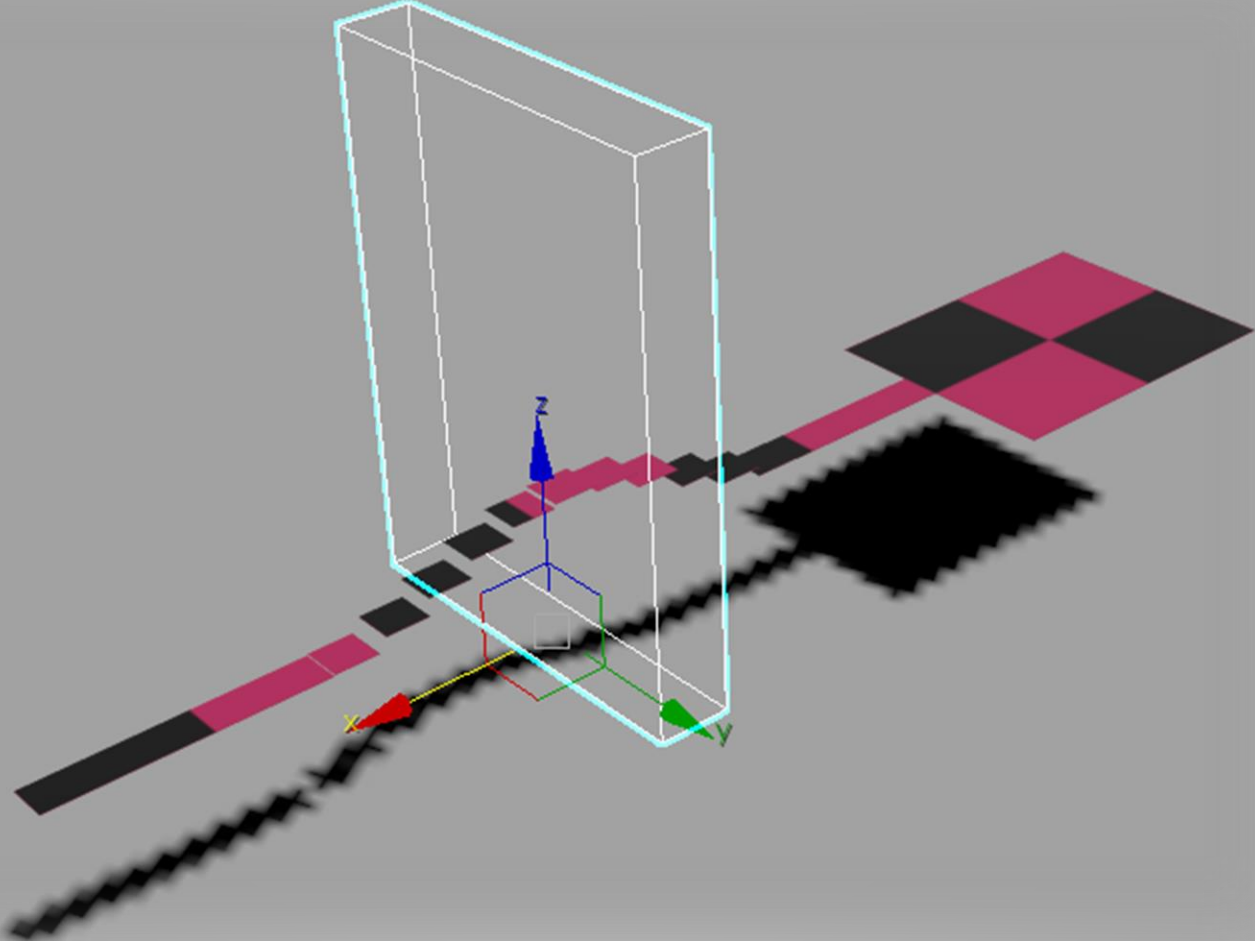


Face Displacement Tool

Face Displacement Tool



Face Displacement Tool

49: AffectRegion

- distance (Single)
- falloff (Single)
- bubble (Single)
- pinch (Single)
- value (Single)
- function (Func)

50: Parameter: Single

falloff

min 0.0

max 100000

default 0.0

system units

value (Single)

function (Func)

31: Parameter: Single

pinch

min 0.0

max 100.0

default 0.0

system units

value (Single)

function (Func)

22: Parameter: Single

bubble

min 0.0

max 100.0

default 0.0

system units

value (Single)

function (Func)

59: Parameter: Single

Height Displacement

min -10000.0

max 10000.0

default 10.0

system units

value (Single)

function (Func)

Face Displacement Tool

The standard affect region function, based on a distance and the three affect region parameters (same as the editable mesh).

This function is a cubic curve which returns 1 at distance 0, 0 if distance is greater than falloff, and other values for distance between 0 and falloff.

This is the function used inside the `Affect_Region` modifier. For the different editables, one of the data channels is the selection weight.

