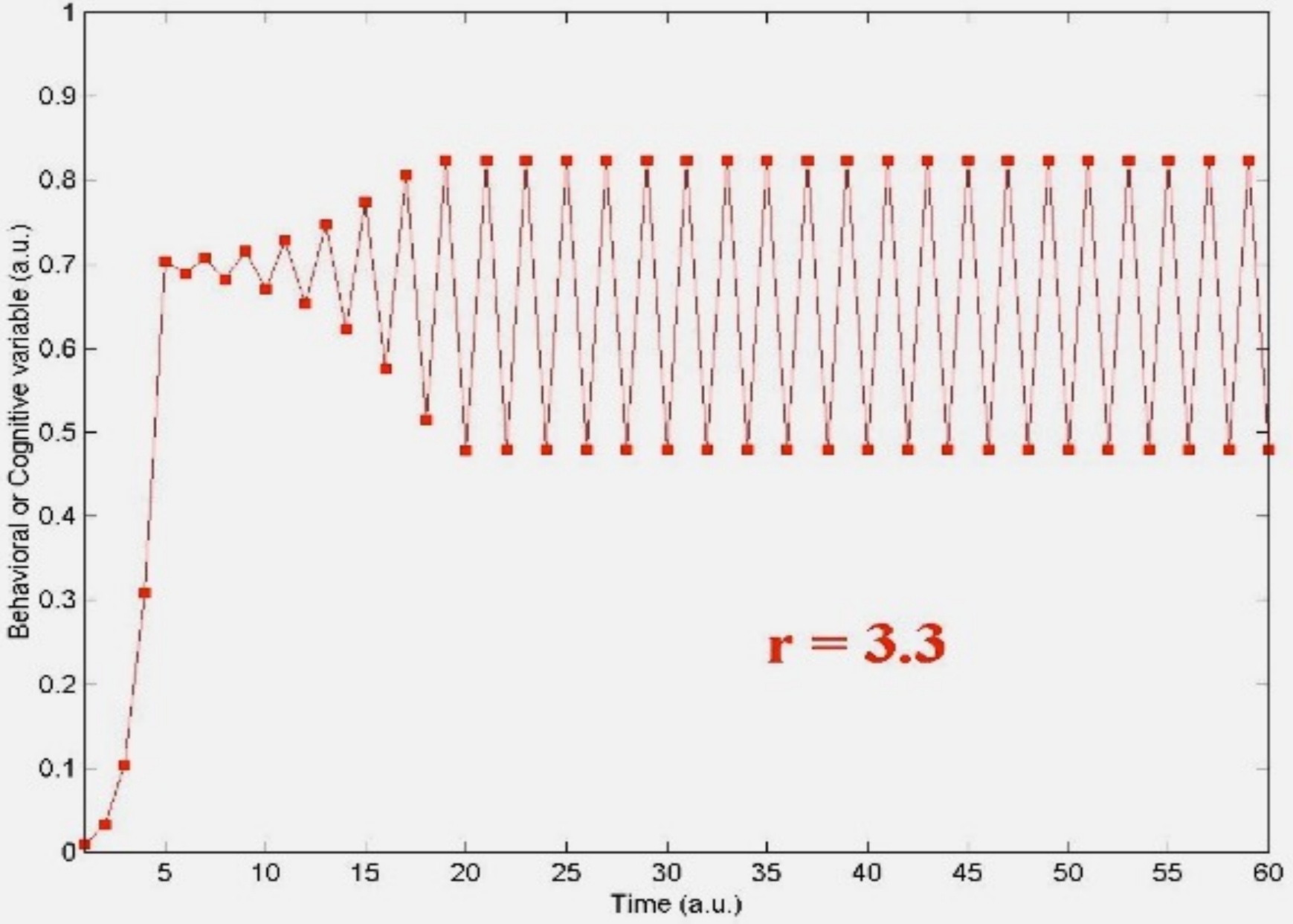
