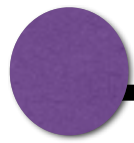


Lecture 17

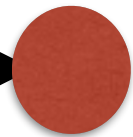
Evaluating Network Models

Geog 490/590
Spatial Modeling
Spring 2015

are you connected?



you



someone else

6

is this a big
or small number?

What is the likelihood that these two species originated from the same lineage at some moment in time?

you



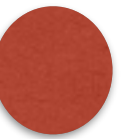
someone
else



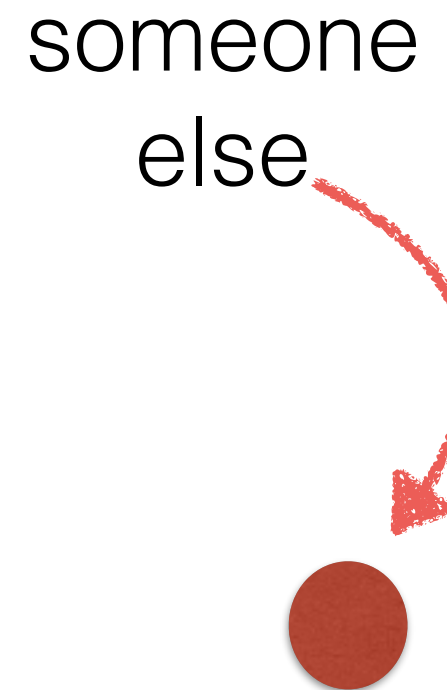
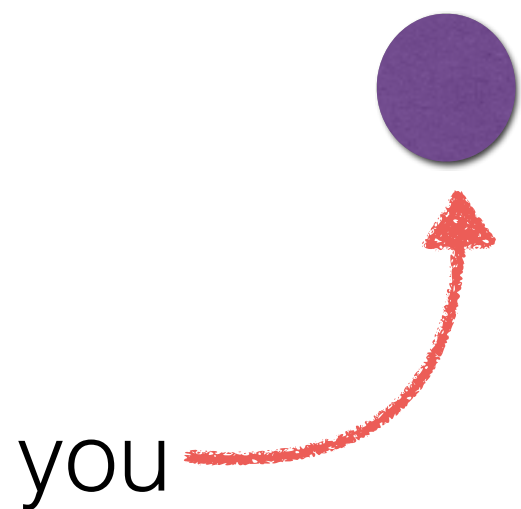
someone
else

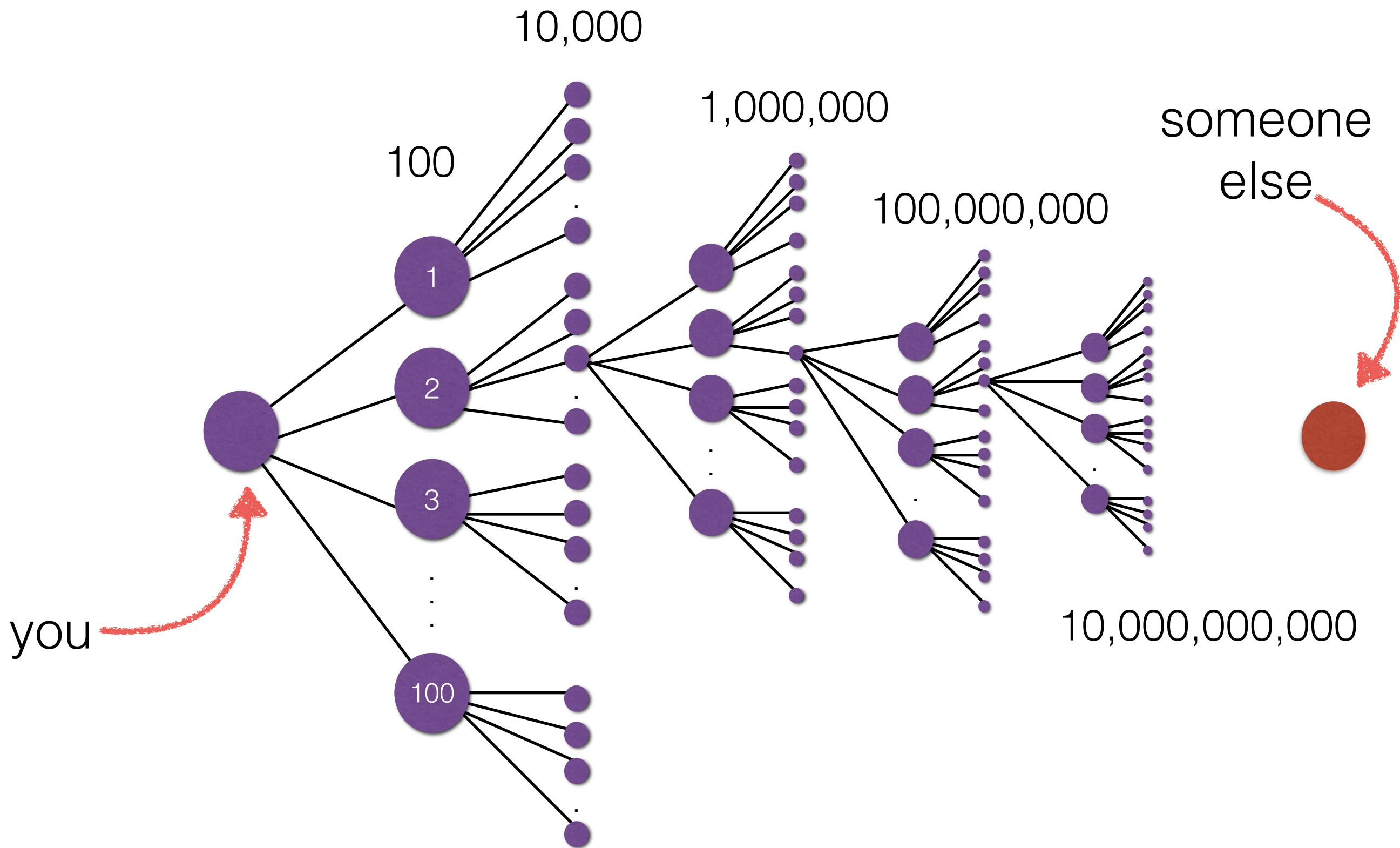
What is the likelihood that a
disease will be transmitted
between these two individuals?

you



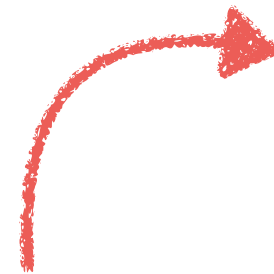
What is the likelihood that a virus will spread from one of these computers to the next?





