain of the older chessboard with a terrain of endlessly varied forms.” In other words, “My brother Toby applied the operations of chess to the battlefield, which presents all the varieties of the terrain.”

The nonfictional background for Toby’s invention is the emergence in the period between approximately 1770 and 1830 of a number of increasingly intricate and sophisticated devices that sought to simulate warfare: war games, or, in Prussian parlance, Kriegsspiele. The first war game to gain wider currency, and the one that forms the template for Montbrison’s and Uncle Toby’s topographical chess, was invented by Johann Christian Ludwig Hellwig (1743–1831) in 1780: Versuch eines aufs Schachspiel gebauten taktischen Spiels von zwey und mehreren Personen zu spielen [Attempt at a tactical game
based on chess to be played by two or more persons. As the title indicates, it marks the beginning of the transition from the strictures of chess to the increasingly complex workings of war games. Hellwig explicitly distances himself from the abstract space of chess, in which all squares are equally traversable with nothing resembling an obstacle standing in the way: “In short, this surface is a parade ground and not a theater of war.” Instead, his tactical game takes place on a map of a concrete terrain that consists of two different obstacles represented by the red and green colors respectively (fig. 10). The red squares indicate mountains that cannot be passed, while the green squares indicate swamps and marshes that also hinder movement but not firepower. Hellwig differentiates between two kinds of obstacles and three kinds of terrain, and he thereby transforms the two-dimensional plane into a three-dimensional terrain. He further expands the field of possible operations by increasing the size of the board from 64 to 1,617 squares, and he even suggests a more complex game to be played on a board of 2,640 squares that takes into consideration smaller elevations of the terrain as well as the provisions for the troops.

In both the forged literary text and the material medium of the war game, the science of fortification and its geometrical order has given way to a topographical order of space based on the terrain. Now the natural accidents and obstacles enter into the immediate considerations of the theory of war. And this entails a vast expansion of space. As the editor notes,
Toby’s map presents an exact image of modern war, in which it is the advantage of the army’s positions and the “superiority of maneuvers” that determine the outcome. Not restricted to the site of a fortification, Toby’s map allows for a simulation of the grand operations that appeared with Napoleon, where the army was split up into independent corps that maneuvered concurrently across the terrain in an extended space.

Montbrison here relies on a book of military theory published in 1815 by the French general Joseph, vicomte de Rogniat: *Considérations sur l’art de la guerre* [Reflections on the art of war]. In the eighth chapter on positions and encampments, he states:

The terrain is the chessboard on which the generals play the game of war with the troops they command. Until now we have assumed that this chessboard was uniform and without obstacles such that when looking at a simple and coherent basis we could all the more easily establish the rules and principles of the order, the arrangement, the support and the successive march of the cohorts, the squadrons and the batteries, which one can regard as the different pieces of the game. But when the terrain changes it is certain that the order of battle will lose its regularity and will adapt to the unevenness and the variations of the locality. The order and the march and the value of the pieces are modified with the increase of information, and the game becomes more complicated.

He here delineates the new spatial order that came to dominate after 1800, and it is this order that Montbrison projects back into the eighteenth century, or, more precisely, back into the discourse on war around 1700 through Sterne’s text from the 1760s. If Sterne’s Toby is quixotic in his obsession with a theory of war that was growing obsolete, Montbrison’s Toby is the lone genius who invents a conception of war that would not appear fully developed until half a century later. It is therefore little surprising that Walter should compare Toby’s invention to the discovery of America.

As Rogniat hints, however, the change in the conception of space is inseparable from an epistemic transformation. The more complicated game of topographical chess cannot be calculated in the same way as the science of fortification. When Walter Shandy, with his usual philosophical verve, claims that every error made in the game is by necessity a breach of an eternal principle in military theory, and, reciprocally, that every error in war transposed algebraically onto one of the boards will amount to an error in the game, Montbrison interpolates: “We are afraid that this entire chapter by M. Walter Shandy is pervaded by an excessive science.” Not beholden to the rules of geometry, following no predetermined sequence of action, no linear progression, the games that can be played on the topographical map are “absolutely different.” Montbrison’s early nineteenth-century text thus suggests a different epistemic order, one that cannot be explained *more geometrico*. Carl von Clausewitz, himself an enthusiastic reader of Tristram Shandy, has
perhaps most succinctly articulated the new role chance comes to play within
the military theory that emerges from the Napoleonic Wars. As he writes in
Vom Kriege [On war]: “War is the realm of chance. In no other human activity
must one give so much leeway to this stranger, because nowhere else is it as
pervasive. It increases the uncertainty of all affairs, and it interferes with the
course of events.” With his introduction of a series of new concepts such
as “friction,” “average probabilities” and “average truths,” Clausewitz out-
lines a conception of war organized around chance and contingency in
which the certainty of geometry is exchanged for the relative uncertainty
of probability. The traditional forms that have organized military writings
in the eighteenth century are therefore explicitly abandoned:

The reader expects to hear of angles and lines, but instead of these citizens of the
scientific world he finds only people from real life, like the ones he meets every day
on the street. And yet the author refuses to be a hair’s breadth more mathematical
than the subject requires, and he is not afraid of the bewilderment the reader might
experience.