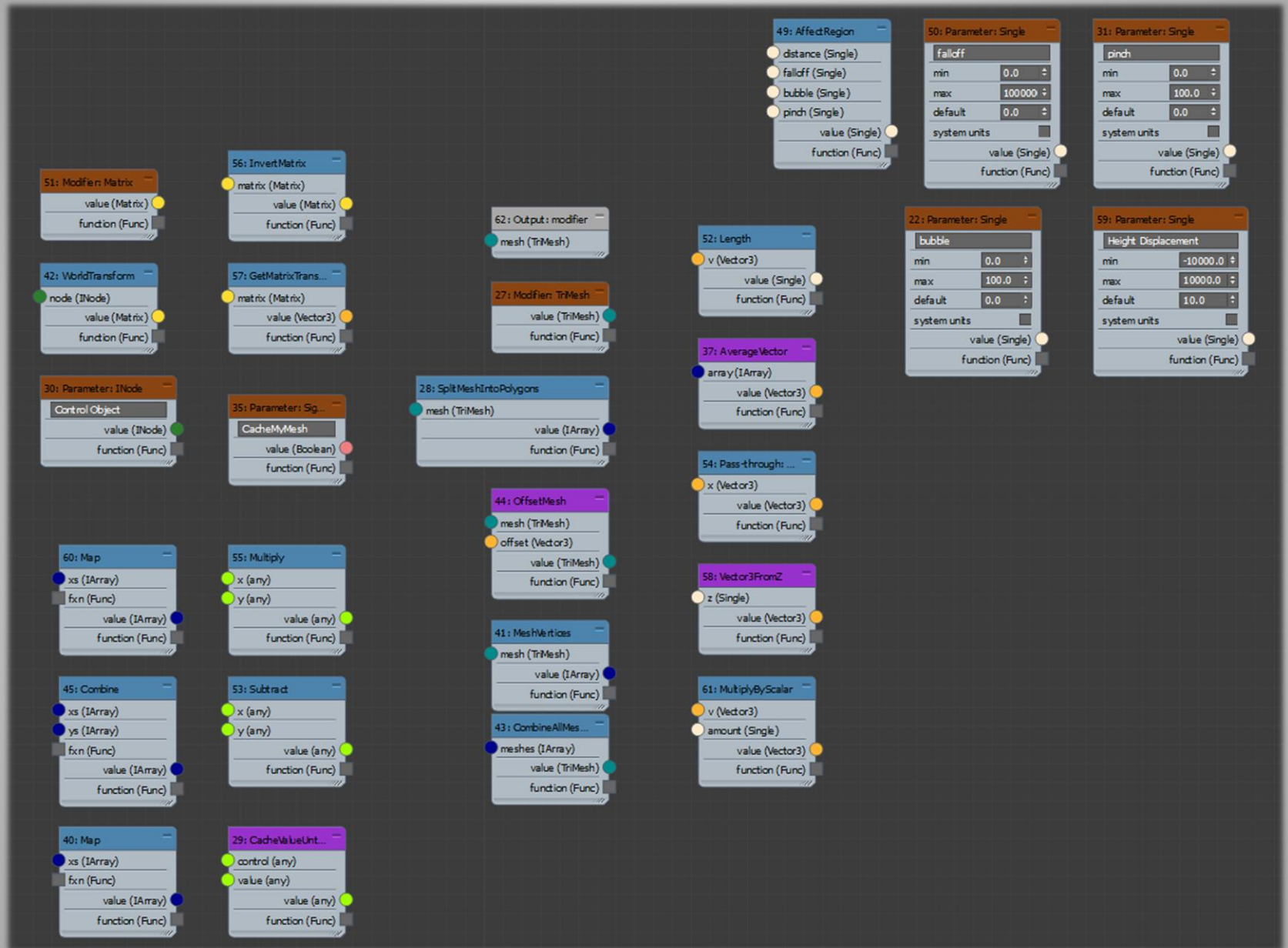
If you wanted to, you could use this function to calculate the vertex selection weights on you own.

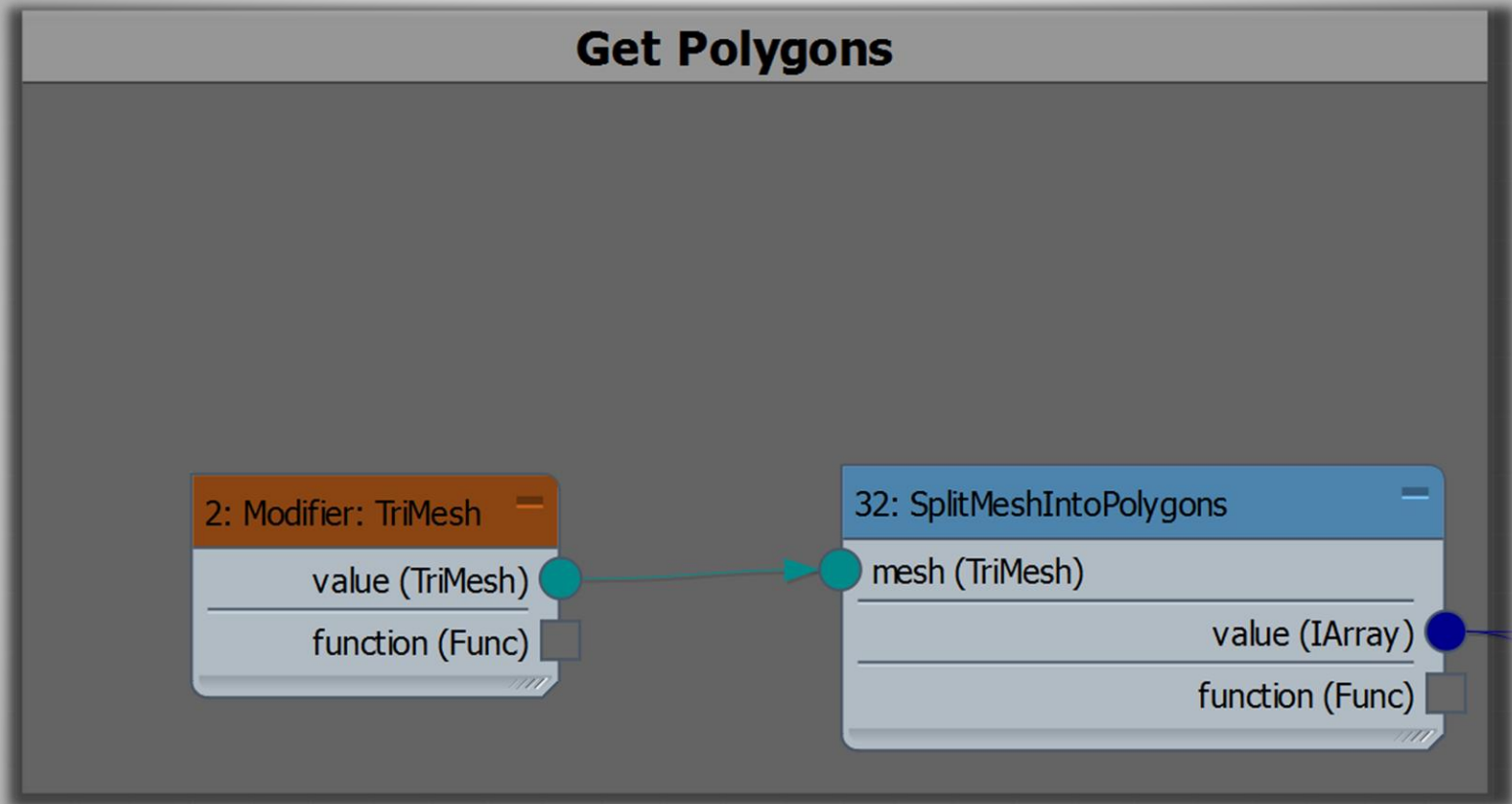
Face Displacement Tool

There is also an affect region modifier than can work with the current sub-object selection.