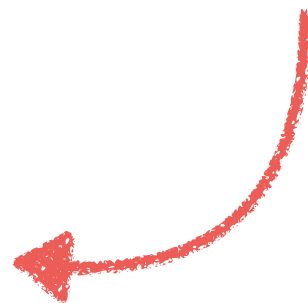
broadcast search
v.s.
directed search

not realistic

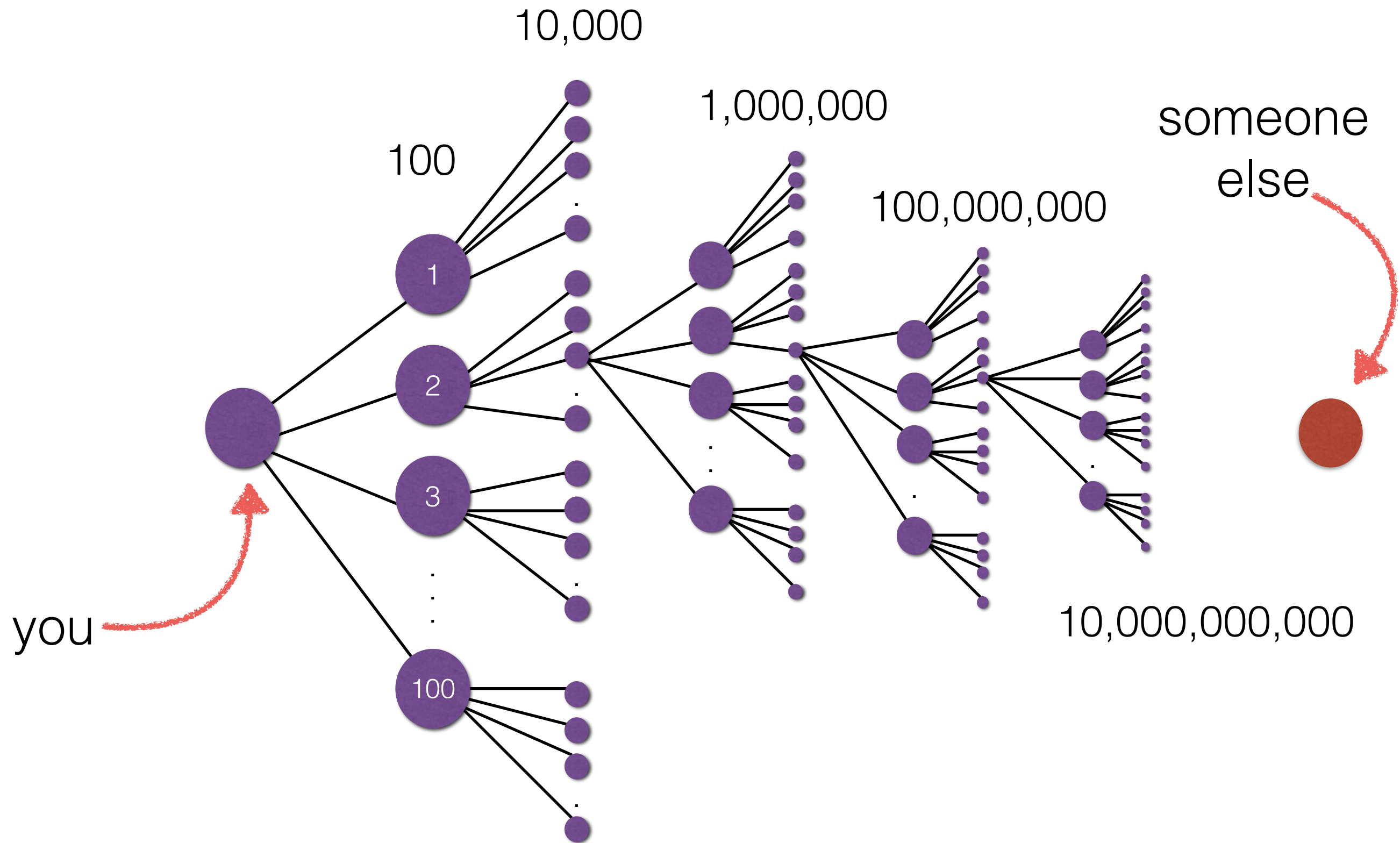


broadcast search
