



# Metodologie e Tecniche di simulazione

**NXN-IMITATE-BEST-NBR-  
EXTENDED.NLOGO. III-4**

PRESENTATO DA  
GIULIA LOMBARDO

# ESERCIZI 1-2-4

**Exercise 1.** How can we parameterize our model to replicate the results shown in figures 1b and 1d of Hauert and Doebeli (2004)?

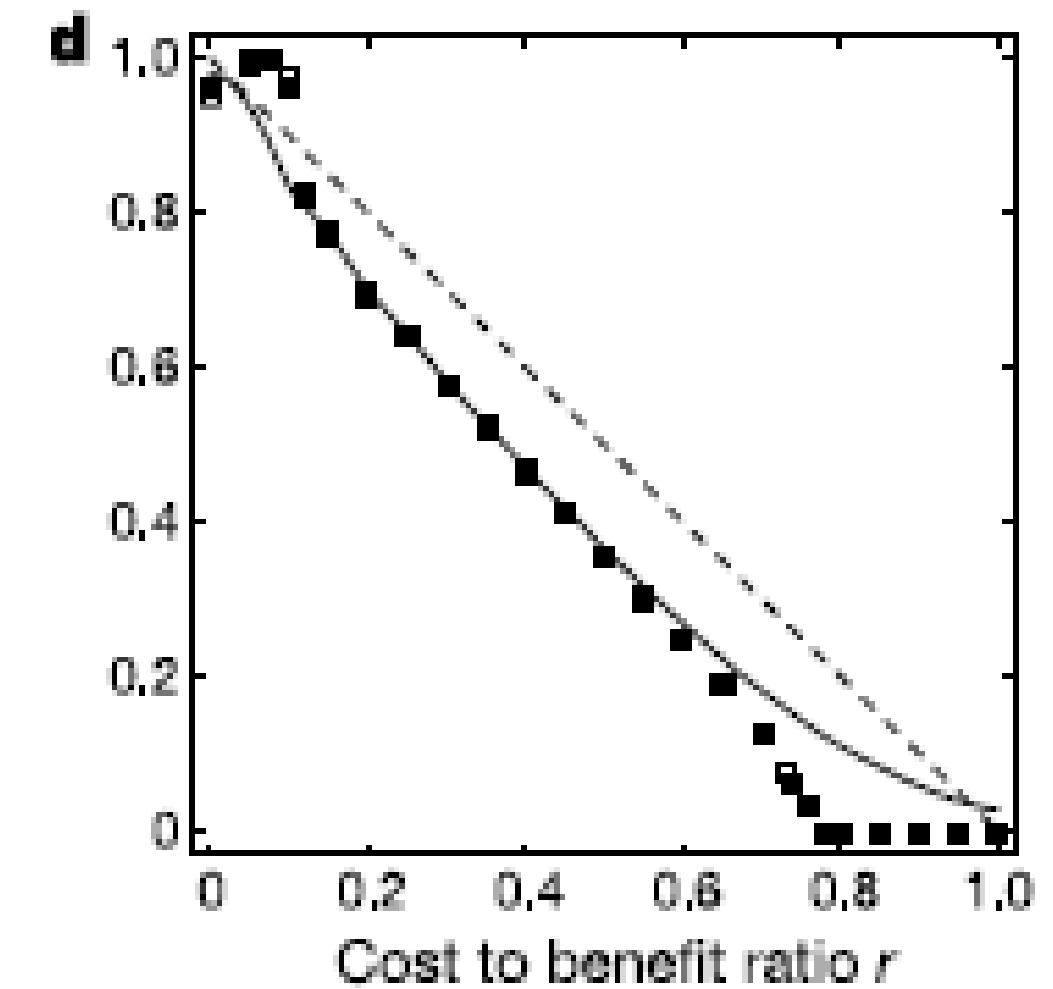
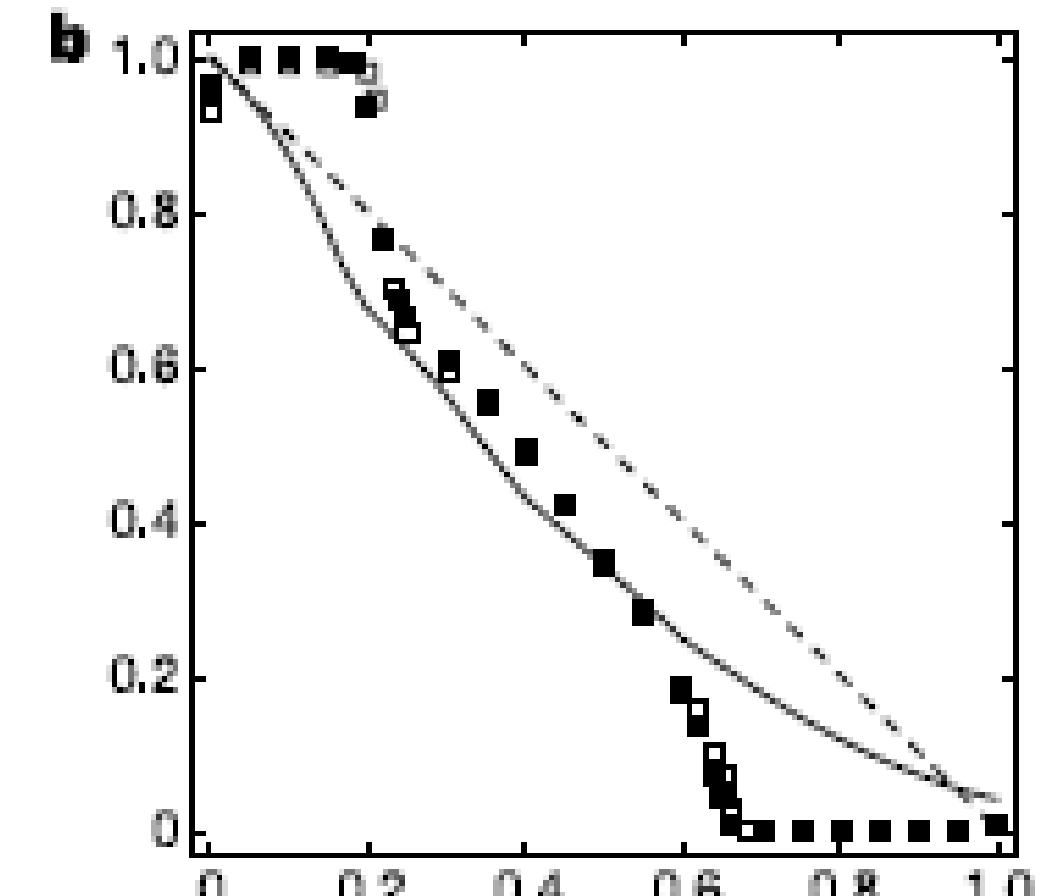
**Exercise 2.** How can we parameterize our model to replicate the results shown in figures 1, 2, 6 and 7 of Nowak et al. (1994a)?