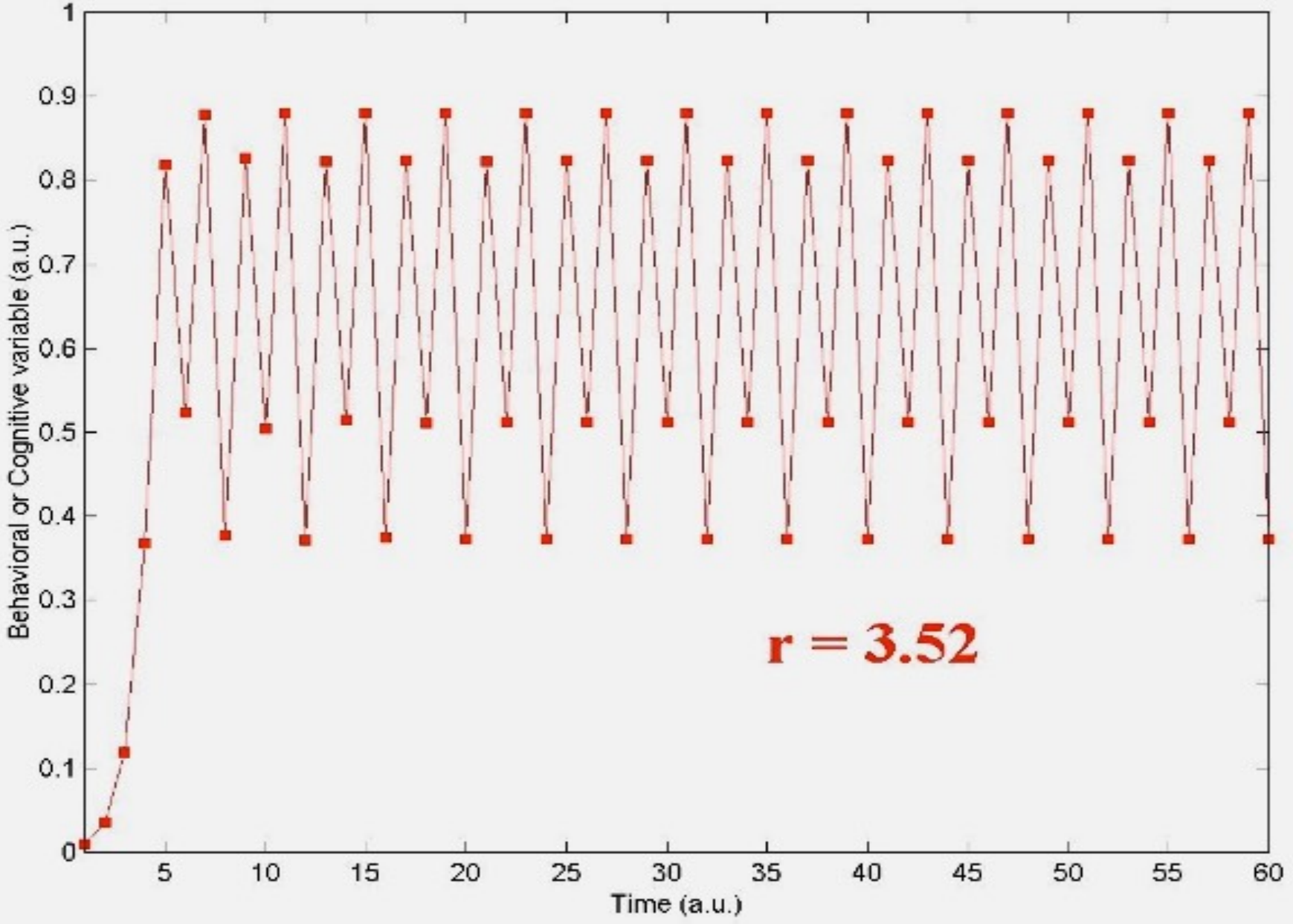