v.s.
directed search

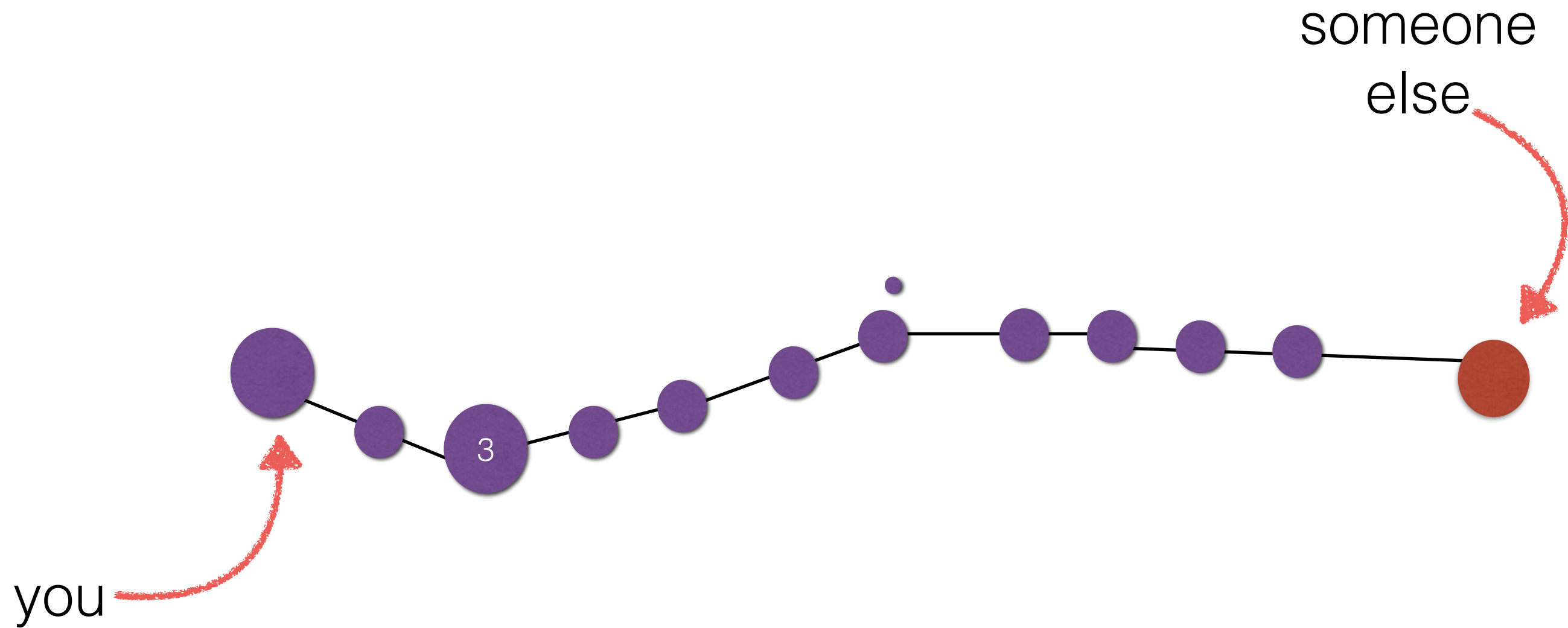
seemingly
impossible



BROADCAST SEARCH

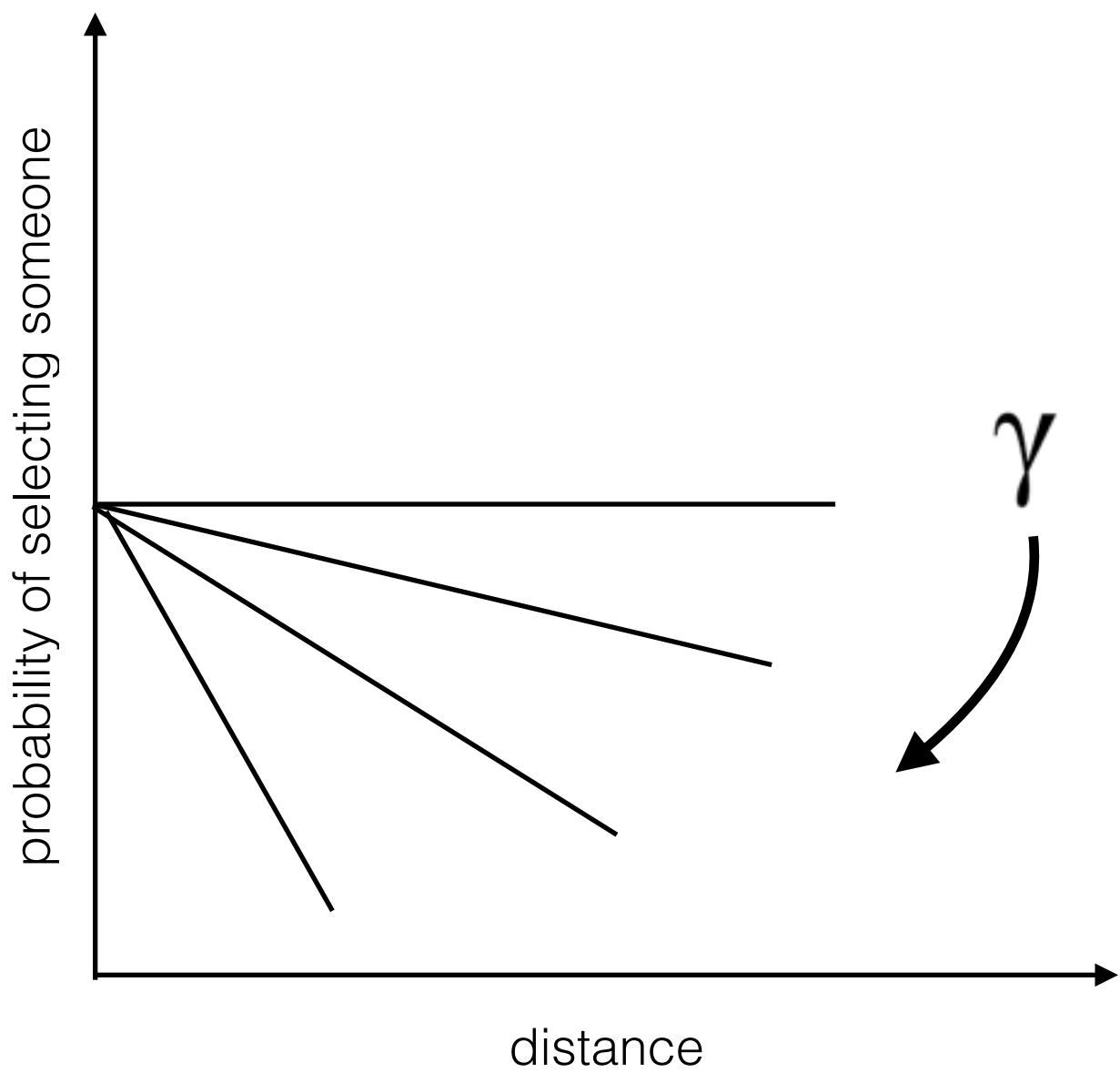


