

Mapping Ideas from Cyberspace to Realspace. Funded by NSF Cyber-Enabled Discovery and Innovation (CDI) program. **Award # 1028177.** (2010-2014) <http://mappingideas.sdsu.edu/>



A Multilevel Model of Meme Diffusion (M³D)

Dr. Brian H. Spitzberg



Principle Investigator: Dr. Ming-Hsiang Tsou mtsou@mail.sdsu.edu, (Geography), **Co-Pis:** Dr. Dipak K Gupta (Political Science), Dr. Jean Marc Gawron (Linguistic), Dr. Brian Spitzberg (Communication), Dr. Li An (Geography).
San Diego State University, USA.

M³D Model

- Theories and models are metaphors—they are not “reality,” and are instead heuristic devices for interpreting reality.
- Ala Popper, theory needs to be bold and is always conjectural—bad theories explain everything; good theories are meant to be broken.
- Ideal theories, like operationalizations, are scalable.

M³D Model

- **Innovation Diffusion:** “an idea, practice, or object that is perceived as new by an individual or unit of adoption”
(Rodgers)
- **Meme:** an act or meaning structure capable of replication
(Dawkins, 1976)
- **Egoism vs. Altruism Axiom:** “Selfishness beats altruism within groups. Altruistic groups beat selfish groups. Everything else is commentary” (Wilson & Wilson, 2007)

M³D Model

- Levels: Egoism
 - **Meme** (message): distinctiveness/entropy, redundancy, simplicity/trialability, media convergence, media expressivity
 - **Competence**: Individual (communicator/sender): motivation, knowledge, skills, adaptation, ethos, N/centrality of influencers

M³D Model

- Levels: Altruism
 - **Network (Structural)**: N past tweets, N nodes, Heterophily, Centrality/Propinquity, N/Centrality of Influencers
 - **Network (Subjective)**: N Counter-memes & Frames, Frame resonance, Subjective homophily, Relative Advantage, Cascade threshold(s)

M³D Model

- Levels: **Competition**
 - Societal (Rivals): Rival networks, Rival memes, Diffusion stage
 - Societal (Media): Publicity, Access/Diffusion
- Levels: **Spatial**—communication facilitators
- **Efficacy**
 - Popularity: % of potential population touching meme
 - Velocity: Rapidity of market diffusion
 - Centrality: Density of population networks touching meme
 - Longevity: Duration of meme circulation
 - Fecundity: Span & Popularity of meme derivations

M³D Model

- Theories Integrated:
 - Meme/socioevolutionary theory (e.g., Robin Thicke-“Blurred”)
 - Frame/Narrative communication theory (e.g., “liberal”)
 - Diffusion of innovations theory (Gangnam style)
 - CMC competence theory
 - General Systems & Pragmatics communication theory
 - Information theory (carrying capacity for new memes)
 - Actor Network Theory
 - Social network theory (it’s who you know)
 - Social identity and intergroup dynamics theory (individuals and groups compete differentially)

