Social Mechanics

The Engines Behind Everything Multiplayer

Raph Koster

VP Creative Design

Playdom
Where players rule

Social Mechanics

T hind

Everyt r

For Social Games

Raph Koster

VP Creative Design

Playdom
Where players rule

What are we going to do?

Go very fast.

Over 160 slides.

I could not restrain myself.

What are we going to do?

Go very fast.

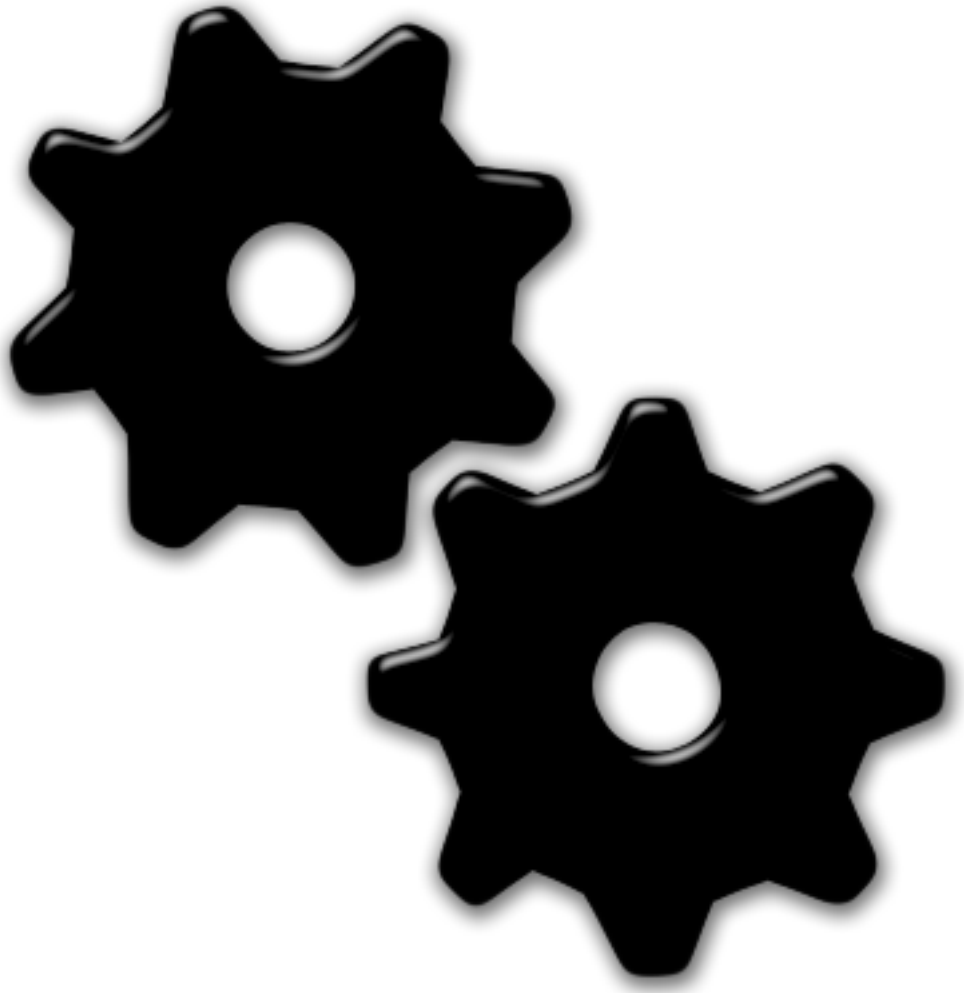
O~~190~~ slides.

I could not restrain myself.

What are we going to do?

The core 40 mechanics of multiplayer games.

- Yes, all of them.
- No further design required -- *ever*.*



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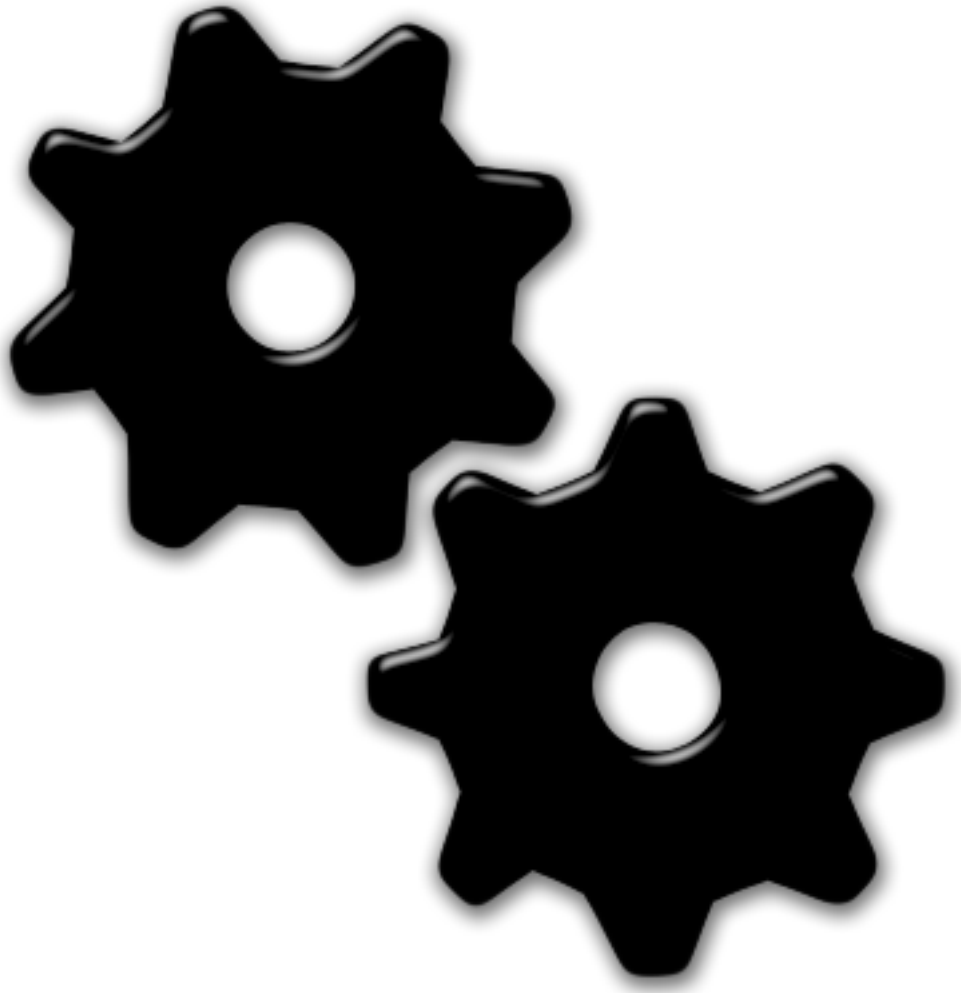


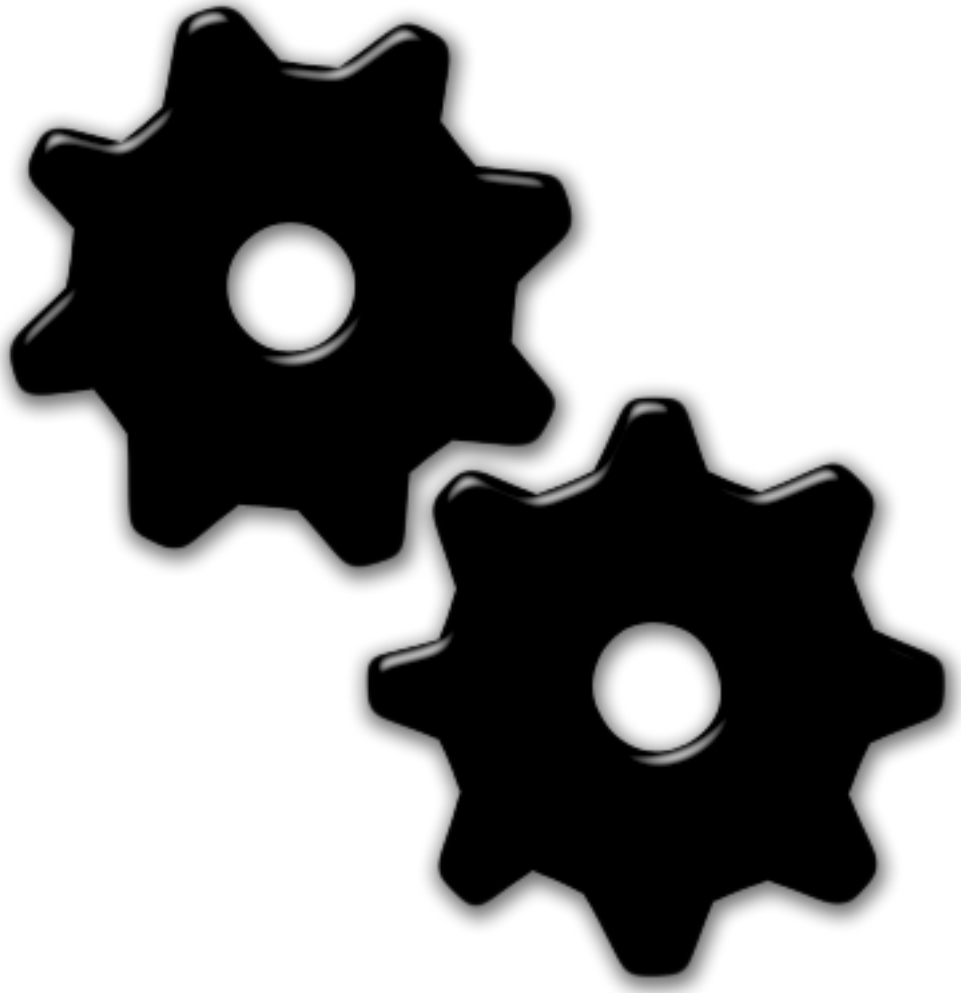
** For certain values of "ever."*

What are we going to do?

They'll be marked like this:

25

For your tweeting convenience!



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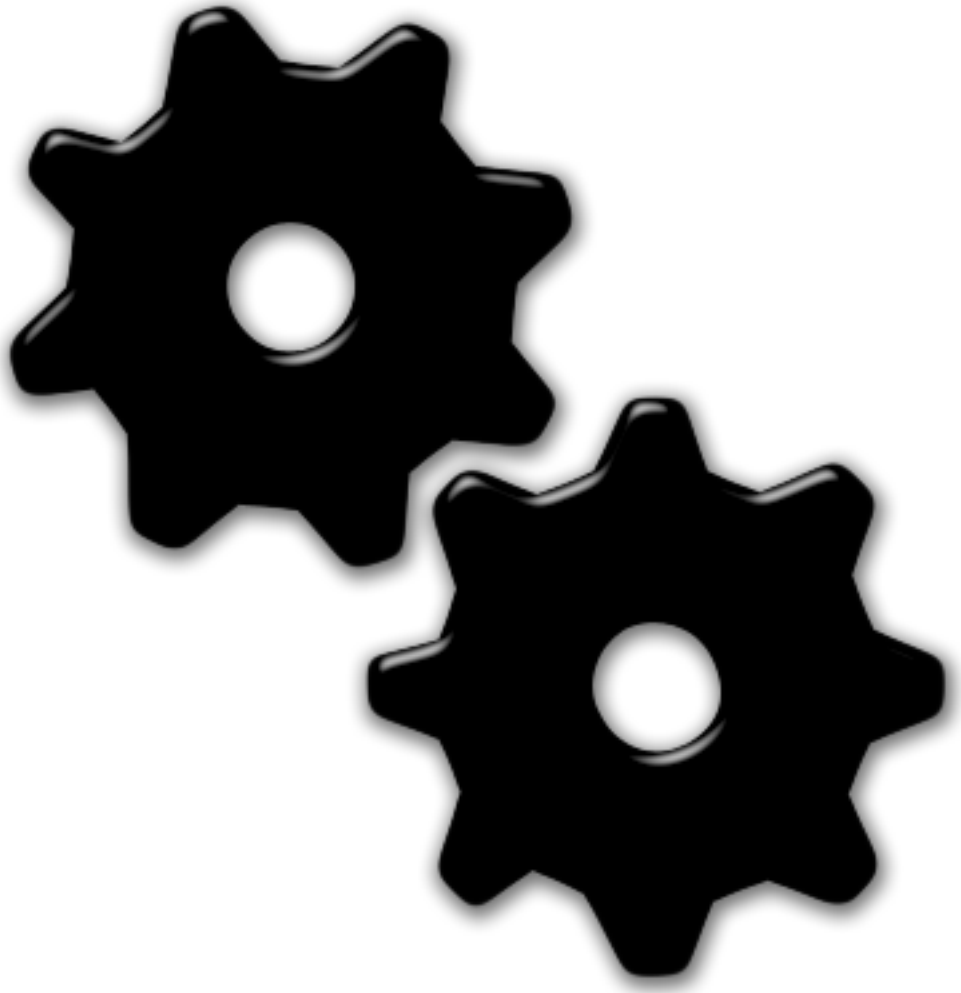
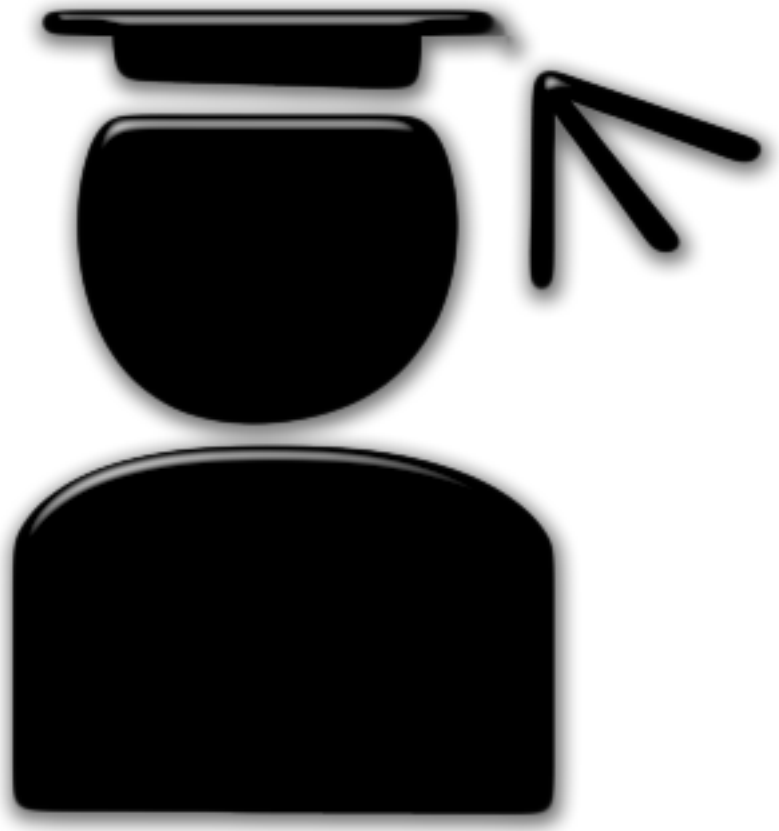


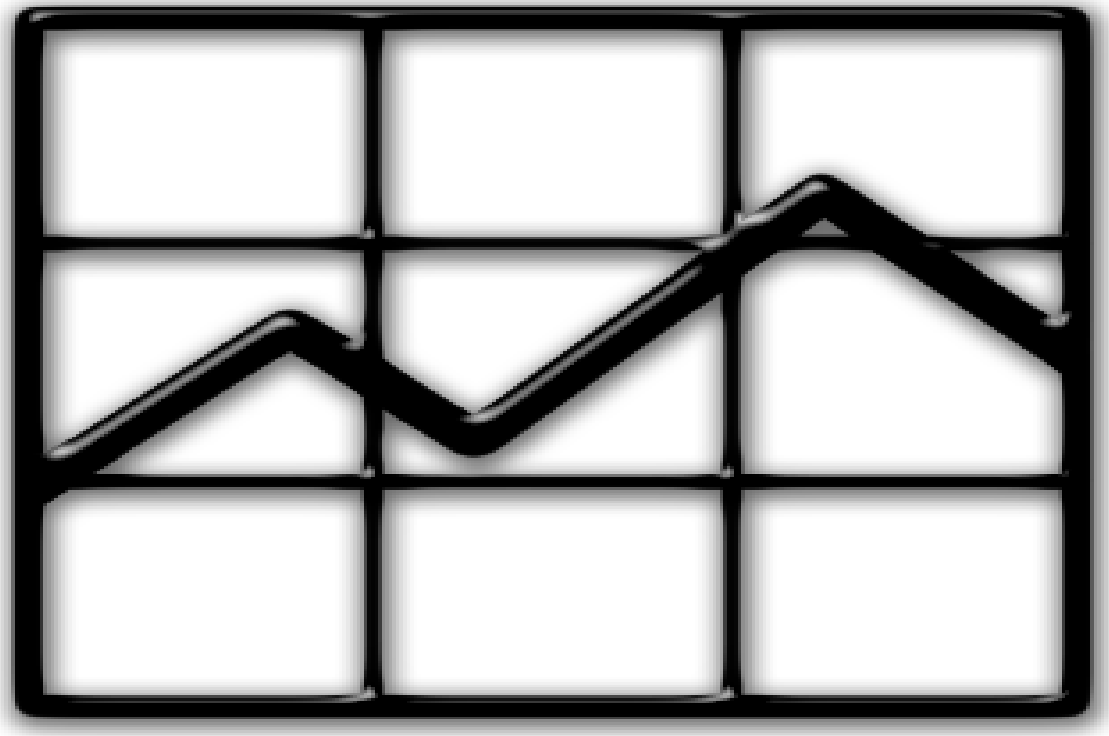
What are we going to do?

We will touch briefly on *game grammar*…



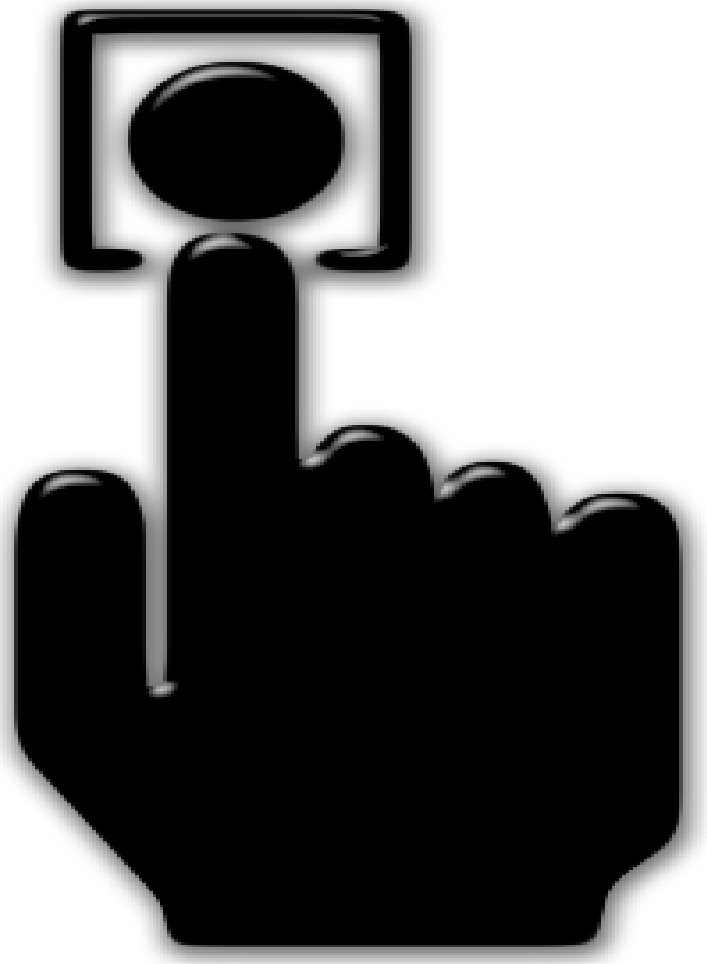
What are we going to do?

...and on *economic theory*...



What are we going to do?

…The famed psychologist *Stanley Milgram*…



What are we going to do?

…1940's *science fiction*…

What are we going to do?

...a game called *Werewolf*...

And...

What are we going to do?

...a somewhat lengthy discursion into *structuralist anthropology,*

for which I apologize, but not as much as for the time spent on...

What are we going to do?

...a little

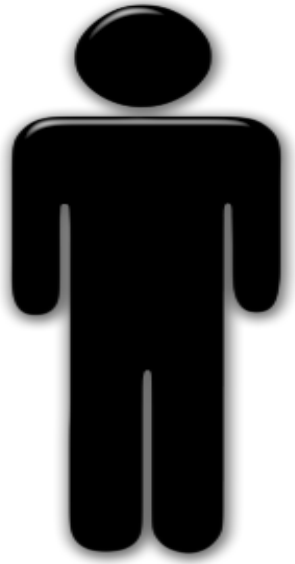
Derrida.

But first…

"**A good game should focus entirely on it's single-player aspect** first and foremost. Then if it's a simple game like a shooter or racer, use the remaining time and space to fit in a multi-player aspect to it… In other words, multi-playing should never take away from the single-player aspect of the game. **Pure multi-player games really should be few and far between.**"

-- the unfortunately named New Troll, Escapist Forums, 23 June 2009


STOP



True single-player

1 *v.* self/system

Defining a “single player game”

A game that is not played in opposition to someone else.

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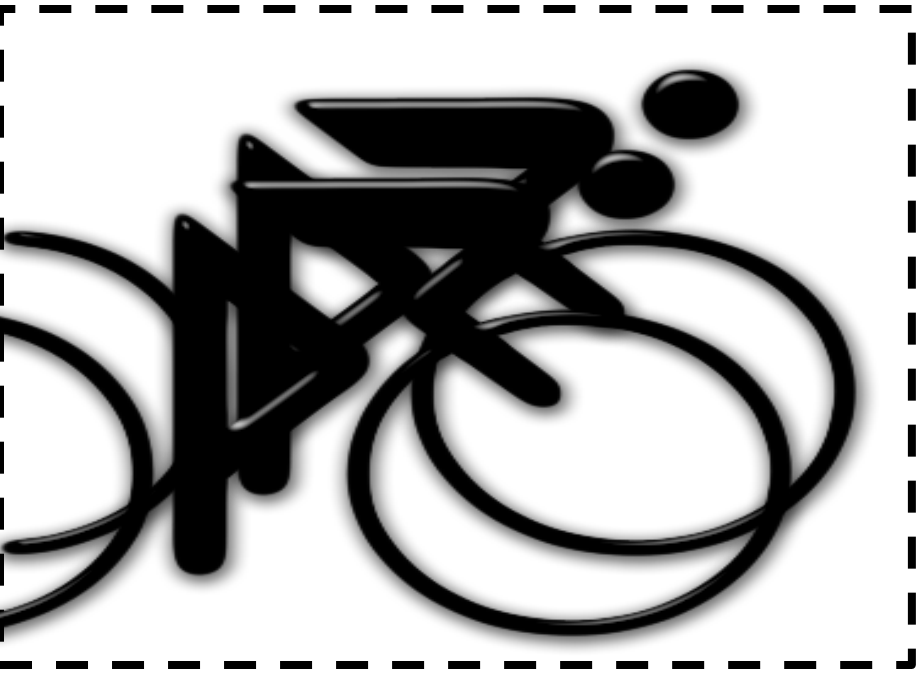
This is the biggest potential for social games

Defining a “single player game”

A game that is not played in opposition to, or in parallel with, or collaboratively with, someone else.

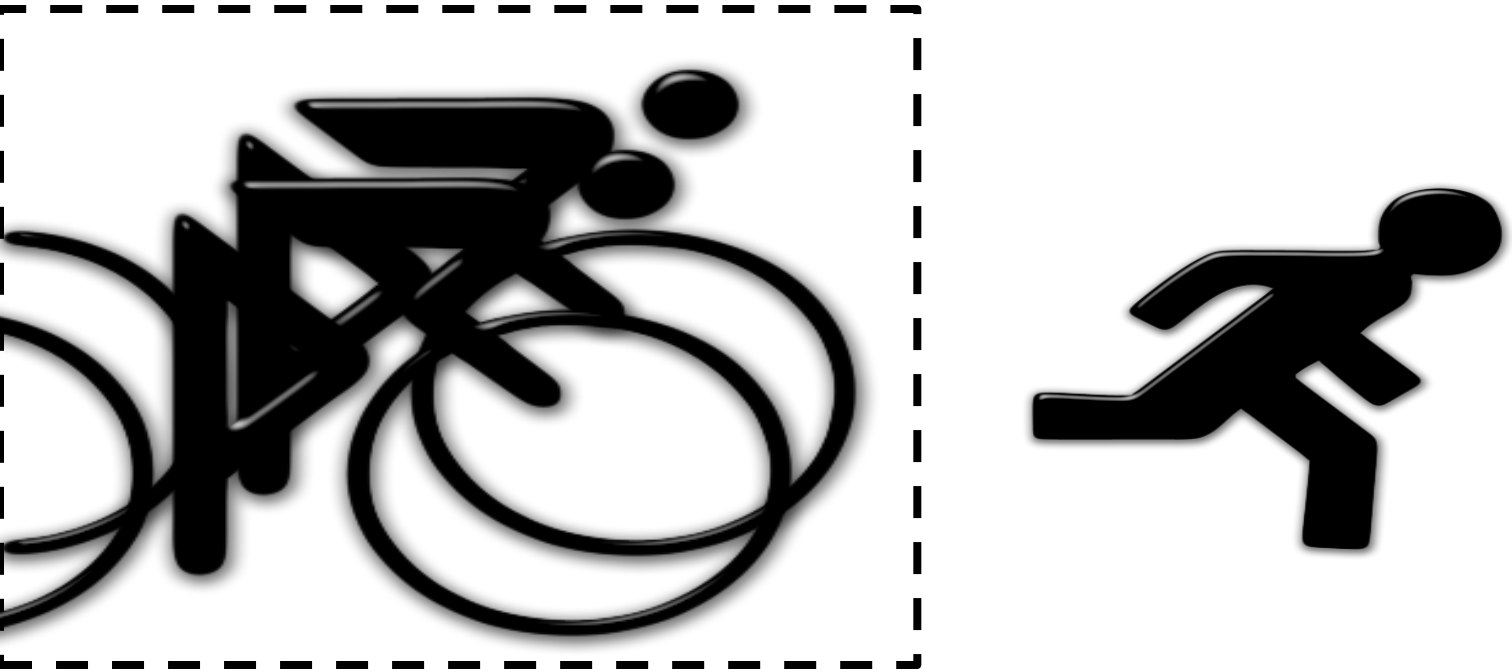
(In other words, hardly anything.)

Boundaries



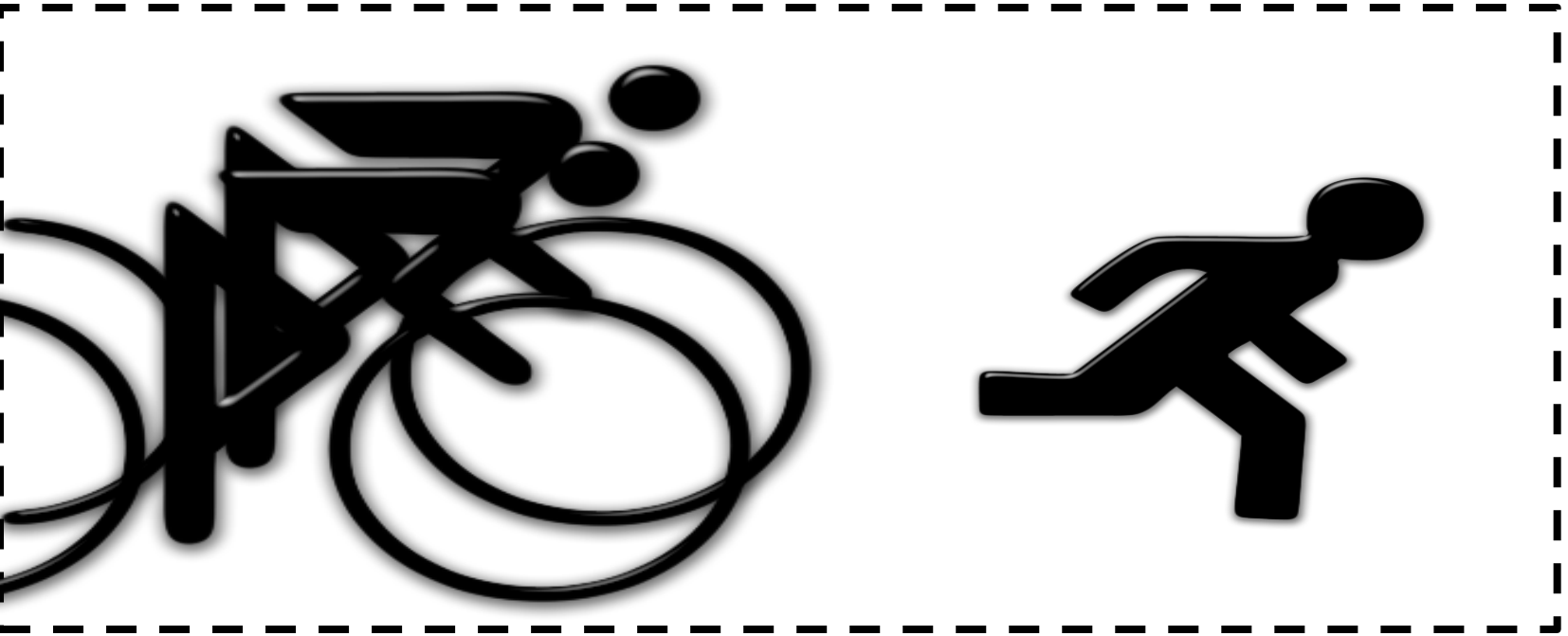
The boundary of a game is not the board, event, world, etc.

