Finding Aid to the
Carol Shaw Papers, 1960-2017

Summary Information
Title: Carol Shaw papers
Creator: Carol Shaw (primary)
ID: 2017.shaw
Date: 1960-2017 (inclusive); 1978-1984 (bulk)
Extent: 4.4 linear feet
Language: This collection is mainly in English, with some advertisements in German.
Abstract: The Carol Shaw papers are a compilation of game design documentation, notes, sketches, source code printouts, advertisements, and other ephemera relating to the career of video game designer Carol Shaw. The bulk of the materials are dated between 1978 and 1984.
Repository:
   Brian Sutton-Smith Library and Archives of Play at The Strong
   One Manhattan Square
   Rochester, New York 14607
   585.263.2700
   library@museumofplay.org

Administrative Information
Conditions Governing Use: This collection is open for research use by staff of The Strong and by users of its library and archives. Though the donor has not transferred intellectual property rights (including, but not limited to any copyright, trademark, and associated rights therein) to The Strong, she has given permission for The Strong to make copies in all media for museum, educational, and research purposes.
Conditions Governing Access: Due to the nature of the printed source code on perforated, connected printer paper, reference scans of these pages may only be available at the discretion of the library staff.
Custodial History: The Carol Shaw papers were donated to The Strong in 2017 as a gift from Carol B. Shaw. The papers were accessioned by The Strong in two accession lots from Shaw (Object ID 117.2777 in March 2017 and Object ID 117.3703 in June 2017). An additional accession lot (Object ID 120.4416) was received in October 2020 via Kay Savetz.
Preferred citation for publication: Carol Shaw papers, Brian Sutton-Smith Library and Archives of Play at The Strong
Processed by: Julia Novakovic, September 2017
Revision Note: The two source code printouts received in the third accession lot were incorporated into Box 3 of this collection in January 2022.

Controlled Access Terms
Personal Names
- Logg, Ed
- Merkle, Ralph
- Shaw, Carol

Corporate Names
- Activision (Firm)
- Atari, Inc.
- Atari, Inc. Home Computer Division

Subjects
- Atari 2600 (Video game console)
- Atari 800 (Computer)
- Atari VCS (Video game console)
- Conceptual art
- Electronic games industry
- Game design and development
- Polo (Game)
- Programming
- River Raid (Game)
- Video game industry
- Video games--Design
- Women in Games

Biographical Note

Carol Shaw (1955-) is an American game designer and programmer. She is best known for creating the best-selling Atari 2600 game *River Raid* (1982).

Shaw became interested in electronics at an early age. During high school, she learned how to program in BASIC and pursued a B.S. degree in Electrical Engineering and Computer Science at the University of California, Berkeley. While obtaining her Master's degree in Computer Science (also at UC Berkeley), Shaw was hired by Atari, Inc. as a microprocessor software engineer. In 1978, she produced what is possibly the first documented game designed and programmed by a woman —an unreleased game called *Polo* (later was distributed on a CD-ROM compilation in 1996). When designing video games, Shaw and her colleagues in the Home Computer Division at Atari would draw graphics on graph paper, then hand-code it into the correct hex values on the computer screen. Shaw also hand-wrote her code on paper and later typed it in, since there were no sufficient editing programs at the time.

Shaw developed several games and software programs while at Atari from 1978-1980. She went on to work for Tandem Computers before joining Activision in 1982. Shaw created the popular game *River Raid* for the Atari 2600 while at Activision in 1982. This top-down scrolling shooter game sold more than a million cartridges and won multiple awards. (*River Raid* was later ported across other home console platforms.) Shaw also programmed the puzzle game *Happy Trails* for the Mattel Intellivision in 1983. She left Activision in 1984 to return to Tandem Computers, where Shaw worked for six more years until she retired in 1990.

Collection Scope and Content Note
The Carol Shaw papers are a compilation of game design documentation, notes, sketches, source code printouts, advertisements, and other ephemera relating to the career of Carol Shaw, the first widely recognized professional female video game designer and programmer. Materials in this collection are sorted by the company under which Shaw worked at the time of creation for the games and programs she produced. Of interest are the source code printouts for *Polo* (possibly the first documented game designed and programmed by a woman, dated 1978) and *River Raid* (her most popular and award-winning game, published by Activision in 1982).

