



Special Issue

The Rise(s) and Fall(s) of Video Game Genres

May 2019

74-102

Wargame, Strategy, Action, and Multiplayer in the Early 1980s¹

Simon Dor

Université du Québec en Abitibi-Témiscamingue

Abstract: Extensive literature underlines the importance to critically examine the phenomenon of game classification. In computer games magazines of the 1980 decade, the combination of “action”, “arcade,” or “real-time” with “strategy” is quite common. Here and there, the expression “real-time strategy” is used. But real-time strategy games as we will come to know them in the 1990s are not very similar to games labelled “real-time strategy” in the 1980s: we are simply not witnessing the description of the same gameplay or experience. Micro-histories of gameplay can underline different forms of continuities and reveal new perspectives on strategy gaming.

Keywords: Game genres; real-time strategy; strategy games; 1980 decade; history of games.

Résumé en français à la fin de l'article

¹ I have to thank the LUDOV research team from Université de Montréal where I pursued my doctoral research for some of the findings used here. I also want to note that I would have loved to play each game mentioned here, but it is unfortunately in practice impossible; I hope the observations I make here will be corroborated or refuted by first-hand play when some of these games will be found or made available.

To poorly paraphrase a maxim, the history of games was written by its great successes. ... a discussion of real-time strategy games invariably conjures up visions of *Dune 2*, *Command & Conquer*, and *Warcraft*. ... One can't deny the importance of those games, but too frequently games that were equally or more interesting, innovative, and fun escaped recognition if they weren't obvious successes.

— T. Byrl Baker on *Gamespot* (s.d.).

Year 1979 sees the publication of two games that are the firsts *Gamespot* and *MobyGames* databases respectively identify as having both “real-time” and “strategy” labels. These games are *War of Nerves!* (Magnavox, 1979) for the Magnavox Odyssey² and *Galactic Empire* (Software Exchange, 1979) for the TRS-80 [Fig. 1].

War of Nerves! is a game where two squads fight. The goal is to eliminate the opposing commander by letting one of our soldiers reach them. Commanders are directly controlled by players' joysticks and soldiers automatically shoot enemies. They are immobilized if they take a hit, until the commander touches them to make them move again. On the other hand, *Galactic Empire* is a sci-fi empire management game, much like John Dalenske's *Empire* (1973). The goal is to explore and conquer at least 20 planets. According to *MobyGames*, one diegetic year takes approximately four game minutes, and it can take up to 1000 diegetic years to win the game. The game can thus last up to 60 hours. These databases obviously don't have the pretention to engage in a genre discussion, but it is still relevant to underline how the games they label are very different.

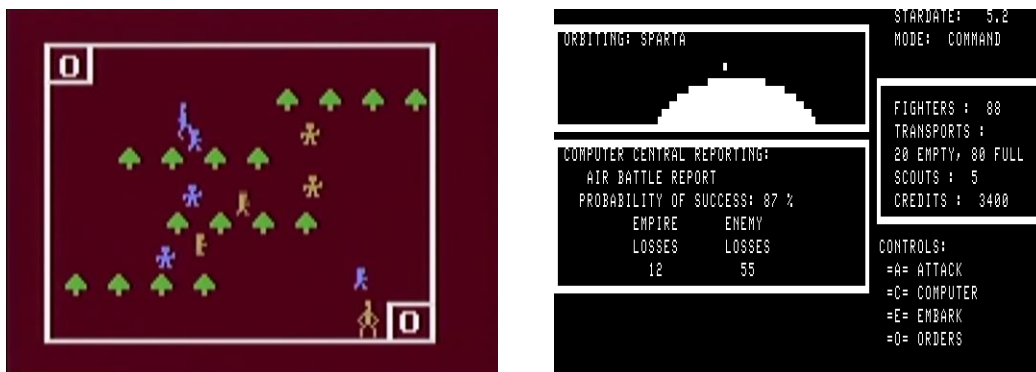


Fig. 1. *War of Nerves!* and *Galactic Empire* (source : *MobyGames*).

Extensive literature underlines the importance to critically examine the phenomenon of game classification (see, amongst others, Wolf, 2001; Apperley, 2006; Arsenault, 2009). In computer and video games magazines of the 1980 decade, the combination of “action”, “arcade,” or “real-time” with “strategy” is quite common. Here and there, the expression “real-time strategy” is used. But real-time strategy games as we will come to know them in the 1990s are not very similar to games labelled “real-time strategy” in the 1980s: we are simply not witnessing the description of the same gameplay or experience. Their classification in the same genre is problematic, to say the least.

Real-time strategy games (or RTS) of the 1990s and 2000s are nowadays most often linked to *Dune II: The Building of a Dynasty* (Westwood Studios, 1992) (see, for instance, Adams, 2006, p. 1; Egenfeldt-Nielsen, Smith and Tosca, 2008, p. 86). But Dave Morris and Leo Hartas say that computer strategy games “can trace their line of descent from the monumental hex-grid boardgames used to simulate grand swathes of history ...” (Morris & Hartas, 2004, p. 9, emphasis mine). As important as wargames can be in the computer gaming history, and especially strategy games history, it is always necessary to look critically at how categorizations are retrospectively made to create lines of continuity between historical events. Foucault argues in *L’archéologie du savoir* that categorizations “are themselves discourse acts that needs to be analyzed as every others; they have complex relationships, but they are never intrinsic, natural, and universally recognized characteristics” (Foucault, 1969, p. 35, my translation). It is then necessary to look at historical gaming practices to know how these games sometimes qualified as “real-time strategy” were played. The challenge is to develop “a method that maintains an awareness of early film’s [or, here, game’s] difference from later practices, without defining it simply as a relation of divergence from a model of continuity (that, in fact, has not yet appeared)” (Gunning, 1990, p. 86). Strategy games from the early 1980s should be analyzed for what they are, not for how they “announce” the real-time strategy games of the 1990s.

As I will demonstrate, there is no intrinsic continuity between early 1980s wargames and real-time strategy games: RTS did not “emerge from” wargames. Early 1980s computer games that were later dubbed “real-time strategy” are no more “ancestors” of 1990s real-time strategy games than games that contributed to a certain multiplayer culture in computer gaming. Stating that real-time strategy games are historically tied to games with “real-time” aspects and strategy is as relevant as to state that role-playing games are tied to games where the player plays a

character; it is true, but it does not clarify the historical explanation. Any historical continuity between cultural practices like gameplay forms is a retrospective construction. We have to look more closely at how games were discussed and played at the time in order to understand them from their contemporary perspective and justify any historical continuity that we trace according to this perspective. Some games that seem less important when focusing on the wargame and militaristic trend still have a legacy nowadays that is too often overlooked.

