

Topic 5: influence and persuasion

Social Engineering (II909)

Kaido Kikkas

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Why different topic

- On the one hand, this one has definite connection to psychology (and its applications)
- On the other hand, it is art vs science:
 - The mind tricks and brain holes are based on observed features
 - Building and using influence is more subjective (it does have connections to rapport though)

A definition

- Christopher Hadnagy:
 - “Influence and the art of persuasion is the process of **getting someone else to want** to do, react, think, or believe **in the way you want them to**”

A scene from Hackers (1995)

- (Phantom Phreak is at a pay phone)
- Operator (on phone): Please deposit five dollars for the first minute.
- (Phreak holds a small box up to the receiver, presses a button, and the box emits a series of tones)
- Operator: Thank you.
- Phreak: Nonono, thank YOU!



<https://i.gifer.com/9314.gif>

(<http://www.freeinfosociety.com/site.php?postnum=402>)

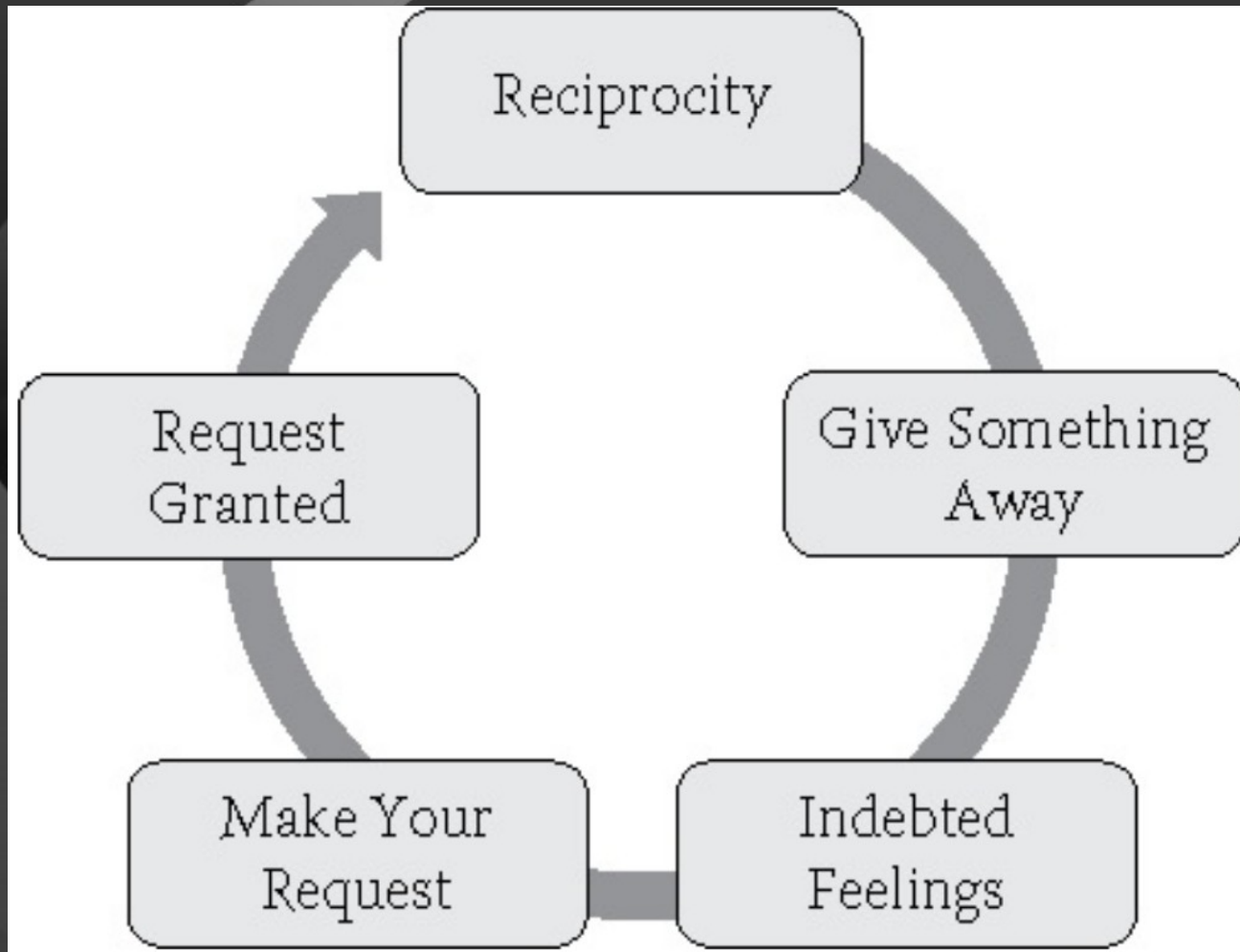
Five fundamentals

- **Setting clear goals** (understanding the mission)
- **Building rapport** (understanding people)
- **Being observant of your surroundings** (understanding the situation; also detect microexpressions)