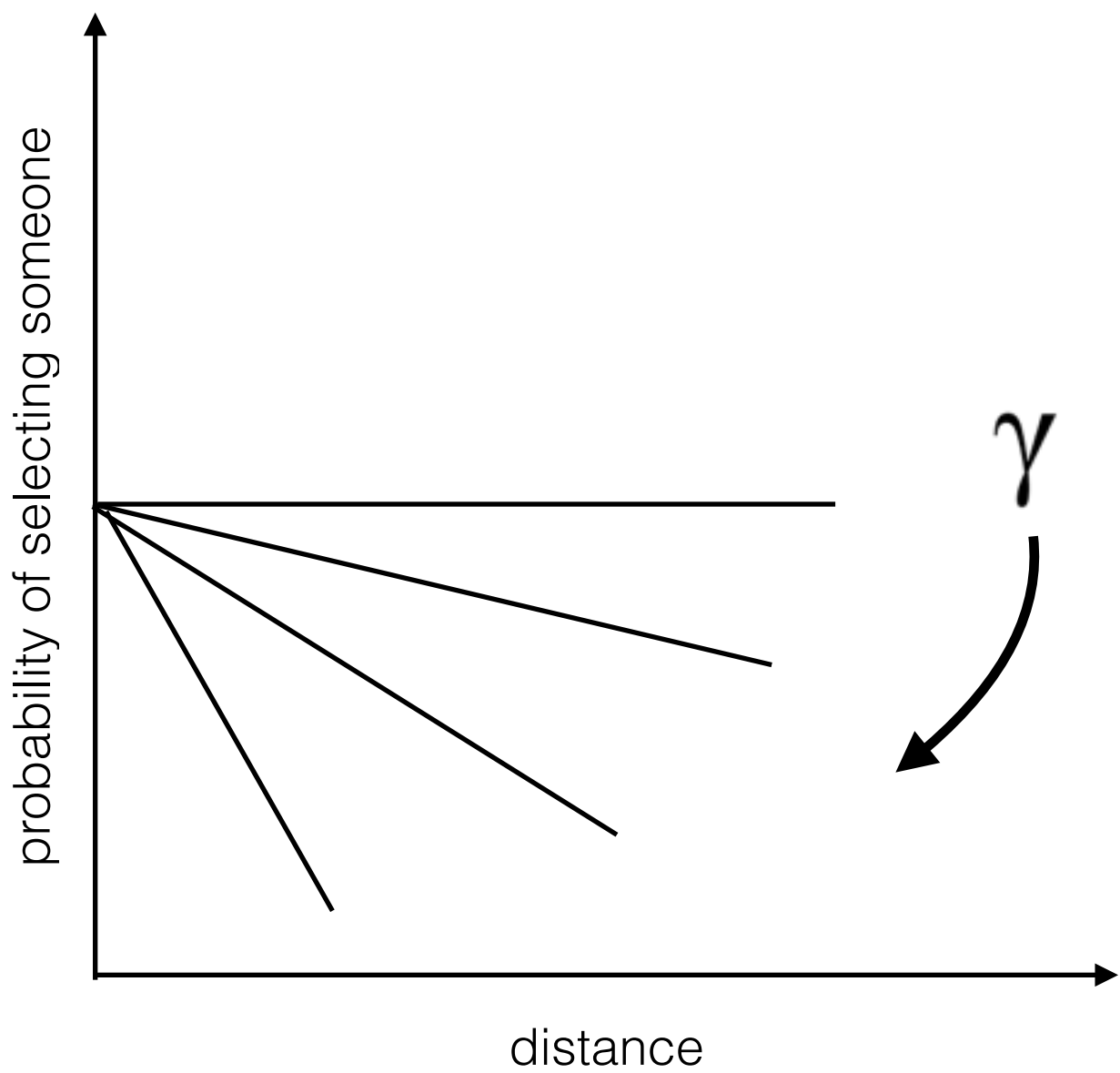
DIRECTED SEARCH



SMALL WORLD SEARCH PROBLEM



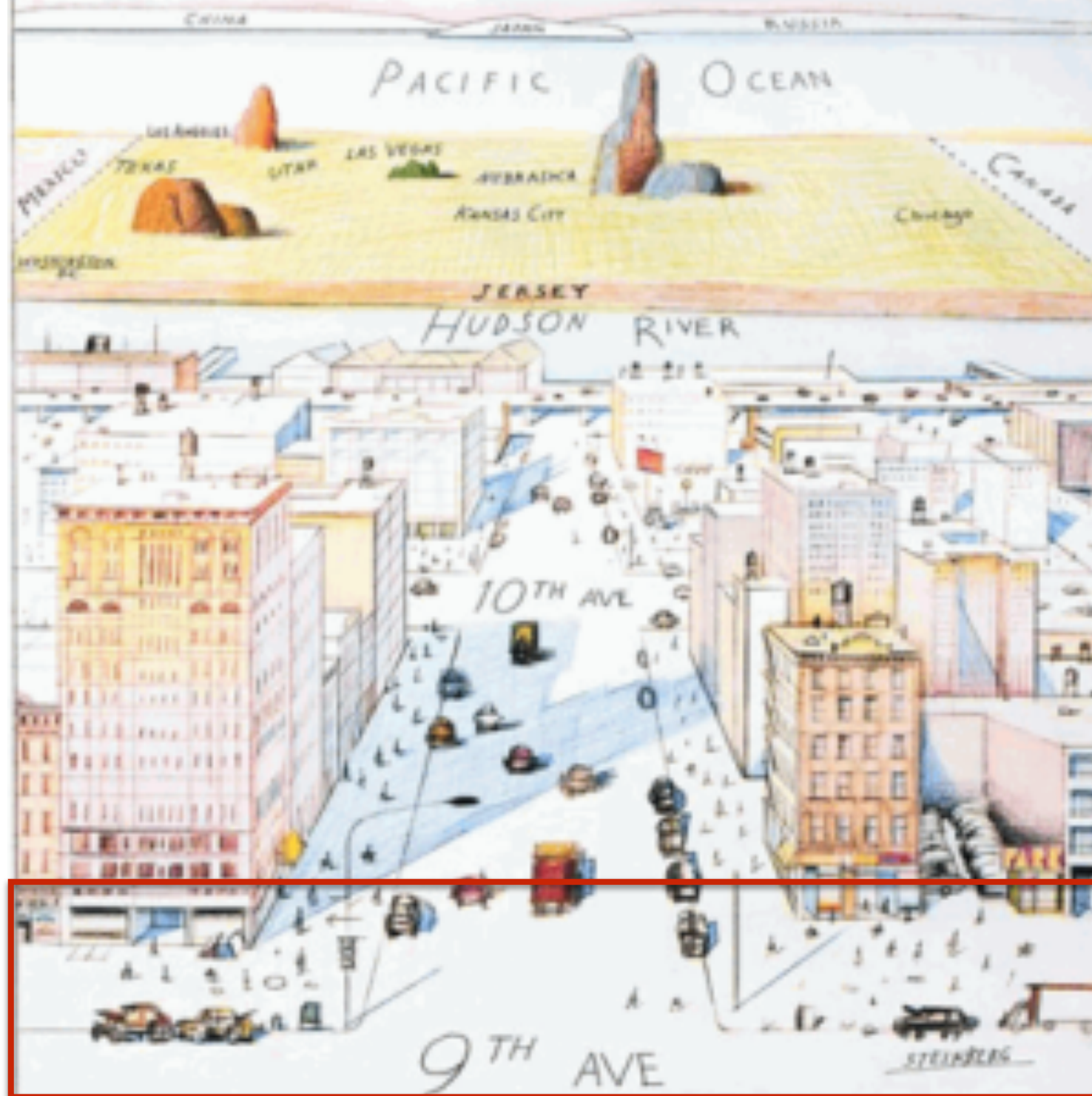




Mar. 29, 1976

THE NEW YORKER

