ORGANIZATIONAL BEHAVIOR AND HUMAN RESOURCE MANAGEMENT

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Lesson 18

Group Dynamics

Part 1: Group «Pathologies»







GROUP DYNAMICS: why it's an important topic for COMPANIES

Performance and Productivity:

-Cohesive, well-functioning teams tend to outperform individuals, especially on complex, interdependent tasks. Group dynamics affect coordination, role clarity, effort levels, and conflict resolution, all directly tied to performance

Innovation and Creativity:

-Diverse teams with positive interactional norms can foster higher levels of creativity and innovation

Adaptability and Learning:

-Teams with strong dynamics can better engage in learning and adaptation in response to external or internal changes

• Employee Retention and Engagement:

-Positive team experiences correlate with job satisfaction and reduced turnover intentions, which in turn generate a number of positive consequences for the companies

Decision Quality:

-When group dynamics enable high-quality information sharing and processing, teams make better decisions, especially under uncertainty

GROUP DYNAMICS: why it's an important topic for INDIVIDUALS

Identity and Athenticity:

-Good dynamics offer individuals a sense of inclusion, identity, and safety to express themselves

Learning and Development:

-People learn informally by interacting with others. Feedback and knolwedge sharing occur naturally in well-functioning teams.

Recognition and Meaning:

-Being part of a successful team contributes to one's sense of competence and purpose, which are central to (intrinsic) motivation

• Happiness and Health:

- in long term studies (e.g. the Harvard study), close relationships are (by far) the strongest predictor of long-term happiness and health (relationships in life and in the workplace): in the workplace, groups is where relationships develop more deeply
- —well functioning groups provide a sense of shared identity shared purpose, belonging, caring for each other

-obviously, all these element interact and tend to strengthen each other

GROUP DYNAMICS: in what context is (increasingly) important?

- ANYWHERE there is a significant need for:
 - multidiscipinarity
 - complex coordination
 - innovation and creativity
 - project-oriented work
 - entrepreneurship
- What about the FUTURE? most likely, the relevance of all these element will increase:
 - Rising Complexity and Interdependence:
 - Most contemporary challenges (e.g., climate change, Al ethics, global health) require interdisciplinary collaboration
 - Remote and Hybrid Work Forms:
 - These highlight the need for and intentional rethinking of group dynamics, as informal alignment and cohesion don't emerge as naturally as with in-presence groups (paradoxically, remotization makes group dynamics even more important!)
 - Shift Toward Flexible, Project-Based Structures:
 - Organizations are becoming more fluid, moving away from rigid hierarchies toward networked teams: individual decision making is increasingly replaced by forms of "collective" decision making
- Increased Emphasis on Soft Skills:
 - As automation replaces routine tasks, human skills like empathy, negotiation, and collaboration become even more central.

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GROUP DYNAMICS: in what context it may become LESS important?

- can you think of reasons / situations in which group dynamics may become LESS important in the future?
- Al-Augmented Work: in some domains, intelligent agents may replace or reduce the need for human collaborative work
 - however, it could be the case that **NEW forms of group dynamics and collaboration** (for example, "Hybrid" groups comprising both Als and humans) become absolutely crucial
 - -the very concept of "group" and "collaboration" will have to be redefined
 - -the classic variables of group dynamics (e.g., coordination, trust, shared mental models, communication norms) must be reformulated to include non-human agents.
 - it may also be the case that if (and when) techology and AI abilities become widely available and replicable (AI as a "commodity"), their competitive relevance might be significantly reduced
 - organizations that will be better able to improve the human side of value production might develop a competitive advantage that is not as easily replicable and accessible as technology
- Individualization of Labor: Gig economy platforms and freelance work emphasize individual contributions over team integration
 - but notice: even these often rely on broader group dynamics (e.g., online communities, client relationships)
 - however: is this a temporary phenomenon? Is it a domain-specific phenomenon?
 - the extent to which this kind of work may be still relevant and/or desirable in the future may be increasingly restricted to very specific domains in which interdisciplinary synergies are not necessary

GROUP DYNAMICS: what we are going to talk about

- GROUPS can be EXTREMELY EFFECTIVE (if well managed) but also EXTREMELY PROBLEMATIC (if poorly managed)
 - -we are going to talk about:
 - WHY and HOW GROUPS MAY FAIL (even in disastrous ways) to reach their potential
 - HOW TO AVOID THOSE RISKS and IMPROVE the group's ability to reach their potential
 - WHAT IS THE ROLE OF LEADERSHIP

group «pathologies»

how and why groups malfunction, generate negative consequences and fail to achieve their full potential

THE MOST COMMON GROUP PATHOLOGIES

- Cascades

- Polarization

MORE DISSENTING OPINIONS

ABSOLUTELY, SIR

WE AGREE 1007

- Groupthink



CASCADES



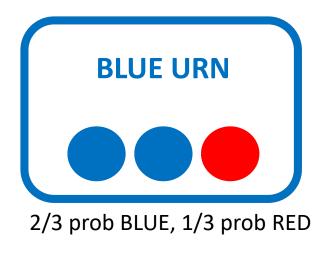
CASCADES: DEFINITION

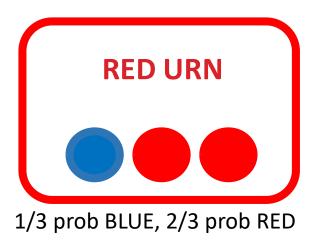
Conformity behaviors of group members may cumulate and reinforce each other over time, and create a «snowball» (cascade) effect, which may generate undesired or suboptimal outcomes. Key elements:

- what happens at the **beginning** of a process has an excessive influence on the final outcome
- the final outcome may become unpredictable and / or weakly correlated with the factual elements of the problem
- behaviors and choice that are individually rational may generate collective outcomes that are irrational, given the available information
- CASCADES = CONFORMITY + TIME + VISIBILITY + CRITICAL MASS

AN EXPERIMENT ON INFORMATIONAL CASCADES (1)

Even rational choices (at the individual level) may lead to an irrational choice (at the group level) because of the cascade effect





- ONE URN IS RANDOMLY SELECTED TO BE USED (UNKNOWN TO THE PARTICIPANTS)
- THEIR GOAL IS TO GUESS WHICH URN IS IT (a \$\$ reward for getting the right answer)
- THE FIRST PARTICIPANT SELECT ONE BALL FROM THE URN; HE DOESN'T SAY TO ANYBODY IF IT'S A BLUE BALL OR A RED BALL (THAT IS HER PRIVATE INFORMATION)
- SHE STATES PUBLICLY HER BEST ESTIMATE ABOUT THE URN (BLUE OR RED URN)
- THE BALL IS PUT BACK IN THE URN
- THE SECOND PARTICIPANT REPEATS EXACTLY THE SAME PROCESS

