Game Styles, Innovation, and New Audiences: An Historical View

Greg Costikyan
Nokia Research Center
355 South End Ave #2B
New York, NY 10280
(646) 489 8609
greg.costikyan@nokia.com

ABSTRACT

From the earliest times, it's been possible to discern clear genre divisions among games, genres based on a collection of game mechanics. The pattern can be seen even in games of the Neolithic, and continues with digital games today. Since the inception of games as a commercial industry (in the 18th century), it also appears that new genres have, over time, attracted new audiences; in recent years, the rise in development cost has reduced publishers' willingness to experiment with games sufficiently innovative to potentially create new game genres, which may be a risk to the industry's long-term health.

Keywords

Game history, game genre

While no clear evidence of games from Neolithic cultures in Asia and Europe survive, some games of Native American cultures are well documented (Culin, 1907). They fall into two categories: gambling games and track games. Gambling games are based on the casting of binary lots, with pay-offs varying with the difficulty of achieving different scores (but not corresponding to the actual odds, since Paleolithic cultures do not understand formal statistics); some are based on the casting of astragals (knucklebones or the like, generating other than binary numbers). Parlett (Parlett, 1999) asserts that similar games using binary lots are known in all cultures that play games at all. Unlike modern gambling games, these games seem to appeal for mystical reasons as well as for the sake of winning the stakes involved: they are a way of testing your luck, or favor with the spirits.

Parlett believes that track games may have begun initially as a way of keeping score for gambling games (p. 35). In primitive cultures, the "board" is usually formed by drawing lines in the earth, or by placing sticks to mark off the "spaces." The simplest variety is a race involving one piece to get home, as in Snakes & Ladders; more complicated games, such as Pachisi (an ancient Indian game) and its commercial successors, Ludo and Parcheesi, involve multiple pieces, typically four. In the most complicated games, such as Backgammon or the Royal Game of Ur, multiple pieces exist, with additional rules for blocking and returning pieces to home, with die-rolls or lots dividable among pieces. The race game thus can be thought of as a "genre," with a common set of key systems (lots or dice for random number generation; a linear track; winning by getting pieces home).

Similarly, according to Parlett, all known "folk" games (that is, those the product of tradition, and not ascribable to individual creators) can be assigned to one of a handful of genres: games of

linear connection (Mills, Morris, Twixt and Hex, the later two modern); games of traversal (Halma, Chinese Checkers, etc); of space control (Go, Reversi, etc.); asymmetric chase games (Fox & Geese, the Norse Hnefatafl); bean games (Wari, Mancala, and innumerable others, mostly from Africa); games of leaping capture (beginning with the Medieval Alquerque, and extending through modern Checkers or Draughts); games deriving ultimately from the Indian game of Chatauranga, all of which share square grids, units that differ in capability, and capture by replacement (Chess, Shogi, Shatranj, etc.). And so on.

The interesting aspect of all this, from this paper's perspective, is that only two folk game genres seem to have arisen spontaneously and independently in many cultures: gambling games based on binary lots, and track games, perhaps because both are obvious given some random number generator. (Parlett). In all other cases, either we can identify an original game from which others in the same genre derive (e.g., Chatauranga for Chess and its Asian relatives); or else we see a cluster of games in the same genre appearing in a limited period of time and in a limited geographic region (e.g., asymmetric chase games appearing in Northwestern Europe during the early Middle Ages), a pattern that (as in paleontology) allows us reasonably to deduce that they derive from some as-yet unidentified common ancestor.

The designed game—that is, a game ascribable to individual creator(s), as opposed to those deriving from anonymous tradition—first appears in the English-speaking world with Carrington Bowles's publication of *A Journey Through Europe* (des. John Jefferys) in 1759[1] (Whitehouse, 1951). Bowles was a publisher of hand-tinted, cloth-backed maps, and *Journey* was apparently an attempt to extend his product line by producing a map with a game overlaid. It is a track game; as with modern such games, players advance through the generation of a random number, in this case, via a teetotum[2], since dice were considered gambling instruments, and therefore morally dubious and inappropriate for an amusement in which children might take part. Certain spaces confer advantages or disadvantages on players who land there (e.g., "He who rests at 28 at Hanover shall by order of Ye King of Great Britain who is Elector, be conducted to No 54 at Gibraltar to visit his countrymen who keep garrison there," or "He who rests at 48 at Rome for kissing ye Pope's Toe shall be banished for his folly to No 4 in the cold island of Iceland and miss three turns.")

