Ancient Games, Old Computers, and New Tech

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Topics

- What is Wari/Oware?

- Basic Gameplay

- A North American Commercial Version

- An Early Computer Version

- Modern Interfaces

- Benefits of the Physical Version

Oware board with pebbles at start of game

What is Oware/Wari

- Member of Mancala family of games: <u>Mancala – Wikipedia</u> (over 800 known variations!)

- Mancala is among the earliest known board games still widely played

- Oware/Wari version was originally played with pits in ground and beans, pebbles, or other suitably sized generic pieces

- Two-player strategy game

- Two rows (one per player) of six cups/pits/holes

Setup and Basic Move

- Board consists of twelve compartments (two rows of six), with six compartments per player.

- At the start of a game each compartment holds four counters.

- A move consists of taking all counters from one compartment and sowing/distributing one counter into each adjacent compartment in sequence following a counter-clockwise pattern.

Scoring (Capture)

- You score points in Wari by capturing counters.

- Capture occurs when you sow your last counter in an opponent's compartment which previously contained either one or two counters. The counters from that compartment are then removed from play. Each captured counter is equal to one point.

- If the previous compartment in line also contains two or three counters at the end of the move, its counters are captured as well.

- This continues until no more counters can be captured in that turn (sometimes capturing all of your opponent's counters in a single move is possible).

End Game

- Play must end whenever the board is empty (all counters have been captured) or whenever one player has no more counters to move.

- The game also ends when one player has captured more than half of the counters (if a player has more than 24 counters, it's numerically impossible for their opponent to win the game).

- Wari also permits stalemate, where each player chases the other around the board fruitlessly; stalemate games should be ended by mutual agreement.

- At the end of the game, your score is increased by the number of counters remaining on your side of the board.

A North American Commercial Version

- **Kalah: A Commercial Count and Capture Game**
- From the University of Waterloo Elliot Avedon Virtual Museum of Games
- Hard to find nowadays

- Mancala-family games in the 'the west' today seem to have mostly gone digital, and often the opponent seems to be the software (based on an informal search).

An Early Computer Version

A version of Wari was published in COMPUTE! Magazine, February 1987 (Issue 81), which is available from archive.org.

Note the highlighted letters. These were shown as you entered the code, by a program provided in the magazine. This was designed to help you catch typing mistakes.

```
EM  20  D$="{H
MK  30  S$="{39
MP  40  DS$=D$+S$
RJ  50  POKE 53280
        0:PRINT CHR
KM  60  PRINT TAB(9)
        **************
GD  70  PRINT TAB(9)"*{
        {19 SPACES}{OFF}{
FD  80  PRINT TAB(9)"*{RVS
        OMMODORE 64 WARI {O
        {YEL}*"
AC  90  PRINT TAB(9)"*{RVS}{7
        {19 SPACES}{OFF}{YEL}*
AR 100  PRINT TAB(9)"*********
        ***********"
BQ 110  PRINT:PRINT TAB(12)"
        {CYN}COMPUTER'S SIDE":C
        P=0:MC=0
AG 120  PRINT TAB(12)"{PUR}MOVE
        #{7}"MC:PRINT TAB(12)"
        {PUR}SCORE:{3}"CP
HK 130  PRINT:PRINT"{6}
        {4 SPACES}<<F<<<<E<<<<D
        <<<<C<<<<B<<<<A<<<"
```

COMMODORE 64 WARI

COMPUTER'S SIDE
MOVE # 0
SCORE: 0

<<F<<<<<E<<<<<D<<<<<C<<<<<B<<<<<A<<<

>>G>>>>>H>>>>>I>>>>>J>>>>>K>>>>>L>>>

PLAYER'S SIDE
MOVE # 0
SCORE: 0

C64 Wari

- Pressing the letter above (top) or below (bottom) would 'sow' counters from that compartment into subsequent compartments in a counter-clockwise direction.

- Each compartment contained a value which showed the number of counters that were in them.

- The game had a computer opponent.

Modern Interfaces

- Spiffy Graphics

- Touch (mobile) or point-and-click (desktop) to 'sow'/distribute the counters

- Automatic counting of number pieces in a compartment

- Some versions feature playing a real person via the internet

- Some single-player versions feature 'levels' of difficulty (how strong an opponent the computer is)

Benefits of the Physical Version

- Aesthetic (for wooden / pebble version)

- No dead battery syndrome

- Anywhere (for pits in ground)

- Practice counting & math

- Real social (live human)

Improvise

I'm sure you can find a way to play if you wish…