AN EXPERIMENT ON CASCADES (2)

- in 77% of cases a «cascade» effect can be observed
- In 15% of cases the individual estimates contradict the «private» information of individuals (the color of the ball that they randomly select)
- Sometimes, mostly depending on the initial «moves», groups make rational estimates, given the information they have

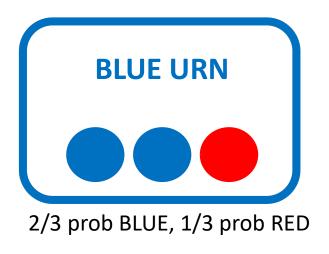
A «WORST CASE» EXAMPLE:

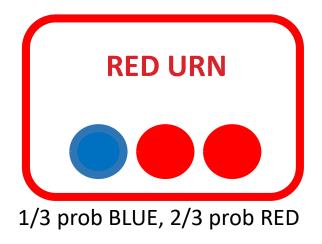
The Urn to be guessed is the BLUE one



PARTICIPANT	PRIVATE SELECTION	PUBLIC ESTIMATE
first	RED BALL	RED URN
second	RED BALL	RED URN
third	BLUE BALL	RED URN
forth	BLUE BALL	RED URN
fifth	BLUE BALL	RED URN
sixth	BLUE BALL	RED URN

AN INTERESTING VARIATION





- SAME EXERCISE AS IN THE PREVIOUS VERSION
- PARTICIPANTS PAID ¼ OF THE REWARD FOR A CORRECT DECISION and PAID ¾ OF THE REWARD FOR A DECISION THAT MATCHES THE DECISION OF THE MAJORITY
- PARTICPANTS COULD LOSE ¼ OF THE REWARD FOR AN INCORRECT DECISION and COULD LOSE ¾ OF THE REWARD FOR FAILING TO MATCH THE GROUP DECISION

Cascades appeared on 96.7% of the trials, while 35.3% of announcements did not match their private information

So, cascades are very likely to happen when people feel that they are rewarded / punished not only for being correct, but also for aligning / not aligning with the majority

A REALISTIC EXAMPLE

A group of executives delibarate about whether a certain project should be financed by their company or not. One at a time, they speak and tell the others their opinion

ANTHONY: he declares that the project **should** be financed

BARRY: he privately thinks that the project **should not** be financed. But ... how confident is he about his own judgment? How much does he trust Anthony's judgment? If his confidence in Anthony's is high enough (in relation to his own), he may decide to stick with Anthony's opinion and declare that the project **should** be financed

CHRIS: he thinks that the project **should not** be financed. But now he is in a minority of expressed opinions (even though he is in the majority of private opinions, as Barry also thinks, privately, that the project should not be financed). So, for informational conformity and/or normative conformity, he may decide to follow the previous group members and declare that the project **should** be financed ... and so forth with other following members ...

In the end, because of the cascade effect, the collective decision may not reflect the aggregate knowledge of group members

Cascades and managerial fads: the forced stack ranking example

The «Forced Stack Ranking Systems": popularized by General Electric, required managers to grade employees into fixed performance tiers (example:)

- Top 20%: high performers, rewarded with bonuses, promotions, or retention.
- Middle 70%: average performers, encouraged to improve.
- Bottom 10%: underperformers, often terminated or placed on performance plans
- The assumptions:
 - performance follows a normal (Gaussian) distribution
 - a company will improve overall performance by removing the bottom
 X% each year: a sort of meritocratic corporate "natural selection"

Do you think it's a good idea? What do you think the consequences might be?

Forced ranking example: common consequences

1. Internal Competition and Sabotage

- Employees had incentives to undermine peers to avoid being in the bottom tier.
- Collaboration, knowledge sharing, and team cohesion were weakened: "I had to make my colleagues look bad so I wouldn't be ranked last." (anonymous Microsoft engineer)

2. Demoralization and Stress

- Even average or good performers feared arbitrary low ratings due to the fixed quotas
- Chronic job insecurity, especially in high-performing teams where someone **had** to be in the bottom 10%

3. Loss of Talent

- High turnover of skilled individuals who rejected toxic competition.
- Microsoft's adopted stack ranking widely, but by the late 2000s it was linked to declining innovation and employee disengagement.
- Internal memos and leaked reports described it as the "most destructive process at Microsoft."
- Microsoft eventually abolished stack ranking in 2013, replacing it with a more collaborative performance review system.

Forced ranking example: common consequences

4. Misalignment with Team-Based Work

- Forced ranking doesn't fit well with teamwork, where success depends on intense cooperation
- Encouraged "superstar" individualism at the expense of systemic or collective performance

5. Legal and Ethical Risks

- Several companies faced discrimination lawsuits where bottom 10% rankings were found to disproportionately affect protected groups (e.g., older workers, minorities)
- However, many firms adopted this practice in the 1990s and 2000s (and consultants promoted it), not because of clear evidence of its effectiveness, but because GE was seen as very credible and successful.
- Even when very clear evidence of negative consequences emerged (demoralization, internal competition, talent loss, etc), the "cascade of adoption" continued
- Eventually, Microsoft and others abandoned the system, but not before it became a dominant HR "best practice", largely because of cascade dynamics.

Different types of cascades: informational cascades

- Mechanism: observational inference
- Individuals rely on observing others' actions to form beliefs under uncertainty
- When people choose to act in a certain way, observers infer they
 must have privately held information that justifies that action (and
 may then ignore their own private signal to imitate them)
- Relies on sequential decisions and public visibility of others' choices
- Leads to public agreement without private conviction
- Notice: this is a dynamic, self-reinforcing case of the general process of INFORMATIONAL CONFORMITY

Different types of cascades: reputational cascades

- Mechanism: social signaling
- Individuals make decisions not based on what they believe is right, but on what will protect or enhance their social reputation
- If others are endorsing an idea or behavior, dissent may signal nonconformity, ignorance, or deviance. People may therefore conform to avoid reputational costs, even if they disbelieve the idea.
- Driven by impression management, not belief updating
- Common in hierarchical or politically sensitive contexts
- Leads to public agreement without private conviction
- Notice: this is a dynamic, self-reinforcing case of the general process of NORMATIVE CONFORMITY:

Different types of cascades: availability cascades

- Mechanism: emotional amplification and media exposure
- when repeated exposure (media or other) makes an issue more cognitively salient, people tend to overestimate its prevalence or importance
- It's a self-reinforcing cycle: media coverage → public concern → more coverage → more concern → ... → policy responses
- Based on **availability bias**: the more easily something comes to mind, the more likely we believe it is true, common, relevant
- Often emotionally charged, can lead to exaggerated policy reactions
- EXAMPLE in an organizational setting:
 - A medium-sized company experiences a minor cybersecurity incident.
 - The IT department escalates the issue, and it's heavily discussed in company meetings, newsletters and informally.
 - Other departments begin make exaggerated demands, such as redundant password protocols, system upgrades, or budget reallocation, even though the actual exposure was limited and well-contained.

