



DISCORSO2017
SERGIO RICOSSA

Adam Smith

on Conduct and Rules

Experimental Trust Games; Emergence of Property

Istituto Bruno Leoni
Discorso Sergio Ricossa
28 September 2017

Vernon L. Smith
Chapman University

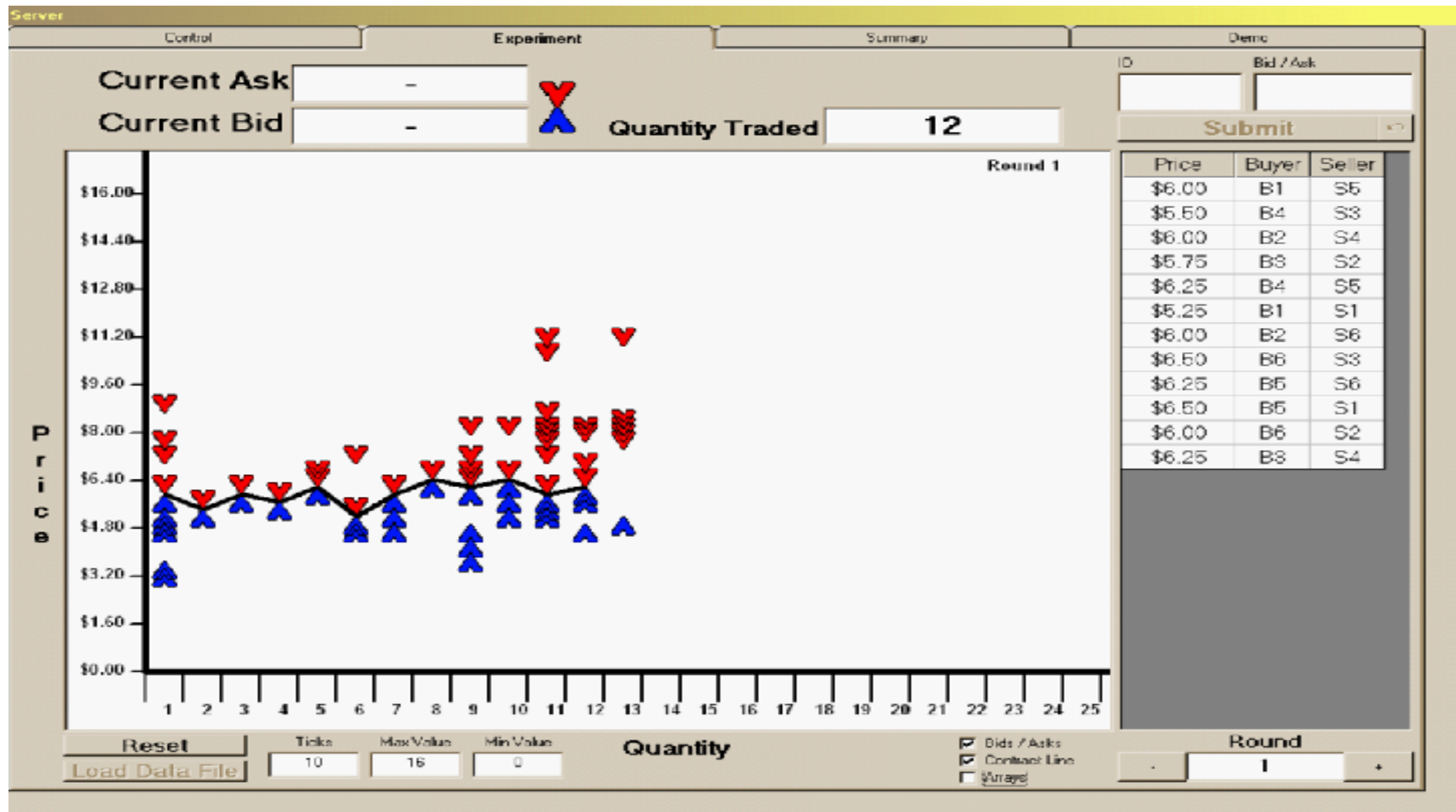
- ❖ We all live simultaneously in two worlds (Hayek, 1988, p. 18):
 - ✦ Our social communities of family, friends, neighbors, and acquaintances where our actions tend to be other-regarding toward each other (Hume's "disinterested commerce.")
 - ✦ And secondly, the larger world of market transactions with others, including strangers, where our behavior tends to be self-regarding. (Hume's "interested commerce.")
- ❖ Adam Smith wrote a book on each of these worlds:
 - ✦ *The Theory of Moral Sentiments* (1759); *Sentiments or TMS*
 - The Wealth of Nations* (1776); *Wealth or WN*
- ❖ (Smith, the Newtonian)

In market supply and demand experiments, 1950s to present, self-interested models [Max U (own)] worked well to predict outcomes.

