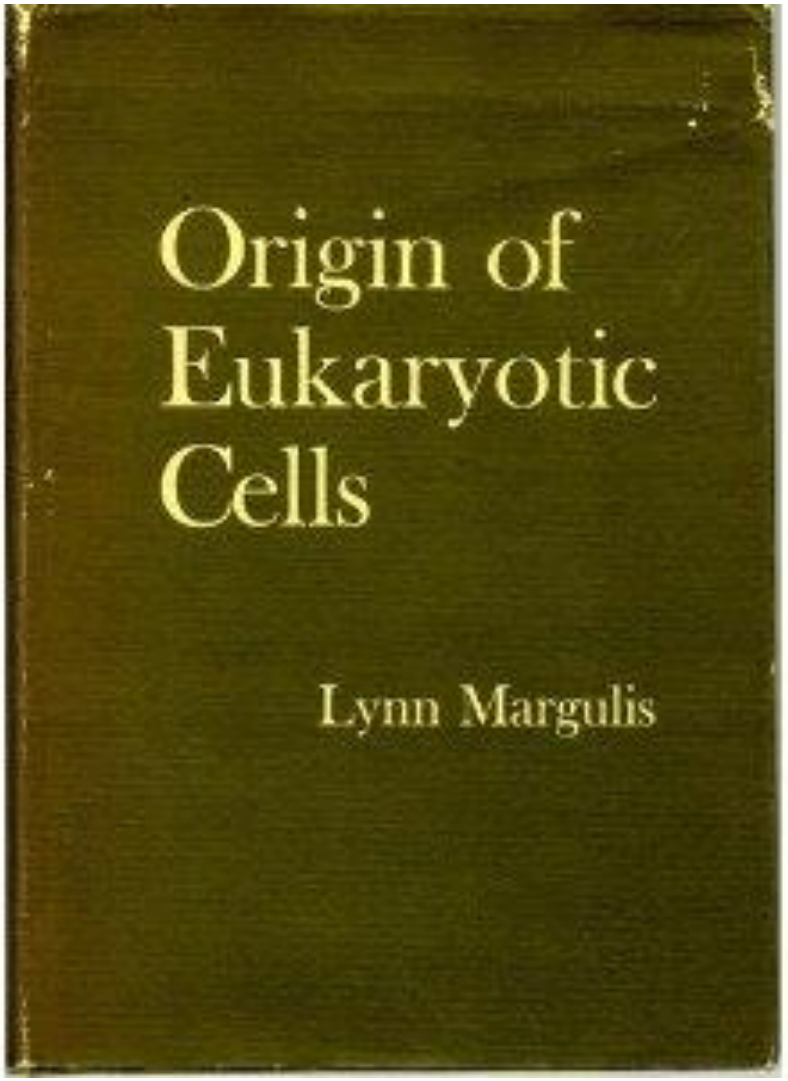
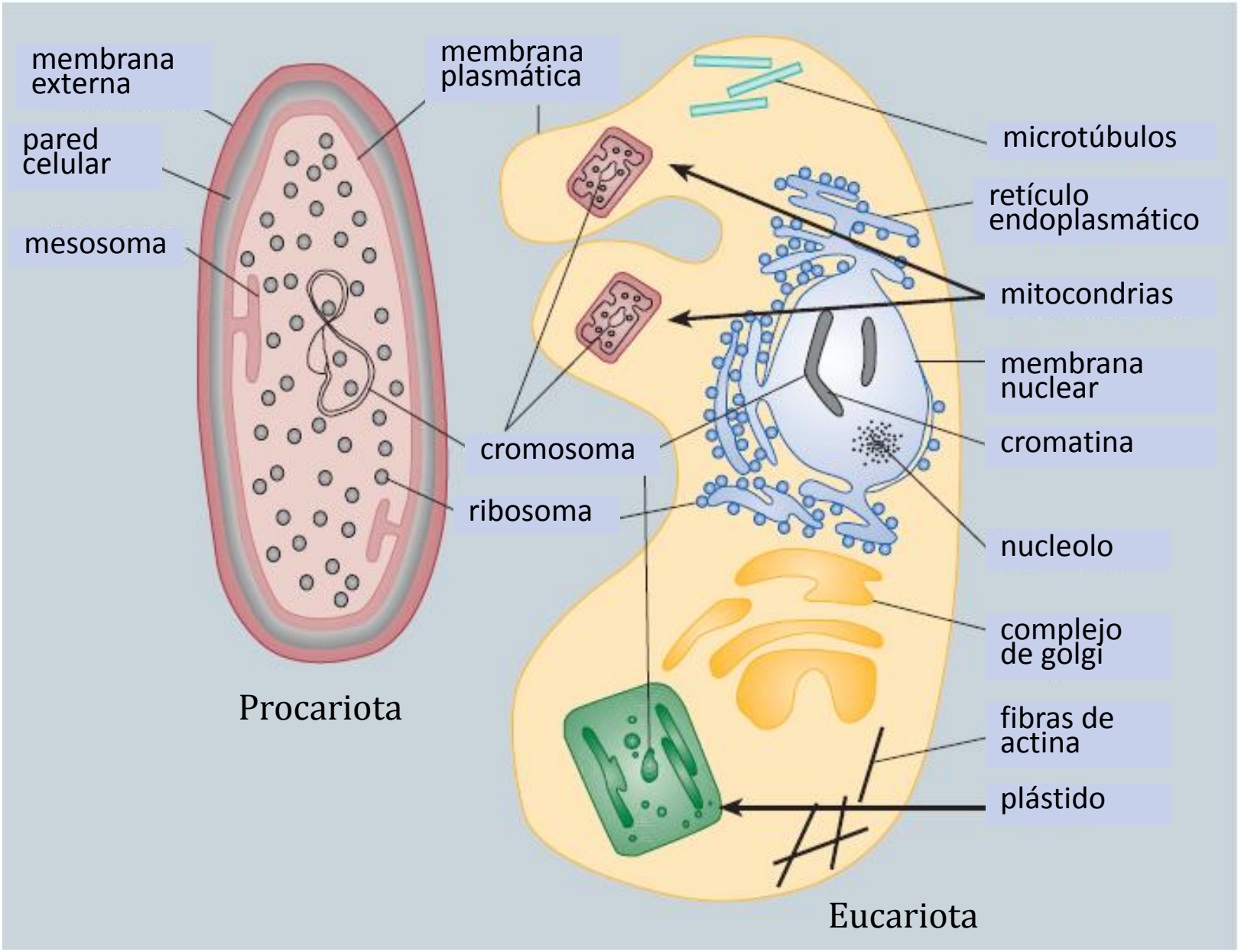
