NUOVA ANTOLOGIA MILITARE
RIVISTA INTERDISCIPLINARE DELLA SOCIETÀ ITALIANA DI STORIA MILITARE

N. 6
2025

Fascicolo 24. Novembre 2025

Storia Militare Contemporanea (6)

Società Italiana di Storia Militare

General Editors: Virgilio Ilari, Jeremy Black, Giovanni Brizzi.

Legal Editor (dir. responsabile Gregory Alegi **Ed. executive (comitato di redazione):** Viviana Castelli, Alessandro Carli, Emiliano Bultrini, Francesco Biasi, Francesco Pellegrini. **Special appointee for Intl cooperation:** Dr Luca Domizio.

Scientific Editorial Board : Foreign members: Prof. Jeremy Armstrong, Christopher Bassford, Floribert Baudet, Stathis Birtachas, Lee L. Brice, Loretana de Libero, Fernando Echeverria Rey, John France, Francisco García Fitz, Tadeusz Grabarczyk, Gregory Hanlon, Rotem Kowner, Armando Marques Guedes, Harold E. Raugh Jr, Yannis Stouraitis: **Italian members:** Giampiero Brunelli, Aldino Bondesan, Piero Cimbolli Spagnesi, Alessandra Dattero, Immacolata Eramo, Carlo Galli, Maria Intrieri, Roberta Ivaldi, Nicola Labanca, Luigi Loreto, Luca Loschiavo, Serena Morelli, Francesco Somaini, Gioacchino Strano, Giusto Traina, Federico Valacchi.

Senior Academic Advisory Board. Prof. Massimo de Leonardis, Magdalena de Pazzis Pi Corrales, John Hattendorf, Yann Le Bohec, (†) Dennis Showalter, Livio Antonielli, Marco Bettalli, Antonello Folco Biagini, Franco Cardini, Piero del Negro, Giuseppe De Vergottini, Gian Enrico Rusconi, Carla Sodini, Donato Tamblé,

Special Consultants: Lucio Caracciolo, Flavio Carbone, Basilio Di Martino, Antulio Joseph Echevarria II, Carlo Jean, Gianfranco Linzi, Edward N. Luttwak, Matteo Paesano, Ferdinando Sanfelice di Monteforte, Simonetta Conti, Elina Gugliuzzo, Vincenzo, Angela Teja, Stefano Pisu, Giuseppe Della Torre

Nuova Antologia Militare

Rivista interdisciplinare della Società Italiana di Storia Militare

Periodico telematico open-access annuale (www.nam-sism.org)

Registrazione del Tribunale Ordinario di Roma n. 06 del 30 Gennaio 2020

Scopus List of Accepted Titles October 2022 (No. 597)

Rivista scientifica ANVUR (5/9/2023) Area 11, Area 10 (21/12/2024)

Direzione, Via Bosco degli Arvali 24, 00148 Roma

Contatti: direzione@nam-sigm.org ; virgilio.ilari@gmail.com

©Authors hold the copyright of their own articles.

For the Journal: © Società Italiana di Storia Militare

(www.societaitalianastoriamilitare@org)

Grafica: Nadir Media Srl - Via Giuseppe Veronese, 22 - 00146 Roma

info@nadirmedia.it

Gruppo Editoriale Tab Srl -Viale Manzoni 24/c - 00185 Roma

www.tabedizioni.it

ISSN: 2704-9795

ISBN Fascicolo 979-12-5669-253-8

NUOVA ANTOLOGIA MILITARE
RIVISTA INTERDISCIPLINARE DELLA SOCIETÀ ITALIANA DI STORIA MILITARE

N. 6
2025

Fascicolo 24. Novembre 2025

Storia Militare Contemporanea (6)

Società Italiana di Storia Militare

Estandart Reyal u d'a Cheneralísma, prencipal bandera carlista d'a primera guerra bordada por María Francisca de Braganza em 1833 Royal Standard of the General in Chief, main Carlist flag of the First War embroidered by Maria Francisca de Braganza in 1833). Wikimedia Commons

Learnable versus Teachable
Reflections on Inculcating Strategic Sense

BY LUKAS MILEVSKI

ABSTRACT: Can strategic sense be taught, and how? This article engages with this crucial question. First it explores the generic strategist's desirable qualities, how strategic sense fits in, and what that sense actually is. It then turns to edu-cation for strategy and the standard understanding as needing to mix deep his-tory and good theory, but this interpretation stems from professional military education which tends to rely on the students already possessing certain insights which ci-vilian students may not have. Thus the article ends with an exploration of gaming as a teaching tool, identifying a function of gaming which is not often discussed: helping students develop an actually strategic way of thinking which, with suffi-cient experiential repetition, might become habitual.

KEYWORDS: STRATEGY, TEACHING, STRATEGIC SENSE, GAMING

In 1973 Bernard Brodie offered a strong commentary on strategic theory: "Strategic thinking, or 'theory' if one prefers, is nothing if not pragmatic. Strategy is a 'how to do it' study, a guide to accomplishing some-thing and doing it efficiently … Above all, strategic theory is a theory for action." He concludes this line of thought by acerbically asking "[w]hat could strategic theo-ry possibly be for if it were not meant to be transferable to the world of action?" It is a perhaps overly bold statement, but is certainly built around a core of truth. Let us replace the word 'theory' with 'education' to shift the focus slightly:

> Strategic education is nothing if not pragmatic. Strategy is a 'how to do it' study, an education for accomplishing something and doing it effi-ciently … Above all, strategic education is an education for action … What could strategic education possibly be for if it were not meant to be transferable to the world of action?[1]

1 Bernard Brodie. *War & Politics*. (New York: Macmillan 1973), 452, 453.

NAM, Anno 6 – n. 24
DOI: 10.36158/979125669253819
Novembre 2025

No longer is this a statement about thinking (i.e. theory) but about education, for both thinking about and practicing strategy. It is at least as bold as Brodie's original thought, if not more so, but it is still built around a truthful core. There are other purposes to education than preparing for action, such as becoming intellectually well placed to analyze it or even for the sheer pleasure of addressing curiosity. Yet in actual practice, However, these both usually overlap substantially with the first.