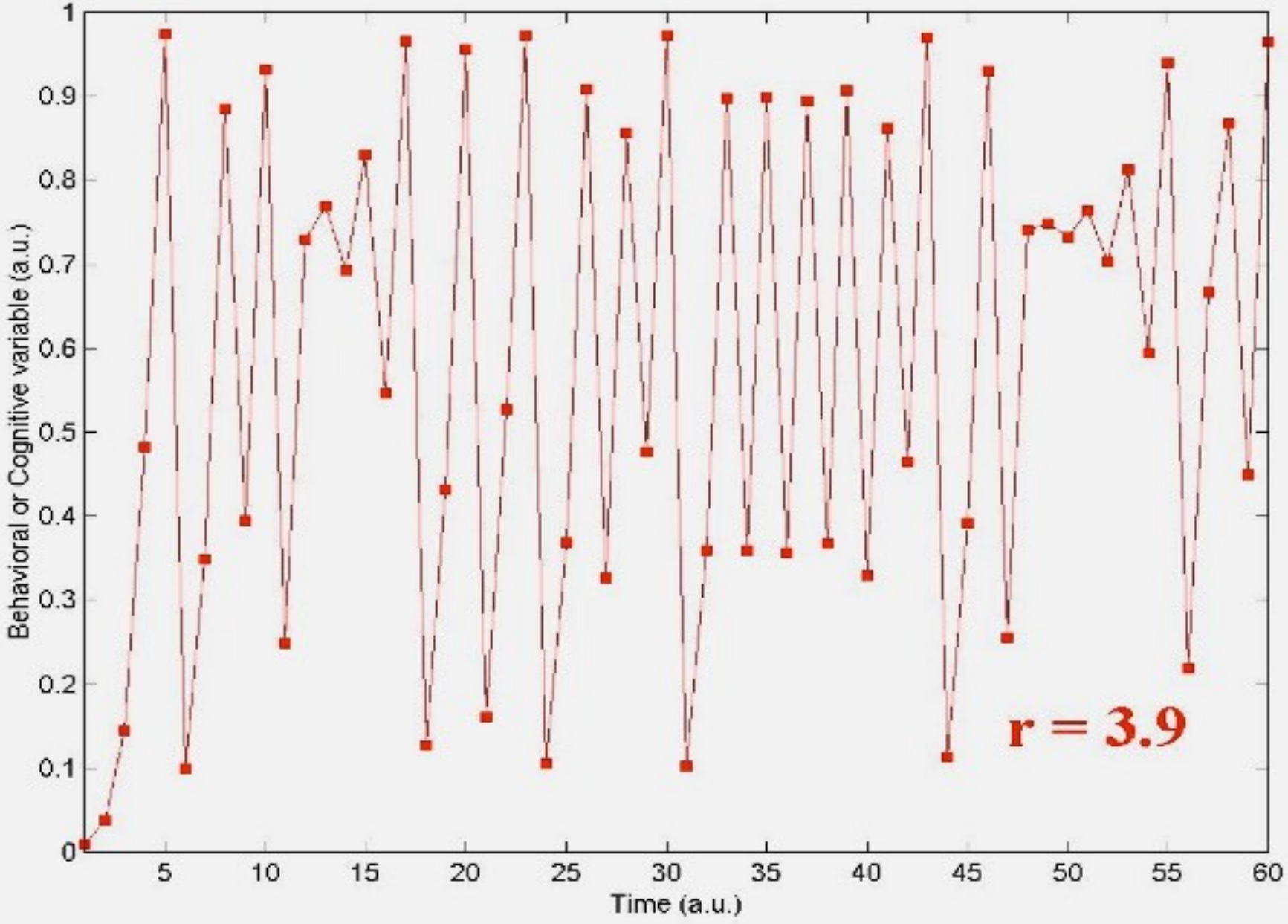