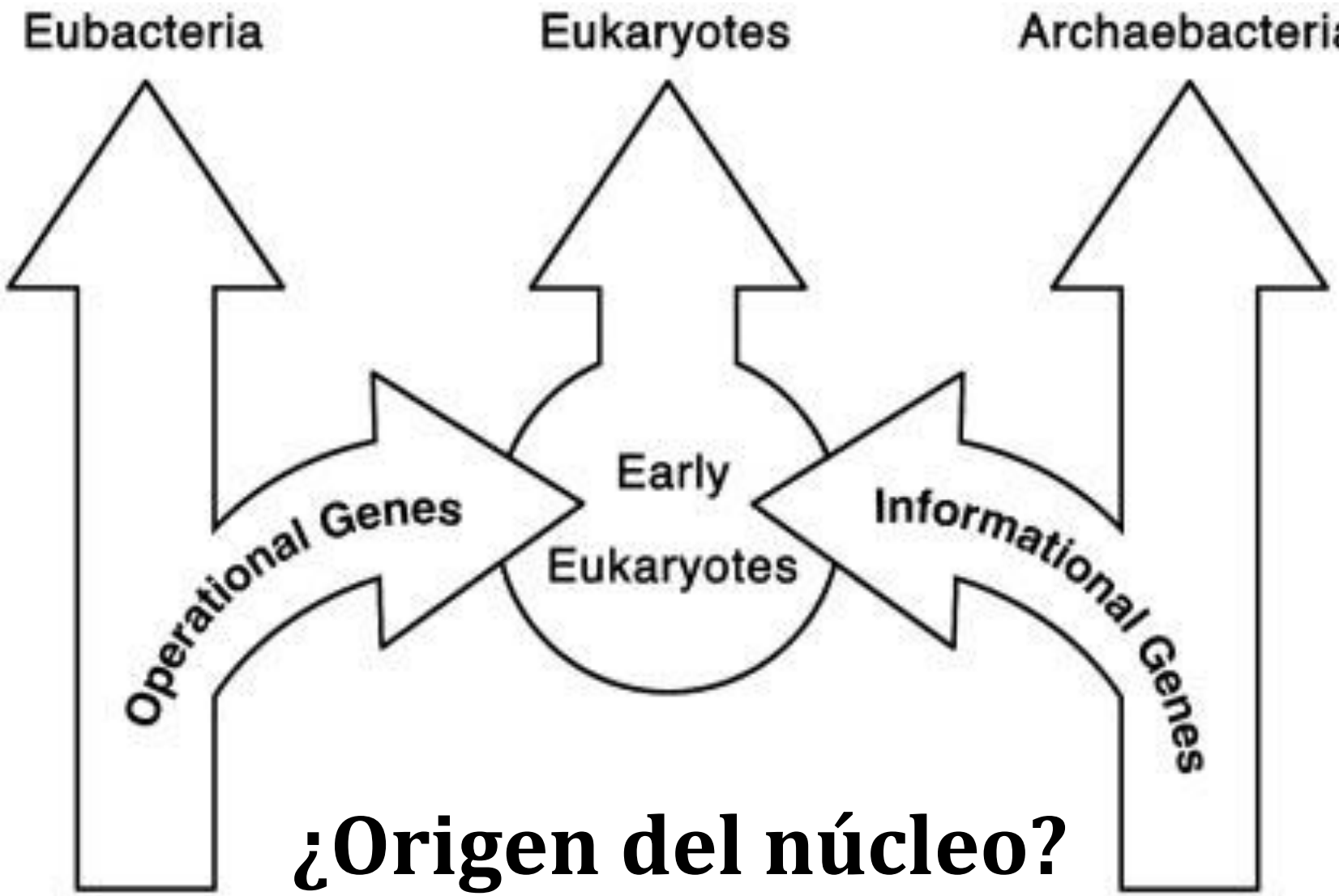
Teoría endosimbiótica