Strategy must be performed; yet this act can be more or less sensible, more or less appropriate. The act of judging and judgments themselves, in regard either to actual performance or to its analysis and evaluation, must also be sensible. Having a degree of strategic sense is indisputably critical for both strategic practitioners and analysts. That Colin Gray considered strategic sense to be missing in action is therefore unfortunate.[2] Although he also suggested that formal education was one way of improving strategic sense, a few years later he more pessimistically felt that "[s]trategy engages too many concerns to be taught."[3] Others have been more optimistic. Sun Tzu famously promised "[i]f a general follows my [methods for] estimation and you employ him, he will certainly be victorious and should be retained. If a general does not follow my [methods for] estimation and you employ him, he will certainly be defeated, so dismiss him."[4]

This article revisits this question: can strategy—and particularly strategic sense—be taught or is it merely learnable, per the old adage that one can bring a horse to water, but cannot make it drink. It requires active participation by both teacher and student as the former guides the latter in making their own sense of strategy through mutual engagement with each other and the subject matter.[5] In this strict sense, probably nothing is truly teachable but everything is potentially learnable, and so a more accurate question would be how teaching can ease the learnability of strategic sense and in doing so also incentivize its learners? This can be done through the use of wargaming for educational purposes. The argu-

2 Colin S. Gray. "Strategic Sense – Missing from Action", *Infinity Journal* 5/3 (Fall 2016), 4-8.

3 Colin S. Gray. "Can Strategy be Taught?", *Infinity Journal* 6/3 (Winter 2019), 8.

4 Sun Tzu. *The Art of War*. Ralph D. Sawyer, trans. (Boulder: Westview Press 1994), 158.

5 On teaching and sense-making see David Carr. *Making Sense of Education: An introduction to the philosophy and theory of education and teaching*. (London: RoutledgeFalmer 2003), 24.

ment is made first by exploring what strategic sense is before turning to more conventional education for strategy, focused on history and theory. Yet, given the practical orientation of strategic sense, it is best developed through practice, which wargaming can provide, with caveats.

On Sense and the Strategist's Qualities

Strategic sense is just one of the many qualities the ideal strategist possesses. Various authors have waxed eloquent about these qualities, most of them characteristics not generally learned through formal education, but which are nonetheless worth enunciating first—before discussing sense itself—because they contextualize strategic sense.

Clausewitz famously conceived of military genius as a 'whole of character' notion, because it was meant to be the commander's counterpart to the climate of war. That climate is no mere intellectual challenge but one which truly oppresses, even threatens, the commander in every way, with its four main features being existential danger, physical effort, uncertainty, and miscellaneous sources of friction. Military genius therefore comprises a harmonious collection of qualities which include the commander's coup d'oeil—the perceptive inner eye, or perhaps instinct—as well as boldness, determination, and resolution.[6] More modern scholars have painted similar images. Harry Yarger has described "the pursuit of national security and strategy" as "the proper domain of the strong intellect, the life-long student, the dedicated professional, and the impervious ego—one which is well prepared and willing to wait for history to render judgment in regard to success."[7] Fred Charles Iklé wrote even more strikingly about the strategist's characteristics, which reach an almost inhuman diversity.

> The demands on intellectual integrity are so exacting because in the development of security strategy the contradictions outweigh the harmo-nies, the uncertainties overwhelm the established facts, the proofs remain utterly incomplete, and yet the stakes exceed all earthly objectives. The strategist has to incorporate into his work the rich and precise facts of physics, en-

6 Lukas Milevski. "The Idea of Genius in Clausewitz and Sun Tzu", *Comparative Strategy* 38/2 (2019), 140-141.

7 Harry R. Yarger. *Strategy and the National Security Professional: Strategic Thinking and Strategy Formulation in the 21st Century*. (Westport: Praeger Security International 2008), 161.

> gineering, geography, and logistics; he has to allow for the swirling currents and blurred edges of psychology, political science, and history; and he needs to fit all this into the dynamic of inter-national conflict among nations—a dynamic of opposing objectives and clashing forces that is driven as much by human stubbornness as by human error.[8]
>
> To do good work on national strategy almost demands a rotund intellect, a well-rounded personality. He whose vocation it is to work on these issues of war and peace cannot suffer from intellectual poverty. His soul must be in harmony with this world of ours. He must not only appreciate different cultures and good art, but also find nourishment in things that are beautiful and be endowed with a sense of humor. He might have, perhaps, an eye for architecture or painting, an ear for the best music; he must have a broad understanding of philosophy, literature and, of course, history. And–why not?–let me have men about me that are sophisticated epicures.[9]

Ultimately, as Gray wrote, "[t]here are grounds for doubt as to whether or not most strategists are heroes. However, the impediments to even adequate, let alone superior, strategic accomplishment are so numerous and so potentially damaging that there is little room for skepticism over the proposition that the strategist's profession is a heroic one."[10] Truly does it seem unlikely actually to be able to teach such professional heroism involving such as range of qualities—but teaching strategic sense is a narrower, perhaps more realistic goal.

What, then, is strategic sense? Gray is somewhat unhelpfully tautological when he notes that "[s]trategists with strategic sense may know what ought to work well enough for the politically determined desired result for policy."[11] The military historian Robert Lyman is perhaps the only one to have tried depicting what strategic sense is:

> Effective command requires strategic sense. Higher commanders need to understand the broader picture and wider context in which their own military operations take place, and thus to structure, plan and mount operations that meet the requirements of this wider strategy. They may not themselves

8 Fred Charles Iklé. "The Role of Character and Intellect in Strategy" in Andrew W. Marshall, J.J. Martin, & Henry S. Rowen (eds). *On Not Confusing Ourselves: Essays on National Security Strategy in Honor of Albert and Roberta Wohlstetter*. (Boulder: Westview Press 1991), 312.

9 Ibid., 315.

10 Colin S. Gray. "The Strategist as Hero", *Joint Force Quarterly* 62 (October 2011), 37.

11 Gray, "Strategic Sense", 5.

> be involved in the construction of grand strategy, but it is paramount that they understand why these decisions are made so that they can make battlefield decisions intelligently.[12]

Lyman's interpretation of strategic sense is that of a subordinate finding his place within a larger strategy, but it is not one oriented toward practicing strategy as a strategist. Strategic sense still requires conceptualization.

Conceptualizing strategic sense properly would be the subject of another, dedicated, article, but crucial elements can be summarized here. The primary logical axis of sense is instrumentality, or determining what to use, and how to use it, to achieve one's desired goals in war. Yet war itself is a non-linear phenomenon. War is adversarial and what the enemy does affects the value of one's own chosen instruments of power and the value of their planned use. War is alchemical, in that strategists are trying to convert military power and action into political, often behavioral, consequence, while the other side remains unwilling to change its behavior. Military power and political consequence are two fundamentally different things and transforming one into the other is analogous to, albeit more realistic than, turning lead into gold. Such strategic alchemy is affected by, and affects in turn, the strategist's instrumental thinking and doing. Finally, war is practical and decisions are not enough; decisions must lead to campaigns, battles, actions, all things which must actually be performed and can vary according to any number of qualitative characteristics. No two battles are alike in conduct or consequences. Friction also occurs. All the qualitative details of practice affect instrumentality as well. The sensible strategist thus needs to master instrumental logic in a fundamentally non-linear environment, which involves not only trying to connect actions to uncertain outcomes but understanding the importance of qualities of both to both. To be able to do so is to be strategically sensible. This is a tall order even before considering the many other qualities a strategist ideally possesses. To make matters worse, there are few if any prior indicators that someone is strategically sensible and historically even well educated strategist often fail the test of war in practice. The proof of sense is in the literal pudding of command performance and not before.