Different types of cascades: preference cascades

- Mechanism: latent preferences revealed through threshold shifts
- when private preferences are suppressed out of fear or isolation, but once a few people express dissent, others feel safe to do so as well.
- this creates a rapid shift from apparent consensus to open opposition.
- Driven by threshold models of collective action
- Common in authoritarian settings or strong normative environments
- Can produce sudden, nonlinear social change
- EXAMPLE in an organizational setting:
 - A department director is widely seen as high-performing but privately resented for autocratic behavior.
 - Most employees stay silent.
 - One day, a respected team lead speaks up and criticizes the leader publicly.
 This breaks the silence, prompting others to share stories, ultimately leading to HR investigation and leadership change.

The possible overlapping of cascade mechanisms

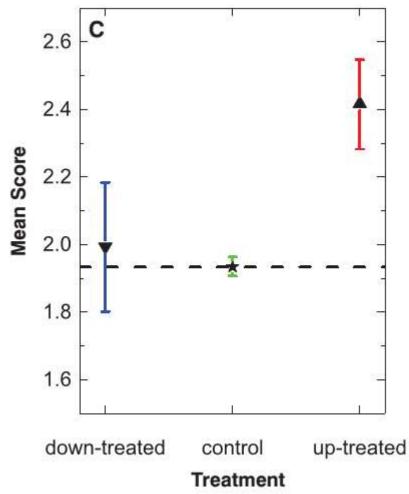
- In practice, it is not always obvious what is the dominant mechanism that generate a cascade (information, reputation, availability, preference)
- Sometimes they overlap and strengthen each other
- Informational + Reputational Cascade
- Common in organizations and politics: You believe differently, but fear that dissent will be seen as ignorant, and/or naive, and/or disloyal
- Informational + Availability Cascade
- Common in media-driven environments: A vivid, high-salience event is widely observed and becomes an information source that others imitate

MUCHNIK'S EXPERIMENT: informational + availability

Over 100.000 people asked to express «votes» (positive or negative) on articles (on a variety of topics) published on a website, within different experimental conditions

CONTROL GROUP: **no intervention**DOWN-TREATED: a first, **negative**vote
UP-TREATED: a first, **positive** vote

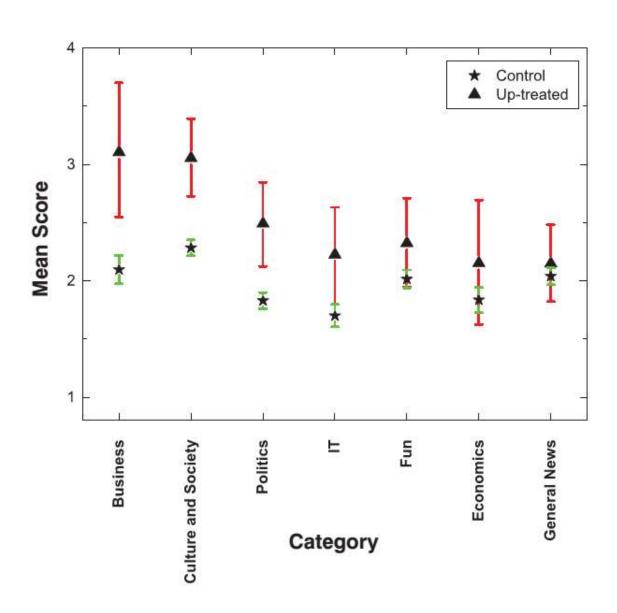
Just ONE early vote is enough to influence significantly the «cascade» of subsequent votes. The influence is much stronger in the «up-treated» case.



MUCHNIK'S EXPERIMENT

This is not just true for topics where judgment is less «objective» or more easy to influence.

Notice: the BUSINESS category is the most influenced one!



SALGANICK'S EXPERIMENTS: informational + availability

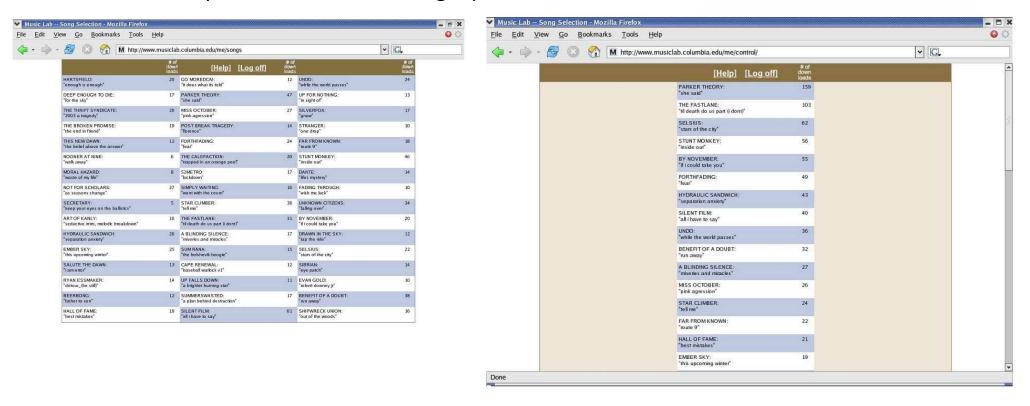
Over 14000 people participating to an artificial «cultural market» (songs)

«INDEPENDENT» GROUP (control group)

- hidden downloads
- no social influence

«SOCIAL» GROUPS

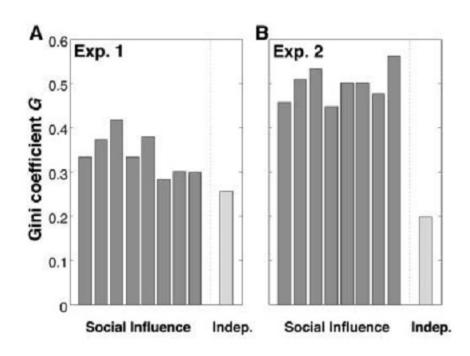
- 8 different «social» groups, completely isolated from each other
- public downloads
- Experiment A: no ranking (random order)
- Experiment B: with ranking, updated in real time