Margulis, L. 1970. *Origin of Eukaryotic Cells*. Yale University Press, New Haven

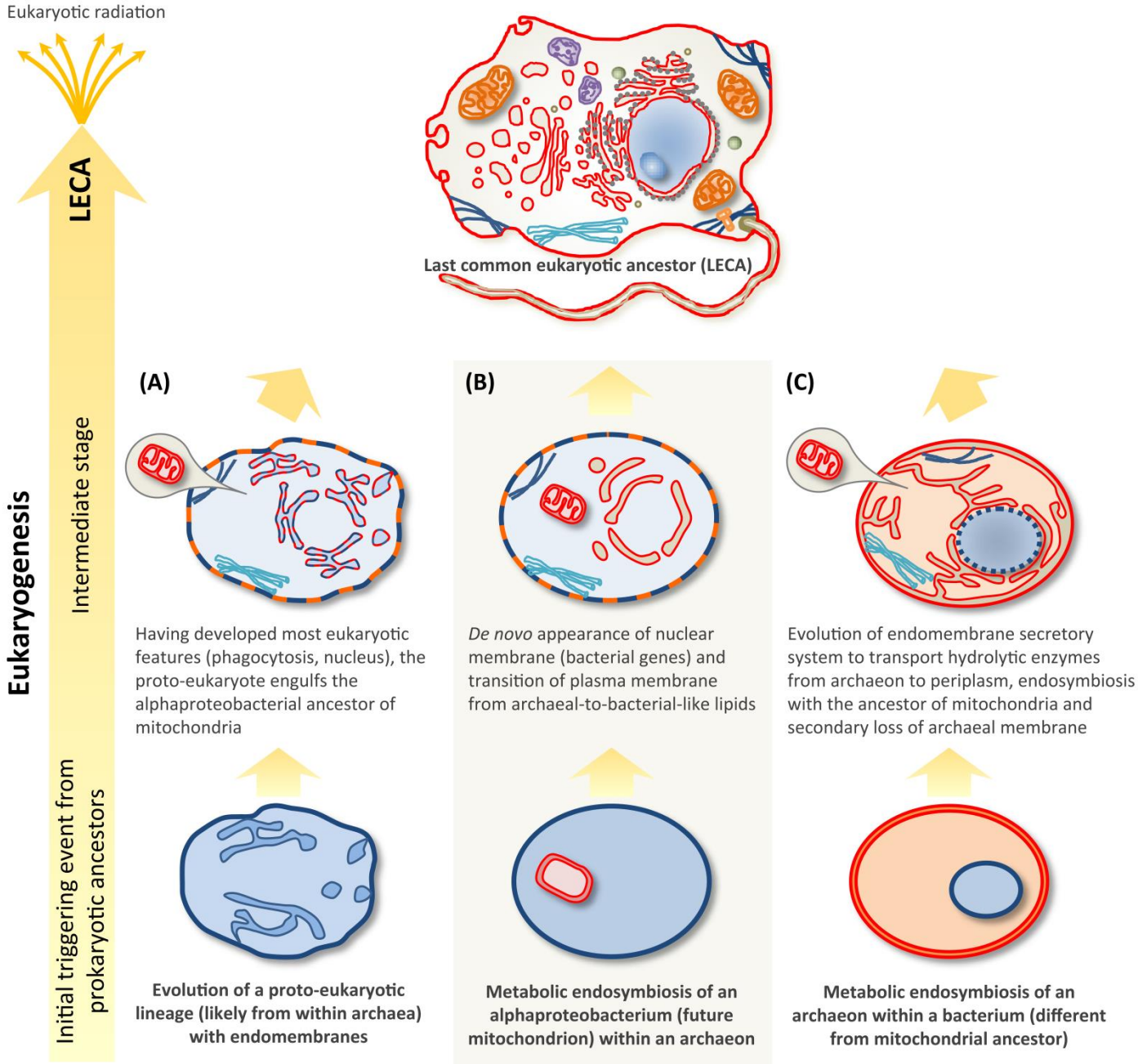

membrana externa
membrana plasmática
pared celular
mesosoma
cromosoma
ribosoma
Procariota
microtúbulos
retículo endoplasmático
mitocondrias
membrana nuclear
cromatina
nucleolo
complejo de golgi
fibras de actina
plástido
Eucariota



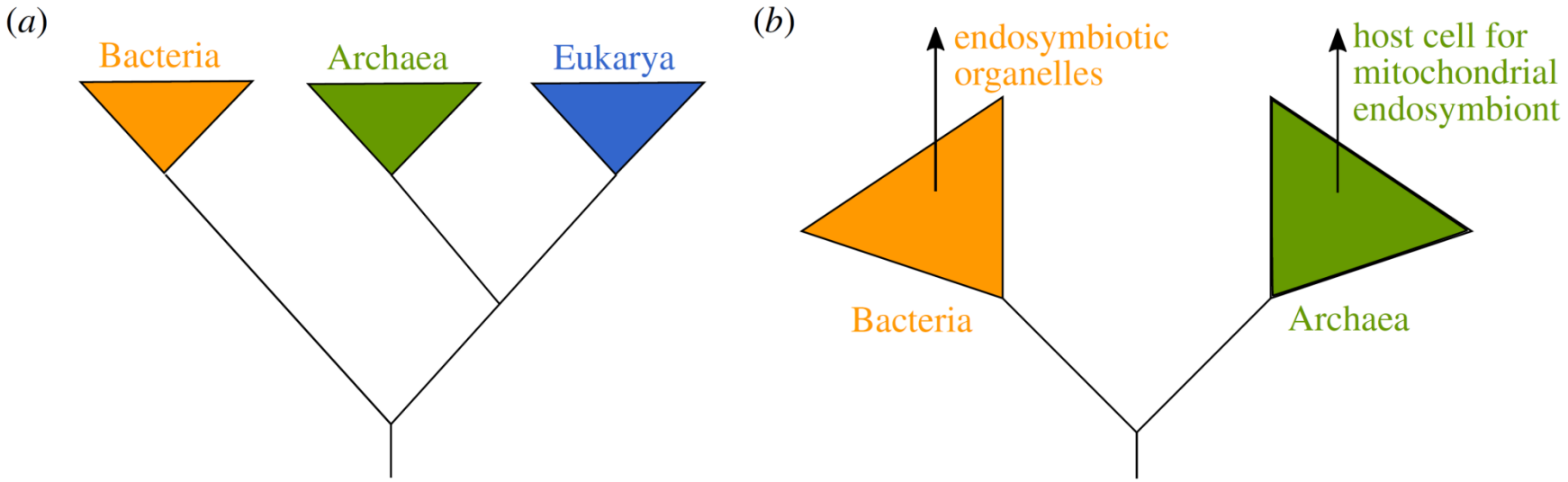
¿Origen del núcleo?