**Exercise 4.** How can we parameterize our model to replicate the results shown in figure 11 of Nowak and May (1993)?

# EXERCISE 1

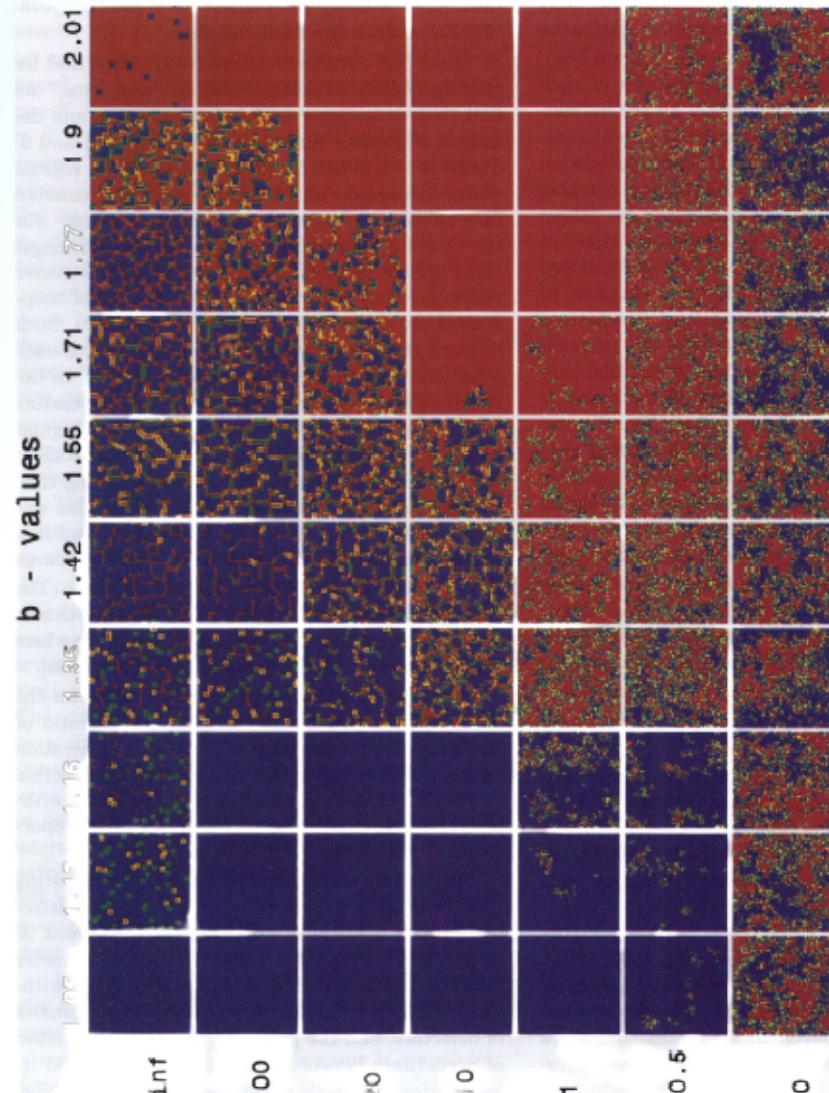
Obiettivo:  
studiare l'evoluzione della  
cooperazione in una situazione di  
Snowdrift Game al variare di alcuni  
parametri e condizioni

- **parametro r**
- **due tipologie di aggiornamento**
- **tipologia di vicinato**