Boundaries



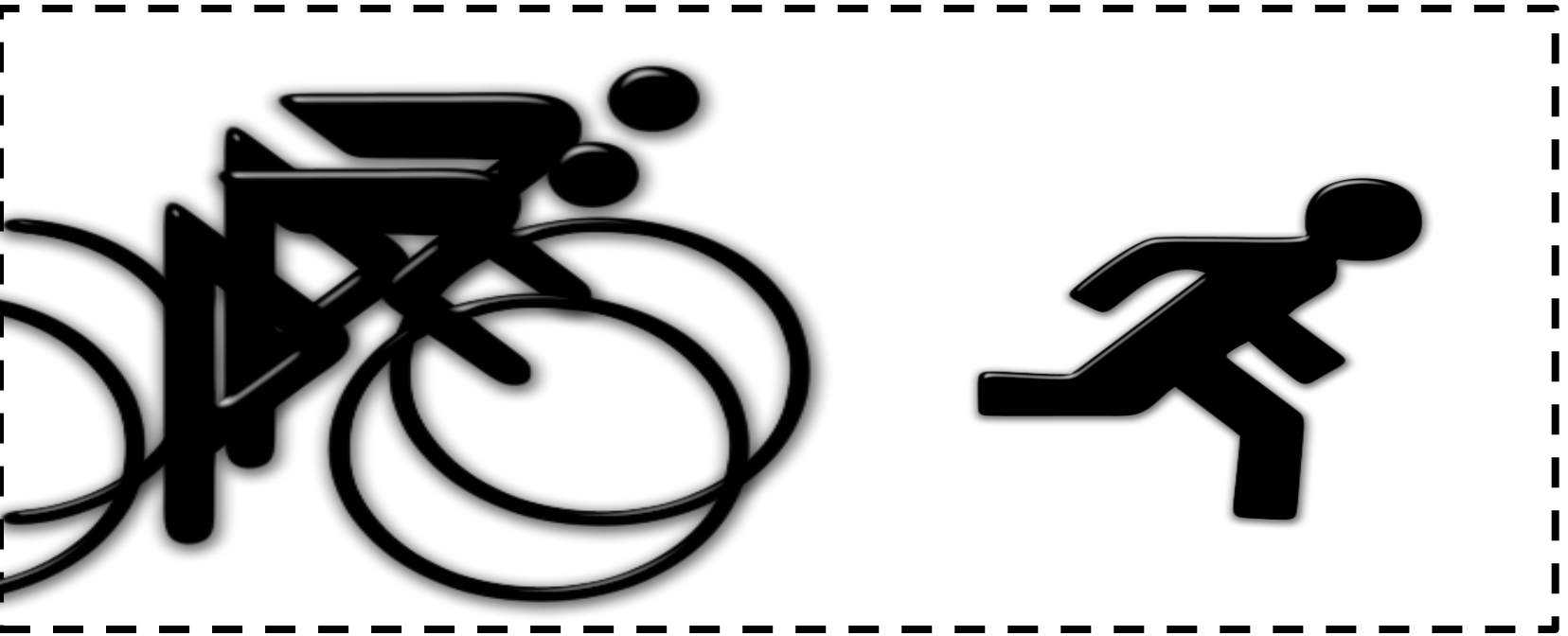
Consider: is training “part of the game”?

Boundaries



How about doping?

Boundaries



The true boundary of a game is based on where actions that can legally affect gameplay stop. Training yes, doping no.

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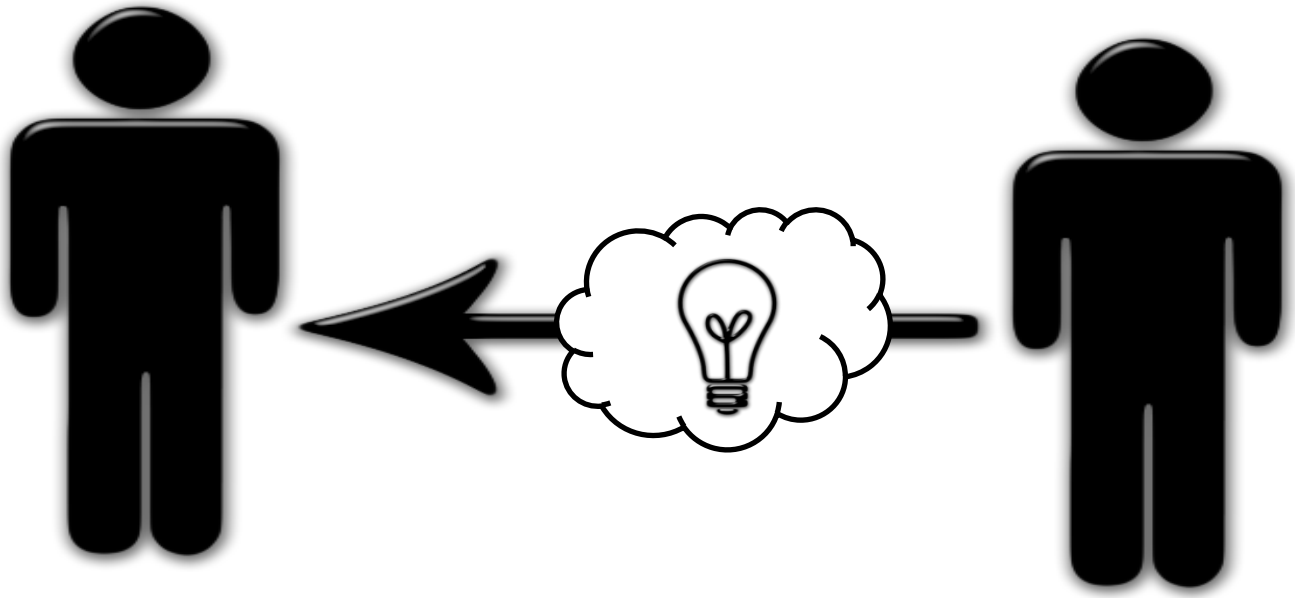
Helping

The simplest form of multiplayer, present even in single-player games, is simple *advice and assistance*.

An outgrowth of "spectating."



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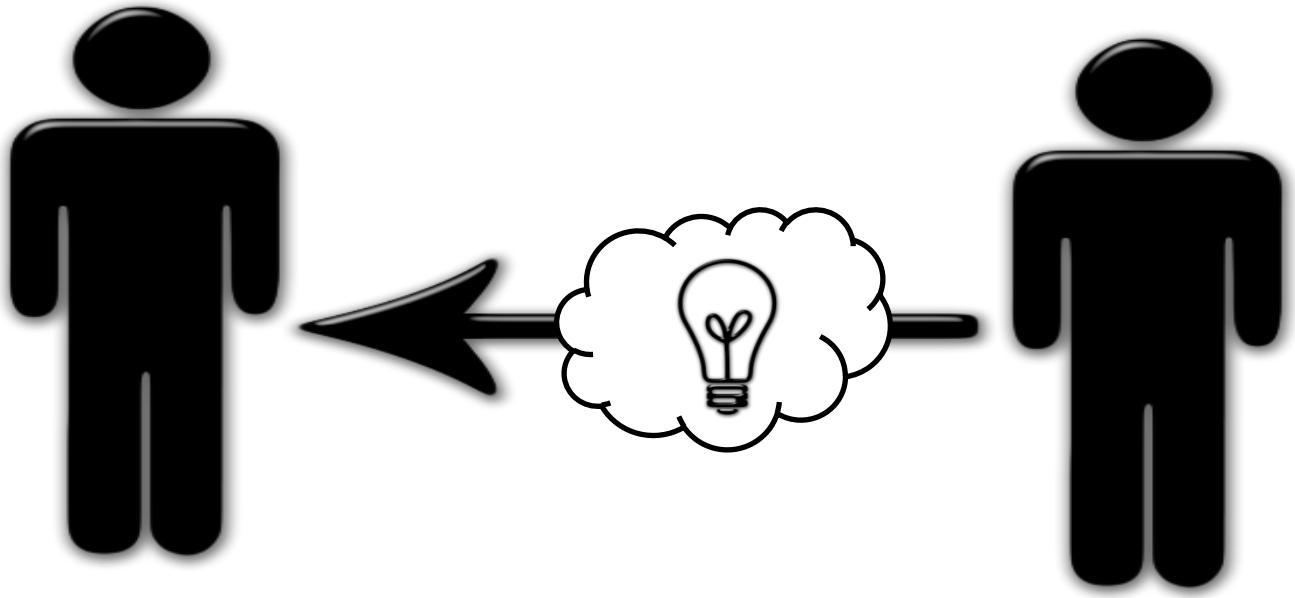

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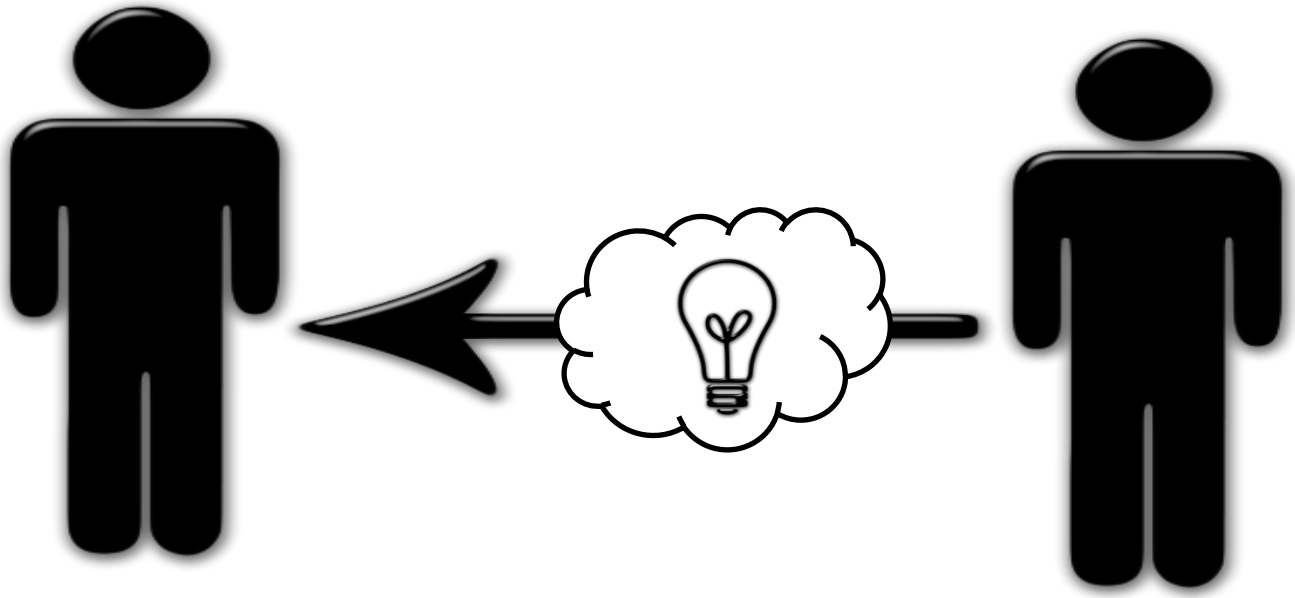
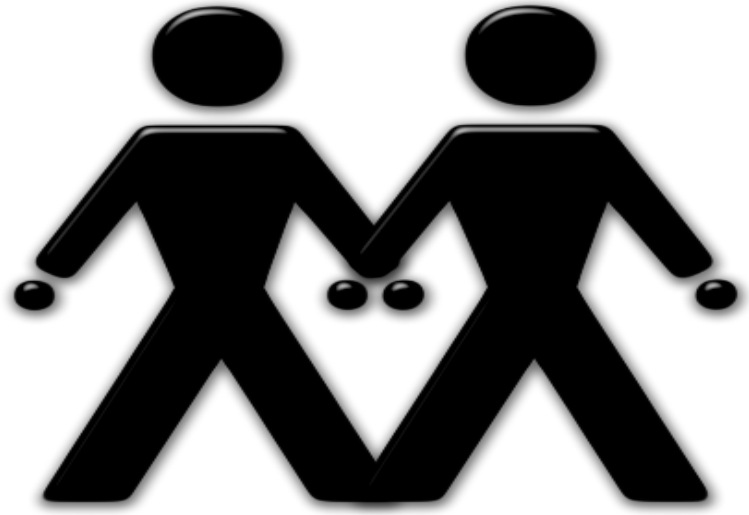
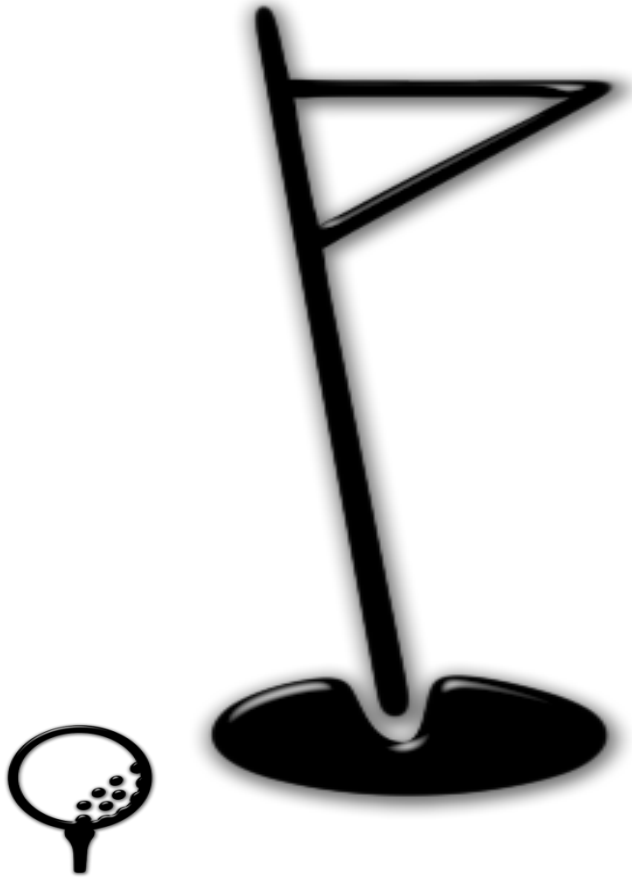




Parallel symmetric

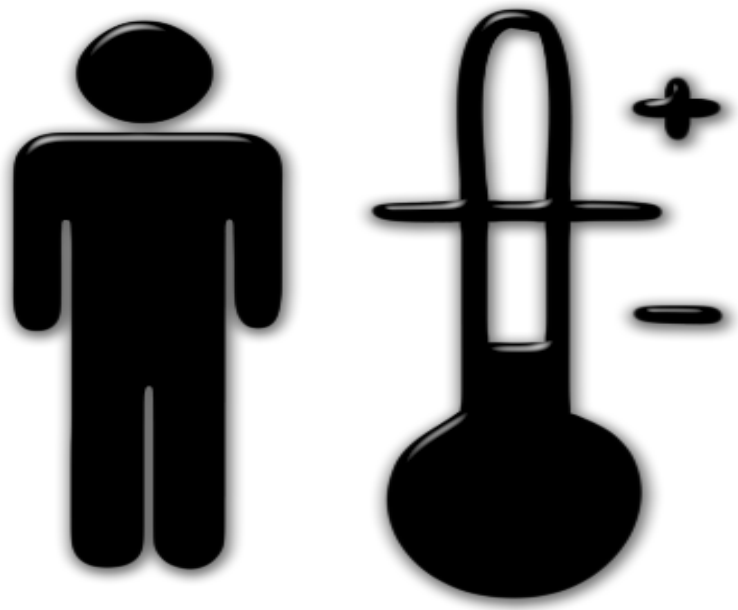
1 v system vs 1 v system

Parallel symmetric games



Status

Quantifying a player's achievement against the systemic opponent.



Typically becomes multiplayer when relative status is compared.

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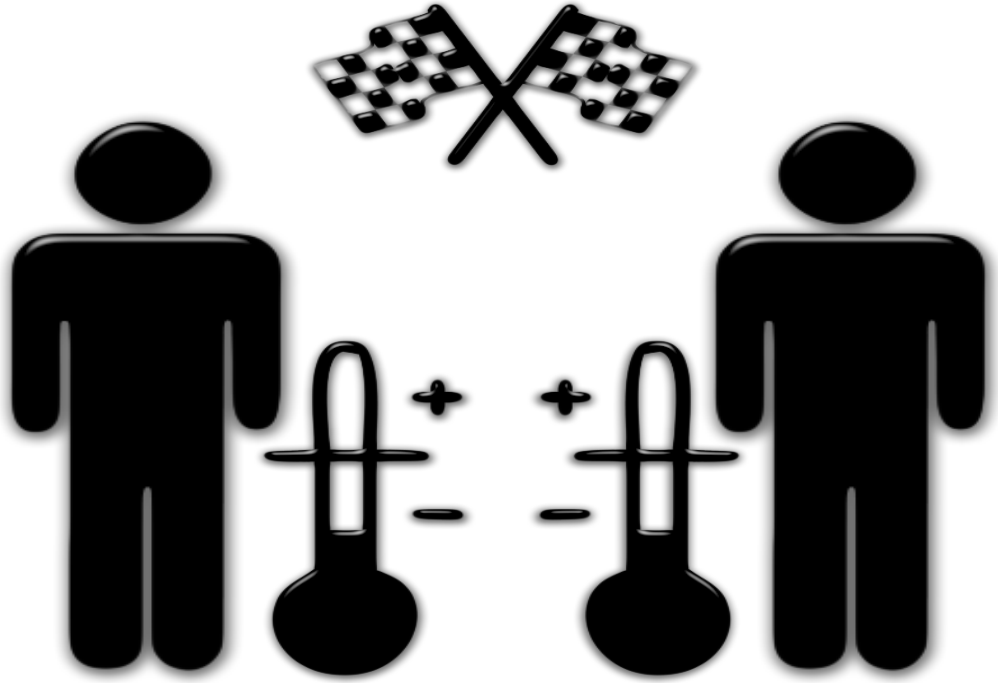
Races

The first user to reach a given status level wins.

(The basic boardgame, and basic sport)



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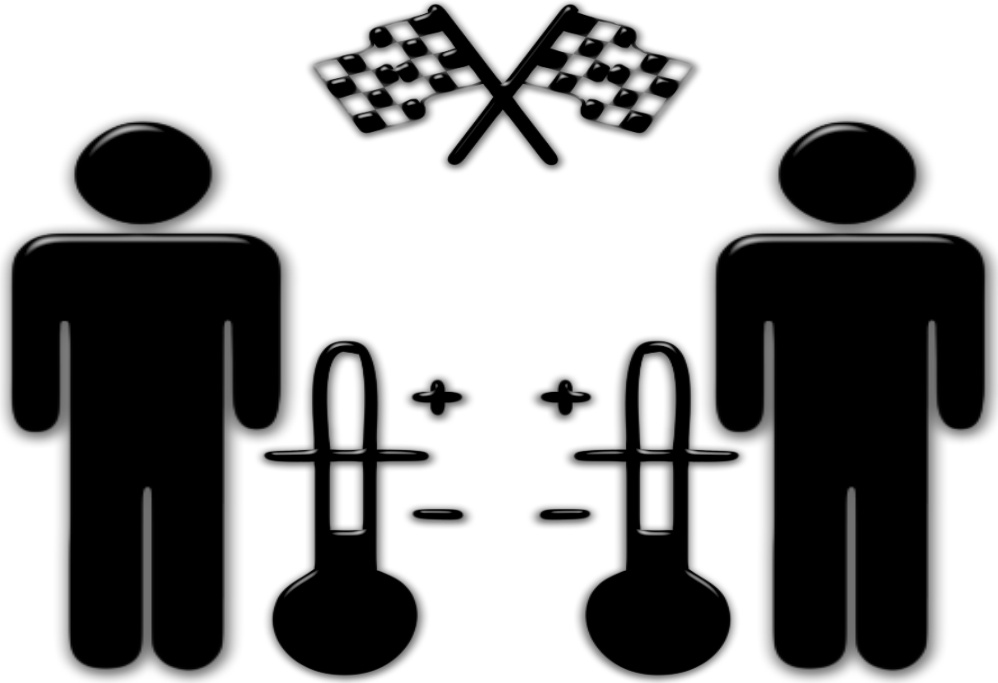

Leaderboards

Compete in asynchronous parallel with all historical attempts.

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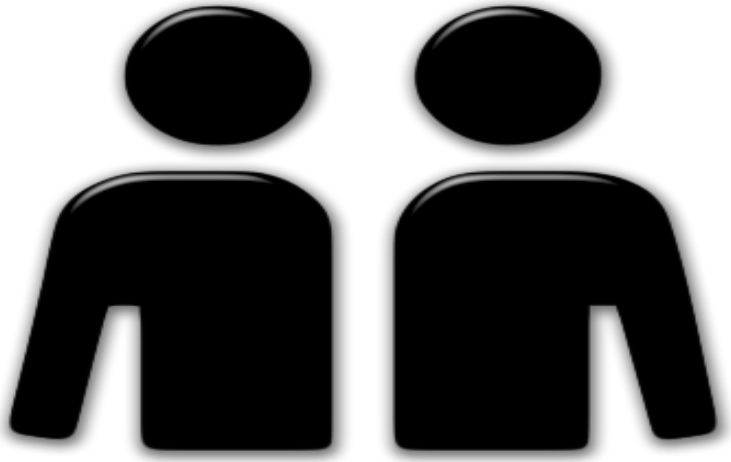
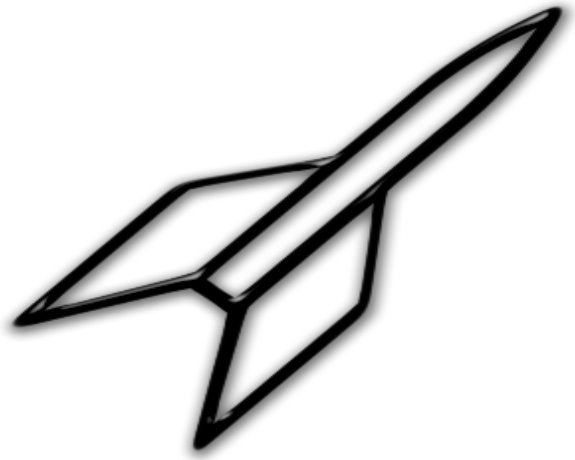


Parallel asymmetric

1 *vs* system, *vs* 1 *vs* another system

A hypothetical arcade game



The player is playing *nested games* of…

1. Steering the ship
2. Hitting the asteroids with lasers
3. Dodging asteroids and bullets and UFOs
4. Getting advice from her friend over the shoulder
5. Getting as high a score as she can
6. To brag to her friend that she beat him
7. And competing against everyone who has played this particular arcade machine

This *nesting* quality will be important…

Scaling parallel

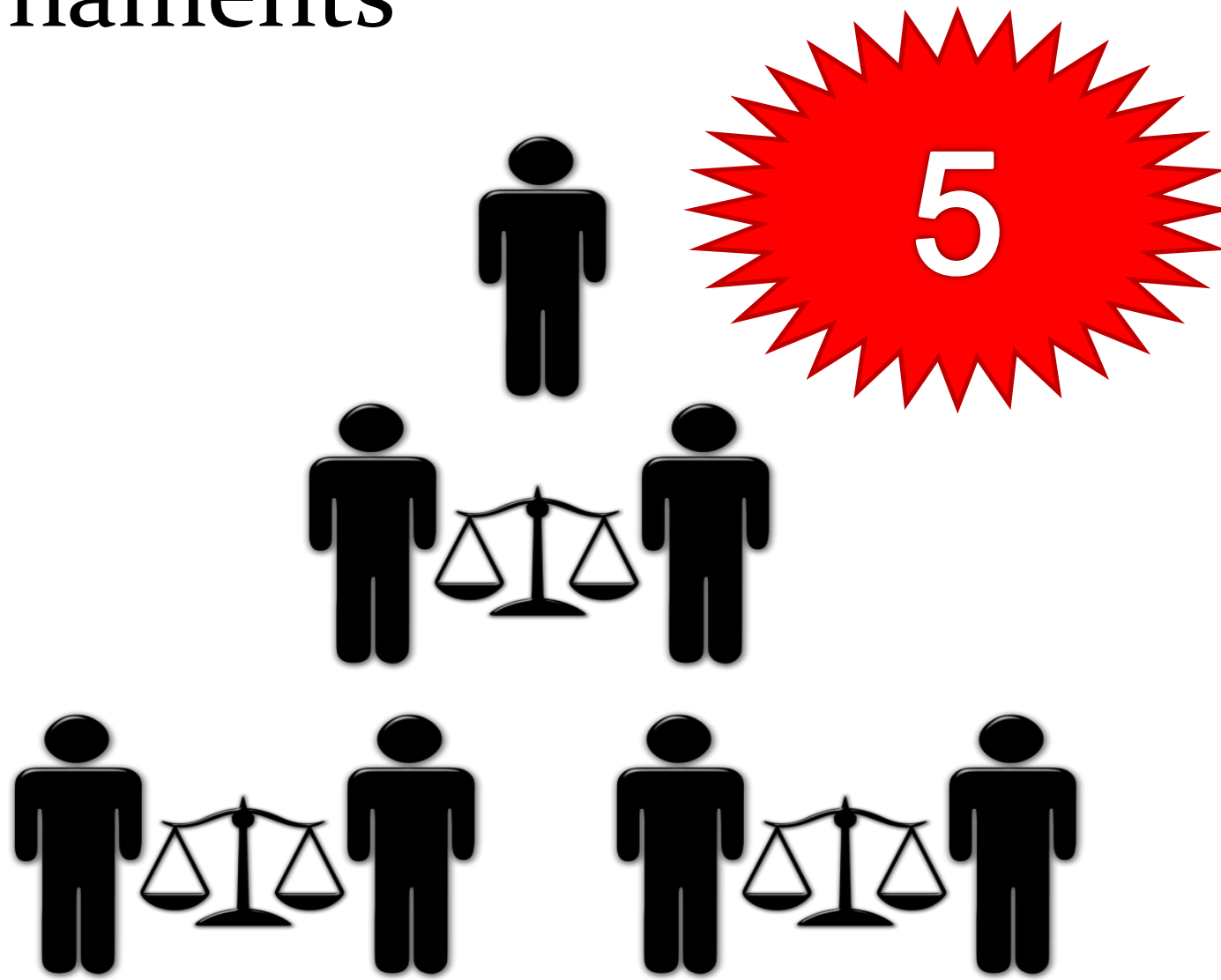
Scaling parallel symmetric play to large numbers is hard to do in a time-bounded way.

- For example, a few people can play an arcade game one after the other and compare…
- …or an infinite amount can play against everyone ever via the high score table…

But how do you do a medium size number?

Tournaments

Brackets are often a game of their own distinct from the scoring or status comparison.



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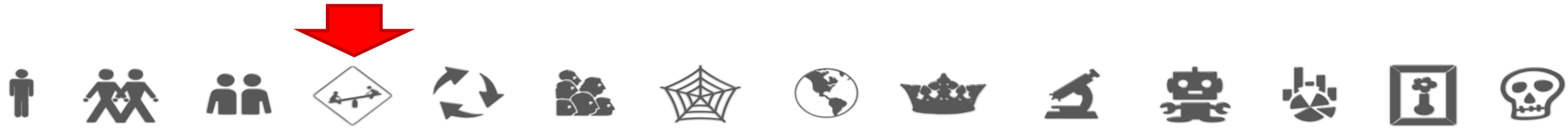
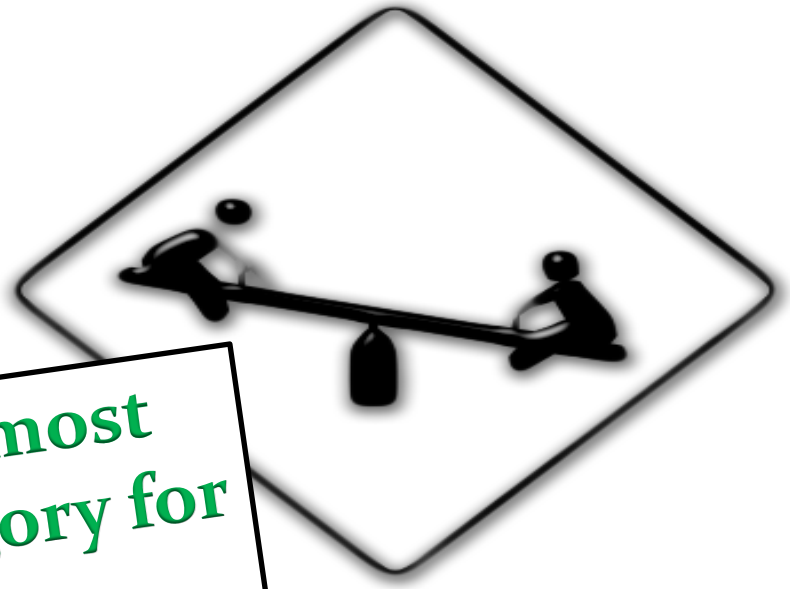
Of course, tournaments are often used for…

Opposition

1 *vs* 1

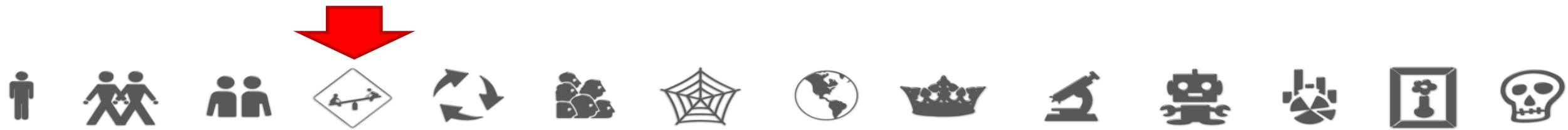




You could almost skip this category for social games

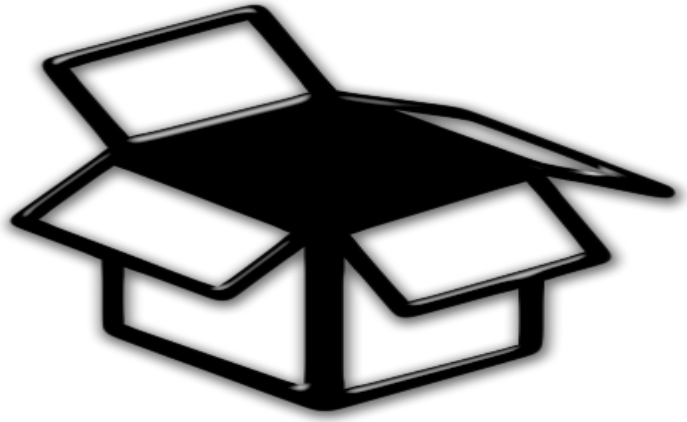
Opposition

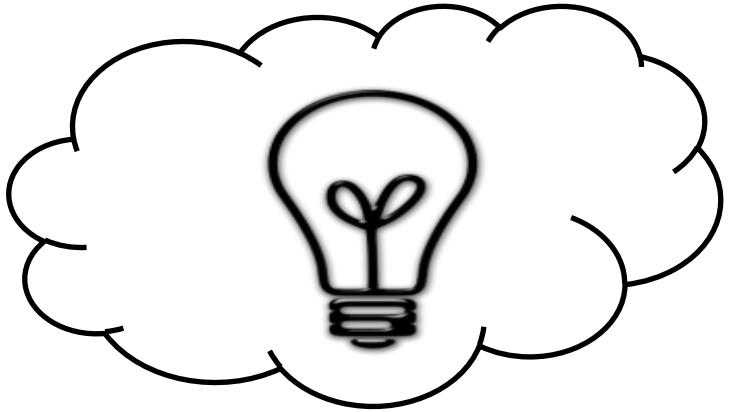
1 *vs* 1



Rival and non-rival goods

A rival good is something that cannot be used by someone else at the same time.