Simonson et al. 2005

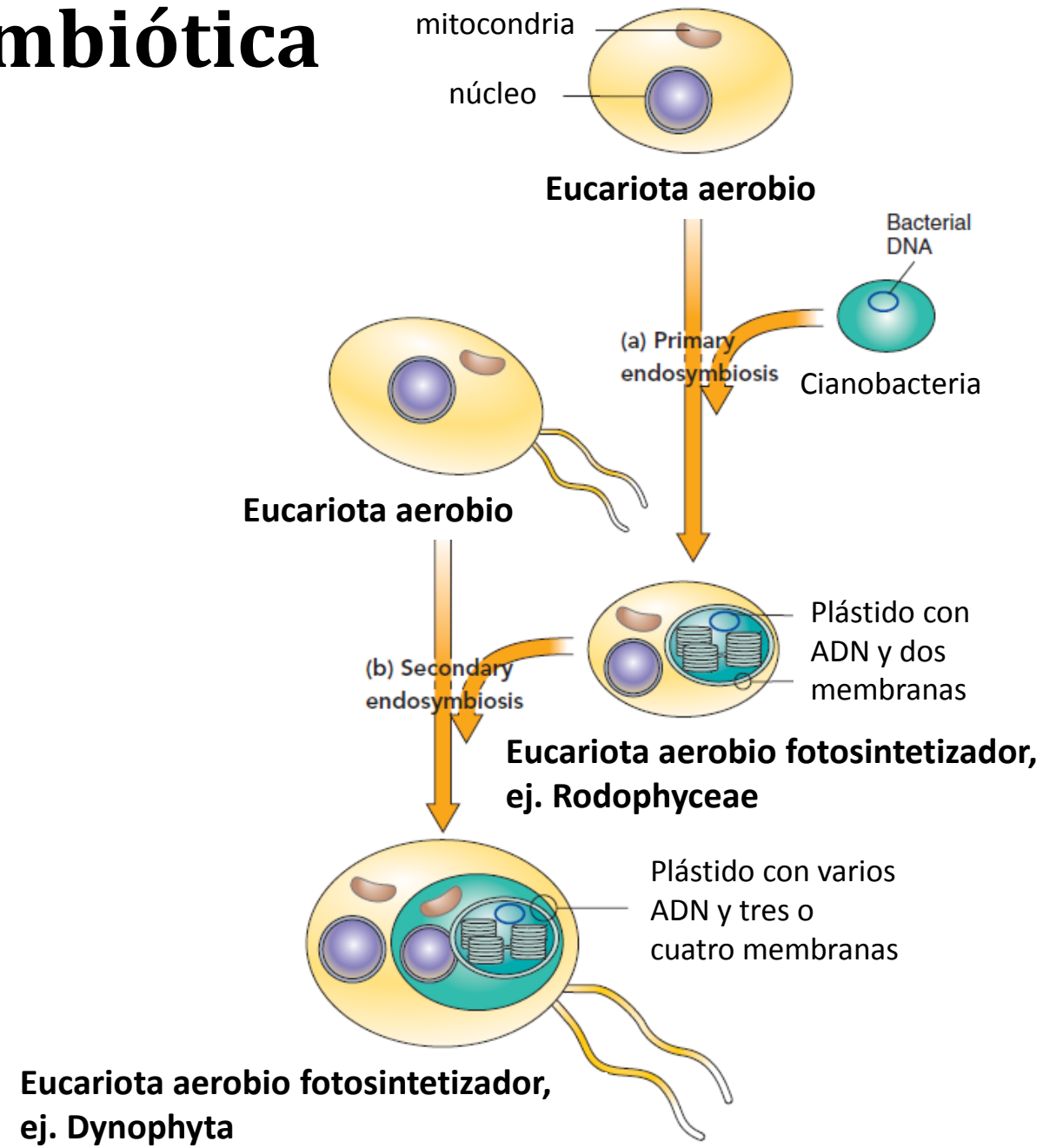
Lopez-García & Moreira 2015



Hipótesis en competencia

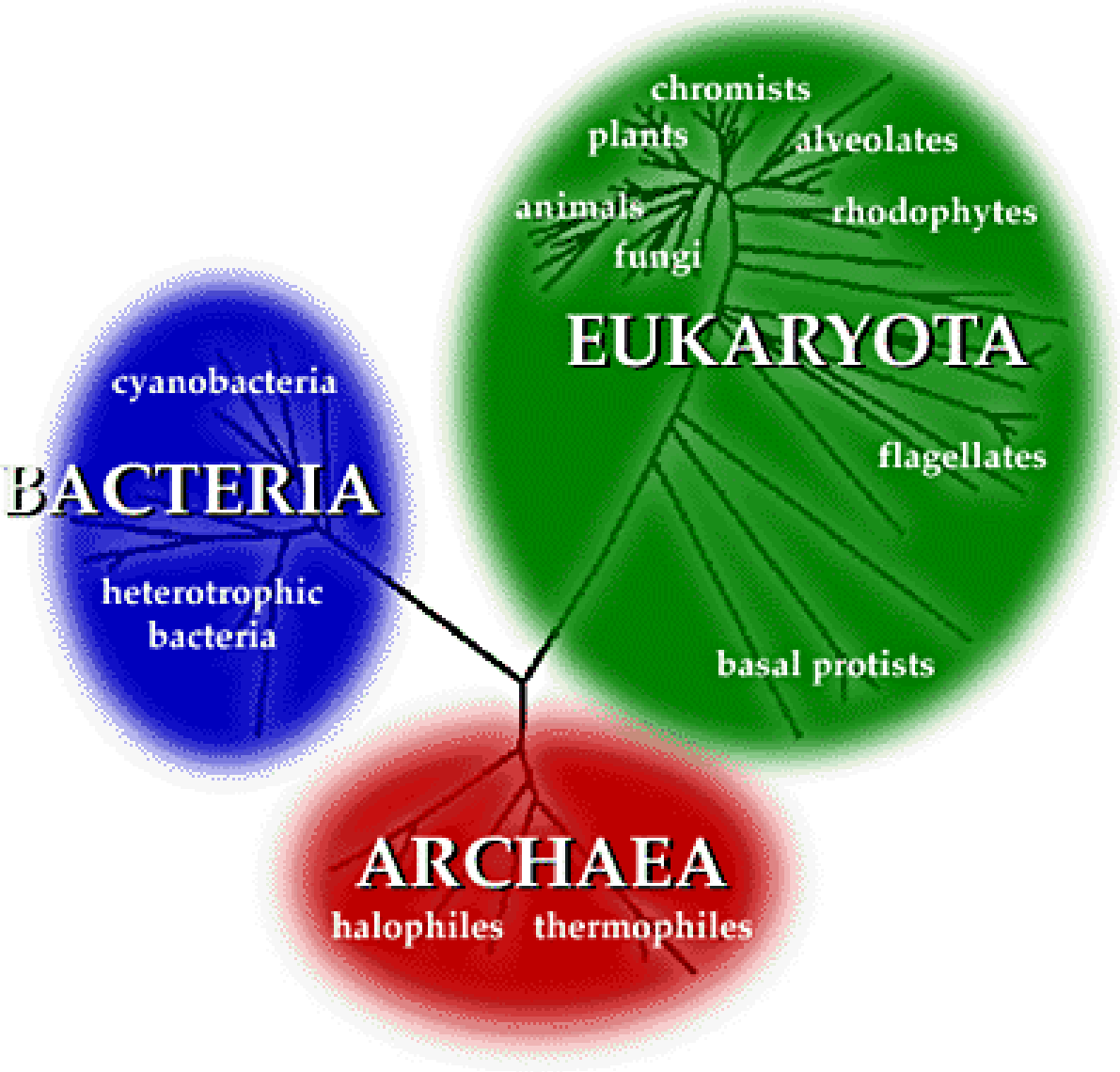


Teoría endosimbiótica serial



