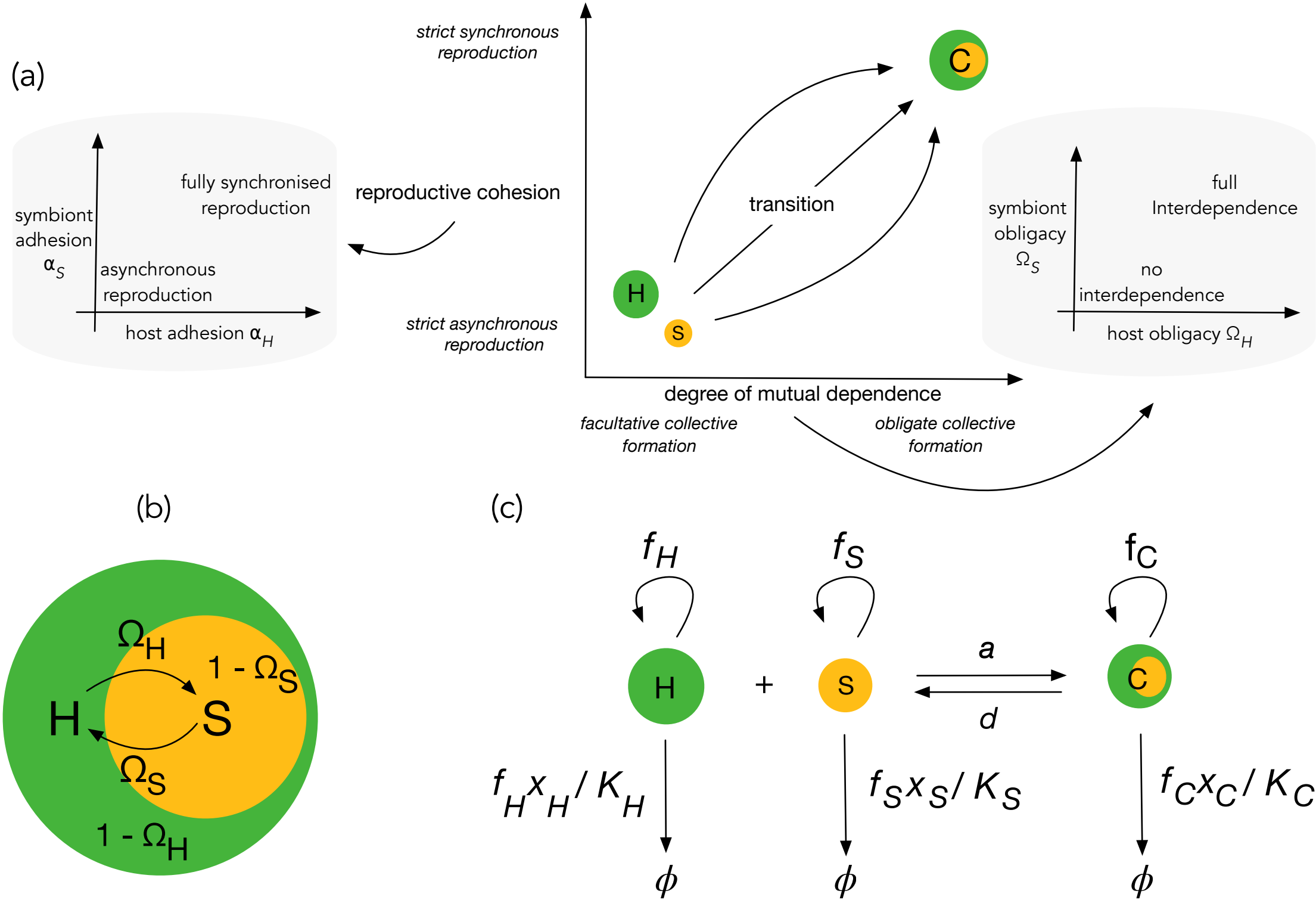
(a)
fully synchronised reproduction
symbiont adhesion α_S
asynchronous reproduction
host adhesion α_H
reproductive cohesion
strict synchronous reproduction
strict asynchronous reproduction
C
H
S
transition
degree of mutual dependence
facultative collective formation
obligate collective formation
full Interdependence
symbiont obligacy Ω_S
no interdependence
host obligacy Ω_H
(b)
Ω_H
$1 - \Omega_S$
H
S
Ω_S
$1 - \Omega_H$
(c)
f_H
f_S
f_C
H
+
S
a
d
C
$f_H x_H / K_H$
$f_S x_S / K_S$
$f_C x_C / K_C$
ϕ
ϕ
ϕ