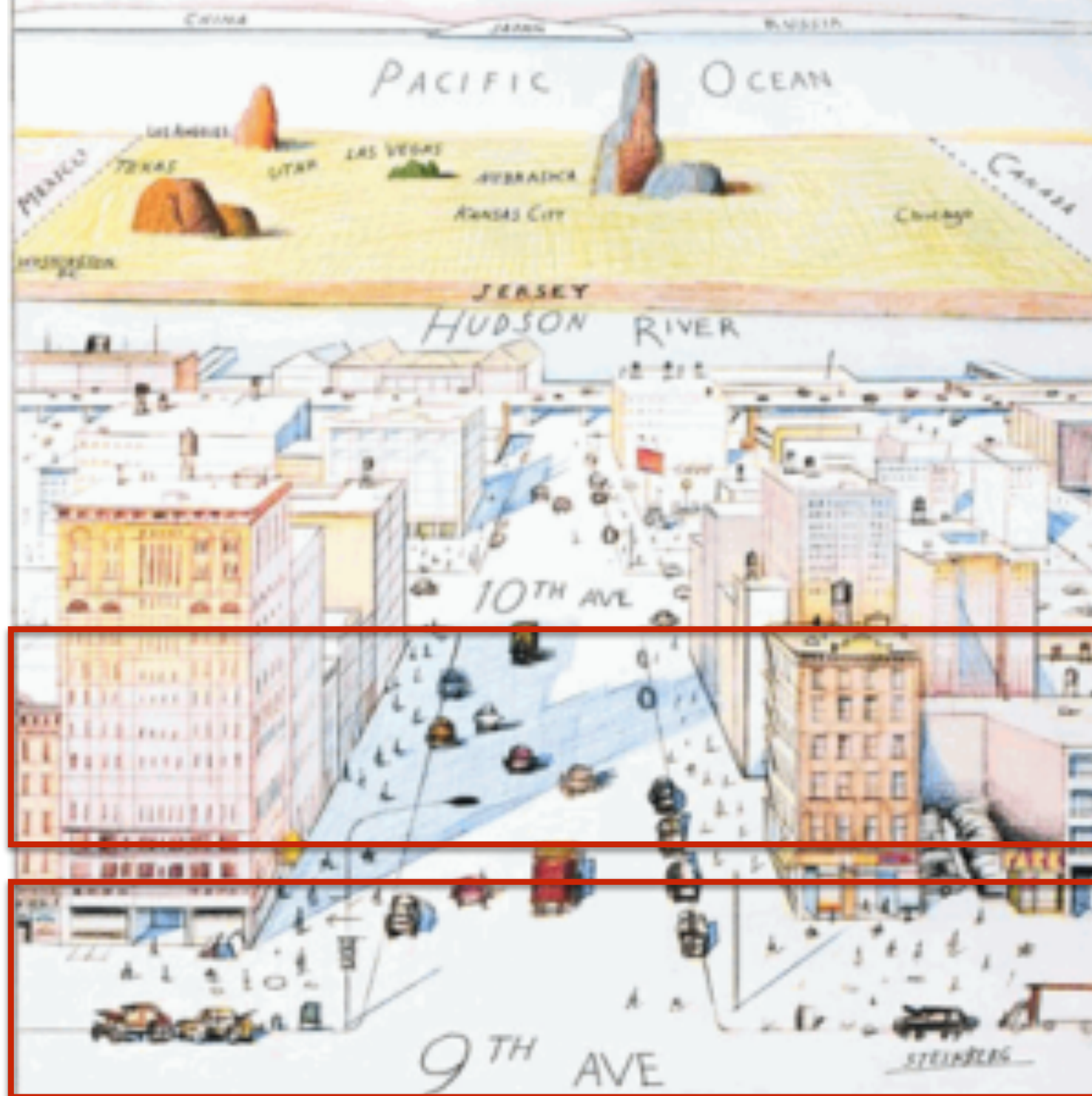
Price 75 cents



Mar. 29, 1976

Mar. 29, 1976 THE NEW YORKER Price 75 cents

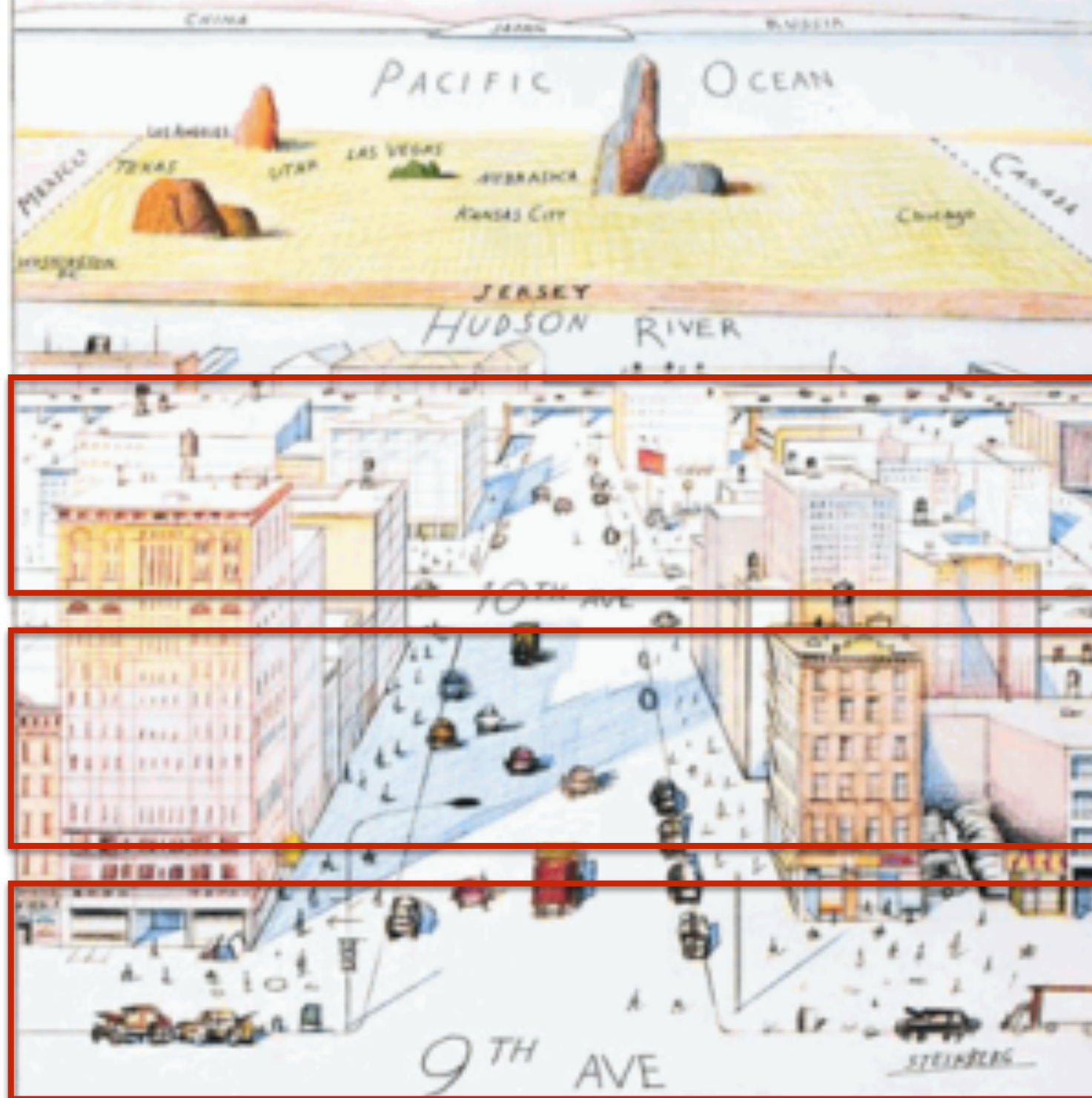