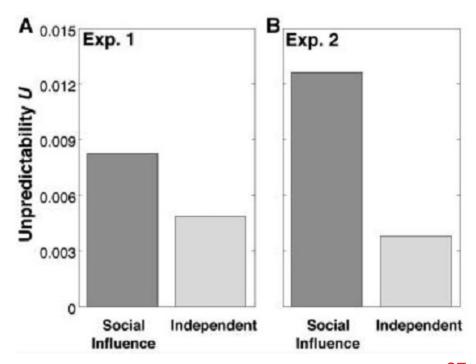


SALGANICK'S EXPERIMENTS: informational + availability

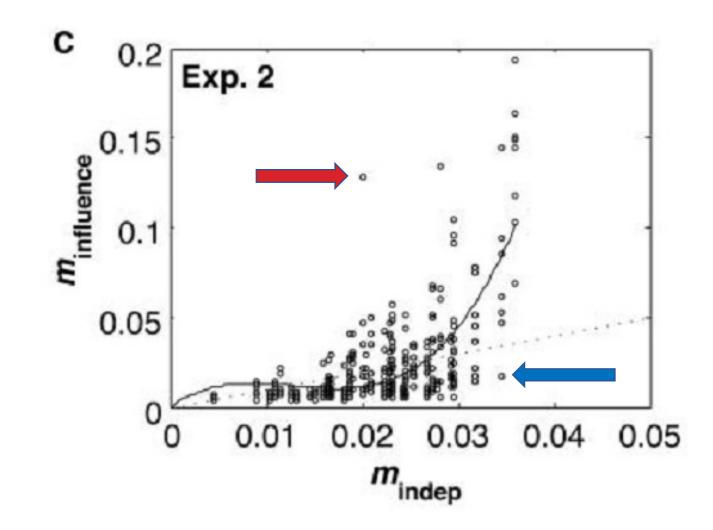
RESULTS:

- Social worlds generate much more «inequality», in terms of individual success
 - Much more difference between big sellers and small sellers
- Social worlds generate **less predictabile** results and **less correlated with the intrinsic quality** of individuals
- Especially when individuals are ranked

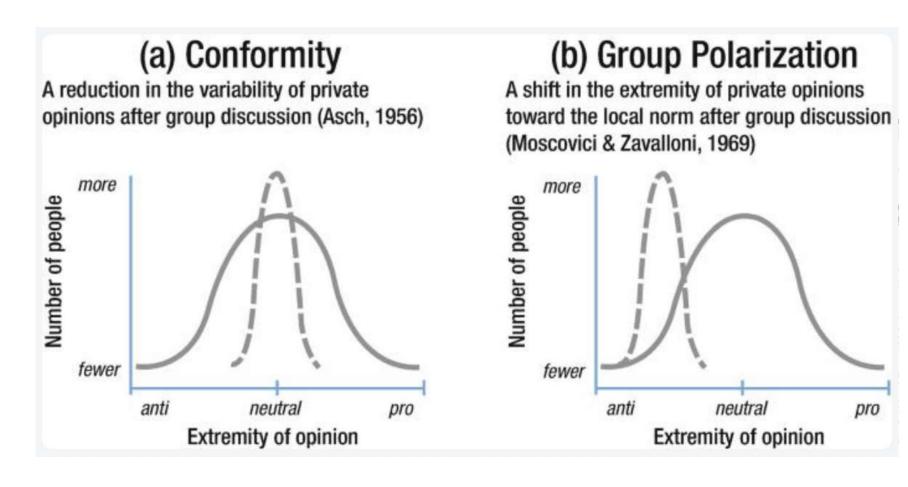




SALGANICK'S EXPERIMENTS: informational + availability



POLARIZATION



POLARIZATION: definition

Group polarization refers to the tendency for group discussion to **amplify the initial leanings of group members**, resulting in a **shift toward a more extreme position than the average** of the individuals' initial inclinations.

This phenomenon can lead groups to make more «extreme» choices than what would be a «rational» choice, given the information at the groups' disposal

- it does not necessarily means that groups take more risks than they should (this is the so called «risky shift» hypothesis)
- it means, instead, that decisions tend to be more extreme towards the «direction» that is mostly preferred, initially, by the group members (whatever that is: it can also be a «caution shift»)
- it is more evident and damaging, for the group effectiveness, when a higher number of group members have similar positions / opinions

the «direction» of polarization

The MEDIAN of the initial (pre-group deliberation) position of members is the best predictor of the group's shift. For example:

- If group members are pre-disposed towards risk taking, a shift towards «more risk» (risky shift) is to be expected
- If group members are pre-disposed towards caution, a cautious shift is to be expected
- This has been shown to happen in all kinds of contexts
- For example, voting patterns of federal judges (in the US)
 - Panels of judges appear to express much more liberal voting orientations when the panel is only composed by judges appointed by a Democratic president
 - When one Repubican-appointed judge is present (out of 3), the tendency is reduced
 - The opposite happens when panels are mostly composed by Republicanappointed judges

a classic experimental example

In Spring Fields and Boulder, Colorado

- Boulder: a strongly progressive community
- Spring Fields: a strongly conservative community

Many groups of people were asked to discuss several controversial issues (climate change, racism, same sex marriage etc) and to reach a shared agreement

4 SIGNIFCANT EFFECTS:

- 1. group positions become more extreme (progressive groups become more progressive, conservative groups become more conservative)
- 2. individual positions (anonymous!!) become more extreme after group discussion
- 3. group consensus increases (diversity among group members decreases)
- 4. the distance between groups increases (between progressive groups and conservative ones)

WHY DOES THIS HAPPEN? Conformity, again!!

1. Informational conformity

 When most members initially support a certain position, that position will be repeated more often, and that will provide to other members a stronger informational clue which will lead to more conformity

2. Normative conformity

- Individual positions in part reflect **how subjects want to be perceived by others** in the group. Thus, subjects shift their positions in order to adjust their perception by others more consitently with the majority position
- Indeed, it is shown that polarization increases when members have a sense of shared identity and are cohesive