Volume select can be used with the modifier, but volume select can only displace the connected mesh and not individual faces or polygons

Face Displacement Tool

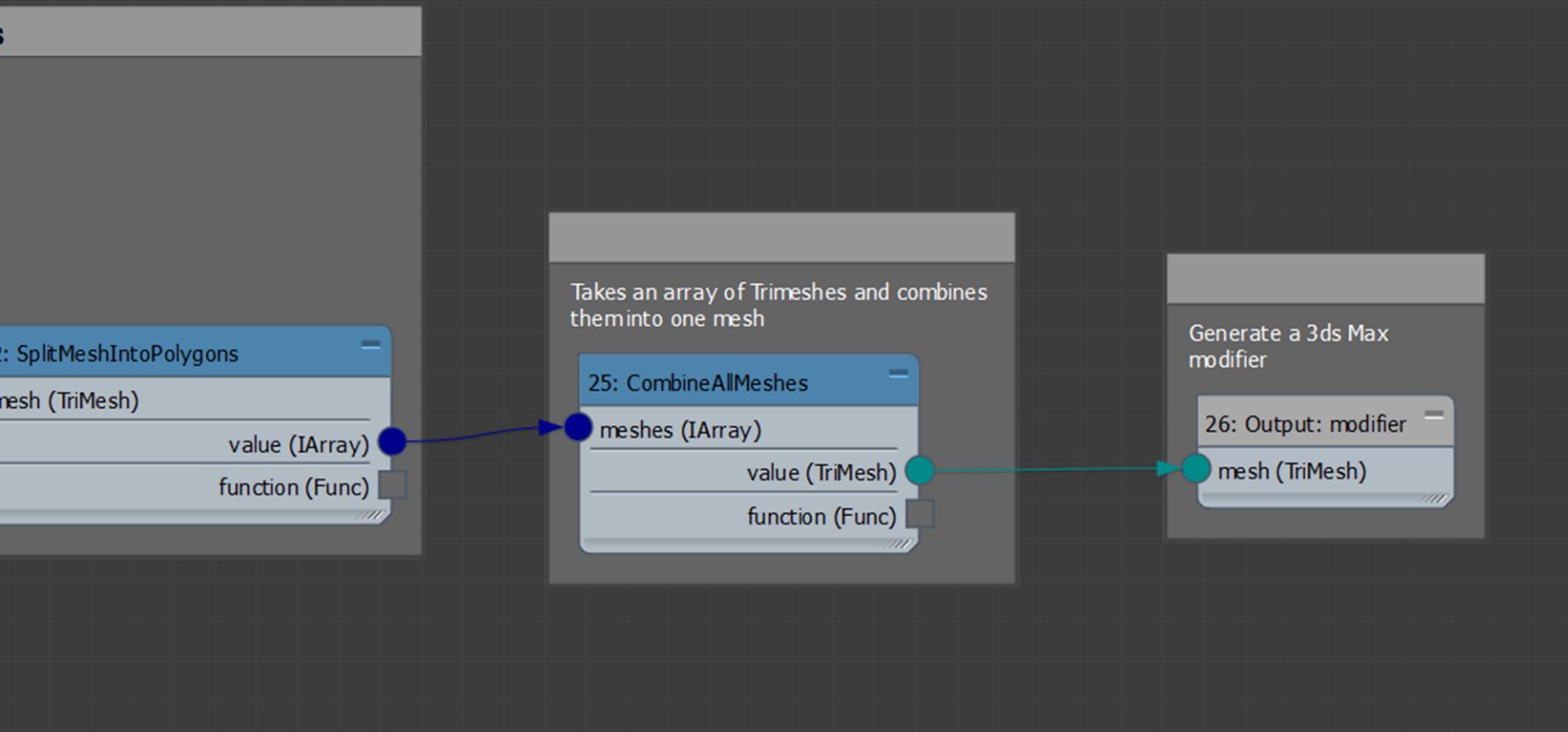




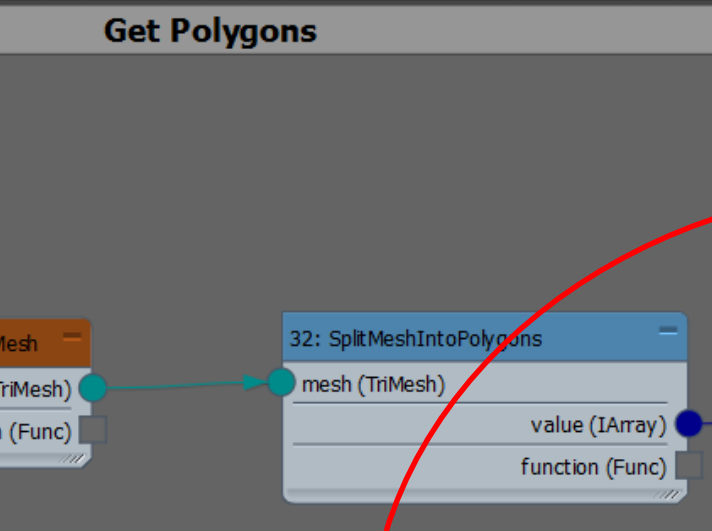
Modifier: Trimesh – Returns the mesh below the mcg modifier