Price 75 cents



Mar. 29, 1976

THE NEW YORKER

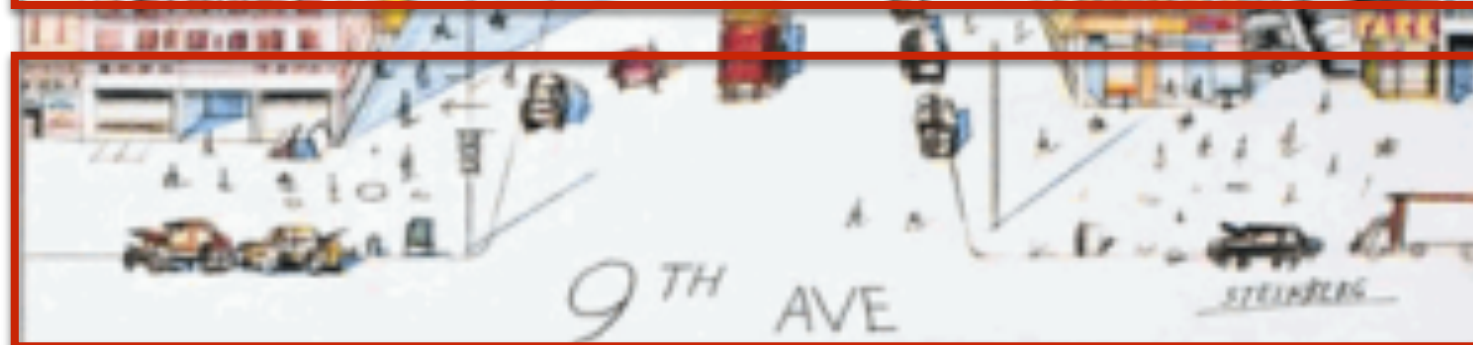
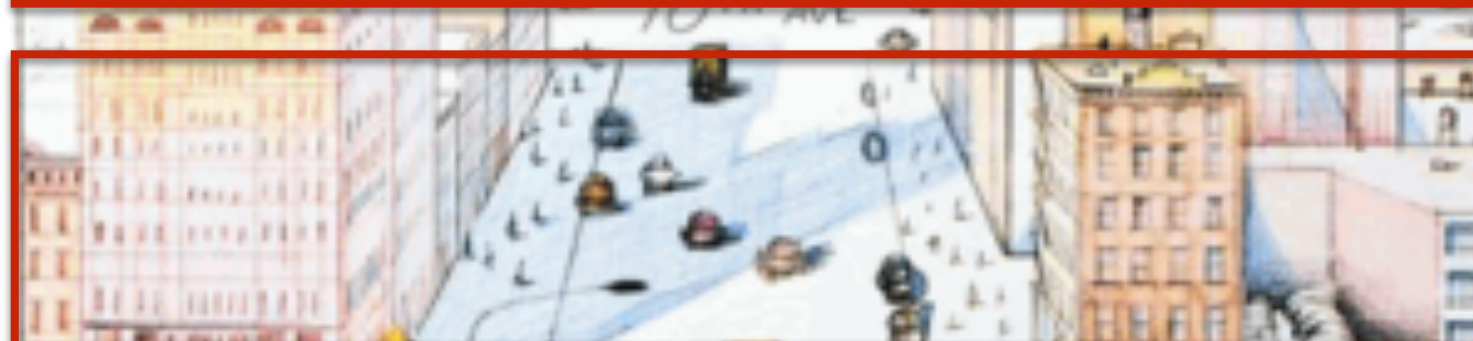
Price 75 cents