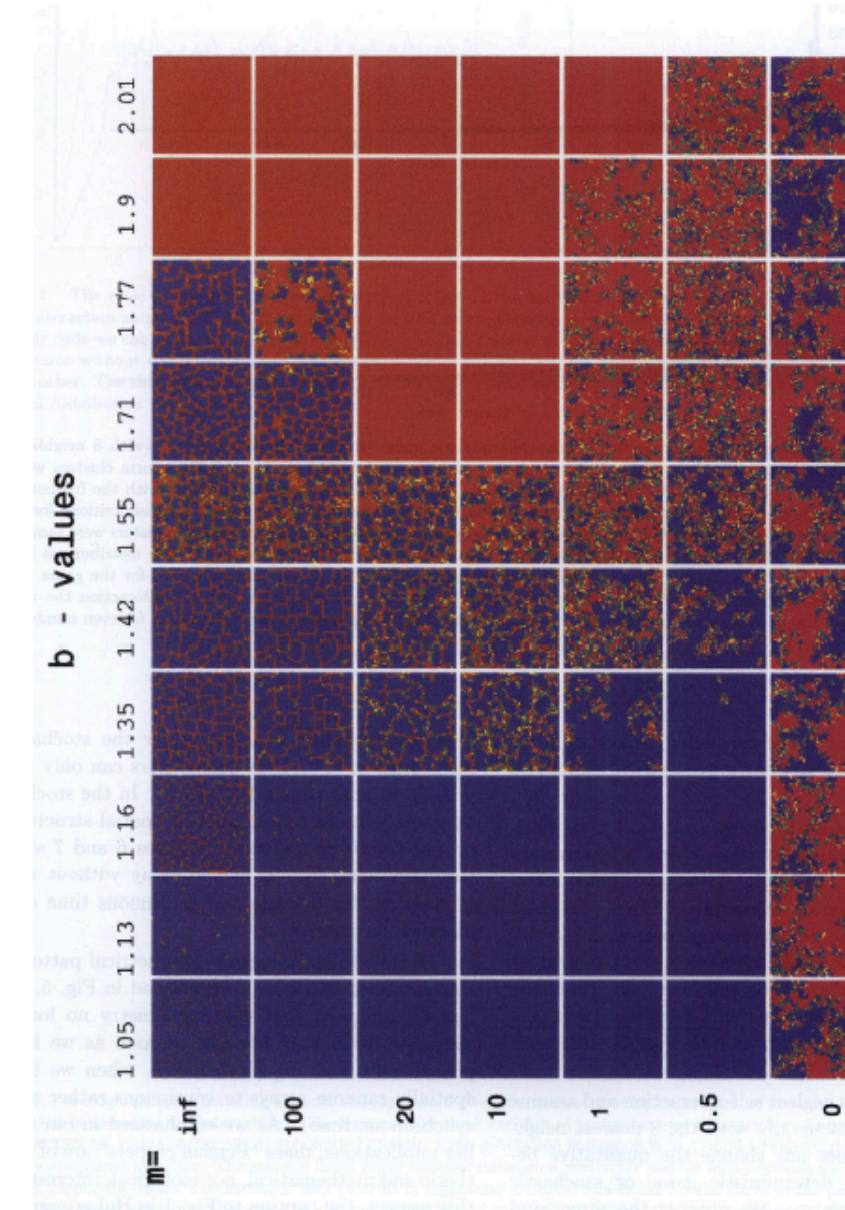


# EXERCISE 2

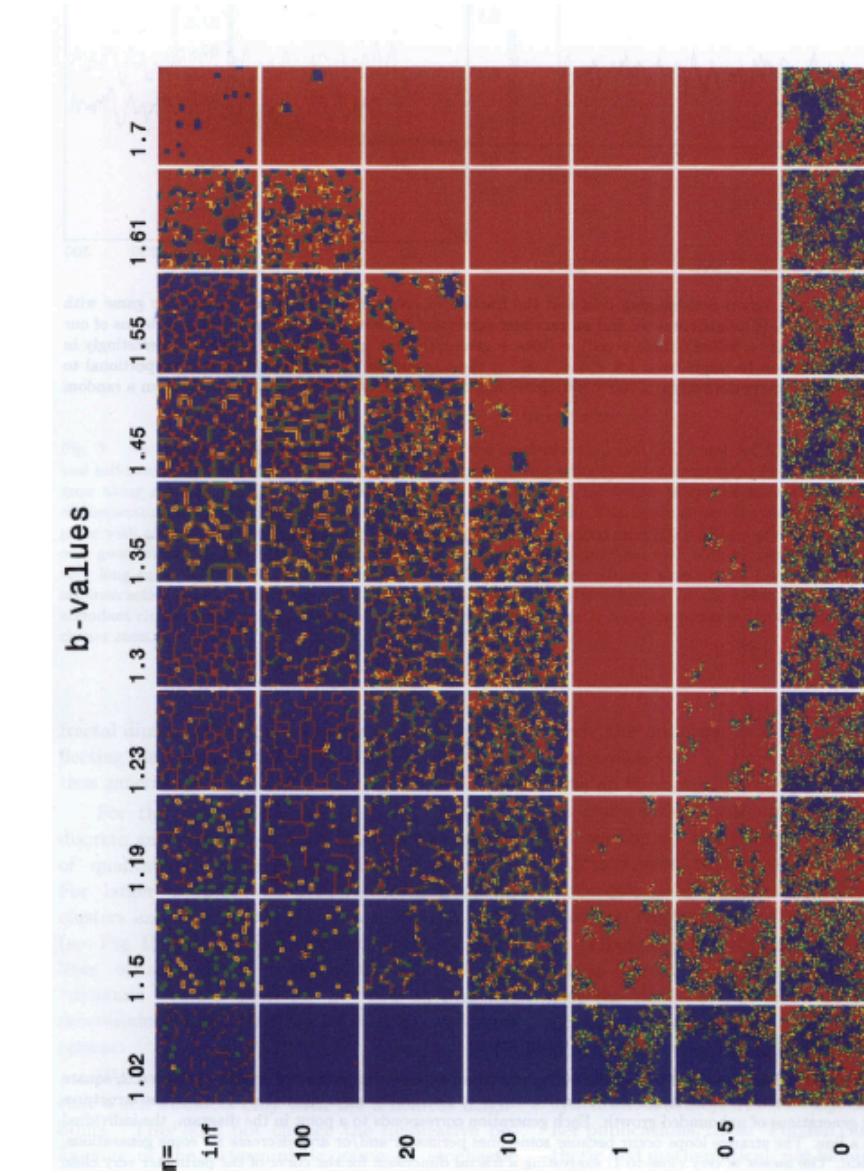
**fig. 1**



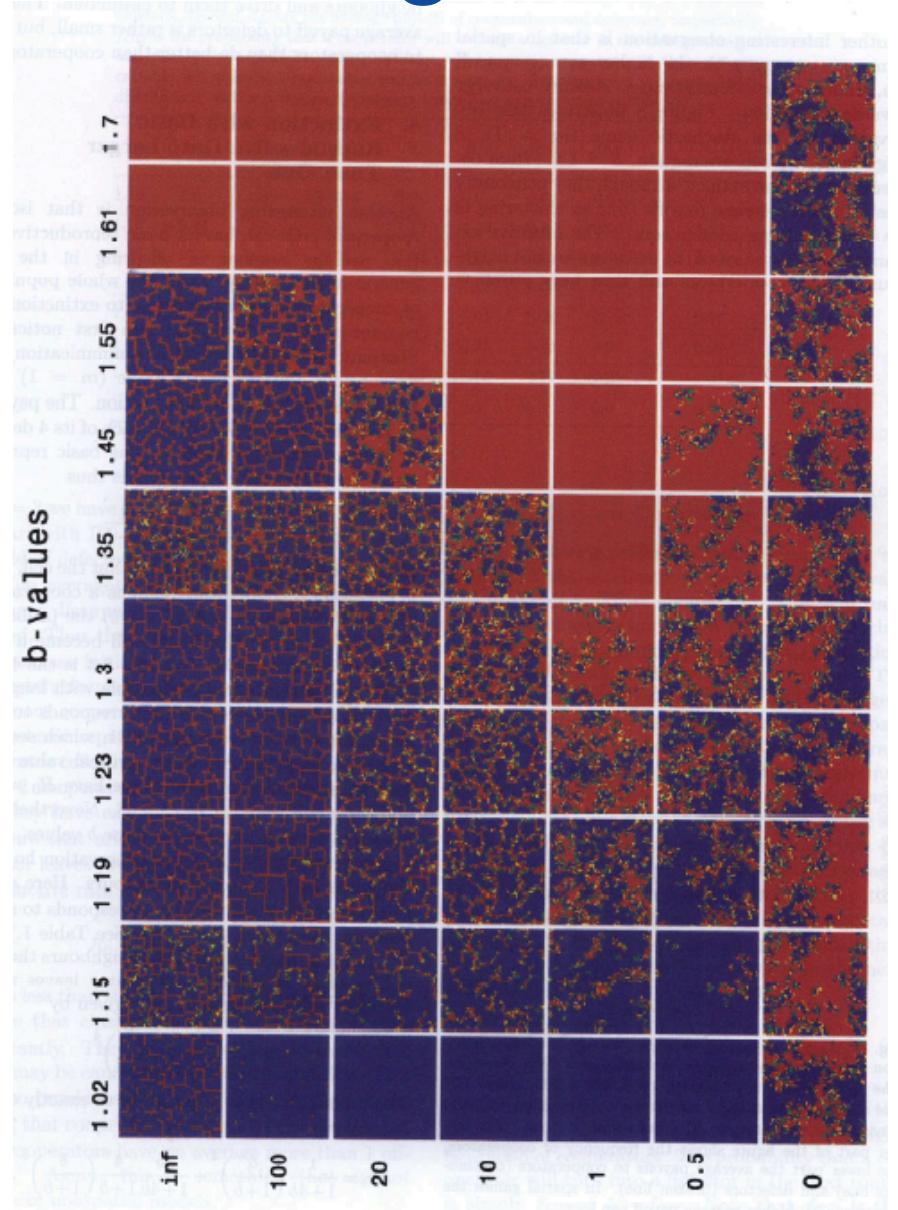
**fig. 2**



**fig. 6**



**fig. 7**



Le immagini mostrano l'evoluzione della cooperazione su una griglia di agenti che giocano allo Snowdrift Game. Ogni riquadro rappresenta l'esito della simulazione in relazione a due parametri:

- $m$  : indica quanto il guadagno influisce sulle decisioni
- $b$  : rappresenta quanto è vantaggioso defezionare

