Hypothetical and Simple Necessity in Aristotle's Physics II.9

Aristotle discusses hypothetical and simple necessity in Physics II.9. In order to understand what he means by hypothetical and simple necessity (199b34-35), I examine the wall example (200a1-5) and his comment on it (200a5-15), while considering the contrast between the two types of necessity. The contrast between hypothetical and simple necessity has been interpreted by scholars in various ways: (H1) 'The coming to be of the wall necessitates certain conditions' and (S1) 'Certain conditions necessitate the coming to be of the wall' (Ross 1936); (H2) 'The presence of the stones, the earth, and the sticks is necessary if the wall is to come to be' and (S2) 'The presence of the stones, etc. is simply necessary' (Charles 1991); (H3) 'The hardness of iron is necessary if a hammer is to come to be' and (S3) 'The hardness of iron is necessary in itself, regardless of the goal' (Irwin 1990). While showing that these views are misguided, I argue that the contrast which Aristotle has in mind lies between (H4) 'The necessary nature that the stones, the earth, and the sticks as the material causes have causes the wall to come to be on the hypothesis of the goal of sheltering and guarding certain things' and (S4) 'The necessary nature that the stones, etc. have causes the wall to come to be without the goal hypothesized'. So understood, the opposed directions of the causation are not contrasted in the text. They are both forward-looking if the direction in which (e.g.) the hardness which iron as the material cause

has *causes* a saw to come to be is forward-looking. (H4) and (S4) are distinguished rather by *the presence and absence* of the hypothesized goal. Aristotle and his opponents, whose view is explained in the wall example, differ over how necessary nature causes the wall to come to be. In my view, (H4) corresponds to the first, and (S4) to the second, alternative of the disjunctive question raised at the beginning of *Physics* II.9, and Aristotle accepts the first, while rejecting the second, of the two disjuncts of the question.

In what way is (S4) described in the wall example, and why does Aristotle think of (S4) as problematic? In outline, the problem with (S4) which is illustrated in the wall example is this: the stones, the earth, and the sticks have various necessary features and properties. Some of these are relevant to the goal hypothesized, others are not. If one does not hypothesize the relevant goal, that of sheltering and guarding things, any natural property may be said to cause the wall as a *result* (not as the goal) to come to be, so that the coming to be of the wall can be explained in terms of the heaviness of the stones and the lightness of the sticks. I argue that a close examination of simple necessity in the wall example and of Aristotle's comment on it reveals that, in his view, the nature of the stones, etc. *as the material cause* should be understood in relation to the final cause. The material cause and the final cause work in tandem.

Biblio graphy

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