

Script : See trajectory of objects and modify it.

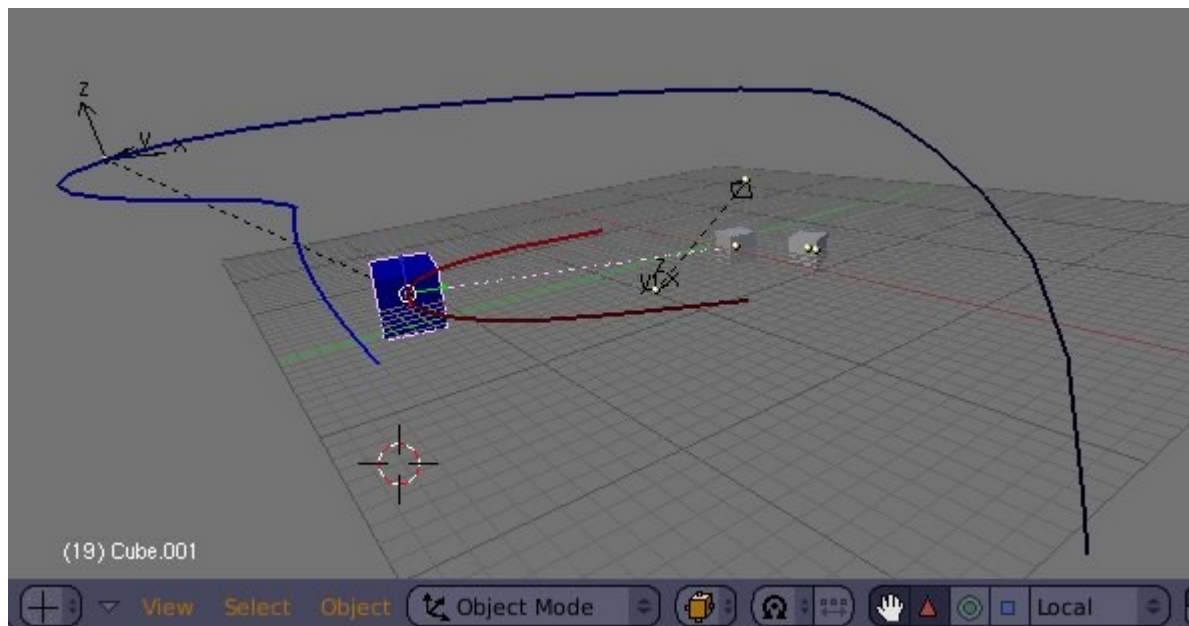
You can download the script [here \(for 2.37\)](#) (old version) or [here \(for 2.40\)](#)

Situation :

You have an animation on one or more objects.

What the script do?

- Show the trajectory of current selected object.
- An option : always show the trajectory of objects selected when you launch the script.
- When trajectory become red (that correspond to an IpoKey), you can modify it. When it's blue you can't modify trajectory unless you add a IpoKey (IKey).



How to use script :

1. Launch script with Alt+P (once the script is imported in Blender) or Put it in .blender/scripts/ folder and follow the instructions open it from the Scripts Window in animation section area (you can follow [this instructions](#))

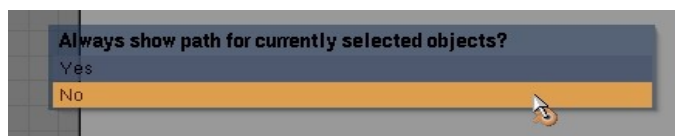
2. Script ask you if you want that currently selected object have always its trajectory shown.

If you select Yes :

Trajectory of currently selected objects will be always drawn in 3DView (in addition of active object trajectory).

If you select No :

The script will only draw trajectory of objects that you select (and don't draw it when object isn't selected).



3. Script ask you how many frames in the futur (origin at current frame) you want the trajectory represents.

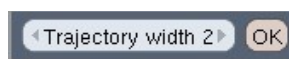


Then :



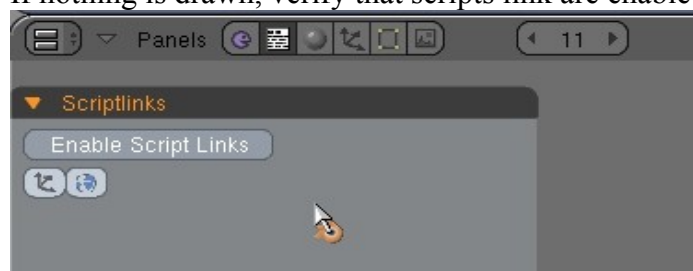
and how many in past :

4. Script ask you the width of trajectories drawn (in pixel):



(1 is very fine and 4 very large)

>> The script is configured, now if you select an object that already have an IPO, its trajectory will be drawn.
If nothing is drawn, verify that scripts link are enable :

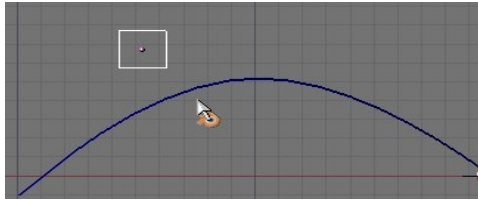


>> But this script allow to do another thing !!!