Besides this practically-oriented concept of strategic sense, those who are

---

12 Robert Lyman. *The Generals: From Defeat to Victory, Leadership in Asia 1941-45*. (London: Constable 2019), 341.

observers, analysts, and researchers of strategy in both history and contemporary practice need another dimension to develop their sense fully: empathy. The classicist Jon Lendon has reflected on the writing of battle:

> Battle descriptions in today's histories are usually written backwards in a logical chain from the outcome of the battle. From the result of the battle, then, proceed in reverse order the fighting that created that result, the manoeuvres, the dispositions of the units of the armies that did that fighting, and, first of all, the plans of the commanders that disposed and set those units in motion (although the plans of one commander can, if a surprise lies in the future, be held back for dramatic effect). This strong logic disciplines the battle description: we hear of the climactic engagement, not what happens elsewhere; we hear of the units in at the kill, but rarely get a full account of the forces of either army; the terrain is described where it bears upon that decisive combat, but the rest of the battlefield is neglected. Similarly, differences in numbers or equipment between the contending sides, matters of supply or weather or chance, the quality of troops or weapons, or human foibles – stupidity, insubordination, over-boldness, cowardice – tend to appear in the account only where the main plot requires them, unless, of course, they offer comic anecdotes.[13]

Every history is written with hindsight, generally telling a distinct causal story. In the process, much is minimized, if not actually left out, particularly the sheer uncertainty and non-linearity facing the practicing strategist. Where with hindsight one can sift through the evidence to identify what one considers the crucial causal and qualitative story, the practicing strategist, peering into the murky future, cannot. The strategist faces a wide open field of action and intends to pursue a particular course of action, with contingencies also in mind, but that fundamental level of uncertainty in the face of the various non-linearities of war and warfare already discussed is difficult to recapture in history. The observer needs deliberately to exercise a degree of empathy with the practicing strategists under study to appreciate properly and fully the difficulty of actually practicing strategy.[14] In this way, empathy is a key consideration in trying to learn to be sensible, as it more effectively allows the student to engage with the funda-mental challenges which the practicing strategist faces.

---

13 Jon E. Lendon. "Battle Description in the Ancient Historians, Part I: Structure, Array, and Fighting", *Greece & Rome* 64/1 (2017), 42.

14 Lukas Milevski. "Strategic Sense in the Writing and Reading of History", *Military Strategy* 7/3 (Summer 2021), 4-8.

Ultimately, strategic thinking is a particular way of thinking, of identifying and evaluating particular known factors within an uncertain environment to achieve the desired goals despite the dangerous and non-linear path to reach those goals. Strategic sense is therefore the epitome of this way of thinking and seeing the world when in, or engaged with, the particular context of war. Yet just like strategic thinking takes place on a spectrum of effectiveness from not at all to sensible, so too is strategic sense variable. There is unlikely to be one single "best" version of sense. If the minimum desired level of strategic competence is "good enough" relative to the immediate enemy being fought, that "good enough" can be of varying qualities—and so too, therefore, can sense. Certain theorists have identified the character of the epitome of taught, rather than instinctual, sense. Clausewitz wrote, for example, that

> Knowledge must be so absorbed into the mind that it almost ceases to exist in a separate, objective way. … Continual change and the need to respond to it compels [sic] the commander to carry the whole intellectual apparatus of his knowledge within him. He must always be ready to bring forth the appropriate decision. By total assimilation with his mind and life, the commander's knowledge must be transformed into a genuine capability. [15]

This epitome of sense is not merely being sensible, but of being sensible on demand—instinctively, as the situation requires. The British military thinker G.F.R. Henderson agreed, writing that "[i]t is only when principles have become so impressed on the mind as to present themselves instinctively for consideration wherever a situation is dealt with, that a knowledge of them is of real and abiding value." [16] To a noticeable degree, both authors leave the content of sense aside; like Gray, the answer would be somewhat tautological. What works is sensible, but this is something which can only be truly known after the fact.

Clausewitz and Henderson were both engaging with issues of thinking strategically at a time when psychology did not exist or, at best, hardly existed as a discipline. Yet from today's perspective it should be possible to modernize their thinking about strategic thinking. First, psychologists generally frame thinking in dual-process terms, often described as Types 1 and 2: intuitive and analyti-

15 Carl von Clausewitz. *On War*. Michael Howard and Peter Paret, eds. and trans. (Princeton: Princeton UP 1984), 147.

16 G.F.R. Henderson. "Strategy and Its Teaching", *RUSI Journal* 42/245 (1898), 776.

cal, generally fast and slow, unconscious and conscious, respectively.[17] They also distinguish between intuition and instinct, with the latter being natural and the former learnable; "[d]escribing intuitive reactions of behavior as "instinctive" then should only be considered metaphorically." [18] Moreover, there is not one single kind of intuition and most psychologists will have their own preferred list, but a set encompassing problem solving, creative, moral, and social intuitions is reasonably representative.[19] What all intuitions have in common is that they are "capable of dealing with complex tasks through extensive information processing without noticeable effort." [20]

Although intuition can be taught, psychologists recognize difficulties. First is the learning environment itself, which psychologists divide into "kind" and "wicked". In the former, experience is representative of the environment, feedback is complete, and intuition can be constructively developed. In the latter, experience is not representative, feedback is distorted or missing, and it becomes much more difficult to develop useful intuition. A key feature in teaching intuition is experience, whether in observation or practice, which enables it to be learned.

> [I]ntuitive processes use all pieces of information that are momentarily activated from memory and salient in the environment. As such, intuition processes encoded information in an extensive fashion irrespective of its origin (memory or environment). An important implication of this notion is that intuition relies heavily on prior experience. The stronger prior experience has been consolidated in memory, the more likely it will be activated by situational cues and, hence, feed input to intuition. This is not to say that intuitive processes can only operate on prior knowledge, but prior knowledge will always be used if it is activated[21].

This reliance on experience has led psychologist Robin Hogarth to query, "[h]ow do we train people's intuitions to handle situations with which they are not familiar?" He immediately and pessimistically followed this query up with his

17 Jonathan St B T Evans. "Intuition and Reasoning: A Dual-Process Perspective", *Psychological Inquiry* 21/4 (2010), 313.

18 Robin M. Hogarth. "Intuition: A Challenge for Psychological Research on Decision-Making", *Psychological Inquiry* 21/4 (2010), 339.

19 Julie Gore and Eugene Sadler-Smith. "Unpacking Intuition: A Process and Outcome Framework", *Review of General Psychology* 15/4 (2011), 304-316.

20 Tilmann Betsch and Andreas Glöckner. "Intuition in Judgment and Decision Making: Extensive Thinking Without Effort", *Psychological Inquiry* 21/4 (2010), 280.