# EXERCISE 4

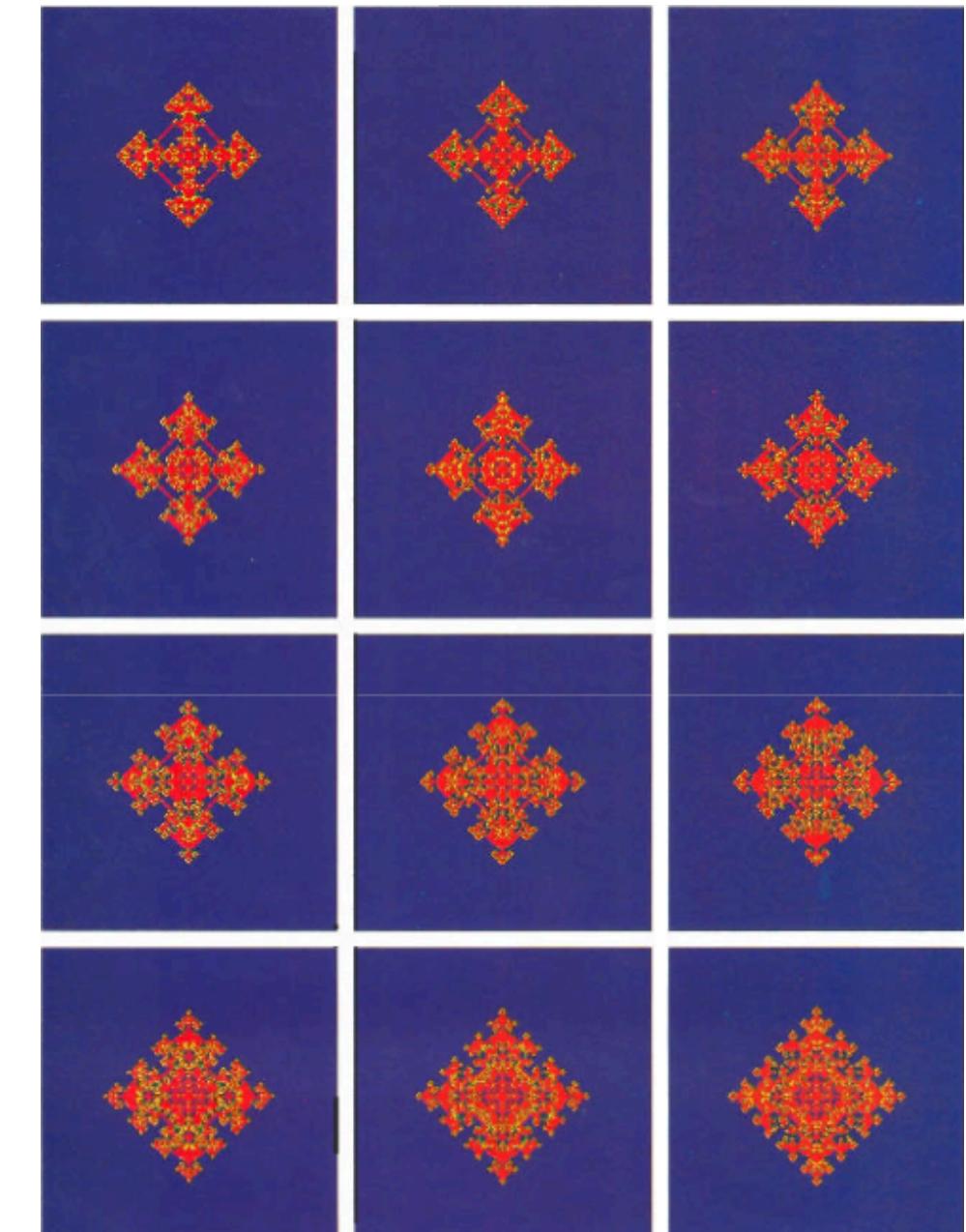