Split mesh into polygons: return the mesh's polygons as an array of trimeshes

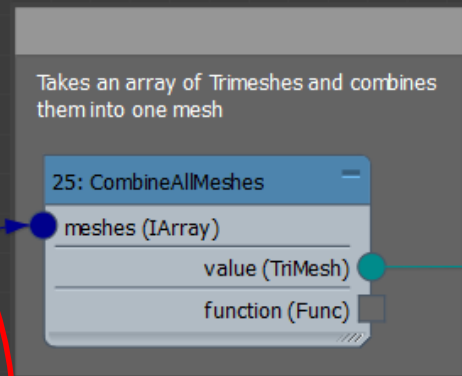
Face Displacement Tool



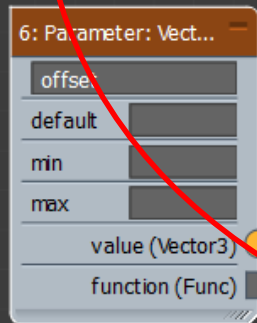
Face Displacement Tool



Map applies a function to a single array.
Similar to a for loop

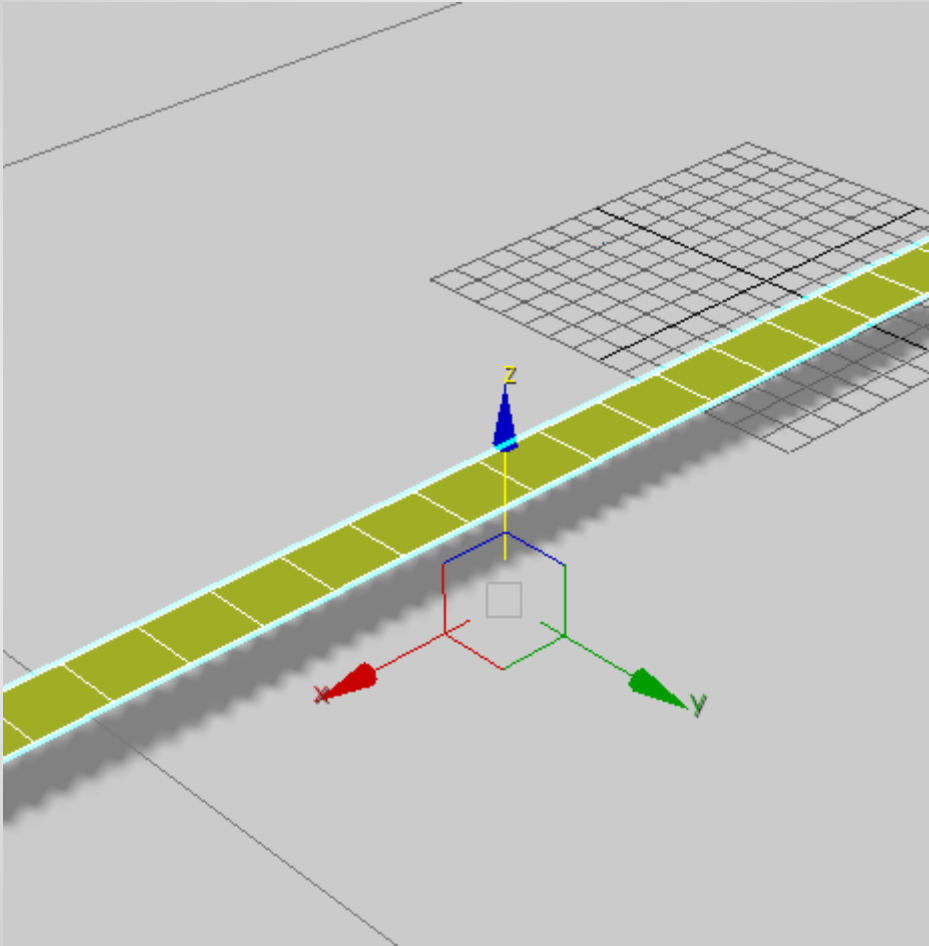