21 Betsch and Glöckner, "Intuition in Judgment and Decision Making", 280.

response: "The answer, in short, is that we cannot." [22]A final point about intuition is that it can be primed—that is, individuals can prepare themselves in advance to maximize their chances of being intuitive at the right moment.[23]

From such a modern psychological perspective, how can strategic sense be understood? First, it is readily apparent that war is not a kind learning environment—it is quite wicked. This wickedness applies both to learning and to creating new and less familiar conditions in which intuition must be employed in practice. Second, the Clausewitzian coup d'oeil, the inner eye aspect of military genius, is probably both intuitive and instinctive. Notwithstanding this duality, even Napoleon, from whom Clausewitz's whole concept of military genius was derived, primed himself by having the right mindset and information.[24] Moreover, given the challenges of strategy, strategic sense is complex rather than simple intuition, involving varying degrees of problem solving, creative, and even social intuition simultaneously. Hogarth's pessimism about teaching intuition for unfamiliar situations is mirrored by Colin Gray's pessimism about teaching strategy, noted in the introduction. Nonetheless, war is too important to abandon the notion of teaching intuition and strategic sense despite its wickedness.

Three consequences result. First, drawing on education theory, because education is the students' individual sense-making under a teacher's interactive guidance, every student will develop their own personal strategic sense, influenced by but distinct from that of their teacher. This implies that the teacher also needs some attainment in the qualities of sense being taught; a senseless teacher will have difficulty conveying sense to a student.[25] And yet few instructors to have a practice-proven sense, whih would therefore have to be replaed by knowledge of both the histories of strategic practice and of strategic theory and hope that this nonetheless suffices. Second, education for strategy should not be intended merely to encourage more sensible students' judgments but, ideally, to push their increasingly sensible judgments closer and closer to being unconscious. Third, sense can best, if not only, be tested and validated through practice and action;

---

22 Hogarth, "Intuition", 349.

23 Marta Sinclair. "Misconceptions About Intuition", *Psychological Inquiry* 21/4 (2010), 380.

24 As is clear from Martin van Creveld. *Command in War*. (Cambridge: Harvard UP 1985), ch3.

25 Carr, *Making Sense of Education*, 43.

nothing else provides quite the necessary kind of feedback. What does such an education look like?

Education for Strategy

Strategic education routinely embraces history and theory: strategic concepts and theory, the history of strategic thought, the history of strategy in practice, in-depth case studies of strategic practice, and so on. Some have suggested that this should suffice, among them Clausewitz.

> Whenever an activity deals primarily with the same things again and again—with the same ends and the same means, even though there may be minor variations and an infinite diversity of combinations—these things are susceptible to rational study. It is precisely that inquiry which is the most essential part of any theory, and which may quite appropriately claim that title. It is an analytical investigation leading to a close acquaintance with the subject; applied to experience—in our case, to military history—it leads to thorough familiarity with it.[26]

This familiarity is based on observed experience of past strategists and their campaigns, for which Clausewitz put together a method of preferably single case study-oriented historical critique to conduct the necessary such an analytical investigations in detail. First, the student of strategy should study military genius in action. Genius tears up old rules of warfare, shines light on better ways, and generally represents the highest and most innate level of strategic sense. The logic of focusing on genius in action is clear: learn how the supremely sensible thought and acted, and then emulate them.[27]

Second is the method of critique itself, comprised of three steps. First is establishing a truthful and detailed narrative of the chosen case study of a military campaign on the basis of inevitably equivocal facts, which he believed was a purely historical exercise with no relation to theory. Second is what Clausewitz considered critical analysis proper, or the tracing of causality through the detailed campaign narrative set out in the first step. This exercise is as much theoretical as it is historical, the two going hand-in-hand. The third step is even more theo-

26 Clausewitz, *On War*, 141.

27 Jon Tetsuro Sumida. "The Relationship of History and Theory in On War: The Clausewitzian Ideal and Its Implications", *The Journal of Military History* 65/2 (April 2001), 338.

retical than the second, being the judgment of decisions made and actions taken by the commanders in the field.[28] Uniquely, and reflecting the importance of empathy, Clausewitz also suggested that when the historical record is incomplete, as it inevitably is at the level of detail required by his method of historical critique, theory can make the distinct contribution of enabling the student to imagine the impact of factors, particularly moral factors, which cannot be or are not known from the available historical record.[29]

Clausewitz's method relies on two key points. First, it requires a strong understanding of theory, to be able to integrate it into the exploration of history in such a powerful and even seamless way. Yet, given Clausewitz's notoriously low estimation of existing theory and the fact that his own theory of war remained both unfinished and unpublished at his un-timely death, one wonders what theoretical education his imagined students could actually receive to enable such an effective historical critique. Clausewitz was aware that it was all still a work in progress. Second as director of the Prussian war academy in Berlin, the body of students over which he presided (but hardly taught) was comprised of military professionals. Moreover, during his tenure, many of these professionals had had some experience of the Napoleonic Wars. By experience and profession, they had a strong sense of warfare, of military organization, and so on, all of which together could form a solid foundation for historical critique, for theoretically-driven imagination and empathy to imagine the unrecorded or at least unpreserved past, and so on. This foundation itself is not strategic sense, but it is certainly a kind of military sense, which can be useful for developing strategic sense. However, not all students of strategy have such potential advantages to help them develop strategic sense, let alone to try to turn it into instinct.

As Michael Howard has pointed out, many modern military professionals do not necessarily have such a luxury (if one can call it that): the military professional "is almost unique in that he may have to exercise it only once in a lifetime, if indeed that often … If there are no wars in the present in which the professional soldier can learn his trade, he is almost compelled to study the wars of the past."[30] The starting point of civilian students is in principle even further removed

28 Clausewitz, *On War*, 156-157.

29 Sumida, "The Relationship of History and Theory in *On War*", 345.

30 Michael Howard. "The Use and Abuse of Military History", *Parameters* 11/1 (March

from the ideal end goal of instinctual strategic sense because they do not have similar insight into military organizations and culture, let alone actual warfare. Howard's advice was to study military history in width, depth, and context. Width refers to the broad patterns and grand narratives of history over the long term. Depth comprises as thoroughly detailed histories of specific campaigns as possible, essentially Clausewitz's historical critique. Context pertains to how any number of other considerations necessarily also affect warfare and strategy in practice: dimensions such as ethics, culture, organization, technology, geography, and so on.[31] The further students are, by background or experience, from warfare and the distinct military realm, the more they must rely on contextual study to make up for this disparity in knowledge and insight which differently experienced students may have already internalized.