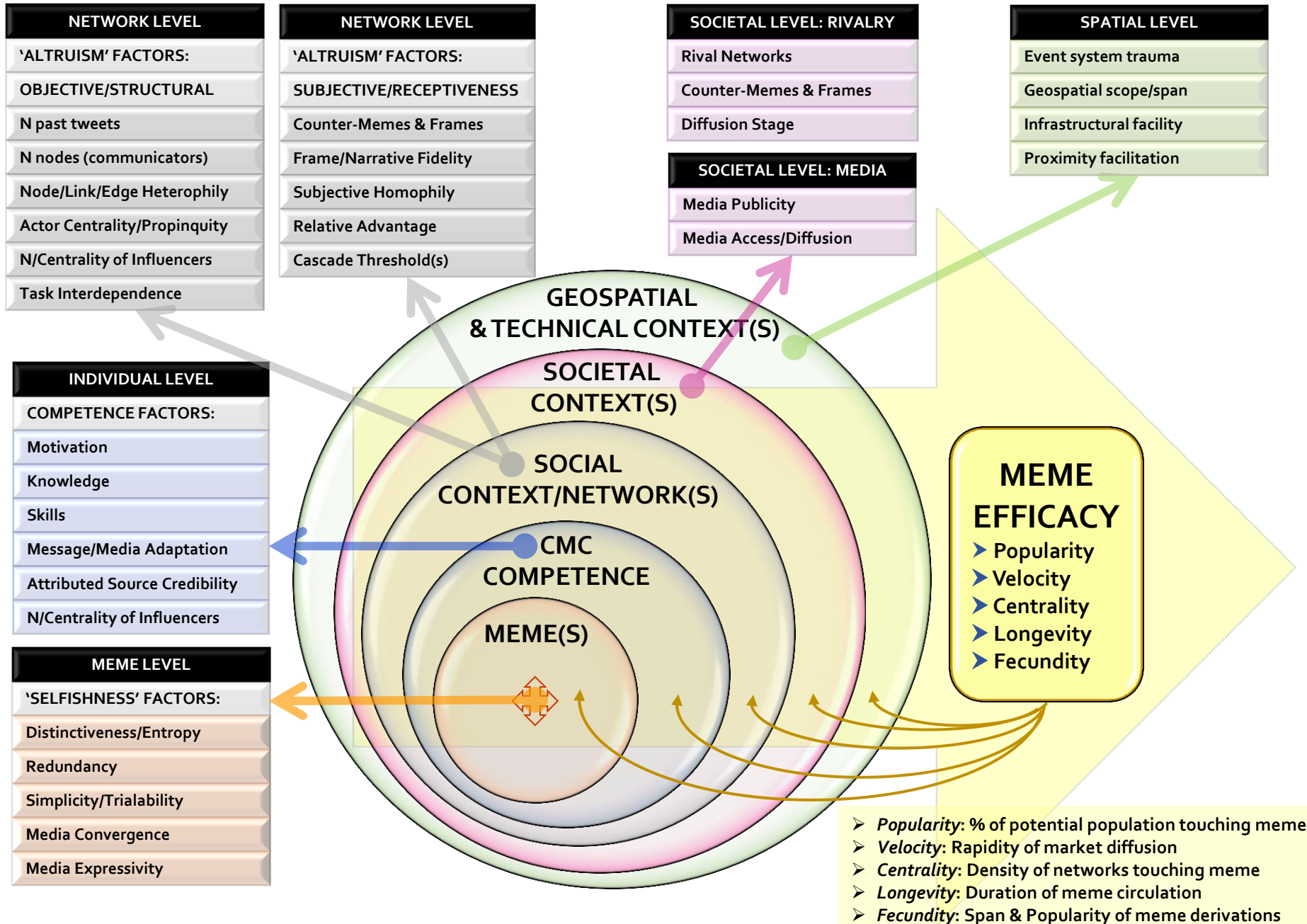
M³D Model

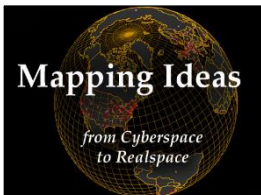
- Some Large Scale Theoretical Notions:
 - **Entropy**: the degree of information uncertainty in a system
 - **Homophily**: similarity (the greater the homophily, the lower the entropy)
 - **Competition**:
 - Homophilous networks tend to reinforce and amplify other homophilous (resonant) memes (frames, narratives), and attempt to counter dissonant memes.
 - However, for *new* memes to make an impact, the network of exposure requires some heterophily, or else it offers no decrease of entropy (i.e., it is merely redundant information)

M³D Model

- Some Large Scale Theoretical Notions:
 - **Altruism:**
 - Altruistic (cooperative) collectives reinforce homophily (i.e., resist heterophily), but must compete against *external* counter-memes and counter-frames
 - However, counter-frames and memes often contain the original meme as part of their own memetic constructions (Lakoff—repeatedly saying something is *not* a “death tax” reinforces the original meme of “death tax”
 - **Meme diffusion** will reveal “S” lifespan curves, moderated by traditional diffusion factors—exposure, trialability, source credibility or status, etc.