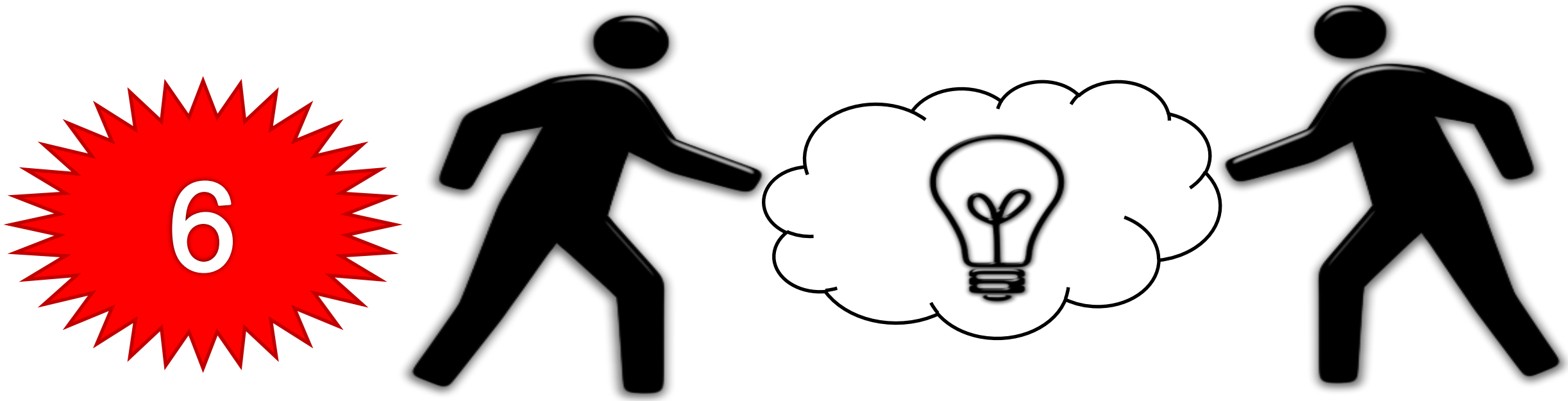




A non-rival good is stuff like information, or the public park.

Flower-picking

Non-zero-sum resource consumption: You compete to get stuff, but there is always more stuff.



Speed-up arrows on a race track… even pickups in many games.

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Non-zero-sum resource consumption: You compete to get stuff, but there is always more stuff.

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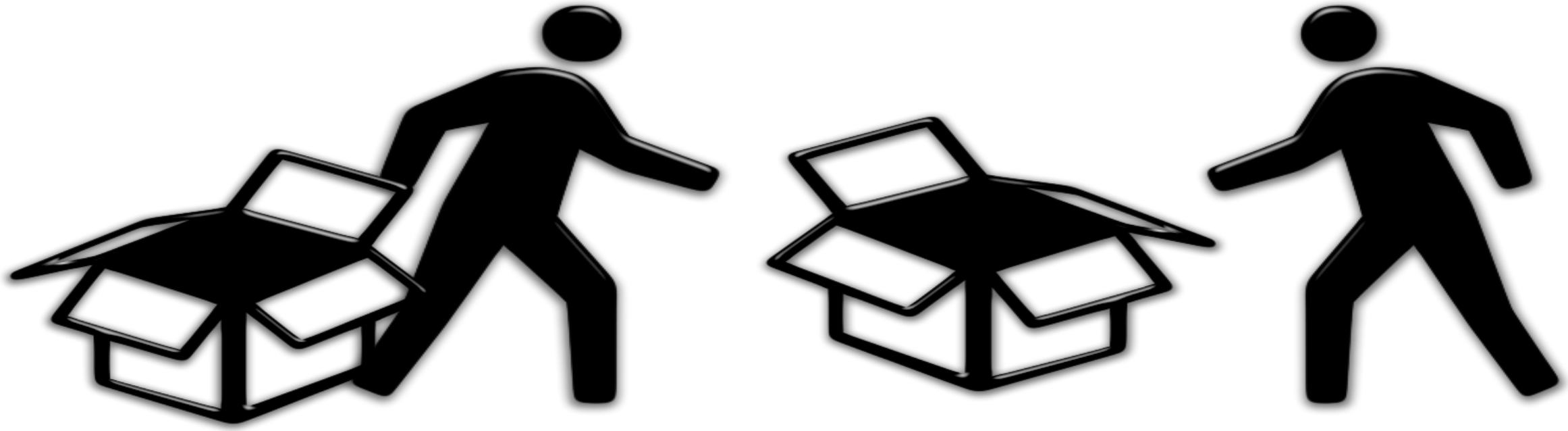
7

Dot-eating

Zero-sum resource consumption.

(also “territory”, in a graph theory sense).



Players compete to get stuff, and whatever I get, you can’t have.

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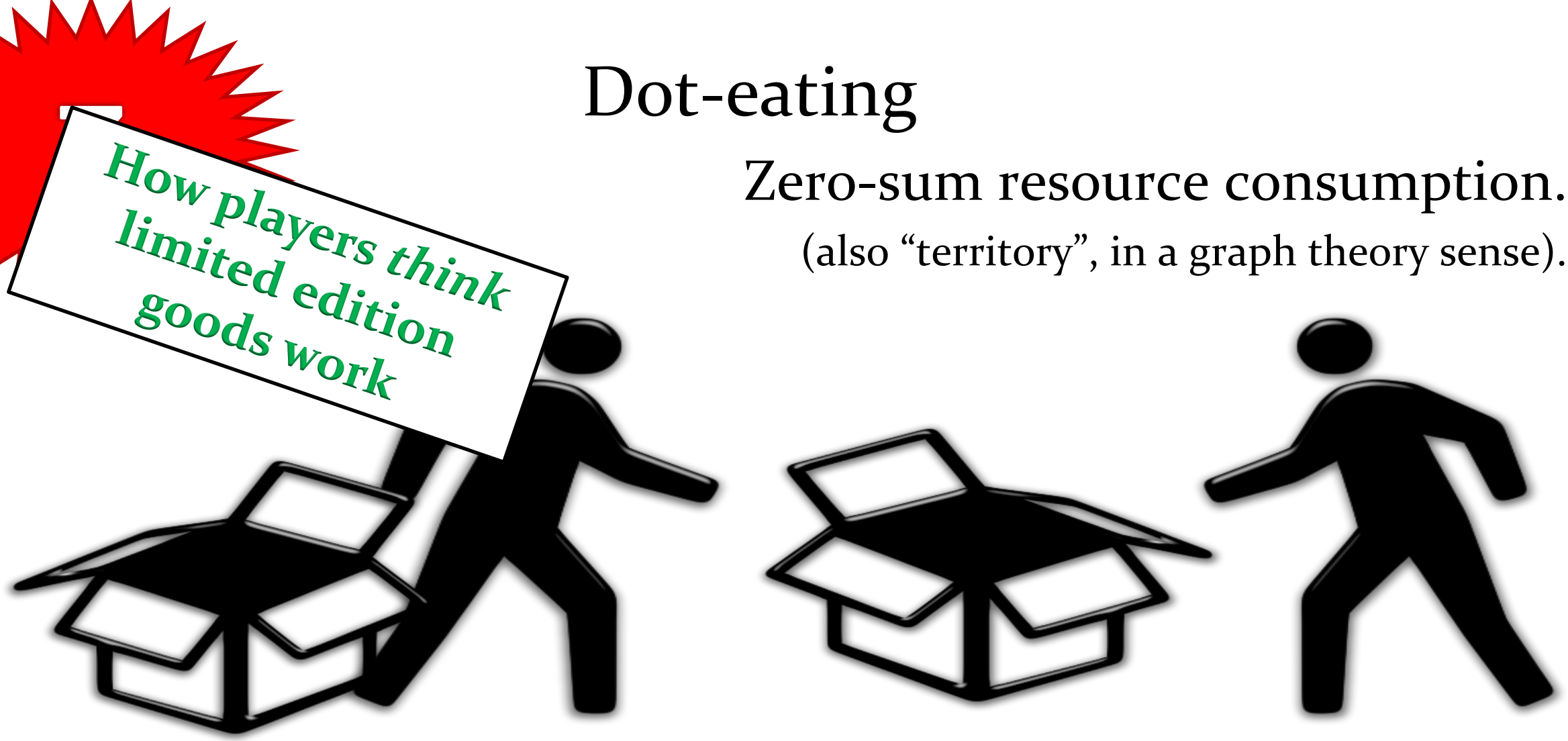
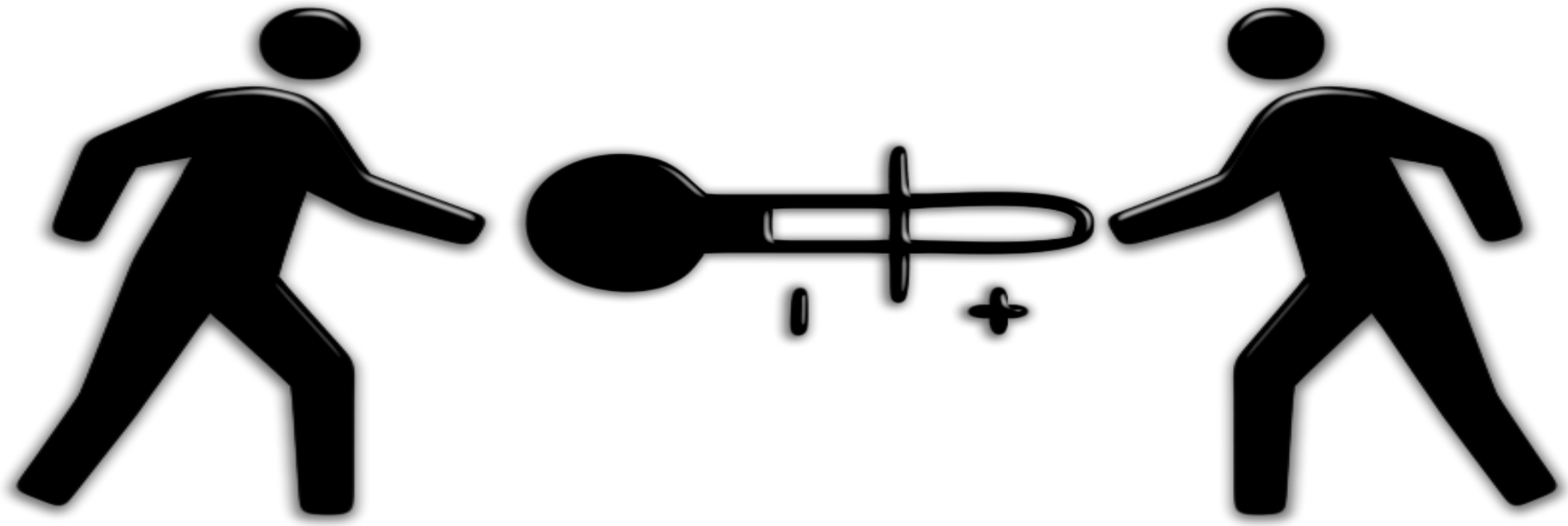


Players compete to get stuff, and whatever I get, you can’t have.

Tug of war

I can take your stuff, you can take my stuff.



Exactly like “zero-sum status.”

The engine behind all combat games.

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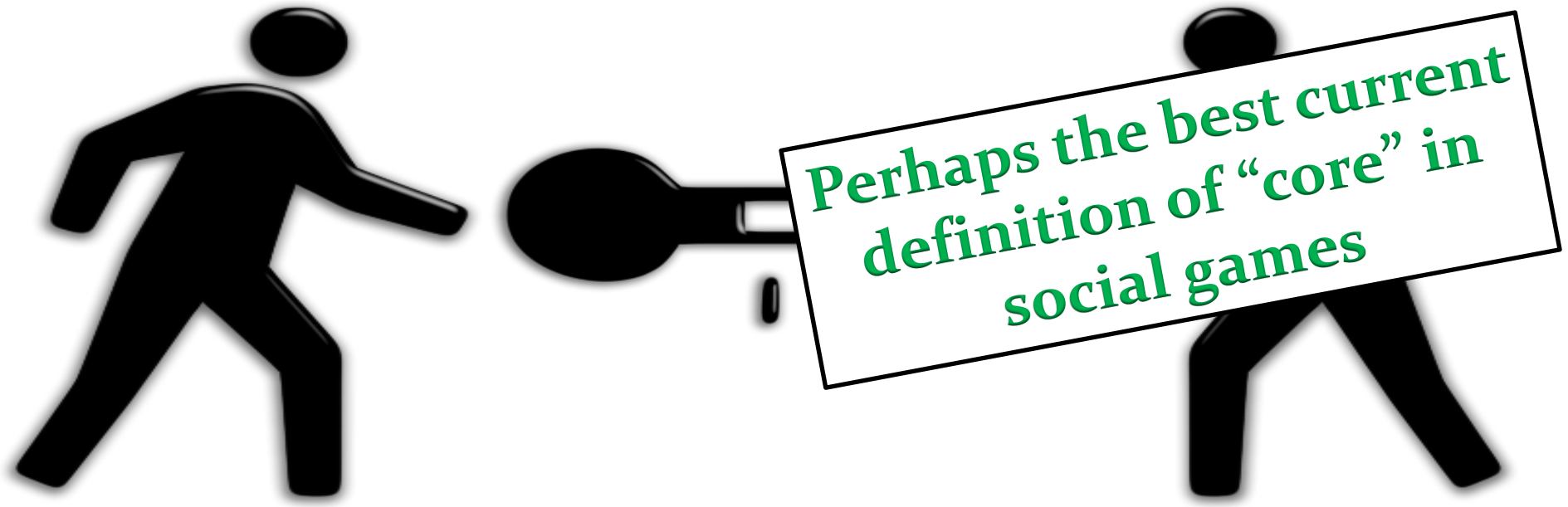

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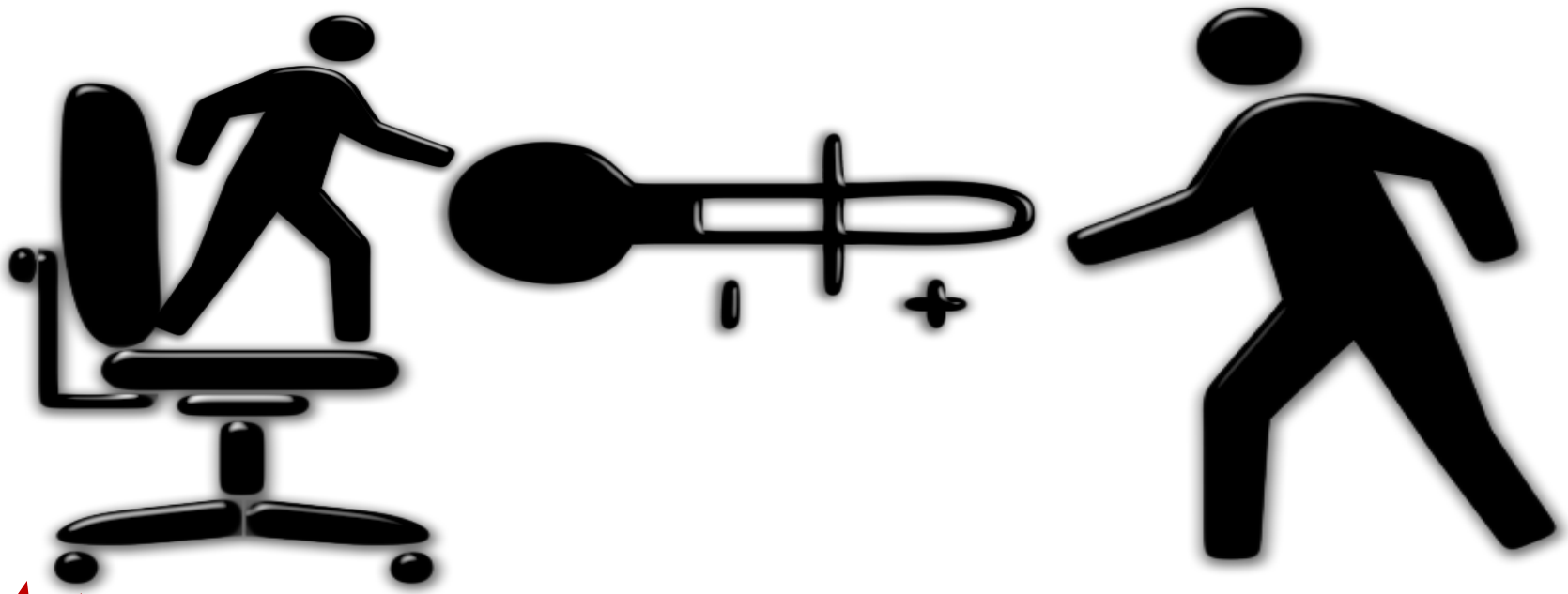
8

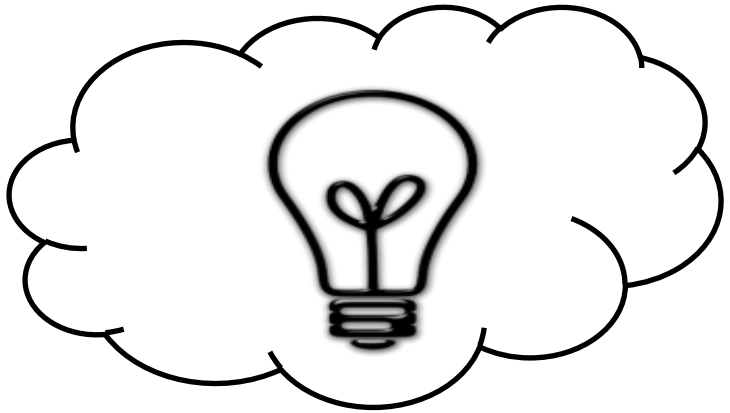
Handicapping



9

Artificially equalizing status in order to provide a tighter race.

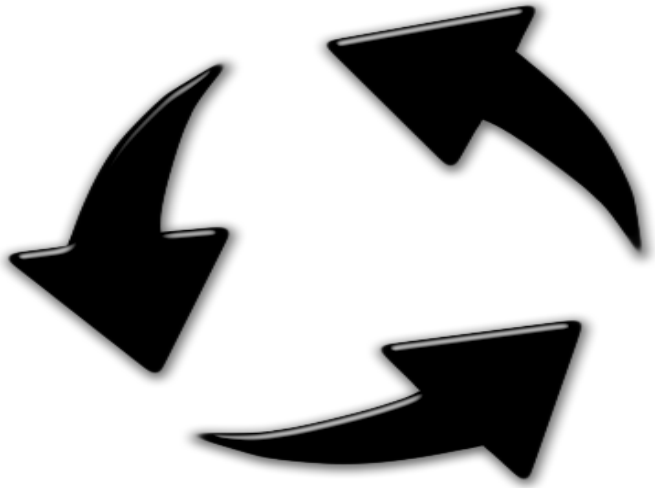
Secrets



10

In game theory terms, “imperfect information” – knowledge as a rivalrous good.

Fog of war, hands of cards, etc.



Multifront opposition

1 *vs* 1 *vs* 1 *vs* ... *n*

Gutschera's terms

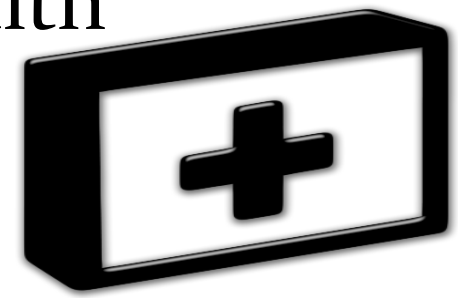
At GDC 2009 K. Robert Gutschera used different terms than mine:

- *Orthogames*: games with a statistical rating outcome
- Parallel symmetric games: *races* (OK, same term here)
- *Brawls*: gluing together 2 player orthogames.
- *Politics* start when you have a choice of whom to interact with.

Rival goods mechanics

Several forms of "brawls" depend on treating resources within the game, such as…

Health



as rival goods.

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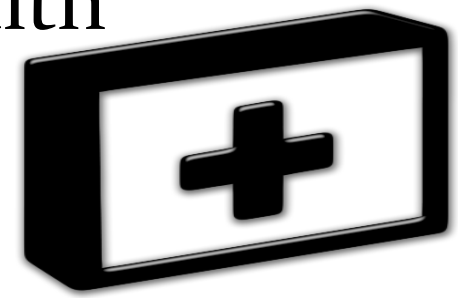

Survival

as rival goods.

Rival goods mechanics

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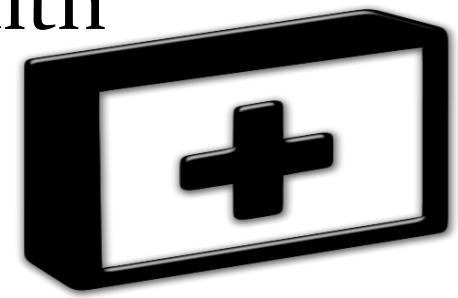
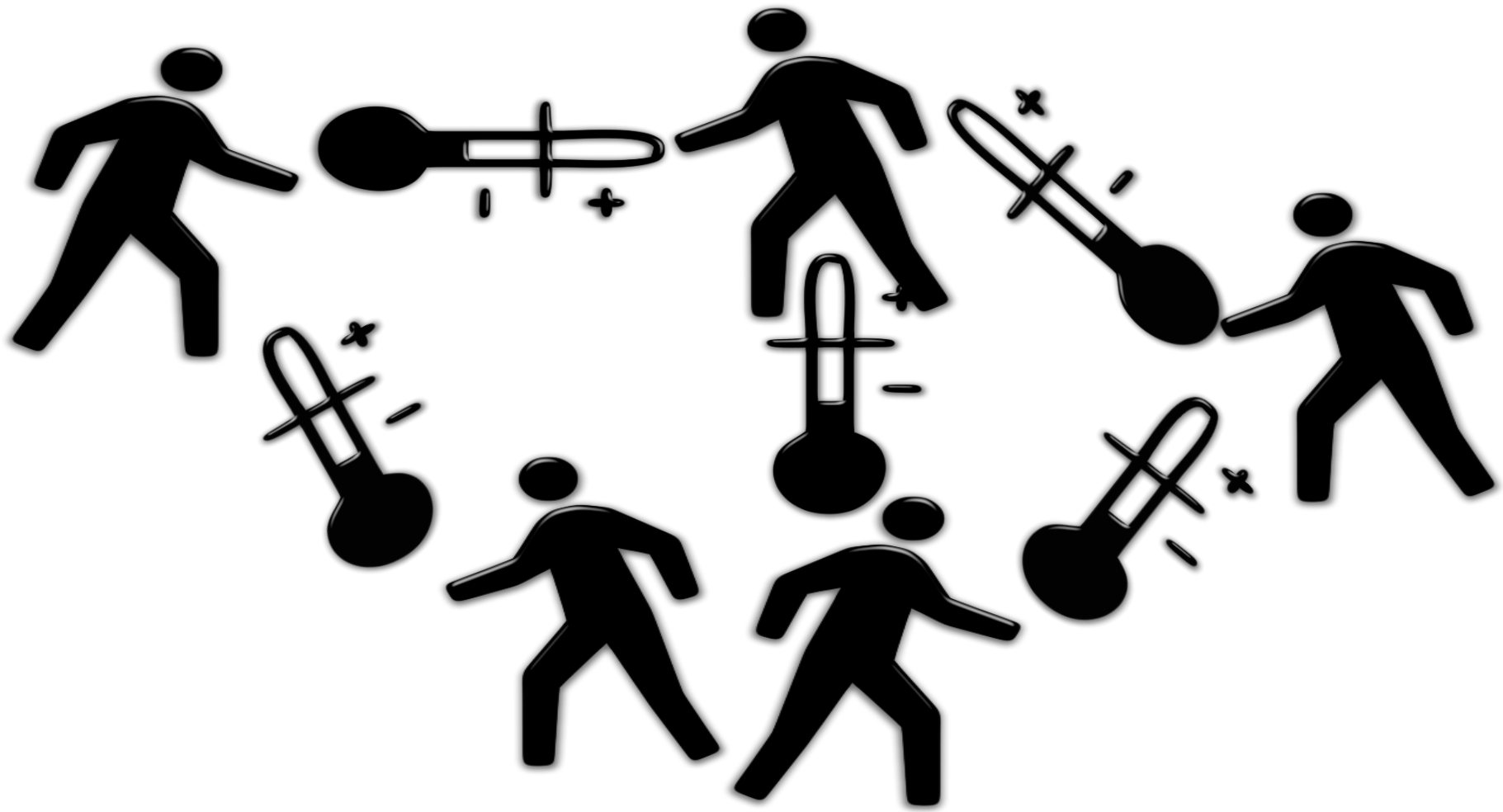


Survival

Stuff

as rival goods.

Take many tugs of war…

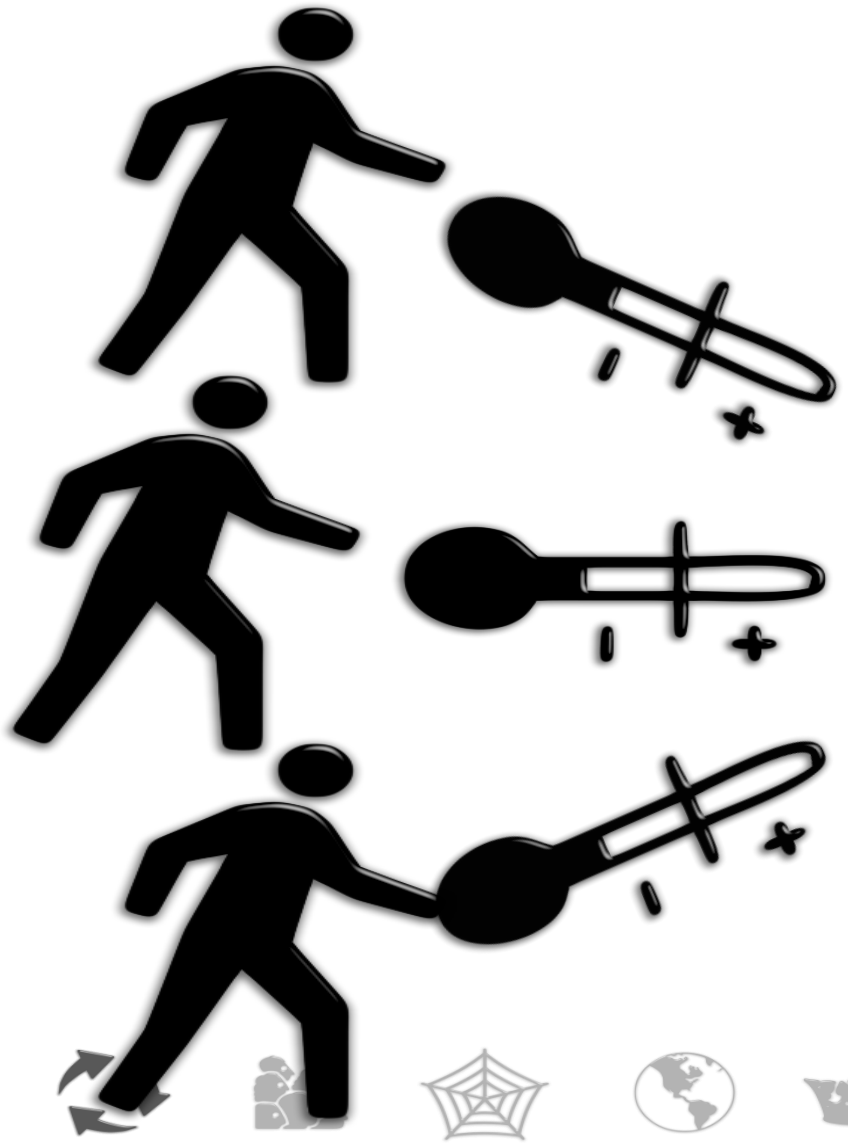


Last man standing

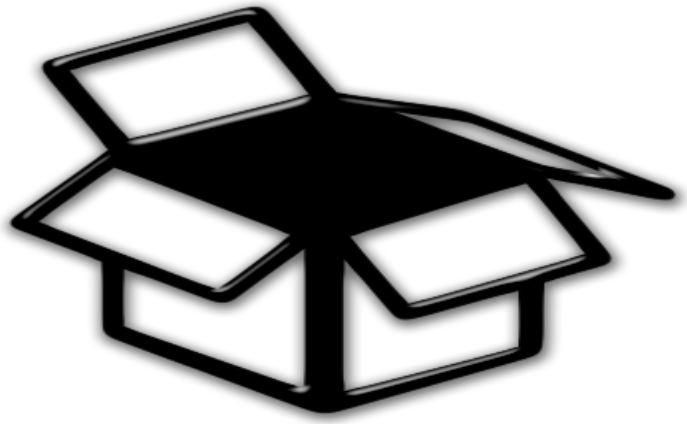
11

Bidding

12



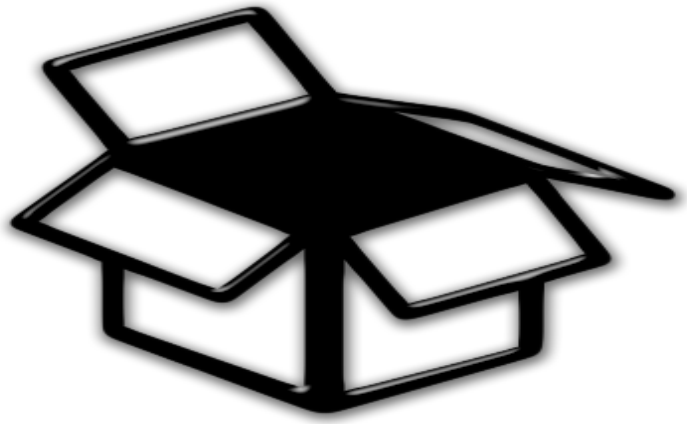
Mediate your status tug of war



via a rivalrous good.

Bidding

Mediate your status tug of war



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Social effects depend on humanization

Numerous social science experiments have found that a variety of psychological effects only occur when we think the interlocutor is human, or "like us."

- The Milgram buzzer experiment
- Zimbardo's work

(Mirror neurons are all the rage.)