The goal of this paper is to begin this work by focusing on four small trends in early 1980s computer gaming. Firstly, I will summarize how “real-time” was introduced in wargames, exemplified amongst others by Chris Crawford’s games. The second trend is the combination of strategy with “action” or “arcade” aspects. Thirdly, I will explain how strategy games exist beyond the wargaming culture. And lastly, I will underline how a few strategy games were inscribed in a multiplayer culture, exemplified by Danielle Bunten Berry’s games. The goal will be to show that at least two gameplay paradigms (Dor, 2014) can be used to describe these games more accurately in their historical context: the prediction and the decryption paradigms.

1) Wargames in Real-Time

Greg Costikyan notes that computer wargames never really replaced traditional wargames. For him, a solitary pastime with unsatisfactory artificial intelligence could not replace a human versus human experience (Costikyan, 1996). However, some game designers literally used computer to supplement the wargaming experience. Chris Crawford released *Tanktics* (1978) with this in mind. The software only calculates encounters, while the visual aspect of the game is entirely assumed by a board, to a point where it is impossible to visualize the game without it [Fig. 2].



Fig. 2. *Tanktics* (sources : tacticalwargamer.com & MobyGames).

Both Chris Crawford and Danielle Bunten Berry (under her former name Dan Bunten) are recurrent columnists in the newly-founded *Computer Gaming World* magazine. Crawford signs the first paper of the publication, where he has a clear vision for the future of wargames. He writes:

At present, most people associate real-time play with arcade games. They therefore turn up their noses at the concept. Real-time play is both more realistic and more challenging than turn-sequence play. It directly solves the problem of simultaneous movement that has never been adequately solved with boardgames. It also provides a reasonable and realistic simulation of tactical combat. Tactical combat does indeed involve decision-making under time pressure. Wargames that do not include this element fall far short of simulating tactical combat (Crawford, 1981, p. 4).



Fig. 3. *Eastern Front (1941)* (source: MobyGames).

For Crawford, it is basically for a more accurate simulation that wargames should embrace real-time. He released *Eastern Front (1941)* (Crawford, 1981) that same year, a single-player game where the German army fights USSR during World War II [Fig. 3]. The player selects units and

gives orders using a joystick (Crawford, 2005, p. 717) and both the player and AI actions are deployed simultaneously (Donovan, 2010, p. 61). It is one of the first games that uses horizontal and vertical scrolling to slowly show a larger map, although Crawford was inspired by a software probably written by Ed Logg in 1980 (Crawford, 2005, p. 715). In a 1981 review of the game, Stanley Greenlaw explains what is scrolling, further corroborating the idea that it is quite new². The player can take their time to play, but “every second you took to plan your move, the computer got another million cycles to refine its own move” (Crawford, quoted in Hague, 2002). As Greenlaw puts it: “Can you think of a more effective way to speed up slow players?” (Greenlaw, 1981, p. 30). While not a “real-time” game, it has two clear similarities with RTS games: speed of execution and simultaneous actions. Yet, *Eastern Front (1941)* is designed as a solo experience, where fast-thinking essentially ensure that the opponent is not too efficient. Bob Proctor explains that the game is very limited in terms of strategy, as a dominant strategy is easy to find and makes it hard to play for those who did not find it, but easy to play to those who found it (Proctor, 1982, p. 10)³. For Proctor, the experience of this solo game is not one of winning or losing, but to reach personal goals such as a specific threshold in score.

The game box of *Legionnaire* (Microcomputer Games, 1982) designed by Crawford could be the first conjunction of “real-time” with “wargame.” “Real-time” is also used in their ad (“This advertisement has no headline!,” 1982) [Fig. 4]. *Legionnaire* is quite similar to *Eastern Front (1941)*: the player uses a joystick to give orders to Roman legions [Fig. 5]. Up to eight orders can be “stacked” while the player can give their attention elsewhere. Robert DeWitt from *InfoWorld* explains how wargamers will appreciate being challenged in real-time (1983, p. 56). His description of the game is clear:

In typical play, Caesar might have five legions, each executing a stack of orders (i.e., moving simultaneously on the board), while the computerized enemy is attacking with twice as many units from various directions, sometimes out of sight (1983, p. 56).

² “The player uses a joystick to move the cursor in any of the four cardinal directions. As the cursor reaches the edge of the current map the entire map will scroll in the direction of the cursor move until the cursor is stopped or the edge of the whole map is reached” (Greenlaw, 1981, p. 30).

³ A letter from a reader corroborates this idea: “To some, Chris Crawford’s EASTERN FRONT is an impossible struggle against overwhelming odds. To others, the challenge lies not in winning, but rather whether or not ALL Russian units can be eliminated before time runs out” (Richard Thuriot, in “Strategy Game Tips,” 1984, p. 36).

This advertisement has no headline!
 Mere words fail to convey the excitement that is truly LEGIONNAIRE.



LEGIONNAIRE is a real-time game of combat between the Roman Legions of Julius Caesar (you) and the Gaulish barbarian hordes (the computer). High resolution graphics and sound brings you the live action. You have up to ten legions to command, each with different strengths and weaknesses, and a choice of any two of sixteen different barbarian tribes to fight. As Caesar did two thousand years ago, you must meet the Gauls and defeat them. They outnumber you at least two to one, so you must use the terrain and the disorganization of the barbarians to counter your disadvantage in numbers. Above all, you must be able to react quickly to the changing battlefield situation, or the battle described above could

happen to you! Caesar managed to conquer all of Gaul—can you do as well, or will the barbarian hordes defeat your legions?

LEGIONNAIRE is ready to run on your Atari® 400 or 800 with 16K memory, 410™ cassette Recorder, and one joystick.

Available at finer computer and hobby stores everywhere. To order by phone, dial TOLL FREE: 1-800-638-9292 and ask for operator XXX, or write: Avalon Hill Microcomputer Games, Dept. 71, 4517 Harford Road, Baltimore, MD 21214. Please add 10% for postage and handling.

*Trademark of Warner Communications

SOFTWARE GAMES	With Cassette For						With Diskette For			
	TRS DR Color	TRS DR Mono	APPLE II & II+	IBM PC	ATARI 400/800	ATARI 5200	ATARI 5200 II & III	ATARI 1300 III	IBM PC	PRICE
Legionnaire					16K					26.00
R.C.	16K	16K	32K	32K		32K	48K	48K		30.00
G.F.S. Success		48K	48K	48K		48K	48K	48K		26.00
Archonics Conquest		76K	16K	16K	32K		32K	48K	48K	110.00
Maneuver				16K						25.00
Tetrigard		16K	48K	32K	48K					23.00
Draw Poker		16K	48K	48K	16K		48K	48K	48K	16.00
Shenai of the BK Galaxy		16K	16K	32K	48K		48K	48K		20.00
							48K	32K		26.00

ATI microcomputer games
 A Division of the Avalon Hill Game Company
 4517 Harford Road • Baltimore, MD 21214

Fig. 4. Advertisement for Legionnaire (“This advertisement has no headline!,” 1982, p. 5).

The simultaneity of actions, speed of execution, and imperfect information of Eastern Front (1941) is still there, while adding this “real-time” aspect.



Fig. 5. *Legionnaire* (source : *MobyGames*).

