

Some notes to use the code

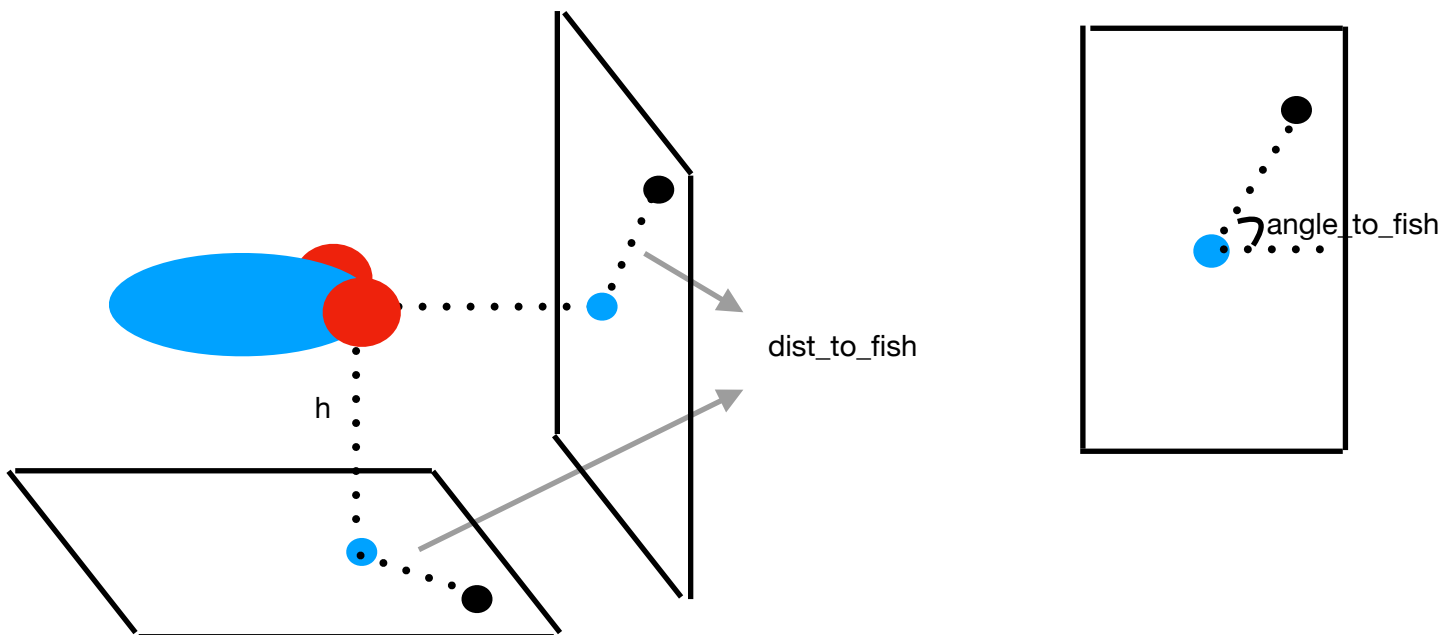
- For `move_dot_away` function: `move_dot_away("horizontal", camera, axes)`

- Choose the direction : **"horizontal"**
or **"vertical"**

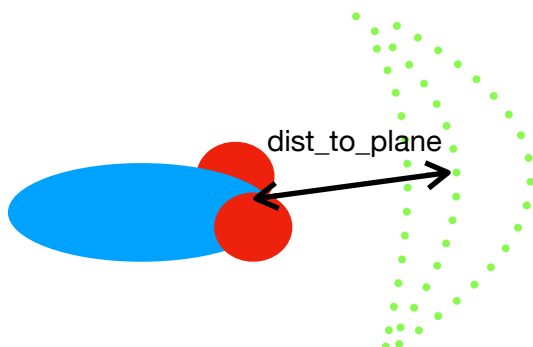
- Need to change `dist_to_fish` to a list of distance from fish to the dot.

```
rad_p = 50 #radius of the dot  
dist_to_fish = [150, 200, 300, 400, 500, 550] #distance from the first dot to the fish  
dist_to_plane = 200 #distance from the vertical (spherical) plane to the fish  
dist_btweve = 80 # distance between the two eyes
```

- In vertical case and horizontal case: `dist_to_fish` is the distance below:



- In spherical case: `dist_to_plane` is the distance from the fish's center between two eyes to the sphere surround it like below:



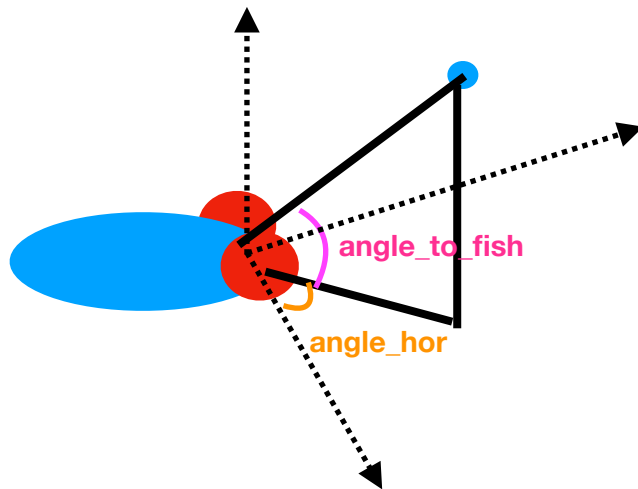
- In spherical case we don't consider the dot moves away from the fish but only consider the case the dot moves around the fish.

- For move_dot_around function:

```
move_dot_around_fish("spherical", camera, axes)
```

- In horizontal and vertical case:
 - change dist_to_fish to a constant number
 - use a list of different angle_to_fish
- In spherical case:

```
dist_to_fish = 150 #  
dist_to_plane = 250  
dist_bt看_eye = 80 #  
.. .. .. .. ..
```



- Depends on how we want the dot to move, in spherical case, we can keep the angle_to_fish constant and change angle_hor or keep angle_hor constant and change angle_to_fish

- About function to find image's coordinate:

```
find_new_coordinate_list(points,num_points, list_of_input, eye_rad, True)
```

USE coordinate with the retina's center at the origin or USE the usual xyz coordinate

- To try ellipse dot*, we change the values of minor_p and major_p:

```
minor_p = 30 #minor axis of the dot  
major_p = 60 #major axis of the dot
```

(*for spherical case, there is still only 1 case - a circle dot (in this case, the radius of the dot = major_p)