VideHoc: A Visualizer for Homogeneous Coordinates

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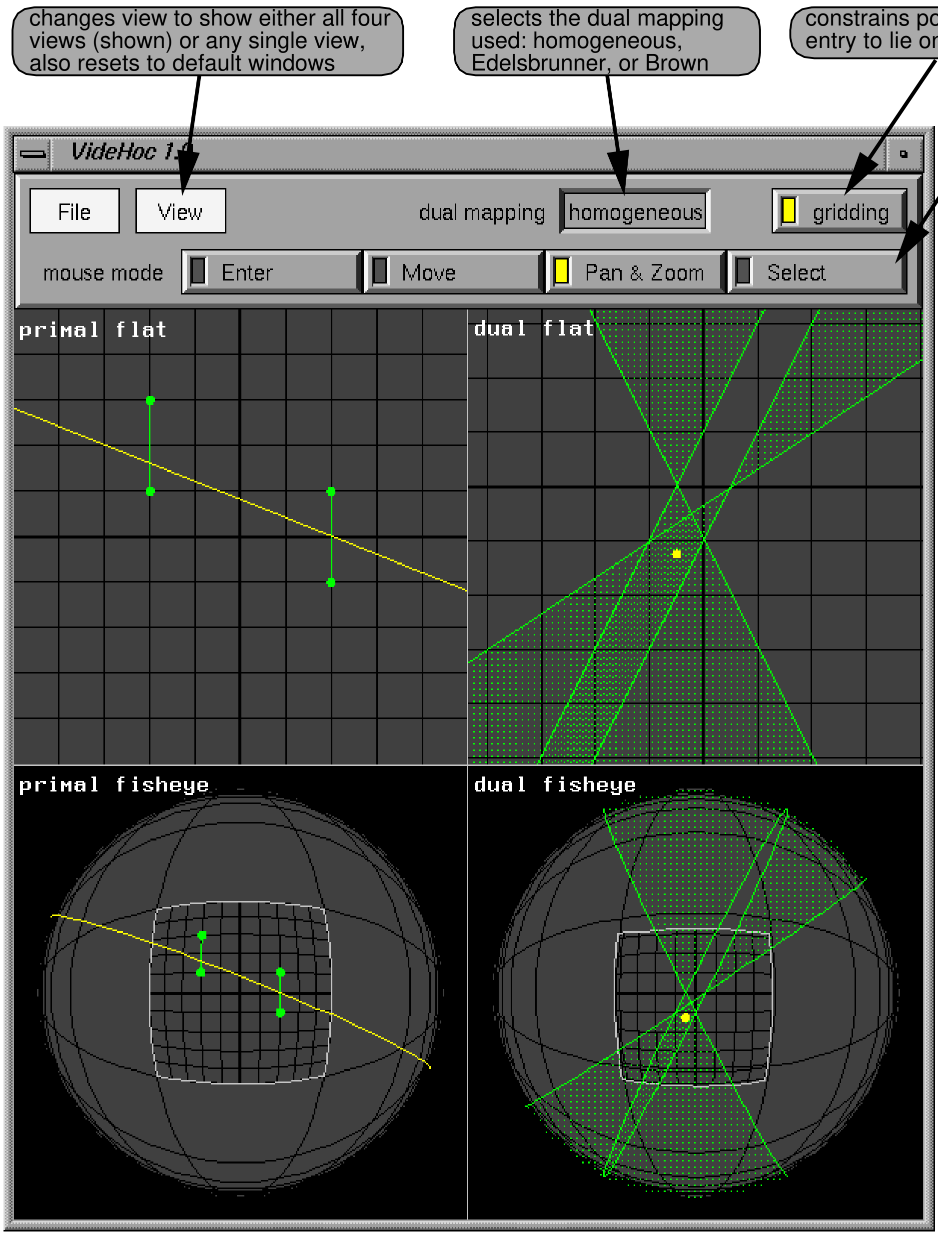
This is a tool to help students and researchers visualize two−dimensional constructions in homogeneous coordinates.



indicates function of left and center mouse buttons:

	Left	Center
Enter	enter points	enter lines
Move	select and move individual points	
Pan & Zoom	new midpoint	new window
Select	toggle object select	toggle area select

The right mouse button invokes a pop−up menu whose entries (usually) act on the selected objects:

select all
selects all objects.

deselect all
deselects all selected objects.

generate ...
will add a user−specified number of points randomly (with uniform distributions) in the current window.

sort ...
sorts the selected points in increasing or decreasing x or y or in the order in which they were selected and labels them with this order.

move
translates all selected points until next mouse click.

join
if two lines have been selected, constructs their intersection point. if two points have been selected, constructs the line that passes through them.

chain
if two lines have been selected, constructs their intersection wedge. if two points have been selected, constructs the (shorter) segment that passes through them.

convex hull
constructs the convex hull of all selected points.

delete
deletes all selected objects.

delete all
deletes all objects, selected or not.

All constructions are dynamic: they change as their defining points and lines change.