Better Randomizer Panikradius Add-On Manual

BRP is a Blender add-on for the randomization of transform data on the object level. Location, Rotation and Scale of objects can be randomized, much like the built-in function "Randomize Transform" of Blender - only now, it's even better!

Advantages:
- Parameters for randomization are always available in the UI
- Use snapping to constrain the effect
- Handy extra functionality
- a .blend-file with simple sci-fi kit bash parts to play around with

HOW TO INSTALL

1. Go to Edit Menu, select "Preferences" and click on the "Add-ons" tab on the left.
2. Click on the "Install" button at the top
3. Navigate to the BetterRandomizerPanikradius.zip file and click on "Install Add-on"
4. Activate the add-on by checking its checkbox in the Add-ons list (use the search bar at the top if the add-on is not visible at first).
5. IMPORTANT: go to the "Experimental" tab (also in the Preferences window) and activate "Undo Legacy"

HOW IT WORKS

- Select one or more objects, or a collection containing objects
- Activate attributes (and amount) to randomize in the add-on's n-panel
- Enjoy the fun of randomization!
- Discover shapes you never would have found otherwise!

IMPORTANT: Be aware that all input is "live" and gets updated in real time every time you change a parameter, including the seed value.

RANDOM SEED

This value slider is used to run through one distinct randomization procedure per value. If you use the same parameters in the attribute areas (see below), the same seed value will give you the same result.

ATTRIBUTE AREAS: LOCATION / ROTATION / SCALE

In these areas you can enter the values that are used for randomizing the transform(s) of the selected objects. You can drag the sliders with your mouse or simply click on one of them to enter a value via keyboard. Above the sliders you find the word "Range", which means that e.g. a value of 2 for location(x) puts the randomized object somewhere between -2 and 2 on the x-axis.
Below the sliders you find the snapping option with the corresponding step value. Activating the checkbox "Use [Attribute] Snapping" will round the random values to multiples of the step value.

CREATE DUPLICATES

To use this button you need to select one or more objects in your scene. Once you have a selection and you click the button, a new collection will be created; this collection will contain copies of your previously selected objects.
The option "Duplicate Linked" will create mesh instances of your selected objects; this way, changes of the meshes in edit mode will propagate to all mesh instances in the scene instantly.

CREATE CONNECTION OBJECT

The button "Create Connection Object" only works if you first selected one or more objects or collections in your scene. If you click the button, a new collection named "ConnectionObject" will be created, containing a new mesh object, also named "ConnectionObject". This new object is made of vertices which have been placed at the origin of each of the selected objects, plus one vertex in the location of the 3D-Cursor. Each vertex is connected to the "3D-Cursor vertex" by one edge. Also, the ConnectionObject has a Skin Modifier to give the connecting edges some volume.
Option "Use Hook Modifier":
A Hook Modifier for each "origin vertex" is added to the ConnectionObject; this way, the shape of the ConnectionObject follows the randomized objects.

FETCH OBJECT LOCATIONS

This button is only available if you first check the option "Individual Obj. Reference Points".

The default behaviour of the add-on is to use the 3D-Cursor as reference point for the randomization. If you want to randomize objects respecting the current locations of their individual origins then you first need to store these locations with the "Fetch Object Locations" button. Keep in mind that every time you change your selection of objects, you need to press this button again to store the locations, otherwise the add-on will give you a warning that the "old" location data can not be used anymore for the new selection of objects.

INS. KEYFR. AT: (INSERT KEYFRAME AT)

By pressing this button, every selected object gets keyframed at the position in the timeline that is shown in the panel right next to the button. The keyframe will be saving all three transform parameters (location, rotation, scale) per object. The use of the "Ins. Keyfr. at:" button is not dependent on any randomization; you can just keyframe any selected object(s) with it at any time.