The function argument



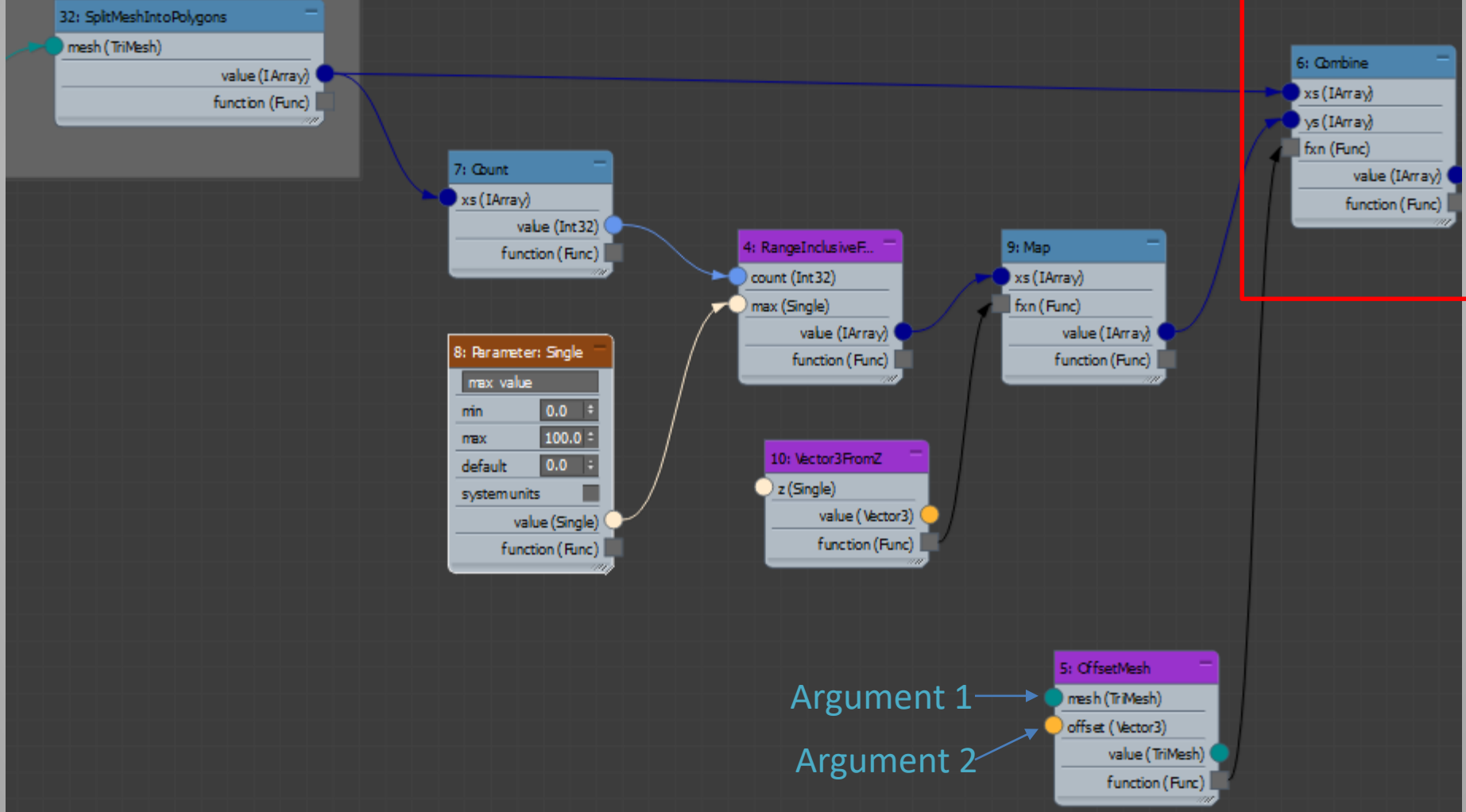
The function: Offset Mesh

Face Displacement Tool

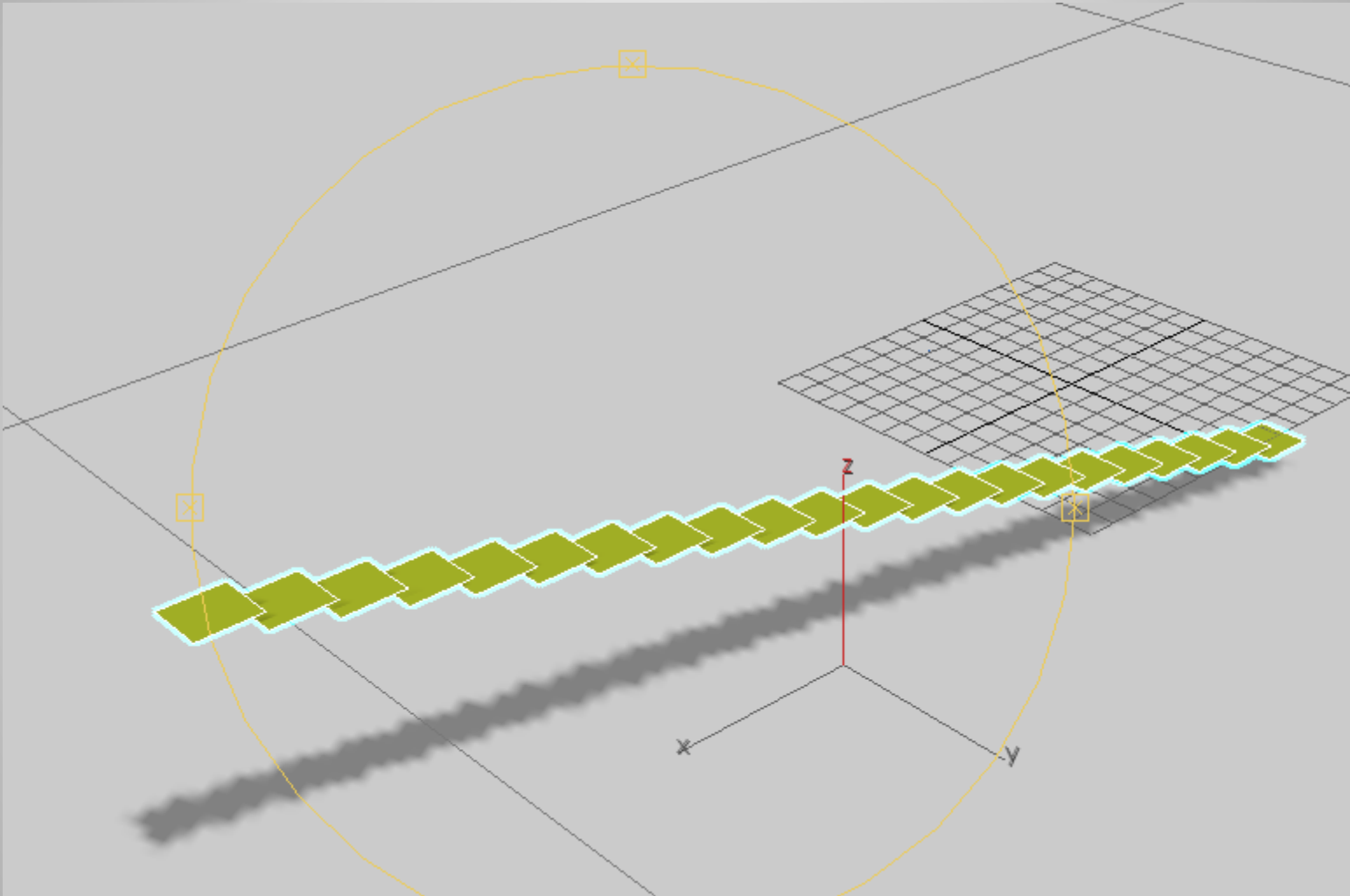


polygons

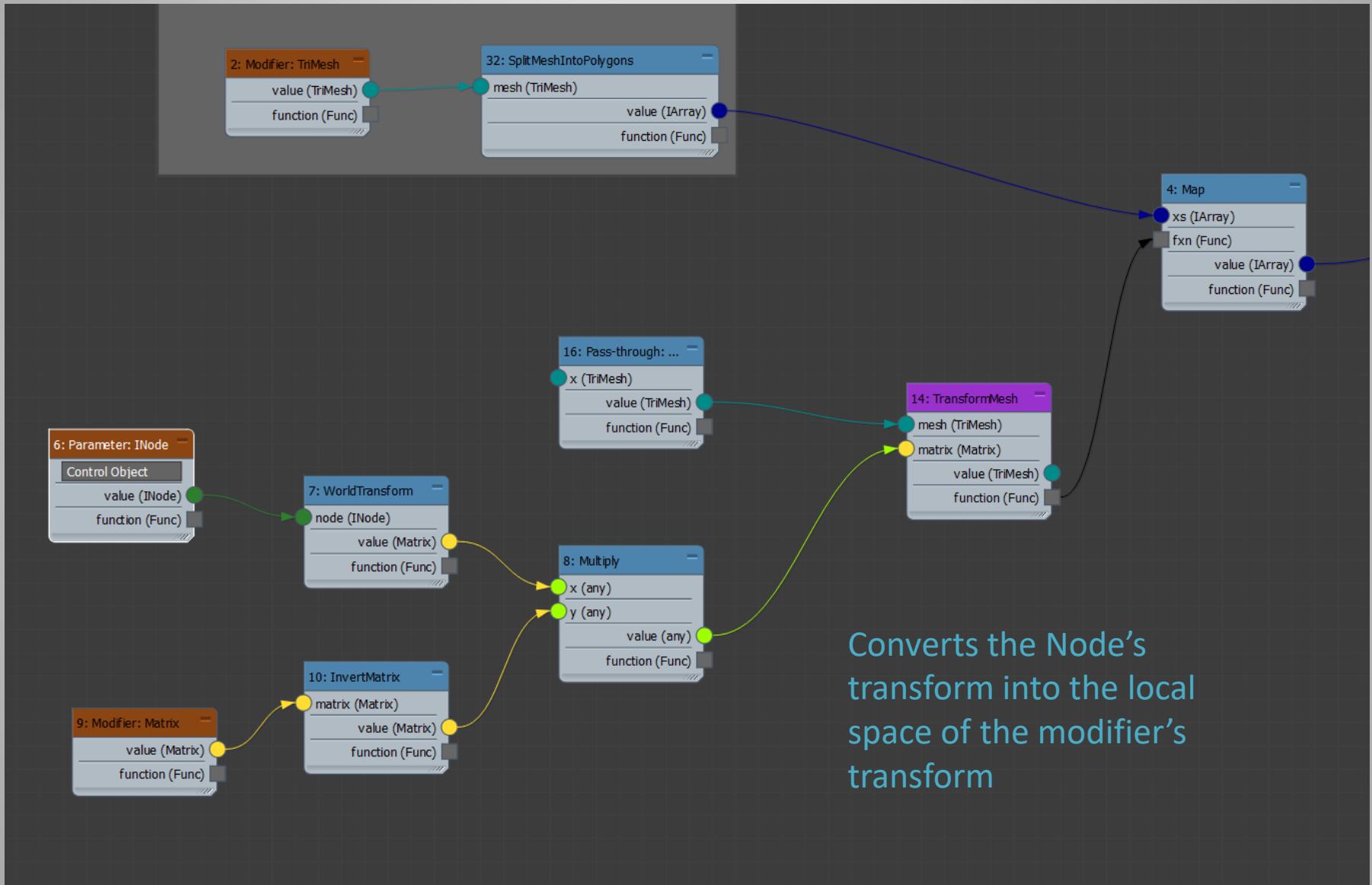
The Combine operator is similar to Map,
But takes two arrays. The function applied to the
combine operator must have 2 arguments