1. In normal mode trajectory is blue (most dark in pas and lighten in futur).

There is no keyframe : trajectory is blue

If you move your object, it doesn't change trajectory (you must insert a keyframe for be able to change trajectory or pass in AutoKeyFrame mode) :

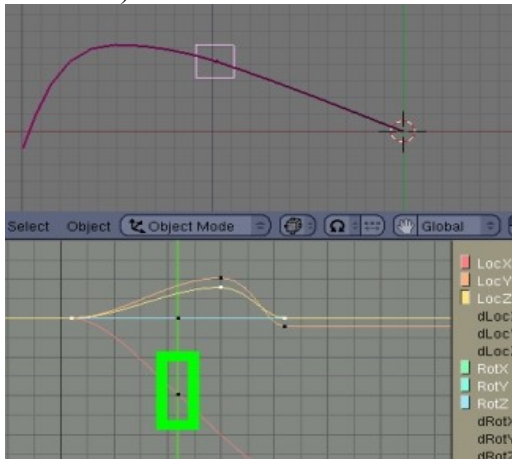


If you move object nothing happens

But if current frame is a keyframe, trajectory becomes red, and you can modify trajectory. Script automaticly update ipo's curves.

There is a keyframe : trajectory is red and if you move object, trajectory follow object.

If there is only a key frame for 1 of 3 curves of location, trajectory is between red and blue (more red if there is a keyframe for 2 of 3 curves locations).

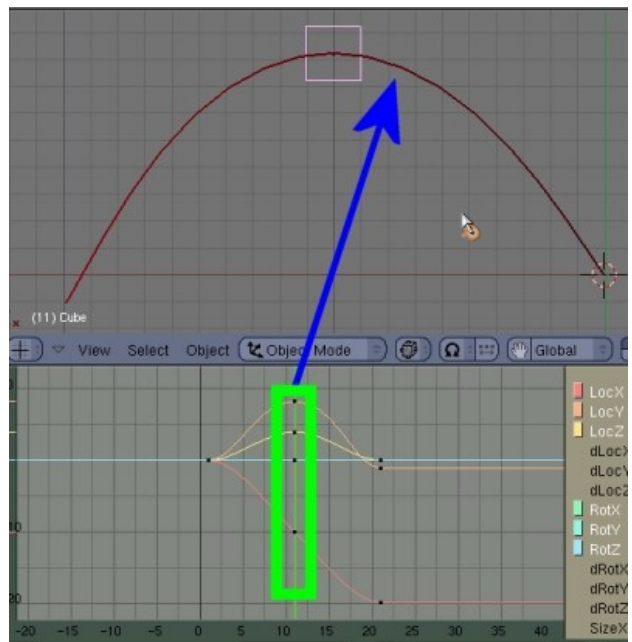
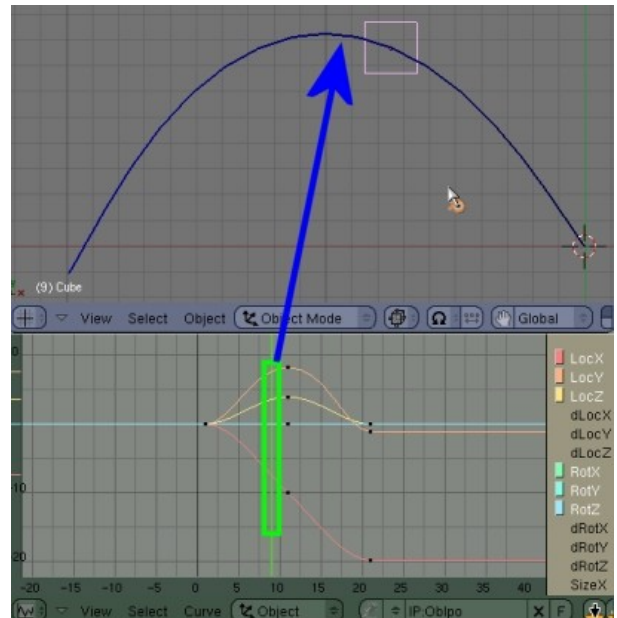


here if you move your object trajectory will follow only on X-axis

NOTE : If you want to modify trajectory when it is blue, just press I-Key >> loc.

The reason why script doesn't able to modify trajectory for each frame is that it would create too much keyframe and make trajectory difficult to modify.

So this is a solution of semi-autokeyframe.



Known problems :

1. Don't use the script if you use curves paths (in follow mode) or time Ipo.

It is not supported by the script and can kill your animation when it try to modify IPO.

Future plans :

- Enable curve paths supports.
- Enable time IPO support.
 - >> For both make a security to prevent from modify animation
- Made a version for 3DHandlers
- Add vertices on trajectory to modify it directly.

Version history (most recent in first):

- Enable usage of NewMap/OldMap options
- 2.40 compatibility.
- Enable parenting
- Enable to modify in real time if there is already an ipo (idea of Caronte)
- Trace trajectory
- Transform movement on path (idea of LOD), this script already exist and developped in another way : Mov2Path (see my scripts directory)

>> Many thanks to all that help and advise me for this script on Elysiun, Zoo-Logique & BlenderClan

For any problems or suggestion contact me : r3gis