

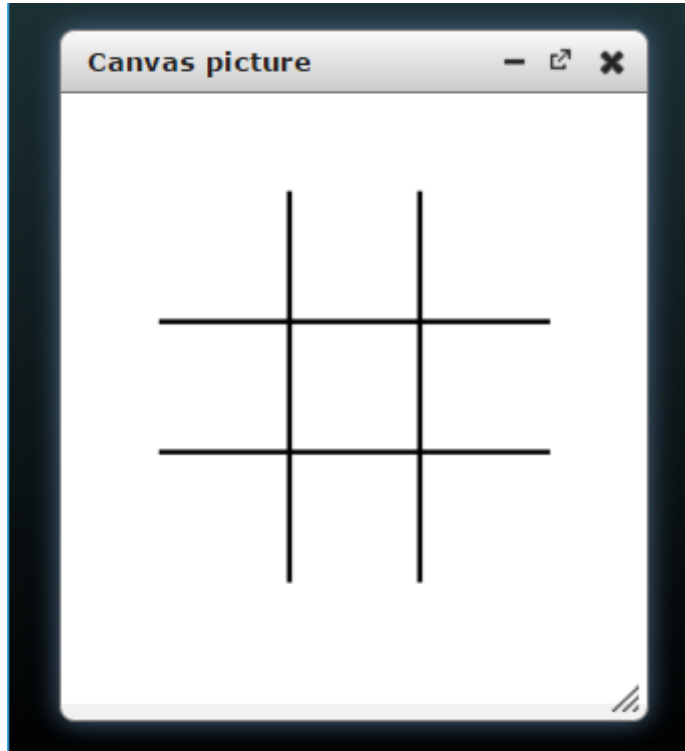
The OXO Laboratory in the MCE

See quickload

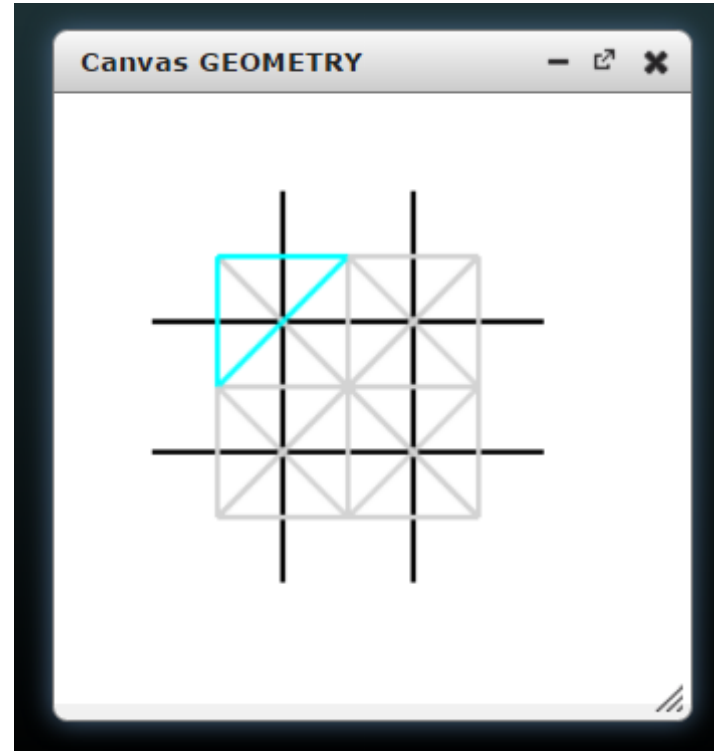
The screenshot shows a web browser window displaying the OXO Laboratory interface. The browser address bar shows the URL: `jseden.dcs.warwick.ac.uk/construit.c3/index-dev.html?import=wmb/OXOlaboratory/intro`. The browser title is "Meurig Beynon" and the version is "v1.2.2-159".

The interface consists of several panels:

- Canvas GAMESTATE**: Shows a 3x3 grid with 'O' in the top-left cell and 'X' in the top-middle cell. Below the grid is an "INITIALISE" button and a dropdown menu set to 'O'. A checkbox labeled "Tick box to automate X:" is present.
- Observable List (showObservables)**: Displays a list of observables including "playhistory", "Construal", and "All Kinds". The code for "playhistory" is shown: `playhistory = [[0, 0, 0, 0, 0, 0, 0, 0, 0],`
`playhistorymove_ix = [1, -1]`
`playhistorymoves = [[1, -1], [2, 1]]`
- Canvas GEOMETRY**: Shows a 3x3 grid with a red horizontal line across the top row.
- Canvas PLAY**: Shows a 3x3 grid with 'O' in the top-left cell and numbers in the other cells: 10, 14, 10, 18, 8, 14, 8, 14. Below the grid is the text "From X's point of view".
- Observable List (statusofgame)**: Displays a list of observables including "xwon\$lowon\$draw", "Construal", and "All Kinds". The code for "statusofgame" is shown: `xwon = false`
`owon = false`
`nofx = 1`
`nofo = 1`
`full = false`
`draw = false`
- Canvas BOARDSTATUS**: Shows a 3x3 grid with 'O' in the top-left cell and 'X' in the top-middle cell. Below the grid is a dropdown menu set to 'O'.
- Canvas SQSCORES**: Shows a 3x3 grid with 'O' in the top-left cell, 'X' in the top-middle cell, and numbers in the other cells: 9, 14, 24, 8, 18, 10, 18. Below the grid is the text "From O's point of view".