VERNON L. SMITH

ADAM SMITH SU COMPORTAMENTI E REGOLE

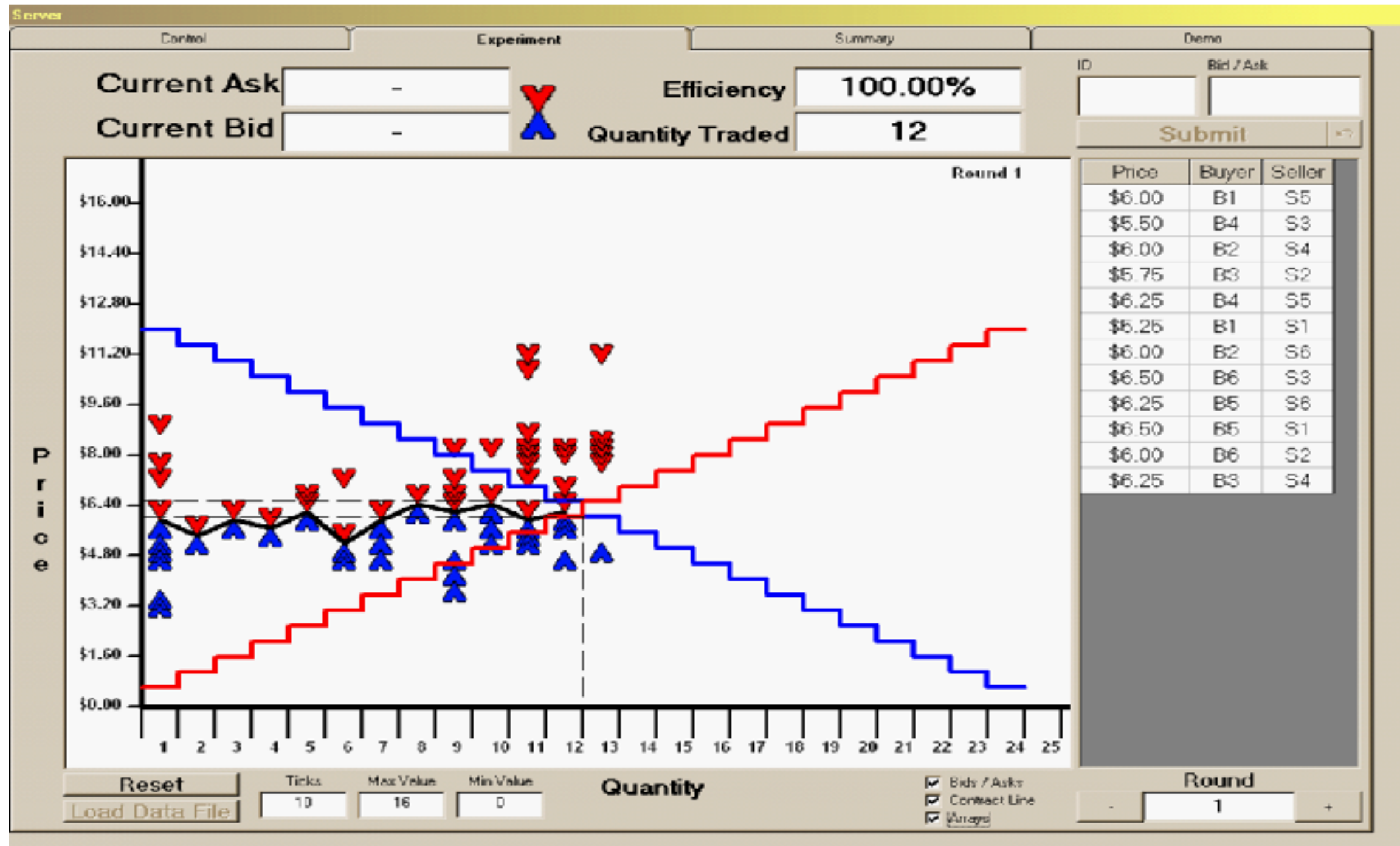
**DISCORSO2017**
SERGIO RICOSSA



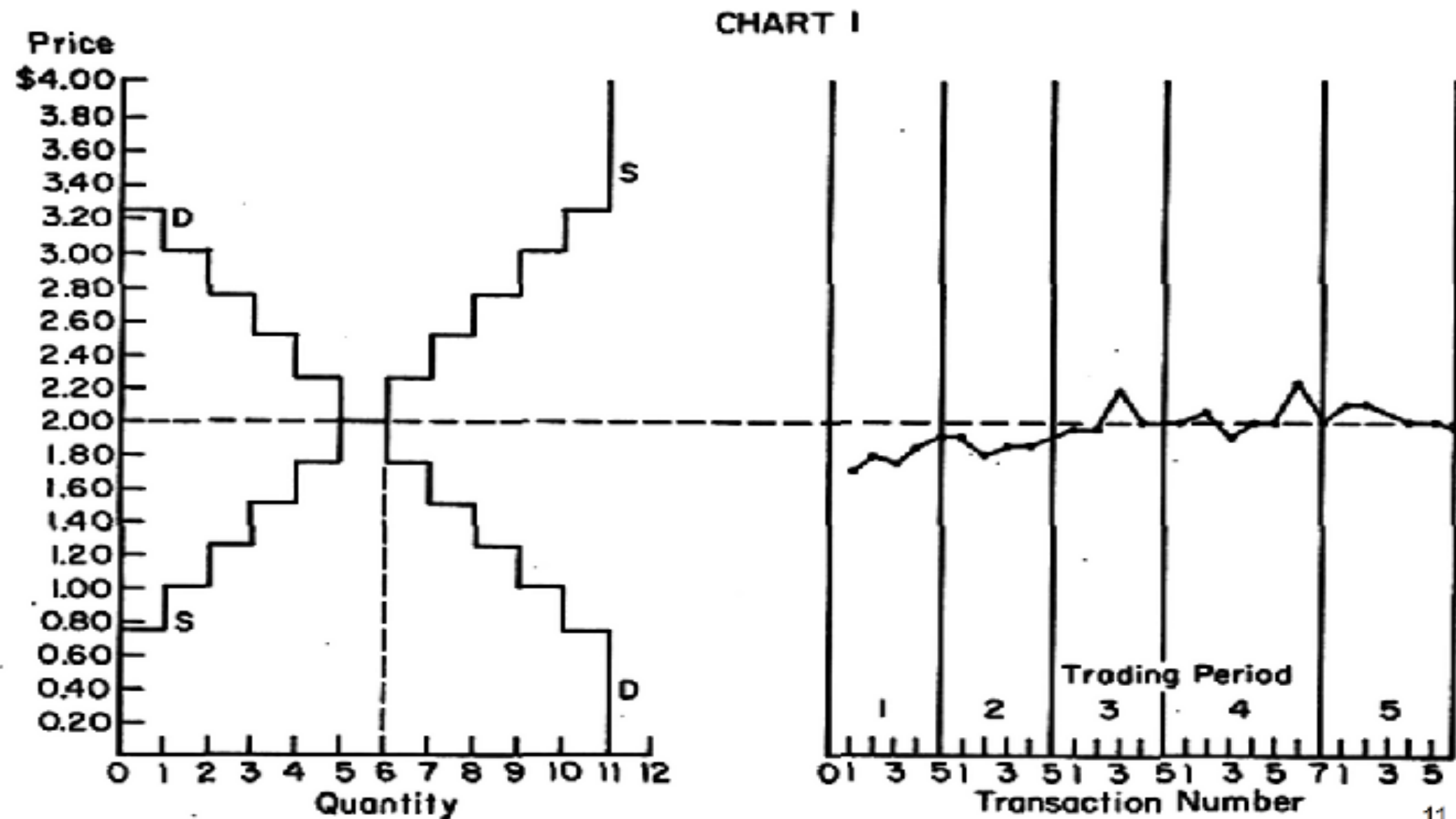
VERNON L. SMITH

ADAM SMITH SU COMPORTAMENTI E REGOLE

DISCORSO2017
SERGIO RICOSSA

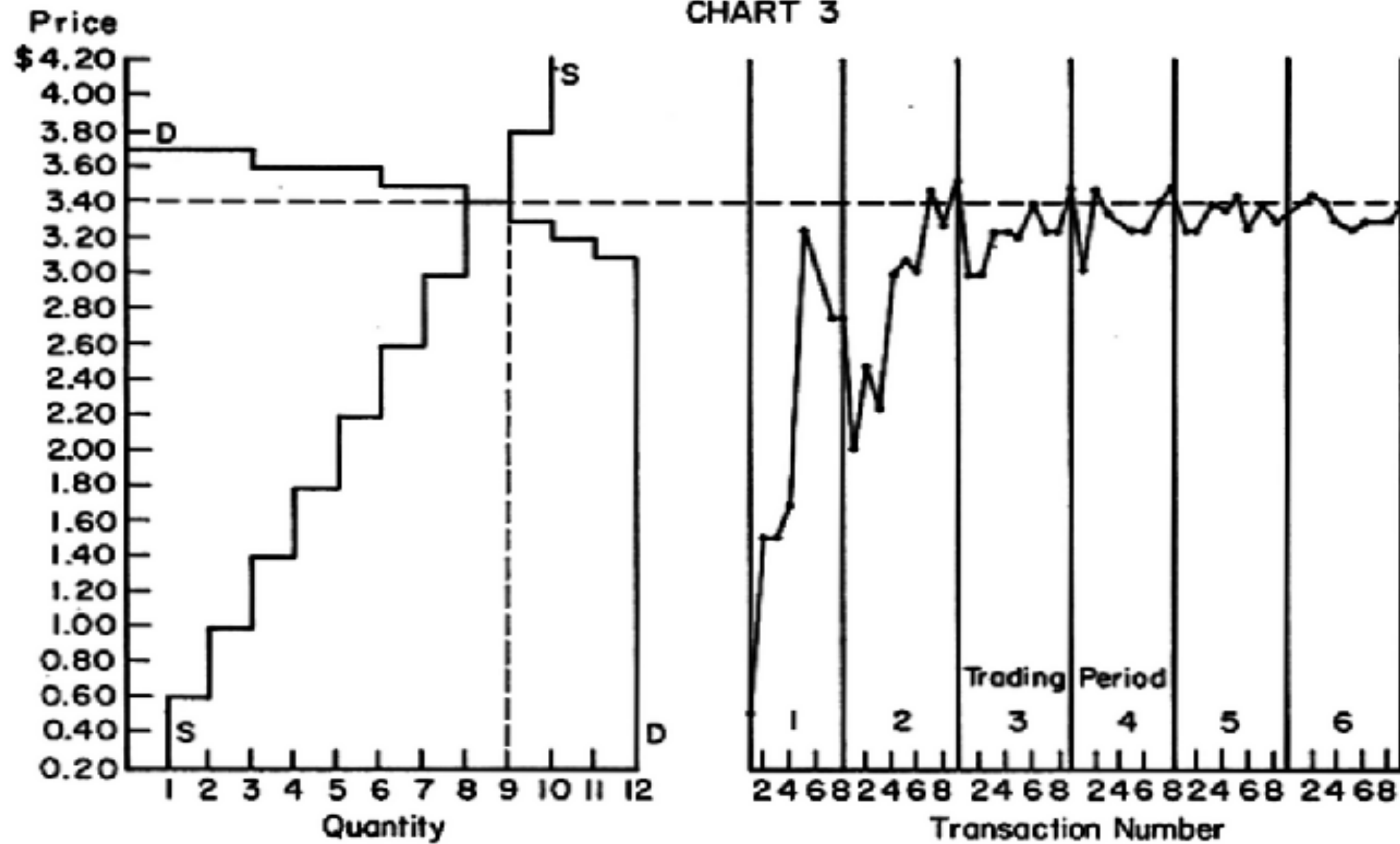