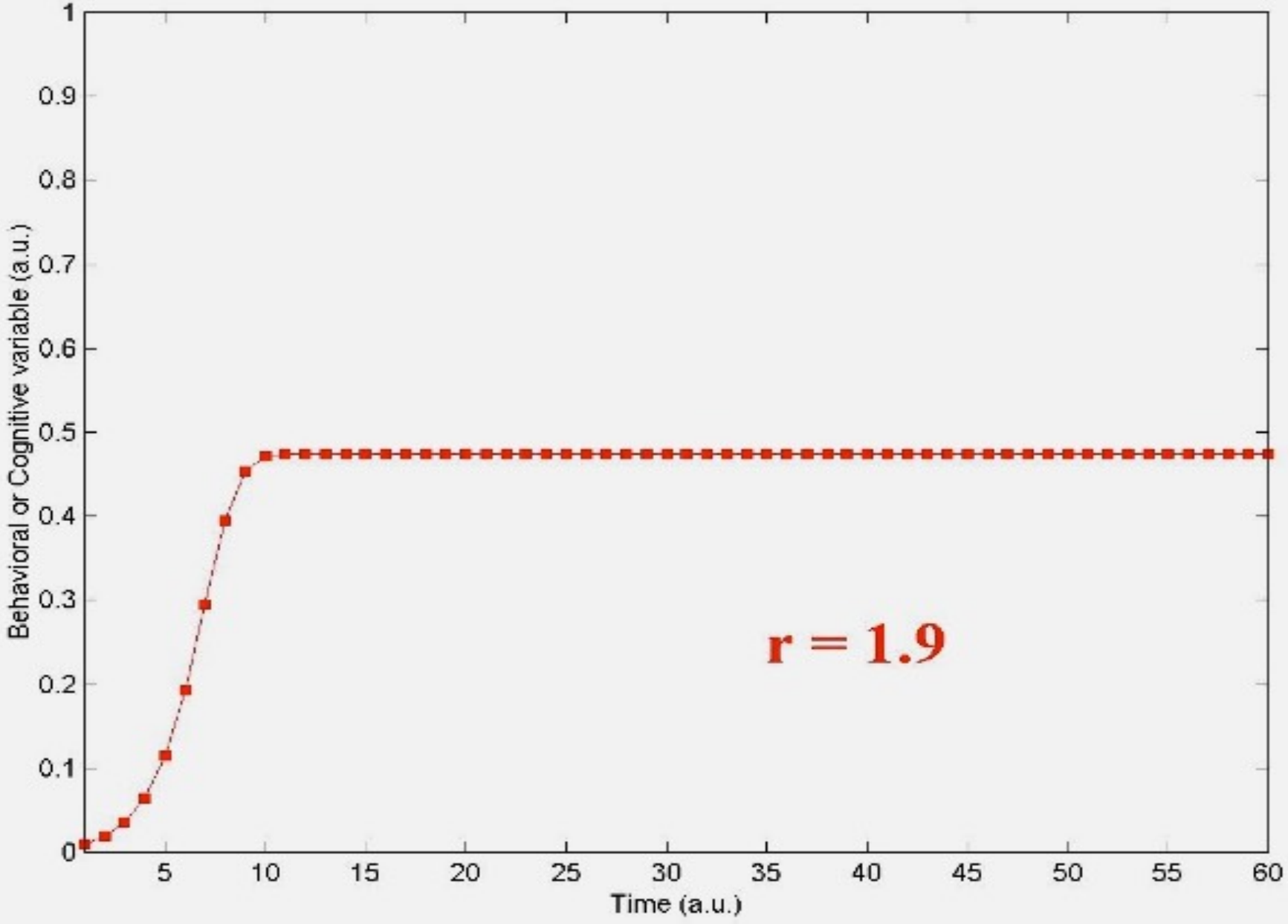
