Ornithological Approaches to Greek Mythology: The Case of the Shearwater

In the *Odyssey* 5.333-337, Ino-Leucothea rescues Odysseus from a terrifying storm while in the shape of an α i β via (*aithyia*) and gives him a magic veil so he can reach the land of the Phaeacians. But what bird is an *aithyia*, and, perhaps more importantly, can this information help us understand this passage of the *Odyssey* and other ancient texts where the bird appears?

Many attempts at identifying Ino-Leucothea's bird shape have been made. Lambin (2006) suggests that the name of *byne* that is occasionally (e.g. Lyc. *Al.* 757-761) applied to the goddess highlights her kourotrophic functions. In a more pragmatic way, Thompson (1895) suggests that the *aithyia* is a large gull such as *Larus marinus*. This identification is based on Aristotle (*H.A.* 7.542b) and Pliny (10.32) who report that the bird breeds in rocks by the sea in early spring. However, in a response to Thompson's identification of a different bird, the $\grave{e}p\omega\delta\iota{o}\zeta$ (*erôdios*) as a heron, Fowler stresses that this bird nests in burrows by the sea (Pliny 10.126-127) and therefore must be Scopoli's shearwater, *Puffinus kuhli*, now renamed *Calonectris diomedea*. The similarities between the *aithyia* and the *erôdios* prompted Thompson not only to reconsider his identification of the *erôdios* as a shearwater but also to argue that other bird names such as *aithyia, memnôn,* and *mergus* must also correspond to the shearwater.

Thompson (1918) comes to this conclusion by taking a closer look at the mythological information concerning these birds. He discusses the legends according to which the *memnôn* and *erôdios* were the metamorphosed companions of Memnon and Diomedes, respectively, and tended the tombs of their leaders by sprinkling them with water. In Arrian's *Periplus*, 21 the *aithyia* performs the same service at the tomb of Achilles. All these birds are thus connected with mourning, and six poems of the *Greek Anthology* (e.g. 7.212) mention the *aithyia* in epitaphs for drowned sailors or tombs near the sea. Thompson connects these poems with the haunting cry of

the shearwater, which sounds like ghastly human voices. Finally, both the *aithyia* and the *erôdios* are connected to Athena (*Etym.Magn. s.v. erôdios*). The goddess is worshipped as Athena Aithyia at a cliffside temple in Megara and the *erôdios* is her messenger to Odysseus and Diomedes in the *Iliad* 10. 274. Thompson thus demonstrates that while Greek and Latin bird names do not always have a one-to-one correspondence with modern bird taxonomy, they carried a specific cultural significance which can be uncovered by analyzing the stories in which they appear.

Based on this principle, our team is preparing a digital edition of Thompson's *Glossary of Greek Birds* which uses formal concept analysis (FCA) to explore the myths attached to the birds listed by Thompson. FCA derives concept hierarchies from collections of objects and their properties (Wolff 2003). We construct this analysis by systematically listing the characteristics of the birds mentioned in the source texts and the storylines in which they appear. In the case of the *aithyia*, this reveals a connection between Ino, Hyperippe, and Aesacus which was not explicit in Thompson's work. All three figures cast themselves into the sea after a tragedy and are compensated by the gods for their acceptance of death (see Versnel 1980 and Gallini 1963). Ino and Hyperippe are metamorphosed into *aithyiai* and Aesacus into a *mergus*. In view of these connections, perhaps the appearance of Ino-Leucothea as an *aithyia* in the *Odyssey* passage suggests the mercy and compensation Athena will later offer Odysseus? Furthermore, does Ino's bird shape, especially considering the association of shearwaters with mourning, suggest the fate of other mortals who have suffered death at sea but overcame the experience in another form?

We will review the results of our FCA analysis of the shearwater and discuss some of the challenges we encountered in view of our projected analysis of the entire *Glossary of Greek Birds*. In particular, we will consider the difficulty of choosing the criteria on which to compare

the stories in the absence of an automated process, which is made impossible by the multiple languages present in Thompson's work and the uneven quantities of text attached to each story or characteristic.

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