FIRST EXPERIMENT: JANUARY, 1956; a flawed accident of symmetry?

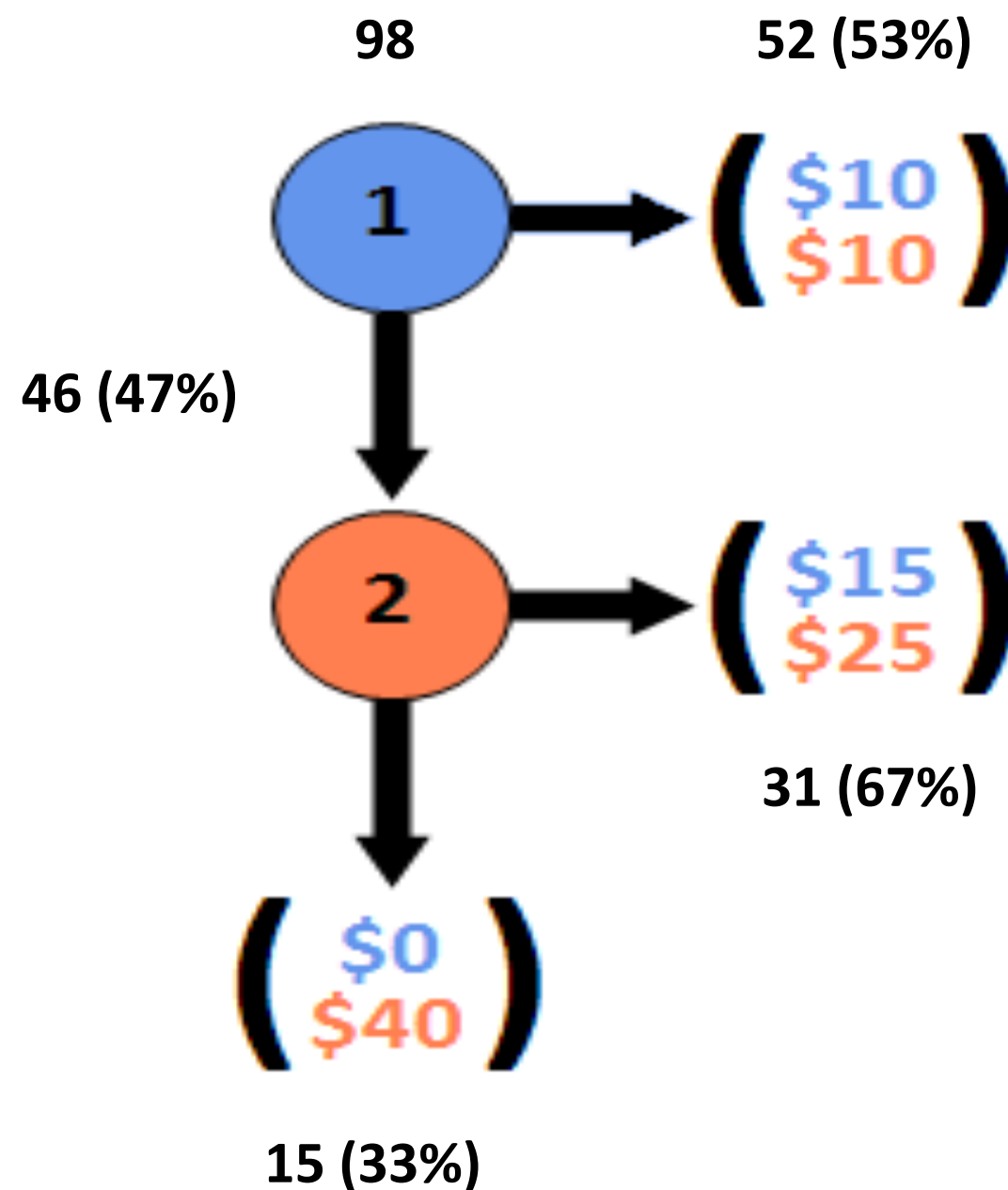


ASYMMETRIC CASE

CHART 3



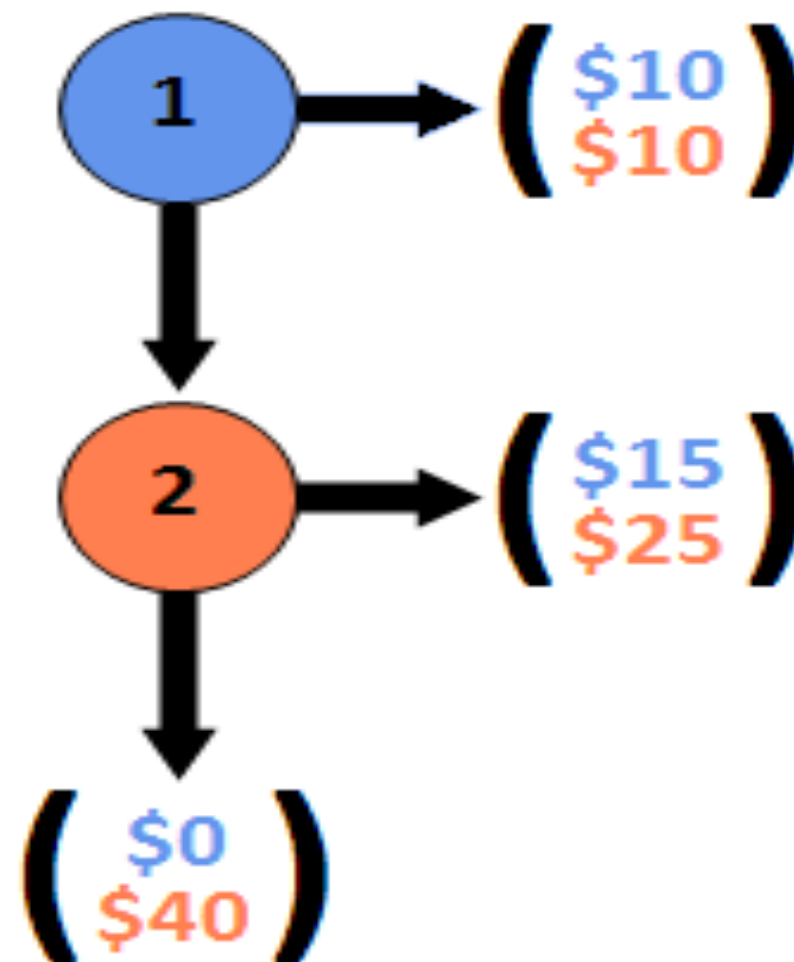
These Strong Results were challenged by the two-person “Trust” Games of the 1980s-90s, for example:



Traditional Game Analysis: Action to Maximize Own Payoff Utility

1. Common knowledge that all people are strictly self-interested, non-satiated.
2. Own payoff outcomes alone matter in choosing action by each player.
3. Determine each player's choice in reverse sequence of play.
4. If the first mover passes to the second mover, the latter is motivated to move down.
5. The first mover's best strategy is to move right, the "equilibrium" of the game.

Max U (own) failed decisively to predict results.



For Smith, however, these Trust Game results are not a surprise: Yet, in *Sentiments* as well as *Wealth*, people are strictly self-interested!

Let us see why, in Smith's model, people are both self-interested and other-regarding in their social actions.

First Fundamental axiom: Common knowledge of self-interest; for each more is beneficial, less is hurtful.

Why does other-regarding action depend on knowledge that all are self-interested?

Because knowledge of who benefits or is hurt by an action is essential for social competence and living in harmony with others.

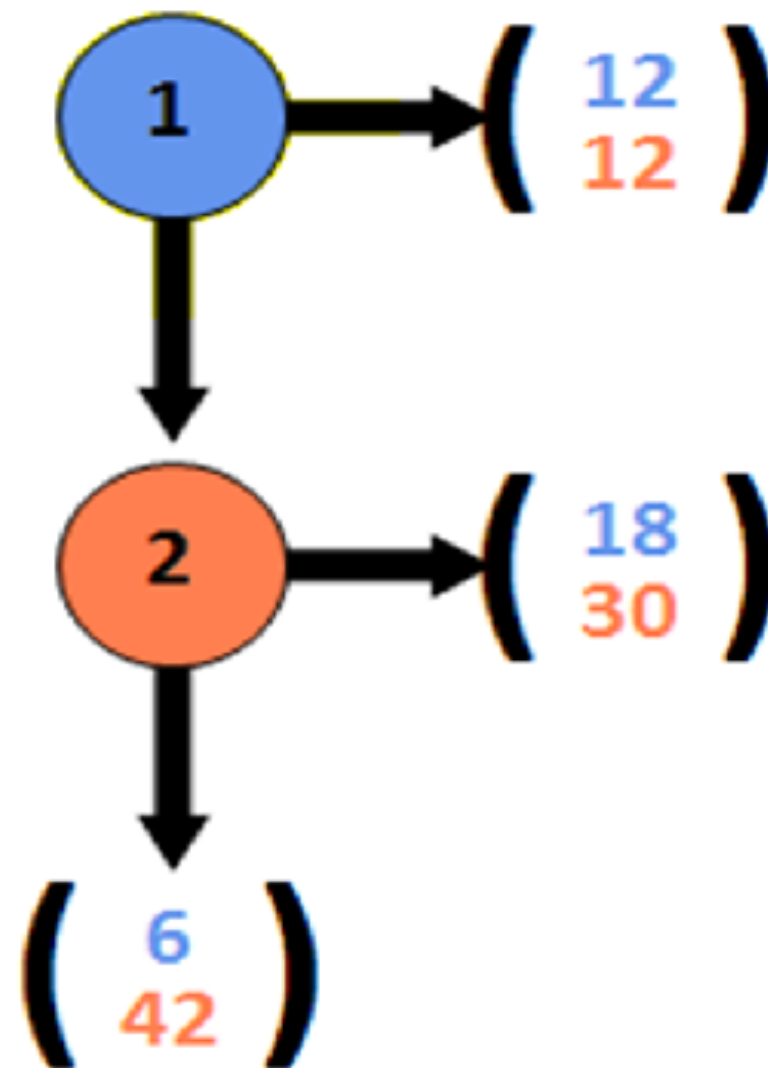
In the maturation process of learning to be social, “we humble the arrogance of our self-love to bring it down to what others will go along with.” (“go along with” appears 41 times).

Sentiments is about:

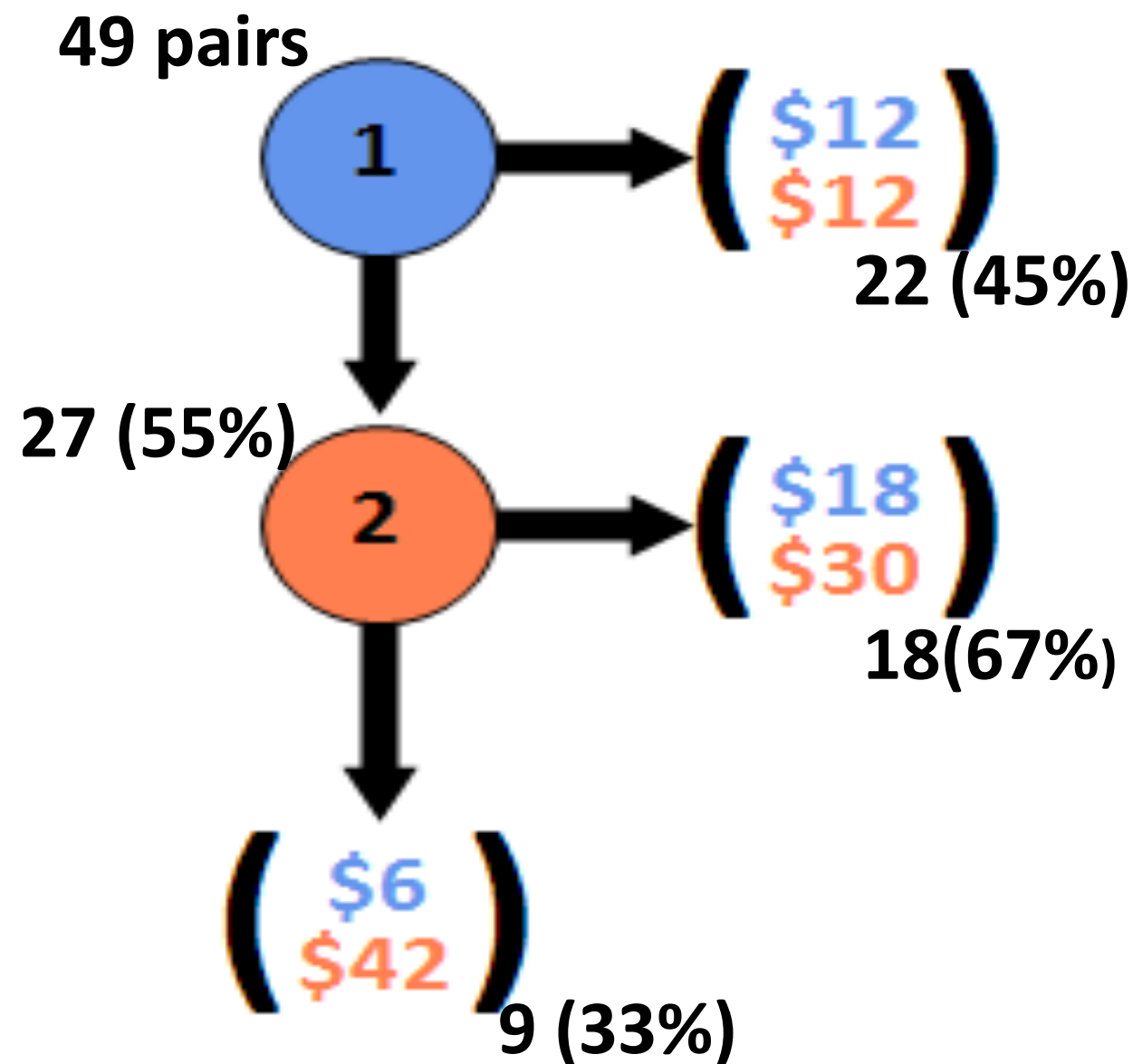
- ♦ Human sociality as other-regarding “conduct” (18th C. word)
- ♦ Rule-following conduct; its propriety and “fitness”
- ♦ Rules emerge by consent & become conventions
- ♦ Accounting for social order in pre-civil (triable) society
- ♦ Sympathy & mutual sympathetic “fellow-feeling”
- ♦ “Equilibrium” if it exists is in rule space, not outcome space
- ♦ “Fair” refers to fair-play; “unfair” means foul
- ♦ Actions are signals that convey intentions
- ♦ And their meaning is read imperfectly from context
- ♦ Propriety evolved into property in the civil order of government.