3. Confidence and credibility

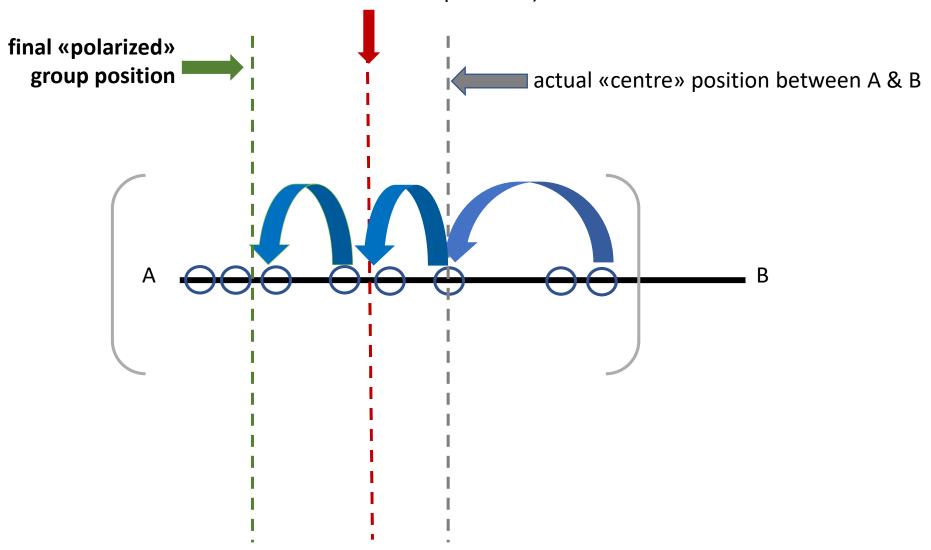
- Subjects who are more confident about their position tend to have more extreme positions (probabilistically: it's not necessarily always the case), and their confidence and assertiveness makes their position more convincing
 - Research shows that attitude extremity is correlated with attitude certainty (how sure you are), attitude importance (how much it matters to you), resistance to change

4. Identity Alignment

 Even moderate subjects may shift their positions away from their beliefs because of positional relativity, in order to maintain a certain self-image

an hypothetical example

the «median» position (in relation to the member's initial positions)



DOES POLARIZATION GENERATE NEGATIVE OUTCOMES?

- Not necessarily, but a sub-optimal outcome is the most likely result
- If circumstances are such that polarization «pushes» groups towards the correct decision / course of action, the outcome may be positive
 - in other words, polarization is **«outcome-agnostic»**: it just amplifies the initial average leaning of the group
 - a positive outcome may happen because of LUCK, because it helps overcome INERTIA, or when the group is leaning towards the right solution because of the EXPERTISE of members
- However, polarization implies SHIFTS in individual positions that are NOT due to reasoning, analysis of evidence, critical thinking, but to social / psychological phenomena that have nothing or little to do with the merit of the problem
- Thus, a polarized group outcome is not reflective of all potentially available information / ideas / reasoning. This usually leads to sub-optimal outcomes (and, sometimes, disastrous outcomes)

What factors increase the probability of polarization?

LIKING (and SIMILARITY)

- we prefer to interact with people we like (Cialdini's liking principle)
- similarity leads to unbalanced initial positions >> polarization
- online echo-chambers, social media etc

GROUP ISOLATION / LOW DISSENT TOLERANCE

- When groups are insulated from external views or actively discourage dissent, polarization thrives.
- Organizational echo chambers or "yes-man" cultures are especially prone to this

STRONG GROUP IDENTITY / HIGH IDENTIFICATION

 High group identification increases motivation to maintain group cohesion, often by aligning with dominant opinions

NORMATIVE CULTURE EMPHASIZING PURITY OR IDEOLOGICAL CONSISTENCY

• Environments that reward moral clarity, uncompromising stances, or ideological purity foster polarization

What factors increase the probability of polarization? (2)

REPUTATIONAL INCENTIVES / SOCIAL STATUS DYNAMICS

- In groups where status is gained by showing commitment to a cause or clarity of belief, members are incentivized to move toward extremes.
- Especially present in activist organizations or political factions

LACK OF ACCOUNTABILITY FOR GROUP DECISIONS

- When there is no clear feedback or no personal accountability, group members can safely support more extreme outcomes.
- Literature on "diffusion of responsibility" or "social loafing"

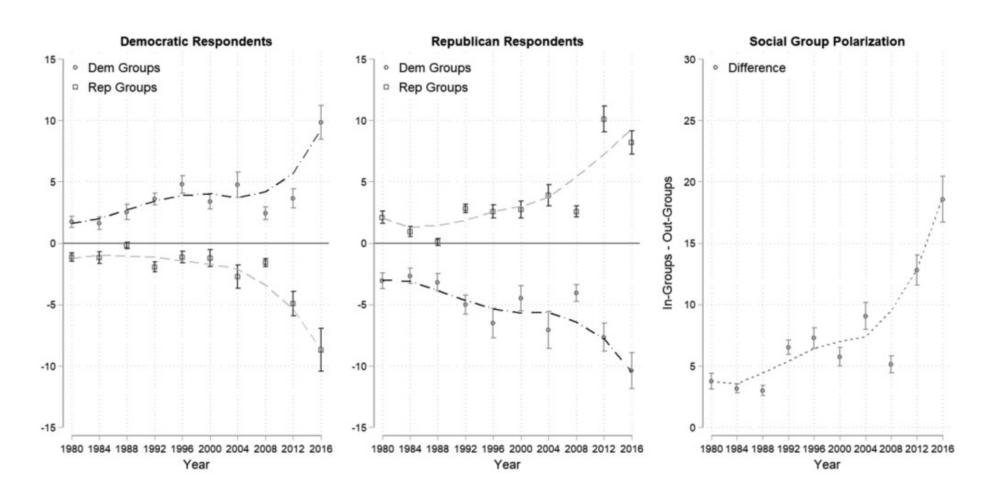
EMOTIONALLY CHARGED TOPICS

- Discussions involving fear, outrage, or strong moral convictions tend to polarize faster and more deeply.
- Emotional arousal reduces openness and encourages black-and-white thinking.
- Particularly relevant in crisis situations or debates over values (e.g., DEI, ethics, sustainability).

POLARIZATION IS EVERYWHERE ...

- In online / social media discussions (Twitter, Facebook, online forums)
 - We tend to prefer to interact with like-minded people
 - Digital networks allow us to find and participate to like-minded groups very easily
 - Groups of like-minded people are more prone to polarization, because dissenters are not present (or, when present, they generate an out-group effect), and group identity and norms are more salient and extreme
 - Tribalism: «us» versus «them»
- In politics and public debate / discourse
 - There is evidence of increasing polarization among people affiliated to opposing political parties
 - This is very evident, for example, in the US electorate (and other as well)
 - Polarization and tribalism can be also observed in public debates and conversations:
 think about the pro-vax / no-vax debate during the Covid epidemic
- In «GOING TO EXTREMES» (2011), Cass Sunstein provides many examples of how polarization generate extremism and tribalism in many circumstances