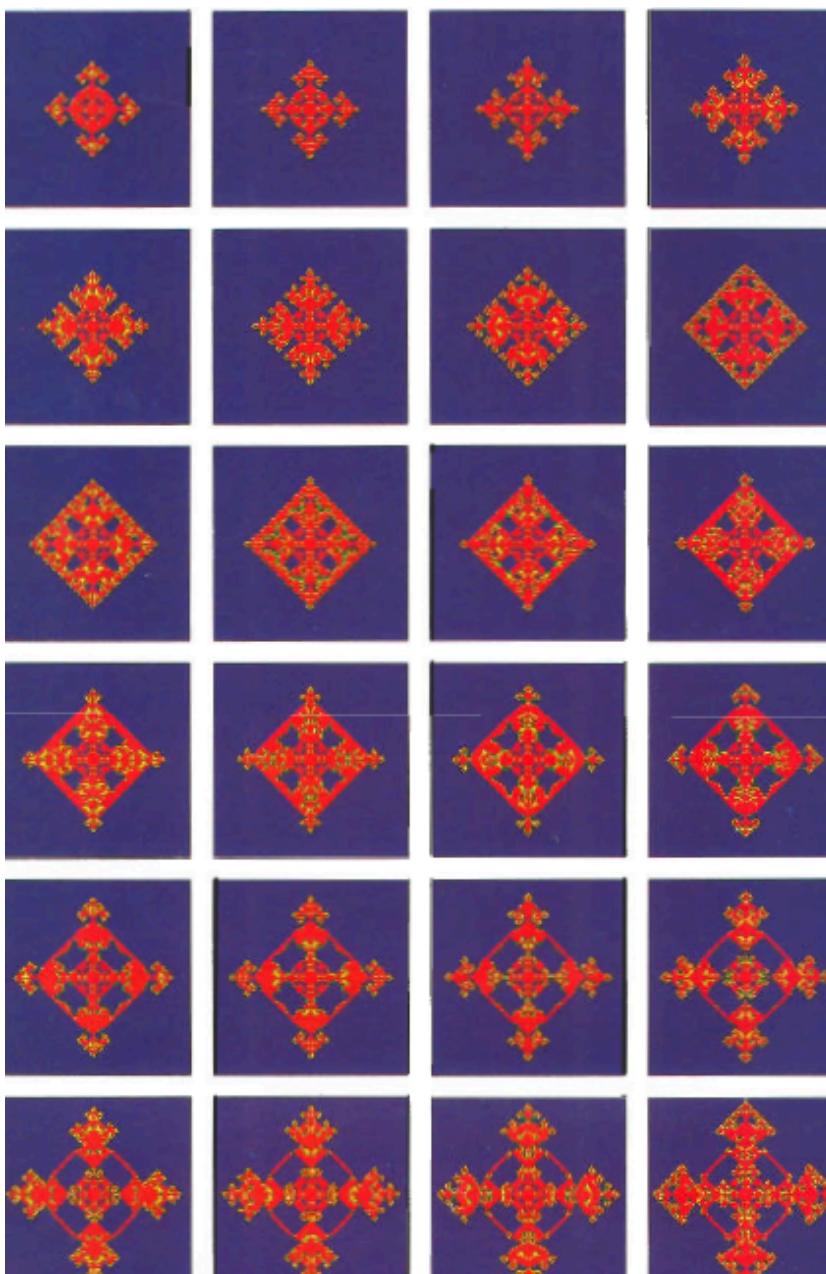
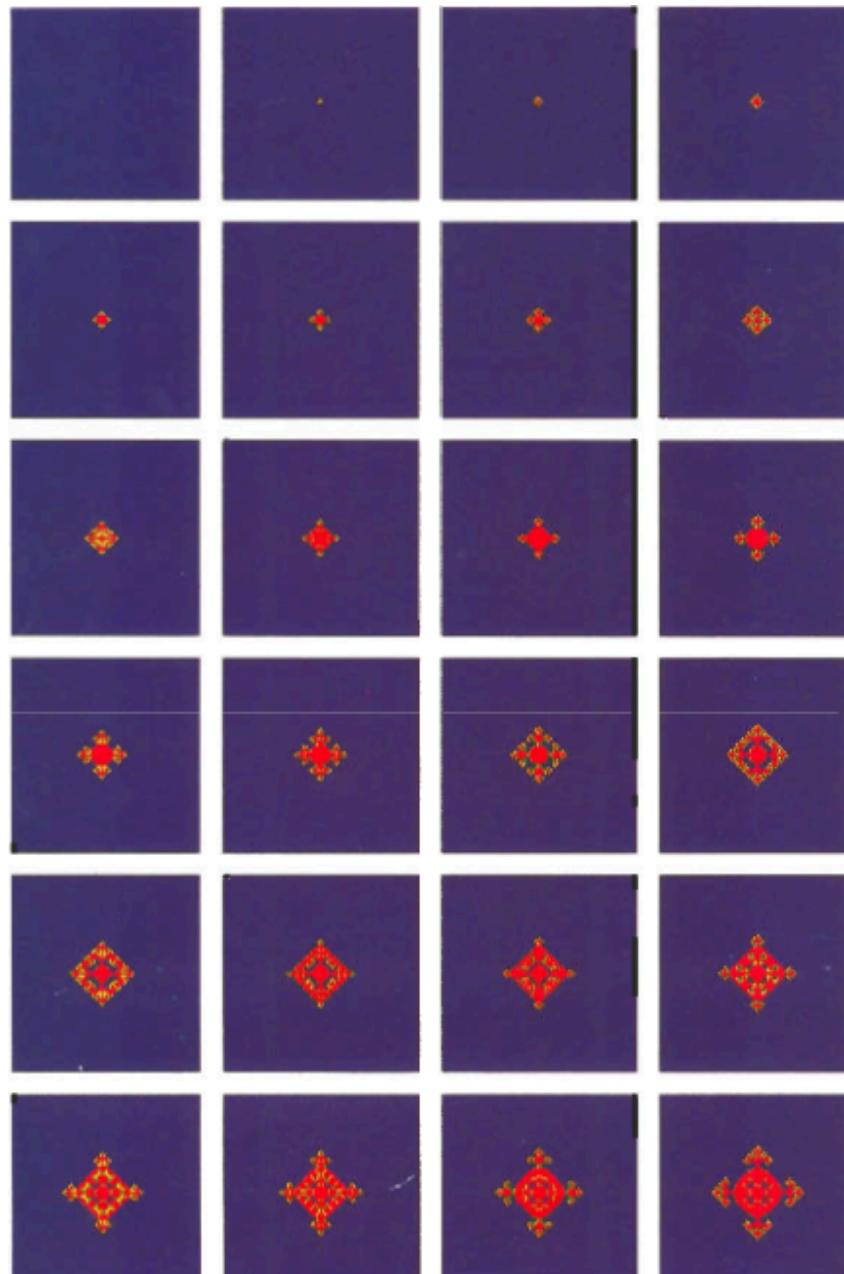