Mar. 29, 1976

THE NEW YORKER

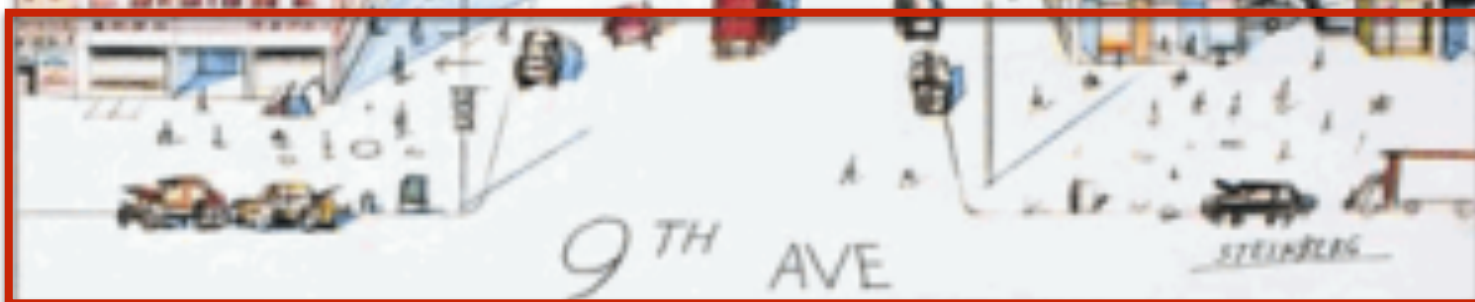
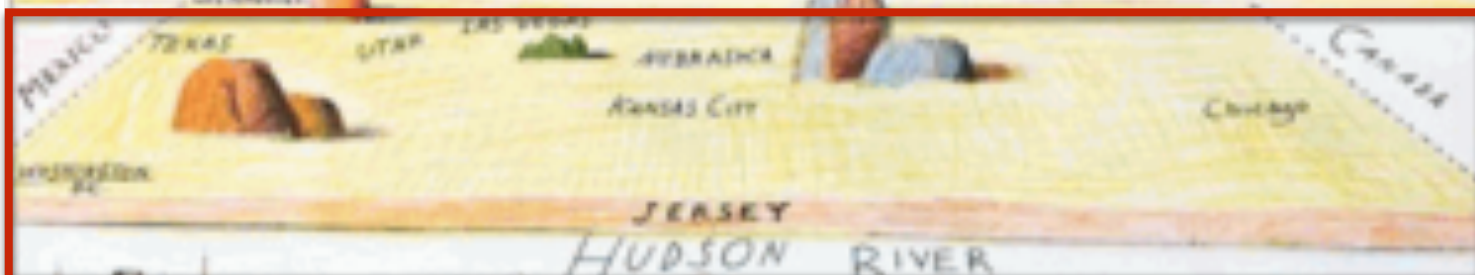
Price 75 cents