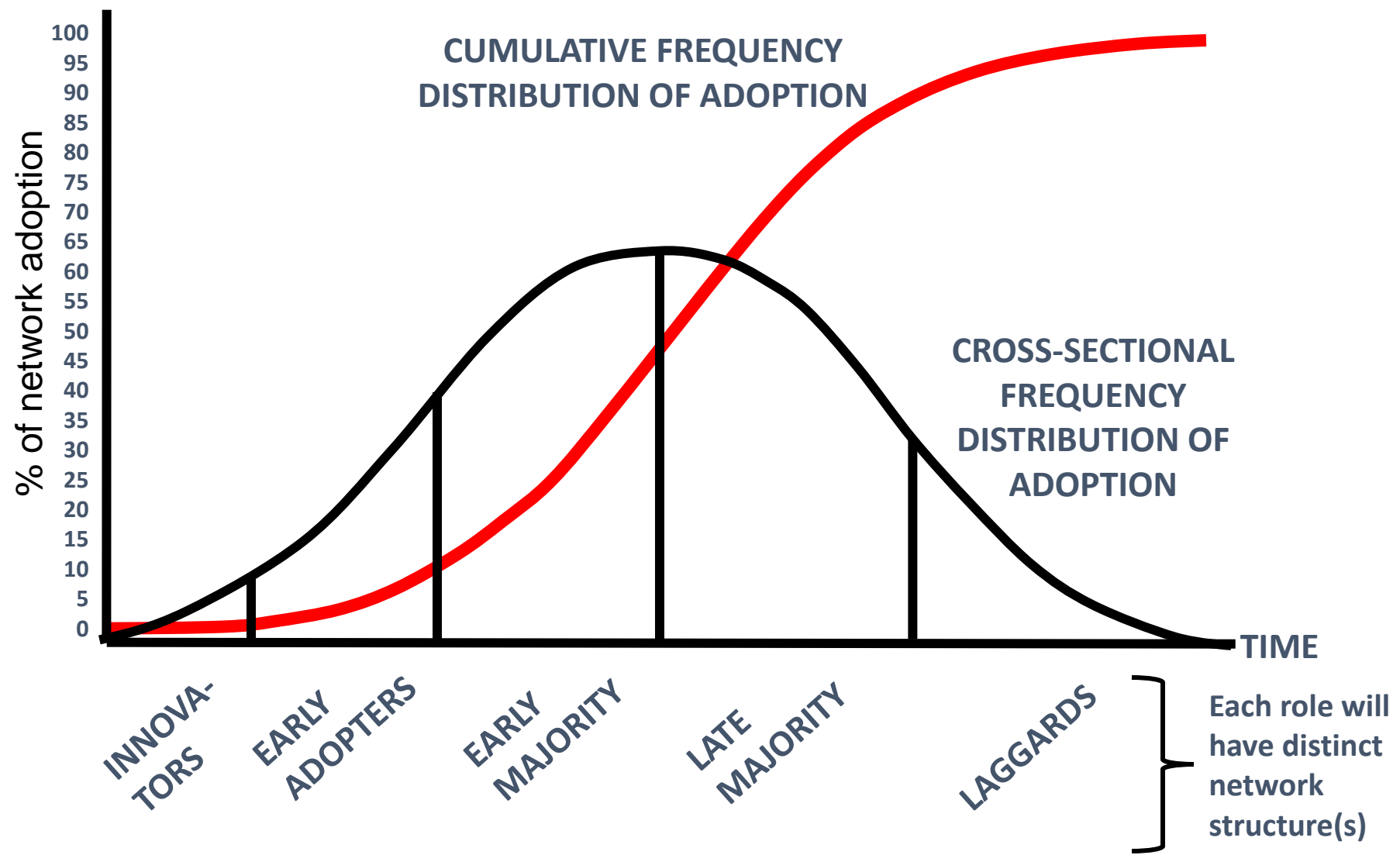
Multilevel Model of Meme Diffusion





M³D Model

Diffusion of Innovations Theory



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