Consider (25 years later) the following new laboratory experiment, a “Trust Game” between anonymously paired individuals like the game above but with somewhat different payoffs.

Baseline Trust Game



Baseline Trust Game Results



The standard self-interested action model fails.

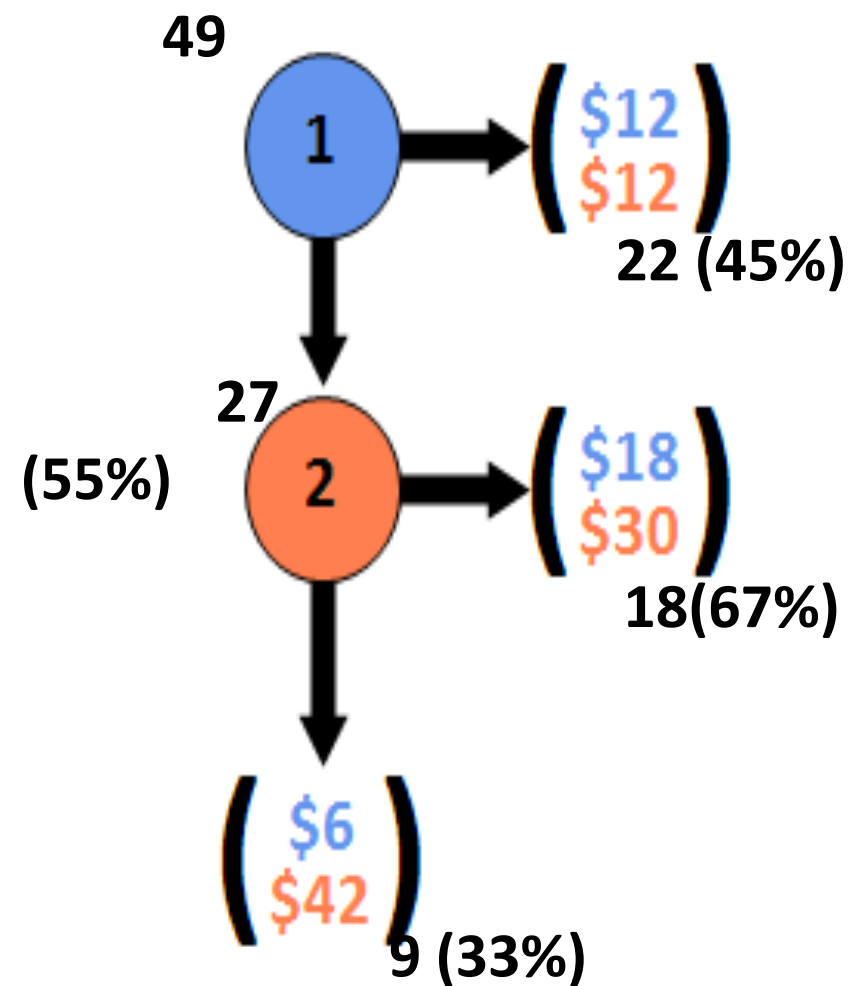
Two “theory fixes” followed in the 1990s:

- ♦ Just add the other’s payoff to preferences: $U(\text{own}, \text{other})$; call them “social preferences;” fit data with new $U(X, Y)$. (test it in new games.)
- ♦ It’s an exchange; call it “reciprocity.”

Smith would reject both: The first because he sees it as false; “social” is about relationships, not preferences; the second is not wrong but inadequate; explains nothing. Why is there reciprocity in a one-shot play?

A proposition in *Sentiments* indicates why 2/3 of Player 2s do not take most of the money, and why over half of the Player 1s might pass to them:

Beneficence Proposition 1: Properly motivated (intentional) actions that benefit others, alone deserve reward. This is because of the gratitude others feel in response to such actions (*TMS*, 1759, p 78)



Player 2 actions are consistent with Beneficence Proposition 1 in *Sentiments*. Knowing the action taken, AND the action not taken by Player 1s, 18 of 27 Player 2s show gratitude, and self-command: 2/3 are consistent with BP1.

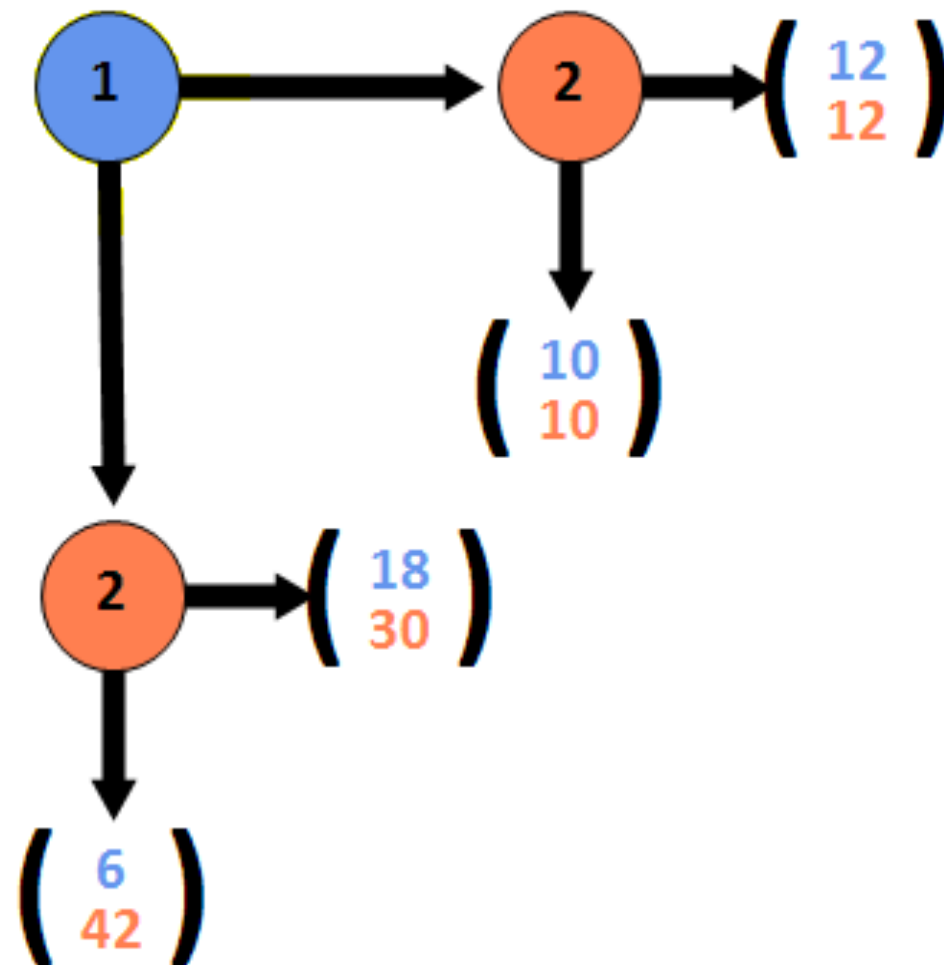
Random assignment implies that the same proportion of Player 1s would play right if they had been assigned position 2. Hence, $0.67 - 0.55 = 0.12$ is proportion of 1s deterred from cooperation by uncertainty that Player 2 is a person like them.