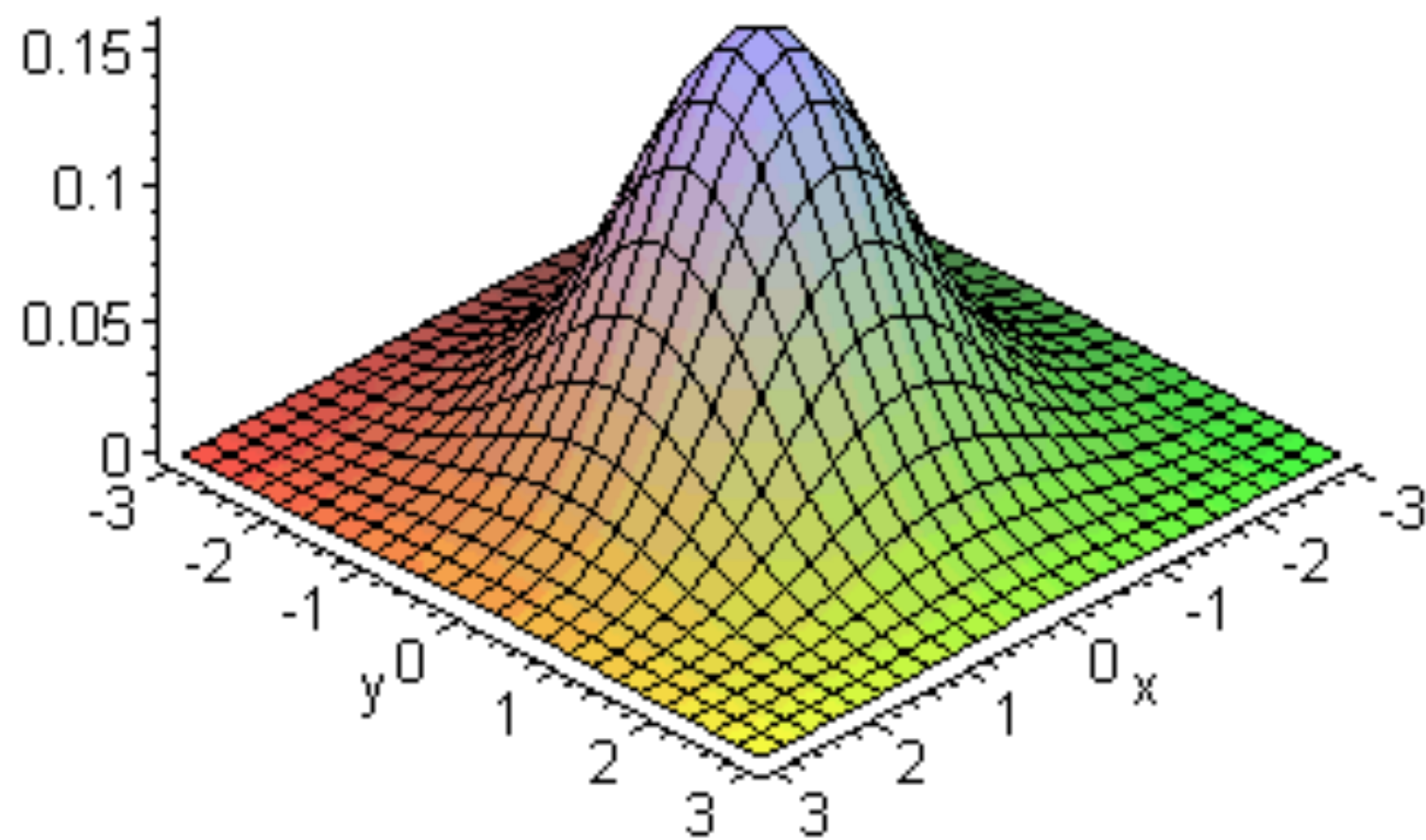
Mar. 29, 1976

THE NEW YORKER

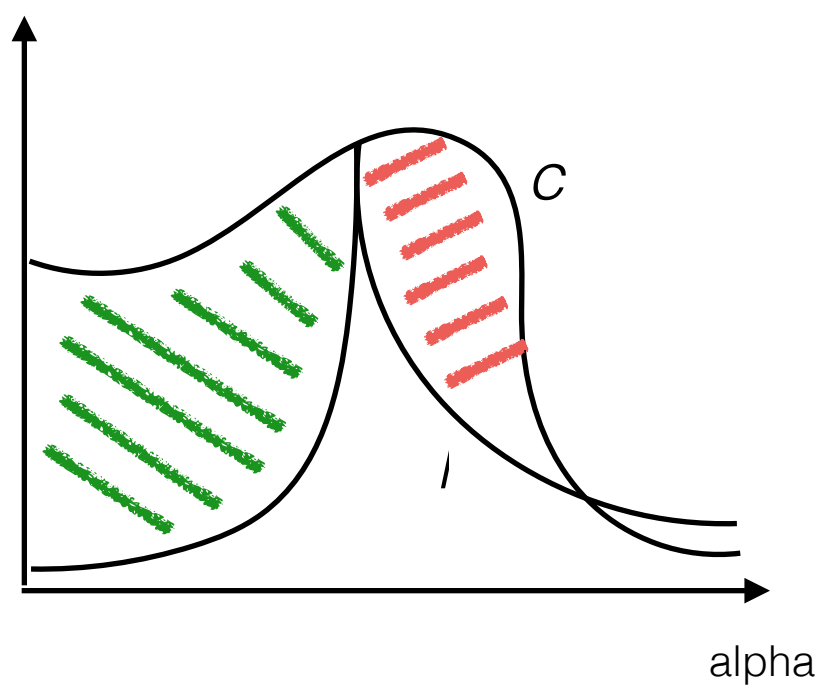
Price 75 cents



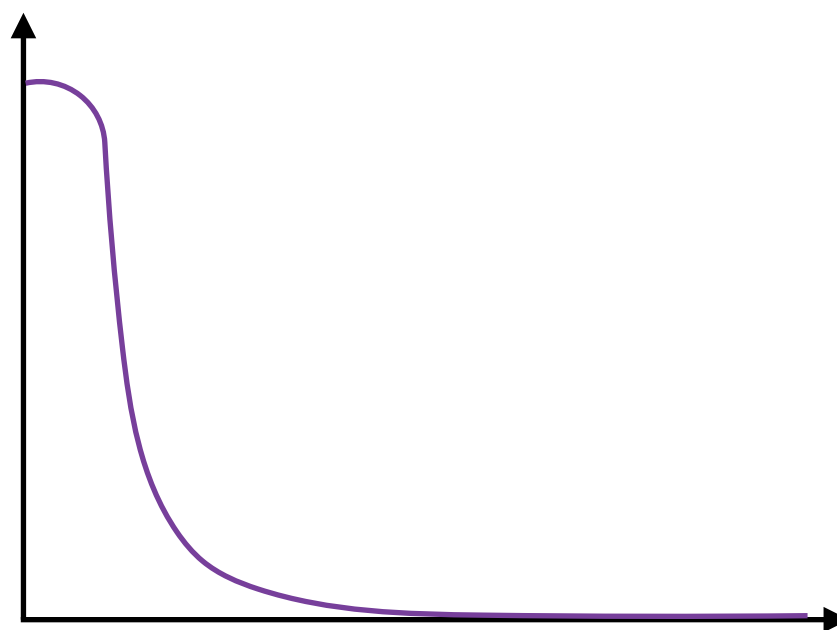
Kleinberg Condition



connectivity &
path length



preferential
attachment



geography