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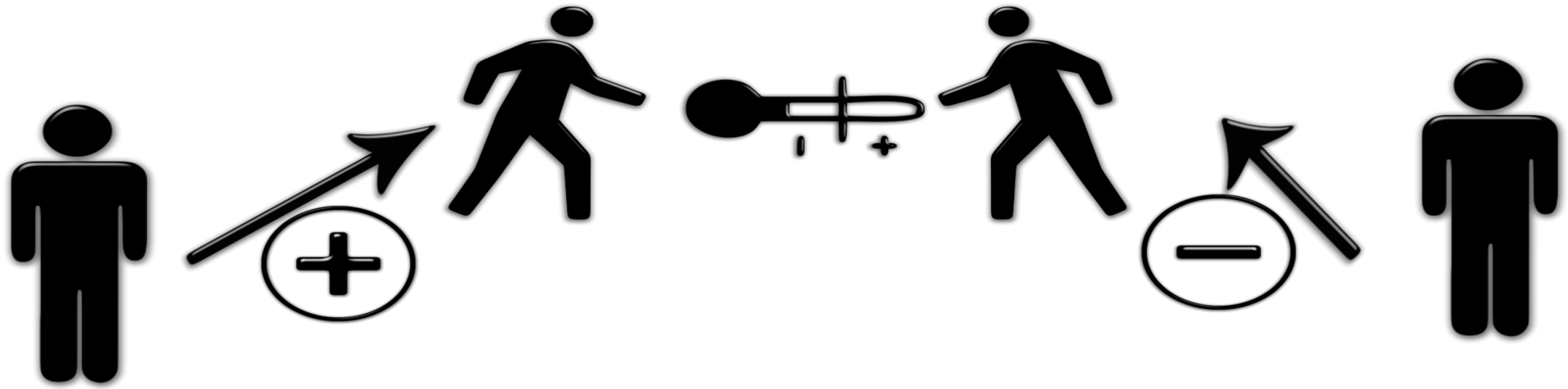
Why don't we use psychology?

Booing

Lousy communication channels?

The multiplayer evolution of "helping"

A psychological 3rd party attack – it only works on human opponents.



Deception and bluffing

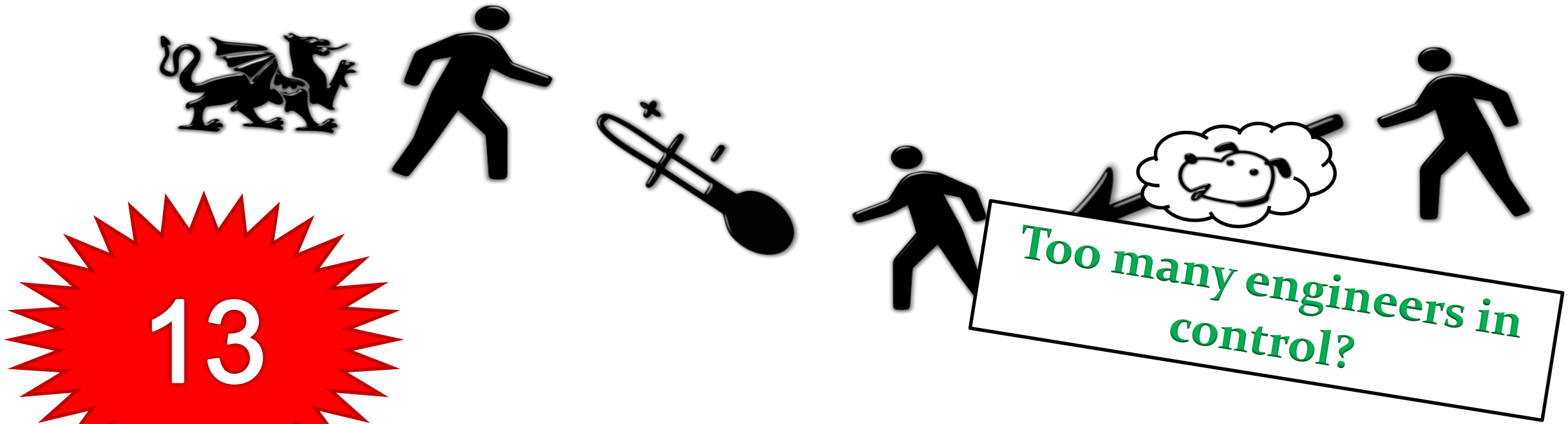
Once secrets are treated as goods, *misinformation* becomes a form of tug-of-war.

Excessive dependence on quantification?

13

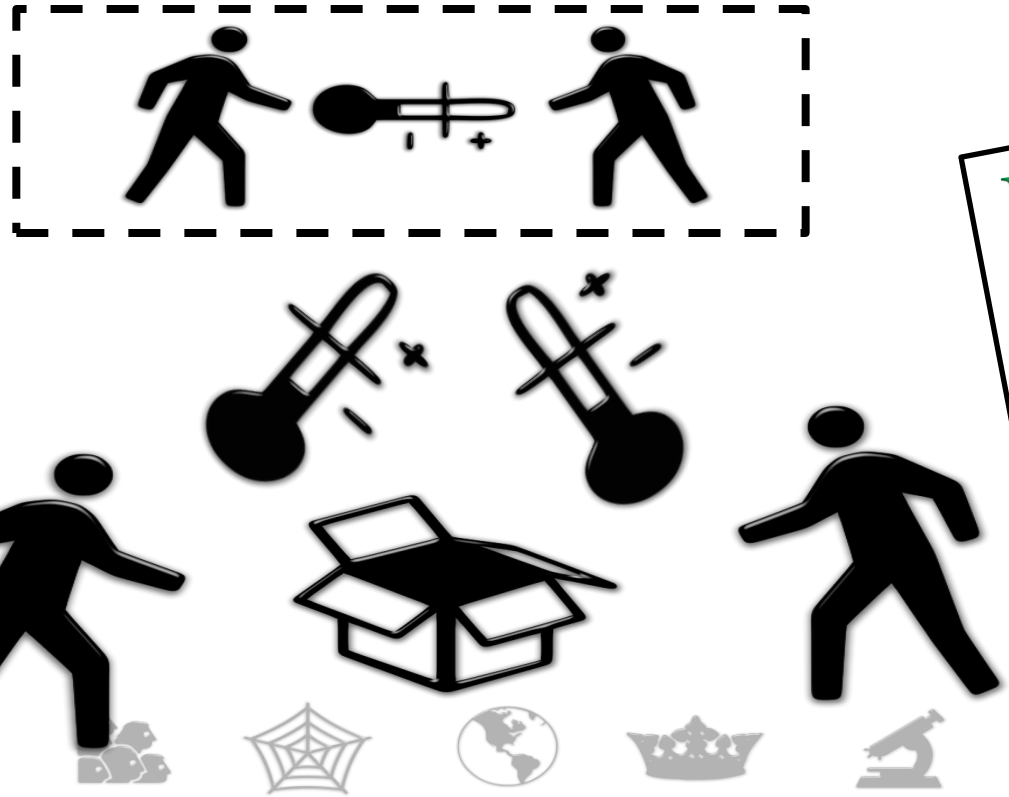
Deception and bluffing

Once secrets are treated as goods, *misinformation* becomes a form of tug-of-war.



3rd party betting

3rd parties play a bidding game against a rivalrous resource pool, based on the outcome of a multiplayer game.

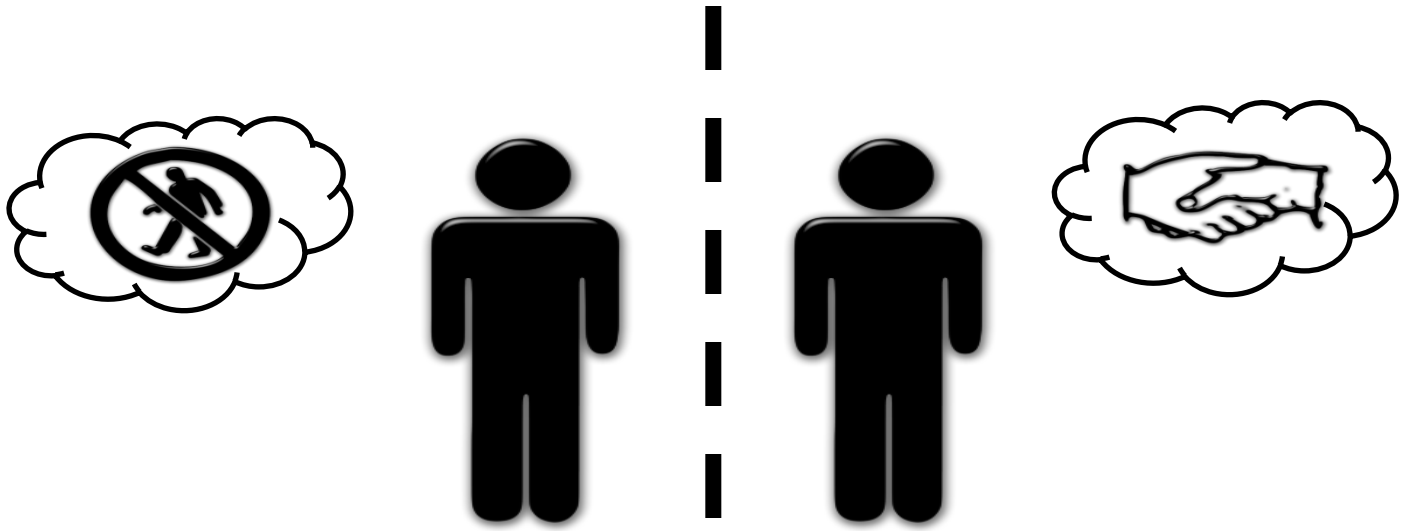


14

Virtually none of the psych-dependent mechanics are used

Prisoner's Dilemma

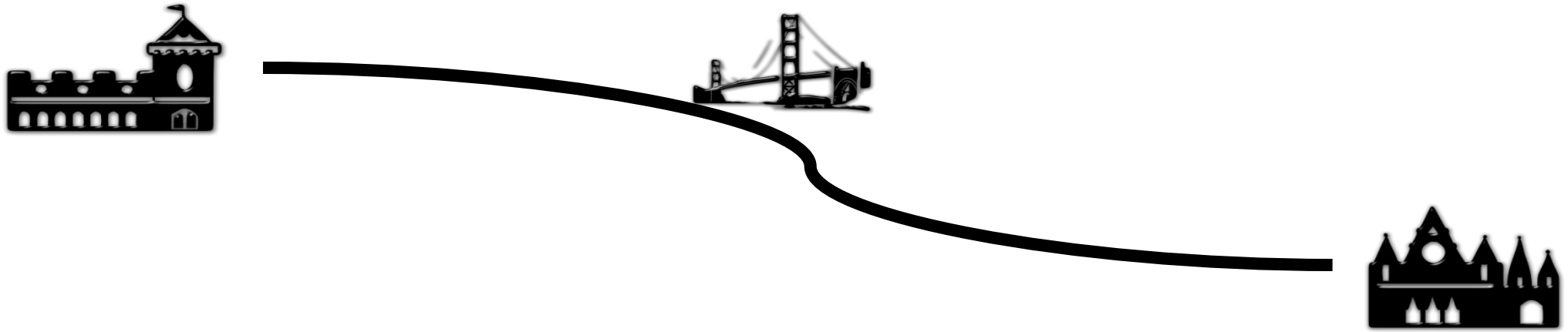
Teammates with secrets from each other who must choose independently to collaborate or both lose.



Kriegspiel

Credited to Von Reiswitz

- First used around 1812 as a form of training for the Prussian army



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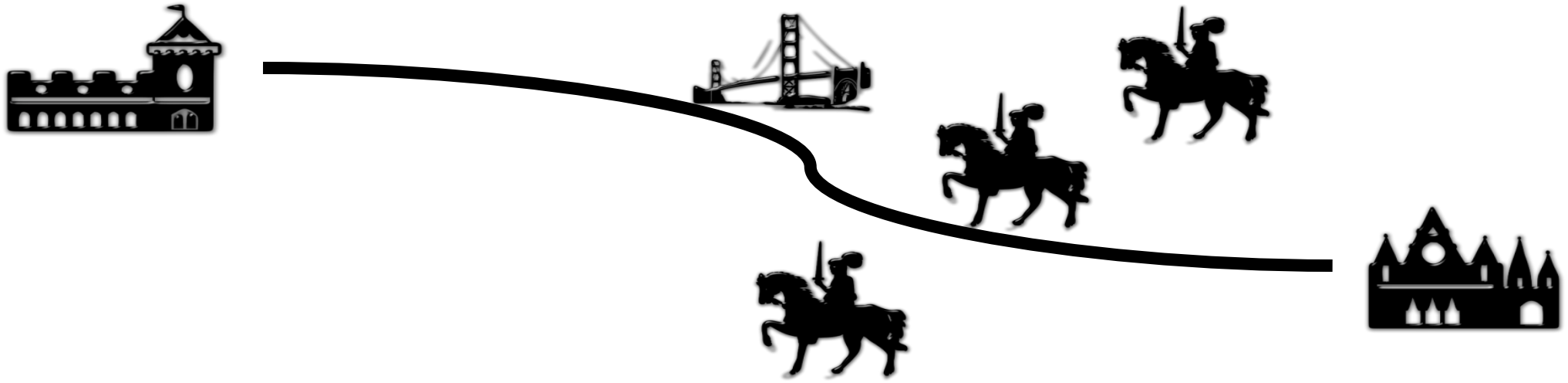
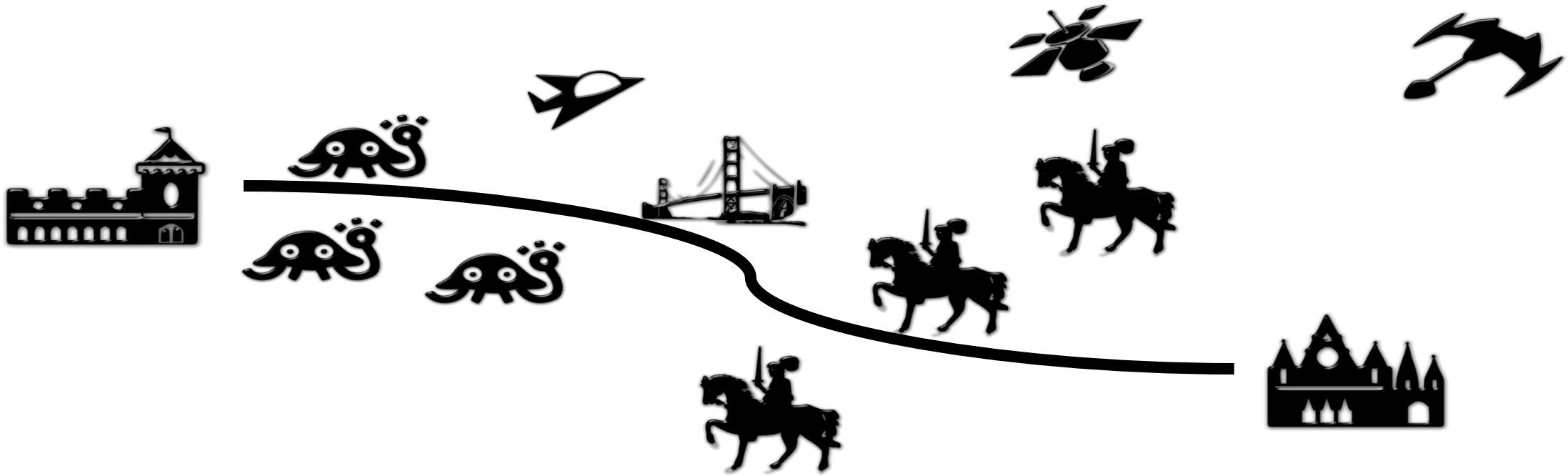


Kriegspiel

Popularized by science fiction writers

- H G Wells wrote *Floor Games* (1911) and *Little Wars* (1913)
- Which led to Fletcher Pratt designing naval wargames in the 1940s



Kriegspiel

Some of whom went on to invent the think tank.

Kriegspiel

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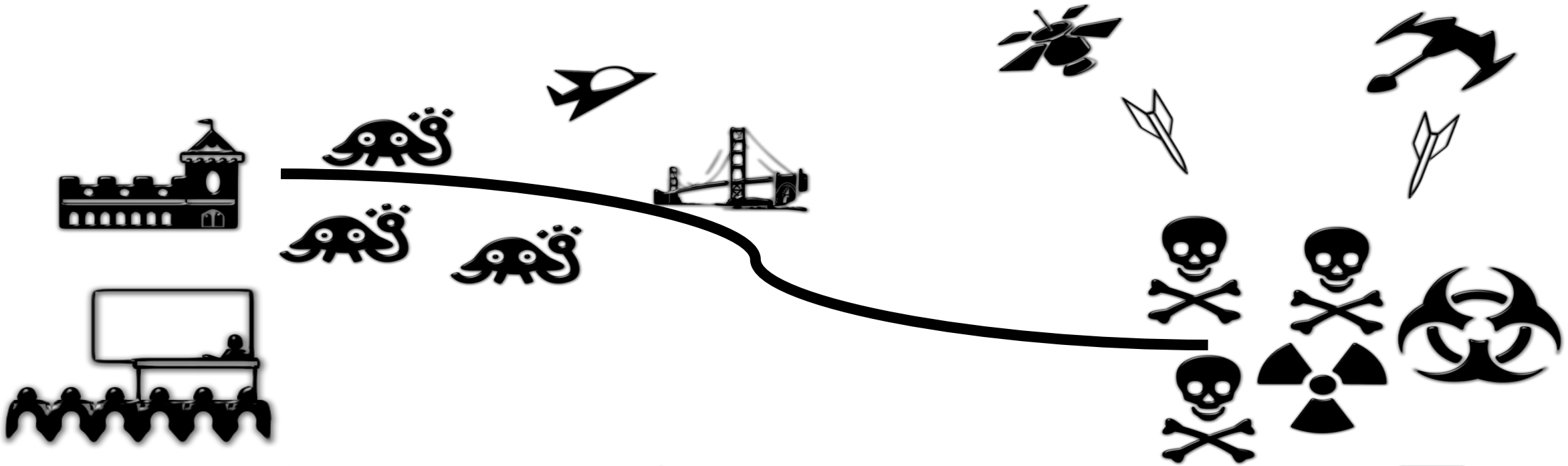
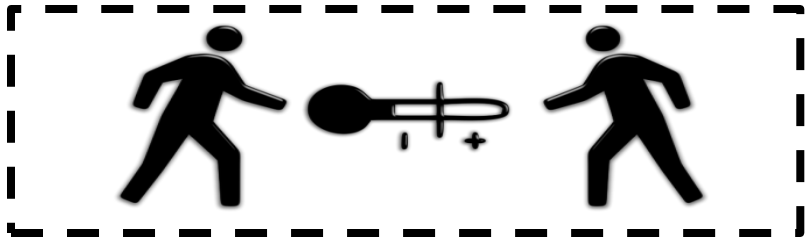
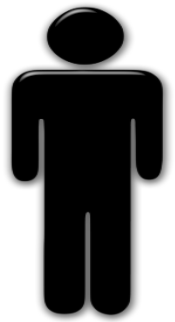


Gamesmaster pattern

A multiplayer game that relies on a third party to *direct* the game – an evolution of the non-mechanic "referee."



Leads directly to…



(Us in this room)

Small groups

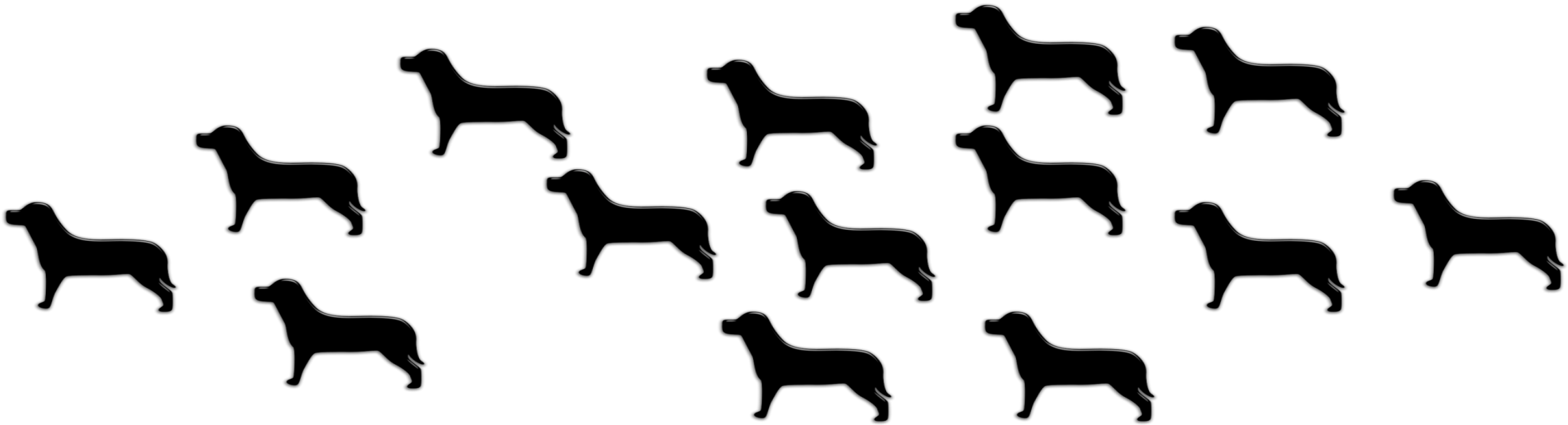
n *vs* n

Werewolf

Aka Mafia, etc

A game where players have secret roles

- Villager



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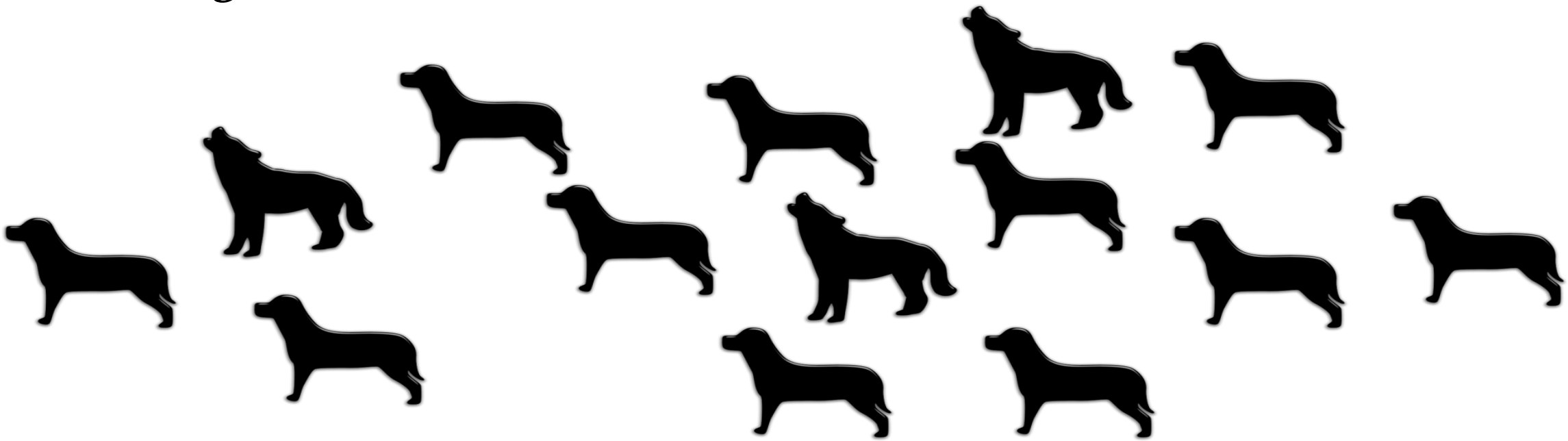
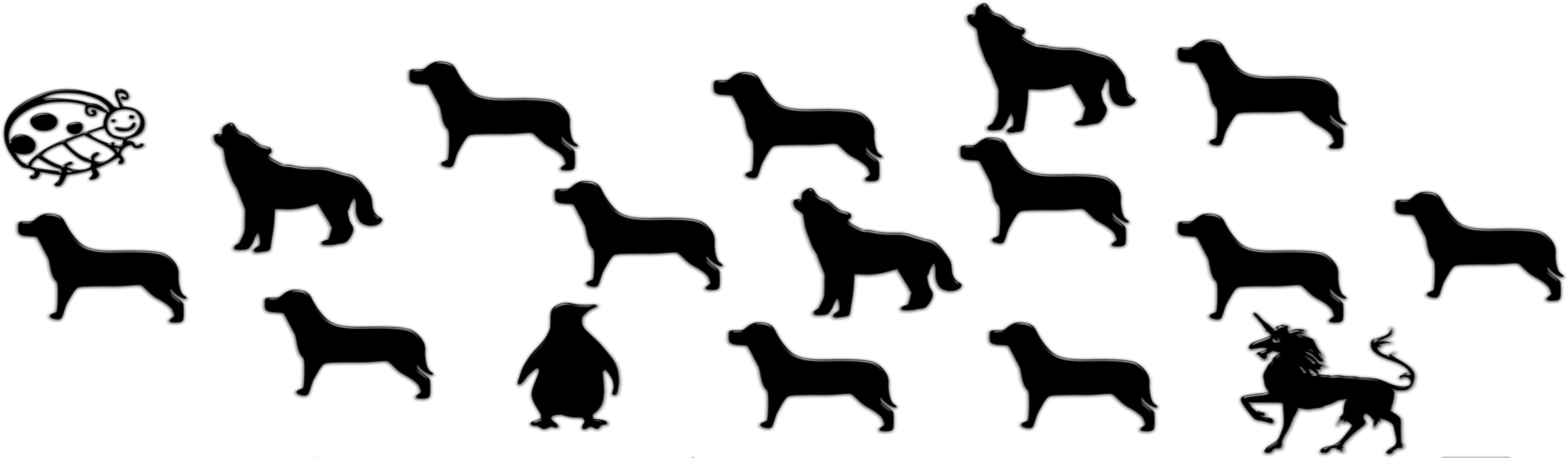


Werewolf

Aka Mafia, etc

A game where players have secret roles

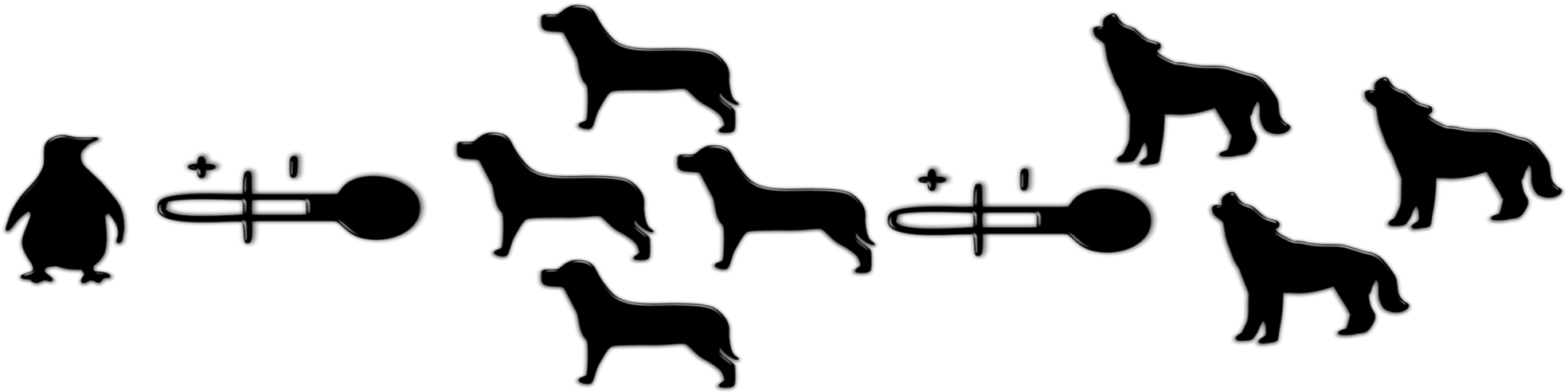
- Villager, werewolf, various other small optional ones



Werewolf

Wolves get to kill off villagers, Villagers get to lynch anyone

- Tons of these mechanics are present: deception, Prisoner's Dilemma, brawls, gamemaster…



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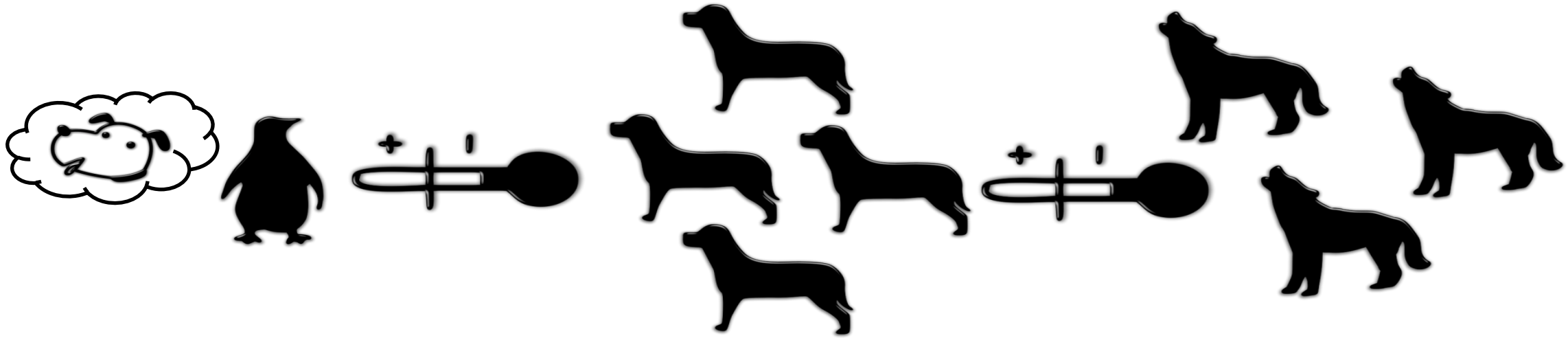
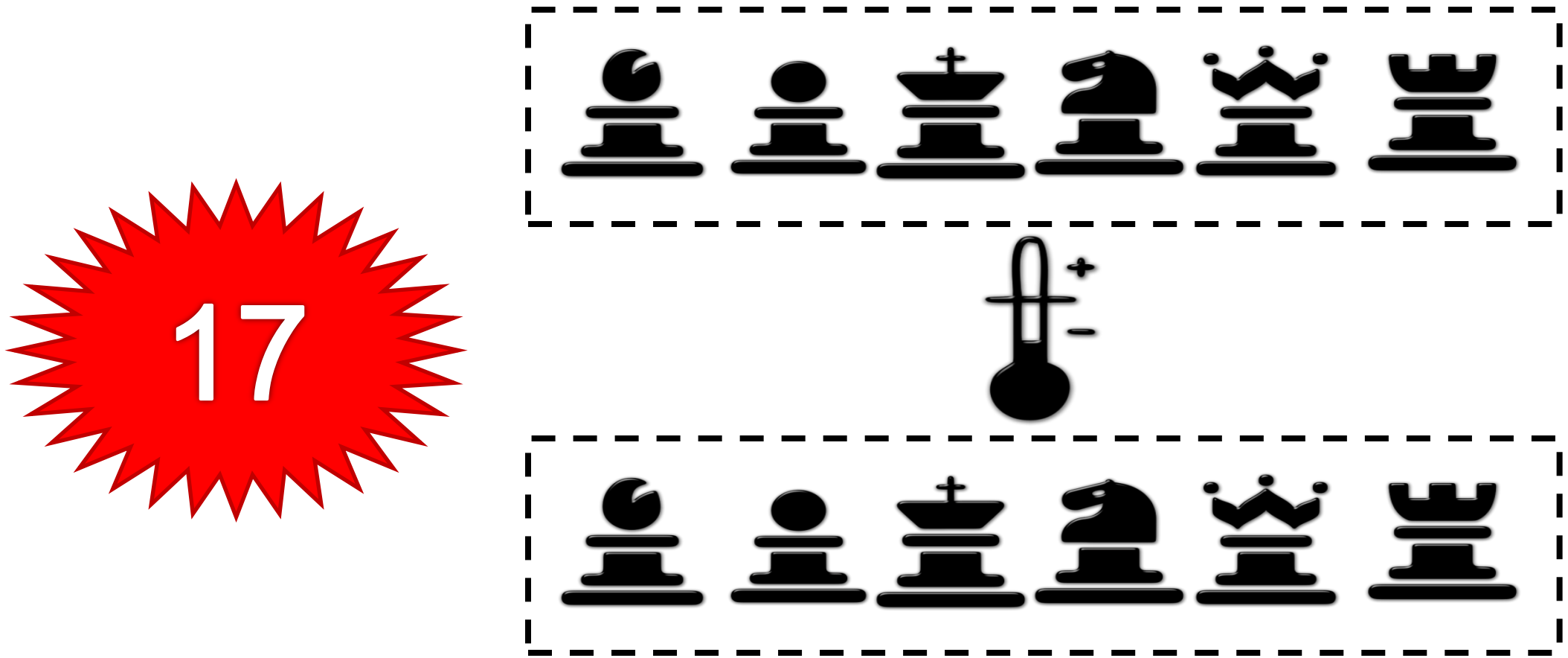