Beneficence Prop 1 helps us to understand and interpret the actions of both players.

Beneficence Proposition 2: "Beneficence is always free, it cannot be extorted by force". Choosing not to act beneficently ("want of beneficence") calls for no punishment because such actions tend "to do no real positive evil." (*TMS*, p 78)

Hence, in trust games we should not expect Player 2s to feel resentment and be willing to incur a cost to punish Player 1s for choosing not to be beneficent. That is their respected right—to live and let live.

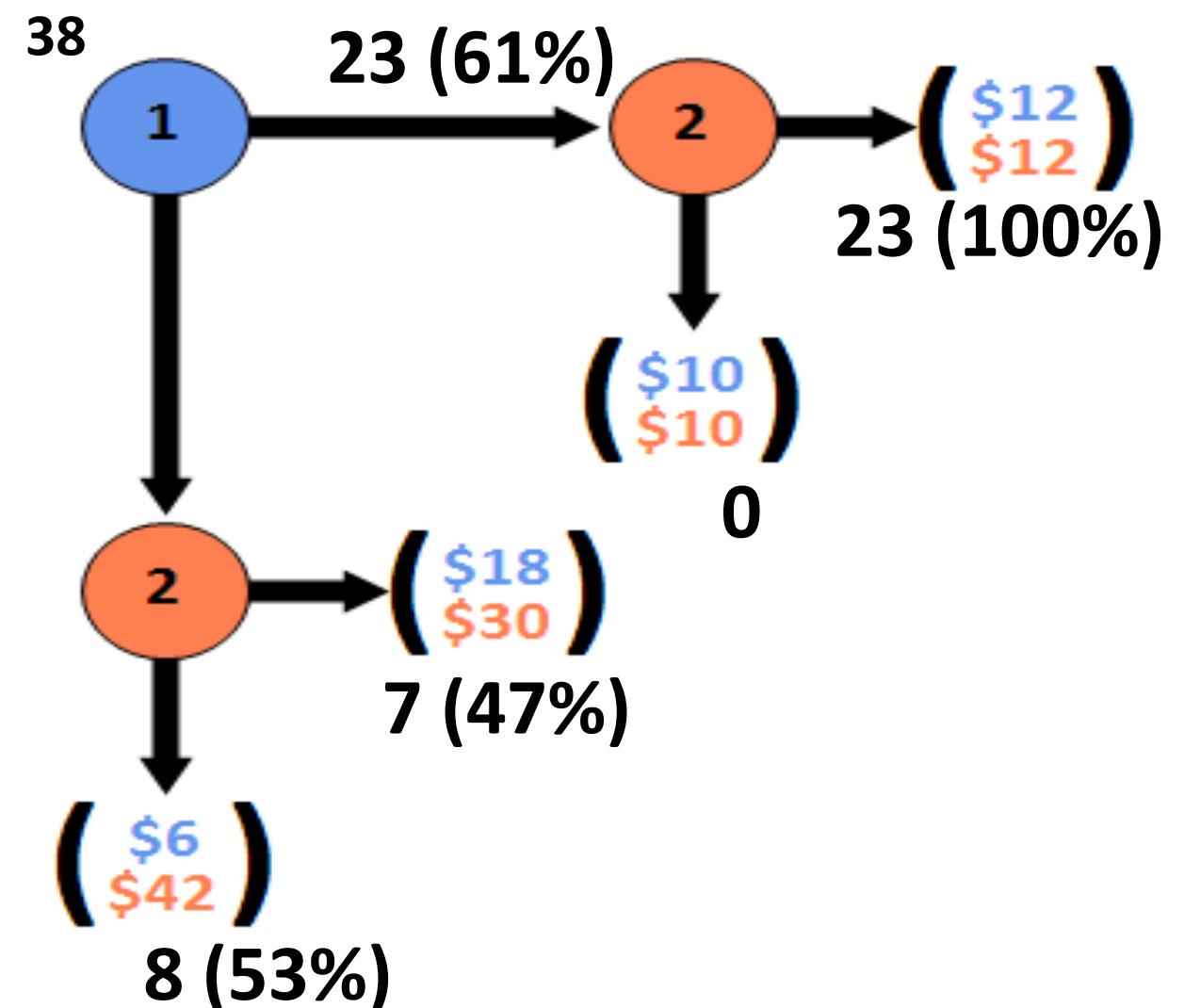
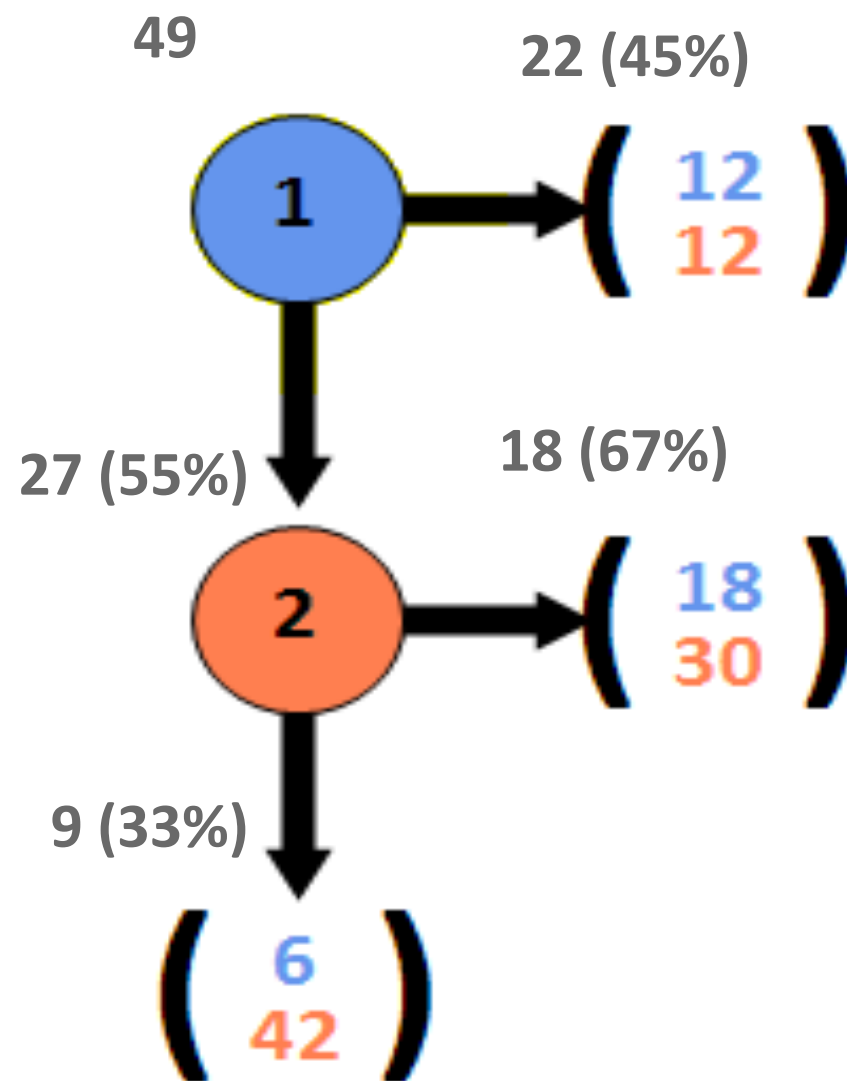
Trust game with Option to Punish not to act beneficently (PWB)