- **Being flexible** (understand the changes; adapt and improvise)
- **Getting in touch with yourself** (understand your own emotions)

Influence tactics: reciprocity

- Giving back in kind, returning the favour
- Examples:
 - Lobbyists at political campaigns
 - Business dinners
 - Big Pharma and doctors

Hadnagy's cycle of reciprocity



Influence tactics: obligation

- Related to reciprocity
- Creating a situation where the person feels that s/he must act in a certain way (duty, promise, contract, social norms)
- An interesting variant: the initial gift as the actual attack vector (e.g. a malware-infested phone), the 'obligation' can be just a placeholder

Influence tactics: concession

- Another relative to reciprocity
- “I’ll scratch your back if you scratch mine”
- Also, bargaining with favours (“Please give me 50 euros. No? OK, just 5 will do.”)
- Excessive concessions may hurt rapport or destroy pretext!

Influence tactics: scarcity

- One of the bugs in the brain: scarcity bias, or “rare must be good!”
- Examples:
 - **Sales:** “Only today!”, “The first 10 callers get a free phone”, “Clearance sale”
 - **Social events:** “exclusive”, “VIP tickets/zone” ...
 - **Economics:** resources valued for scarcity (e.g. gold)
 - **Social interaction:** “The boss is very busy!”
- An important tool for manipulating people

