

Commentaries on Albert-László Barabási's books

Networks101Link1.0 ©frederick david abraham, 9 January 2013

Preface to Networks 101.

Texts & Resources:

Barabási, A.-L. (2002). *Linked*.

Barabási, A.-L. (2009). *Bursts*

Easley, D. & Kleinberg, J. (2010). *Networks, Crowds, and Markets*, Chapters 1-5, 13-14, 19-21.

Mitchell, M. (2009) *Complexity*

Gephi 0.8.2 beta (2012). <http://gephi.org/>

NetLogo <http://ccl.northwestern.edu/netlogo/>

This is a pretend or virtual course, self-organizing in a variety of senses. I am teaching myself by reading two books by Barabási (*Linked* and *Bursts*) as part of my studies of network begun a couple of years ago. I use these books as specific sources to give coherence to this effort. I have read some papers and dabble a bit in Mitchell's book (2009) on CA systems in an effort to chase down the concepts 'edge of chaos' which I have reframed in a concept of μ -bifurcation cascades, and written some comparisons of dynamical systems to binary networks (see beginner's guides on my website; unfinished manuscripts). And dipped my fingers into a social analysis course on Coursera, and played with Gephi a bit, and run a couple of apps in NetLogo, Wolfram, and Wikipedia articles. In short, I am still pretty much an ignoramus, wandering virtually in sub-erdős pathways. I am pretending that as a student in my course, I have been instructed to write short essays reacting to each chapter in the 'texts', (called Links in *Linked*). These will not be a synopsis or summary of the chapters, but reactions and perspectives that strike me as either interesting or important.

I will post these vignette's in this section of my web site, and invite others to comment upon them, to comment on Barabási, and to suggest other readings. If anyone wants to share this effort and obtain credit at their university, you may seek out an arrangement that will satisfy them that with my vouching that you have completed significant inroads into the subject. I can be available for Skype conferencing and cloud venues as well as email. Unlike real course, one can amble at their own pace.

Note, Mitchell is doing a course via MOOC at SFI, and Lada Adamic is starting a Social Network Analysis course via Coursera; both courses commence 28-January-2013.