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▶ emergent socio-semantic structures

- social annotations and folksonomies
- models of complex information networks
- interplay of social and semantic networks

▶ social similarity

- annotations, meanings and social context
- notions of similarity and their semantic characterization
- ranking and filtering, detecting non-social behaviors

▶ patterns of human activity on the web

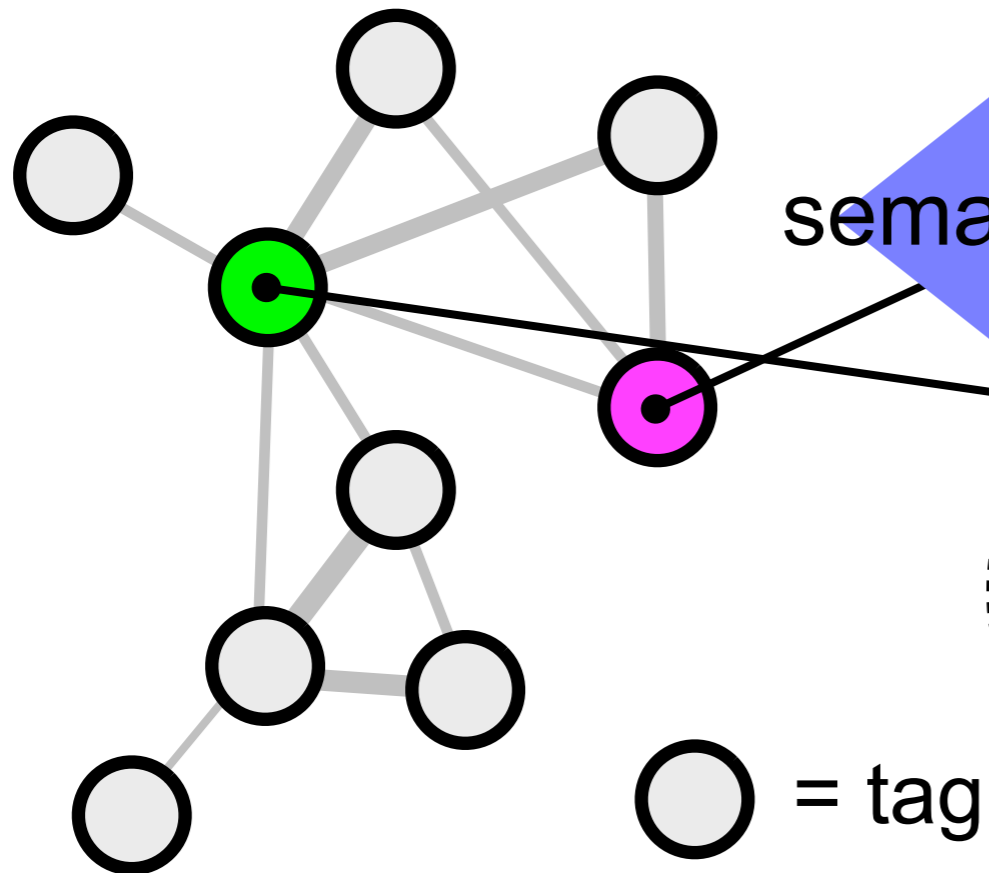
- collective attention
- the dynamics of growing information networks