It is tempting to view Sterne’s metafictional map of the novel’s narrative
architecture as an image of Clausewitz’s military theory as well. For here
also, the forms of Euclidean geometry are refracted critically. Yet, with
Clausewitz, the esprit géométrique is abandoned altogether as the governing
paradigm of war. It is rather on the topographical map of Montbrison’s
forgery and in the “absolutely different” games played on its extended
terrain that a material correlate to the new order of knowledge can be
found. As one of Clausewitz’s contemporary theorists claims, war has grown
into “l’empire du hazard [sic]”—a world of both topographic and epistemic
hazards. It is therefore not surprising that Montbrison would seize upon
Tristram Shandy for his forgery, for with its poetics of contingency the novel is
governed by a narrative logic that was now believed to govern the world of
military events as well. Following Tristram Shandy across the threshold into
the nineteenth century, we can track not only the development of the media
of war and the increasing obsolescence of the geometrical order but also
a shift in the relationship between literary text and military theory. For
where Sterne deploys contingency as a satirical device against the theory
of fortification, as a prism that twists military theory out of shape in a wild
refraction, after 1800 contingency becomes a centerpiece of military
thought. Inventor of a new war medium, Uncle Toby champions a topo-
graphic and epistemic order fully in accordance with the reigning military
theory. Given this accordance, the character of the media satire is displaced.
It now lies in the anachronism that makes of Toby not the last man standing
within an increasingly obsolete military order, but the prescient inventor of
a new order a hundred years avant la lettre. In this way, the profound
development in the intellectual history of war is given a literary origin. Not merely a refraction of military theory and media, fiction is cast as their forgotten birthplace. Evidently a forged conclusion, Montbrison’s text nevertheless indicates the wider perspective it is necessary to adopt in order to grasp the larger frames that organize the understanding of war. His superimposition of traditionally distinct fields—literature, maps, games, and military theory—is emblematic of the need to attend to the poetics of a diverse ensemble of material and discursive sources in order to grasp the governing paradigm of war. And, as the extended life of Tristram Shandy shows, the literary text can serve as a prism for the full array of these sources as they morph one military order into another.

Notes

7. As Martin Warnke notes, the space of such treatises has the topography of a parade ground. Warnke, “Raumgreifende Graphik,” in *Bildwelten des Wissens: Kunsthistorisches Jahrbuch für Bildkritik* 1, no. 1 (2003): 79–103, here 80.
9. Ibid., 75.
11. Ephraim Chambers, *Cyclopædia*, or, An universal dictionary of arts and sciences: containing the definitions of the terms, and accounts of the things signify’d thereby, in the several arts, both liberal and mechanical, and the several sciences, human and divine: the figures, kinds, properties, productions, preparations, and uses, of things natural and artificial: the rise, progress, and state of things ecclesiastical, civil, military, and commercial: with the several systems, sects, opinions, &c: among philosophers, divines, mathematicians, physicians, antiquaries, critics, &c: the whole intended as a course of ancient and modern learning (1728), 1:79.
14. Ibid.
16. The tactical effects of this structure were described with some sarcasm by Daniel Defoe in 1697: “Now ’tis frequent to have Armies of Fifty thousand men of a side stand at Bay within view of one another, and spend a whole Campaign in Dodging, or as ’tis genteeely call’d, Observing one another, and then march off into Winter-Quarters. The difference is in the Maxims of War, which now differ as much from what they were formerly, as Long Perukes do from Piqued Beards; or as the Habits of the People do now, from what they then wore. The present Maxims of the War are;

*Never Fight without a manifest Advantage.*
*And always Encamp so as not to be forc’d to it.*

And if two opposite Generals nicely observe both these Rules, it is impossible they shou’d ever come to fight.” Daniel Defoe, *An Essay Upon Projects* (London, 1697), 256–57.
20. Ibid., 688.
21. Ibid., 151.
22. The implied but openly visible epistemology of fortification has a further theological anchoring. For as Ephraim Chambers notes in his *Cyclopædia* from 1728, “Some Authors go back to the Beginning of the World, for the Author and Origin of Military Architecture. According to them, GOD himself was the first Engeneer (sic); and Paradise, or the Garden of Eden, the first Forteresse,” Chambers, *Cyclopædia*, 1:79. In this genealogy, the engineer is performing the task of

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a demiurge who, with the forms of geometry, creates a world of perfection complete unto itself. In an imitation of the initial creation, the engineers made order out of the chaos of war with the *Elements* of Euclid. See also Baier and Reinisch, “Schußlinie, Sehstrahl und Augenlust. Zur Herrschaftskultur des Blickens in den Festungen und Gärten des 16. bis 18. Jahrhunderts,” 45.