Roles

Specialization into different games within one group



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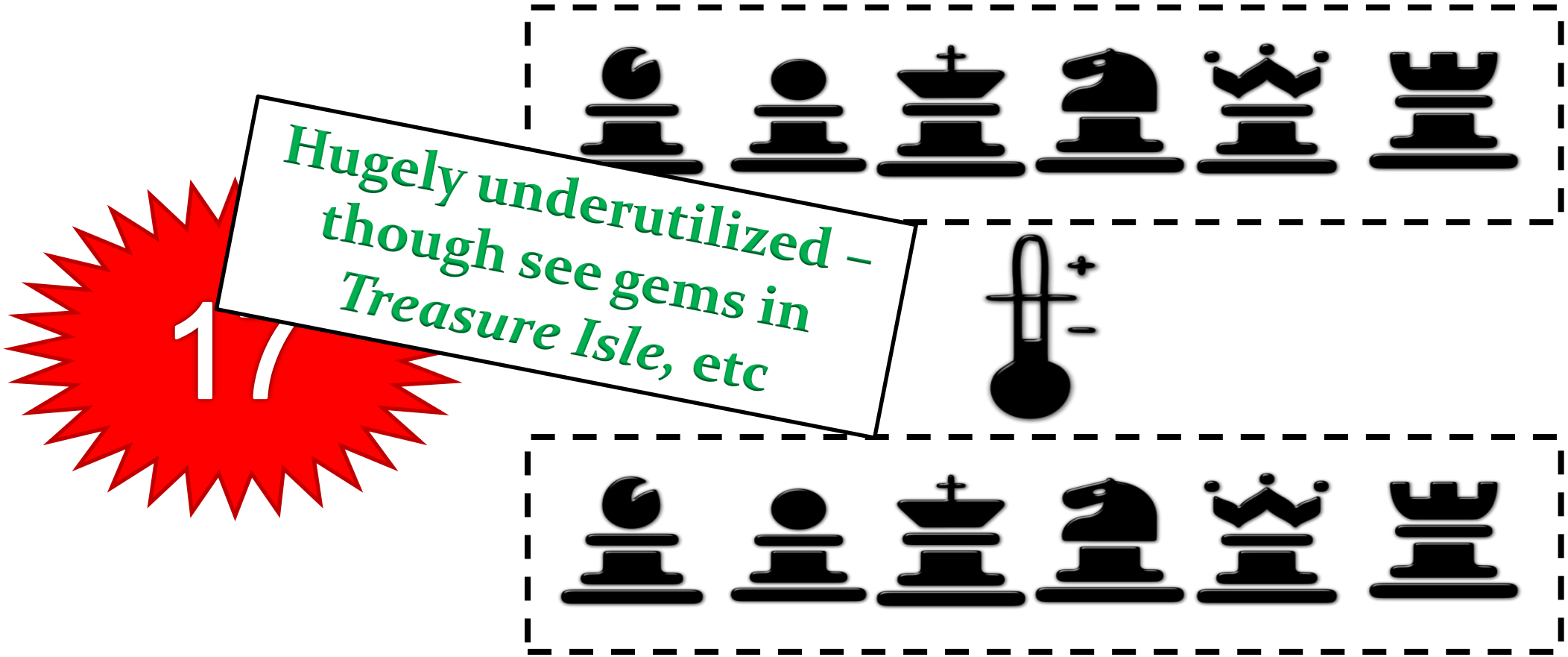
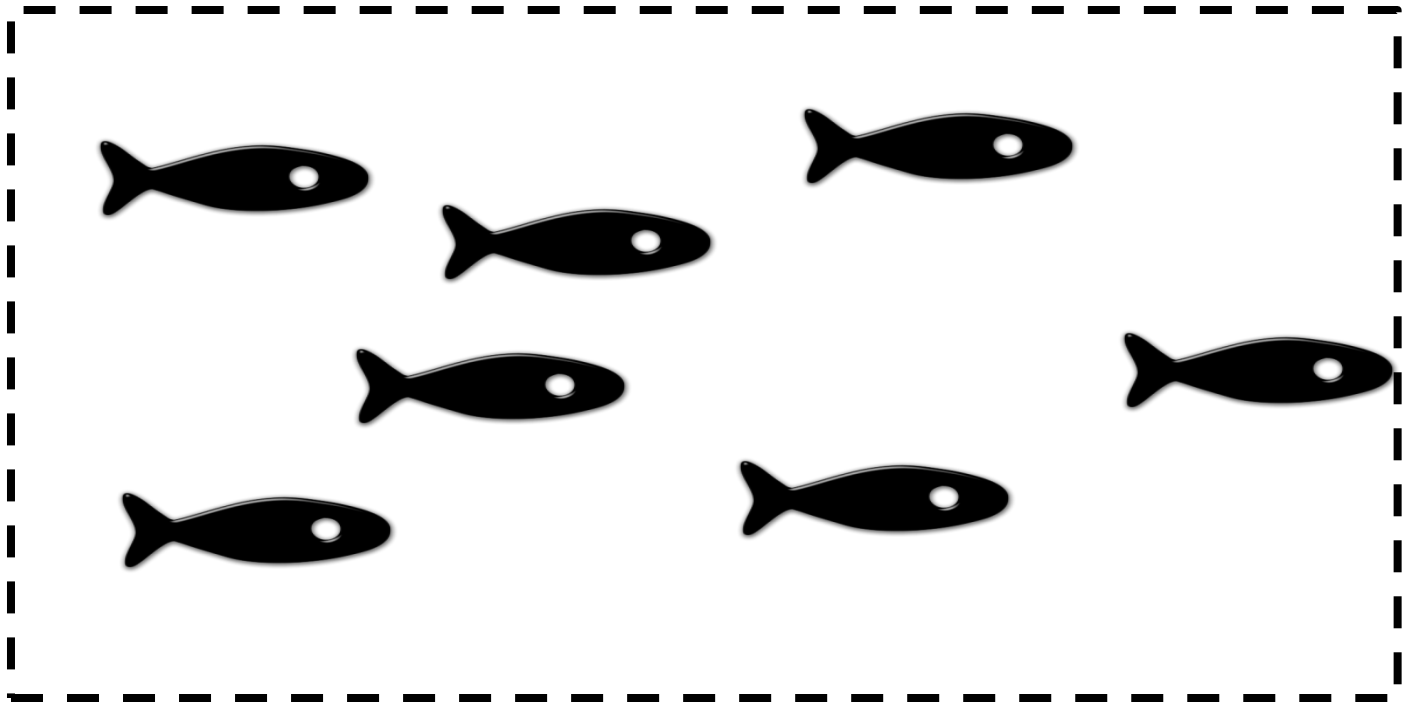


Hot potato/ganging up

Rotation of roles within a multiplayer game (often a brawl), creating ad-hoc groups.

Think of tag...



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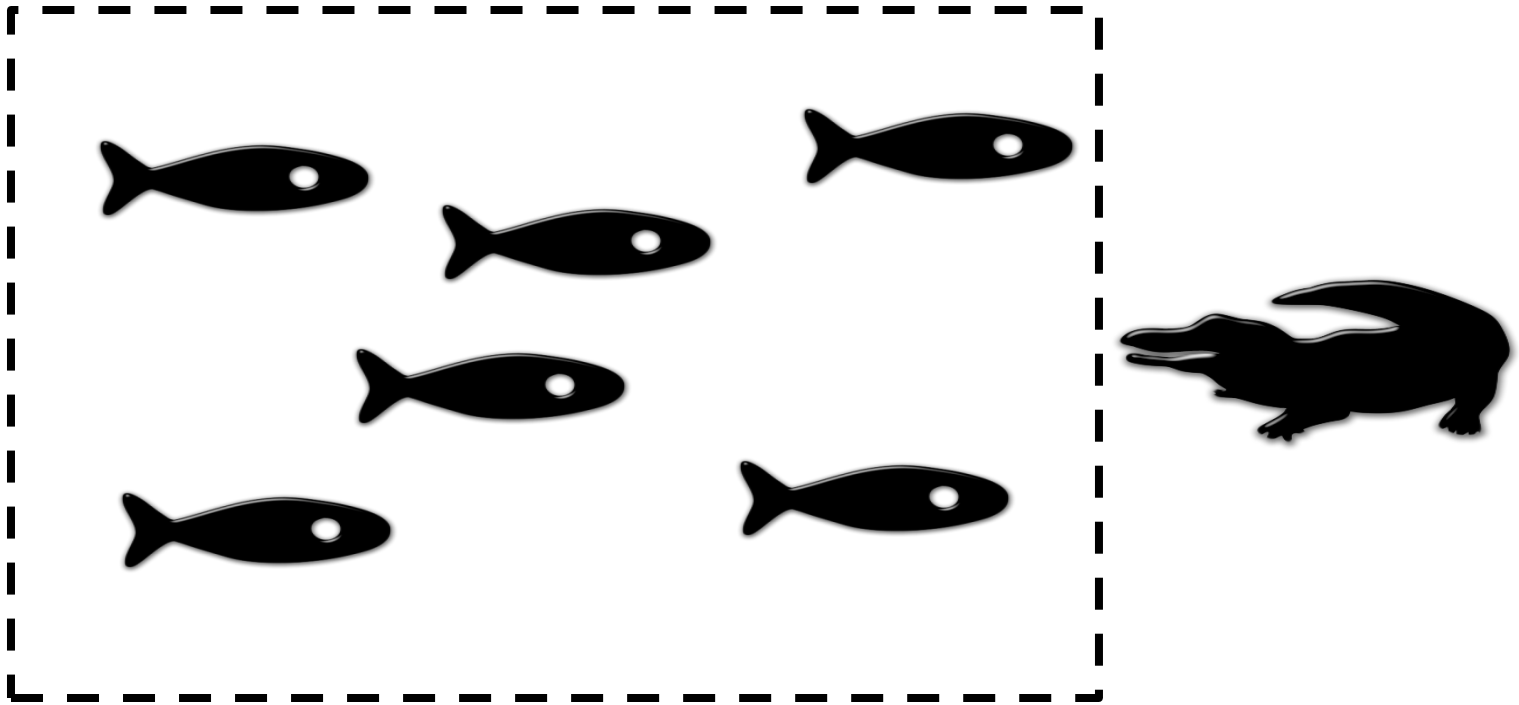


Tag

Layering of multiplayer mechanics gives way to whole new games

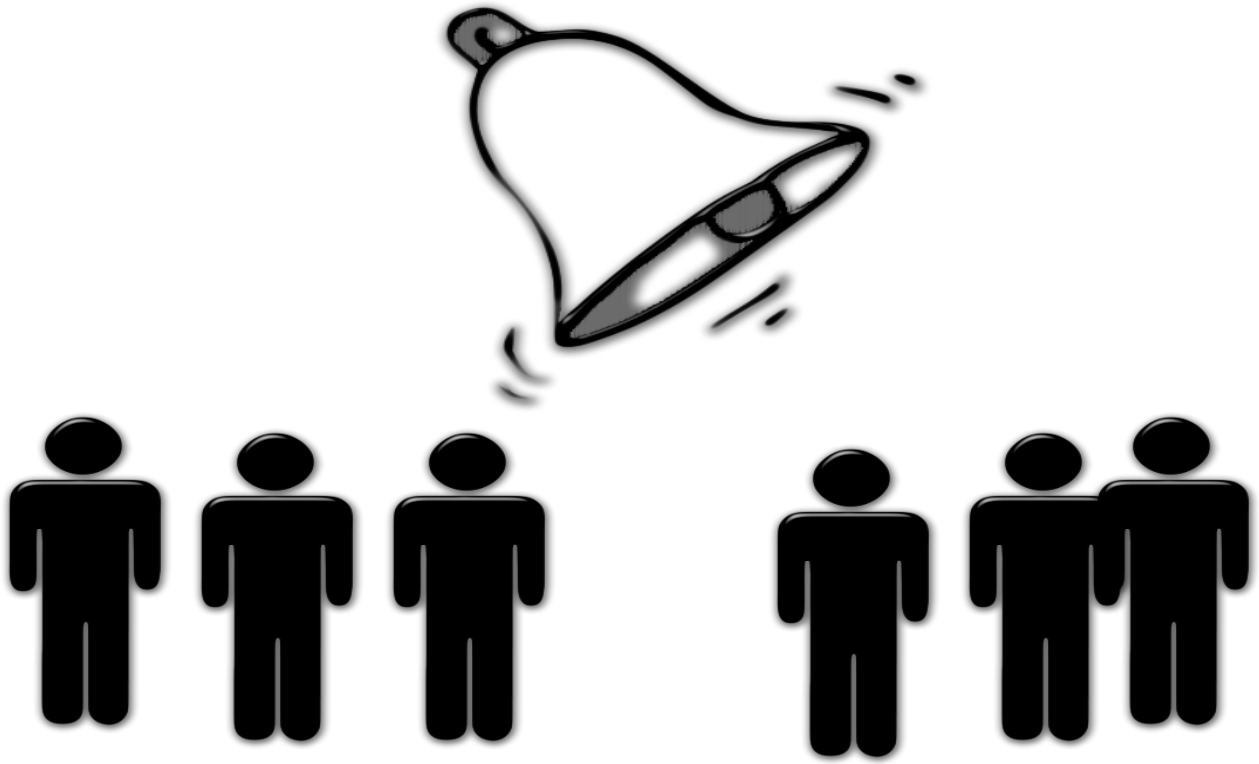
- Add *secrets*: Blind Man's Bluff.
- Add *dot eating*: Duck Duck Goose (compete for the chair)
- Add *flower-picking*: Freeze tag.
- Add *grouping*: Cops and Robbers.

But then there's "Olly Olly Oxen Free!" (or whatever)… what's that about?

Rituals

Ceremonies marking significant role transitions within a social structure.

19



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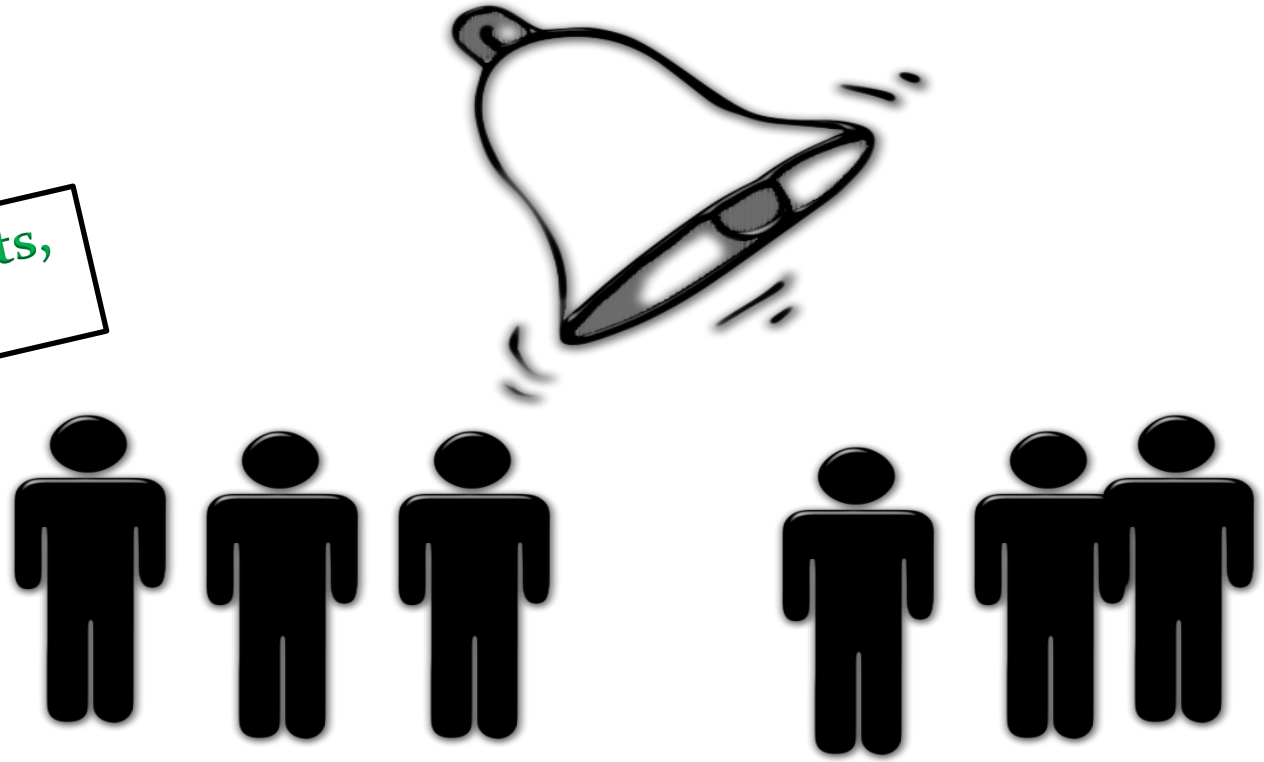

Functionalism

Sociology and anthropology used to see all of group interaction as being about structure: groups as “organs” that make the “body” work.

Today the field has moved on, but it’s a useful lens for multiplayer game designers!

Ritualism and lifecycles

Compare Robert Merton's theory of deviance to player lifecycles:

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4. Then they *retreat* and stop caring about the goal *or* the method.
5. Finally, they *rebel* and start doing their own thing.

Common rituals

- *Transitions of state* (birth, marriage, death, levelling up)

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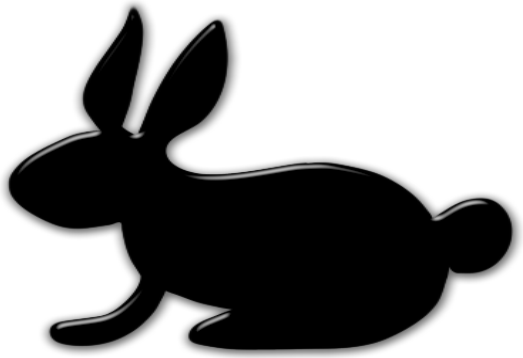

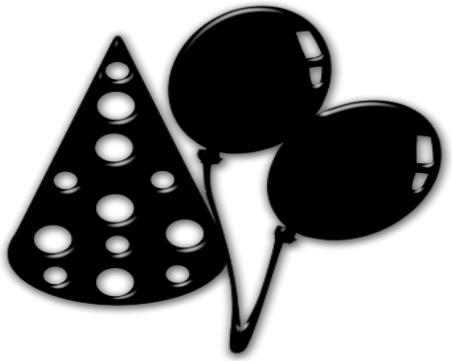

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- *Transitions of state* (birth, marriage, death, levelling up)
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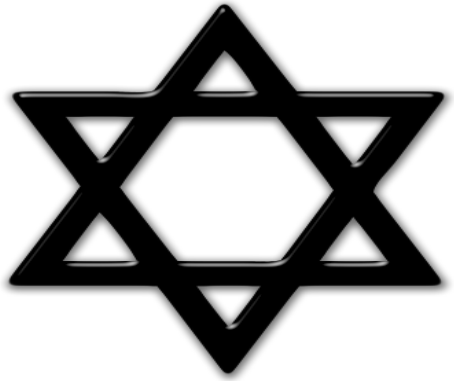

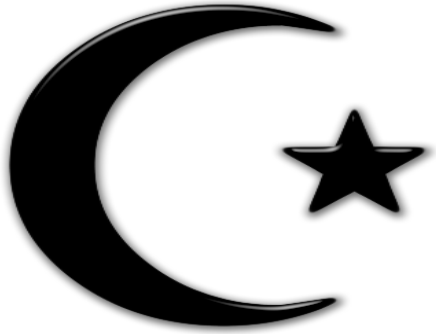

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These are often marked by mechanics such as

- Changes of uniform
- Gatherings
- But above all… *gifts*.

Common rituals

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- *Holidays* (environmental transitions, commemoration of historic or individual transitions of state)
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These a by mecha
- Chang uniform
- Gatherings
- But above all… *gifts*.

This one, social games nailed.

Arguably, the only reason they are deserving of the name.

Gifts are ubiquitous

We “give away” the bride

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We give gifts at major holidays

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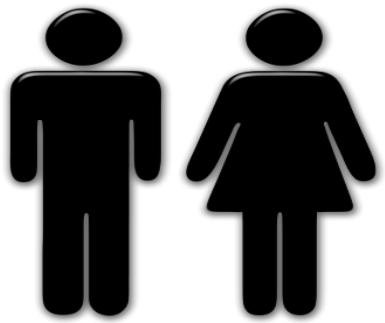

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We give gifts to the dead to take with them

We give gifts at weddings

We give gifts to babies

We throw t-shirts at hockey games

Gifts

Transferring a rivalrous good to another actor in order to increase their status.

20

Gifts

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20

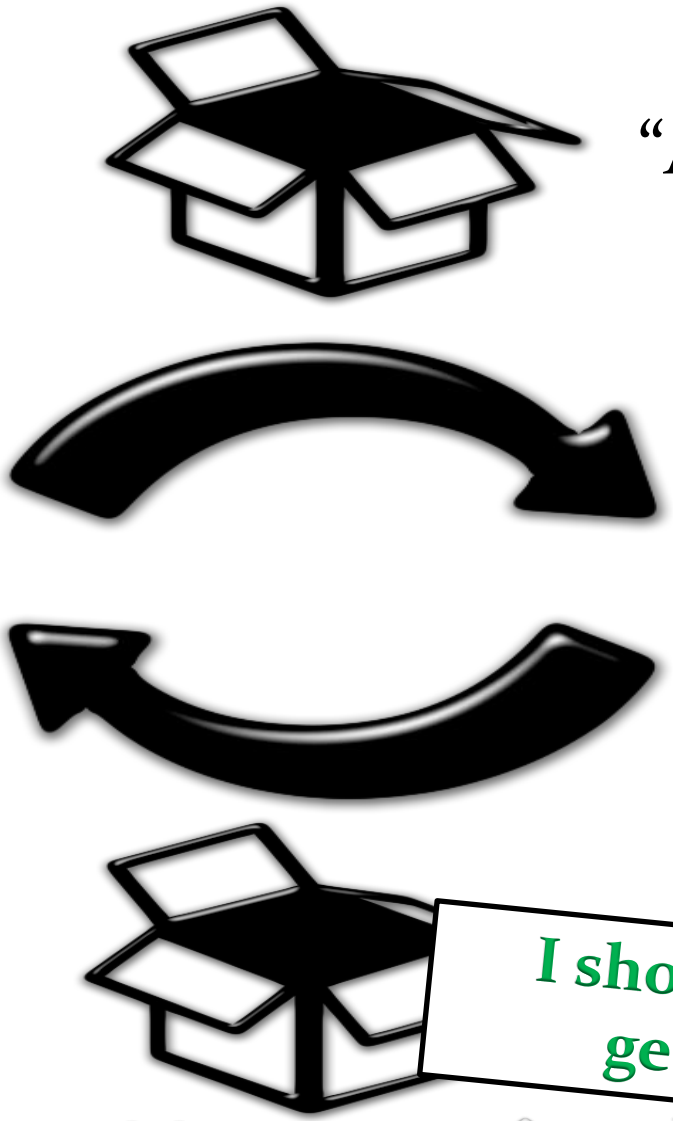
Gift theory

Marcel Mauss in "*Essai sur le Don*"

- Gifts are never "free" to either party.
- Reciprocal exchange is typical.
  - Failure to return a gift in Polynesia costs you *mana*.
- There are three steps: give, receive, reciprocate. Each can fail and each can have consequences.

Gifts are *inalienable*… they always retain their source.

Kashmiri anecdote



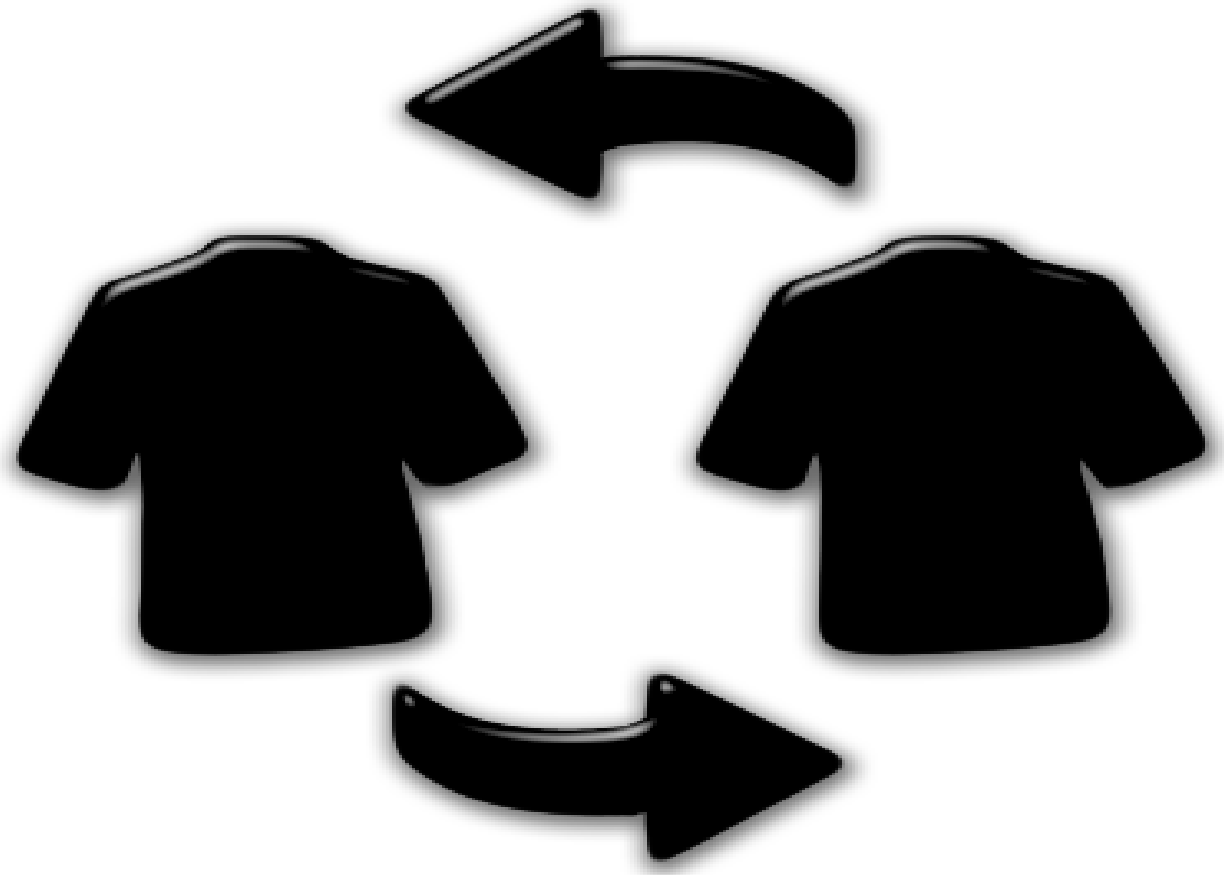
"A Kashmiri tale tells of two Brahmin women who tried to fulfill their obligations for alms-giving simply by giving alms back and forth to one another. On their deaths they were transformed into two poisoned wells from which no one could drink, reflecting the barrenness of this weak simulacrum of giving."

-- Wikipedia, summarizing an anecdote itself summarized in Lewis Hyde's *The Gift: Imagination and the Erotic Life of Property,* who got it from who knows where

I should have cut this slide, it's pure academic geekery, and I'm going to run out of time

Reciprocity

In an iterative simulation, the social expectation of a future return of a gift.