The Carol Shaw papers are arranged into three series, two of which have been further divided into subseries. The collection is housed in four archival document boxes and one oversized folder.

Related Materials
The International Center for the History of Electronic Games (ICHEG) at The Strong holds published versions of Shaw's games for various consoles, as well as the EPROM (erasable programmable read-only memory) containing Shaw's *Polo* game.

System of Arrangement
    Series I: Atari, 1960-1980
        Subseries A: Game design documentation and reference, 1960-1980
        Subseries B: Source code and other printouts, 1978-1980
        Subseries C: Company publication, 1980
    Series II: Activision, 1982-2008
        Subseries A: Source code printouts, 1982-1983
        Subseries B: Company publications and advertisements, 1982-2008
    Series III: Reference, 1981-2017

Contents List

Series I: Atari, 1960-1980

> **Scope and Content Note:** This series contains game design documents, source code printouts, and other materials related to Carol Shaw's career at Atari, Inc. from 1978-1980.

> **Subseries A: Game design documentation and reference, 1960-1980**
> **Scope and Content Note:** This subseries houses various notes, sketches, correspondence, and other related materials pertaining to the development of several programs by Shaw from 1978 to 1980. (Some reference materials are photocopies of articles or book pages and date earlier than the actual creation of the associated software.) Within Folder 2, there are notes and printouts from well-known Atari game designer Ed Logg.

> Printouts originally on thermographic paper have been scanned in order to retain the information from this fragile media; reproductions have been included in the folders as physical access copies.

Box 1

Folder 1   *Polo* - notes, sketches, reference, and correspondence; 1963-1979 [bulk 1978-1979]

Folder 2   "Qubic" [*3-D Tic-Tac Toe*] - notes, sketches, reference, and correspondence; 1972-1979 and n.d. [bulk 1978-1979]

Folder 3   *Calculator* - notes, reference, and sketches; 1977-1979 [bulk 1979]

Folder 4   "VCS Checkers" [*Video Checkers*] - notes, reference, sketches, and correspondence; 1960-1980 [bulk 1979-1980]

> **Subseries B: Source code and other printouts, 1978-1980**
> **Scope and Content Note:** This subseries contains printed source code listings for *Polo*, *3-D Tic-Tac-Toe* (here, called "Qubic"), *Calculator*, *Video Checkers,* and *Super Breakout*. Games marked with "Stella" are for the Atari 2600, while "Colleen" games are for the Atari 800 system. Of particular interest is the 1978 printout for *Polo*, which is perhaps the first documented game designed and programmed by a woman.

> These printouts are on 11" x 15" lined printer paper, with the pages still attached at the perforations. Shaw marked annotations in pencil and pen on some of the pages.

Box 2

Folder 1   "Polo, by Carol Shaw" [*Polo*] source code listing for Atari 2600, started 8/17/78, final 12/13/78; 1978

Folder 2   "Qubic by Carol Shaw" [*3-D Tic-Tac-Toe*] source code listing for Atari 2600, started 10/26/78, final 1/15/79; 1978-1979

Folder 3   "Atari Calculator Cartridge Function Summary by Carol Shaw" [*Calculator*] printout for Atari 800, 5/25/79; 1979

Folder 4   "Colleen Qubic by C Shaw" [*3-D Tic-Tac-Toe*] source code listing for Atari 800, 11/21/79; 1979
Folder 5   "Atari 400/800 Calculator Cartridge User's Manual by Carol Shaw" [*Calculator*] manual draft printout, 9//24/79; 1979
Folder 6   "Basic BNF by Carol Shaw" printout for Atari 800, 3/27/80; 1980
Folder 7   "Atari 800 Checkers Display by C. Shaw" source code listing, 3/31/80; 1980
Folder 8   "VCS Checkers Instructions, PAL and NTSC versions, Carol Shaw" [*Video Checkers*] printout for Atari 2600, 5/15/80; 1980
Folder 9   "VCS Checkers by Carol Shaw" [*Video Checkers*] source code listing for Atari 2600, 6/3/80; 1980
Folder 10   "VCS Breakout by C Shaw" [*Super Breakout*] source code listing for Atari 2600, 7/15/80; 1980
Folder 11   "Colleen Calculator by Carol Shaw"[*Calculator*] source code listing for Atari 800, listed 7/16/80; 1980