Face Displacement Tool



Face Displacement Tool



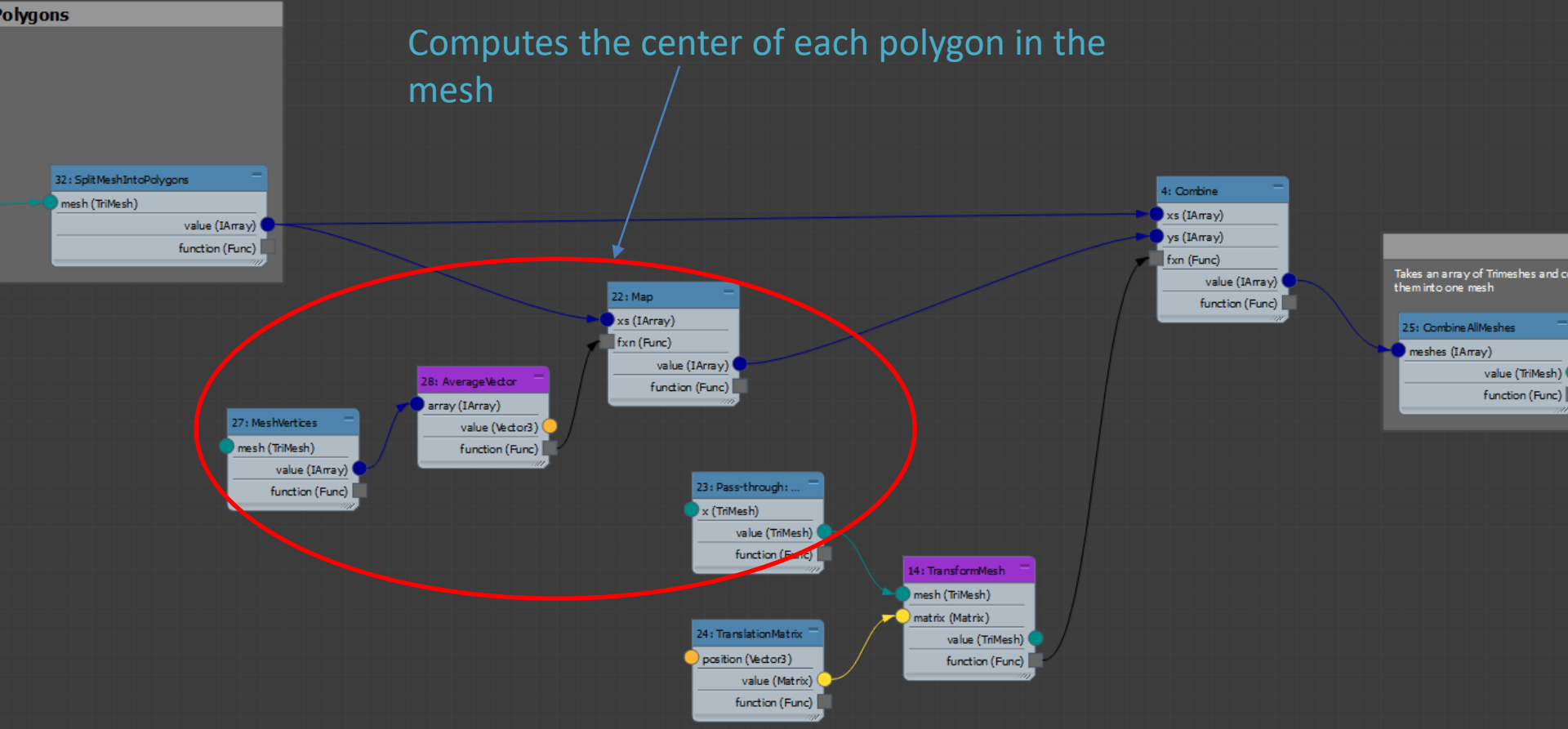
Face Displacement Tool

Transforming the control object node to the modifier's local space allows the control object to affect the mesh, as well as allowing that moving the modifier mesh will react to the position(transform) of the control object

