Embeddedness

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Getting into Street Crime: The Structure and Process of Criminal Embeddedness

McCarthy, B. & Hagan, J.

Brief Overview

Integrated Theory: Social Capital, embeddedness, and differential association

Tutelage: Instruction

“Criminal Capital”: Knowledge and technical skills that can facilitate successful criminal activity

Economic Elements of Crime: Prostitution, theft, and drug selling

“The process of criminal embeddedness may well begin while at home and extend to the street”

Adverse experiences ➔ Embeddedness in Criminal Street Networks

Drug selling and theft: “Criminal activity at home has substantial effects on tutelage on the street”

Why is This Important?

Makes us see the significance of criminal capital.

Empirical evidence that tutelage can increase an individual’s criminal participation.

We learn the significance of criminal networks and attitudes at home.

Has us see crime can be a learned skill.

Crime is multi-dimensional.

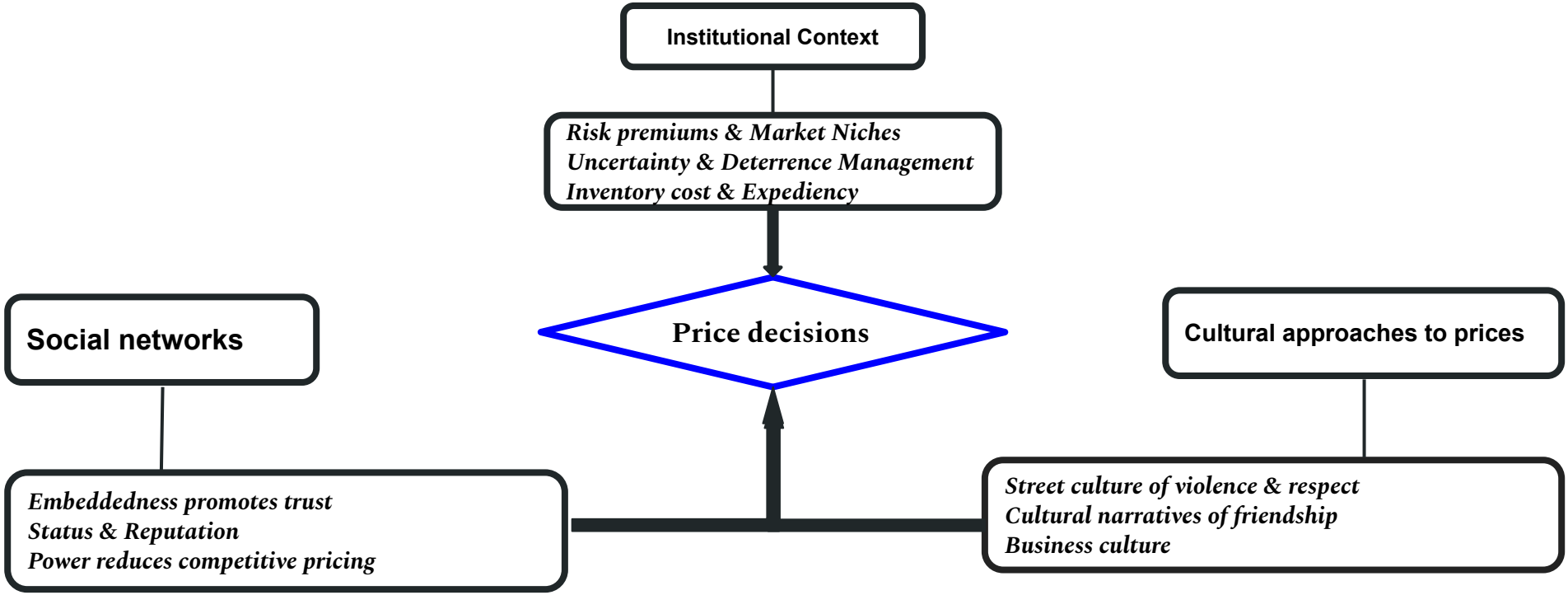
Discussion Questions

1) How might the measure of the person providing the mentorship to an individual for criminal behavior expand our knowledge on network theory and embeddedness?
2) This article was written 27 years ago. What other crimes could we add to this study and how might have tutelage evolved during this time span?

Putting a price on drugs: An economic sociological study of price formation in illegal drug markets

Moeller, K. & Sandberg, S.

Graphical Framework



Main takeaway: Mark Granovetter (1985)

Imperfect market dominated by “under-socialized” individuals (self-interest, utilitarian and opportunism).

Operations are “embedded” within social relationships and network relations.

“The embeddedness argument stresses instead the role of concrete personal relations and structures (or "networks") of such relations in generating trust and discouraging malfeasance.
The widespread preference for transacting with individuals of known reputation implies that
few are actually content to rely on either generalized morality or institutional arrangements to guard against trouble.”
(Granovetter, 1985)

Discussion Questions.

1) It is evident that in imperfect market systems, “oversocialized individuals” are key to operations, or at least, engage in such illegal activities. What rules govern their behaviors (perfect or imperfect market conditions) and how might network science help us understand the behavior of such persons?
2) Distance is an important factor in illegal markets. How might network science approach the study of space in illegal activities ethically (consider the ethics of research?