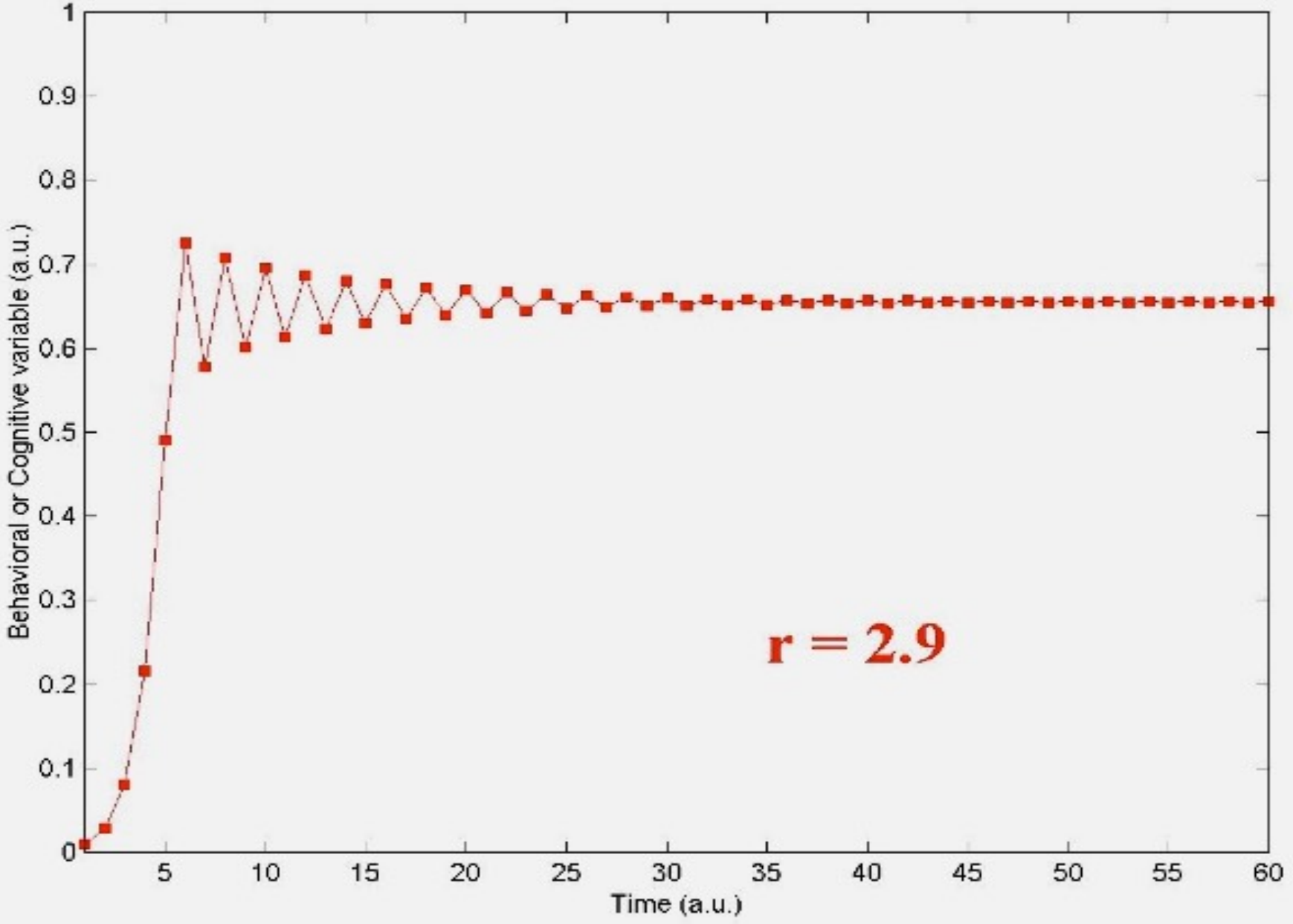
[1]refs


