

Soul, Intellect, and Biology in Aristotle's *De Generatione Animalium*  
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Aristotle's doctrine in the *De Generatione Animalium* that the whole human soul—irrational, sensitive, and intellectual—is present potentially in the father's sperm has caused a great deal of controversy among recent scholars. How can the soul exist even potentially in a body that is not equipped with the organs necessary for the soul to act? What would such a potentiality entail? The problem is especially acute in the case of the intellect, which Aristotle says is immortal and eternal (*De Anima* III.5) and arises from outside (*thyrathen*, *De Gen. An.* II.3). I will argue that Aristotle has developed a broader hierarchy of meanings for the term "potential" than usually believed as well as a specific meaning of *thyrathen* which allows him to establish a method for claiming that the soul in all its functions, including the intellect, pre-exists in the father and is passed along through his sperm to the embryo.

Earlier scholars, such as Zeller and Brentano, thought that the intellect, at least, existed outside the sperm and was introduced into it externally. As such it could not be inherited from the father. This interpretation contradicts Aristotle's statement that all the soul is passed from the father through the sperm to the embryo. Moraux, Lefèvre, and Balme, (among others) try in various ways to smooth over the apparent contradiction between an intellect that comes from outside and also is inherited from the father. Preus argues that Aristotle is "purposely ambiguous;" Charlton resorts to altering the text to explain away Aristotle's statement that the intellect comes from outside.

A solution to the dilemma requires an interpretation of *thyrathen* and of "potential" that would allow Aristotle to be saying that the soul is potential and the intellect is both external and potential. A careful examination of *De Gen. An.* II.3 shows that the Greek adverb *thyrathen* has a specific meaning in this chapter: separate from and hence unassociated with body. The intellect, unlike sense perception or nutrition, is the actuality of no body. The meaning of "potential" is also to be found in this work. In the *De Anima*, Aristotle argues that the soul is the first entelechy of a natural body fitted with appropriate organs. Thus soul is an actuality that it is not actually functioning, similar to an adult who has learned Greek grammar but is not using that knowledge at present. The soul present in the sperm cannot be a first entelechy since the sperm is not the right sort of body to allow the soul to actualize. It cannot, however, be a mere potentiality either, as when a child is said to know Greek grammar potentially before it has studied Greek. The soul is functional—or would be—if it had the correct organs through which to actualize. In the *De Anima*, as elsewhere, Aristotle presents a threefold view of the motion from potentiality to actuality: pure potentiality, first entelechy, and full actualization. In the *De Gen. An.* II.2, in speaking of the growth and development of the embryo, Aristotle adds that between pure potentiality and first entelechy there are different degrees. Thus, the nutritive capacity in the fetus is closer to first entelechy than either the sensitive or intellectual simply because all it needs to be able to actualize is the presence of a fetal heart whereas sensation will not arise until birth and intellectual activity even later. This expansion of the meaning of "potentiality" allowed Aristotle to claim that the soul exists potentially in the sperm as well; when coupled with a precise definition of *thyrathen*, it also allowed him to claim that the intellect comes from outside yet resides in the sperm.