Almost all of the early British boardgames (Royal Geographic Amusement [Robt. Sayer,1759], Tour of Europe [John Wallis, 1794], Voyage Round the World [John Wallis, 1796], etc.) and many of the earliest American games (Traveller's Tour through the United States [F&R Lockwood,1822], The Amusing Game of Innocence Abroad [Parker Bros., 1888])are clearly of the same basic genre (see Whitehill, Hofer). And indeed the few games from the earliest period that take other themes—e.g., Royal Genealogical Pastime of the Sovereigns of Europe (E. Newberry & John Wallis, 1794), Mansion of Happiness (Laurie & Whittle, 1800) (see Whitehouse)—simply take the same mechanics and attach them to different themes (genealogy

---

[1] As I speak only English, my research has been restricted to games from the Anglophone world, and I would be grateful to pointers to early designed games from other nations.

[2] A teetotum consists of a spindle, to which a polygon is attached, with the sides of the polygon numbered. Players spin the spindle, which eventually falls over, with one side of the polygon resting on the table; the number on that side is used.

or moral improvement, in these cases)[3].

It isn't until the mid-19th century, with the invention of multi-colored presses and the elimination of the need to hand-tint boards, that we see the spread of new genres, starting with the quiz game, of which Trivial Pursuit is a modern example: The Game of Great Events (R. & F. Claxton, 1850s), Patriot Heroes (Milton Bradley, 1860s), Grandmama's Game of Useful Knowledge (McLoughlin Bros., 1860s), and so on (see Shea and Malloy). There's an explosion of games in the mid-to-late 19th century, with the foundation of McLoughlin Brothers and Milton Bradley in the 1850s and 60s respectively, the predominant US publishers of games until the arrival of the George S. Parker Company (later Parker Brothers) in 1883 (Orbanes); and while many of them are original and do not clearly fall into established genres, it's also clear that several new genres sprang up during the period, quickly spawning imitators. Among clear genres are:

- The fishing game, in which players attempt to withdraw small items from holes in a board (examples: Fish Pond (McLoughlin Bros., circa 1890), Four and Twenty Black Birds (McLoughlin Bros.., 1908), Game of Frog Pond (R. Bliss, 1890) (via Hofer) – Operation is a modern example.
- The parlor sport (Tiddledy Winks [J. Jacques & Son, 1890s], Pillow-Dex [Roberts Bros., 1897], King's Quoits [McLoughlin Bros., 1893) (see Orbanes and Hofer.
- And what we might call the Mad-Libs-style game, in which players combine short phrases and/or a story with blanks and words on cards or strips of paper to produce a humorous story of turn or phrase (the Victorians must have been easily amused)— Komikal Konversation Kards (Adams & Co., 1856); Peter Coddle's Trip to New York (Milton Bradley, circa 1890); Mixed Pickles (Selchow & Richter, circa 1890) (via Malloy and Hofer).

As with the folk era, we see in the early commercial game world that one novel product establishes a new gameplay dynamic, that is, a collection of mechanics, or a genre—and many games shortly appear exploiting and slightly extending that genre. In the case of these games, it's hard to find the "Ur" game in each genre, because so many titles were published over the period (and because without access to the physical games themselves, their actual gameplay has to be inferred from available sources). Nevertheless, it seems that the competitive publishers of the time aggressively and gleefully imitated each other (sometimes in defiance of copyright law) henever anyone discovered a genre that appealed to the public.

We see the same phenomenon working out in hobby gaming as well. The first commercial rules for miniatures gaming was published by H.G. Wells in 1910 (Floor Games, followed by Little Wars in 1913); that hobby persists, mostly with home brew rules (although Fletcher Pratt's naval rules appear in 1940) until 1957, when Jack Scruby's *Military Digest* appears, spurring interest in the hobby. Within a decade, dozens of rules sets are on the market (see Beattie). In 1953,

---

[3] There are a handful of unique games from the period (e.g., Combat with the Giant, Champante & Whitrow, 1796) but there in any period, there are original games that do not belong to established genres, and do not themselves spawn one; this does not, I think, contradict the paper's primary thesis.