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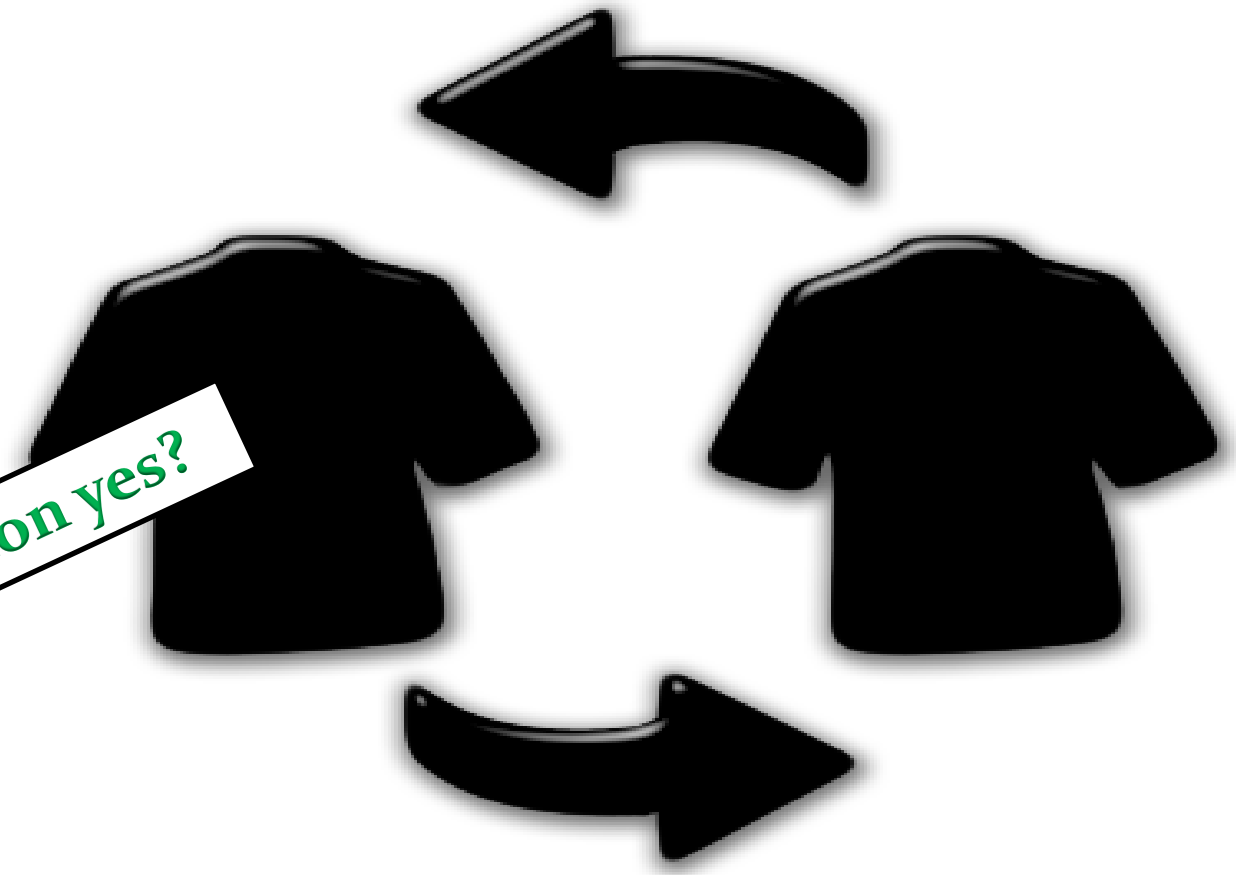


You do have a "return gift" button yes?

Tiers of economy

Non-market economies: no concept of price

Generalized reciprocity: just give, whee, no expectations!

- Reciprocity resides in satisfaction, social closeness. In western society this tends to be gifting between family members, etc

Balanced reciprocity: expectation of a return gift at an undefined future date.

- Still pretty informal. This is where social game gifting tends to reside.

Negative reciprocity: barter systems, which enable transactions between strangers.

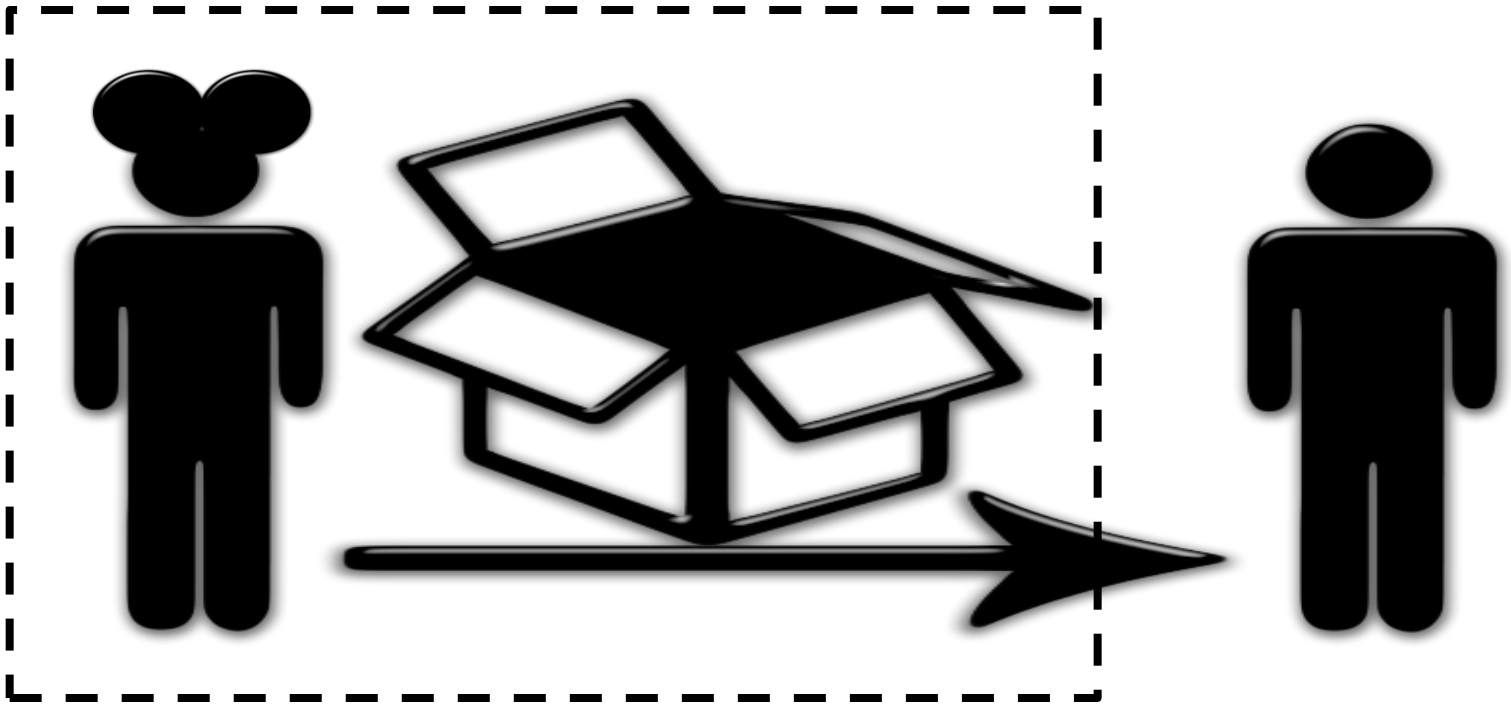
- A way to establish friendly relations when meeting strangers.

22

Mentoring & twinking

Onboarding and socializing group members via the gifting of rivalrous or non-rivalrous goods.

- Giving a car at graduation
- Or Mickey Mouse ears when you join Disney.



An asymmetric exchange: I get *social obligation*, you get *value*.

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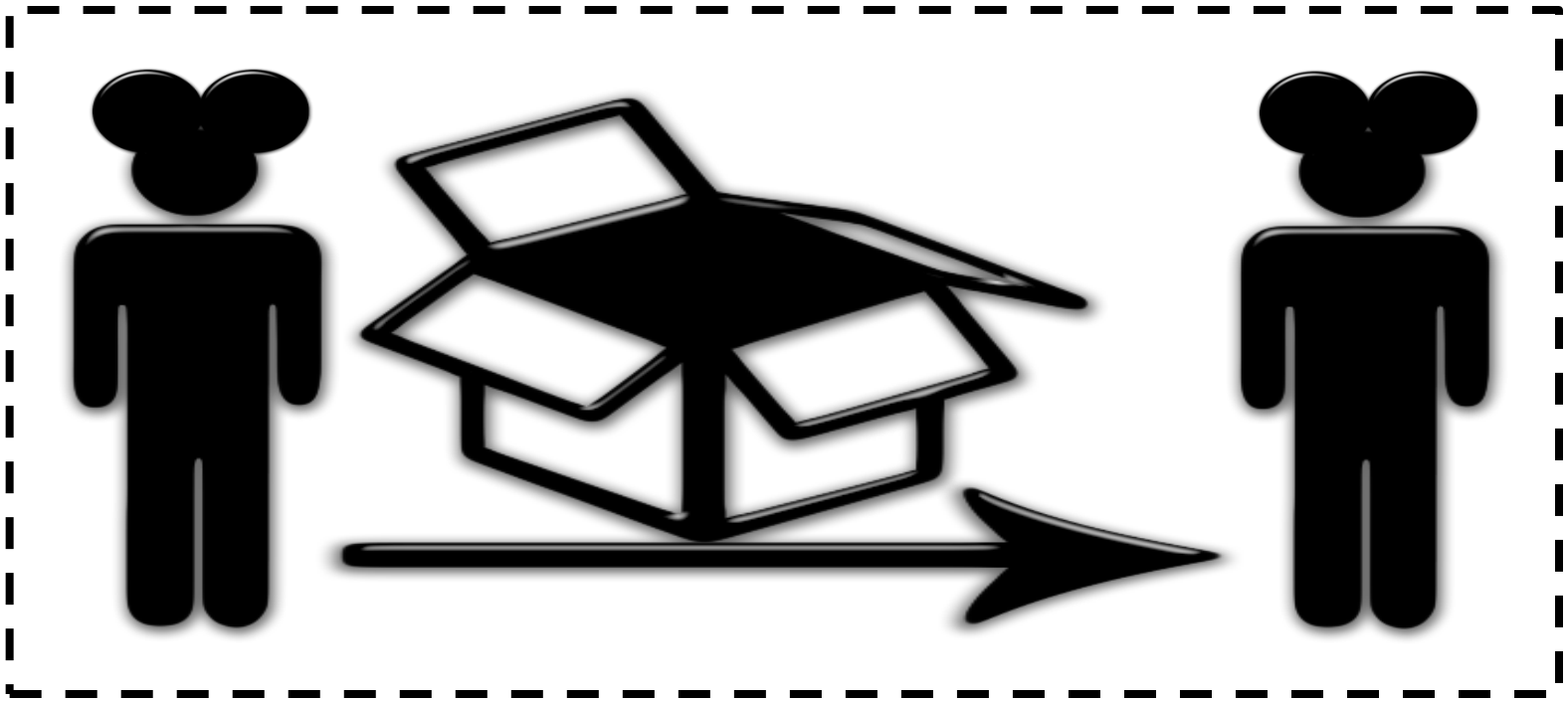

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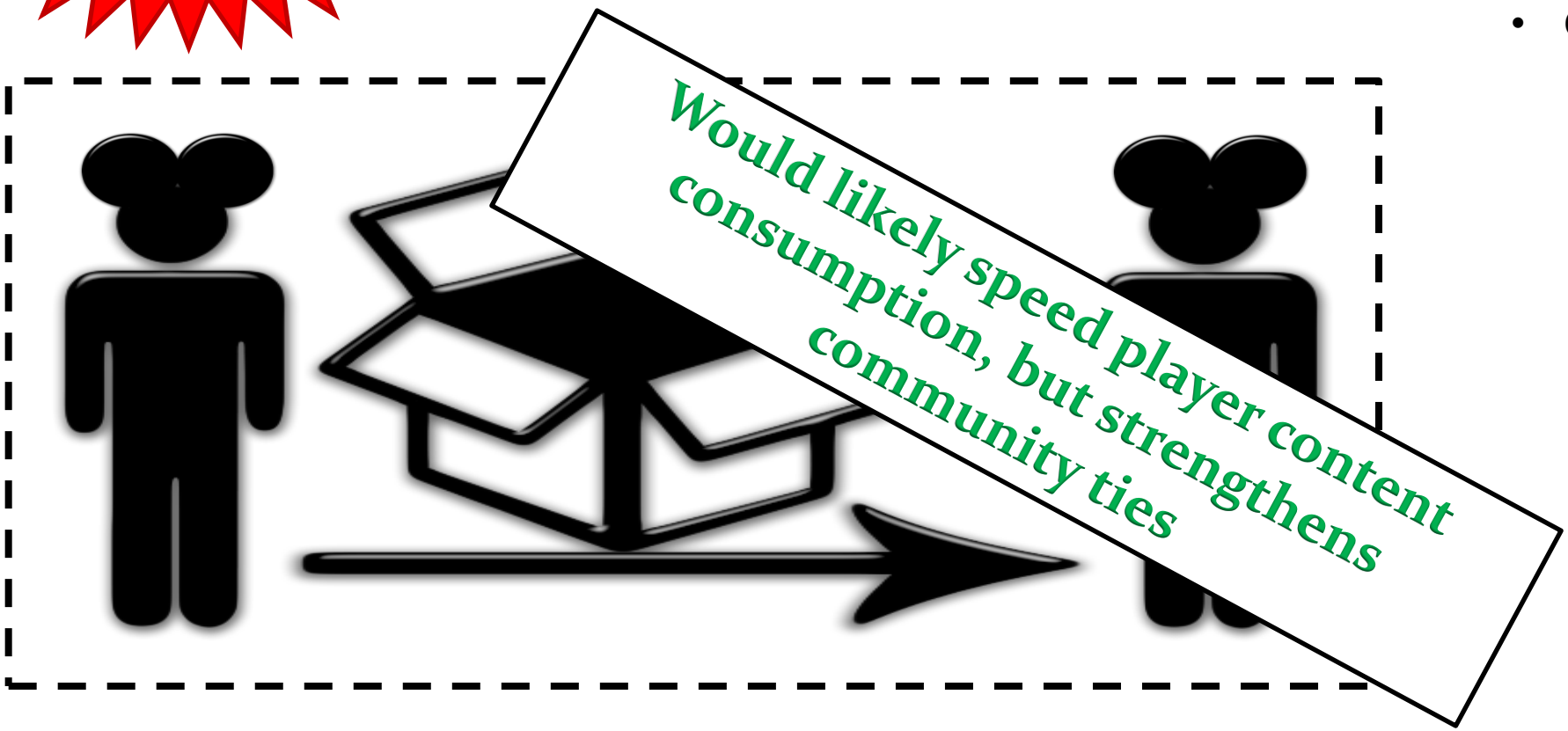

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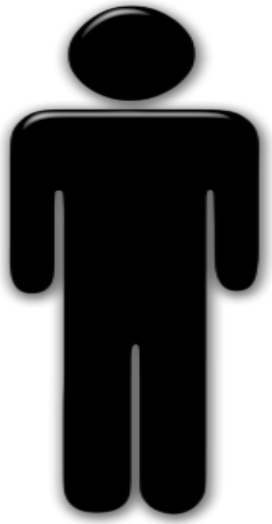
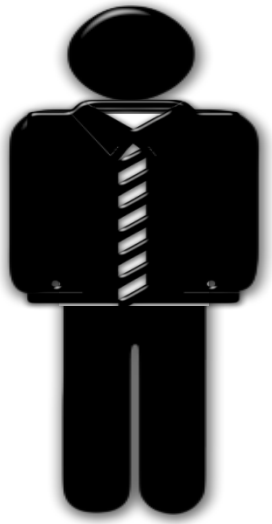
Identity

Means of displaying status and role via rivalrous goods.

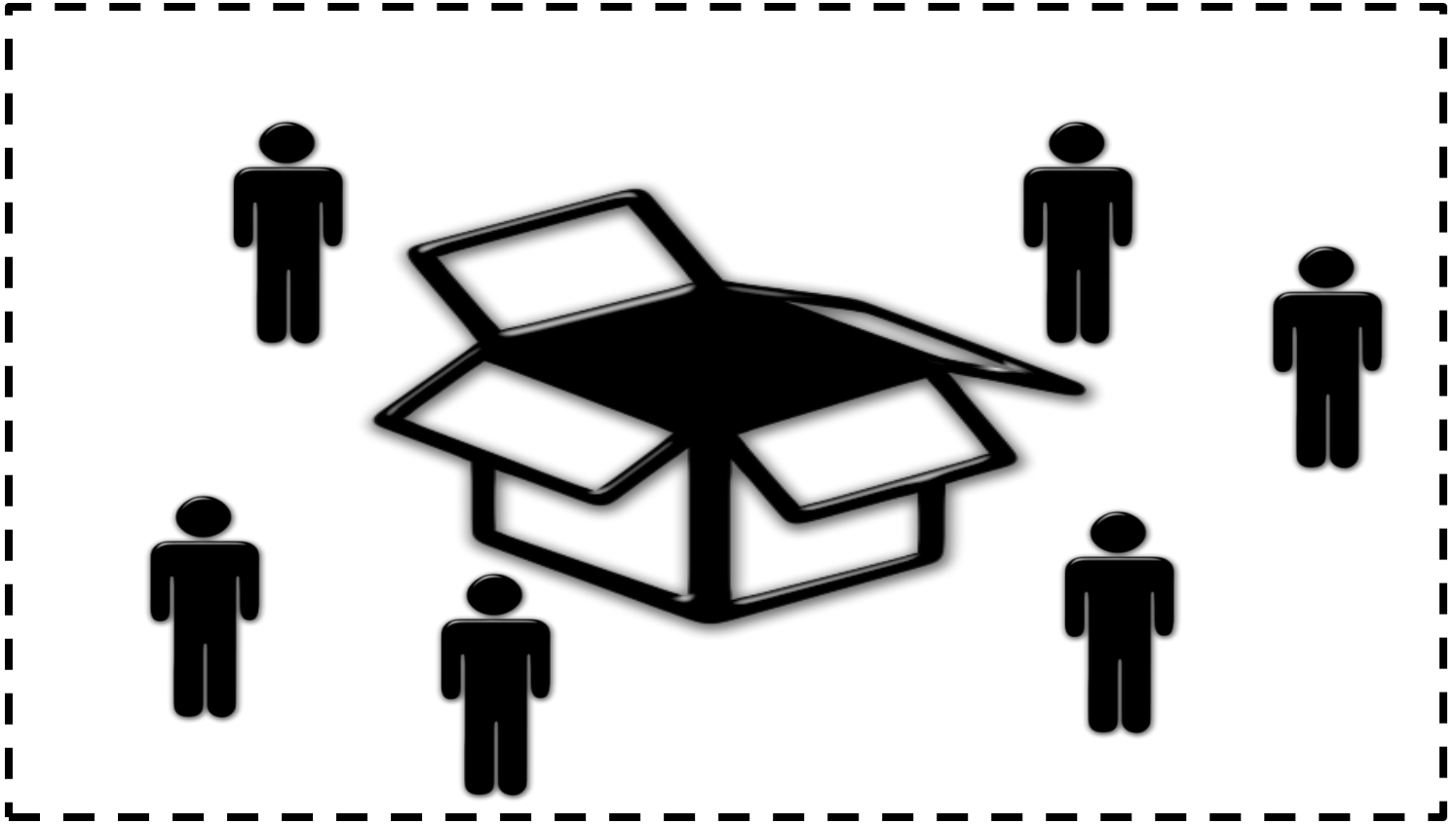
- Extremely important with groups, from skins vs shirts to class gear, etc.

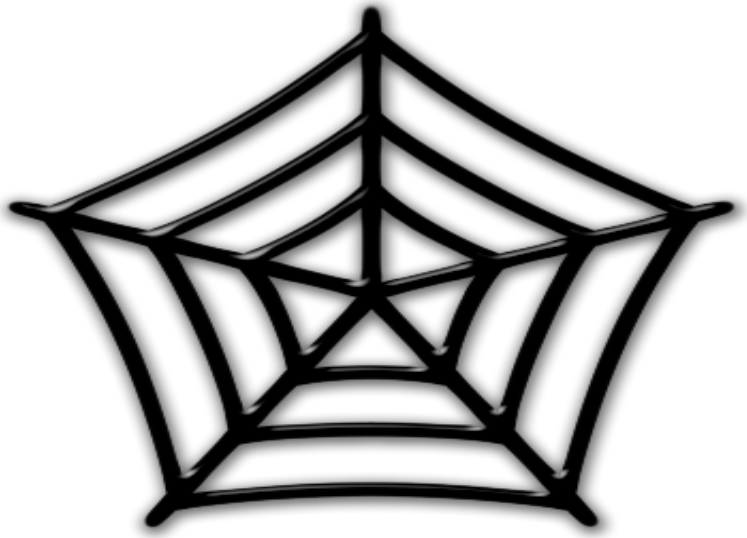




Ostracism

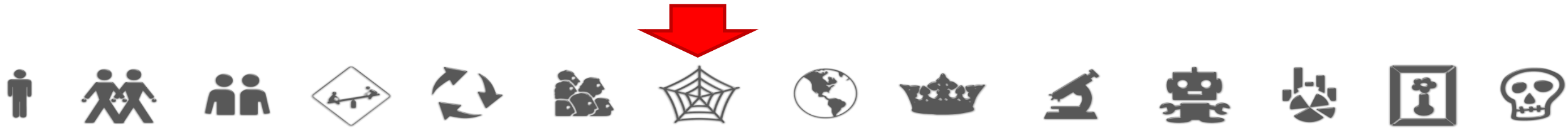
Group removal via denial of common resources.





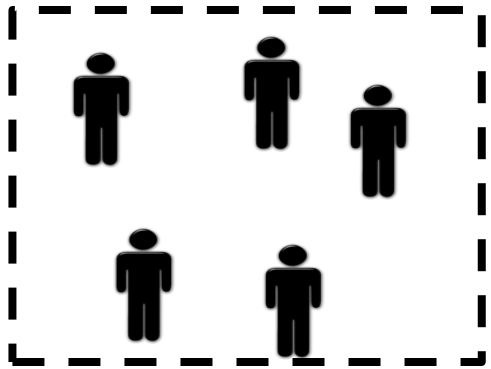
Networks

Scale-free social structures



Clustering

Until now we have talked about groups, which kind of look like this:



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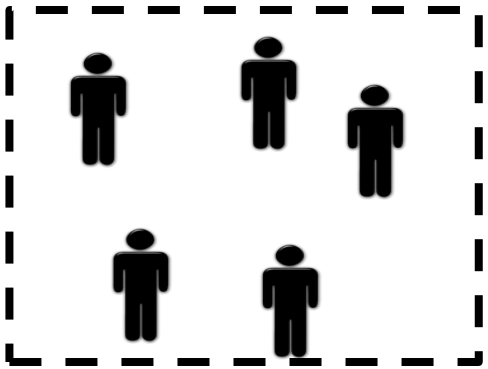

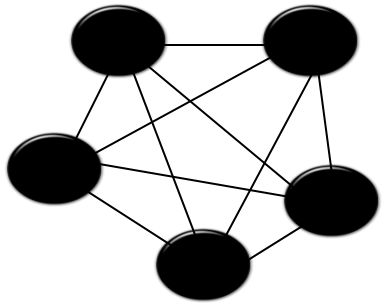

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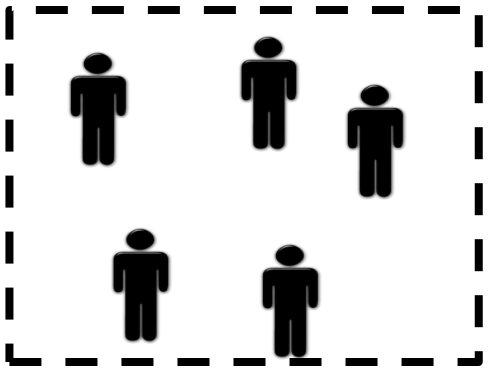
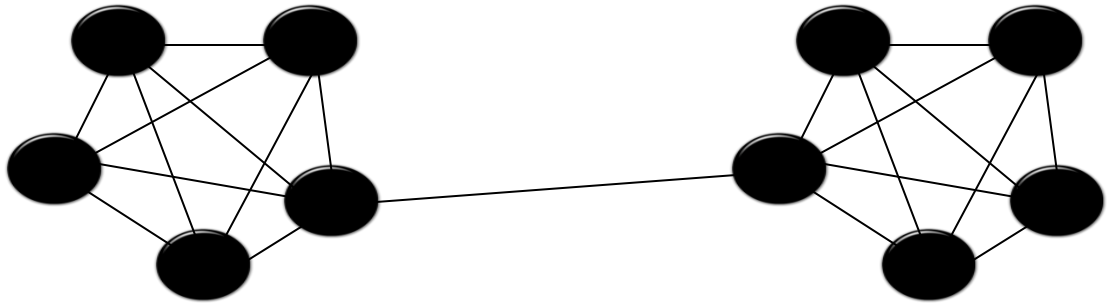


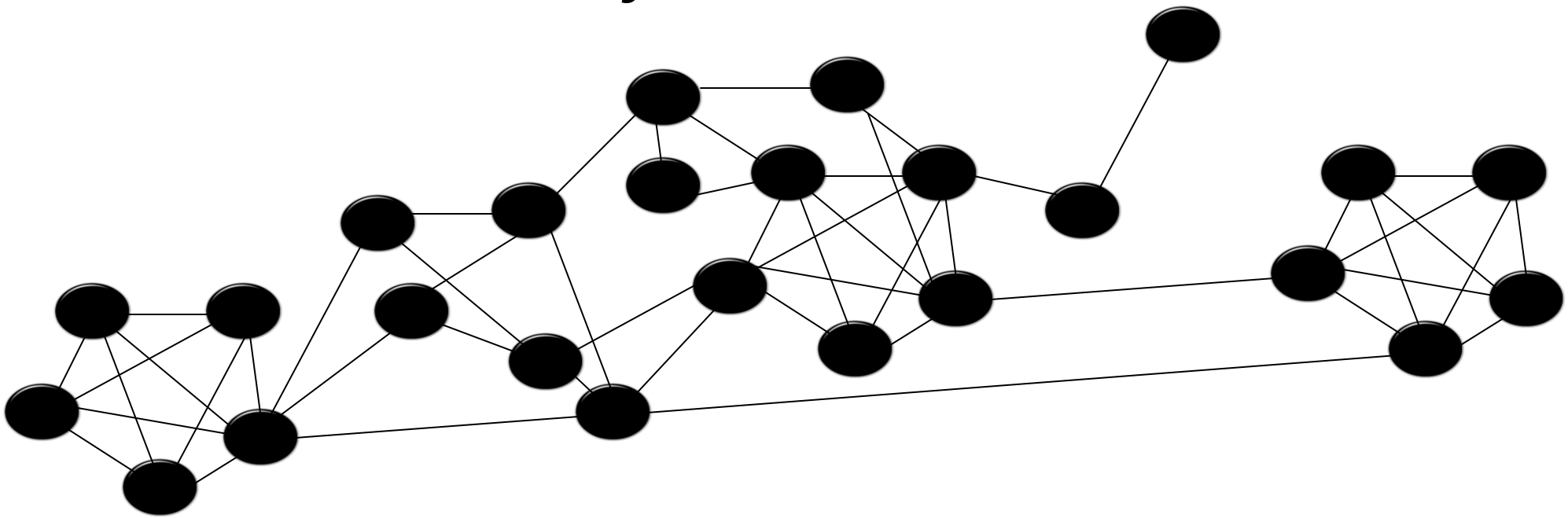


In social networking theory, these are called *clusters*.

- And they often have *weak ties* to other clusters.

Networks

Technical term: *scale-free networks*.



A very particular sort of structural pattern – and universal in human society.

Networks

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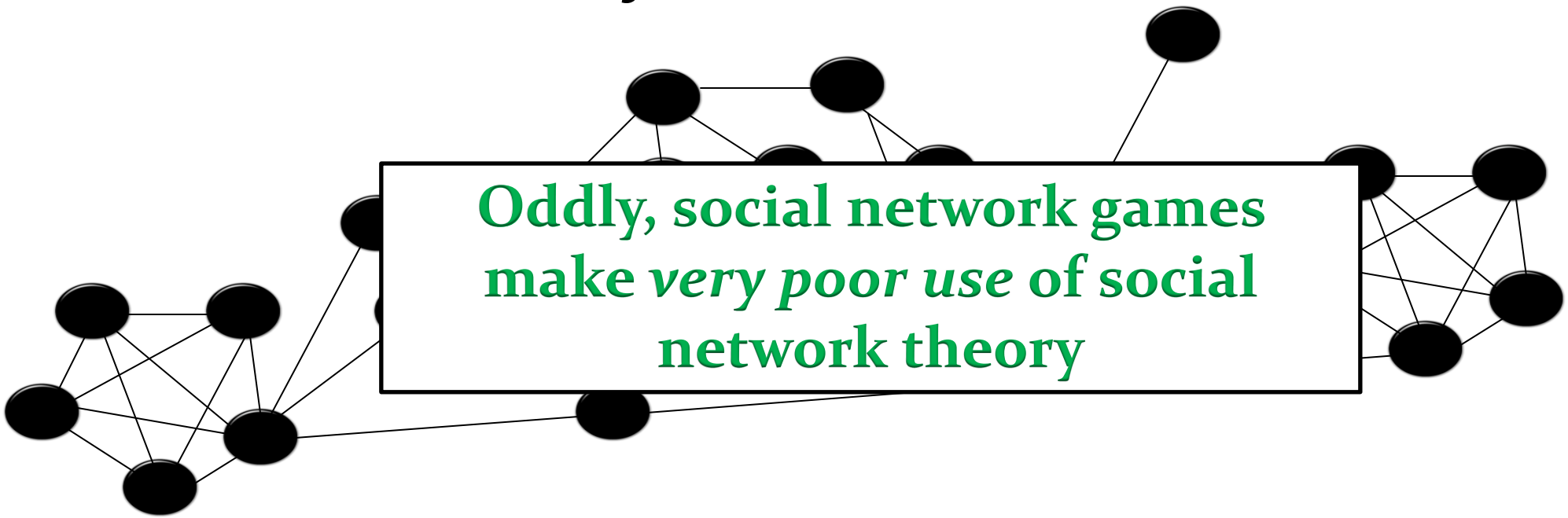
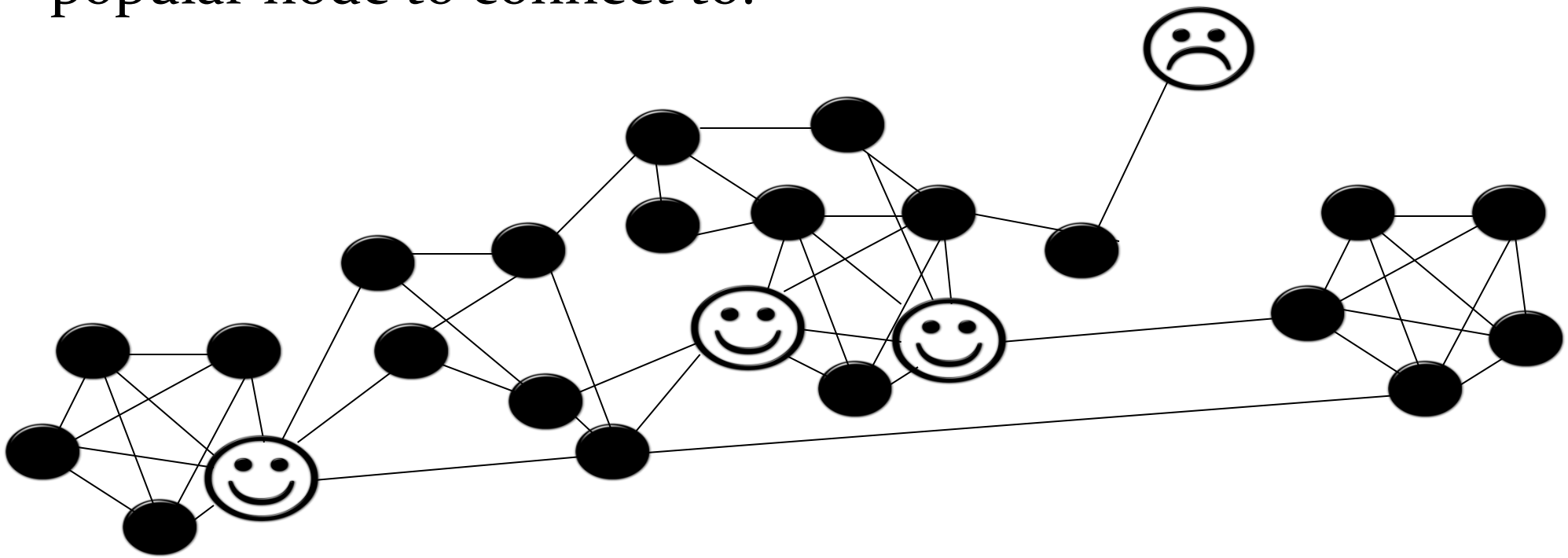


A very particular sort of structural pattern – and universal in human society.