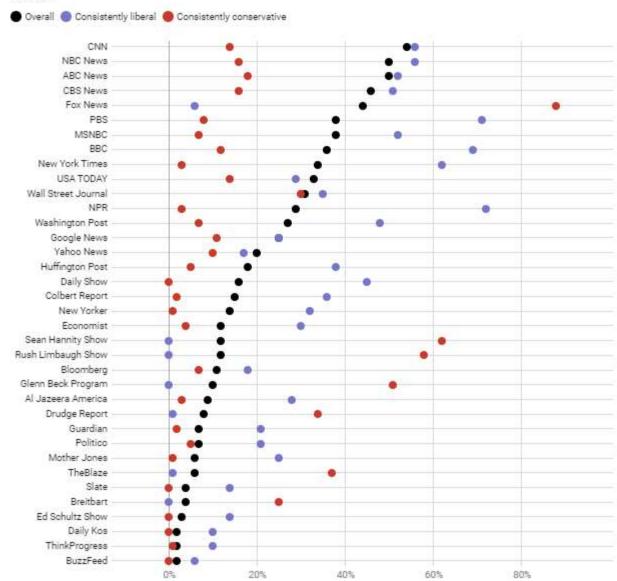
A study on political affective polarization in the US



A SURVEY ON TRUST IN MEDIA ARTICULATED BY POLITICAL AFFILIATION

Trust in media

A 2014 survey asked consistently liberal and consistently conservative Americans whether they trusted different news sources.



Respondents categorized as mostly liberal, mixed, or mostly conservative not shown.

Chart: The Conversation. CC-BY-ND • Source: Pew Research Center • Get the data

POLARIZATION EXAMPLES in ORGANIZATIONS (1)

- **Scenario**: A product development team is evaluating whether to include an experimental AI feature in the next software release.
- Before discussion: Most members are cautiously optimistic. They think the feature is exciting but worry about reliability.
- After discussion: The group becomes strongly in favor of including the feature, even with known technical risks.
- Mechanism: The exchange of supportive arguments, enthusiasm, and group identity around being "cutting-edge" pushes the group toward a riskier and more ambitious launch plan.
- **Scenario**: A corporate sustainability task force is setting environmental targets for the next five years.
- Before discussion: Members generally favor increasing sustainability goals —
 e.g., reducing emissions by 20%.
- After discussion: The group decides to aim for net-zero emissions within the same timeframe.
- Mechanism: Members bring in success stories from competitors and emphasize the brand value of being a leader in ESG. The group moves from moderate to highly ambitious goals.

POLARIZATION EXAMPLES in ORGANIZATIONS (2)

- **Scenario**: An HR committee is discussing how to revise the company's diversity recruitment policy.
- Before discussion: Most members agree that more should be done to improve representation, with some suggesting soft targets.
- After discussion: The group unanimously adopts a hard quota system and ties it to performance metrics.
- Mechanism: The conversation frames diversity as a moral imperative and reputational risk. Social comparison leads individuals to outdo one another in commitment.
- **Scenario**: An internal group is reviewing whether to formalize remote and hybrid work arrangements.
- **Before discussion**: Most members are in favor of flexible work, but with some in-office days for collaboration.
- After discussion: The group decides to go fully remote-by-default, removing office attendance requirements entirely.
- Mechanism: Members share positive experiences, cite productivity gains, and highlight employee surveys favoring remote work. The group shifts from mild support to full endorsement of remote-first policies.

HOW CAN GROUPS AVOID POLARIZATION?

 We will talk about this next week. First, we need to talk about another major group pathology (the most important and comprehensive one: groupthink)

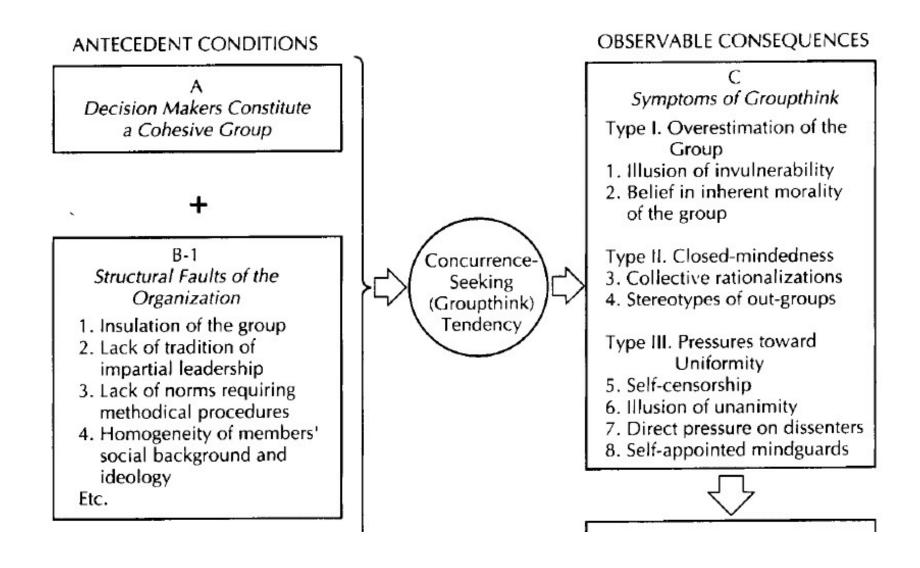
GROUPTHINK



Definition of GroupThink

- (Janis, 1972) "a mode of thinking that people engage in when they are deeply involved in a cohesive group, when the members' strivings for unanimity over-ride their motivation to realistically appraise alternative courses of action"
- In other words, Groupthink occurs within a cohesive decisionmaking group when the desire for harmony, consensus, or conformity becomes so dominant that it overrides the realistic appraisal of alternatives. Members suppress dissenting viewpoints, fail to critically evaluate alternatives, and ignore potential risks, leading to poor or irrational decisions.

Janis' classic framework (part1)



Janis' classic framework (part2)



B-2 Provocative Situational Context

- High stress from external threats with low hope of a better solution than the leader's
- Low self-esteem temporarily induced by:
 - a. Recent failures that make members' inadequacies salient
 - Excessive difficulties on current decision-making tasks that lower each member's sense of selfefficacy
 - c. Moral dilemmas: Apparent lack of feasible alternatives except ones that violate ethical standards

Etc.