The next year, an ad for *Combat Leader* (Strategic Simulations Inc, 1983) integrates almost every keyword that connotes the hybridity between strategy and action: a “real-time wargame so fast you’ll call it a strategy arcade game” (“*Combat Leader*,” 1983, p. 19, emphasis preserved). French magazine *Micro 7* states in a text box that it is a wargame “that has every advantages of a real-time game” (“*Combat Leader*,” 1984, p. 118, my translation). Roy Wagner sees a greater simplicity, since the player chooses simple commands with a letter and indicates a location where the command is to be issued (Wagner, 1984, p. 35).

This simplicity is also seen in one game retrospectively identified as an RTS: *Stonkers* (Imagine Software, 1983). Released only in Europe on the ZX Spectrum, Andrew Rollings and Ernest Adams suggest that it is the first RTS (Rollings & Adams, 2003, p. 161). This single-player game gives the player control of infantry, tanks, artillery, and supply trucks to take the enemy’s headquarters and port [**Fig. 6**]. Tony Bridge in *Micro Adventurer* explains the game principles as simple: “a large cursor which may be moved (under keyboard or joystick direction) over the unit you wish to move” (1984, p. 21).



Fig. 6. *Stonkers* (source : MobyGames).

Information on each unit (health, morale, supply) is revealed when the mouse is over it. Bridge describes the principles of giving “orders” to units, saying that the player has to first click on them, and then to click on a destination. The player then can manage other tasks while the unit carries the order. Bridge sees it as an especially simple and short wargame that is an efficient introduction to more complex wargames such as *Eastern Front (1941)*. Tony Tyler (1984, p. 30), editor of *Big K* magazine, also remarks a similarity with Crawford’s games. An anonymous reviewer in *Crash* notes family resemblances with arcade games because of its speed: “It gets to the point where you barely have any time left to think, and you’re punching keys all the while” (“Stonkers,” 1984, p. 102). *Home Computing Weekly* suggests that both audiences will be left unsatisfied: “Too little action for arcaders — not enough information for strategists” (D. C, 1984, p. 30). A letter in the “Playing tips” section of *Crash* magazine underlines that a dominant strategy let the player wins every time⁴. Nevertheless, readers from this magazine declared it was the “Best wargame” for 1984 (“Crash,” 1984, p. 100). The label “real-time” implicitly calls for more action in strategy games; *Stonkers* shows that strategy games with action elements can definitely rivalize with traditional wargames in 1983. The combination of “action” and “strategy” will be recurrent throughout the decade.

⁴ This dominant strategy is described by S. Hennessy: “simply move your men and some tanks to the bridge head and wait, keeping them supplied and moving everything else to your port HQ. When the enemy reach you they are so depleted of power that you come out of the battle well on top. The remaining energy will go to the occupied base (usually only a few units left) where they are easy prey for your men” (quoted in “Playing tips,” 1984, p. 77). D. Hobson adds that the most efficient method is simply to wait for every enemy unit up to the last one comes engaging yours (“Playing Tips,” 1984, p. 143).

2) Action/Arcade and Strategy

This hybridization between arcade and strategy is frequent at the beginning of the 1980s, and not necessarily only in classical wargames per se. Following their readers' comments, *Computer Gaming World* underlines that one of the five most important events in 1982 in computer gaming is the introduction of "strategy/action games which combine strategy and arcade action" ("Some Reader," 1983, p. 9). In his series on Atari, Allen Doum comments on the difficulty to classify games, amongst other strategy and arcade games:

In fact, distinctions between strategy and arcade games are getting harder as well. Real-time wargames such as *Combat Leader* and *Legionnaire* aren't fast enough to be called action games yet, but next years crop will include some that will be hard to categorize (Doum, 1984, p. 22).

Luther Shaw also notes this in his review of *BEZ-MX* (Bez, 1982), labelled as a "wargame/arcade". The game is described as a "a two player wargame in which the players try to destroy each other's military-industrial strength while preserving their own" (Shaw, 1982, p. 34). The player can assign different tasks to their population to fuel their war machine, or hide them from enemy bombings at the cost of their workforce. Shaw suggests that the game would be more interesting for strategy gamers with a certain taste for arcade rather than the other way around (p. 35).

This hybrid arcade-strategy is seen by Shaw as a contemporary tendency well represented by *Mission Escape*⁵ and *Guns of the Fort Defiance* (Avalon Hill, 1981). The latter is, under certain aspects, similar to what tower defenses are today. The game puts the player in the role of a group of artillery soldiers that defends a weak spot on a fort during the 1812 Canadian-American war [Fig. 7]. Their goal is to rout the enemy regiment, which slowly approach pixel-by-pixel. They have to use different artillery bombshells and choose an efficient fuse and elevation to hit their constantly moving target.

⁵ It is not clear as to which game Shaw refers. It could be *Mission: Escape!* (MicroSparc, 1982).

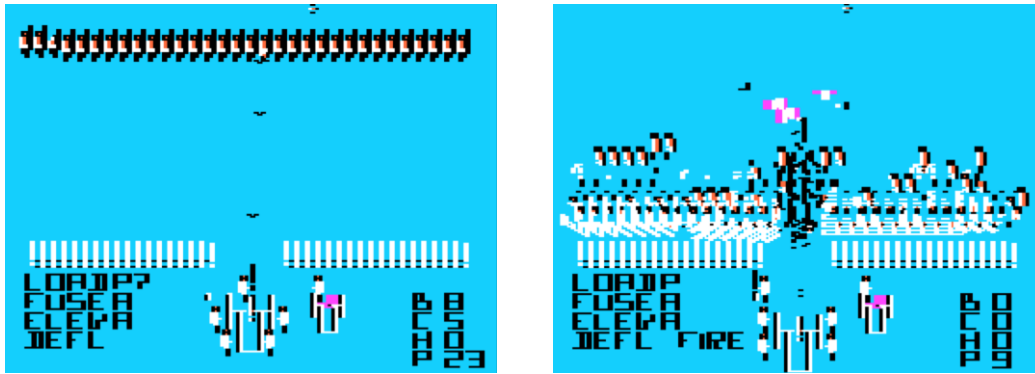


Fig. 7. *Guns of the Fort Defiance* (Apple II version). Left, soldiers beginning to approach. Right, soldiers routing after a successful defense.

In two short sentences, Johnny L. Wilson pins how it mixes strategy and speed: “The cavalry, especially, have a tendency to be able to close range faster than my befuddled fingers can type orders. Hence, one often has to think ahead in terms of range estimation” (Wilson, 1982, p. 35). The speed of the game becomes significant to the point where longer-term thinking is necessary.