Behavioral or Cognitive variable (a.u.)
Time (a.u.)
r = 3.3
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
5
10
15
20
25
30
35
40
45
50
55
60


Behavioral or Cognitive variable (a.u.)
Time (a.u.)
r = 3.52
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
5
10
15
20
25
30
35
40
45
50
55
60

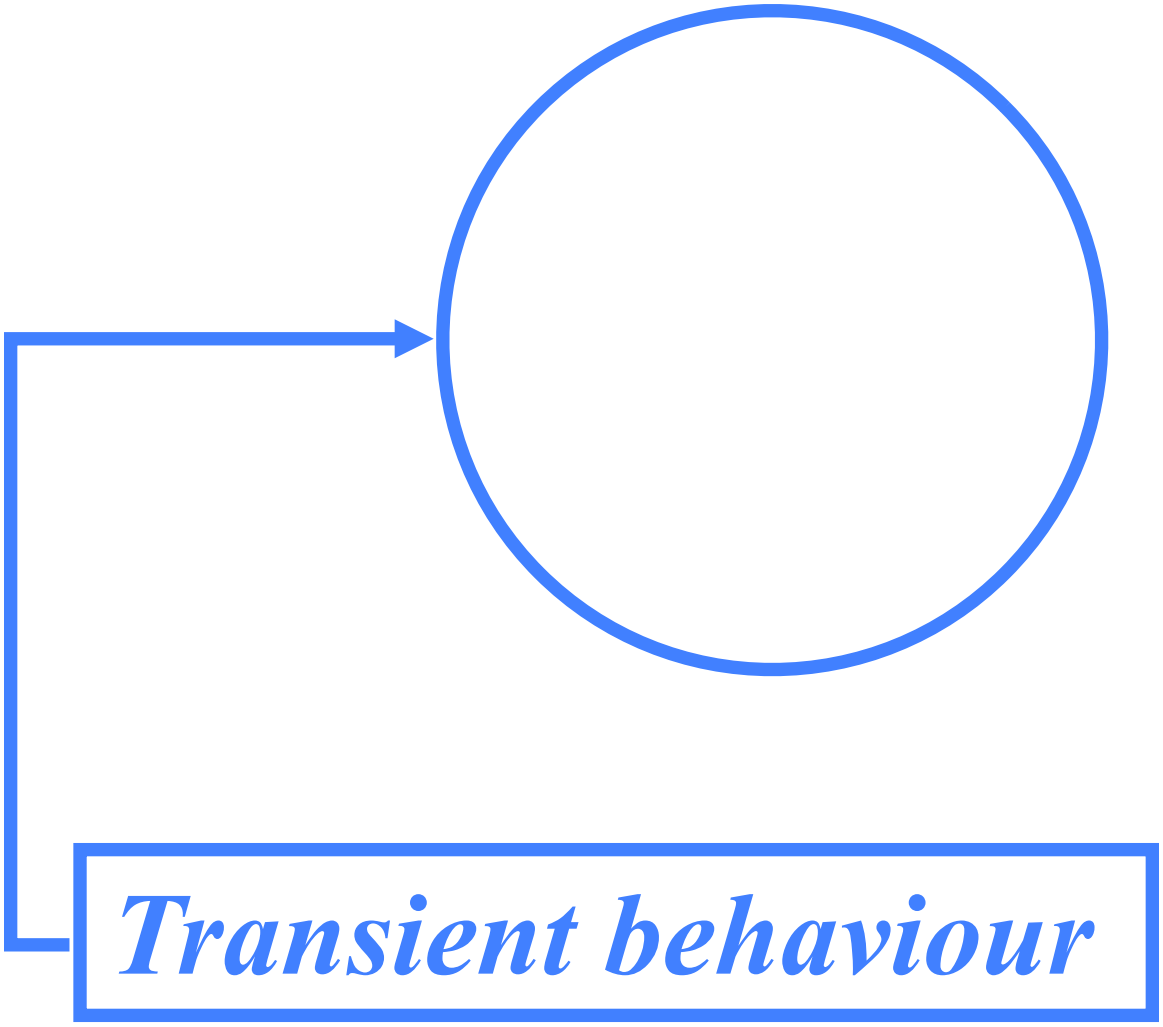

Behavioral or Cognitive variable (a.u.)
Time (a.u.)
r = 3.9
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
5
10
15
20
25
30
35
40
45
50
55
60


Behavioral or Cognitive variable (a.u.)
Time (a.u.)
r = 1.9
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
5
10
15
20
25
30
35
40
45
50
55
60


Behavioral or Cognitive variable (a.u.)
Time (a.u.)
r = 2.9
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
5
10
15
20
25
30
35
40
45
50
55
60