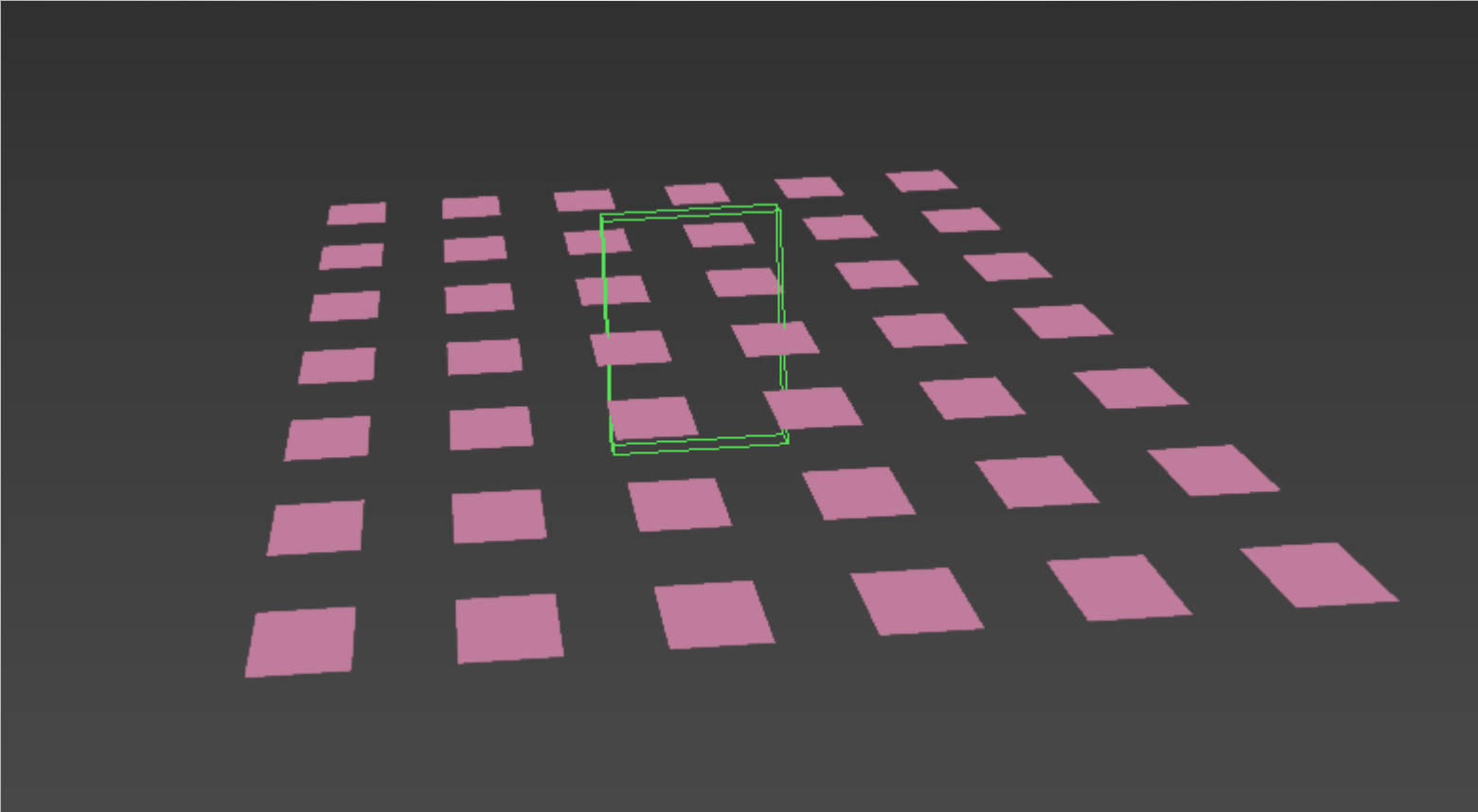
Try playing with the node connection, and see the changes in behavior

Tip: Holding down the alt key while moving an operator will remove it from a connection, control will inject an operator into a connection