Preferential attachment

Rich get richer syndrome

- A new person coming into a network tends to pick the most popular node to connect to.



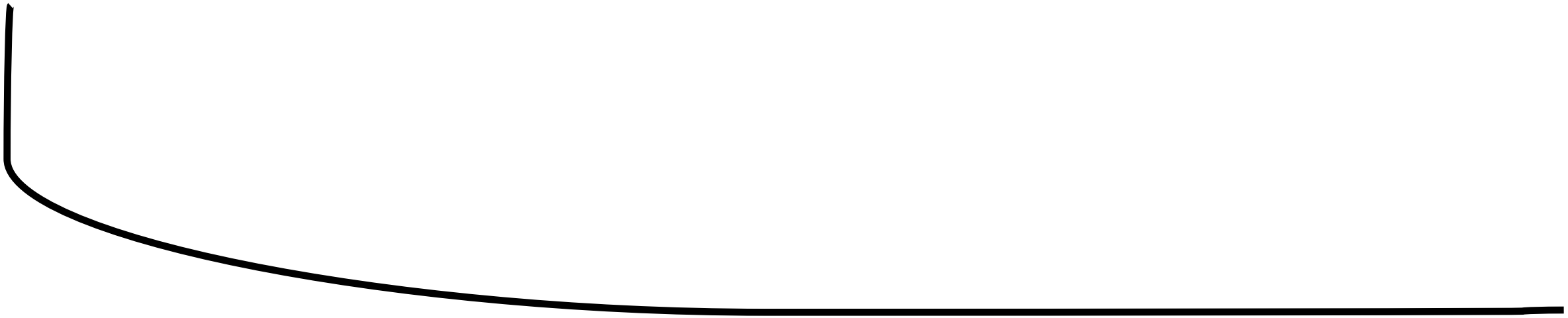
Preferential attachment

Rich get richer syndrome

- A new person coming into a network tends to pick the most popular node to connect to.

Power laws

The mathematical distribution of “popularity” of link destinations.



There are consequences to this distribution.

- Median lower than the mean
- Unknowability of the network
- Unequal information dissemination
- Network longevity and hub vulnerability

Bose-Einstein condensate

A *phase transition* where a network's power law gets so extremely kinked that a single hub dominates:

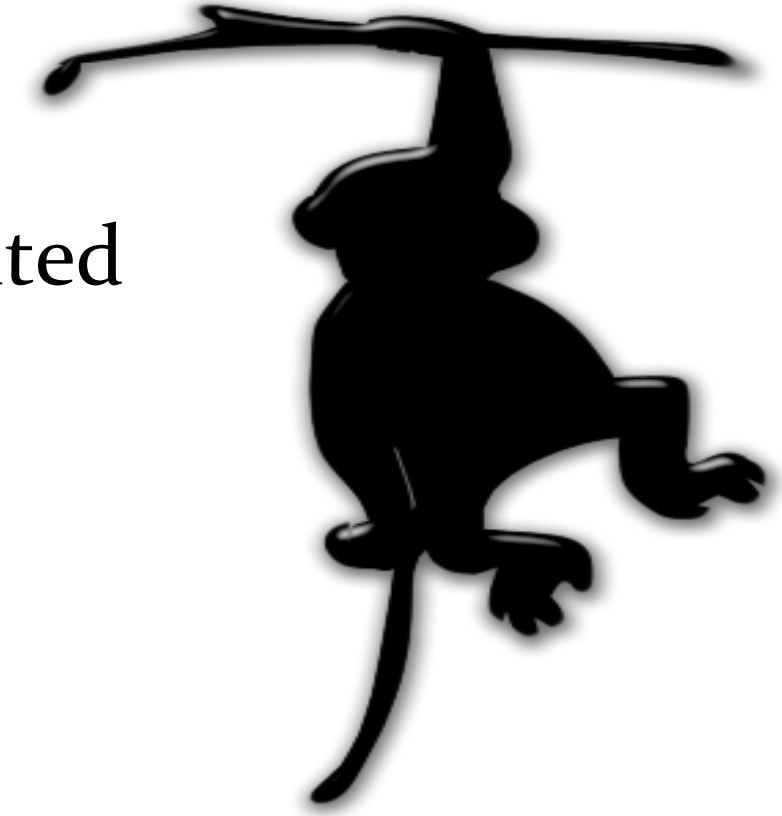
- Windows operating system
- Tiger Woods' win-loss record earlier in his career
- The winning kingdom in *Shadowbane*

Channel capacity & sympathy groups

Lots of evidence to suggest that your "knowable" part of the network is limited

- Robin Dunbar, "monkeysphere" etc

This leads to special mechanics when dealing with nodes at different graph distances.

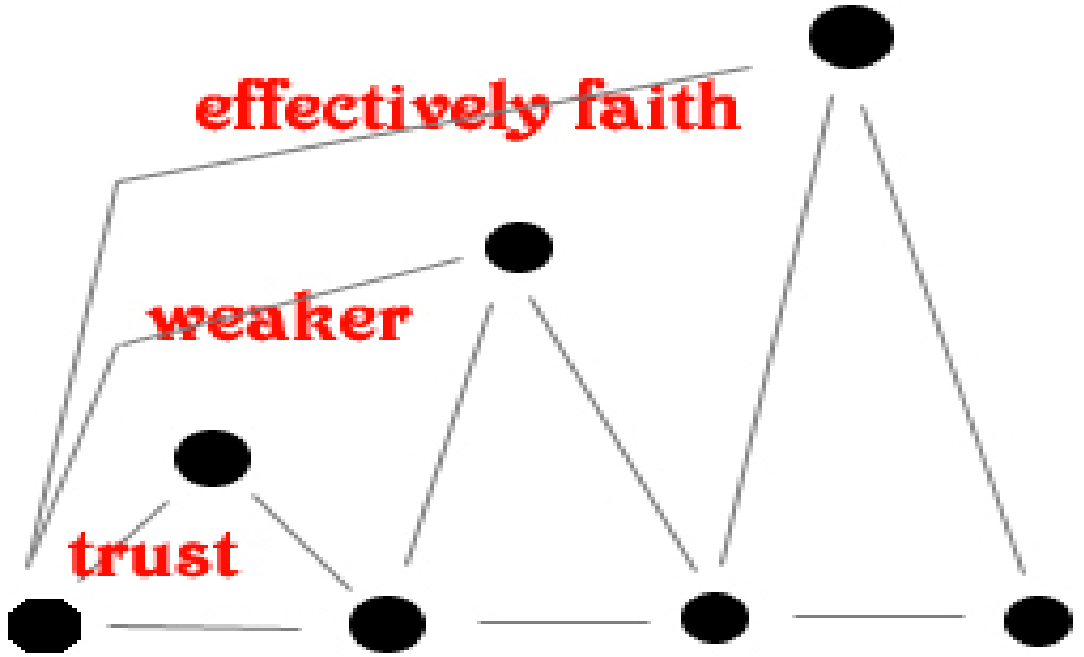


Trust

Trust up close – and it's non-transitive!

Reputation at midrange

Faith at a distance (*aka* social contract)



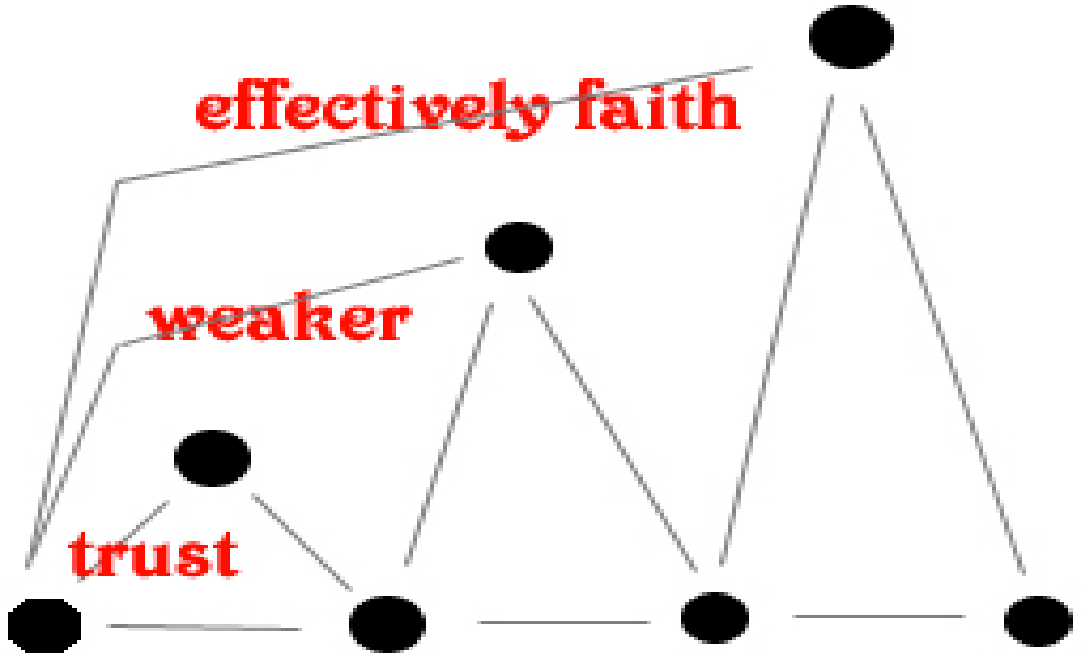
Trust

Trust up close – and it's non-tr

Reputation at midrange

Faith at a distance (*aka* social contract)

Do players in your game ever need to *trust* anyone?



Homogeneity

Tightly linked nodes tend to be *homogeneous* – liking the same things

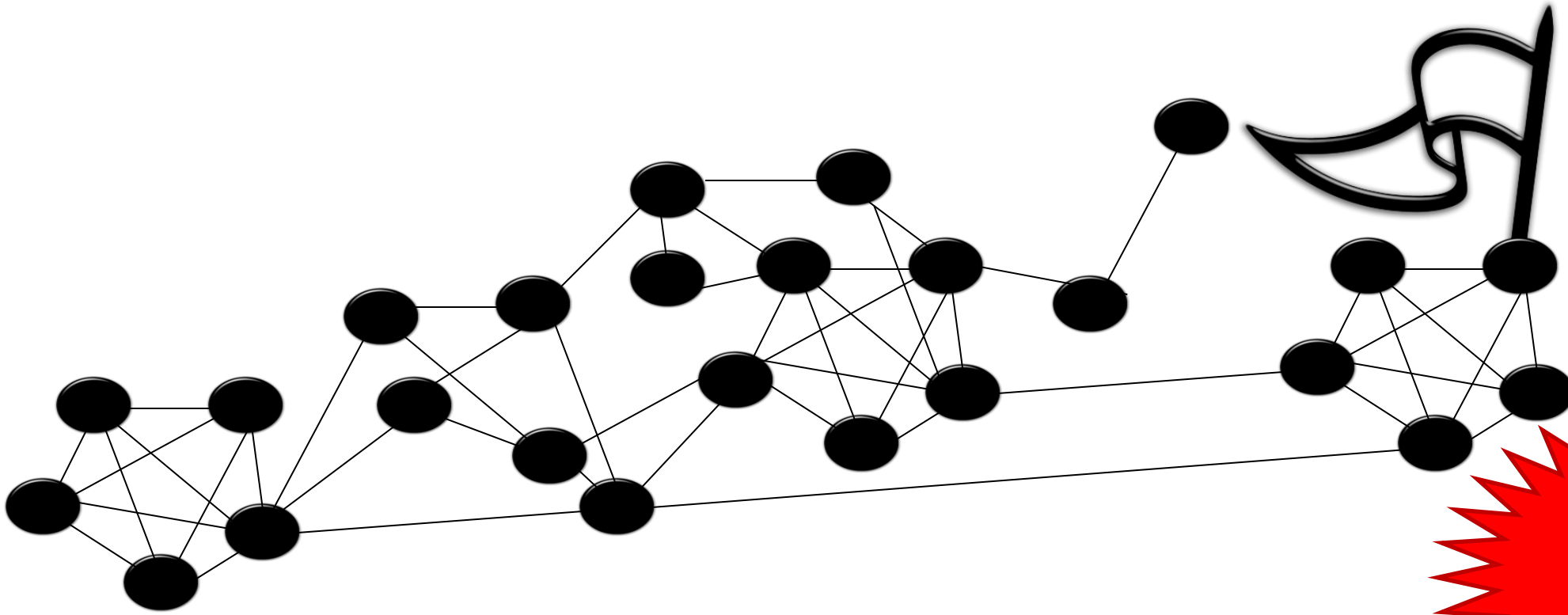
- This also introduces interesting liabilities in gameplay

As those with kids know, one's peer group carries more social weight than authority

Combined with trust and other network characteristics, we get…

Guilds/tribes

Association of self-similar nodes into a multi-cluster sub-network with its own social identity



Guilds/tribes

Association of self-similar nodes into a multi-cluster sub-network with its own social identity

Hugely powerful.
Barely present.

26

Guilds vs Neighbor Structures

T. B. Naik specifies these as the identifiers of *tribes:*

- social distance from other tribes
- frequency of contact
- community of interests
- scale
- compactness and self-sufficiency
- politically organized
- customary laws
- multifarious economic pursuits

Keep in mind, these groups are implicitly present on the social graph. We just don't *identify* or *surface* them.

Impact of scale

Different social structures at different scales:

Dozens → Hundreds → Thousands

Bands

No fixed home

"Egalitarian" leadership

No real bureaucracy

No laws

Unstratified culture

Tribes

A single home

"Egalitarian" or "big-man"

Organized resource extraction

Still unstratified

Chiefdoms

Many homes

Castes and classes

Cronyism & monarchs

Bureaucracy & laws

Taxes, indentured labor, and slavery

Public architecture

Luxuries for elites

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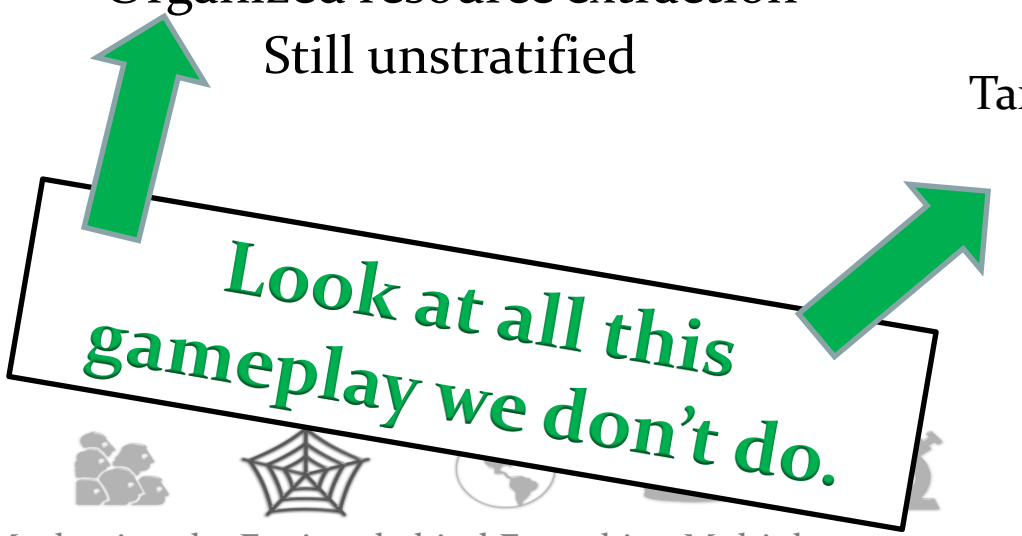
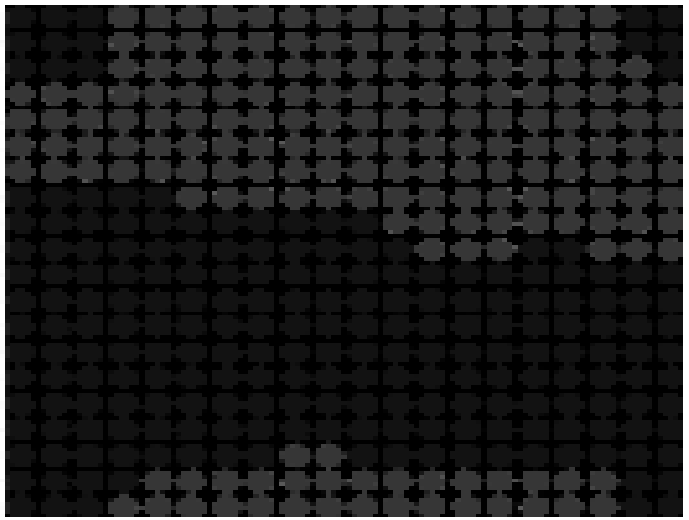
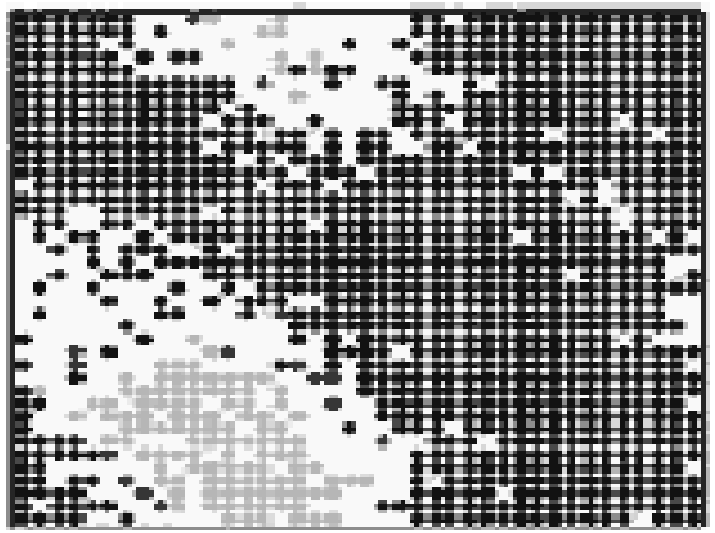


Segregation and genocide

Mathematical simulations show that given a petri dish, tribal structures always

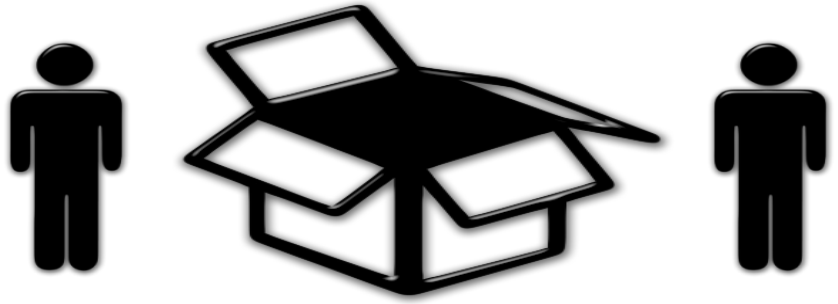
- Self-segregate
- Annihilate each other





Exclusivity

The use of identity and other earlier mechanics to manipulate the *value* of rivalrous and non-rivalrous goods.



Also known as “velvet rope.”

27

Exclusivity

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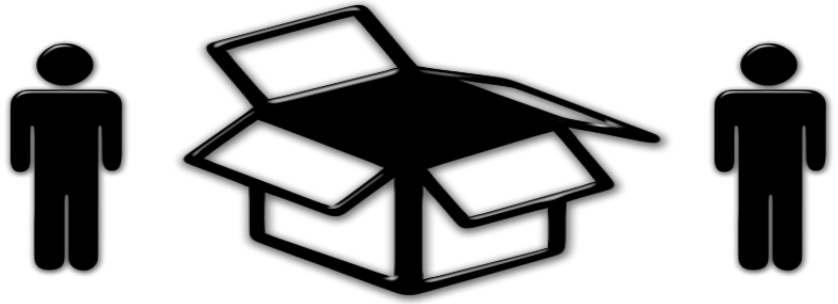
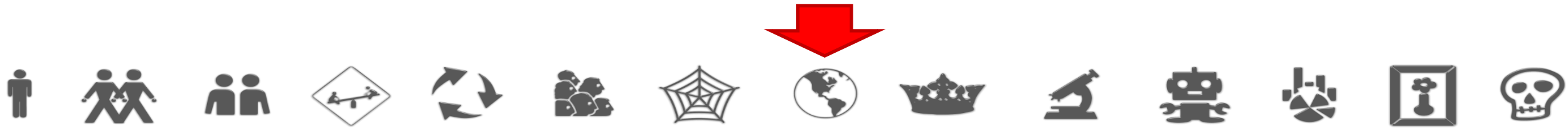


Also known as “velvet rope.”

Massive groups

Designing games at the societal level



OK, I have to stop and say this.

Social games have the largest game canvas in all of HISTORY.

And yet social games are designed primarily at the single-player level, with minor multiplayer mechanics.

From here on up, it's uncharted territory.

But it is also the potential
and the future
and the GLORY of social games.

Swapping models

The functionalist way to look at things is:

Game systems that are “problems of control and coordination at a societal level”

-- Herbert Spencer

Resource distribution, goods production, etc.

Structuralism

The sequel to functionalism! More of an emotional model, also now out of favor:

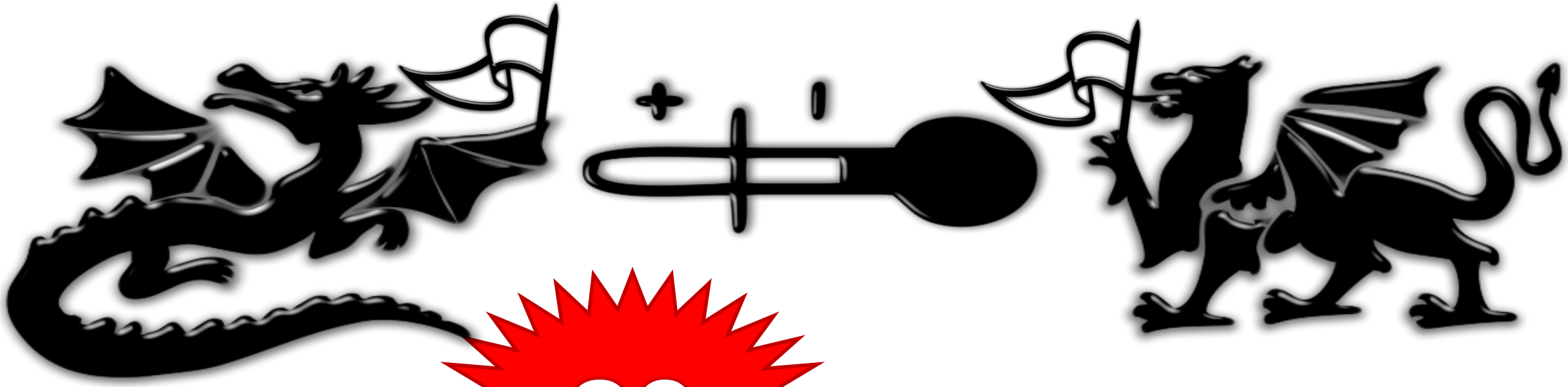
"Meaning produced and reproduced via practices and activities that are systems of signification"

-- Levi-Strauss

(Such as games)

Guild vs guild

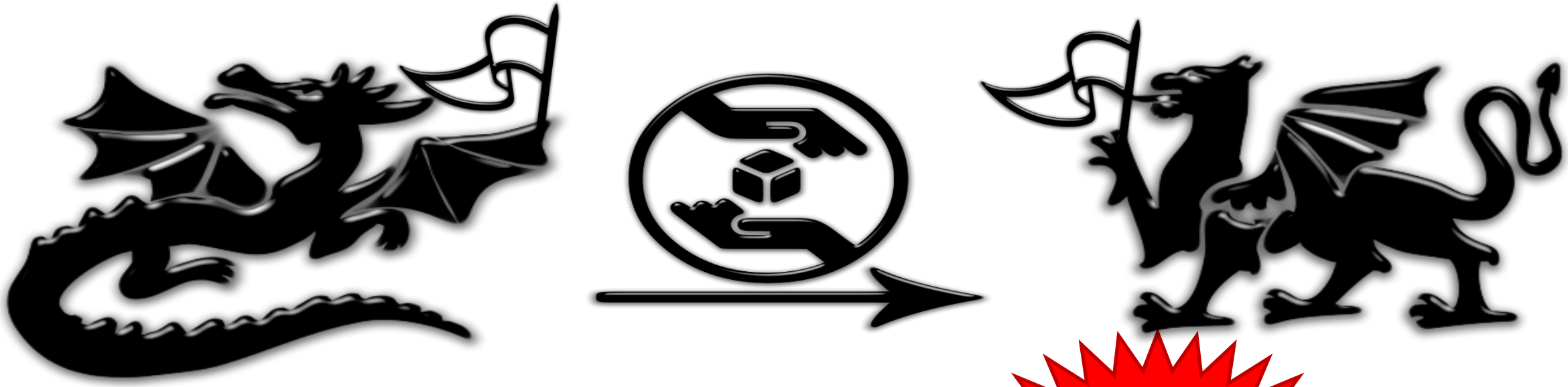
Large-scale interactions using available systems to create competition between social entities



28

Trade and contract

Formalized means of allowing mutually beneficial interactions between overly-distant nodes on the network



29

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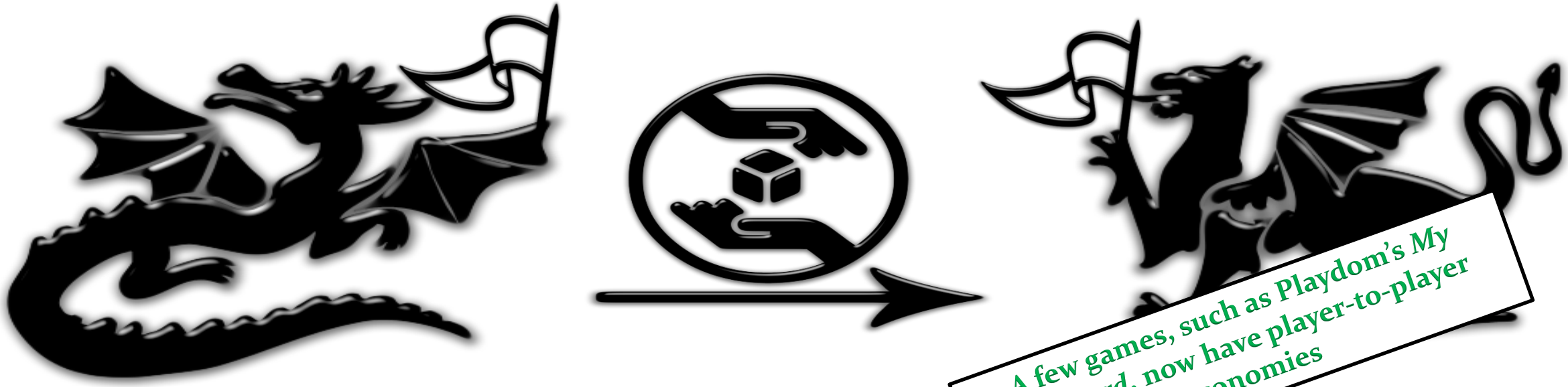


A few games, such as Playdom's *My Vineyard*, now have player-to-player economies

29

MMOs versus social games

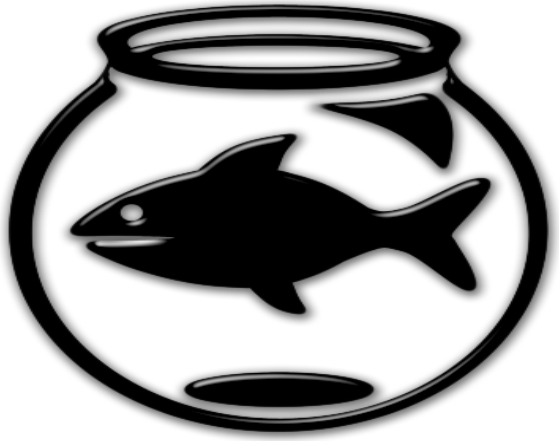
MMOs developed stronger social structures than social games, because they had *shared economic participation*

- despite not having *constancy*.

Social games usually have constancy without shared economic participation!

To add retention and social depth, *pool your players' economies.*

Anthony Giddens



Social structure as game rules

- "Ant farming" or "goldfish bowl"

Structure, Modality, Interaction

- **Structure** is the rules and resources
- **Modality** how structures become action.
- **Interaction** what the actor actually does

This analogizes directly to the forms of rules in *Rules of Play*, or to the MDA framework.

Post-structural thinking

A challenge:

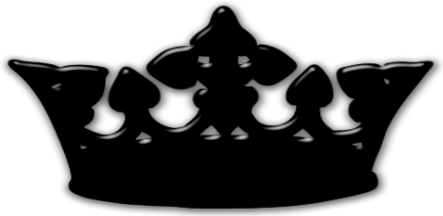
A lot of post-structural thinking is about seeing past dualities and to shades of gray.

Moving beyond dualities such as neighbor and not, tribe or not.