A few years later, another hybrid case is released: *The Ancient Art of War* (Evryware, 1984). The player must lead battalions composed of three different units—knight, archer, or barbarian—on the battlefield and take care of their supply and fatigue. A fight starts when two battalions meet, fight which can be managed more precisely by going into “zoom” mode, in a lateral perspective space [Fig. 8]. The player can create a custom campaign by choosing on which type of map the skirmish will take place, difficulty level, special rules, and the opponent (from Sun Tzu to Napoleon). Russell Sipe underlines in *Computer Gaming World* that all things being equal, knight beats barbarian, which beats archer, which beats knight (Sipe, 1985, p. 25); more than 20 years later, Ernest Adams and Andrew Rollings took this game to illustrate intransitive relationships in games (2007, pp. 364–365). The game is in “real-time” most of the time, except in one crucial moment: when a moving order is given, the time stops until the player selects a destination. It only plays in solo and there is not any way to create new units during play contrarily to modern RTS. Laurent Schwartz from *Tilt* explains in a wargame feature from 1986 that, in *The Ancient Art of War*, even if speed is interesting, “too many parameters direct combat so that your speed cannot determine the result” (Schwartz, 1986, p. 125, my translation).



Fig. 8. *The Ancient Art of War*. Left, the game map. Right, a combat (source: *Abandonia*).

“Real-time” and “real-time strategy” are used more than once in the next years. Within a list of entertainment software available for Amiga (Mitchell, 1986, p. 48), there are two 1984 games from Krentek Software: *Rome and the Barbarian*, labelled as a “[r]eal-time strategy game” », and *Napoleon at Waterloo*, a “simulation in real-time” retrospectively labelled as “real-time strategy” in the *MobyGames* database. An ad in *Computer Gaming World* announces *TRODART*, developed by GoWhile Software⁶, a “war game” in real-time where there are simultaneous actions between two players by modem (“TRODART,” 1986, p. 43).

Yet, the expression “real-time” in strategy games does not necessarily mean what it commonly accepted nowadays, i.e., that the game time flows continuously and pressure their players. This expression is sometimes used to qualify games from the trilogy Sid Meier and Ed Bever released in 1985-1986 inspired by Meier’s earlier game *NATO Commander* (MicroProse, 1983). “Real-time” is used on the box of the first game of the series, *Crusade in Europe* (MicroProse, 1985) [Fig. 9]: “Non-stop action takes place in accelerated real-time”. The five scenarios of *Crusade in Europe* take place in 1944-45 where the player gives order to units, but it is still possible to pause the game on demand and still give commands. The diegetic time flows by units of 30 minutes. Schwartz (1986, p. 129) does not remark the real-time aspect of the game or of its successors, *Decision in the Desert* (MicroProse, 1985) and *Conflict in Vietnam* (MicroProse, 1986), while it was seen as a singular aspect of *The Ancient Art of War* in the same article. The definition of “real-time” used on the game box seems different from real-time in modern strategy games, i.e., that time is a constant pressure. In design notes he published for

⁶ The only other mention of the game that I found, except reprint of this same ad, is on the reviewer M. Evan Brooks’ (2002) personal website.

his submarine simulator *Silent Service* (MicroProse, 1985) in *Computer Gaming World*, Sid Meier states that the game is in “real-time” when an action is needed, but in “accelerated real-time” in-between (Meier, 1986, p. 28). “Real-time” then refers to the time of a “real” action, while the accelerated time refers to the fact that, when nothing happens, the game accelerates the time. A “real-time” game then in the 1980s does not necessarily equivocates a fast game. The tradition with which real-time strategy gaming shares more in the early 1980s is probably to be found somewhere else; let us then go back to the beginning of the decade.

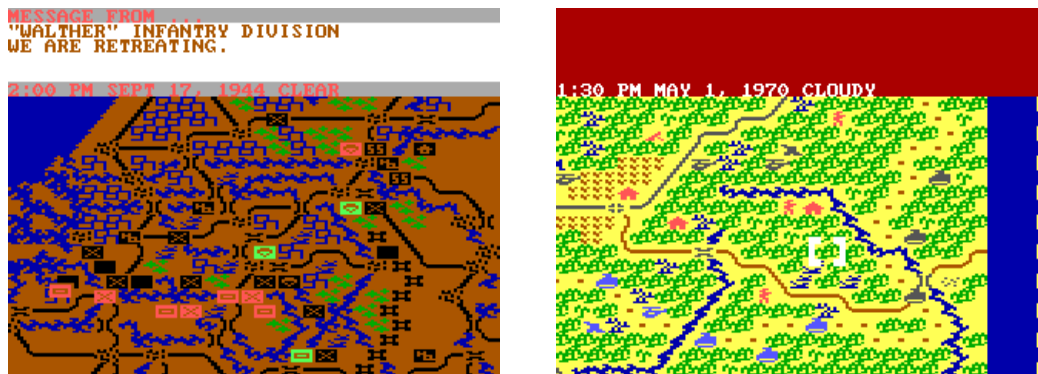


Fig. 9. Left, *Crusade in Europe*. Right, *Conflict in Vietnam* (source: MobyGames).

3) “Real-time” Strategy beyond Wargames

The December 1980 issue of *Creative Computing* has a section called “Compleat Computer Catalogue” where a reader can order games and computer products by mail using a “Reader Service Card” annexed to the magazine. One of the games is *Computer Quarterback* (1981), available for the Apple II, and is described as a “real-time strategy football game” (“Compleat Computer Catalogue,” 1980, p. 174). It is the first mention of “real-time strategy” as far as my research could go. In an official advertisement in the same issue, the publisher mentions that it is in “real-time” and that it is a “strategy football game” (p. 19). The title screen mentions the name “Dan Bunten,” the name under which Danielle Bunten Berry will also publish among others *M.U.L.E.* (Ozark Softscape, 1983) and *Modem Wars* (Ozark Softscape, 1988), largely considered today as landmarks in multiplayer gaming.

In *Computer Quarterback* [Fig. 10], an American football game “essentially strategic” (Harbott, 1987, my translation), two players compete in front of the same computer, each with

their own paddle. Before the match, each player assigns offensive and defensive strategies to numbers from 1 to up to 36 depending on the side and the game mode. Each player has a limited time to choose their strategy and can change it depending on what they see of their opponent's player positioning, until the offensive team makes a move; then, the game automatically resolves the exchange. It is a game of imperfect information between two players: the choice of action does not appear on screen in order to hide that information even if players are sitting side by side. Other football computer games of the 1980s are similarly called "action/strategy" (Lee, 1987, p. 16).



Fig. 10. *Computer Quarterback* (Apple II version, emulated with Applewin).

Even though wargames seem like a strong influence for strategy gaming, *Utopia* (Mattel, 1981) could be an early influence for the genre, whether it is as the "first true proto-RTS game" (chobopeon, 2012) or "the first real simulation game, or 'God Game,' for a home console" (Melissinos & O'Rourke, 2012, p. 43) [Fig. 11]. Published on the Mattel Intellivision and designed by Don Daglow, one or two players must manage an island, accumulating gold and points, fighting pirates, natural disasters, and rebels sabotaging production. They can buy buildings (school, factory, hospital, etc.) by moving a squared cursor with the joystick and by clicking on one of the nine numbered buttons on the Intellivision controller, or directly control boats to accumulate gold by fishing or to attack the opponent's boats. The game uses a system of "timed turns": it is in real time because the time flow is continuous, but turn-based in the sense that at a frequency of 30 to 120 seconds, at the players' choice, a turn ends. At the end of a turn, the game stops for a few seconds to attribute points, add gold, and display the islands' populations. The goal is to have more points than your opponent or to beat your personal score at the end of a predetermined number of turns.