The OXO grid
See [geometry](#)

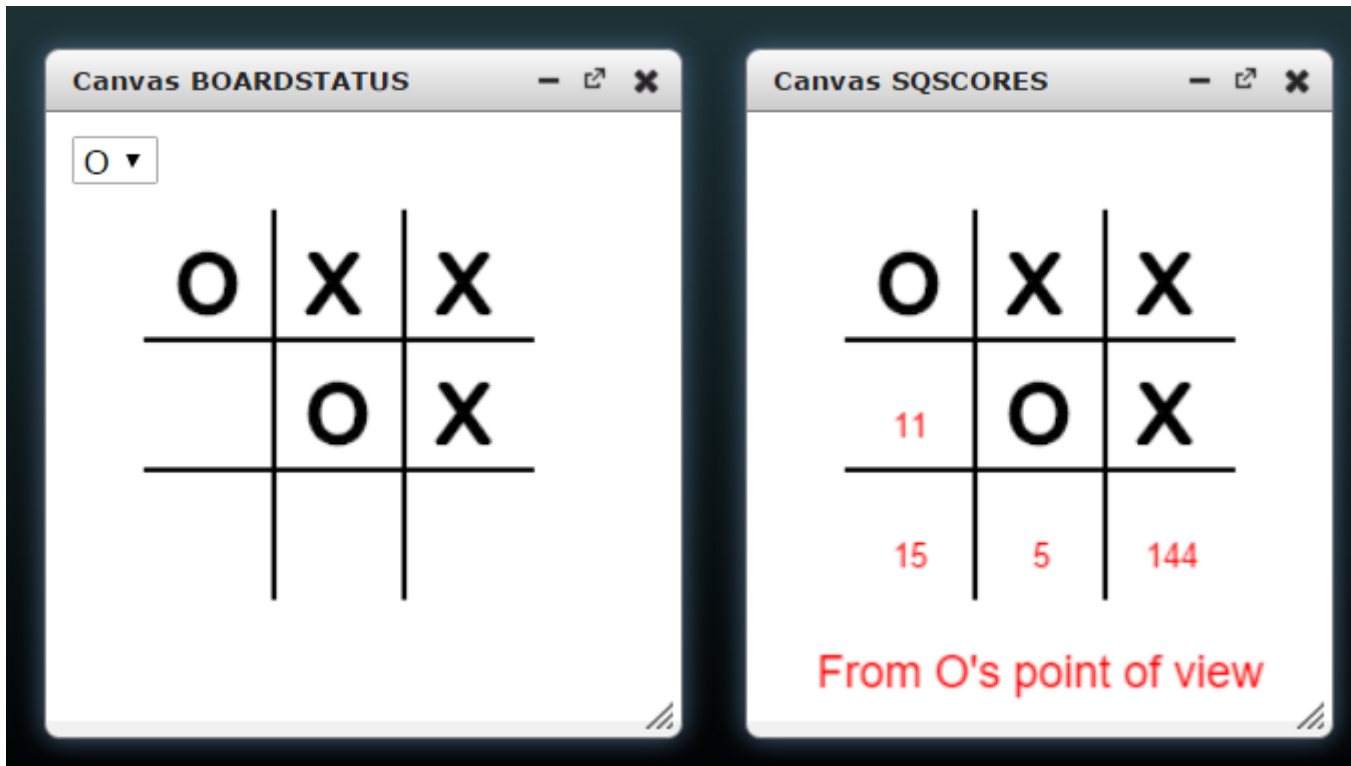


Winning lines
See [animatewinlines](#)

The image shows two side-by-side windows from a software application. The left window, titled "Canvas BOARDSTATUS", displays a 3x3 tic-tac-toe board. The board contains 'O' in the top-left cell, 'X' in the top-middle and top-right cells, and 'O' in the middle-middle and middle-right cells. Below the board, the text "X wins" is displayed. The right window, titled "Observable List (statusofgame)", shows a list of game state variables: `xwon = true`, `owon = false`, `nofx = 3`, `nofo = 2`, `full = false`, and `draw = false`. The window also includes a search bar with the text `xwon$|owon$|draw|`, a dropdown menu set to "Construal", and another dropdown menu set to "All Kinds".

Board status (non-standard winning lines)

See `selectmove` and `altwinlines`



Square scores (standard winning lines)

See `sqvals`

A game in play

See control
and play

Canvas GAMESTATE

O to play

O	X	O
	X	

INITIALISE to start

Tick box to automate X:

X is automated

Canvas PLAY

Prior to last move

O	50	O
16	X	16
11	14	11

From X's point of view

Observable List (showObservables)

playhistory\$|playhistorymoves [Edit Listed](#)

Construal All Kinds

```
playhistory = [[0, 0, 0, 0, 0, 0, 0, 0, 0], [-1, 0, 0, 0, 0, 0, 0, 0, 0], [
playhistorymoves = [[1, -1], [5, 1], [3, -1], [2, 1]]
```