49

The speaker rebuts the reading's argument by pointing out the lack of connection between intelligence and the ability to use start as navigation, the existence of another possible orientation for wales and that spy-hopping may not have anything to do with navigation.

First, the speaker begins by stating that wales are highly intelligent does not necessarily means that they have the ability to navigate themselves by stars, there is no clear connection between these two characteristics. He then further demonstrates by giving the example of some birds, especially ducks. Ducks have this ability but their intelligence is only about average. The fact that they can use stars as navigation does not seem to have any connection with their intelligence, but it is an instinct that they are born with. Therefore, this theory does not apply to wales either.

Second, the speaker points out that there can be explanation for whale’s ability to migrate in straight lines other than the guide of stars. The force orienting them, which is necessary if they migrate in straight lines, can be provided by the earth’s magnetic field. A structure called bio-magnetite is found in humpback whale’s brain. This substance generally make animals sensitive to earth’s magnetic field, hens the presence of this substance suggests that they are oriented by magnetic field while migration but not stars as the reading states.

Third, the speaker disagrees that whales spyhop to look at stars. Although spyhopping is rare among animals, there are still some sharks who possess this behavior. While these sharks actually do it to look for animals to hunt instead of to watching stars. What’s more, scientists have found that humpback whales always spyhop during the day when no star can be seen, so sharks can not be looking at stars then.

The speaker further demonstrates by giving the example of some birds, especially duck. Duck can use start as navigation, but their intelligence is only about average, which means this ability is only the instinct that they are born with, but not that they are smart enough to learn to do so.