24. Ibid., 75.
27. Ibid., 80.
28. Ibid., 79.
29. Melvyn New, Richard A. Davies, and W. G. Day are surely correct to say that it is superfluous to follow Toby and attempt to locate, as Ian Watt does, the precise spot of the encounter. Yet, Toby’s use and abuse of media are not simply a cause of bewilderment as they suggest. They also provide some insight into the conception of war within the discourse on fortification. See The Florida Edition of the Works of Laurence Sterne, vol. 3, *The Notes*, ed. Melvyn New, Richard A. Davies, and W. G. Day (Gainesville, FL, 1984), 127.
31. Ibid., 400.
35. The choice of the bowling green as the site of the fortification may reflect the flourishing of the “garden labyrinth” in England between 1650 and 1740. The fusion of pastoral and military architectures might explain not only the size of the model but also Toby’s position inside it. See Stephen Soud, “Weavers, Gardeners, and Gladiators: Labyrinths in *Tristram Shandy*,” *Eighteenth-Century Studies* 28, no. 4 (Summer 1995): 397–411.
37. Ibid., 86–87.
38. Ibid., 401, 404.
39. David McNeil’s claim that Toby’s model is merely a “ludicrous game” misses the point. We should, as Richard Lanham suggests, take the war game seriously. Reading it within the larger framework of Johan Huizinga’s *Homo Ludens* and game theory from the 1960s, however, Lanham does not address the nature of the model as model and its reflection on the discourse on war around 1700—the line of inquiry followed here. David McNeil, *The Grotesque Depiction of War and the Military in Eighteenth-Century English Fiction* (Newark, 1990), 150; Richard A. Lanham, “*Tristram Shandy*: The Games of Pleasure (Berkeley, 1973).


41. Friedrich Kittler’s early book Gramophone, Film, Typewriter set the tone for this line of inquiry. As Geoffrey Winthrop-Young points out in the introduction to the English edition, “Readers of Gramophone, Film, Typewriter and Kittler’s related essays might be left with the impression that in spite of all distancing maneuvers, Kittler seems to feel a certain reverence, if not for the writers themselves, then certainly for their largely unquestioning admiration of (media-)technological innovations” (xxxviii). Friedrich Kittler, Gramophone, Film, Typewriter, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford, 1999). See also Geoffrey Winthrop-Young, “Drill and Distraction in the Yellow Submarine: On the Dominance of War in Friedrich Kittler’s Media Theory,” Critical Inquiry 28 (Summer 2002): 825–54.


43. “Verisimilitude...is not always on the Side of Truth.” Sterne, Tristram Shandy, 262. Rainer Warning claims that Sterne breaks with the tradition of identifying the narrator with the historiographer in Defoe and Henry Fielding by repeatedly undermining all attempts at grounding the narrative in fact. This is confirmed indirectly by Walter’s statement, which seeks to ground fact on the improbable. Rainer Warning, “Fiktion und Wirklichkeit in Sternes ‘Tristram Shandy’ und Diderots’ ‘Jacques le fataliste,’” in Nachahmung und Illusion, ed. Hans Robert Jauß (Munich, 1969), 100.

44. Sterne, Tristram Shandy, 33, 12.
45. Ibid., 33–34.
46. Ibid., 34.
47. If it is indeed the same map. It is not certain that the initial promise, which would have placed the map at the end of the last volume, is ever kept. As the inscription indicates, this map appears to issue from the study of Tristram Shandy rather than from the engraver’s shop.

48. When Wolfgang Iser in his study of Tristram Shandy mentions the “typographical patterns” he discusses them against the background of the biographical form of the eighteenth-century novel. The more immediate foil seems to be the graphics
of the science of fortification, but the convergence on the map of military and narrative architecture, and Sterne’s subsequent disquisition on the polyvalence of the line suggests that he is operating at several levels and against several backgrounds at once. Iser, Laurence Sterne: “Tristram Shandy,” 72–73.