Charles Roberts publishes *Tactics,* the first board wargame[4], reissuing it in 1958 under the Avalon Hill label; within 15 years, we have literally hundreds of board wargames on almost every conceivable military topic. In 1973, Tactical Studies Rules (later TSR) publishes Gygax & Arneson's Dungeons & Dragons; within a decade, there are dozens of competing roleplaying games. In 1993, Wizards of the Coast publishes Richard Garfield's Magic: The Gathering, and within a decade there are dozens of competing collectible card games (Costikyan, 1994).

And the same phenomenon is clearly at work in the digital era. Name almost any genre, and you can point to the Ur-game, the pioneer that first collected the key mechanics for that genre in one entity, and you can also clearly identify the works that follow. For the adventure game, Crowther's Colossal Cave (circa 1972). For the platformer, Donkey Kong (1981). For the first-person shooter, Doom (1993). For the real-time strategy game, Dune II (1992)[5]. For the massively multiplayer game, Bartle & Trubshaw's MUD1 (1978) (see Koster). And so on.

In other words, throughout the history of games, and indeed into the prehistory, we can see a common phenomenon at work, a phenomenon that Dan Schirlis (former CEO of Tubine Entertainment) describes somewhat cynically as "Genre is what we call one hit game and its imitators." To put it less cynically, in the space of all possible games, there are certain "peaks," places where a fruitful combination of core mechanics combines to create engaging gameplay—and once that peak in gameplay-space is discovered, it becomes possible for designers to ring the changes of the possible in that collection of mechanics, producing innumerable variations that are themselves appealing (assuming competence of execution).

To view it through another lens, "genre" has a similar meaning for games of all kinds, from classic boardgames to modern video games: genre is defined by a shared collection of core mechanics. Thus "genre" has quite a different meaning for games than it does for fiction, or film; it is not based on theme (science fiction, noir, musical comedy), but on a gameplay dynamic, and in this regard, is closer to the use of "genre" for music, where it refers to a particular sound.

From a design perspective, we may also conclude that "the big win," the greatest accomplishment a designer can hope to achieve is not to execute a game in an existing genre well (although there is no shame in that), but to envision a new genre, to find a new peak in the gameplay-space to support a novel style of play.

And from a business perspective, we may conclude likewise that while games in existing genres can prove profitable, world-shaking hits generally arise with the discovery of a new genre—which suggests that modern publishers' increasing aversion to taking risks on innovative product is a troubling sign for the industry's long-term health.

---

[4] Not, please note, the first board game dealing with military conflict (such date back at least into the 18th century), but the first game of the genre conventionally called "board wargaming," incorporating such core concepts and mechanics as combat strength ratios, movement allowances, and zones of control.

[5] Elements of the RTS are present in earlier games (e.g., Patton vs. Rommel or Herzog Zwei), but Dune II is the Ur-game of the genre because it brings together the core mechanics for the first time: resource extraction, structure construction, structures that build units, real-time combat with opponents.

REFERENCES

1. Beattie, Robert G. (1981); "The Courier's Timeline of the Historical Miniatures Wargaming Hobby." Available at: http://www-personal.umich.edu/~beattie/timeline2.html.

2. Costikyan, Greg (1994); "A Short History of Paper Gaming." Available at: http://www.costik.com/paphist.html.

3. Culin, Stewart (1907);Games of the North American Indians; Washington, DC; Smithsonian Institute.

4. Hofer, Margaret K. (2003); The Games We Played: The Golden Age of Board & Table Games; New York, Princeton Architectural Press.

5. Koster, Raph (2002); "Online World Timeline." Available at:
http://www.legendmud.org/raph/gaming/mudtimeline.html.

6.Malloy, Alex G. (2000); American Games: Comprehensive Collector's Guide; Iola, WI, Antique Trader Books.

7. Orbanes, Philip E. (2004); The Game Makers: The Story of Parker Brothers from Tiddledy Winks to Trivial Pursuit; Boston, MA, Harvard Business School Press.

8. Parlett, David (1999); The Oxford History of Board Games; Oxford, Oxford University Press.

9. Shea, James J. (1960); It's All in the Game: A Biography of Milton Bradley, The Man Who Taught America to Play; New York, G.P. Putnam's Sons.

10. Whitehill, Bruce (1992); American Boxed Games and Their Makers, 1822-1922; Radnor, PA, Wallace-Homestead Book Company.

11. Whitehouse, F.R.B. (1951); Table Games of Georgian and Victorian Days; London, Peter Garnett Ltd..