▶ linking on-line and off-line worlds

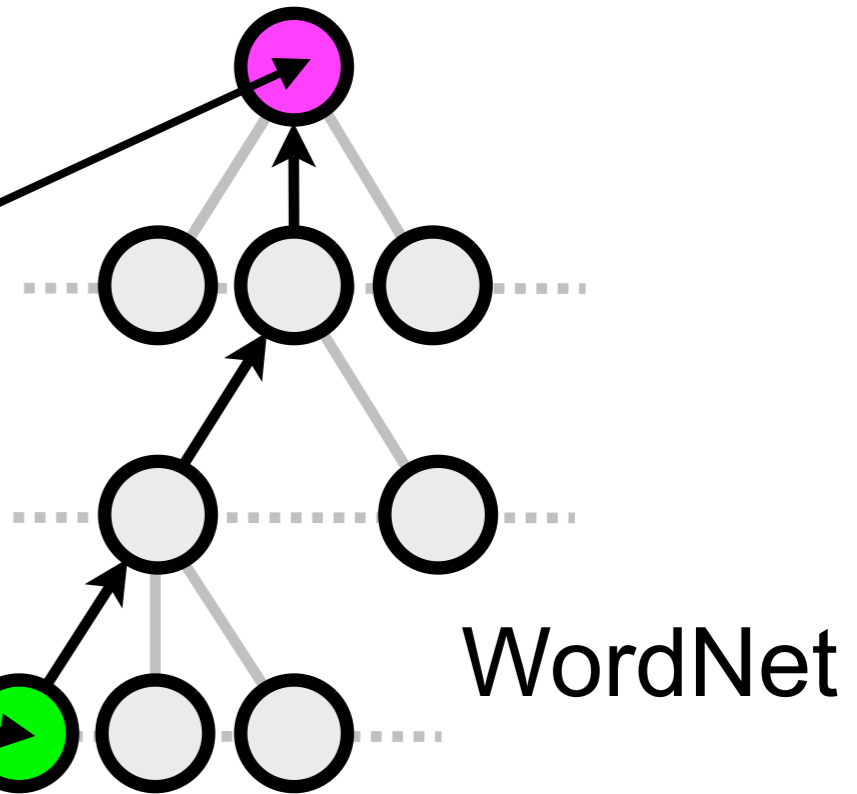
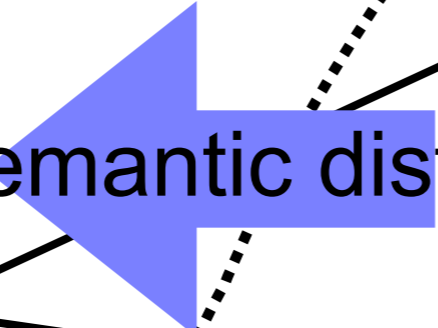
social context and social similarity

C. Cattuto, D. Benz, A. Hotho and G. Stumme,
Semantic Grounding of Tag Relatedness in Social Bookmarking Systems,
ISWC 2008

tag co-occurrence network



semantic distance



 = { syn1, syn2, syn3, ... }

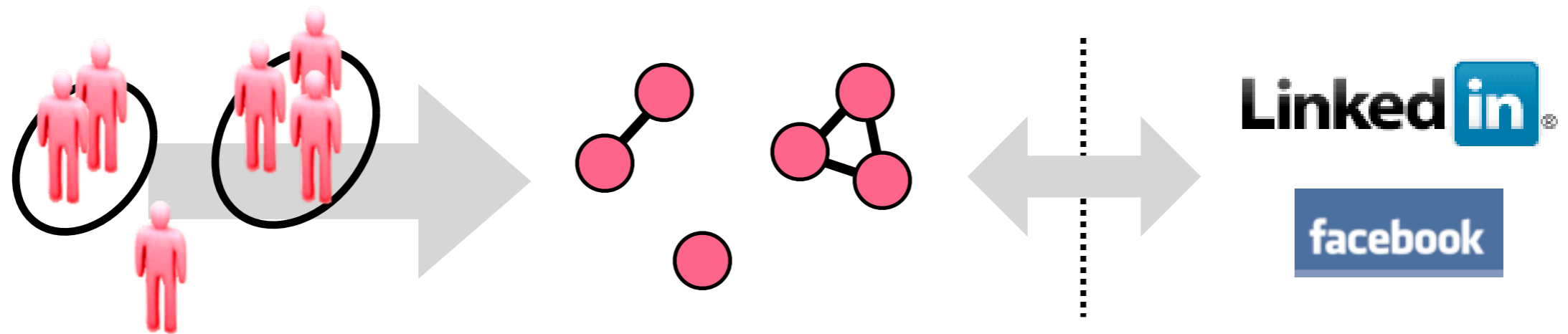
- *folksonomy projections*
- *aggregation methods*
- *network observables*
- *information theory*
- *collaborative filtering*

- *formal representation*
- *semantic distances*
- *user studies*



linking on-line and off-line worlds

what are the statistical properties of the networks of contact and co-presence of people in social interaction?



fine-grained **spatial** (\sim m) and **temporal** (\sim s) resolution + large **scale**

how much predictive is off-line interaction for on-line interaction, and vice-versa? how do SNS structures correspond to behavioral patterns in physical space?

experiments underway: <http://www.sociopatterns.org>