Note: We have added a dominated option. In Max U (own) analysis such options are irrelevant; in *Sentiments* they are essential to the analysis: the meaning signaled by a chosen option depends upon all options.

NP Trust

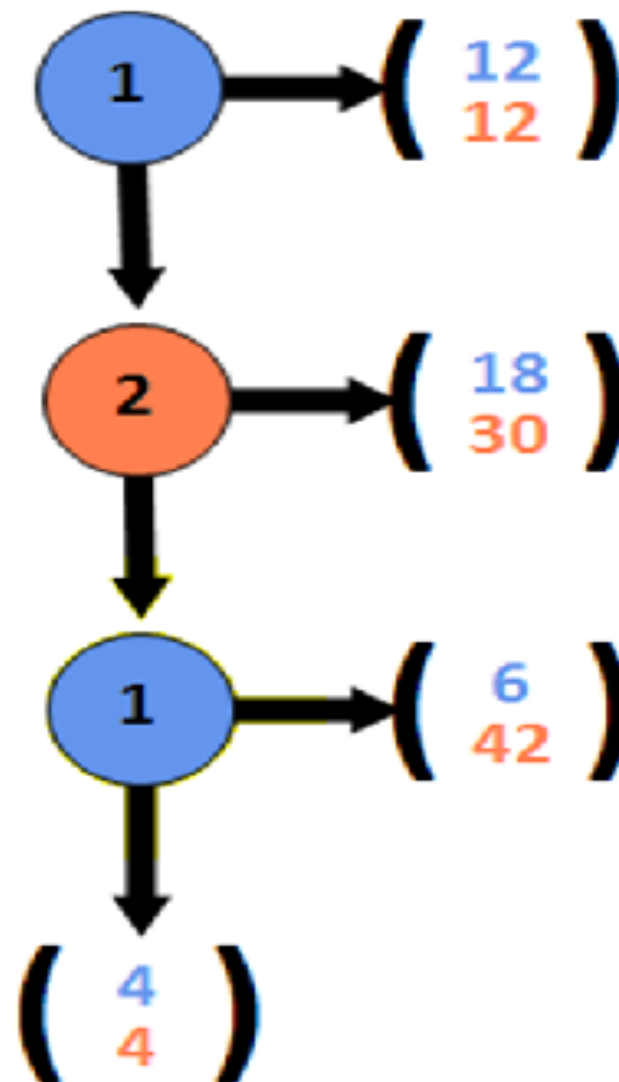
PWB? No! BUT Tst/Tsw reduced! “Trust” signal of beneficence is now ambiguous. Only 47% of Player 2s now choose to cooperate. (Have excuse to defect?)



Injustice Proposition 1: Improperly motivated (intentional) actions that are hurtful to others, alone deserve punishment. This is because of the resentment others feel in response to such actions. (*TMS*, p 78)

Suppose Player 2 defects on the offer of Player 1 to cooperate. IP 1 predicts that many Player 1s will feel resentment, and are willing to incur a cost to punish Player 2s.