Box 3
Folder 4   "Colleen Calculator, by C Shaw/ Atari Calculator Cartridge" [*Calculator*] source code listing for Atari 800, annotated 6/13/1979; 1979
Folder 5   "VCS Checkers by Carol Shaw 5/15/80" [*Video Checkers*] source code listing for Atari 2600, 5/15/80; 1980

                   Subseries C: Company publication, 1980
                   Scope and Content Note: This subseries contains a 1980 Atari Personal Computer Systems Software Catalog, which features descriptions for several programs developed by Shaw (including *Calculator* and *3-D Tic-Tac-Toe*, which Shaw marked in pencil on the catalog pages).
Box 1
Folder 5   Atari Personal Computer Systems Software Catalog, 1980

Series II: Activision, 1982-2008
> **Scope and Content Note:** This series houses source code printouts, company publications, advertisements, and other material related to Carol Shaw's career at Activision from 1982-1984.

> **Subseries A: Source code printouts, 1982-1983**
> **Scope and Content Note:** This subseries contains printed source code listings for *River Raid* (versions for two different Atari systems) and *Happy Trails* (for the Intellivision).

> These printouts are on 11" x 15" lined printer paper, with the pages still attached at the perforations. Shaw marked annotations in pencil and pen on some of the pages.

Box 3

Folder 1	"River Raid Atari 2600 VCS," Carol Shaw, source code listing, started Jan. 1982, v. 10.34.4, 2/10/83; 1982-1983
Folder 2	"5200/800 River Raid," Carol Shaw, source code listing for Atari 400/600/800/1200/5200, January 1983, v. 10.36.6, 9/22/83; 1983
Folder 3	"Happy Trails for Mattel Intellivision," Carol Shaw, source code listing, August 1987, v. 2.0 1/13/83; 1982-1983

> **Subseries B: Company publications and advertisements, 1982-2008**
> **Scope and Content Note:** Within this subseries are advertisements by Activision for Carol Shaw's *River Raid* in both English and German, as well as catalogs, commercials, a poster, and business cards. (These advertisements and catalog pages are notable for highlighting Carol Shaw as the designer of *River Raid*, since companies did not typically acknowledge the creator in the game's title.)

Box 1

Folder 6	Activision business cards, Carol Shaw, Designer, n.d. [c. 1982-1984]
Folder 7	Activision "Carol Shaw's *River Raid*" sell sheet, 1983
Folder 8	Activision *River Raid Jagdflieger* sell sheet, 1983 [in German]
Folder 9	Activision Video Game Cartridge catalogs, 1983-1984, and River Raiders high-scorer patch, n.d. [c. 1983]

Box 4

Folder 1	River Raid commercial "Red Alert," U-matic tape, 00:30, 12/13/82; 1982
Folder 2	Happy Trails commercial "Legend of Happy Trails," U-matic tape, 00:30, 5/12/83; 1983
Folder 3	River Raid and Happy Trails commercials, DVD [transfer from U-matic tapes, 1982-1983], 2008

Oversized

Folder 1	Activision *River Raid Jagdflieger* poster, 1983 [in German]

Series III: Reference, 1981-2017

> **Scope and Content Note:** This series holds a photographic slide of Carol Shaw, a letter from an Activision executive upon the release of the *Atari 2600 Action Pack* (which featured *River Raid*) in 1995, and a list of the materials donated by Shaw to The Strong in 2017.

Box 1

Folder 10   Carol Shaw with Atari 800, photographic slide, April 1981
Folder 11   Activision letter to Carol Shaw, 1995
Folder 12   Carol Shaw donation list to The Strong, 2017