A Calm Approach to Sense and Decision Making

Taming Wicked Conversations

Photo by Johannes Plenio on Unsplash

Outline

Motivation

Approach

Example

Benefits

Alternative approaches and motivation for our approach

Conclusion

Motivation - global issues

Think of these issues: complex, multiple stakeholders

- Climate Change
- Global wellness issues
  - Pandemics
  - Availability of HealthProviders
- Clean Water
- Civil Rights

Many others..

Many scientists believe that failure to properly address these can lead to global societal collapse

Motivation - Collective wisdom for global issues

- Some urgent global issues can only be solved through convergent action
  - We need to overcome narrow interests
- We need individual action to be grounded in a better understanding of complex problems
  - We need to respect the complexity of multiple legitimate interests
  - We need to overcome polarization
- Some issues even require coordinated action
  - We need new solutions, combining lessons learnt from many perspectives
  - We need better ways to combine our understanding
  - We need better ways to coordinate action

Motivation - Obstacles to collective wisdom

- Information silos:
  - People deal with partial information
  - *Silos* become *echo chambers* where the feedback loop from from lessons learnt is broken, allowing inappropriate ideas and actions to continue
- Information overload
  - People are bombarded with information at rates they cannot handle
- Weaponized disinformation
  - People are actively fed disinformation, reinforced by the echo chambers
- Wicked problems (i.e. complex causality, feedback, multi-stakeholders)
  - Wicked conversations typically lead to no solution at all, or poor decisions

Motivation - Increasing Obstacles

Needs

- Information silos
  - Social networks enable larger-scale opaque communities
- Information overload
  - Acceleration of the gap between:
    - Rates of information flows
      - Our information technology is improving at a rate far higher than human capabilities
    - Ability of humans to process information is comparatively stable
- Weaponized disinformation
  - Micro-targeted disinformation campaigns
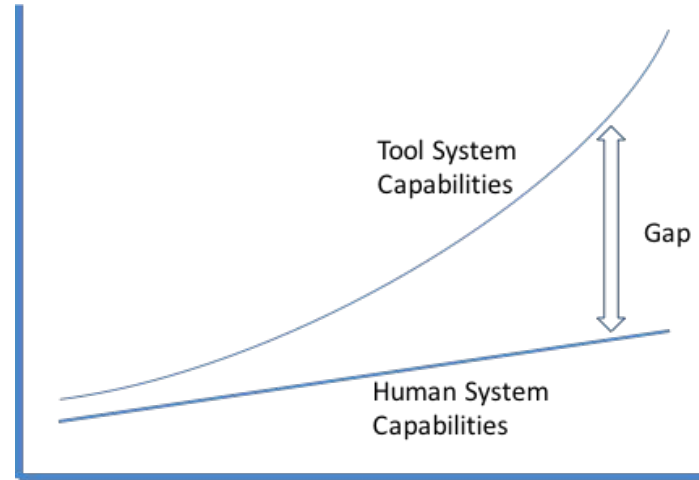
Our approach

We are proposing **a role-playing game** where
teams co-construct
structured conversations.

1. What is a structured conversation?

- Break down ideas into small connected components
  - Easier to combine and reassemble, allowing large-scale collaboration
- Structural constraints make the tree easier to read at a glance
- Adding a component is a "game move"
  - Allows for gamification
- Express components of a conversation using those components:
  - Questions
  - Understanding
  - Proposals
  - Arguments
  - References
 - etc...

A structured conversation: IBIS

- Invented at UC Berkeley to tame conversations which are so complex, they are unsolvable by people in face-to-face conversations such as town hall meetings - they are *wicked* conversations.
- The approach calls for facilitators recording the ongoing conversations (typically shouting matches) in a conversation tree known as a *Dialogue Map*.
- When participants are asked to review the map, they frequently recognize that they actually had some points of agreement (they were too busy shouting to listen to others) and the conversation now has a conversation now has the opportunity to resume with fresh understandings.
  - The *Deep Listening* problem of conversations

