Vergil's Baby Bees

Georgics 4.197-209 have long perplexed readers and commentators. Despite the fact that Vergil has suggested that bees reproduce sexually in earlier passages (specifically, *Georgics* 4.139), here he writes that unlike other creatures, bees acquire offspring by locating them in fragrant flowers, squirreling them away in their mouths, and transporting them back to the hive to raise. This is not how honeybee hives are propagated.

Two immediate questions arise: (1) is there any logical, scientific rationale for thinking that bees might propagate a hive in this manner? and (2) is there any literary rationale that makes this a particularly compelling story at this moment in Vergil's text?

The scientific knowledge that the ancients had about honeybee reproduction was limited. Aristotle offers that some (oi $\mu \hat{\epsilon} \nu$) believe bee offspring are acquired from flowers, while others (oi $\delta \hat{\epsilon}$) think that they repopulate via sexual reproduction (*HA* 5.21). Pliny asserts that most people (*plures*) believe that bee offspring are formed in the mouth and then deposited in the hive to mature, though some (*aliqui*) subscribe to sexual reproduction (*HN* 11.16).

Observation of egg-laying within the hive was difficult until recently. Yet, Aristotle's and Pliny's descriptions likely come from observed behavior. Eggs of approximately 1.5 mm in length are deposited at the bottom of a cell; within three days they have changed into larvae that are fed by young nurse bees. These bees secrete "brood food," which is deposited right at the mouth of the larva. As brood is typically raised at the bottom of a hive (near the opening), it is likely that ancient scientists and farmers could see the nurse bees at work, and that the "logical" conclusion was that they were depositing eggs there by mouth.

While Aristotle, Varro, and Pliny state that there is disagreement about how brood is generated, Vergil here asserts the gathering of offspring by mouth is unique to bees, and the sole

possible method of propagation. Given Vergil's engagement with other agricultural writings, he likely knew that there was disagreement about how bees reproduce. So, why choose at this point in the text to offer only one alternative, and for it to be rather fantastical?

Thibodeau asserts that Vergil wants to inspire wonder at the bees, but does not prescribe what we are to do with that sense of awe (2011: 142). Context may offer some help. In *Georgics* 4.148-196 Vergil describes other unique qualities of bees: they raise their offspring collectively, share housing in their "city," live under great laws, recognize their fatherland (*patriam*) and household gods (*penatis*), and store up food for the common good (153-157). In this context of the ideal society, in which everything operates as it should, and all work with the greatest industry, this unprecedented manner of reproduction is merely another wonder, suggesting a divine or golden-age kind of self-sufficiency granted to the bees.

Yet at 4.201 Vergil writes that the bees supply their *regem parvosque Quirites* from the offspring gathered from flowers. Are these bees Vergil's Romans? Some scholars have been loath to connect these creatures with the Roman citizenry (Thomas 1988:184), though the use of *Quirites* makes it is hard not to ponder an allegorical reading. Yet, the description at 4.153-157 does not perfectly mirror Rome. If the bees are not Romans, might Vergil here, as elsewhere in *Georgics* 4, be revealing how distant his Rome is from this wondrous other world? Still, this does not feel like a grim or didactic moment.

There is, perhaps, an argument for believing that Vergil intended the reader's mind to juxtapose the hive with the Roman city by his introduction of *Quirites*, though neither as an allegory nor a severe contrast. Vergil concludes this section stating that although the bees have a short life, an immortal race (*genus immortale*, 208) remains; a fortunate hive (*domus*) will endure for many years and grandfathers will succeed grandfathers (*avi numerantur avorum*, 209). This

appears to be a direct contradiction to what has just preceded it: offspring are not begotten; grandfathers do not exist. The hive is not immortal but ever new, furnished with new blood and brood in a quasi-magical fashion. Yet, Rome itself, and the empire more broadly, was at that time, and had been for generations, a place of continual renewal, and mythologically a city born of immigrants. Perhaps Vergil should not be chastised for choosing this etiology for honeybee reproduction: there is both a biological rationale for it, and also, more importantly, this narrative allows him to create for his reader an imaginative space in which Roman methods of populating the city are read as wholesome, positive and regenerative, as well as offering continuity and stability.

Bibliography

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