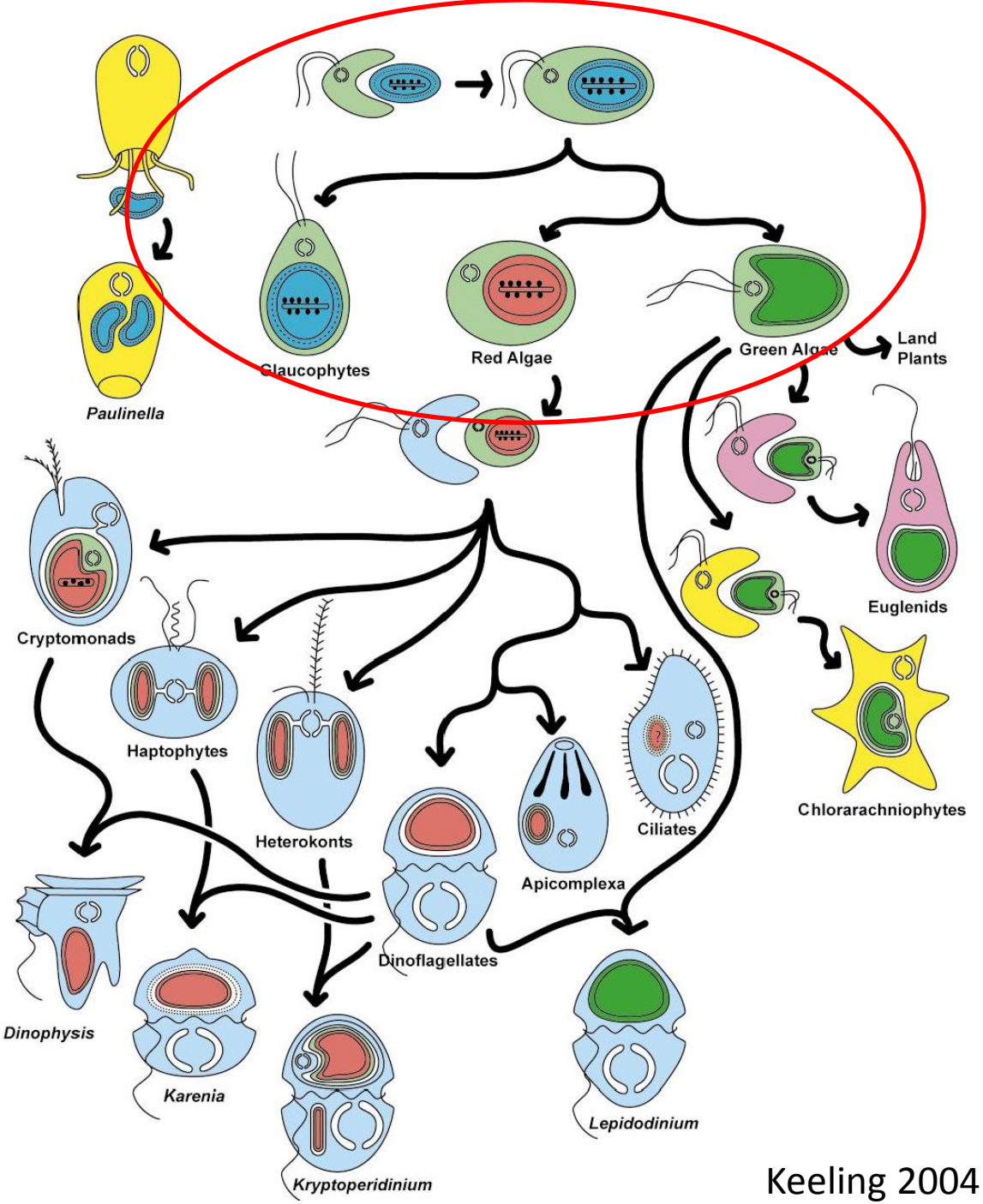
Salomon et al. 2008

Dominios biológicos

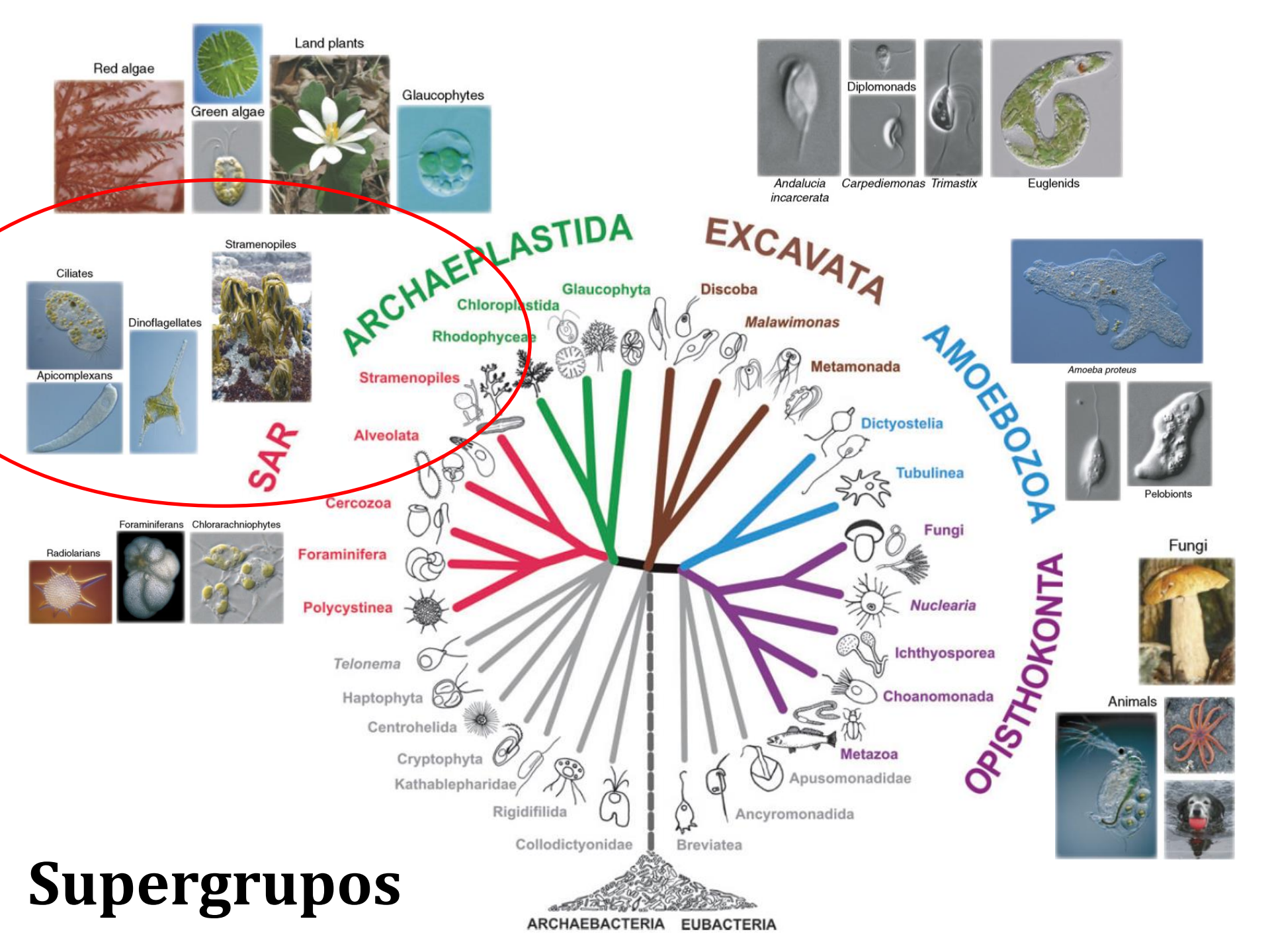


Supergrupos

Origen de los plástidos en cada supergrupo

