

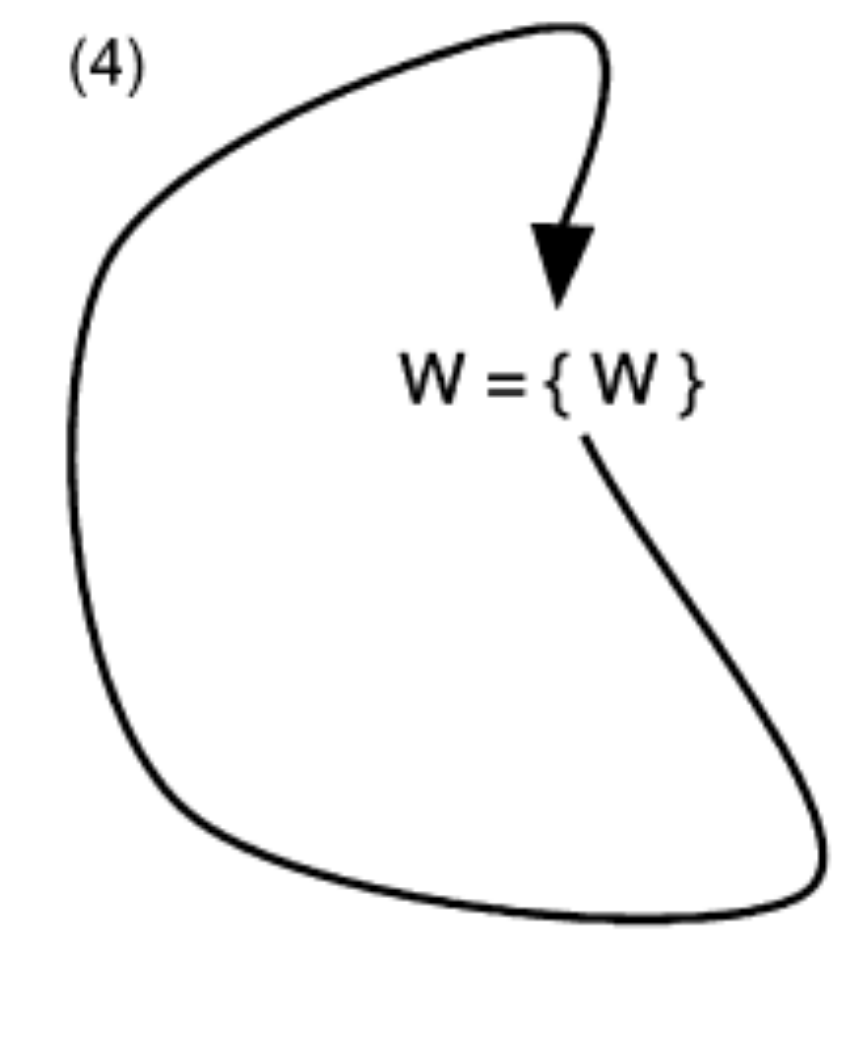
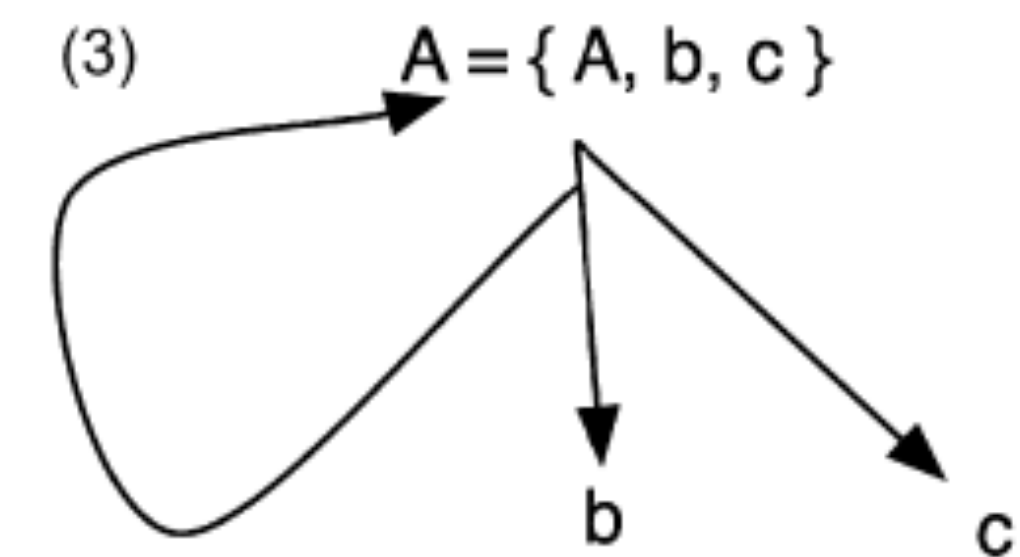