All of this is clearly useful in any education for strategy. Yet it ultimately is not and cannot be sufficient for trying to develop strategic sense. History can only close the gap between teaching and learning so much. Empathy with strategists through paper can only go so far. As Henderson asserted,

> But such an impression is not easily made. Will reading make it? Hardly. The printed page seldom leaves more than a superficial mark. Will experience make it? Possibly; but by no means certainly. No; the same method must be adopted in teaching strategy as in teaching tactics. Knowledge can only be made instinctive by practice, by constant practice, and by practice only. [32]

Modern psychologists have also highlighted that stronger memory of experience is more accessible for intuition to use. For strategic sense, one final educational tool is necessary: (war) gaming.

Gaming for Education

Gaming is the closest approximation we have to actual strategic practice. As Philip Sabin, a keen scholar of war gaming, has suggested: "The key characteristic uniting war and games, and which sets them apart from most other human

1981), 13.

31 Ibid, 14; for a good discussion of the dimensions of strategy see Colin S. Gray. *Modern Strategy*. (Oxford: Oxford UP 1999), ch 1.

32 Henderson, "Strategy and its Teaching", 776.

activities, is their competitive and agonistic nature. In games, this competition is mainly artificial, while in war it is mainly situational, but the effect is the same."[33] The similarities are by design: in general, not all games are adversarial or simulate violence, but war games are and do. Each war game is a unique model of war and warfare, simulating their dynamics in particular ways. Games can also be used for varying purposes, not all of which are equally beneficial, or beneficial in the same ways.

Most war gaming is done among, by, and for military professionals. This biases the uses toward which war gaming is put and how it is understood. Robert Rubel noted that "[m]ost war games are oriented in some way to the future, either explicitly or inherently; accordingly, the predictive value of knowledge emanating from a game is critical."[34] War gaming expert John Curry is more specific on how most war games are usually employed: "having training value, developing new tactics or for operational analysis which informed decision making."[35] The fundamental belief among professionals is that one should be able to draw a straight line from gaming to practice. Yet this straight line can take multiple forms, as Rubel also observed:

> Many organizations within the U.S. government sponsor games in order to get a wide and diverse set of stakeholders to "buy into" a set of concepts or doctrine. Military "Title X" games (that is, Title Ten, referring to the federal statute that directs the armed services to raise, maintain, and train forces) frequently have this as at least a tacit purpose.[36]

In this sense, gaming is political, intended to convince others that one's reforms, policies, etc, are the right way forward. Others have noted how war gaming has been used primarily to optimize planning, usually in a way which both reflects and uncritically reinforces existing, often poorly substantiated, assumptions.[37] Yet regardless of exactly how it links war gaming and the professional military,

---

33 Philip Sabin. *Simulating War: Studying Conflict Through Simulation Games*. (London: Bloomsbury 2012), xvi.

34 Robert C. Rubel. "The Epistemology of War Gaming", *Naval War College Review* 59/2 (Spring 2006), 110.

35 John Curry. "Professional Wargaming: A Flawed but Useful Tool", *Simulation & Gaming* 51/5 (2020), 614.

36 *Ibid*, 112.

37 Nick Bosio. "Moulding War's Thinking: Using Wargaming to Broaden Military Minds", *Australian Army Journal* 16/2 (2020), 32.

the straight line assumption remains strong: "Professional wargaming should aim to provide insights that can inform decisions, based on a degree of evidence. In essence professional Wargaming should equal the test of theory, in that it should explain extant phenomena and enable a degree of prediction."[38] Such uses of war gaming as socialization or optimization are close to the heart of military existence or at least *must* be close if they are to be useful.

Yet professional war gaming has received its share of criticism. Rubel warns against particular artifacts—invalid inferences about war and warfare—which may emerge in the gaming environment as a result of factors such as poor control over the game leading to players receiving information which is faulty in ways not accommodated by the game's rules; if players are not immersed in the game and taking it seriously, therefore make decisions which are invalid due to their alienation from the game; players demonstrating artificial aggressiveness, given the artificial nature of the game; and dangers of relying on dice to determine outcomes.[39] Other criticisms are much stronger:

> [T]here seems to be little informed discussion or scientific and academically rigorously [sic] writing on what makes a good or bad wargame fit for professional use. In fact there seems to be little beyond opinion and faith based assertions that x or y models are valid and safe to employ and that professional wargames are of value regardless of the model. This is not to say professional Wargaming has no value. The right war-game applied in the right way clearly does have immense value. It merely suggests we need to get better at understanding what has value and what doesn't.[40]

Yet both the purposes and the criticisms of gaming emerge from the professional military world and so make exactly the same implicit assumptions as did Clausewitz about the intended audience: that it is audience is substantially military—or at least experienced in national security —and that they already think instinctively in certain ways which reflect their military or professional background and experience and may help con-tribute to military, if not yet strategic, sense.

But strategic sense is the epitome of a particular way of thinking, one which is

38 William F. Owen. "What's wrong with professional wargaming?", *PAXsims*, 26 April 2020, https://paxsims.wordpress.com/2020/04/26/owen-whats-wrong-with-professional-wargaming/, accessed 30 October 2024.

39 Rubel, "The Epistemology of War Gaming", 115-120.

40 Owen, "What's wrong with professional wargaming?".

difficult to instill through history and theory alone. War gaming can make a real contribution to encouraging the development of strategic sense. One Australian army officer describes it as "developing potential":

> Through this approach, wargaming strengthened the descriptive and explanatory power of military experience and theory, and helped students develop a shared understanding. Live wargames, known as fleet problems, further reinforced this shared world view. Overall, the US use of wargaming helped broaden the minds of US military officers, develop their capacity to test context and adjust to it, and inculcate in them the need to balance the principles and rules of warfare with changing con-text and thinking concerning war.[41]

Beyond professional military education, the development of potential for civilians learning strategy involves acquainting and ultimately familiarizing them with the manner of strategic thinking: that it is not merely instrumental, but also adversarial, alchemical, and practical, resulting in a need to think instrumentally in a substantially contingent and non-linear way.