IMMAGINE 11

# EXERCISE 4

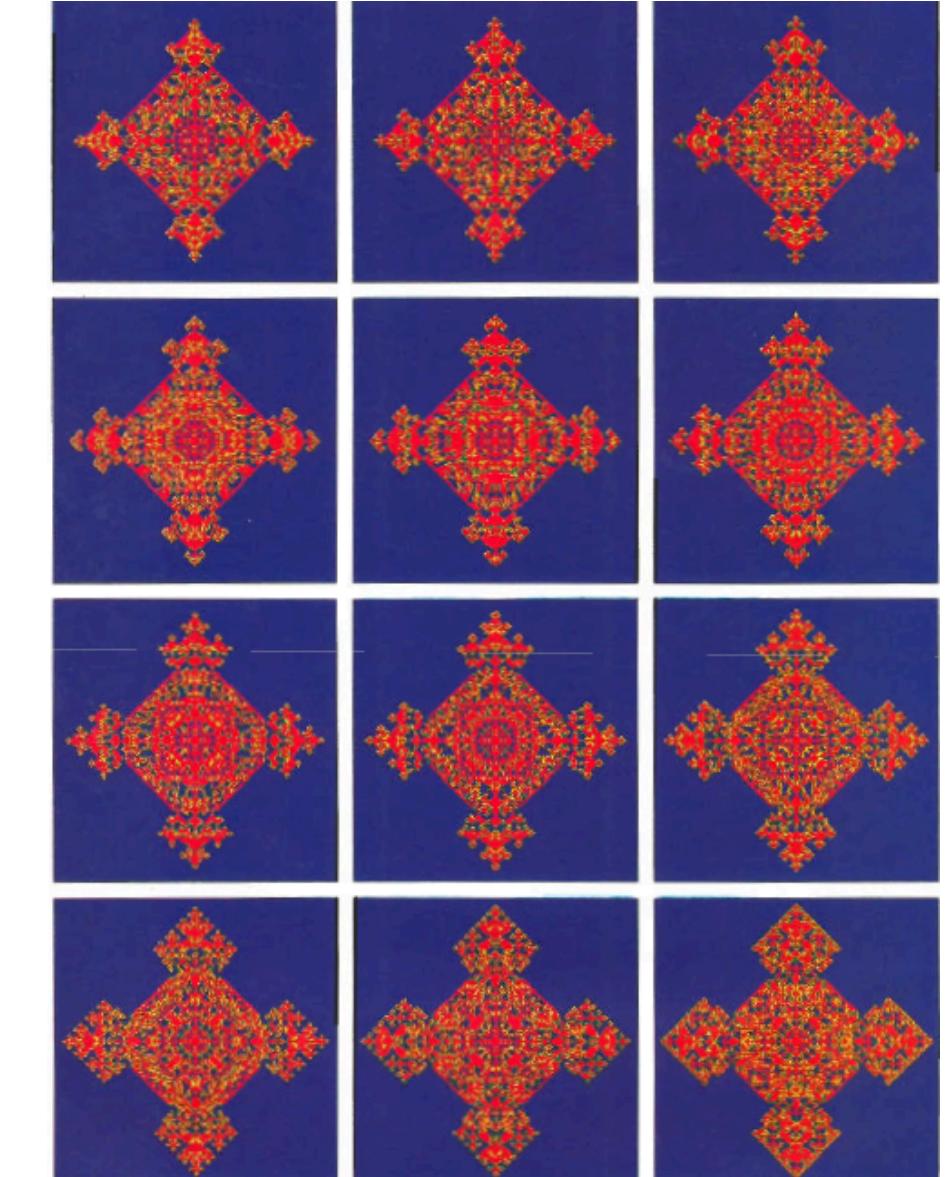