IBIS Game Moves

- IBIS Game Moves Include
  - Questions (issues)
  - Answers (positions)
  - Pro Arguments with evidence
  - Con Arguments with evidence
  - Link nodes to online evidence
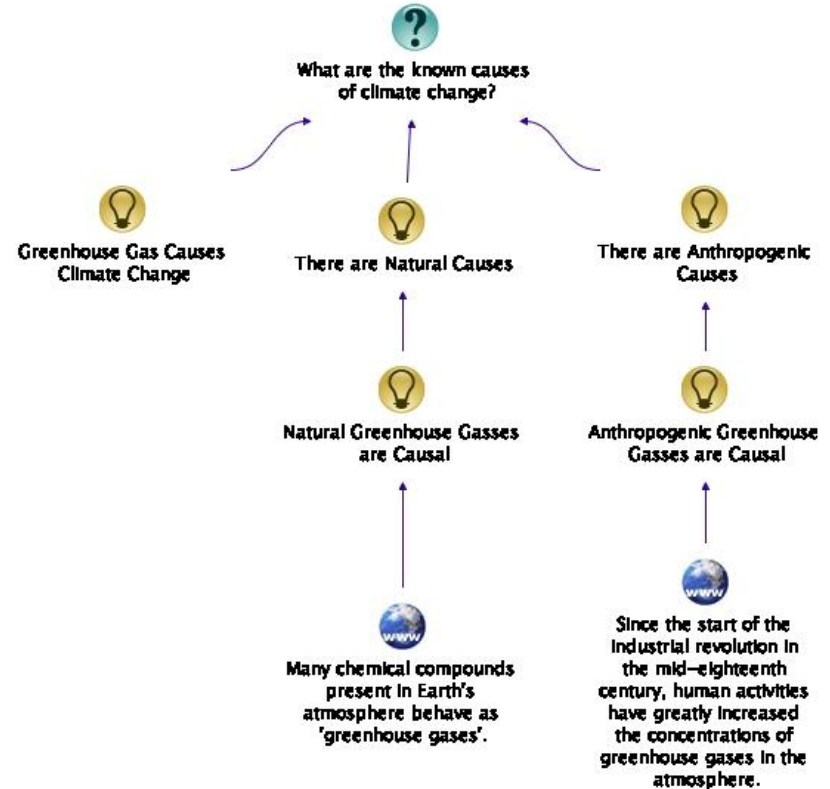
2. Team role-playing games

- Our approach is to adapt important concepts from Massive Multiplayer Online Role Playing games, e.g. World Of Warcraft, to create game-like spaces, rules of engagement, and incentives.
- Teams compete to contribute meaningfully to a shared information space
- Leverage competition dynamics between teams
- Leverage cooperation dynamics within teams
- World of Warcraft provides a model approach to *improving human behaviors and capabilities* in deep, complex, collaborative situations

"I would rather hire a high-level World of Warcraft Player than an MBA from Harvard." -- John Seely-Brown

Who should play?

- Overall, all adults who wish to participate
- In the beginning
  - School children at age levels sufficient to be able to reason about complex issues
    - Typically, high school students
- Eventually
  - An animated 3-d approach which allows younger children to to play the equivalent of *adventure games*

3. Game dynamics around conversations

- A sponsor sets up a Quest, i.e. a shared topic of conversation
- Multiple teams (Guilds) contribute to a shared structured conversation
  - Game moves consists of adding one (or multiple) components to the shared conversation
  - In a shared conversation, teams have to understand other team's contributions
- The guilds' contributions are scored, and guilds develop a reputation according to the quality of their contributions to successive quests
  - Different types of contributions are scored independently, and guild players may specialize for these contribution types, or for overall strategy. Such specializations may be codified into guild roles.
- The result should be a shared deep understanding of the problem space

Game mechanism components

The RPG we want to build consists of

- A Quest
  - A Dialogue Map which is created by *game moves* made by Guilds
- Some Guilds
- Some Guild Members - Avatars
  - Role players
- Game moves
- Scoring mechanisms
- Rules
- Badges and leader boards
- Leveling up
  - The process by which role-players earn badges which, as they accumulate, allow role-players to accept new opportunities and responsibilities
- Game mechanics, Guild social dynamics, and Avatar psychology serve to tame wicked conversations
  - Guilds, in contrast to the IBIS facilitator, are *self facilitating*
- K-Hubs - web portals which host guilds and quests