The ties that bribe: Corruption's embeddedness in Chicago organized crime

Joseph, J. & Smith, C.

Overview

Examines the embeddedness of politicians, police officers and non-state actors in organized crime before and after Prohibition in Chicago

Theory of networks

How embeddedness of the network actors changes as organized crime grows in size and centralizes in power

The data comes from the Capone database and a tie is determined by two actors connected to the same crime

Primary takeaway: As the profitability of the criminal activity increases, the frequency of state actors decreases, the type of state actor moves up the chain of command, and their embeddedness increases

Important Definitions

Embeddedness - interconnectedness of relationships as related to illicit economic activity

Corruption - Crime of powerful leveraged from occupational position for economic or political gain

Organized Crime - Exists to dominate and protect illicit markets; leverages high profile and every day state actors to assert control

Measures of Embeddedness

Degree refers to the number of connections in the network

- More opportunities to engage in crime

Eigenvector is a measure of network connectedness of an individual's direct alters

- Shielding of criminal activity

Nestedness is the number of subgroups to which one belongs

- Access to different specializations

Results: Structural Changes

Size - Number of nodes grew 3x

Edges - Number of connections grew 4x

Centrality - More centralized hierarchy

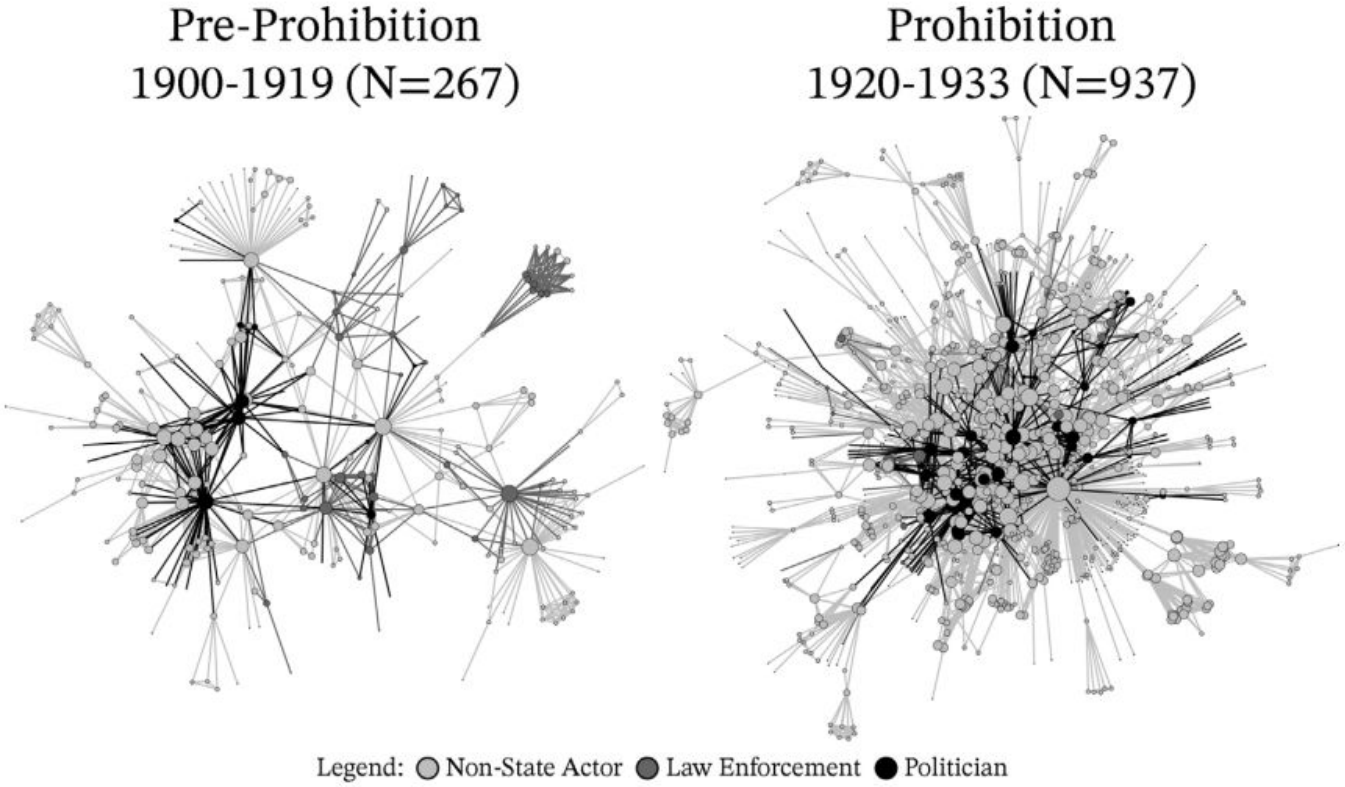
Density - Drops from 2.2% to 0.7%

Nested Subgroups - More nested subgroups

Embeddedness - More variation among individual nodes

More opportunity for profit result in a larger, more centralized network structure

Visual of Network Centralization



Results: Group Changes

Police - Much fewer and much less connected

Politicians - Same proportion of actors despite network growth. Maintained higher levels of embeddedness compared to police

Non-State - Growth in numbers. Much variation in embeddedness

Discussion Questions

1. How relevant is this data to modern problems? Are the insights valid today? In general, what are your thoughts on using old data in researching social questions?
2. Can we apply findings about the role of political corruption to crimes in which politicians are not necessarily involved (i.e. white collar crime)?
3. Do you think degree, eigenvector and nestedness as measures of embeddedness carry varying degrees of importance depending on the type of criminal network?

