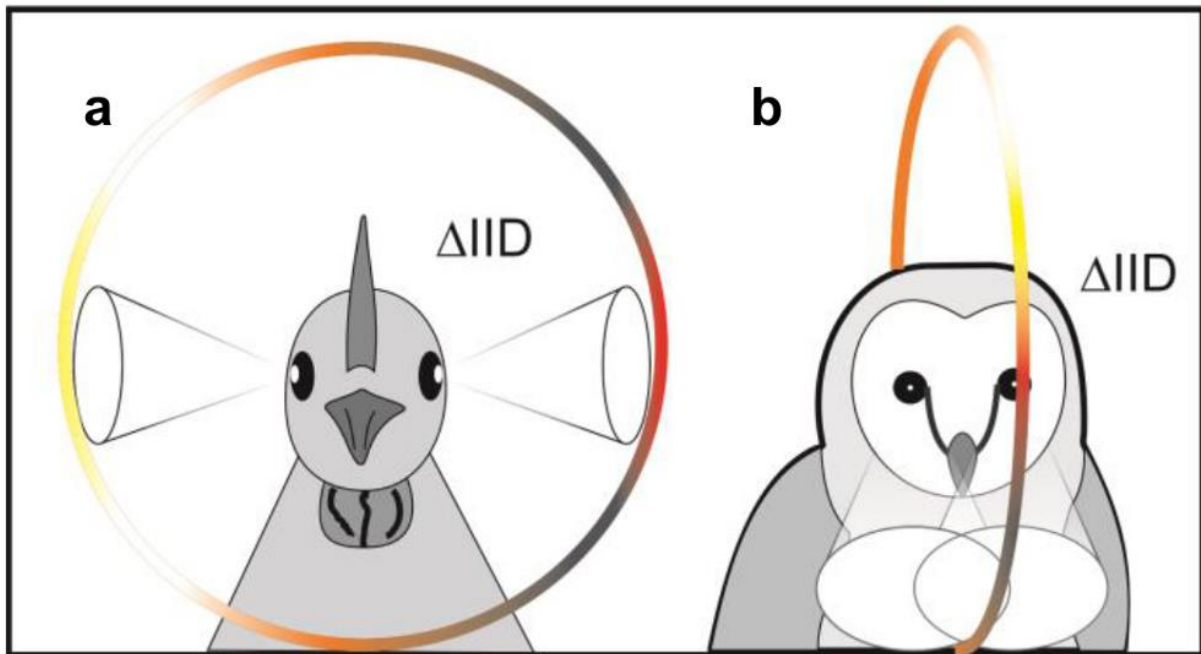


BIRD SENSES II.

Hearing

Birds do not have external ear, but their hearing is still quite sophisticated. The ear canal is covered with feathers, so it is not visible.

Birds are able to detect the source of the sound, i.e. the sound above, below or at the same level. **The slightly oval head shape plays a role** in this. Depending on where the sound waves hit the head, they may be reflected, absorbed or deflected. The head filters out sounds coming from different directions, some sound waves passing through the head trigger a reaction in the opposite ear. Thus birds with side-eyes that can see at an angle of almost 360° combine this ability with their special sense of hearing to defend themselves against predators.



Source: https://mediatum.ub.tum.de/1236383?show_id=1236393&dir=1236383

Hearing is particularly important for birds that hunt mainly at night. Their eyes - like those of humans - look ahead. In owls, the shape of the face and the arrangement of the feathers play an important role in the perception of sound. Their asymmetrically positioned ears greatly help to identify the source of the sound, which enables and facilitates night hunting. Some owl species have feathered ears, but these play no role in sound detection.



Barn Owl

Source: <https://pixabay.com/photos/barn-owl-owl-bird-beak-feathers-5451001/>



Long-eared owl - the ear-like feather fluffs have no role in hearing.

Source: <https://pixabay.com/photos/owl-long-eared-owl-asio-otus-raptor-3063893/>