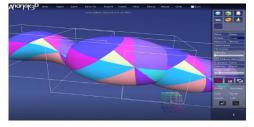# Anarkik3d Design V3.1. Tutorial 5:
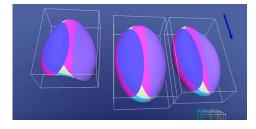
Scaling multiple objects uniformly and non-uniformly, insert and export, group and ungroup. (Goes with Video Tutorial5)
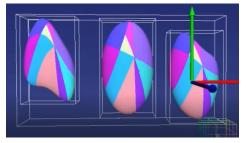
Complex organic colourful forms can be swiftly created using standard primitive shapes (i.e. sphere), tools (i.e. scale), 3D touch, plus movement in 3D, to easily and playfully explore and experiment.

1. In the top menu click on the 'open' button

2. In open window select the object saved in tutorial 4 i.e. booleaned sliced oval and click OK (or create your own new object!)

3. Select object and move to side (use x key to keep on same plane)

4. In the top menu click on 'insert', select another object and click OK (or create your own second object!)

5. Repeat 3. to move it from the centre and repeat 4. for a 3rd object (create your own)

6. Select all 3 objects by holding down Shift key while touching each object and clicking Falcon back button

7. Click on scale button in side menu (or use 'Q' key on keyboard)

8. With these objects selected, hold down centre button on Falcon handle/grasp and push/pull to **UNIFORMLY** scale objects. The objects will scale up and overlap each other as they scale around own centre points.

9. Next hold down 'Shift' key at same time as Falcon centre button and move grasp sideways, up/down, forward/back to dynamically and NON UNIFORMLY scale and change the forms freely along x, y and z axes

10. Still holding centre button on Falcon, switch from Shift to holding down z, then x and then y keys for more controlled form-changing along each axis.

11. Repeat and if wanted use 'Save as' to save all the objects in the working space.

12. To save different forms separately: select an object, click on 'Export' in the top menu, and, in the open window, give it a file name and click OK. (This exported object will open in the exact same spot from which it was saved.)

13. Select all 3 objects by holding down Shift key while touching each object and clicking Falcon back button OR use Ctrl +A

14. In side menu click on **GROUP**, move cursor into workspace and click. A bounding box will be created around all selected objects.

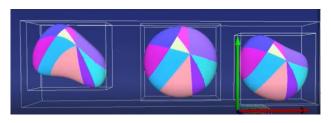15. Click on scale button in side menu (or use 'Q' key on keyboard)

16. Hold down centre button on Falcon handle/grasp and push/pull to **UNIFORMLY** scale objects. The objects will scale up separately from each other and will keep apart, contained in their own bounding boxes as they scale around the Group's centre point.

17. Next hold down 'Shift' key at same time as Falcon centre button and move grasp sideways, up/down, forward/back to dynamically and NON UNIFORMLY scale and change the forms freely along x, y and z axes. Again each objects will scale and reform separately.

18. Still holding centre button on Falcon, switch from Shift to holding down z, then x and then y keys for more controlled form changing along each axis.

19. To rotate the whole working space, hold down the Falcon right button and move the grasp in any and all directions to view models from all sides.

20. To ungroup, click on Ungroup in side menu, move cursor into working space and click Falcon centre button.

21. Whole scene can be saved. Individual objects can be Exported separately.