Trusting the Untrustworthy: The Social Organization of Trust Among Incarcerated Women

Young, J. & Haynie, D.

Trustworthy people are: older, have spent more time in prison, non-christian and non-muslim religious affiliates, whites and hispanics compared to blacks, brokerers of get along with, people who trust others (reciprocity).

People who trust others have the following characteristics: non-christian and non-muslim religious affiliates, hispanic, brokerers of get along with, receivers of trust nominations.

Structural factors (entrainment, brokerage, embeddedness) are more influential than individual factors in building trust.

Grandma teaser: Trust is embedded within friendship relations.

Network Concepts: Embeddedness

A concept that shows how **social network relationships** impact **economic action**

In this case, the **resource** to be gained through networks is **trust**

Dyadic Embeddedness - Reciprocal Process between two individuals

- ***i*** is more likely to trust ***j*** if ***j*** trusts ***i***

Network Embeddedness - Involves three parties

- ***i*** trusts ***k***, ***k*** trusts ***j***
- ***k*** gets along with ***i***, ***k*** shares positive information about ***j*** with ***i***

Network Concepts: Other

Homophily is network ties based on similar individual characteristics

- Race, religion and time in unit

Entrainment is when ties between two networks co-occur

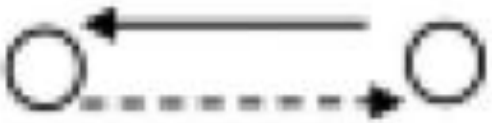
- Get along network facilitates the trust network

Brokerage refers to the degree at which an individual bridges ties

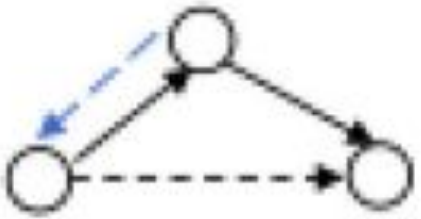
- Hypothesis: High brokerage individuals are more likely to trust others and less likely to be trusted

Diagram of Embeddedness Process

5. *i* is more likely to trust *j* if *j* trusts *i*



6. i is more likely to trust j if a) i trusts k and k trusts j and b) k gets along with i



Notes:.

[a]Short-dash black lines indicate the hypothesized trust tie, solid black lines represent existing trust ties; long-dash blue lines represent existing get along with ties.

[b]Black/White nodes indicate the presence/absence or higher/lower value of an attribute, respectively.

Results: Embeddedness

Overall strong support for the importance of embeddedness in building trust ties

Dyadic

- Probability ***i*** trusts ***j*** increases by 2.34% if ***j*** trusts ***i***

Network

- Probability ***i*** trusts ***j*** increases by 1.63% if ***i*** trusts ***k***, ***k*** trusts ***j***, and ***k*** gets along with ***i***

Results: Other

Homophily had mixed results

- Religious homophily for Muslim and None
- No race homophily
- Support for homophily based on time in unit

Entrainment had strong support

- 5.58% more likely to trust if both get along

Brokerage had minimal support

- High brokerage individuals are slightly less likely to trust others

Discussion Questions

1. Would this study replicate in a men's prison? Which variables and network ideas would persist and change in that setting?
2. Based on Jacob's hypothesis of embeddedness, *i* is more likely to trust *j* if (a) *i* trusts *k* and *k* trusts *j* and (b) *k* gets along with *i*. If *k* was to leave (either a transfer to another pod or serves their sentence), would we expect *i* to still trust or get along with *j*?

Legal Marijuana Markets

Discussion of Modern Policy Implications

California and the Legalization of Marijuana

Legalized in 2017

Red Tape: Raised the price of marijuana for consumers by 50 percent due to taxes

Market: Only 866 licensed dispensaries across the state, leading to growers having a small market to sell their products to (States like Oklahoma, Colorado, and Washington have a higher per capita).

Unintended consequences: Legal sales in California reached $4.4 billion in 2020, it is expected that illegal sales generated twice as much revenue.

Continues to be illegal marijuana farms and unlicensed dispensaries. As one is closed, another one pops up.

Analysis: People are more comfortable buying marijuana within their network rather than going through a legal channel.

Discussion Question

If we are seeing that illegal sales of marijuana are twice the amount of legalized marijuana dispensaries, why do you think people are more comfortable purchasing marijuana within their network as opposed to a legal channel?