Possible guild roles

- Leadership
  - Someone has to be responsible for a guild's conduct
  - In the beginning, teachers and librarians could make ideal leaders
- Research
  - There may be several types of research such as
    - Big Picture
    - Supporting Evidence
    - Contrary (challenging) Evidence
      - Prechallenging own game move and defending against that
      - Challenging the game moves of other guilds
- Game move Planning
  - Philosophical
  - Strategy and Tactics
- Scribe
  - Record the *narrative* behind the game moves
- Other

Img: Doc Searls: https://www.flickr.com/photos/docsearls/5500714140

Roles are like Silos with a Purpose

Narratives' role in guild strategy

- Narratives can have *narrative arcs*
  - A beginning and a target
- If a guild takes a particular *worldview* on, say, climate change causality, it writes a story about how it *sees* causality in this context
  - For instance
    - It might take the view (a *Perspective*) that there are two causal actors
      - Natural causes
      - Human-derived (Anthropogenic) causes.
- That perspective sets off a story, a narrative, which describes as much as is knowable to that guild
- That story drives game move planning
- Alterations in that story drive revisions to the game moves

Imaginary Game Play with some Guild Members

- Meet 5 Handles (Avatars)
    - Joe.Islander
    - Yi.Ching
    - Sarah.Pope
    - Rhea.Smith
    - Harriet.Forrier
- Some might indicate gender
- Others might be ambiguous
- Handles do not reflect the actual identity of the individuals
- They will all be playing the *General Research Role* for the *StarLancer Guild*
- None has any previous gaming experience
- A Role Mentor will guide them
    - Required when role players have no experience

The General Research Role

- This role has the characteristics of
    - Gathering *facts* - what is known about
        - Climate
        - Climate Change
        - Climate Impacts
    - But not gathering facts about pros and cons of the situation
        - The Guild has designated those tasks to be served by two other roles
    - All facts gathered must be justified by appropriate documentation
        - In effect, this is a research role
- Rules about research
    - All literature cited in game moves *must be brought into the K-Hub* which is hosting the guild prior to use in the game move - this promotes a *level playing field*
    - Facts may be found
        - Online
        - In the Federation
        - In other game moves
    - Citations will be rated according to some metrics (TBD) of quality

The Quest

Since this imaginary exercise is about *Climate Change*, this will be a *Sensemaking* Quest, one intended to collect all knowable and possibly theoretical *world views* on the situation.

- Being a *sensemaking quest*, the optimal *kind* of quest is
  - One which elicits all knowable ideas and their justifications
  - Avoids restricting the conversation with "*binary* - yes-no" or "which" questions.

What are the known and potential causes of Climate Change?

This Quest

- The quest is posed online and advertised on a particular date
    - Game play is not yet permitted
    - Guilds all over the world see it
        - Some of them decide to enter this quest
        - They immediately begin their research
            - They are already planning how they want to play the game
                - This is like the time in World of Warcraft where they are planning their moves
- The quest is released for game play, say, one week later
    - This is a very short time window - say, one week
    - Quests begin their game move
        - In effect, there is a tiny Theory U in play
            - They did their sensemaking quest during planning
            - Now they are doing their decision making quest during this window, planning and executing their game move.
        - World of Warcraft calls this process a *Raid*
- The game move window closes, for, say, another week
- Rinse and repeat until the Quest owners declare the game has concluded

Day One for the StarLancer Guild

- Theoretically, this occurs on *Guild Formation*
  - Includes
    - Establishing Guild Leadership
    - Recruiting members - say, from a catalog of K-Hub members (handles, not humans) advertising their resumes
      - Many will not yet have resumes of game experience
    - Establishing Guild Structure
    - Establishing Guild Rules
    - Assigning Roles to new members
    - …
- This guild - like others in this concept - uses an IBIS structured conversation tree for its internal conversations, where it plans everything
  - Roles report out their findings to that conversation tree

Day One for the StarLancer's General Research Role

- The Role is now populated with its 5 members and a *Mentor-Role-Leader*
- Mentor begins the process of holding a structured conversation which encourages role players to learn
  - how research is conducted
  - what rules apply to research, such as
    - All resources found by the research *must* be in the K-Hub before it can be used in game moves
    - Duplicating existing resources takes away game points in the scoring process
      - This relates to the problem in most conversations of not *deep listening*
      - This affects the role-player's personal game points, as well as the guild's
    - If a game move used in another quest is brought into the current game, more points are added