$$L_{i+1} = r L_i (1 - L_i)$$

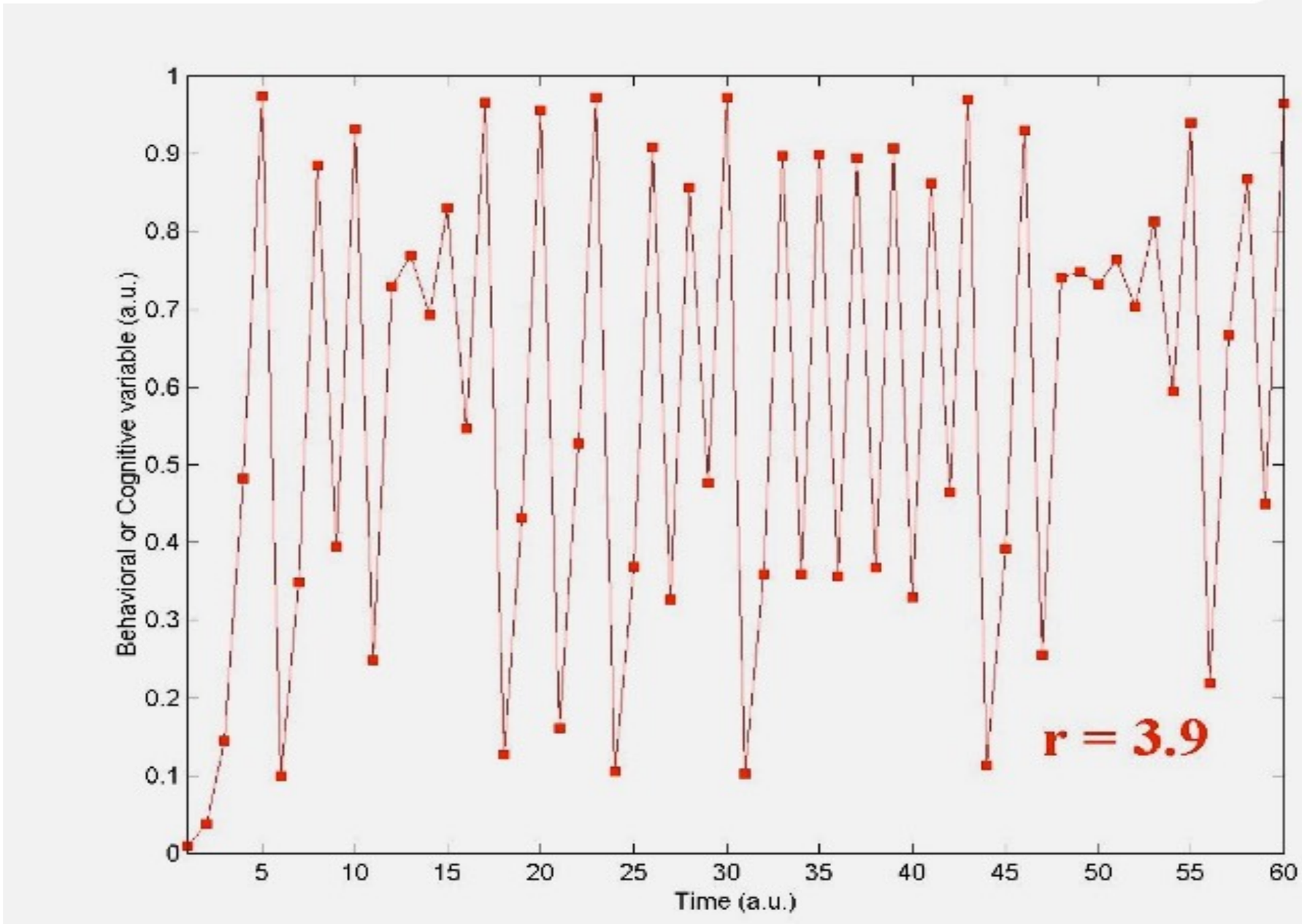
Logistic Map: Graphs


Transient behaviour

46

Logistic Map: Graphs

$$L_{i+1} = r L_i (1 - L_i)$$



[1]refs

An ecology of growth models?
Same principle!

Basic Growth Models: Exponential + Restricted Growth

$$Population = rN \times \left(\frac{K - N}{K}\right)$$

Additional Parameter: Carrying Capacity

$$CognitiveGrowth = L_i\left(1 + r \times \frac{K - L_i}{K}\right)$$

$$StylizedLogistic = rY_i \times \left(\frac{1 - Y_i}{1}\right)$$