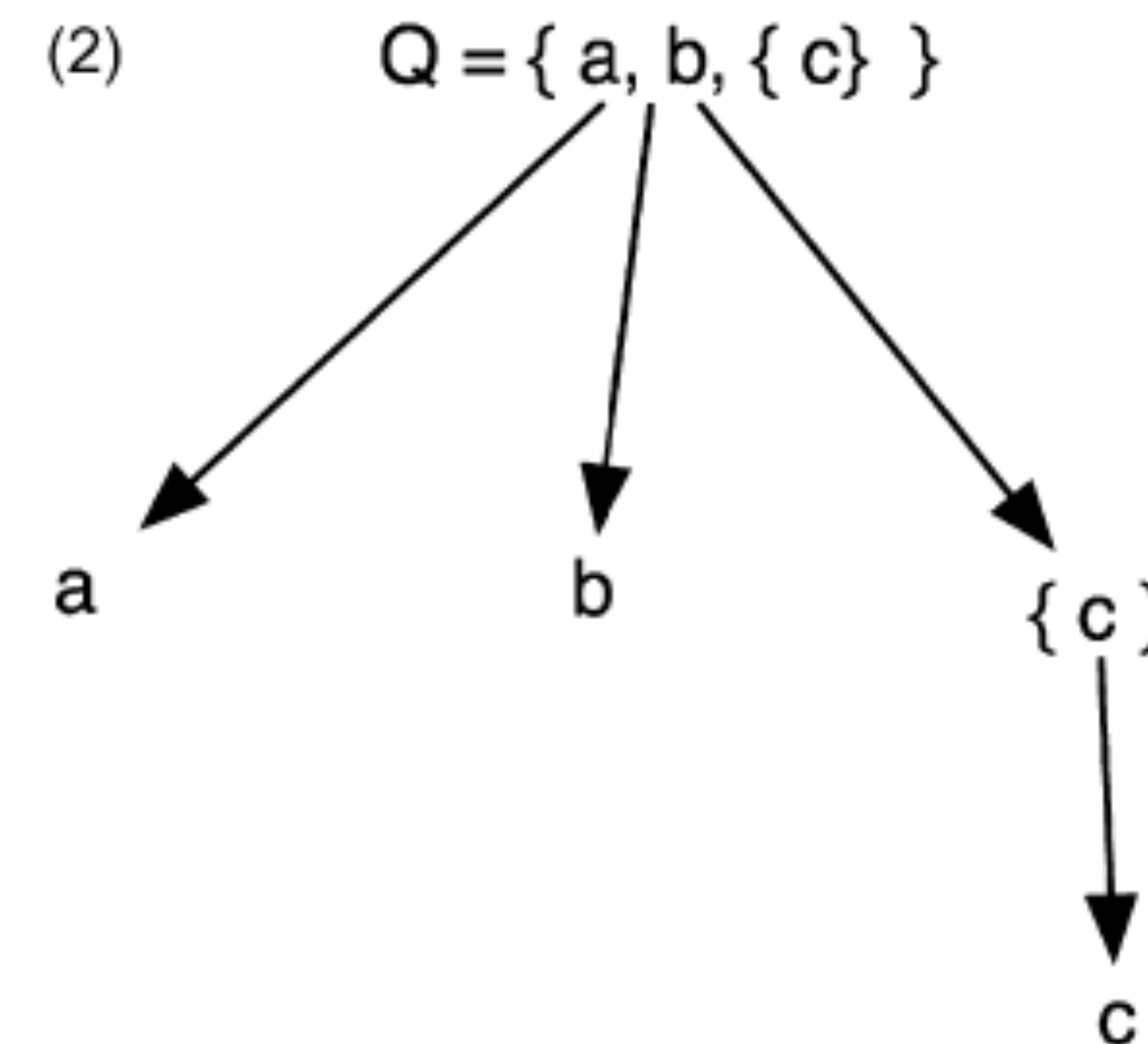
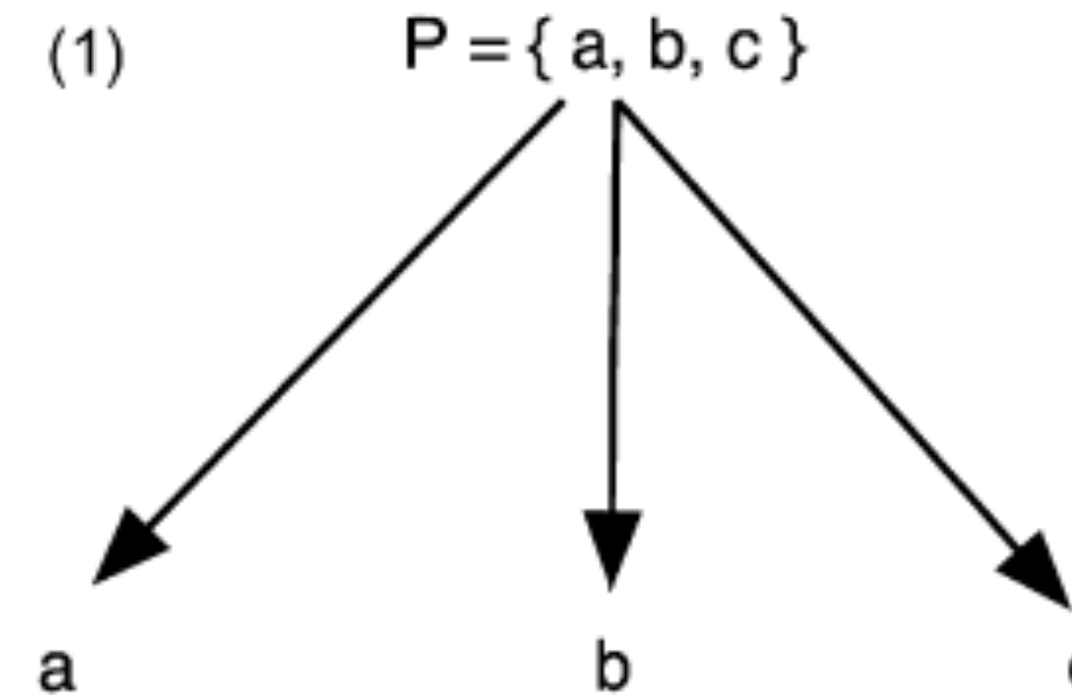
# Hyperset theory + Graph theory = Hyperset Graphs (Impredicative Logic)