To answer the obvious next question of how war gaming actually achieves this, it is necessary first to return to the issue of rulesets and the degree to which they reflect the basic logics of strategy. As an initial caveat: every game has its own ruleset, which makes generalization difficult but comprehensive detailed discussion implausible given the sheer number of strategy games which exist, whether digitally or as a board game. This being the case, a ruleset is a model, a particular representation of reality. Depending on the game's setting, the ruleset might represent some particular historical reality, present reality, imagined future reality, or imagined fantasy or science fiction realities. The quality of the representation versus the actual historical reality, as understood by the cutting edge of historians and military analysts, is a different issue. "Indeed even professional models may well pander to popular perceptions of outcomes as the mechanics are often modified from hobby games. For example the idea that infantry derive an increase in effectiveness if defending in wooded terrain is highly context specific, so not the absolute given most models assume."[42]

That said, war games by definition focus on instrumental logic, of using means in player-chosen ways within the given ruleset to achieve the goals as determined

41 Bosio, "Moulding War's Thinking", 36.

42 Owen, "What's wrong with professional wargaming?".

by either (or both) players and ruleset. War games are also inevitably adversarial, with two sides competing predominantly via virtual combat. War games tend to focus on the practical dimension of strategy: moving armies around; simulating combat; simulating various pertinent qualities, albeit usually in a quantitative way; and to varying degrees also other aspects of campaigning such as logistics and so on. The rulesets are good at representing the instrumental logic of strategy, even if the quality of that representation can be questioned in some way for any particular game. They are equally good at representing the adversarial logic of strategy, at least as far as the campaigning of armies, of adversarial instrumentalities, is concerned. The practical logic of strategy can be represented in various ways, including through the recourse to chance-laden mechanics such as dice. Controversial though such things may be, there is still logic to building chance into the ruleset in this way because the roll of dice can represent any number of factors on the battle-field or on campaign, from pure chance to friction, the flow of tactical intelligence, command relationships among subordinates, and so on, which are below the ruleset's intended level of simulation. Dice also introduce a critical source of non-linearity which strategists inherently face but which otherwise may not make an impression on students' minds, which may be critical if the intention is to familiarize students with a non-linear phenomenon. However, at the same time, Rubel's query on the role of dice has real force: "does the introduction of Monte Carlo methodology distort the intellectual structure of the game?"[43] Perhaps it depends on the ruleset surrounding the roll of the dice. One can disagree with any ruleset design choice, but outside of outright mistakes in the representation of reality, most if not all such choices can be defended reasonably one way or another, if our purpose is to inculcate a fundamental way of thinking.

One logic not yet mentioned in the context of the ruleset is the alchemical. Here, indeed, rulesets generally fall flat. Rulesets in general tend to be linear and, potential dice rolls aside, rely on player interaction to generate non-linearity. But rulesets often do not account for the non-linearity inherent in transforming military action into political consequence. Instead, the rules to convert battlefield victory, territorial conquest, or the like, into an effect measurable against the end goal of the game, if present at all, tends to be clearly communicated, unchanging,

43 Rubel, "The Epistemology of War Gaming", 119.

and linear—substantially the very opposite of reality! Rulesets have a hard time accommodating politics.

This can be a problem, but does not have to be fatal for war gaming to develop strategic sense, largely because the ruleset is not the only level at which war games are played. They are also played socially, and at war gaming's human level one may see 'political' consequences emerge from events for which no ruleset can or should account. This is because, even if the whole exercise is ultimately artificial, players can often become sufficiently immersed in the game that their adversarial way of thinking relative to the opposing team may be affected by battlefield fortunes. One of my own MA-level elective courses on strategy ends the semester with students playing a war game for a whole day. Over the nine years that this war game has been a staple of the course (a grand total of twelve times with twelve different groups of students by May 2025) I have seen the 'political' will of certain student teams truly broken by repeated battlefield defeat, those individuals becoming increasingly listless and disengaged from the simulated war after that final, will-shattering defeat.

The discussion of rulesets demonstrates the substantial but not perfect overlap of rulesets and logics of strategy, indicating the plausibility of learning strategy as a way of thinking to direct and try to control warfare despite war's non-linearity. The next question is therefore: how exactly does playing such games actually enable learning this way of thinking?

First, wargaming provides generic experience of making strategy and performing strategically. This is not experience of the military realities and warfare of our immediate past and present but, the stronger criticisms of war gaming noted above notwithstanding, war gaming to enable a strategically sensible way of thinking does not require a ruleset which is the most accurate and representative possible. After all, strategy as a way of thinking is more resilient than that; it does not need perfect accuracy in the tactical meaning of woodlands, for example, to be meaningful for strategic education. If it did, there would be no sense in reading history, because such conditions and meanings of such details in history have varied over space and time. Colin Gray similarly observed from the theoretical perspective: "From the perspective of the theory of strategy, it really does not matter what style—or styles—are preferred and employed in combat. The theory has authority over all. Of course, the empirical details show wide variation in combat

outcomes."[44] Generic strategic experience is plausible, and war games can provide it. For developing ways of thinking, rulesets matter more in reflecting the fundamental logics of strategy than in the precise details, except inasmuch as the players recognize the importance of such details for strategy in practice and maintain the intellectual flexibility to understand that the details will vary in practice.

Besides the match between rulesets and the logics of strategy which allow students to experience the latter in practice, however artificial, war games open the door to effective strategic thinking in other ways. A second way that war gaming enhances strategic sense is the sheer impact of the experience of war gaming on students whose program of study is probably not replete with other examples of such an experiential mode of learning. Speaking again from my own experience teaching strategy, a whole day of war gaming focuses the students and allows for serious engagement with the practice of strategy. Longer would be better, but in practical terms a whole day is already demanding at a civilian university and still creates an experience which will linger in students' memories. "As witnesses to any engrossing simulation activity can attest, the role-play aspect is extraordinarily powerful. Players never forget how they acted in the simulation, what happened to them, etc. The simulation experience often becomes a lifetime memory of considerable significance." [45]

This impactfulness comes from real participation, a key distinction on which veteran wargamers such as Peter Perla reflect. Perla notes that history is generally narrative, and narrative can be impactful by confronting empathetic readers with the challenges, triumphs, and failures of the main actors within the historical narrative. The reader is invited to empathize with these actors but the reader nonetheless always remain external to the narrative. Not so with gaming:

> Like literature and film, high-engagement games give players a taste of the emotional and empathetic challenges they may face during situations like those presented in the game. Unlike literature and film, games give players active responsibility for their decisions, similar to what they would experience in the real world, and force them to bear many of the same consequences of those decisions, both positive and negative.[46]

---

44 Colin S. Gray. *Theory of Strategy*. (Oxford: Oxford UP 2018), 99.

45 Raymond E. Glazier, Jr. "Gaming as a Vehicle for Reflective Thought", *The High School Journal* 57/7 (April 1974), 313.

46 Peter P. Perla and ED McGrady. "Why Wargaming Works", *Naval War College Review*

Even as a singular event, it is inherently a more impactful experience than just historical or theoretical study, but nonetheless such impact only suffices to open the door to developing strategic sense.