Punish Hurt, Trust Game

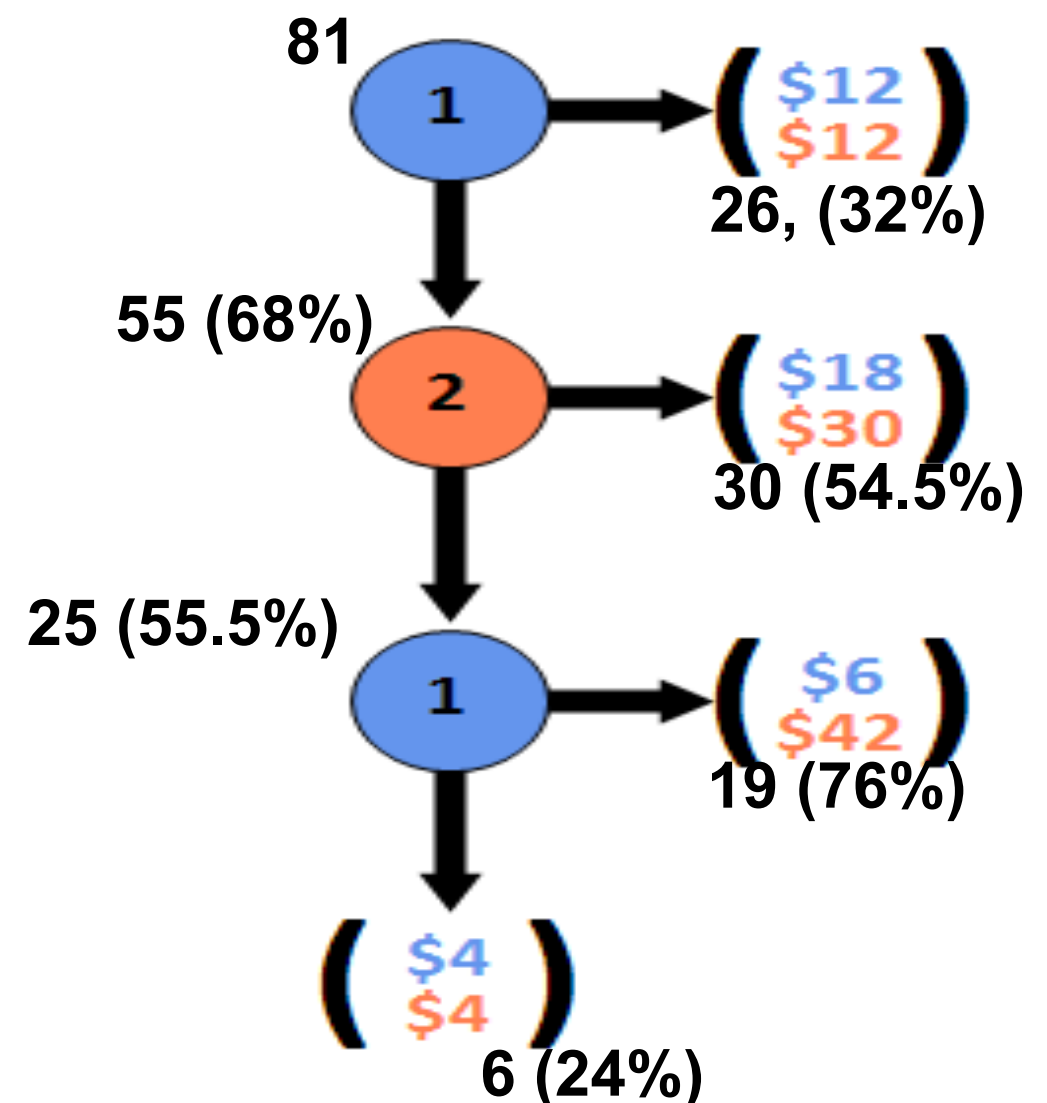
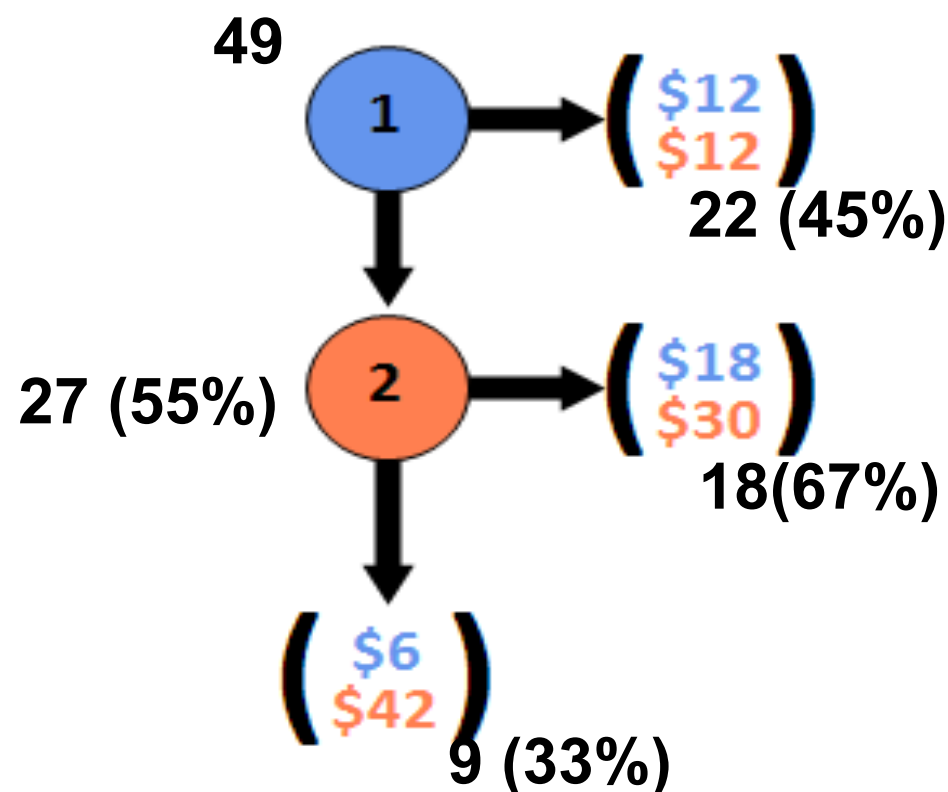


Backward Induction Analysis in *Sentiments* Involves: Benefit or hurt, inferred intentions, imagining other's situation, and "self-command."

1. Common knowledge that all Players are strictly self-interested, non-satiated.
2. Action guided by who is hurt or benefits from an action, and an inference of intent.
3. Hurt, benefit and intentions are inferred from alternative actions not taken.
4. Intentional Beneficence → Gratitude → Reward;
Intentional Hurt → Resentment → Punishment.
5. Apply backward induction to the game tree to determine who benefits or is hurt from an action at each node and to judge intent.
6. Each Player's "impartial spectator" imagines herself in the role of the other in judging intent and probable responses.
7. Forward play is a signaling game—a conversation—that conveys intent.
8. If Player 1 would cooperate in the Player 2 role, will Player 2 see it in the same way if given opportunity to act?
9. Will Player 2 cooperate, given unambiguous signal of Player 1's beneficial intentions?

NP (Trust)

24% of 1s punish defection. But more 1s now play down & more 2s defect; signal is less credible under threat of punishment; Beneficence must be free, it cannot be extorted.



Smith: There are two pillars to society; Beneficence and Justice.

- ♦ “Beneficence...is less essential to the existence of society than justice. Society may subsist, though not in the most comfortable state, without beneficence; but the prevalence of injustice must utterly destroy it.”
- ♦ “[B]eneficence...is the ornament which embellishes, not the foundation which supports the building..(it is) sufficient to recommend...by no means necessary to impose. Justice on the contrary is the main pillar that upholds the whole edifice.”

In *Sentiments*, Justice Proposition 1 Is used by Smith to explain the Origin of Property Rights

- ♦ Common feelings of resentment toward improperly motivated actions of a hurtful nature within close-knit communities is the origin of the civil order of law, and of punishment proportioned to resentment.
- ♦ “As the greater and more irreparable the evil that is done, the resentment of the sufferer runs naturally the higher...”
(*TMS*, p 83)
- ♦ Hence: under the rule of law—the classical liberal heritage—justice is a residue.

Justice is what is left over after introducing penalties for unjust action. Society seeks the good—achieves human betterment—by discouraging the bad: theft, robbery, violation of contract, bearing false witness, etc., as in the Decalogue.

Sentiments and Wealth of Nations

- ◆ Property rights: necessary but not sufficient in *Wealth*.
- ◆ Smith adds his Axiom of Discovery: “..the propensity to truck, barter and exchange...” Human sociality in *Sentiments* is expressed in the form of trade in *Wealth*. Third party enforcement of property means reduced dependence on trust and trustworthiness for mutually beneficial trade interactions.
- ◆ In trade, giving and receiving are simultaneous (whether barter or money).
- ◆ *Sentiments*, and *Wealth* both emphasize process not only outcomes.
- ◆ *Wealth of Nations* is about a discovery process: Exchange → Prices → Facilitate Comparisons & calculations (grow more corn less hogs) → Discover Specialization.
- ◆ The neo-classical marginal utility revolution too eagerly abandoned process for equilibrium. First Supply & Demand experiments seemed magical in finding the equilibrium with only private information—we had no process thinking!

Summary

- ❖ Morality is discovered through rules governing the approval or disapproval of our conduct (propriety; rights to act).
- ❖ Propositions on beneficence explain trust/trustworthiness in games.
- ❖ Justice propositions explain the punishment of hurtful actions.
- ❖ Beneficence and Justice enables human social-psychological betterment, and sets stage for the rule-of-law in national economies.
- ❖ Beneficence an ornament; Justice, the foundation.
- ❖ Justice is infinite opportunity space of action left over after using punishment to discourage acts of injustice.
- ❖ Natural liberty: “Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way,” (WN, 1776)
- ❖ But you have to read *Sentiments* to find out what is “justice,” “own interest” and “own way.”

Thank You

References

Smith, Vernon L. and Bart J. Wilson (2017) "Sentiments, Conduct and Trust in the Laboratory." *Social Philosophy and Policy*, 34(1) pp. 25-55. DOI: <https://doi.org/10.1017/S0265052517000024>

Smith, V.L. (2013) "Adam Smith: From Propriety and Sentiments to Property and Wealth." *Forum for Social Economics*, 42, Issue 4 July 16, 2013.