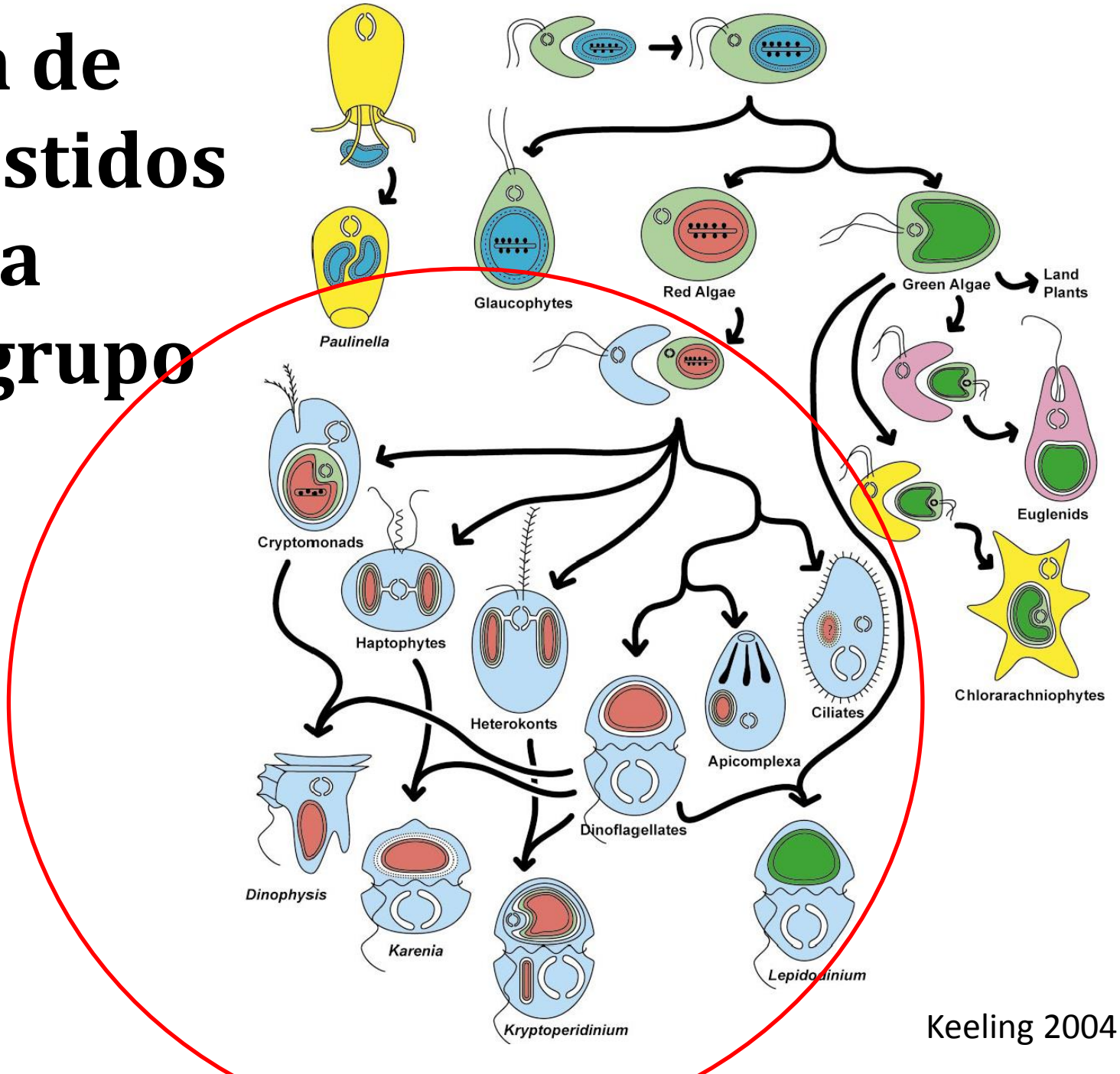


Keeling 2004

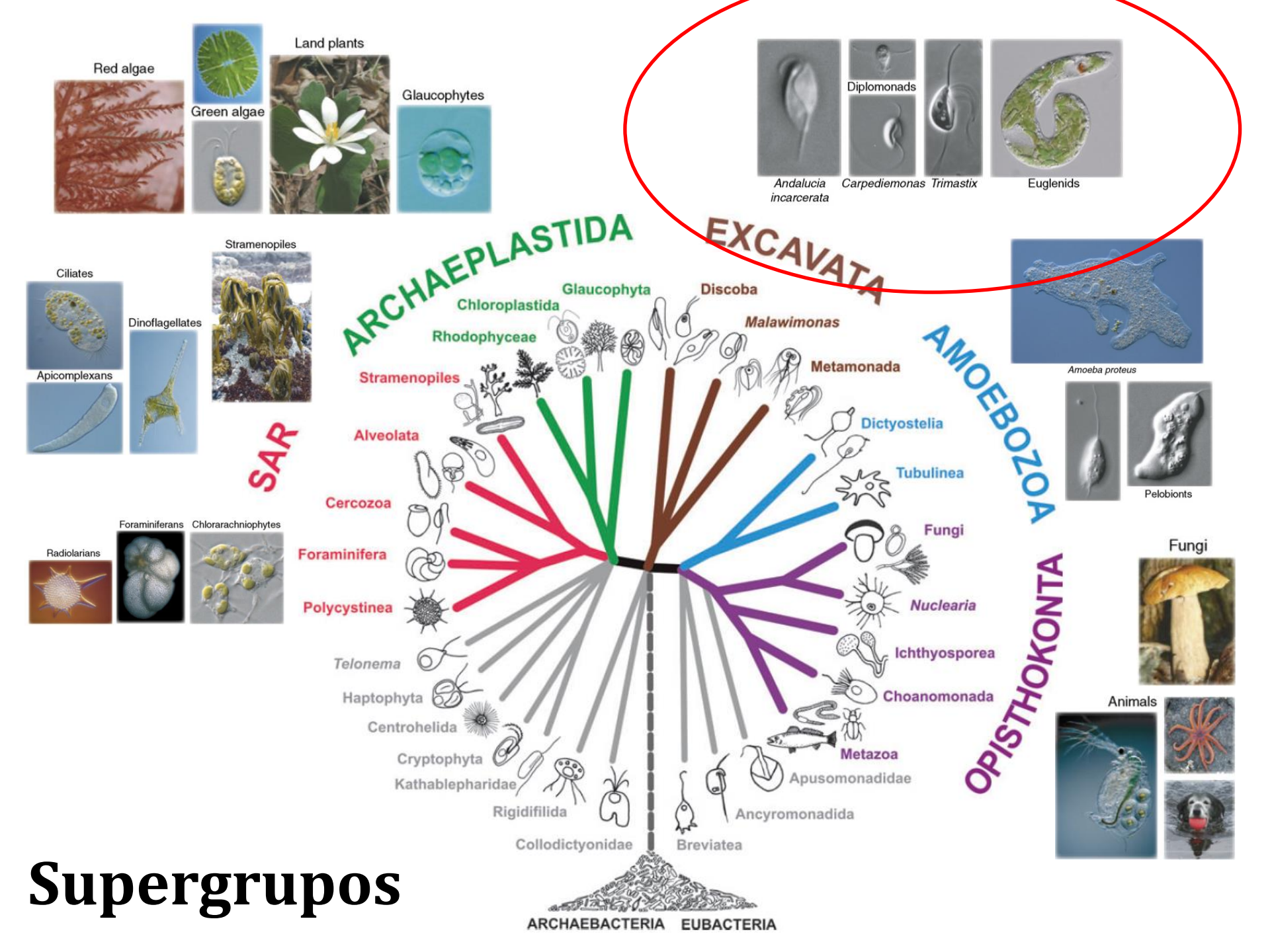


Supergrupos

Origen de los plástidos en cada supergrupo

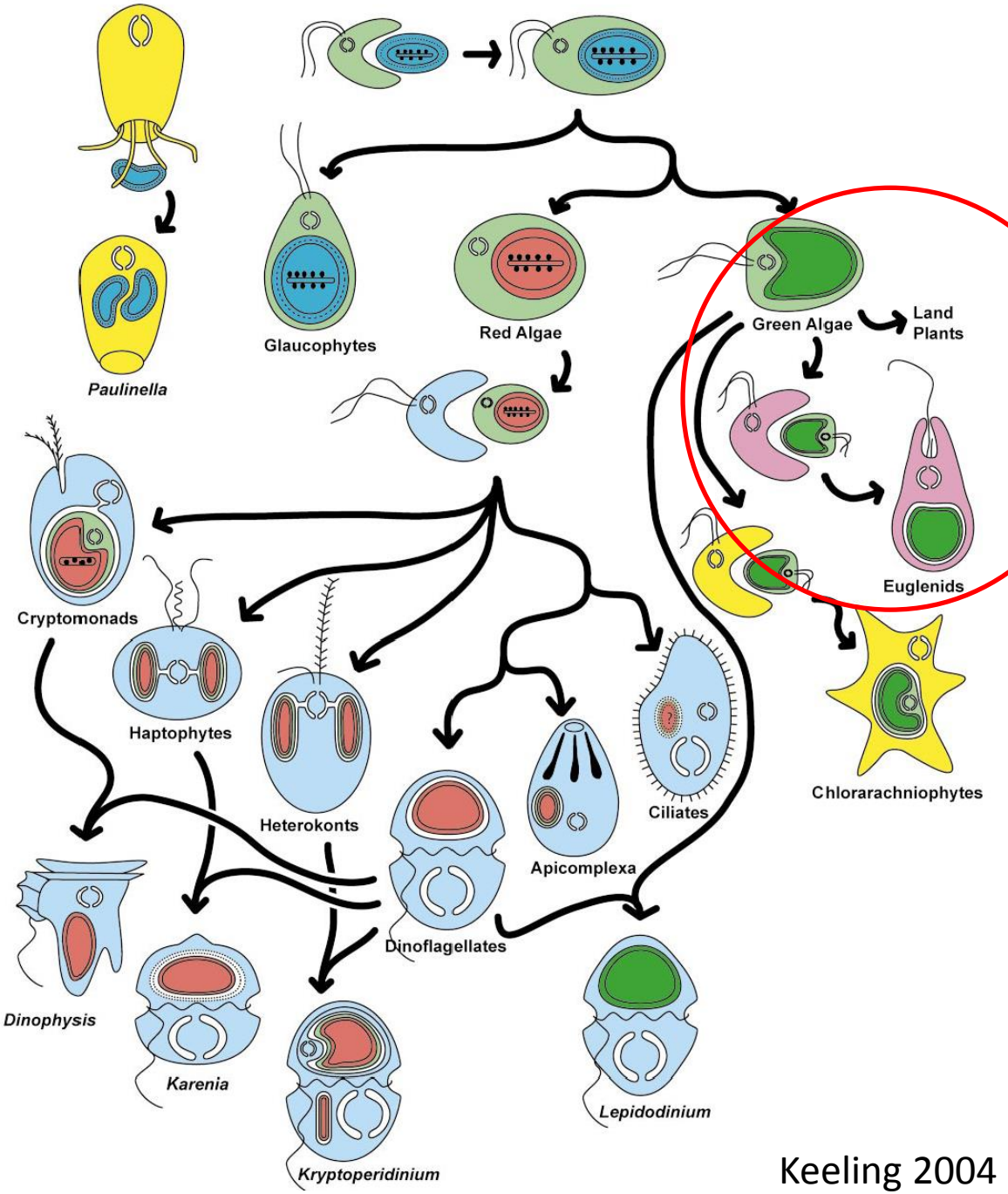


