THE PROBLEM:

The base head that I used to create my blendshapes off of had frozen geometry, which does not match our rig file, nor other blend shapes that were made. This caused the problem of the hero_head flying away when blendshapes were applied in our compiled blend shapes file, as the head was trying to match the movements applied.

THE SOLUTION:

- In order to fix this problem you need your **blendshapes** and the non-frozen hero_head file.
- Step One:
 - Open your **blendshapes** file and import the non-frozen **hero_head** geo.
- Step Two:
 - Duplicate the hero_head and name it hero_head_origin (this is for easy recognition).
- Step Three:
 - Move the **hero_head_origin** to x: 0, y: 0, z: 0
- Step Four:
 - In vertex mode, select three points on your **blendshape head**. These should be points that <u>HAVE NOT BEEN MOVED</u> from the original head (I used points on

the back of the head, knowing my FV blendshape did not move or alter these at all) and try to select points that are a bit spaced out.

- Step Five:
 - On the hero_head_origin, ALSO select three vertices. These points MUST be the <u>SAME</u> point that have been selected on the blendshape head. If they are not the <u>SAME POINTS</u> this method WILL NOT WORK.
- Step Six:
 - Once the same three points are selected on both the hero_head_origin and the blendshape head, go to: Modify > Snap Align Objects... > 3 points to 3 points. This will align your blendshape head perfectly to the hero head origin.
 - Make sure you <u>select the points on the blendshape head FIRST and THEN on</u> <u>the hero_head_origin</u>, so that the blendshape head is moving to the hero_head_origin.
- Step Seven:
 - Once all of your blendshape heads are lined up to the hero_head_origin, delete the hero_head_origin.
- Step Eight:

- Select all of your blendshape heads, and go to Modify > Freeze Tansformations.
 This will make it so that the origin of your blendshape heads match your hero_head.
- Step Nine:
 - If you have followed this properly, you can now apply your blendshapes to the hero_head as normal, selecting all of your blendshapes and then your hero_head and going to deform>blendshapes. When you activate your blendshapes, you will see now that the problem of your head flying away has disappeared.

This will also apply to blendshapes that have been zeroed out, meaning you no longer have to start from scratch on blendshapes that you have completed, due to an error in your workflow!