Day *N* for StarLancer Guild

- The Quest has been Posted
- StarLancer Guild chooses to enter that quest
- Leadership and certain Roles (e.g. game move planners and scribes) begin to work together to establish a *narrative* and which explains how they wish to make their opening game move
- That narrative - called a *Perspective Document* - is handed to all research roles
- Research roles begin to establish facts and arguments to support the game moves

Day P for StarLancer Guild

- The Quest is now open for the opening game moves
- The General Research Role has produced some facts already
  - It continues to produce more facts
  - Mentor continues to help members refine and improve their capabilities
- The narrative is now refined by game move planners
- The narrative is now updated with planned game moves
- StarLancer leadership (or an assigned role) begins to assemble the planned game moves - made against the Quest's question game node itself - in a special structured conversation space made especially for for the move itself
- All roles continue to refine their processes
  - changes to the proposed game moves (and narrative) might occur
- When the guild decides the game move is ready - typically moments before the window closes - the game move is executed
  - The move itself is appended as one or more *subtrees* to the parent node

Day Q for StarLancer Guild

- The Quest's game move window has closed
- All roles of the StarLancer Guild begin to study the new *game board* - the full, growing game tree of the Quest itself
  - They are now studying all the game moves made by other guilds
    - Some other guild game moves might
      - Improve on this guild's own game move nodes
      - Challenge some of this guild's own game move nodes
  - This is now a period for planning their next game move which can include
    - Improving their own game moves
    - Defending challenges on their own game moves
    - Improving game moves of other guilds
    - Challenging game move of other guilds
    - Revising their own narrative

Day R for StarLancer Guild

- The Quest's game play window has opened again.
  - The process repeats until the Quest Owner declares the game has ended
    - It may be that the Quest specified, e.g. 4 game move windows (raids).

The end result of the game

- At the end of the game, the guild's contributions to the shared structured conversation is scored
- The guild may also craft a narrative based on its contributions (which may receive its own score.)

Immediate benefit: Structured conversation

- At the end of the game, the guilds will have co-created a rich structured conversation, which anybody can consult to deepen their understanding of the many aspects of the root question

Long-term benefits

- Benefits to quest sponsor
    - Diversity of guild's contributions can increase understanding of multi-stakeholder problems
    - Increasing the chances of identifying new solutions requiring a diverse know-how
    - Reducing the incidence rate of failed conversations
- Benefits to society at large
    - Improving Journalism by providing highly polished and curated narratives about matters that matter
    - A testbed that allows to study conversation dynamics, and which strategies improve shared understanding or increase polarization
- Benefits to game players
    - Participants gaining new collaborative skills
    - Participants gaining new perspectives

Motivation - Related Work - WorldCafés

- The closest related work is that of WorldCafés
    - Café tables set for 4-5 live participants
    - A quest is posed
    - Tables have 20 minutes to record their ideas on a paper table cloth.
    - At the end of that period, all but one table participant leave and scatter to other tables
        - There, each table returns to recording ideas on the table cloth
    - The quest runs a certain number of cycles
    - Table maintainers report out their findings at the end of the period..