49. Neither Sterne nor Tristram therefore succeed in finding an Archimedian point that provides a (cartographic) overview of Tristram’s life. Instead, the map displays only the unmanageable space of narration. See Matthias Buschmeier, “Ordnungen der ungesicherten Welt. Archiv und Karte in der Metaphorologie des Wissens bei Sterne und Goethe,” in Topographien der Literatur: Deutsche Literatur im transnationalen Kontext (Stuttgart, 2005), 126–150, here 138–39. The disjunctive link between military cartography and narration is also a salient feature of the frontispiece that Sterne commissioned from William Hogarth for the second edition of the book. The engraving depicts Trim reading the sermon that has fallen out of Toby’s copy of Stevinus. On the wall in the background hangs a map of a fortification, which we, with W. B. Gerard, may assume is Toby’s map of Namur, even though the fortification in the engraving appears to be more regular than the one at Namur. Such regularity, however, is contrasted by the series of random events that not only brought the “ill-fated sermon” into the treatise of fortification, but also continues to haunt the sermon after Trim has read it aloud in an improbable crescendo of chance happenings. See Tristram Shandy, 108–27. For a detailed analysis of Hogarth’s engraving see W. B. Gerard, Laurence Sterne and the Visual Imagination (Hampshire, 2006), 53–66.


51. There are indeed occasional somber overtones to the celebration of contingency, but to claim, as Jesse Molesworth does in an otherwise eminently readable and enlightening book, that Tristram Shandy is governed by the “extensive project of denouncing accident” is somewhat of an overstatement, and it disregards the narrative potential of chance, which Sterne exploits in full measure. See Molesworth, Chance and the Eighteenth-Century Novel, 204.

52. After the turn of the century Napoleon would write: “Without a doubt they cannot stop an army by themselves; but they are an excellent means for slowing down, hindering, weakening and threatening a victorious enemy.” Napoléon, Maximes de guerre de Napoléon (n.p., 2006—facsimile of the edition published in 1837 by the Société Belge de Librairie in Bruxelles), 23–24.

53. The phrase is Guerlac’s. “Vauban: The Impact of Science on War,” 73.

54. Moreover, the restrained wars of the eighteenth century served as a “theater of the aristocracy,” as David A. Bell points out; i.e., as part of a culture of honor in which values were put on display. This would come to an end with the Napoleonic Wars. David A. Bell, The First Total War: Napoleon’s Europe and the Birth of Warfare as We Know It (Boston, 2007), 5, 34–37.


56. Sterne, Tristram Shandy, 511–12. In spite of Toby’s awareness of the importance of geography, his obsession with sieges means that none of the major battles in the Wars of the Spanish Succession that took place in the open terrain are mentioned. See Fritz Gysin, Model as Motif in Tristram Shandy (Bern, 1983), 100.

57. In his poem L’Art de la Guerre from 1751, Frederick conjures the ghost of Vauban to show the military novices “par quels sciences et par quels artifices / Vous avez assuré les places des Français / Contre les bras germains et les canons
anglais.” At the beginning of the Seven Years’ War, he further composed a series of aphorisms on the basic principles of fortification in which he claims that the construction of the fortification should seek to gain as much advantage from the terrain as possible. Fifty years later, when the nature of war had changed significantly, Napoleon would still meet weekly with his Committee on Fortifications. See Duffy, The Fortress in the Age of Vauban and Frederick the Great, 1660–1789, 139, and Philippe Prost, “Les places fortes terrestres,” in Architectures Militaires Napoléoniennes, ed. Philippe Prost (Paris, 1994), 30.

Isabelle Warmoes explains that the gallery of plans-reliefs was eventually attached to the “Service géographique de l’armée,” whose main concern was with cartography. Also at the institutional level, then, models became less important than map production. Henry Guerlac also notes that Vauban toward the end of his life appears to lay more emphasis on the army and less on fortification. Warmoes, Le musée des Plans-Reliefs, 15; Guerlac, “Vauban: The Impact of Science on War,” 90.

59. For a detailed bibliography of these works that nevertheless ends just before the publication by Montbrison in 1818, see René Bosch, Labyrinth of Digressions: Tristram Shandy as Perceived and Influenced by Sterne’s Early Imitators (Amsterdam, 2007), 281–93. For the implications of Tristram Shandy’s publication history, in particular its serialization, see Thomas Keymer, Sterne, the Moderns, and the Novel (Oxford, 2002).
60. See Arthur Chuquet, La jeunesse de Napoléon (Paris, 1897), 1:181, 429.
62. Ibid.
63. Ibid., 2.
64. Ibid., 4.
65. Ibid.
66. Ibid., 30.
69. For a detailed analysis of Hellwig’s game from 1780 see Pias, Computer-Spiel-Welten, 204–13.
70. Hellwig, Versuch, 13.

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71. Ibid., 14. The map is reproduced from the second edition of the book *Das Kriegsspiel—ein Versuch die Wahrheit verschiedener Regeln der Kriegskunst in einem unterhaltenden Spiele anschaulich zu machen* (Brunswick, 1803).


73. Montbrison, *Jeu de la guerre*, 35n.


76. Ibid., 41.


78. Clausewitz, *Vom Kriege*, 234.