Face Displacement Tool

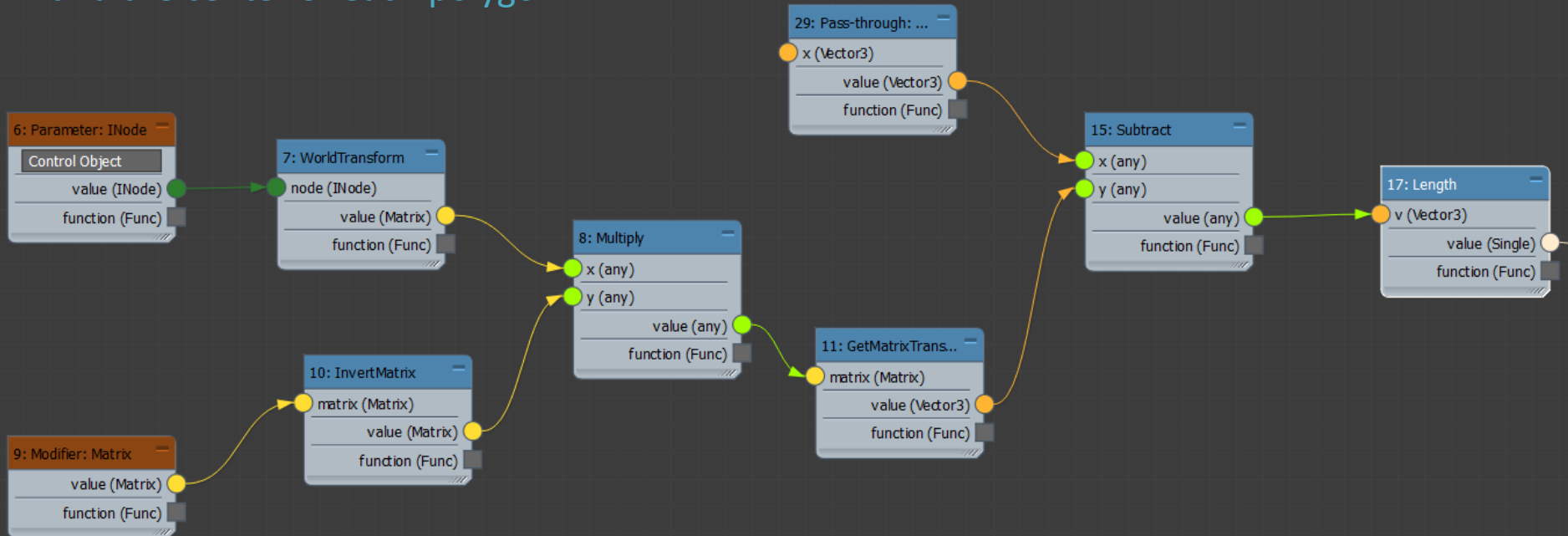


Face Displacement Tool



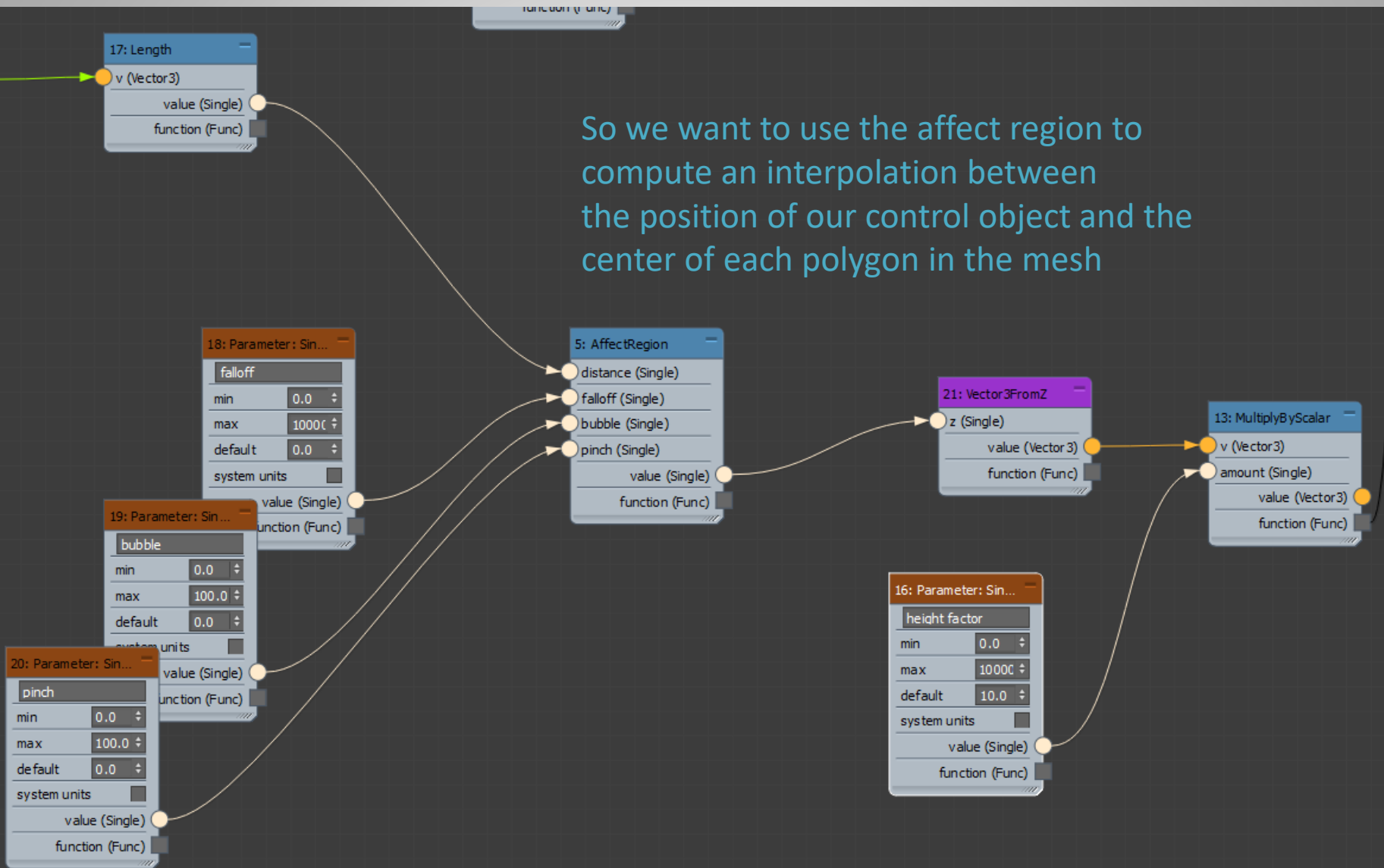
Face Displacement Tool

Here we are calculating the distance from the control object and the center of each polygon

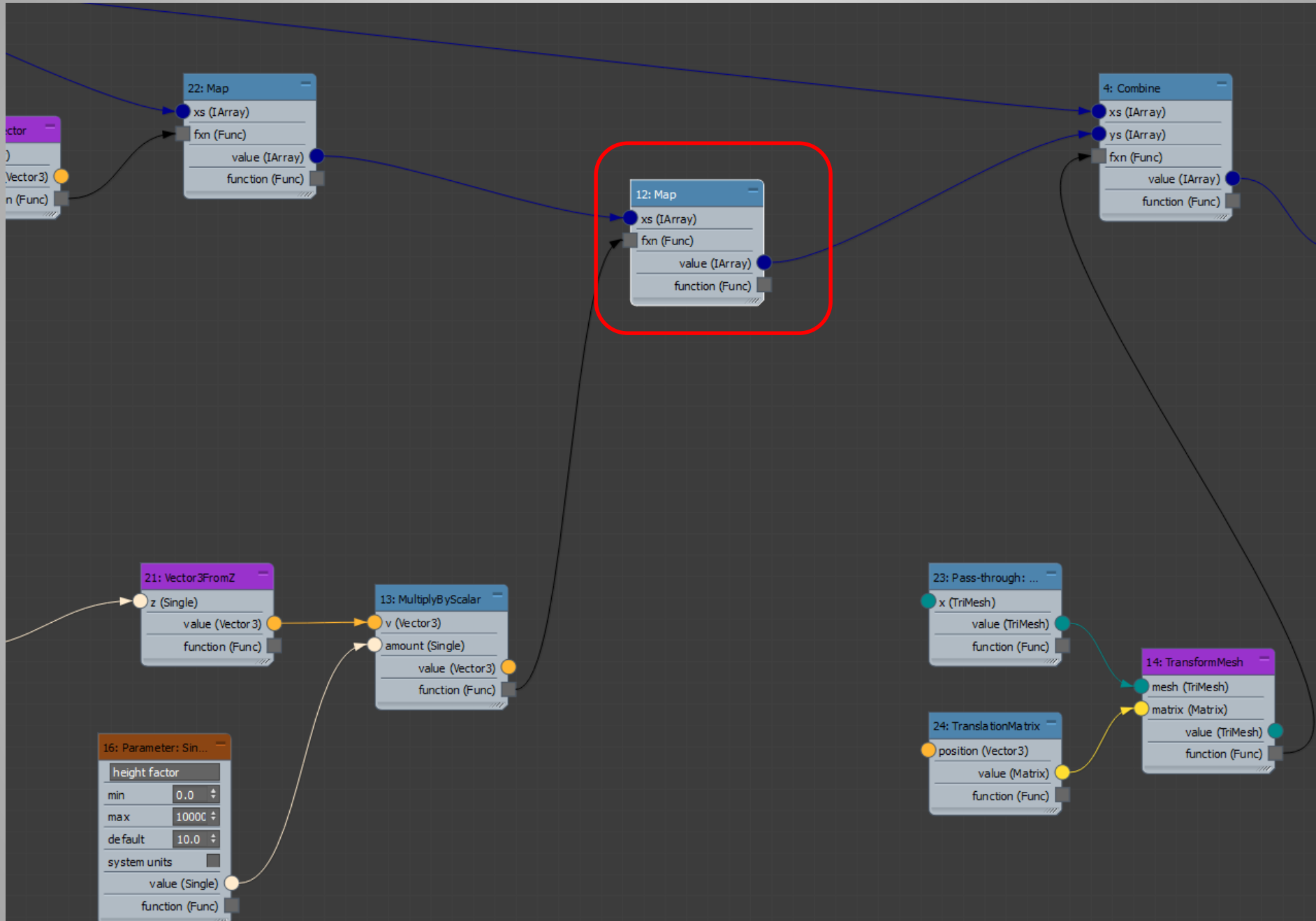


Face Displacement Tool

So we want to use the affect region to compute an interpolation between the position of our control object and the center of each polygon in the mesh



Face Displacement Tool



Face Displacement Tool