**Aczel's Anti-Foundation Axiom (1988)**  
(hyperset theory, circular causality, complexity analysis)

Non well-founded sets:

Definition of a set can  
contain itself

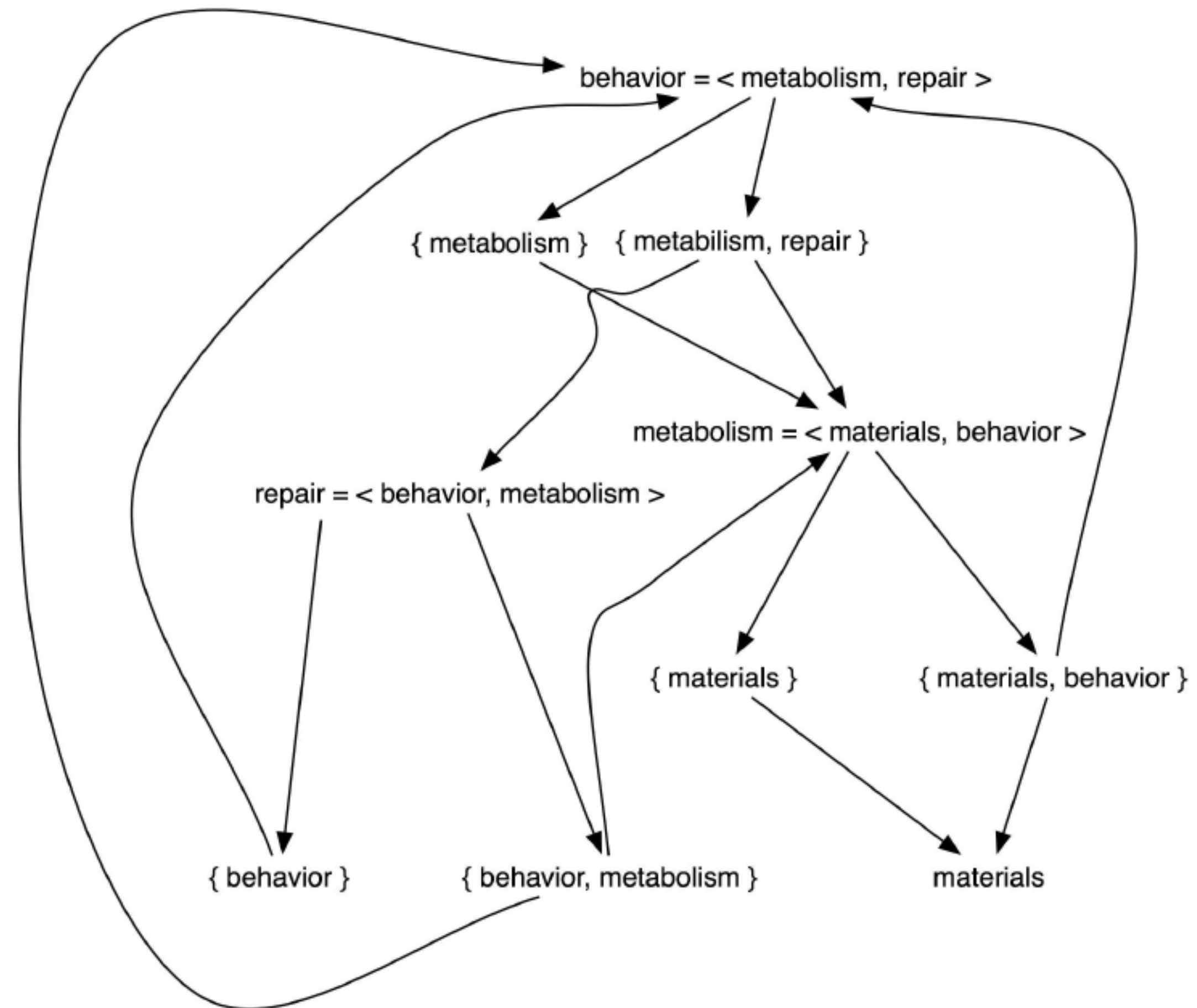


# Hyperset theory + Graph theory = Hyperset Graphs (Impredicative Logic)

Impredicative loop

Hyperset loop

Rosen's definition of  
a living system  
(metabolism-repair-system)



**Fig. 6.** Hyperset diagram of Rosen's metabolism-repair system. Functions are represented as ordered pairs containing their domain and range. So  $f(a) = b$  is represented as  $f = \langle a, b \rangle$ .