Keeling 2004

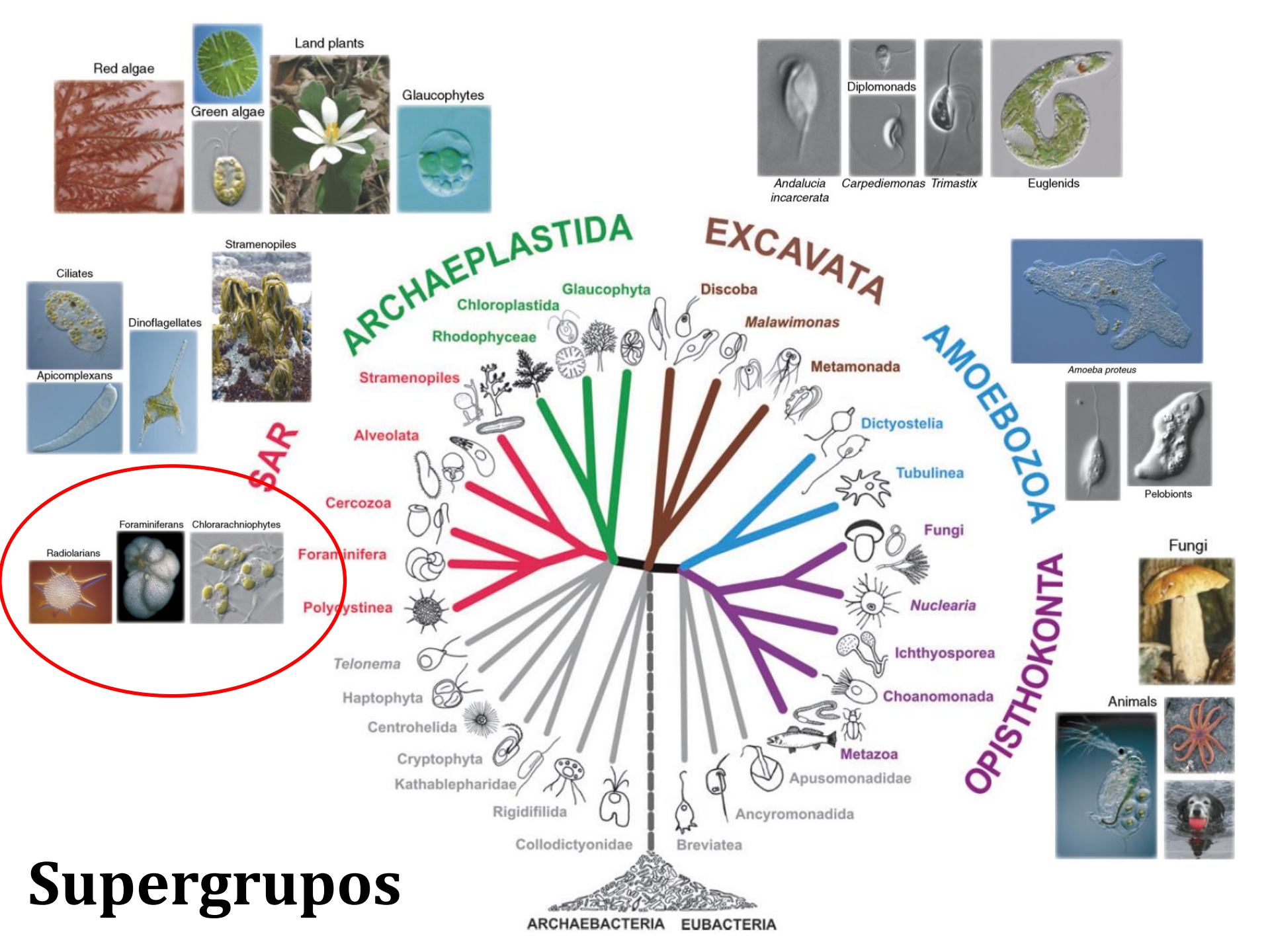


Supergrupos

Origen de los plástidos en cada supergrupo

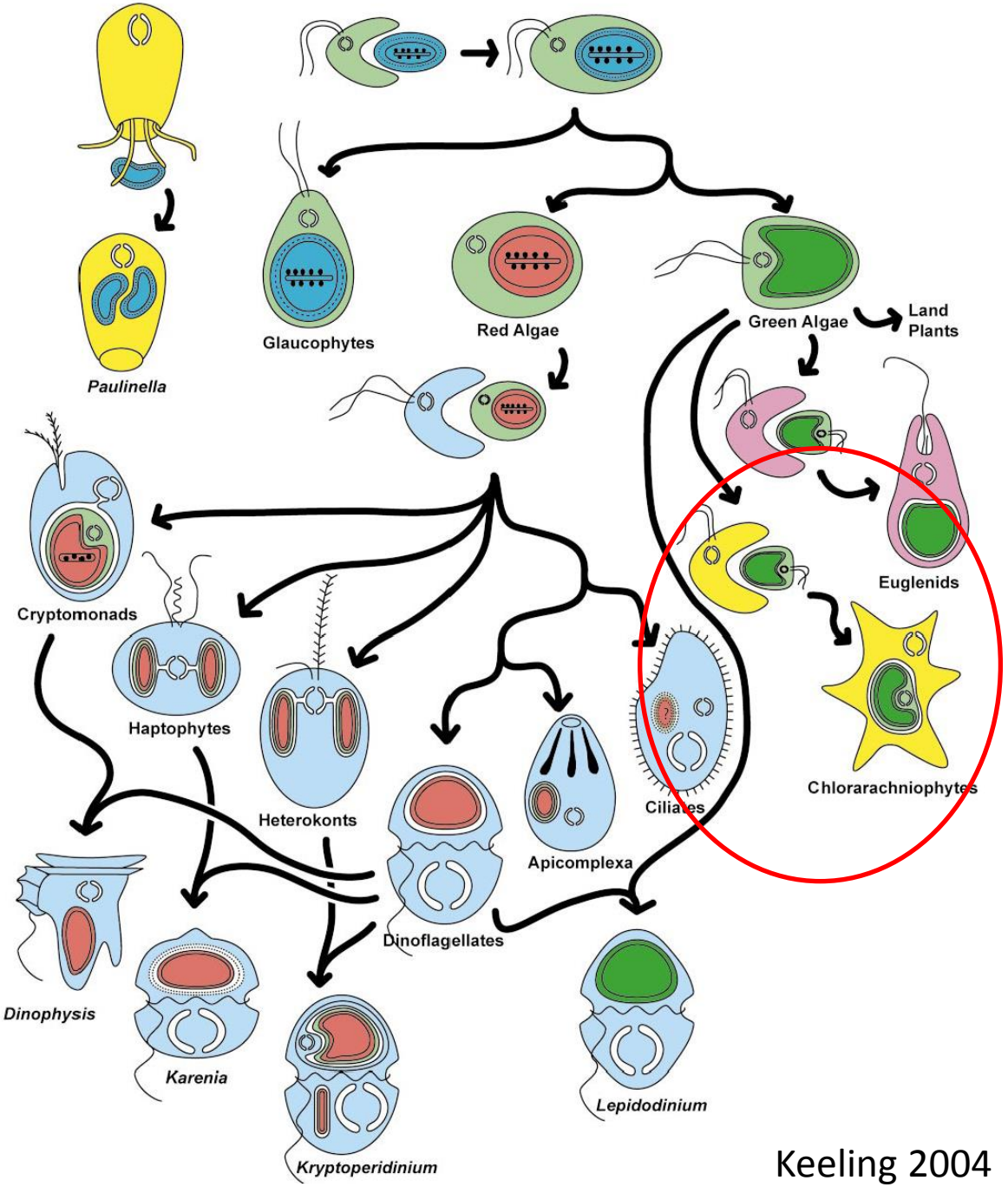


Keeling 2004



Supergrupos

Origen de los plástidos en cada supergrupo



Keeling 2004

Supergrupos

Plástidos con dos membranas

Plástidos con tres membranas

Plástidos con tres y cuatro membranas