Fig. 11. *Utopia* (source : *MobyGames*).

Competition between two players is of course extremely common in electronic games, but games in the early 1980s rarely integrated this function by connecting two or more computers together. An ad box in *Basic Computing* presents the game *Combat* (B. Schilling, 1981), claiming that it's about time a combat game let two players fight against each other, provided they have an Apple, Atari, or TRS-80 computer with a "full-duplex modem (or a modem eliminator if the computers are in the same room). Your mission : Find and destroy the enemy's base before he [sic] discovers and annihilates [sic] yours" ("The Company," 1983, p. 49)⁷. To get the claims to extract uranium in the Deneb galaxy, each player fights the other with eight tanks, four reconnaissance drones, and mines, missiles, bombshells, etc. Typographic characters represent units [Fig. 12]. In his review of the game, George Stewart explains the inherent interest in *Combat*: fighting a human opponent. This "tele-game," as he dubs it, creates a different dynamic than when fighting computer opponents: "after all, what does a computer know about the thrill of victory or the agony of defeat?" (Stewart, 1981, p. 100). If Dobson states more than 30 years later that the game was not in real-time (Dobson, 2012, p. 3), the description made by Stewart clearly indicates the contrary:

⁷ Robert A. Schilling wrote a letter in the *BYTE* magazine specifying that he wanted to make this game a trilogy, and that the second title was finished in April 1982 (R. A. Schilling, 1982, p. 22). My research could not identify this second game, which could have been ultimately published by another name.

Another essential game element is its interactiviveness. You and your opponent can move, fire weapons, and select different tanks and decoys at any time. This makes the game infinitely more challenging than the typical, wait-your-turn war game played on a board. Suppose, for example, that while you're typing in a command, you notice some enemy action through one of your three windows. You can cancel the command and make an immediate response to your opponent. You can even send him [sic] a message at any time ("Let's quit for a while," "Aha!" or some distracting thought) (Stewart, 1981, p. 102).

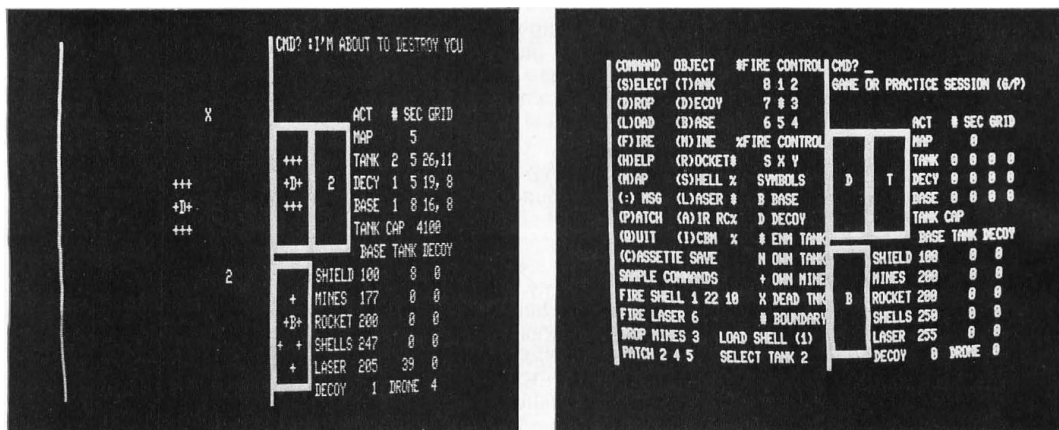


Fig. 12. *Combat*, illustrated in *BYTE* magazine (Stewart, 1981 p. 102). Left, the fighting screen (« 2 » is a player tank and « X », an enemy tank). Right, the help screen illustrating the different possible maneuvers.

While some technical problems inevitably make modem play difficult—especially when a combat can extent somewhere from 30 minutes to 4 hours—, Stewart notes in conclusion that he sees two fundamental elements of this game that prefigures the future of computer gaming: 1) the diversity of play in human-versus-human interaction; 2) the combination of strategy, tactics, and reflexes. This combination bears family resemblances with RTS; this assemblage of gameplay elements will be part of a lot of subsequent games.

It is in the tradition of *Combat*, *BEZ-MX*, and, of course, *Computer Quarterback* that the next game from Buntan Berry can be inscribed. *Cytron Masters* (Strategic Simulations, Inc., 1982) is “one of a new breed of games combining the action and graphics of arcade-type games with the authenticity of simulations” (Botner, 1982, p. 30), as one of its play tester puts it. *Cytron Masters* is the first Buntan Berry game that vaguely uses a military theme and, according to her,

the first that combines action and strategy with more or less success (Bunten Berry, s.d.). Two players will fight using five unit types, each with their particularities, including commanders that can relay orders to adjacent units [Fig. 13].

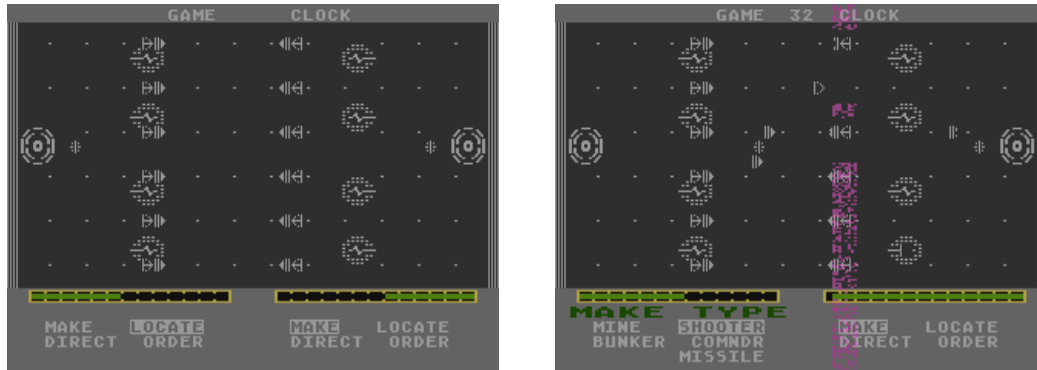


Fig. 13. *Cytron Masters* (source : Mobygames).

The goal is to destroy the enemy's command center. To create new units, the player must control some of the eight power centers, which are in a fixed number on the battlefield. By looking beyond traditional wargames in “real-time,” we can see that a tradition of multiplayer slowly emerged in the early 1980s. The roots of this multiplayer culture is still to be unveiled.