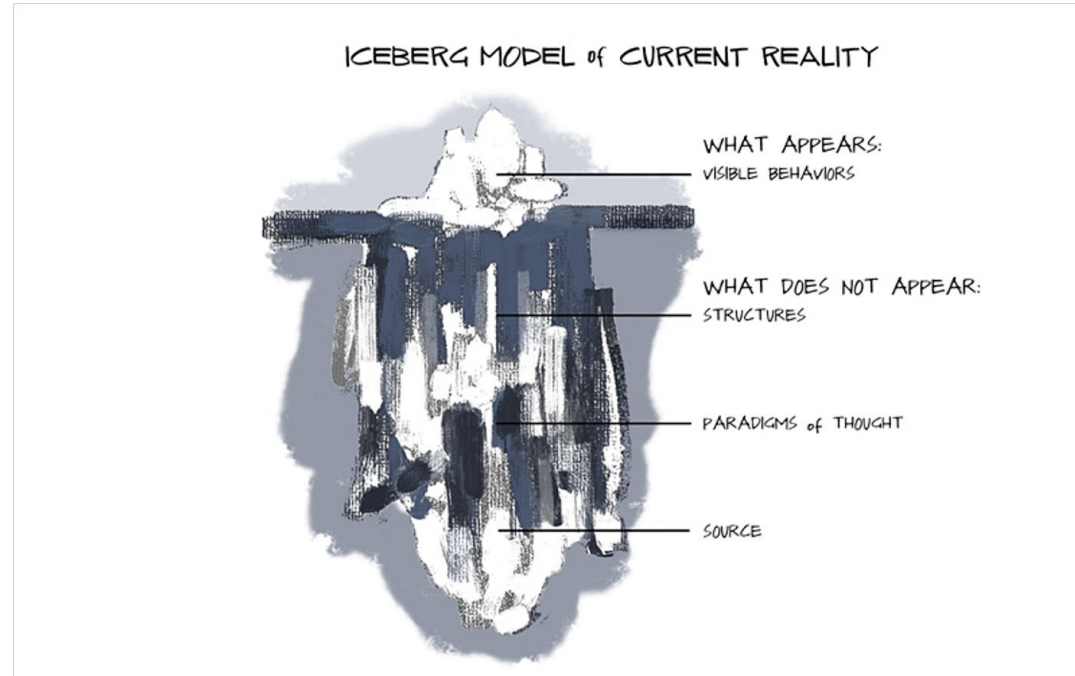# Motivation - Related Work - ForesightEngine / MMOWGLI

Competition

- IFTF's ForesightEngine and its clone as the U.S. Navy's MMOWGLI
    - Quests and structured conversations
        - Centered on predictions rather than shared understanding or action proposals
    - Handles (anonymity) optional
    - Not a role-playing game; more like First-person Shooter - No guilds

Background: Sensemaking Quests

- Sensemaking frequently deals with:
  - Unknowns
  - Controversy
  - Preparing research findings to later support decision making

ICEBERG MODEL of CURRENT REALITY

WHAT APPEARS: VISIBLE BEHAVIORS

WHAT DOES NOT APPEAR: STRUCTURES

PARADIGMS of THOUGHT

SOURCE

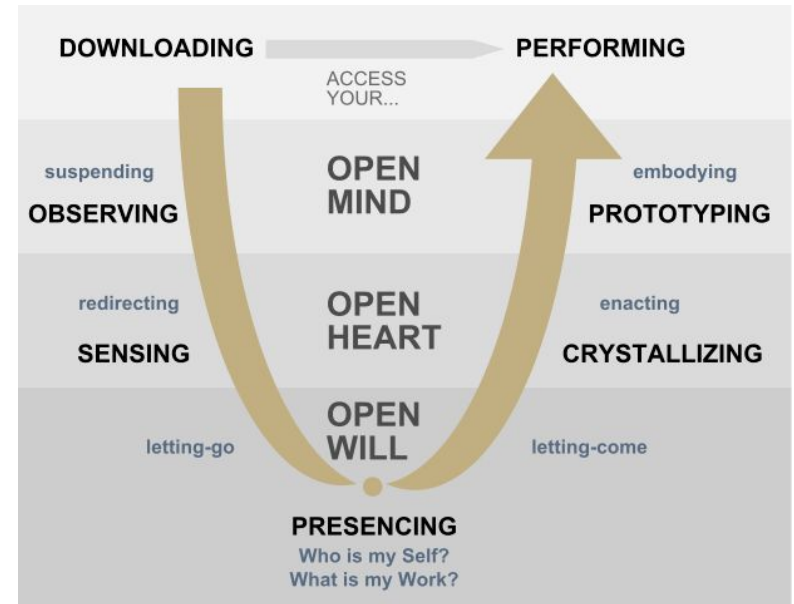Img: https://www.presencing.org/assets/images/aboutus/ego-to-eco/E2E-banner.jpg

Background: On Quests and Theory U

- Primary Quest Types
  - Research to gather information about a complex (wicked) situation - Sensemaking
  - Research to gather information about decision making in the context of what is known about the situation
- Theory U makes it clear that, before one performs decision making
  - All participants are asked to be *present* with the situation before making decisions
    - Present means
      - understanding the situation
      - understanding one's natural biases
  - Thus, two kinds of quests: sensemaking, and decision making

DOWNLOADING → PERFORMING

ACCESS YOUR...

suspending
OBSERVING — **OPEN MIND** — embodying **PROTOTYPING**

redirecting
SENSING — **OPEN HEART** — enacting **CRYSTALLIZING**

OPEN WILL
letting-go — letting-come

PRESENCING
Who is my Self?
What is my Work?