Games do this poorly. But…

The PASSE model

Five general ways of building large, shades-of-gray social structures in multiplayer games:

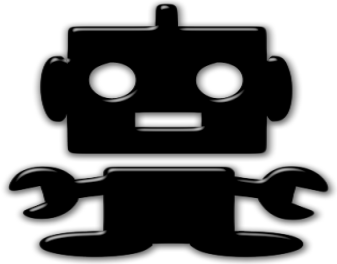


Politics

Arts

Science

Sociology



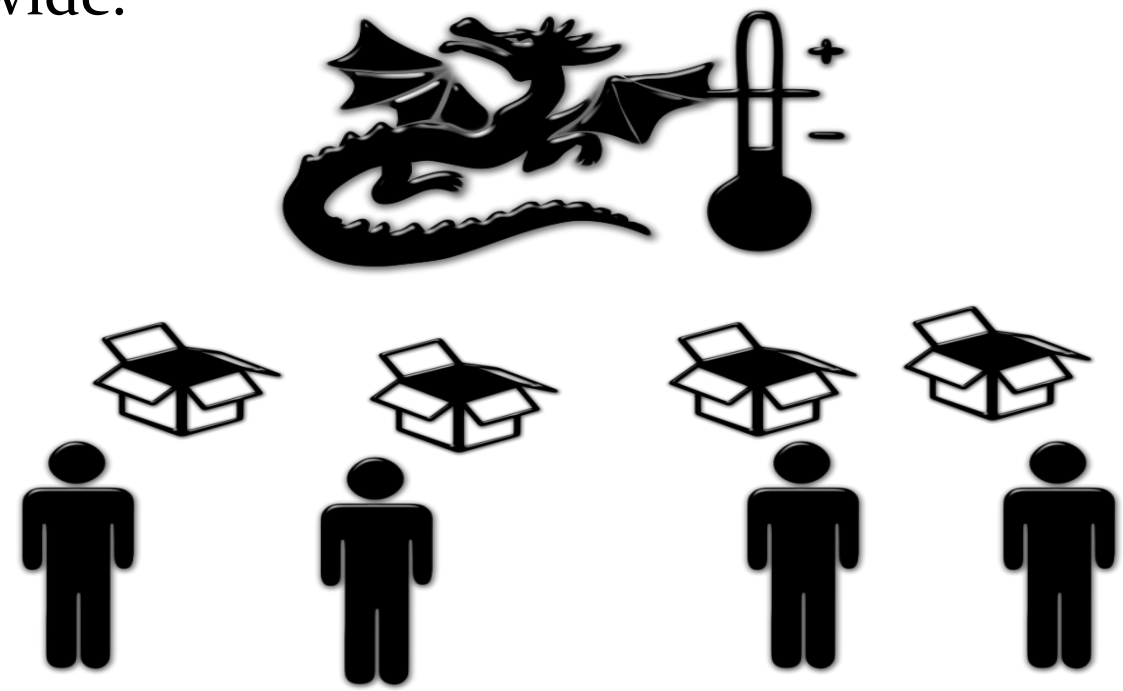
Economics

Politics

Influence and social control

Elections

Actors of any distance from the interaction apply a rivalrous good towards an objective metric that applies network-wide.



Politics --
or *American Idol*,
the largest MMO
in the world.

Reputation, influence and fame

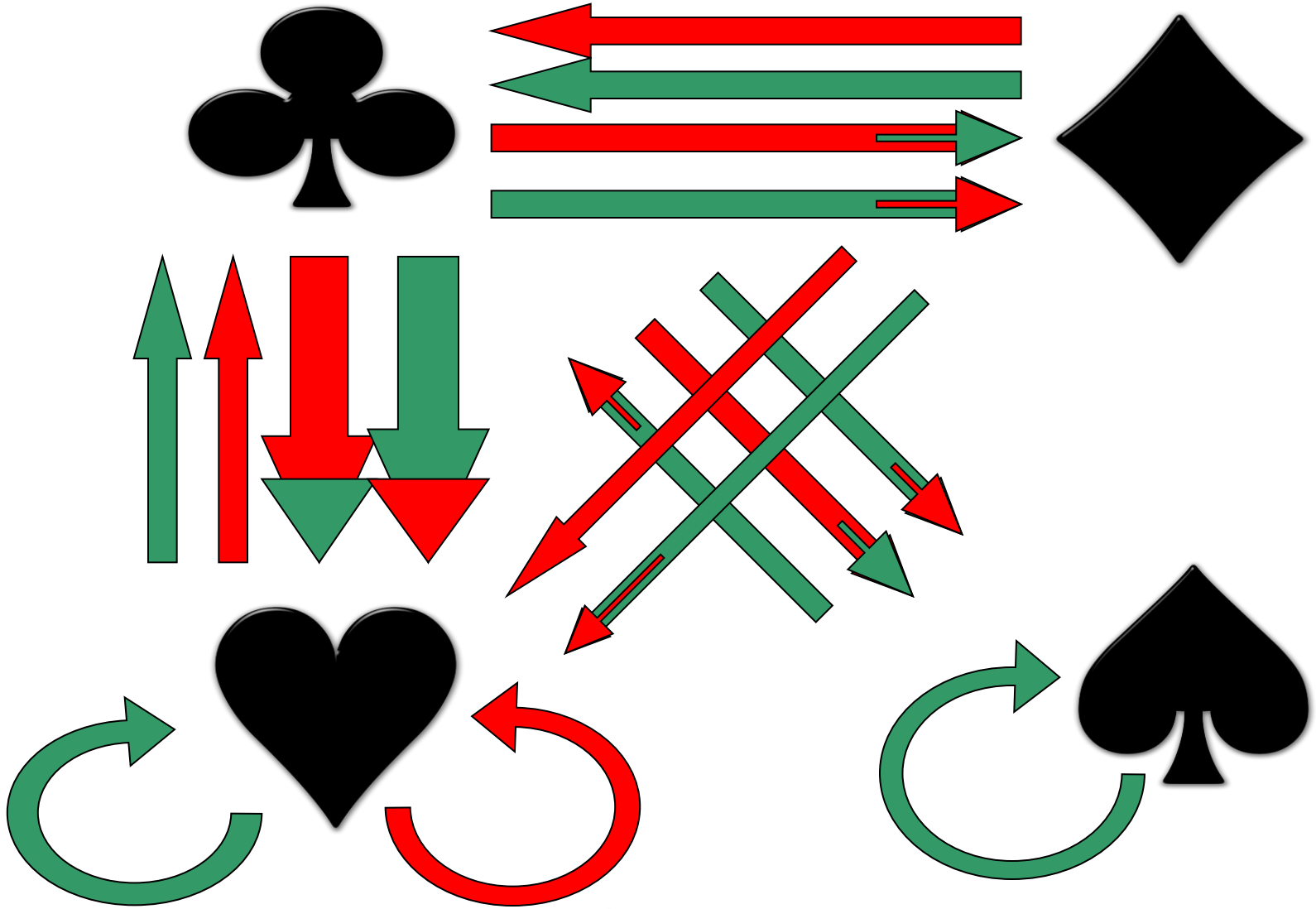
Quantified signifiers for social currency, and formalized spending of this rivalrous good.

Conflict theory

The European post-structuralism:

"Structures are developed out of conflict between people with differing interests and resources."

Bartle Types



Structure vs agency

The big question: are we locked into the game design?

- Structure creates *habitus* – a structure of mind, a set of acquired schemata… "what goes without saying" for a group -- Pierre Bourdieu

The same question as socialization vs autonomy.

Structuration

Anthony Giddens in 1984 had an answer:

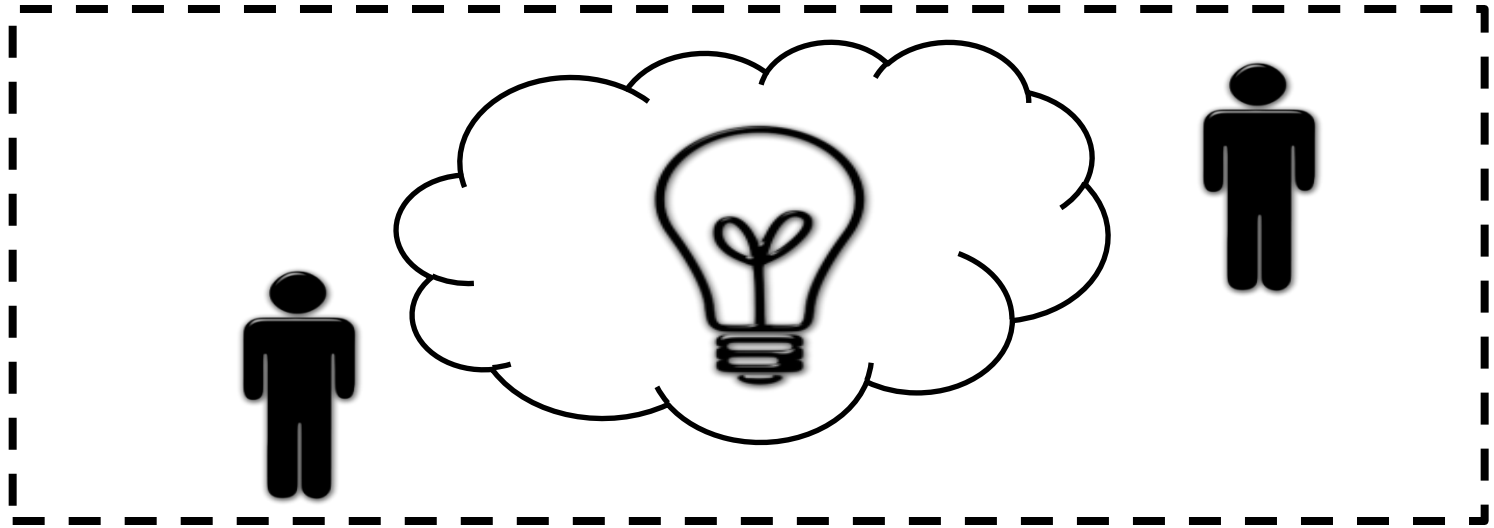
- Social life is both the small *and* the big
- People constantly reinforce and extend the structure through actions
- And the structure constrains what they can do

So there's a reflexive action that makes things change overall, slowly.

Which leads to interesting game problems such as…

Public goods

Like a multiple player prisoner's dilemma. Public goods are non-rivalrous, so there is a temptation to enjoy the good with no contribution. For example, breathing. Public parks.

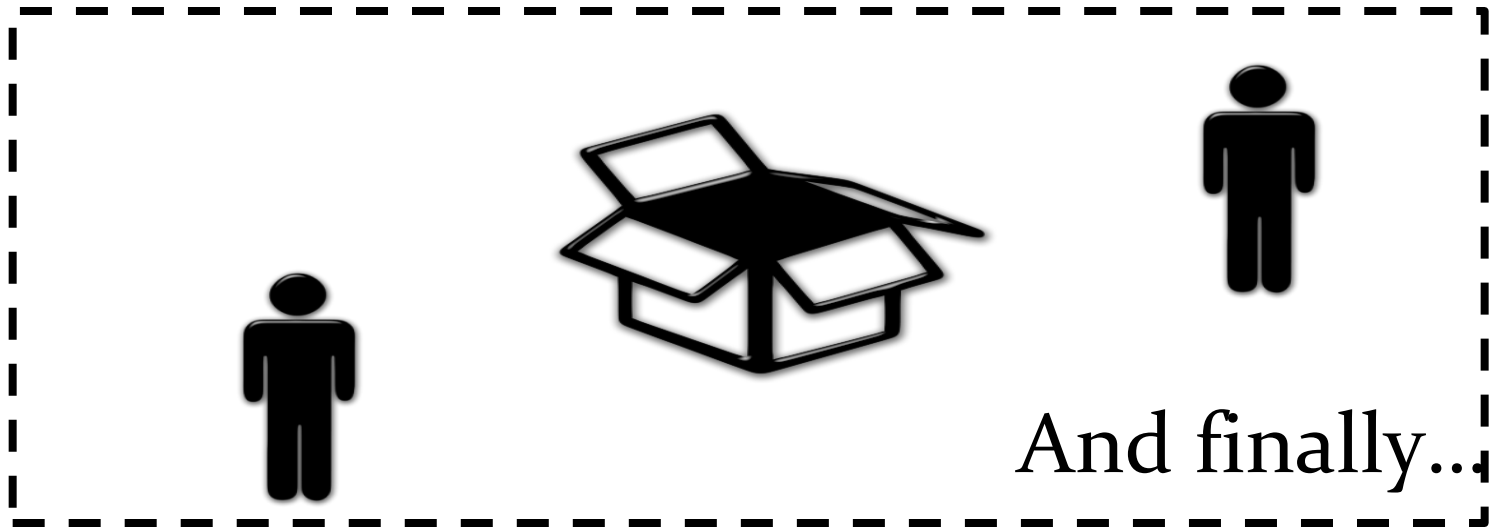


Tragedy of the Commons

Flip side of public goods: if they are rivalrous, then they can get used up. Classic example, the commons in a village.... Or spawns, territory, etc. The game is in

solving the

unsolvable.



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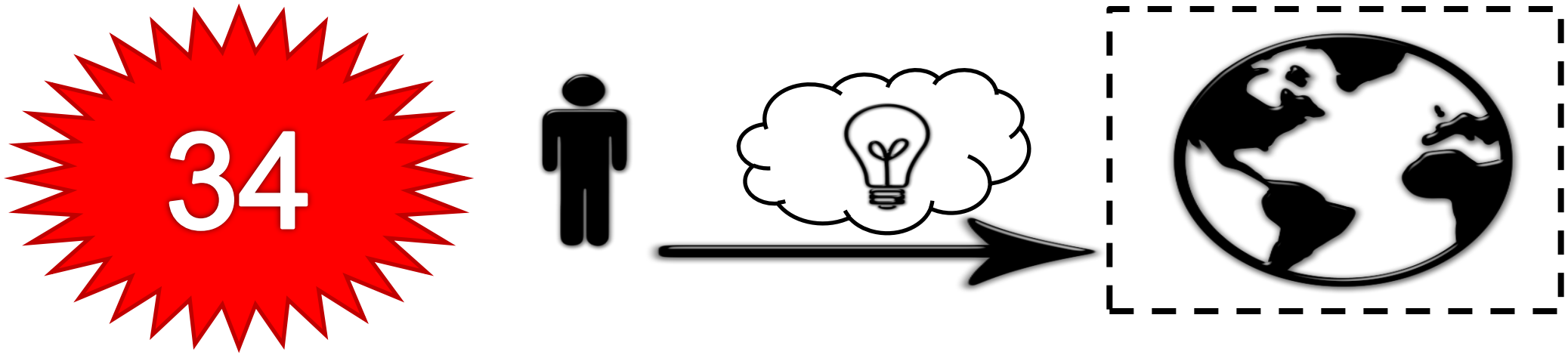
Community

Where we start playing games on YOU.



A properly managed community is structuration in action, and becomes the ultimate political game for users.

Science

Figuring out how things work

ARGs and Puzzles

Ridiculously complex puzzles can be solved by hive brains.

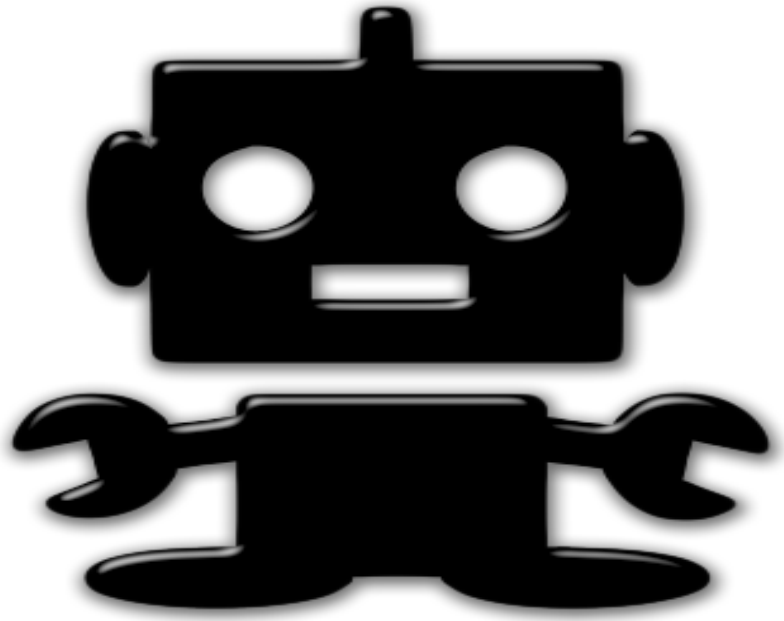
ARG puzzles such as image-based steganography hidden in white noise in a poster. Combat system algorithms in an MMO.

"Underlying logical rules discovered via experimental method" equals…

Strategy guides

The transformation of rule-based secrets into a public good.

36



Sociology

The guts of sociability

MLS

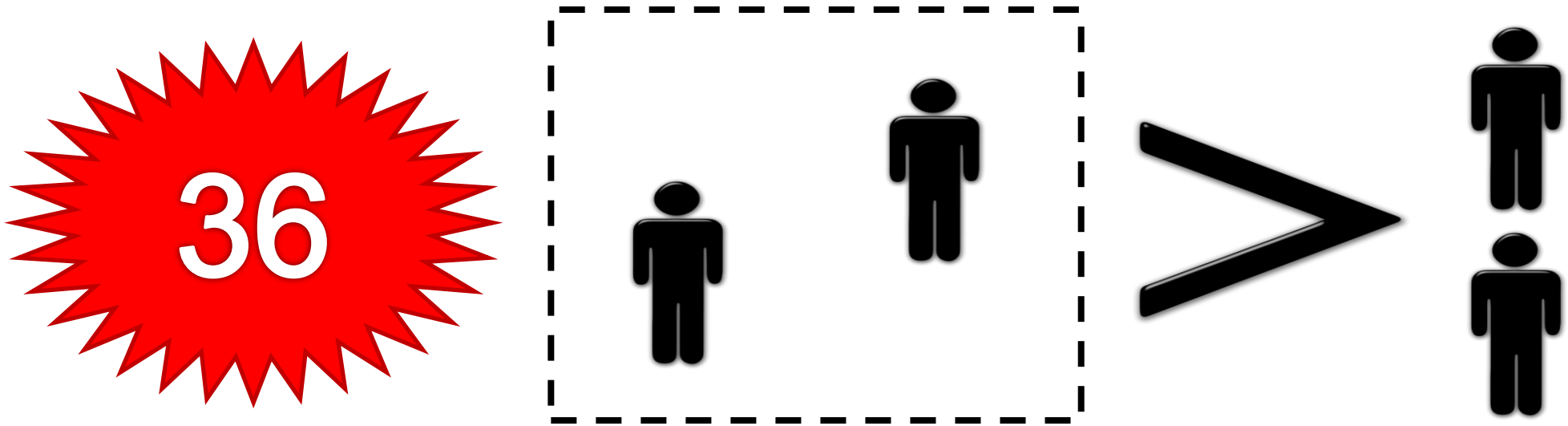
Multilevel Selection Theory

"Natural selection can be affected by cooperation at the group level."

-- David Sloan Wilson and Elliot Sober

Teamwork

The aggregation of social mechanics leading to the emergence of greater across-the-board competence.



Wisdom of Crowds, DPS systems, *Survivor*.

Interdependence and scaling issues

Scale-free networks are highly insulated from failure.

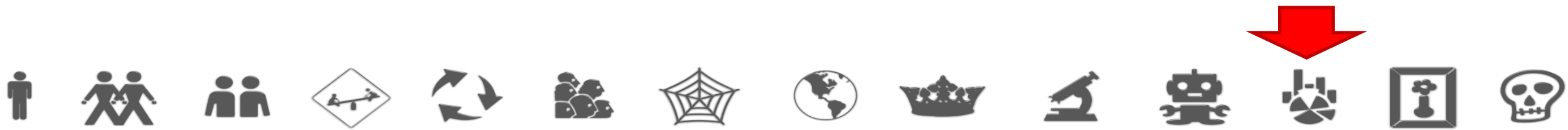
But *collapse* occurs if hubs are suddenly removed.

If your game design has hubs and one breaks…

- (cf *Star Wars Galaxies, Pirates of the Burning Sea*)…

This probably happens all the time in social games, and we can't even tell.

Economics



Fundamental multiplayer dilemma

The game equivalent of psychology's *Fundamental Attribution Error.*

The basic premise of economics is mutual improvement and optimal distribution of resources.

It's a way for a group to level up.

This is *anathema to games.*

Veblen goods

A good where people's preference for buying them increases because of their price.

- Luxury cars
- Limited Edition virtual items

See also: soulbinding, level limits, etc.

Services

Classes and roles can be seen as forms of asymmetric trade.

Even mechanic #1, "helping" is a service!

So are numerous others on the list.

In other cases, mechanics are premised in unequal contributions.

- All of these are *generally non-quantifiable.*

Therefore, cheating

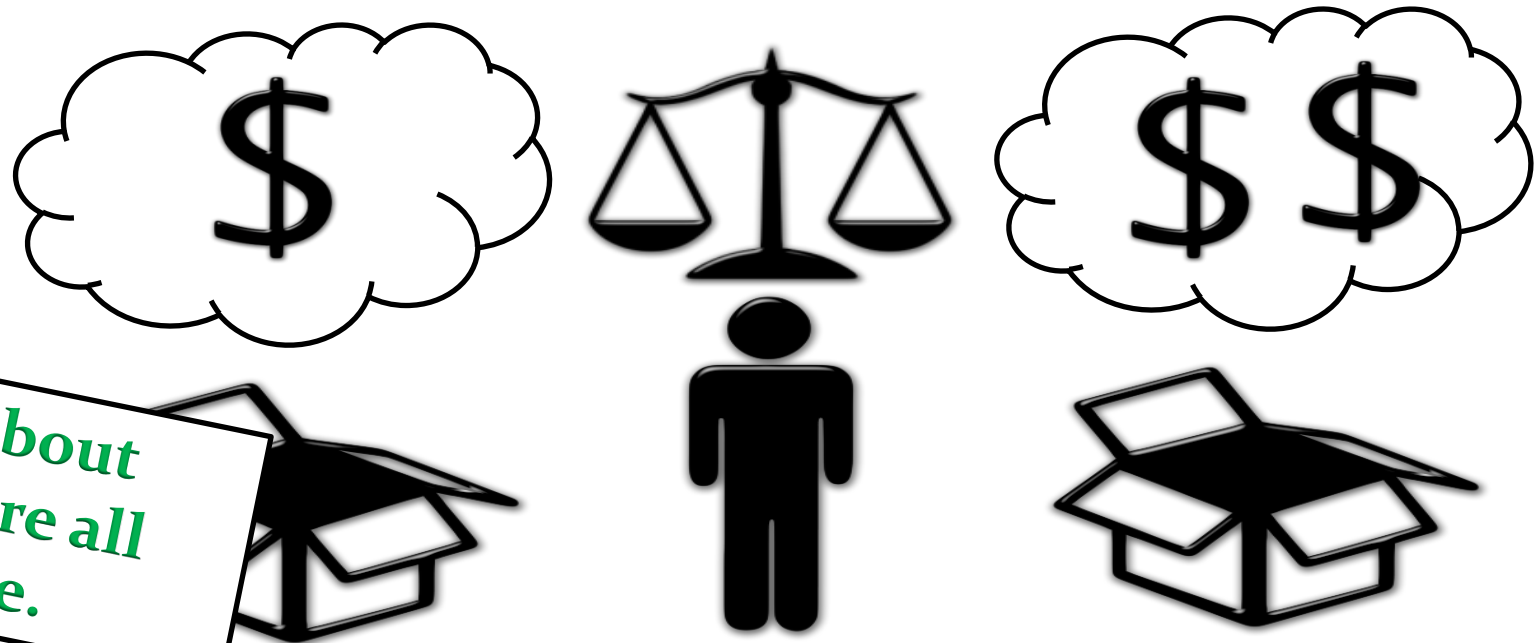
Randy Farmer's KidTrade proposal

- **Gifting** → Twinking
- **Gifting** + **Multiple Chars/Server** → Muling
- **Gifting** + Messaging + Trust → Trading
- Trading – Messaging – Trust + **In World Machinery** → Robust Trading
- **Robust Trading** + **Scarcity** + Liquidity → External Market (eBay)
- External Market – Trust + **In World Machinery** → GOM

Gifts inevitably cause Real Money Trade, which is a form of…

Arbitrage

Allowing unequal quantified valuations of the same good to arise within the system, and permitting trade that exploits them.



Asynch games about shipping goods are all about arbitrage.

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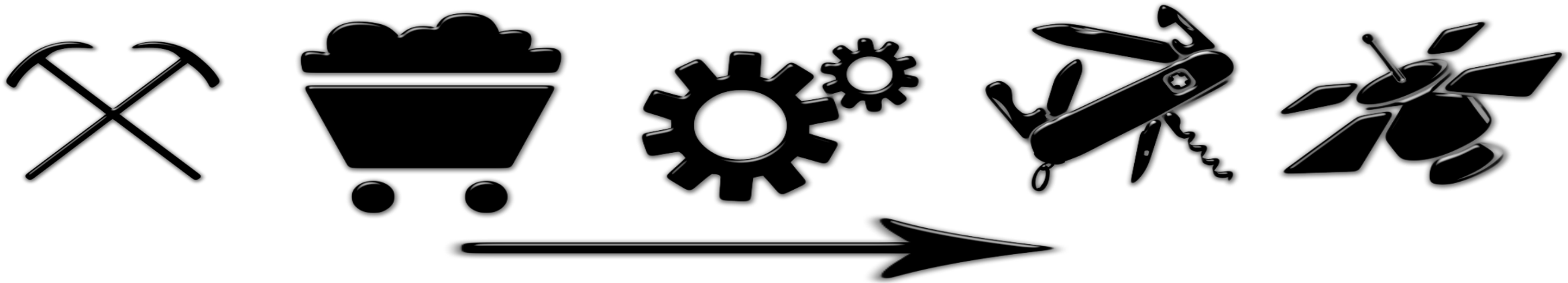
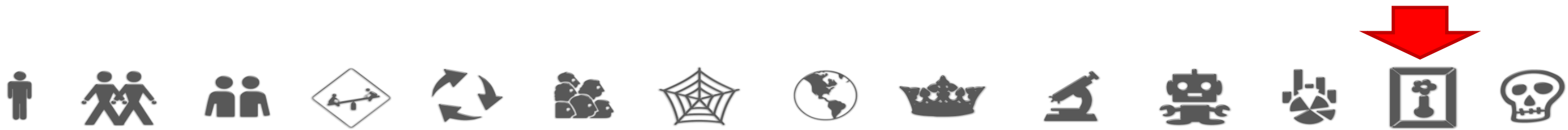
Supply chains

Cascading inequal valuations of goods arranged in sequence.



Arts



The act of invention

Games Are

"...solving statistically varied challenge situations presented by an opponent who may or may not be algorithmic within a framework that is a defined systemic model."

-- me

Statistical variations are handcrafted, randomized or...

User generated content

- Forums.
- Character art.
- Roleplay narratives.
- Fan fiction.
- Player conventions.
- Weddings.
- Game maps.

The game has to be designed to encompass and permit this sort of activity.

User generated content

- Forums.
- Character art.
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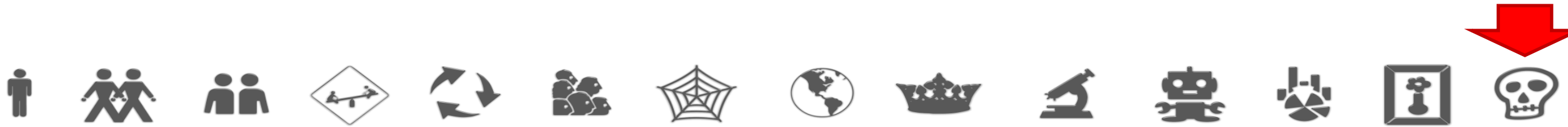
The game has to be designed to encompass and permit this sort of activity.

Deconstruction

Taking it all apart



Remember the quote?

"**A good game should focus entirely on it's single-player aspect** first and foremost. Then if it's a simple game like a shooter or racer, use the remaining time and space to fit in a multi-player aspect to it... In other words, multi-playing should never take away from the single-player aspect of the game. **Pure multi-player games really should be few and far between.**"

-- the unfortunately named New Troll, Escapist Forums, 23 June 2009

Derrida

"As a turning toward the presence, lost or impossible, of the absent origin, this structuralist thematic of broken immediateness is thus the sad, *negative*, nostalgic, guilty, Rousseauist facet of the thinking of freeplay of which the Nietzschean *affirmation*-the joyous affirmation of the freeplay of the world and without truth, without origin, offered to an active interpretation-would be the other side. *This affirmation then determines the non-center otherwise than as loss of the center*. And it plays the game without security. For there is a *sure* freeplay: that which is limited to the *substitution of given and existing, present,* pieces. In absolute chance, affirmation also surrenders itself to *genetic* indetermination, to the *seminal* adventure of the trace."

-- "Structure, Sign, and Play in the Human Sciences"

Derrida

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-- "Structure, Sign, and Play in the Human Sciences"

Yeah, I don't know what that means either.

Griefing

Griefing can be an act of game literacy: engaging in the ultimate transgressive play with the system,

Or the act of "virtual sociopathy."

All* the multiplayer mechanics

1 v self/system
Helping

1 v 1 parallel
Status
Races
Leaderboards
Tournaments

1v1 opposed
Flower-picking
Dot-eating
Tug of War
Handicapping
Secrets

1 v 1 v 1 v …
Last man standing
Bidding
Deception and bluffing
3rd party Betting
Prisoner's Dilemma
Gamesmaster

n v n (groups)
Roles
Hot potato
Rituals
Gifts
Reciprocity
Mentoring & Twinking
Identity
Ostracism

Networks
Iterative interaction & trust
Guilds
Exclusivity
Guild vs guild
Trade and contract
Elections
Influence and fame
Public goods
Tragedy of the Commons
Community
Strategy guides
Teamwork (MLS)
Arbitrage
Supply chains
User generated content

Deconstruction
Griefing

PASSE:
Politics
Art
Science
Sociology
Economics

**41-50 are left an exercise for the reader*

Hidden info

- For brawls and races, see *Characteristics of Multiplayer Games: Lessons from the World of Paper Gaming*, K. Robert Gutschera, GDC2009.
- The MDA framework is described in *MDA: A Formal Approach to Game Design and Game Research* by Hunicke, LeBlanc, and Zubek.
- I recommend *Linked* by Albert-Lazslo Barabasi for an intro to social networks, and *Influence* by Robert Cialdini for more on influence structures. And of course you read *Rules of Play* and *Designing Virtual Worlds* right?
- For more on network structures, I refer you to my GDC2003 presentation *Small Worlds: Competitive and Cooperative Structures in Online Worlds* and its extensive bibliography. There's a series "On Trust" on my blog as well.
- I would start with Wikipedia for reading up on sociology and anthropology.
- You can read Randy Farmer's *KidTrade: A Design for an eBay-resistant Virtual Economy* on his website at http://habitatchronicles.com/Habitat/KidTrade.pdf
- More on interdependence's issues at http://www.next-gen.biz/news/what-went-wrong-with-pirates-mmo
- You can read Derrida's "Structure, Sign and Play" at http://hydra.humanities.uci.edu/derrida/sign-play.html or in *Writing and Difference*. If you really, really, really want to.

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This presentation and dozens more are available in various formats on my website:
http://www.raphkoster.com