4) A Multiplayer Culture

Online services such as CompuServe were not available for every gamer, but some games playable through these services were not far from contemporary multiplayer games. Suzan D. Prince from the *Video Games* magazine identifies explicitly the game *Megawars II*, for CompuServe, as a “multiplayer real-time strategy”:

This high-speed, multiplayer real-time strategy game with the arcade flavor and souped-up 3-D color graphics accommodates up to 10 players at any time, with each player's computer screen serving as his or her cockpit window through which he looks at the others (Prince, 1983, p. 24).

What Prince dubs as “timeshare games,” with persistent universes in which players log in, “... provide human interaction that is missing from player vs. system games » (Prince, 1983, p. 24). Patricia Fitzgibbons calls *MegaWars* as well as *Empire* on PLATO as “fastpaced, exciting, multi-player games of warfare and conquest” (Fitzgibbons, 1985, p. 52). *Empire* and *MegaWars*

both seem to have different versions over the 1970s and 1980s, and their “real-time” aspect is difficult to evaluate.

However, one of the most renowned multiplayer game from the 1980 decade is *M.U.L.E.* (Ozark Softscape, 1983), designed by Danielle Bunten Berry within her new company. Electronic Arts wanted to publish a previous Bunten Berry game, *Cartels & Cutthroat* (Bunten & Bunten, 1981) but SSI still had its rights. Bunten Berry then suggested to remake the game, but better, while also borrowing ideas from her own *Wheeler Dealers*, a “real-time stock market simulation” (Moriarty, 1998) for Apple II with an extension that can support up to four players (Moroagh, 2008). The result was *M.U.L.E.* (Bunten Berry, s.d.).

M.U.L.E. is a four-player “trading game” (Wade, 1985, p. 24) and a “competitive strategy title” (“M.U.L.E.,” 2001) for Atari 800, offering “an exquisite play balance of teamwork and rivalry, bitter cooperation and delicious treachery” (Moriarty, 1998). The *Commodore User* describes it as “[a]nother cerebral game of the management/strategy persuasion” (L. S, 1985, p. 29) and John J. Anderson underlines its educative aspect, stating that its competition necessitates cooperation (Anderson, 1983, p. 114). *M.U.L.E.* players develop a colony by claiming land, buying “multiple use labor elements” [M.U.L.E.] to collect resources on a planet called Irata [Fig. 14].

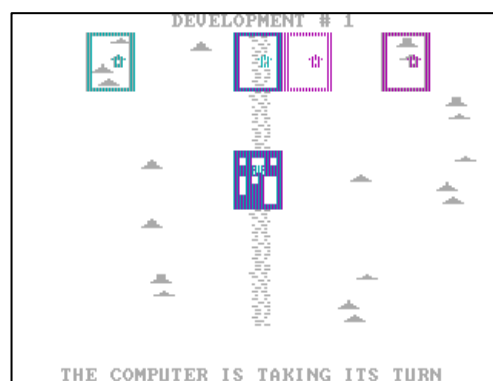


Fig. 14. *M.U.L.E.* (source : *MobyGames*).

Each player takes decisions during their development phase, which has a time limit; executing all their actions faster during a phase gives a bonus in cash (Curtis, 1983, p. 12). When every player has finished their development phase, everyone can put their resources in an auction for the other players to buy them. The auction works with joysticks; buyers and sellers set their

price with a gauge controlled analogically by the joystick, and a transaction occurs when an offer meets its demand. At the end of each turn, players have a score based on the value of their products and the colony in general is also evaluated. Different difficulty levels change game rules, the most difficult implying for example collusion rules where only some players can exchange goods. *Micro 7* calls in the “new standard in terms of economic simulation” (Giudicelli, 1984, p. 115). The AI is perceived as very predictable, which makes playing with less than four players less attractive (Curtis, 1983, p. 13). In a similar way, Carl M. Evans (1984, p. 34) from *Computer Gaming World* recommends some strategies that he judges efficient against the computer, but uniquely “adequate” against humans. The game is designed as a multiplayer game and its “real-time” aspect is only meaningful in the relationship between different human players. While a lot of complex strategy games share a military setting and a complexity with real-time strategy from the 1990s, *M.U.L.E.* clearly show how multiplayer games have a history of their own in strategy gaming.

I have argued elsewhere that real-time strategy gaming in the 1990s could be divided in two different gameplay paradigms (Dor, 2014) and these paradigms can also be seen in the corpus I have used here. The prediction paradigm is what drive games like *Computer Quarterback* or *M.U.L.E.*; the game is based on the idea that multiple players can foresee their opponents’ possible actions and choose their action consequently. For example, in *Computer Quarterback*, a player knows which strategies are possible for their opponent and which ones would be more valuable for them; choosing a good opposing strategy is based on this prediction. The decryption paradigm is on the other hand exemplified by the traditional single-player wargames, from *Eastern Front (1941)* to *Stonkers* and *The Ancient Art of War*. The player thinks their opponent as a “puzzle” that needs to be solved. The human player is a privileged agent in the system, in the sense that everything is made up so that the experience can be interesting for them. The interest of games in this paradigm is to give enough challenge to players rather than trying to balance different similar agents. Surprise enemy actions can feel like a “jack-in-a-box,” but that can be acceptable for players if they feel like they have some agency to cope with these actions. The 1980s are dominated by decryption, but the prediction paradigm slowly emerges from some multiplayer games we have introduced here. These two paradigms are a way of constructing histories in game studies rather than following pre-established continuities such as contemporary game genres or platforms.

5) Conclusion

In February 1987, game designer Jim Meadows published an article in *Amazing Computer* where he described the genesis of one of his games, *Gemini-2* (Paragon Software Corporation, 1986), a multiplayer first-person shooter between two tanks. He decorticated in details the way he succeeded in coding the interaction by modem between two computers, explaining that the first one he did for modem play in 1985—*Gemini-1*—was “basically a real-time strategy game that used only character graphics for the display” (Meadows, 1987, p. 19). It is impossible to attest the appearance or gameplay of *Gemini-1* to see what Meadows could have meant by “real-time strategy game,” but arguably, this description seemed sufficient for him to think that his typical readership could understand what he meant⁸. The expression appeared sufficiently simple to be understood. This anecdotal evidence amongst other similar cases shows how gameplay and gaming lexicon needs to be clarified and contextualized historically.

Clearly, “real-time strategy” as an expression existed as early as 1981. But the expression does not refer to a homogeneous gameplay, design stance, or gaming practice; it can qualify a two-player football game, a solo wargame, or a strategy game with a persistent universe. These practices could have their own legitimate histories contextualizing them rather than being used as merely precursors of a future videogame genre. Taking into account different traditions shows things from different perspectives; games without a militaristic setting, for example, can be put forth for their gameplay experience rather than being only marginally considered.

If some games from the early 1980s are clearly inspired by traditional wargames, computer games quickly introduced their own “arcade” or “action” aspects and a lot of them were far from complex wargames except for their militaristic setting. “Real-time” and arcade games were a trend by themselves, eventually leading to a certain multiplayer culture that would need more research in order to grasp its importance on computer gaming culture. A history of gameplay shows us how strategy games and wargames from the 1980s do not form a “natural” continuity: gaming preferences, habits, or styles of play have a history of their own with interesting points of intersections.