Wikimedia

Background: On Knowing Hubs and Guilds

- Guilds are *hosted* in *Knowing Hubs* (K-Hubs)
  - K-Hubs exist in a larger ecosystem based on a *federation* of many K-Hubs.
  - One K-Hub might host a few, or several hundreds of such Guilds
- A *Federation* (Knowledge Federation) provides many services to each member
  - A complete *topic map* which brings together all of the subjects covered in game moves and research of each guild
  - Artificial intelligence-based augmentation of that topic map
    - Increases research on the many topics in those conversations
- A Topic Map creates *wormholes* among the conversations
  - A quest on some medical condition - cancer, say - can benefit from being exposed to the topics that quest happens to share with other quests

Background: Theory 1

- Conversations need to occur in small groups
  - Dunbar limit (maximum size of stable social structures) used to be ~150 people
    - Now, it's revised down to ~5 people
  - A Guild's *Roles* to play are populated with a Dunbar number of Avatars
    - If you have 50 Guild members, you need 10 *roles* to play
- Games need scoring metrics
  - Scoring metrics apply to
    - The conversation tree of the Quest
    - Guilds
    - Guild members
- Roles need leadership
  - Someone based on personal scores achieved during play
    - Before that can happen, teachers or librarians could be recruited to serve the purpose

Background: Theory 2

- Roles need *Mentors* (coaches)
  - Role leader might serve that purpose
  - Bootstrapping - in the early days of development
    - Teachers and librarians are ideal mentors
  - After bootstrapping
    - Mentors emerge as role-players *level up*
  - In the distance
    - It might be possible to create online *MOOCs* or, e.g. Coursera courses on topics such as
      - Role playing for the different kinds of roles
      - Guild craft
      - Quest design

Background: Theory 3

- Avatars
  - Does not have to be an image, but there are important properties of an image
    - e.g.
      - An avatar that presents the human a bit less *over weight* (think: skin color, etc) than the human, has been documented to make the human more comfortable in game play
        - That's not likely to be an issue in this context
  - Can be a *handle*
    - A name which anonymizes the human
  - Critical purpose
    - Well documented that humans behind avatars are not *identity challenged*
      - It's the *avatar* in game play, not the human
      - Attacks on the avatar are not taken as attacks on the human
      - Humans are motivated to make their avatars important contributors
    - **Goals**
      - **Humans learn to be *ecocentric* contributors while becoming less as *egocentric* contributors.**
      - ***Key to taming conversations*.**

Background: Theory 4

- Narratives - Perspectives
  - All game moves will take some *perspective - lens -* on a situation
    - It might be possible for a Guild to take more than one perspective, and thus, create more than one *narrative* which explains their game moves
      - Experienced guilds might adopt that approach
  - Quests may or may not require such Perspective Documents as the final act of game play
  - Perspectives are created and maintained by the Scribe Role
  - Perspectives are a valuable way for guilds to plan and think about their game moves
  - Perspectives are a valuable way for the public to understand the Quest itself
    - For many people, an *OpEd* in a newspaper is an easier way to dive into some complex issue than wandering all over a possibly massive and confusing conversation tree

Final Observations

- The *Aristotelian Final Cause (purpose)* of this project is to promote *Planetary Thrivability -* not just *sustainability*
- We raise the odds of our goal by *Taming Conversations*
- We do so by engaging far more people than individuals in dealing with ever more complex and urgent global issues such as:
    - Newspaper editorials
    - Politicians
- We do so by engaging as many members of society as possible
- The process allows each participant to *take ownership* of the issues behind each quest
- The process, as John Seely-Brown points out, makes them far more valuable members of society.