1

To grow animal, smart, the membranes of eucaryotic cells rim, twice, the coded library of the nucleus, tangle

then fuse to the gaudy network of sacs of the endoplasmic reticulum. Pinched off subcellular organelles empower cells

with the know-how to reject transplants, wrap a myelin sheath around a neuron, see red, and then, see yellow. Still better

microscopes make out more partitions. In the emerging inner texture, freedom, to change, is built from lipid-tailored

confinements, warm prisons where enzyme brews gel. Ways in and out are ingenious: shaped pores, embrasures, and this chemical

escalator called active transport. Fluid, mosaic, the membranes' holed sequestering works.

2

In 1655 Juana Inés de Asbaje begged her mother to dress her as a boy, so that she could study at the University

of Mexico. At the court of the viceroy she astounded forty professors with her mathematics and Latin odes. But it was not

a time for learned women in Mexico, so Juana entered the convent of San Jeronimo; within, watched two girls spinning a top, and

from what she called her black inclination for wisdom, had flour sprinkled, so that as the top danced out its loss of momentum one might see its spiral trace, and not a circle. Juana mixed earths, and in a library of 4000 volumes wrote theology and love

poems. Sor Juana Inés de la Cruz, shutting herself in the cell where knowing is permitted.