⁸ While *Gemini-2* exists in *MobyGames* and on *My Abandonware*, I found no other trace of *Gemini-1*. One could assume that its distribution was very small since its creator describes it as essentially a demonstration (Meadows, 1987, p. 19).

This research is strongly inscribed in an historical perspective I tend to call “history of gameplay,” although it is not a new or personal perspective on the history of games. Rather than analyzing the objects themselves, I think historians should try to take into account as far as possible the way games were played, using first-hand sources when possible such as game reviews and strategy guides (Montembeault & Dor, 2018). The expression “history of gameplay” has already been used by Mia Consalvo in a similar way that I use it here (2007, p. 2). Henry Lowood used in 2004 the expression “history of interactivity” and described the idea like this: “Computer games provide the opportunity to think carefully about how to construct a history of *interactivity*. As we preserve interactive media, we must not lose sight of how we will document interactivity itself, which means capturing traces of *activity*, that is, gameplay” (Lowood, 2004, p. 6). The micro-history I have written here is part of a larger history of strategy gameplay that needs to be done.

References

ADAMS, D. (2006). The State of the RTS. *IGN*, April 7. Retrieved from <<http://ca.ign.com/articles/2006/04/08/the-state-of-the-rts>>.

ADAMS, E., & ROLLINGS, A. (2007). *Fundamentals of Game Design*. Englewood Cliffs, NJ: Prentice Hall.

ANDERSON, J. J. (1983). M.U.L.E. *Creative Computing*, vol. 9, no. 12, p. 114–117.

APPERLEY, T. H. (2006). Genre and game studies: Toward a critical approach to video game genres. *Simulation and Computer Gaming*, vol. 37, no. 1, p. 6–23.

ARSENAULT, D. (2009). Video Game Genre, Evolution and Innovation. *Eludamos. Journal for Computer Game Culture*, vol. 3, no. 2, p. 149–176.

AVALON HILL. (1981). *Guns of the Fort Defiance* [Apple II].

BAKER, T. B. (s.d. [~2001]). *Unsung Heroes. Groundbreaking Games From The Computer History* [HTML cached version]. *Gamespot*. Retrieved from <http://web.archive.org/web/20010506050212/http://gamespot.com/gamespot/features/pc/unsung_heroes/index.html>.

BEZ. (1982). *BEZ-MX*.

BOTNER, M. (1982). *Cytron Masters: The View From a Play Tester*. *Computer Gaming World*, vol. 2, no. 5, p. 30; 45.

BRIDGE, T. (1984). *A challenge to foil enemy*. *Micro Adventurer*, no. 7, May, p. 21–22.

BROOKS, M. E. (2002, 1998). *Publishers* [1998] [HTML cached version]. Retrieved from <<http://bit.ly/brooks-2002>>.

BUNTEN BERRY, D. (s.d.). *Game Design Memoir*. Retrieved from <<https://web.archive.org/web/20030406142809/http://www.anticlockwise.com/dani/personal/biz/memoir.htm>>.

BUNTEN, D. [Danielle Buntten Berry]. (1981). *Computer Quarterback*.

BUNTEN, D. [Danielle Buntten Berry] & Buntten, B. (1981). *Cartels & Cutthroat\$*.

CHOBOPEON. (2012, March 27). *A History of Esports* [forum message]. *TeamLiquid* Retrieved from <http://www.teamliquid.net/forum/viewmessage.php?topic_id=324077>.

Combat Leader (1984). *Micro 7*, April, p. 118.

Combat Leader [ad] (1983). *Computer Gaming World*, vol. 3, no. 4, p. 19.

Compleat Computer Catalogue. (1980). *Creative Computing*, no. 6, p. 160–176.

CONSALVO, M. (2007). *Cheating: gaining advantage in videogames*. Cambridge, MA: MIT Press.

COSTIKYAN, G. (1996). A Farewell to Hexes. Retrieved from <<http://www.costik.com/spisins.html>>

Crash Readers Awards 1984. (1984, 1985). *Crash*, Christmas special, p. 94–105.

CRAWFORD, C. (1978). *Tanktics*.

CRAWFORD, C. (1981). *Eastern Front (1941)*.

CRAWFORD, C. (1981). The Future of Computer Wargaming. *Computer Gaming World*, vol. 1, no. 1, p. 3–7.

CRAWFORD, C. (2005). Eastern Front (1941). In K. Salen & E. Zimmerman (eds.), *The Game Design Reader: A Rules of Play Anthology*. Cambridge, MA: The MIT Press, p. 714–724.

CURTIS, E. (1983). M.U.L.E. *Computer Gaming World*, vol. 3, no. 4, p. 12–13.

D. C. (1984). Stonkers 48K Spectrum £5.50. *Home Computing Weekly*, February 21-27, p. 30.

DALESKE, J. (1973). *Empire*.

DEWITT, R. (1983). With Legionnaire, fight Caesar's battles on Atari. *InfoWorld*, February 14, p. 56–57.

DOBSON, D. (2012). Games from the Trash: The History of the TRS-80. *Gamasutra*. November 26. Retrieved from <https://www.gamasutra.com/view/feature/182224/games_from_the_trash_the_history_.php>.

DONOVAN, T. (2010). *Replay. The History of Video Games*. East Sussex, UK: Yellow Ant.

DOR, S. (2014). A History of Real-Time Strategy Gameplay From Decryption to Prediction: Introducing the Actional Statement. *Kinephanos*, special issue, p. 58–73.

DOUM, A. (1984). Atari Arena. *Computer Gaming World*, vol. 4, no. 1, p. 22.

EGENFELDT-NIELSEN, S., SMITH, J.H., & TOSCA, S.P. (2008). *Understanding Video Games : The Essential Introduction*. New York, NY: Routledge.

EVANS, C. M. (1984). Whipping Your M.U.L.E. Into Shape. *Computer Gaming World*, vol. 4, no. 1, p. 34.

EVERYWARE. (1984). *The Ancient Art of War*.

FITZGIBBONS, P. (1985). How to Telegame. *Computer Gaming World*, vol. 5, no. 5, p. 18; 52.

FOUCAULT, M. (1969). *L'archéologie du savoir*. Paris: Gallimard.

GIUDICELLI, P. (1984). Les simulations économiques. *Micro 7*, no. 15, p. 114–115.

GREENLAW, S. (1981). Eastern Front. *Computer Gaming World*, vol. 1, no. 1, p. 29–30.

GUNNING, T. (1990). Non-Continuity, Continuity, Discontinuity. A Theory of Genres in Early Films. In A. Barker & T. Elsaesser (eds.), *Early cinema : space-frame-narrative*. London: BFI Publishing, p. 86–94.

HAGUE, J. (2002). Halcyon Days. Interview with classic computer and video game programmers. Retrieved from <<http://www.dadgum.com/halcyon/index.html>>.