D Symptoms of Defective Decision Making

- Incomplete survey of alternatives
- Incomplete survey of objectives
- Failure to examine risks of preferred choice
- 4. Failure to reappraise initially rejected alternatives
- Poor information search
- Selective bias in processing information at hand
- Failure to work out contingency plans



Low Probability of Successful Outcome

to summarize: antecedents

Antecedent Conditions (What makes Groupthink likely):

- 1.High Group Cohesiveness Strong social bonds and loyalty among group members
- **2.Insulation of the Group** Lack of exposure to external opinions or critical feedback
- **3.Directive Leadership** Leaders who signal preferred outcomes or discourage dissent
- 4.Homogeneity of Members Similar backgrounds, ideologies, or value systems
- **5.High Stress and Time Pressure** Situations demanding quick decisions or involving moral dilemmas
- **6.Lack of Norms Requiring Methodical Procedures** No standard practices for critical evaluation.

to summarize: symptoms

Symptoms of Groupthink:

- 1.Illusion of Invulnerability Excessive optimism and risk-taking
- **2.Belief in Inherent Morality of the Group** Ignoring ethical or moral consequences
- **3.Collective Rationalization** Dismissing warnings or contrary data
- **4.Stereotyping of Outsiders** Viewing opponents as weak, evil, or unintelligent
- **5.Self-Censorship** Withholding doubts or counterarguments
- 6.Illusion of Unanimity Assuming silent members agree
- **7.Direct Pressure on Dissenters** Pressuring those who question the group
- **8.Mindguards** Members who shield the group from dissent or information

to summarize: outcomes

Outcomes:

- Narrow range of considered alternatives
- Incomplete survey of objectives
- Failure to reappraise rejected alternatives
- Overconfidence in the chosen path
- Poor contingency planning

many examples in the business world (1)

Volkswagen Emissions Scandal ("Dieselgate", 2015)

- What happened: VW installed software to cheat emissions tests on diesel vehicles.
- Symptoms of Groupthink (per later internal audits and external investigations):
 - Loyalty to group goals (beating U.S. regulations) at the cost of ethics
 - Suppressed dissent from engineers
 - Risky decisions justified by "everyone else is doing it"
- Aftermath: Billions in fines, massive reputational damage, and leadership changes
- Cultural pressure for results and a top-down hierarchy suppressed internal whistleblowing and dissent

many examples in the business world (2)

Product Development Failures

- Teams working on product launches (e.g., New Coke in 1985) often suppress feedback that contradicts prevailing enthusiasm
 - Symptoms of Groupthink:
 - Illusion of consensus in market research interpretation
 - Dismissal of early user concerns
 - Overconfidence in brand strength or product uniqueness

Boardroom Decisions in M&A

- Some failed mergers and acquisitions (e.g., AOL—Time Warner, 2000) are attributed to:
 - Echo chambers of optimism
 - Suppressed risk assessments
 - Unchallenged strategic visions



A FAMOUS EXAMPLE: THE 1986 CHALLENGER TRAGEDY (1)

- NASA awarded the design and manufacturing of the Solid Rocket Booster (SRB) component of the Space Shuttle to Mortan Thiokol
- Thiokol based the SRB design on a segmented design of the Titan III solid fuel rocket motor
- The SRB used a joint-based design. Joint sealing was provided by two O-rings





A FAMOUS EXAMPLE: THE 1986 CHALLENGER TRAGEDY (2)

- The Sealing Joints Design was reportedly problematic
 - 1982, erosion of primary O-ring
 - From Criticality 1R to Criticality 1
 - 1984, O-rings showed excessive erosion
 - It became "allowed erosion", "acceptable risk"
 - 1985, the worst seal failure was reported on both O-rings
- On the eve of the launch (january 1986), cold temperature was predicted at the proposed launch time (9:38 a.m.)
- NASA asked Morton Thiokol whether this low temperature will cause improper operation of the O-Rings in the Solid Rocket Booster



A FAMOUS EXAMPLE: THE 1986 CHALLENGER TRAGEDY (3)

• 1st Teleconference:

- NASA and Thiokol reps attended and concerns were addressed
- Thiokol's position: <u>Delay Launch</u>

• 2nd Teleconference:

- NASA and Thiokol reps attended
- Thiokol engineers again emphasized the potential adverse effects of low temperature on the SRB's O-rings
- Mulloy (NASA) didn't want to delay
- At this point, Thiokol management asked for 5-minute caucus off-line.

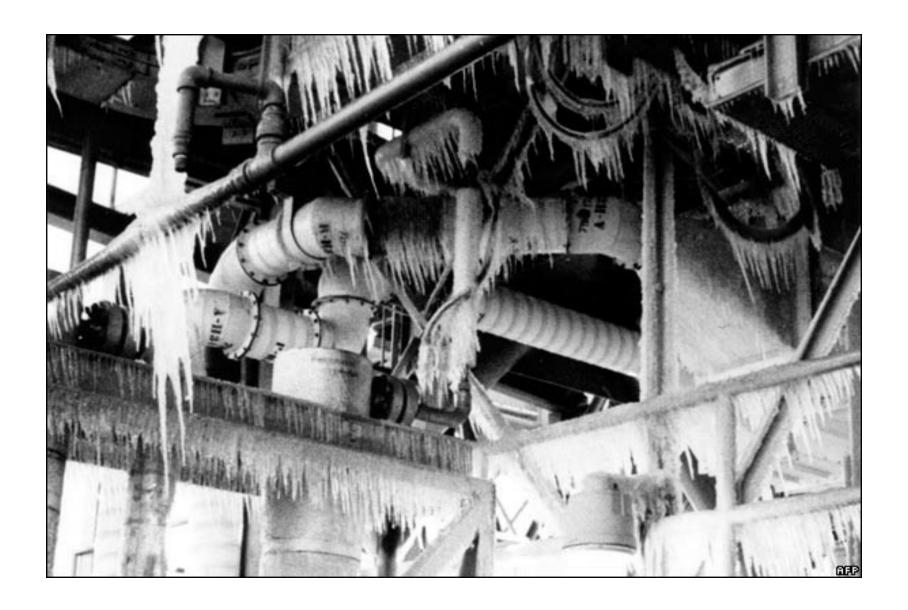


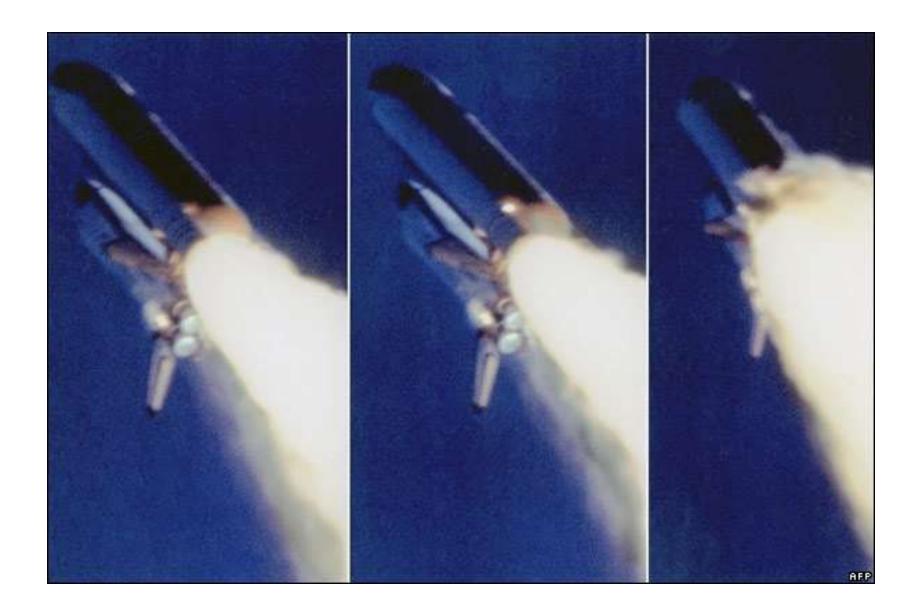
A FAMOUS EXAMPLE: THE 1986 CHALLENGER TRAGEDY (4)