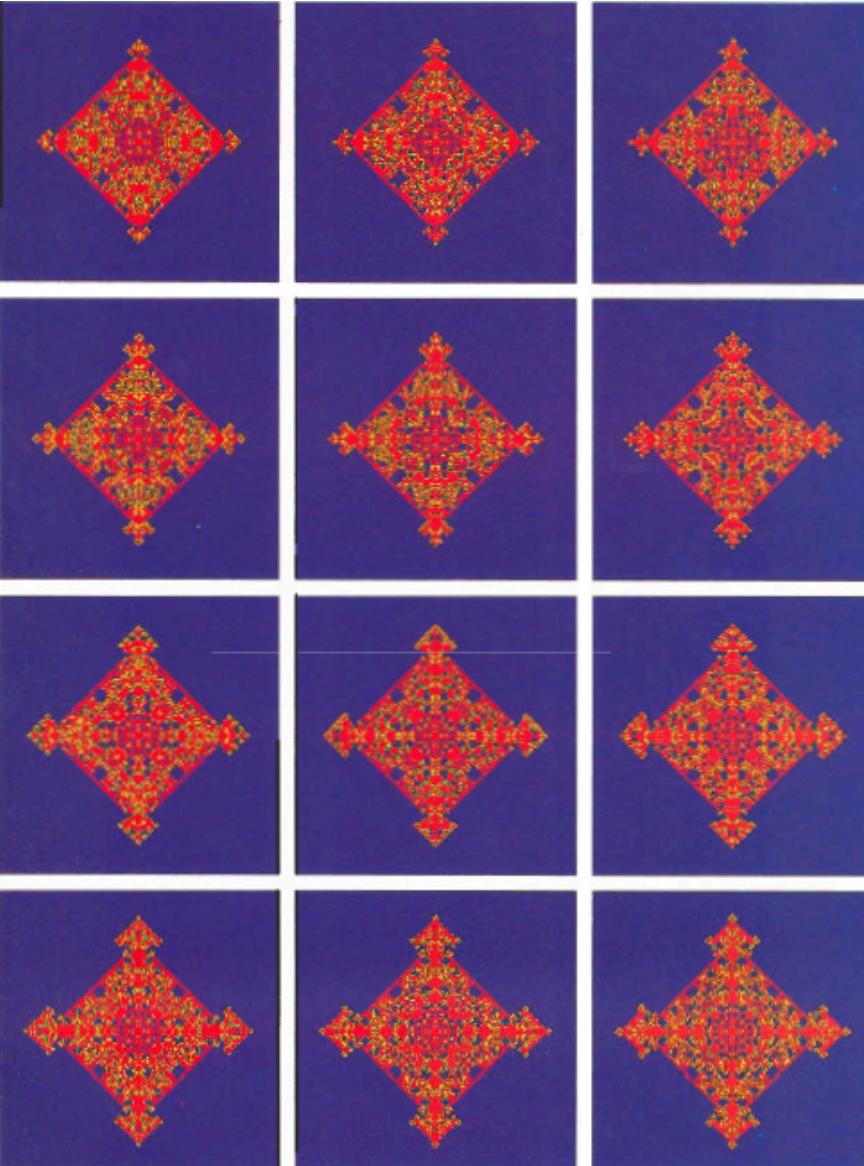
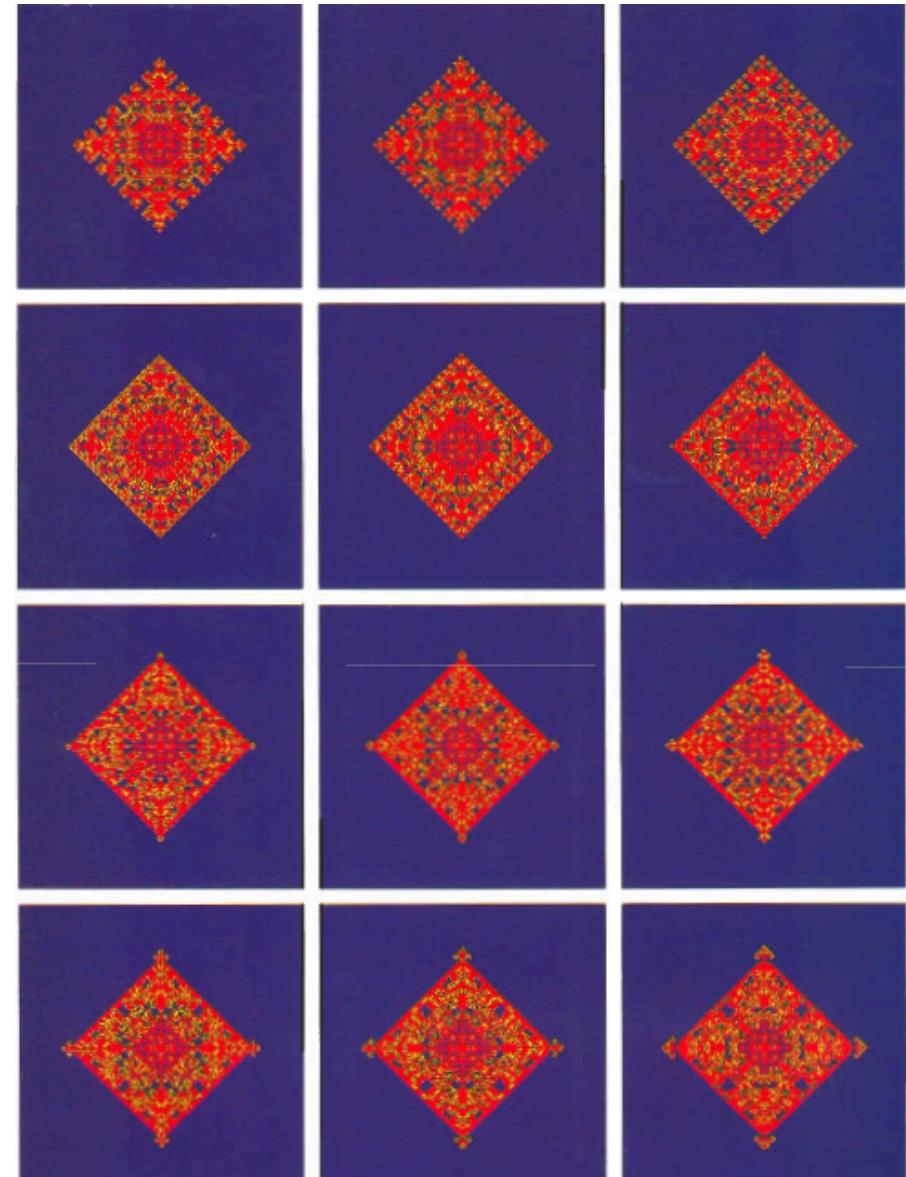


IMMAGINE 11