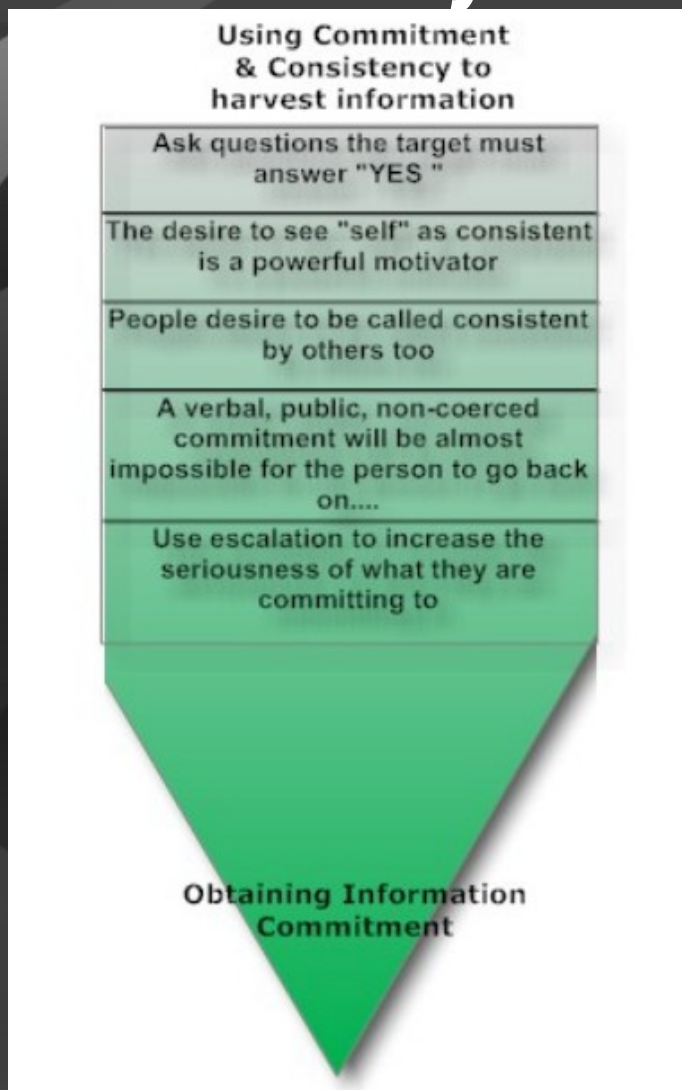
Influence tactics: authority

- If someone is deemed an authority, s/he is easier to obey (and not only in the specific field)
- Aspects:
 - **Legal:** enforcers of the rules
 - **Organizational:** higher ones in the hierarchy
 - **Social:** natural 'pecking order' - informal hierarchies, but also based on status symbols (in the West, Top 3 are **titles**, **clothes** and **vehicles**)

Influence tactics: commitment/consistency

- People want to be consistent (a component in trustworthiness)
- Changing one's mind is often felt as shameful
- The experiment by Thomas Moriarty in 1972
 - a) the 'victim' listened to radio on the beach, then went to buy a drink, leaving the radio unguarded but near other people – the 'thief' grabbed it and ran away. 4 bystanders out of 20 reacted
 - b) all the same, but the 'victim' asked people to 'watch his radio'. 19 out of 20 reacted

Consistency attack



Influence tactics: liking

- People like people who like them (see Facebook!)
- Salespeople push things, friends give tips and advice (foundation of multilevel marketing: Tupperware etc)
- Halo effect: attractive people in ads
- Aspects:
 - Visuals
 - Familiarity
 - Positive reinforcement (compliments)
 - Appreciation (see rapport building in previous topic)

Influence tactics: social proof

- a.k.a. consensus (a.k.a. herd mindset) – many people thinking alike must be right
- Especially potent in uncertain situations and with people with many similarities
- An interesting case: both Cialdini and Hadnagy argue for effectiveness of the 'laugh track' (recorded laughter) in U.S. TV shows. However, Europeans almost universally hate them (and quite many consider them a distinct case of 'American stupidity') and they are rare in European-produced shows

Framing

- A kind of reality bending caused by earlier experience
- The story of a nasty captain and smart first officer
- Common in politics, but also advertisement/sales
- Not just 'way with words', but a function of our brain to remove clutter and focus on important things

Who sees the arrow?



<https://www.social-engineer.org/wiki/images/1/1f/FedEx-Truck.jpg>

Diseases and cures

- Tversky and Kahneman 1981 – questions about two diseases for two groups (pick one option):
 - Group 1
 - treatment A saves 200 peoples' lives
 - treatment B has a 33% chance of saving all 600 people and a 66% possibility of saving no one
 - Group 2
 - option C in which 400 people die
 - option D has a 33% chance that no people will die but a 66% probability that all 600 will die

Manipulation

- Typically understood as influence on steroids
- Common techniques include
 - Increase suggestibility (can be subtly or with force, e.g. sleep, water or food deprivation)
 - Control environment (from total blackout to FB campaigns)
 - Create doubt
 - Create a sense of powerlessness
 - Create strong emotional responses (guilt, humiliation, confusion)
 - Heavy intimidation and violence
- Read Hadnagy's book for more

Conclusion

- Influencing is manipulating people's will
- Most tactics centre on rapport building and using social biases in human brain
- Influence and persuasion work because people are brought up to be nice (again!)

Thanks!

- Next time, we go on with tools