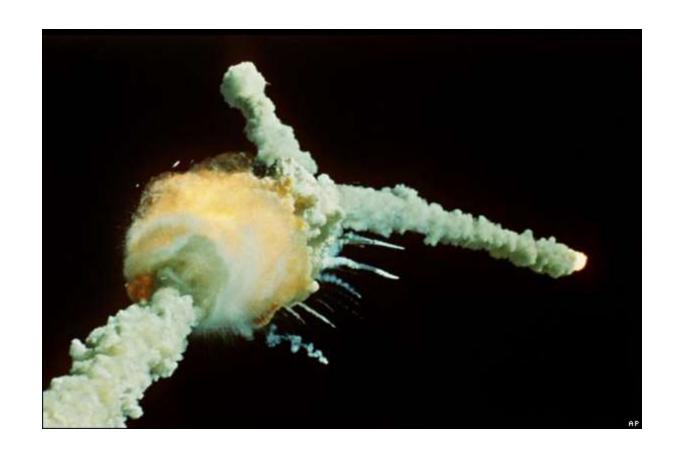
Caucusing Off-Line

- Mason (Sr. VP Operations, Thiokol) insisted on a "management" decision (vs. "technical" judgement)
- Lund (VP Eng, Thiokol) sided with Kilminster (VP SRB Project, Thiokol) and Mason and formulated the decision to launch.

Thiokol senior management approved the launch









TYPICAL GROUPTHINK SYMPTOMS: OVERESTIMATION OF THE GROUP

- 1. Illusion of Invulnerability. Despite the launchpad fire that killed three astronauts in 1967 and the close call of Apollo 13, the American space program had never experienced an in-flight fatality. When engineers raised the possibility of catastrophic O-ring blow-by, NASA manager George Hardy nonchalantly pointed out that this risk was "true of every other flight we have had." Janis summarizes this attitude as "everything is going to work out all right because we are a special group." 11
- 2. Belief in Inherent Morality of the Group. Under the sway of groupthink, members automatically assume the rightness of their cause. At the hearing, engineer Brian Russell noted that NASA managers had shifted the moral rules under which they operated: "I had the distinct feeling that we were in the position of having to prove that it was unsafe instead of the other way around."

TYPICAL GROUPTHINK SYMPTOMS: CLOSED MINDEDNESS

- 3. Collective Rationalization. Despite the written policy that the O-ring seal was a critical failure point without backup, NASA manager George Hardy testified that "we were counting on the secondary O-ring to be the sealing O-ring under the worst case conditions." Apparently this was a shared misconception. NASA manager Lawrence Mulloy confirmed that "no one in the meeting questioned the fact that the secondary seal was capable and in position to seal during the early part of the ignition transient." This collective rationalization supported a mindset of "hear no evil, see no evil, speak no evil." 12
- 4. Out-group Stereotypes. Although there is no direct evidence that NASA officials looked down on Thiokol engineers, Mulloy was caustic about their recommendation to postpone the launch until the temperature rose to 53 degrees. He reportedly asked whether they expected NASA to wait until April to launch the shuttle.

TYPICAL GROUPTHINK SYMPTOMS: PRESSURE TOWARD UNIFORMITY (1)

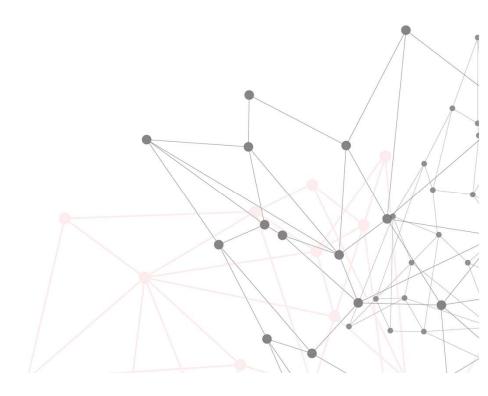
- 5. Self-Censorship. We now know that Thiokol engineer George McDonald wanted to postpone the flight. But instead of clearly stating "I recommend we don't launch below 53 degrees," he offered an equivocal opinion. He suggested that "lower temperatures are in the direction of badness for both O-rings. . . . " What did he think they should do? From his tempered words, it's hard to tell.
- 6. Illusion of Unanimity. NASA managers perpetuated the fiction that everyone was fully in accord on the launch recommendation. They admitted to the presidential commission that they didn't report Thiokol's on-again/off-again hesitancy with their superiors. As often happens in such cases, the flight readiness review team interpreted silence as agreement.

TYPICAL GROUPTHINK SYMPTOMS: PRESSURE TOWARD UNIFORMITY (2)

- 7. Direct Pressure on Dissenters. Thiokol engineers felt pressure from two directions to reverse their "no-go" recommendation. NASA managers had already postponed the launch three times and were fearful the American public would regard the agency as inept. Undoubtedly that strain triggered Hardy's retort that he was "appalled" at Thiokol's recommendation. Similarly, the company's management was fearful of losing future NASA contracts. When they went off-line for their caucus, Thiokol's senior vice president urged Roger Lund, vice president of engineering, to "take off his engineering hat and put on his management hat."
 - 8. Self-Appointed Mindguards. "Mindguards" protect a leader from assault by troublesome ideas. NASA managers insulated Jesse Moore from the debate over the integrity of the rocket booster seals. Even though Roger Boisjoly was Thiokol's expert on O-rings, he later bemoaned that he "was not even asked to participate in giving input to the final decision charts."



SUMMARY



FROM PROBLEMS TO ... SOLUTIONS

- groups have an inherent, great potential to be very effective / creative decision making "social devices"
- however, there are some very significant, very common problems that very often lead groups to make serious mistakes or prevent them to fully utilize their potential
- the fact the group members are competent, intelligent, in good faith, is helpful but it is not enough to avoid such mistakes and danger

WHAT CAN BE DONE TO PREVENT THESE PROBLEMS? WHAT CAN BE DONE TO IMPROVE THE GROUPS' EFFECTIVENESS?