Third is the comparatively quick of cause and effect. From the concentration of armies for a campaign to the virtually bloody results, whatever they may be, the feedback loop for strategists on decisions and practice in war gaming is measured in hours or sometimes even just minutes. Depending on the particularities of any game, waging a simulated war even over a single day may result in students experiencing dozens of decisions, dozens of implementations, and dozens of results from those of individual battles to the failure of entire campaigns and even defeat in the war as such. As Sabin noted,

> The most important function of wargames is to convey a vicarious understanding of some of the strategic and tactical dynamics associated with real military operations. Besides learning about the force, space and time relationships in the specific battle or campaign being simulated, players soon acquire an intuitive feel for the more generic interactive dynamics associated with warfare as a whole.[47]

Quick feedback loops enable the development of what is sensible in that particular war game. To jump from what is particular to that war game to the general insight Sabin describes requires a further intellectual process involving being able to excise the particular to leave only the generic, which often involves comparison to historical case studies, interpretation by theory, and playing games with other rulesets. The impactfulness of war gaming as an experience is critical in enabling students not just to hold on to that experience but also to reflect on it. Moreover, that reflection may influence how students engage with history and theory by potentially improving their abilities to empathize with historical or contemporary strategists. After a war game students have, in a synthetic sense, faced the same fundamental problems of uncertainty of action against an uncooperative enemy in a wide open strategic field. It should also allow them to engage with theory with more a more practical eye and imagination for translating it into practice. Ultimately, war gaming most effectively enables generic strategic sense to be learned only with a fuller strategic studies program both to contextualize and to benefit from it.

64/3 (Summer 2011), 113.

47 Sabin, *Simulating War*, 31.

Yet fully inculcating that sensible way of strategic thinking requires something more than just experience and quick feedback loops, even if at the scale of dozens. Experiental learning such as war gaming benefits from repetition. First, students need to learn from the experience, which requires sufficient time away from it to reflect on it. Second, students would benefit from testing their revised thinking and way of thinking in a similarly experiential way. Ideally, the use of war gaming is an iterative process. Third, the experience of war gaming merely opens the door to sense. To develop sense requires turning that effective way of strategic thinking into a habit, which by definition requires repetition. As one serving US Marines infantry major with a varied personal history in doing, learning, and teaching tactics wrote about the Close Combat computer games, "None of these activities or learning experiences can match the effective and focused tactical learning that I have experienced through repetitive fighting of the small unit scenarios in *Close Combat*." [48] Furthermore,

> [i]n order to understand and identify patterns, Marines need hundreds of simulated examples. In order to internalize lessons, Marines need to fight an active enemy and suffer from their own tactical mistakes. Through repetition the basic lessons become so well-known that advanced tactics and experimentation can be attempted. Only with the experience of fighting through 100 enemy positions can a leader look for weaknesses in a given position and initiate creative ways to exploit that weakness. Reading the subtle aspects of a tactical situation is a learned skill that requires far more practice than is currently available outside of a simulation. [49]

The principle remains the same for strategy. Sense can be developed but for it to be most useful, sensible thinking must be habitual. Unfortunately, in practical terms the needed repetition is difficult to provide as part of a course or even a program in a university environment, particularly civilian. Yet, notwithstanding these limitations, even a singular experience can be sufficiently impactful to set, or hurry, students on a beneficial intellectual path which may lead them closer to sense.

48 Brendan B. McBreen. "Close Combat and Learning Infantry Tactics", *Marine Corps Gazette* 88/9 (September 2004), 12.

49 Ibid, 14.

Conclusion

The actual experiences of trying to translate general instrumental intentions into concrete operational plans, of adversariality, of non-linearity in war and warfare, and so on, are highly distinct from merely reading about these same issues. In the form of generic insight from artificial (however well modeled) experience, war gaming offers educational benefits which countless hours of history or theory cannot. War gaming for the purposes of experientially conveying the fundamental logics of strategy, of teaching strategy as a way of thinking, and so of developing potential is a valuable, even necessary, addition to strategic studies programs.

Returning to the original question: is it possible to teach strategic sense or only to learn it? Teaching always depends on students' receptivity to teaching and willingness to engage in individual but guided sense-making, but even given this fundamental difficulty, war gaming's experiential na-ture and immersive character narrows that gap between teaching and learning to probably the narrowest possible distance. Strategic education is nothing if not pragmatic, and to be pragmatic it not only needs to ex-pose students as effectively as possible to the practice of strategy as such but also try experientially to develop and validate their own individual strategic senses. War gaming fits these requirements in a double sense, both in terms of the subject matter and of classroom dynamics.

BIBLIOGRAPHY

Betsch, Tilmann and Andreas Glöckner. "Intuition in Judgment and Decision Making: Extensive Thinking Without Effort", *Psychological Inqu*iry 21/4 (2010), 279-294.

Bosio, Nick. "Moulding War's Thinking: Using Wargaming to Broaden Military Minds", *Australian Army Journal* 16/2 (2020), 25-48.

Brodie, Bernard. *War & Politics*. (New York: Macmillan 1973).

Curry, John. "Professional Wargaming: A Flawed but Useful Tool", *Simulation & Gaming* 51/5 (2020), 612-631.

Carr, David. *Making Sense of Education: An introduction to the philosophy and theory of education and teaching*. (London: RoutledgeFalmer 2003).

Clausewitz, Carl von. *On War.* Michael Howard and Peter Paret, eds. and trans. (Princeton: Princeton UP 1984).

Creveld, Martin van. *Command in War.* (Cambridge: Harvard UP 1985)

Evans, Jonathan St B T. "Intuition and Reasoning: A Dual-Process Perspective", *Psycho-*

logical Inquiry 21/4 (2010), 313-326.

Glazier, Jr, Raymond E. "Gaming as a Vehicle for Reflective Thought", The *High School Journal* 57/7 (April 1974), 312-316.

Gore, Julie and Eugene Sadler-Smith. "Unpacking Intuition: A Process and Outcome Framework", *Review of General Psychology* 15/4 (2011), 304-316.

Gray, Colin S. "Can Strategy be Taught?", *Infinity Journal* 6/3 (Winter 2019), 4-8.

Gray, Colin S. *Modern Strategy*. (Oxford: Oxford UP 1999).

Gray, Colin S. "Strategic Sense – Missing from Action", *Infinity Journal* 5/3 (Fall 2016), 4-8.

Gray, Colin S. "The Strategist as Hero", *Joint Force Quarterly* 62 (October 2011), 37-45.

Gray, Colin S. *Theory of Strategy*. (Oxford: Oxford UP 2018).

Henderson, G.F.R. "Strategy and Its Teaching", *RUSI Journal* 42/245 (1898), 761-786.

Hogarth, Robin M. "Intuition: A Challenge for Psychological Research on Decision-Making", *Psychological Inquiry* 21/4 (2010), 338-353.

Howard, Michael. "The Use and Abuse of Military History", *Parameters* 11/1 (1981), 9-14.

Iklé, Fred Charles. "The Role of Character and Intellect in Strategy" in Andrew W. Marshall, J.J. Martin, & Henry S. Rowen (eds). *On Not Confusing Ourselves: Es-says on National Security Strategy in Honor of Albert and Roberta Wohlstetter*. (Boulder: Westview Press 1991), 312-316.

Lendon, Jon E. "Battle Description in the Ancient Historians, Part I: Structure, Array, and Fighting", *Greece & Rome* 64/1 (2017), 39-64.

Lyman, Robert. *The Generals: From Defeat to Victory, Leadership in Asia 1941-45*. (London: Constable 2019).

