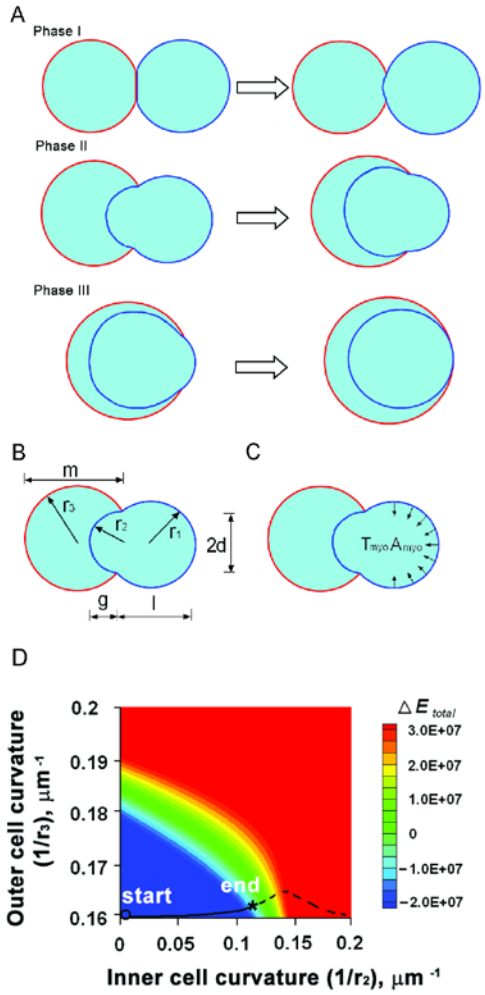

Figure S4

Supplementary information, Figure S4 Geometry evolution during entosis. Related to Figure 4.

(A) The three phases of the cell geometry during entosis: phase I, symmetry breaking; phase II, engulfment; and phase III, completion.

(B) Geometric parameters in the physical model of entosis.

(C) Myosin II contractility in the inner cell and the effective area

$$A_{myo} \sim \pi r_1^2$$

(D) Energy landscape of entosis for the late symmetry breaking case (Fig. 4B). Here the contractility of myosin II is only 1% of that in Fig. 4. In this case, the cell starts along the path denoted by the solid black line but halts at the star, which represents the ending position of the process. The solid line represents the path along which the entosis can proceed spontaneously, whereas the dotted line is a hypothetical path where entosis could proceed with additional driving force. We note that myosin contractility much above 1% was sufficient to drive the process in the model. However, the model was optimized for entosis, whereas real cells must integrate many other inputs simultaneously so that such additional driving forces could be experienced by live cells.