HARBONN, J. (1987). Computer Quaterback [sic]. À toute vitesse. *Tilt*, no. 43, p. 59.

IMAGINE SOFTWARE. (1983). *Stonkers*.

L. S. (1985). M.U.L.E. *Commodore User*, no. 23, p. 29.

LEE, W. (1987). The electronic gridiron. *Computer Gaming World*, no. 42, 16–17; 20; 52.

LOWOOD, H. (2004). *Playing History with Games: Steps towards Historical Archives of Computer Gaming*. Presented at the Annual Meeting of the American Institute for Conservation of Historic and Artistic Works, Portland, OR. Retrieved from <<http://cool.conservation-us.org/coolaic/sg/emg/library/pdf/lowood/Lowood-EMG2004.pdf>>.

MAGNAVOX. (1979). *War of Nerves!*

MATTEL. (1981). *Utopia*.

MEADOWS, J. (1987). Gemini, or “It takes two to Tango.” *Amazing Computing*, vol. 2, no. 2, p. 19–23.

MEIER, S. (1986). Silent Service. Designer’s Notes. *Computer Gaming World*, no. 26, p. 28–29.

MELISSINOS, C., & O’ROURKE, P. (2012). *The Art of Video Games : from Pac-Man to Mass Effect*. New York: Welcome Books.

MICROCOMPUTER GAMES. (1982). *Legionnaire*.

MICROPROSE. (1983). *NATO Commander*.

MICROPROSE. (1985). *Crusade in Europe*.

MICROPROSE. (1985). *Decision in the Desert*.

MICROPROSE. (1985). *Silent Service*.

MICROPROSE. (1986). *Conflict in Vietnam*.

MICROSPARC. (1982). *Mission: Escape!*

MITCHELL, R. (1986). The Amiga Software Market. *Amiga World*, vol. 2, no. 2, p. 40–53.

MONTEMBEAULT, H. & DOR, S. (2018). À quoi pensent les archives de la jouabilité? Une approche historiographique de l'expérience vidéoludique. *Conserveries mémorielles*, 23. Retrieved from <<https://journals.openedition.org/cm/3171>>.

MORIARTY, B. (1998). Dani Bunten Berry. Lifetime Achievement Award. Retrieved from <<http://ludix.com/moriarty/dani.html>>.

MOROAGH. (2008). Social and family gaming #2: History - How Dani Bunten Berry has said it all already. January 25. Retrieved from <<https://moroagh.wordpress.com/2008/01/25/social-and-family-gaming-2-history-how-dani-bunten-berry-has-said-it-all-already/>>.

MORRIS, D., & HARTAS, L. (2004). *Strategy games*. Cambridge, UK: Ilex Press Limited.

M.U.L.E. (2001). *Video Game Critic*. April 22. Retrieved from <<http://videogamecritic.com/nesmn.htm#M.U.L.E>>.

OZARK SOFTSCAPE. (1983). *M.U.L.E.*

OZARK SOFTSCAPE. (1988). *Modem Wars*.

PARAGON SOFTWARE CORPORATION. (1986). *Gemini-2*.

Playing Tips. (1984-1985). *Crash*, Christmas special, p. 143–145.

Playing tips. (1984, November). *Crash*, no. 10, p. 77–78.

PRINCE, S. D. (1983). At Your Service. Plugging Into Interactive Telecommunications and Games. *Video Games*, vol. 2, no. 3, p. 23-27; 81.

PROCTOR, B. (1982). A Beginner's Guide to Strategy and Tactics in Eastern Front. *Computer Gaming World*, vol. 2, no. 2, p. 10–12.

ROLLINGS, A., & ADAMS, E. (2003). *Andrew Rollings and Ernest Adams on game design*. Indianapolis: New Riders.

SCHILLING, B. (1981). *Commbat*.

SCHILLING, R. A. (1982). More Commbat. *BYTE*, vol. 7, no. 4, p. 20–22.

SCHWARTZ, L. (1986). Les fous de guerre. *Tilt*, no. 37, p. 124–146.

SHAW, L. (1982). BEZ-MX. *Computer Gaming World*, vol. 2, no. 4, p. 34–35.

SIPE, R. (1985). IBM Goes To War. *Computer Gaming World*, vol. 5, no. 2, p. 24–25.

SOFTWARE EXCHANGE. (1979). *Galactic Empire*.

Some Reader Comments. (1983). *Computer Gaming World*, vol. 3, no. 2, p. 9.

STEWART, G. (1981). Commbat: A Tele-Game for Two. *BYTE*, vol. 6, no. 12, p. 100–104.

STONKERS. (1984). *Crash*, no. 2, p. 102.

STRATEGIC SIMULATIONS, INC. (1982). *Cytron Masters*.

STRATEGIC SIMULATIONS INC. (1983). *Combat Leader*.

Strategy Game Tips. (1984). *Computer Gaming World*, vol. 4, no. 5, p. 36–37.

The Company That Started It All. Scott Adams Adventure [ad]. (1983). *Basic Computing*, vol. 6, no. 12, p. 49.

This advertisement has no headline! (1982). *Computer Gaming World*, vol. 3, no. 1, p. 5.

TRODART [ad]. (1986). *Computer Gaming World*, no. 26, p. 43.

TYLER, T. (1984). Stonkers. *Big K*, April, p. 30.

WADE, B. (1985). M.U.L.E. *Zzap! 64*, no. 2, p. 24–25.

WAGNER, R. (1984). The Commodore Key. Wargames. *Computer Gaming World*, vol. 4, no. 5, p. 35.

WESTWOOD STUDIOS. (1992). *Dune II: The Building of a Dynasty*.

WILSON, J. L. (1982). Guns of Fort Defiance. *Computer Gaming World*, vol. 2, no. 4, p. 35.

WOLF, M. J. P. (2001). *The medium of the video game*. Austin, TX: University of Texas Press.

Simon Dor, Ph.D, is an Assistant Professor in videogames studies at Université du Québec en Abitibi-Témiscamingue (UQAT). His research mainly focuses on strategy games, whether it is from a gameplay or representational point-of-view, with a competitive or narrative lens, or using a cognitive, philosophical or historical approach. His teaching and research also led him to work on e-sports, immersion, ethics, and game design.

Résumé : De nombreux auteurs soulignent l'importance d'avoir un regard critique sur la classification des jeux. Dans les magazines de jeux vidéo de la décennie 1980, la combinaison des expressions « action », « arcade » ou « temps réel » avec le mot « stratégie » est fréquente. Mais les jeux de stratégie en temps réel de la décennie 1990 ne sont pas très similaires aux jeux de stratégie en temps réel des années 1980 : ce n'est pas la même jouabilité qui est décrite. Des micro-histoires de la jouabilité peuvent révéler de nouvelles perspectives sur les jeux de stratégie.

Mots-clés: Genres ludiques; jeu de stratégie en temps réel; jeu de stratégie; décennie 1980; histoire des jeux vidéo.