McBreen, Brendan B. "Close Combat and Learning Infantry Tactics", *Marine Corps Gazette* 88/9 (September 2004), 12-14.

Milevski, Lukas. "Strategic Sense in the Writing and Reading of History", *Military Strategy* 7/3 (Summer 2021), 4-8.

Milevski, Lukas. "The Idea of Genius in Clausewitz and Sun Tzu", *Comparative Strategy* 38/2 (2019), 139-149.

Owen, William F. "What's wrong with professional wargaming?", *PAXsims*, 26 April 2020, https://paxsims.wordpress.com/2020/04/26/owen-whats-wrong-with-professional-wargaming/, accessed 30 October 2024.

Perla, Peter P. and E.D. McGrady. "Why Wargaming Works", *Naval War College Review* 64/3 (Summer 2011), 111-130.

Rubel, Robert C. "The Epistemology of War Gaming", *Naval War College Review* 59/2 (Spring 2006), 108-128.

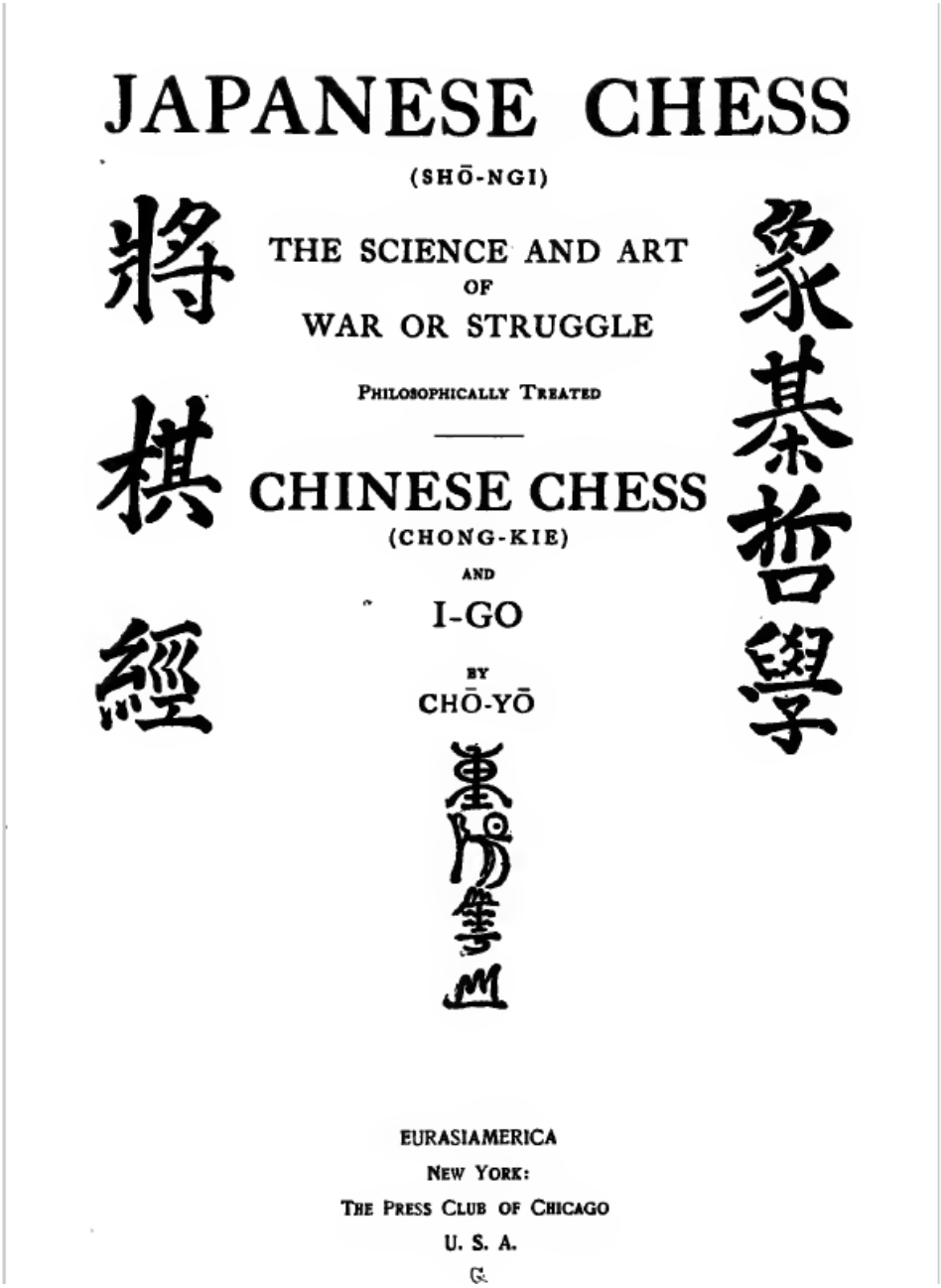
Sabin, Philip. *Simulating War: Studying Conflict Through Simulation Games*. (London: Bloomsbury 2012).

Sinclair, Marta. "Misconceptions About Intuition", *Psychological Inquiry* 21/4 (2010), 378-386.

Sumida, Jon Tetsuro. "The Relationship of History and Theory in On War: The Clausewitzian Ideal and Its Implications", *The Journal of Military History* 65/2 (April 2001), 333-354.

Sun Tzu. *The Art of War*. Ralph D. Sawyer, trans. (Boulder: Westview Press 1994).

Yarger, Harry R. *Strategy and the National Security Professional: Strategic Thinking and Strategy Formulation in the 21st Century*. (Westport: Praeger Security International 2008).


JAPANESE CHESS

(SHŌ-NGI)

將棋經

THE SCIENCE AND ART
OF
WAR OR STRUGGLE

PHILOSOPHICALLY TREATED

象棊哲學

CHINESE CHESS

(CHONG-KIE)

AND

I-GO

BY

CHŌ-YŌ

EURASIAMERICA

NEW YORK:

THE PRESS CLUB OF CHICAGO

U. S. A.

Chō-yō [Suzuki], *Japanese Chess* (*Shō-ngi*). *The Science and Art of War and Struggle, Philosophically Treated. Chinese Chess* (*Chong-kie*) *and I-go*. Eurasiamerica, New York, The Press Club of Chicago, 1905.

William Balfour Ker (1877-1918), *Knights of Columbus*, 1917 / Poster showing a priest looking heavenward and raising a crucifix, blessing kneeling soldiers. Library of Congress, Prints and Photographs Division Washington, D.C. 20540 USA. Reproduction Number: LC-USZC4-10131 Rights Advisory: No known restrictions on publication. https://www.loc.gov/pictures/item/2002711996/

Storia Militare Contemporanea (6)

Articoli / Articles - Military History

Strategic History

Documents and Insights

Notes

Recensioni / Reviews