

Improving Internet Discussions

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Introduction

Communications in modern society have reached a breaking point. The primary cause of this breakdown is the inability of human brains, refined by evolution for survival in a primitive natural environment, to deal with the complexity of modern technological culture. Humans essentially still have Stone Age Brains. (This is discussed at length in my article [Complexity and Stone Age Brains](#).)

The breakdown is far more serious than most people recognize. When addressing **complex issues**, modern society's ability to investigate and resolve issues has essentially come to a standstill. In world government, for example, it is often referred to as Gridlock. Yet we still see complex issues "debated" all the time on TV and the internet. The major online problem is the use of time-organized "stream of consciousness", post and comment formats. Most people take this format for granted. They think it is the only way it can be done. But it's one of the Internet's major disasters.

This document outlines the depth of the problem and introduces needed elements that have been shown to greatly improve discussion outcomes.

Reasons for a new approach

Why do "stream of consciousness", post and comment discussions fail? To deal with a complex issue, the following communication interaction elements are typically needed:

1. Many subtopics and details need to be included and addressed.
2. The subtopics and details often interrelate in complex, overlapping ways.
3. It takes a lot of time to review all the details.
4. Understanding the details requires involved thinking.
5. Understanding and interpreting the details requires specialized backgrounds.
6. Verifying the accuracy of details often requires references to external sources.
7. Recognizing novel interrelationships among many details requires creative skills.
8. Judging the logical interrelationships of details requires philosophical skills.
9. Recognizing hidden questions or mistakes requires critical thinking skills.
10. Organizing the flow of discussion information requires system skills.
11. Organizing the process of discussion requires management skills.

What tools does the internet provide to address all of these issues during communications? Current formats include: email, chat sites, articles and blogs with comments, forum discussions, and bulletin boards. In short, none of these formats address the elements listed above. All of the current formats are designed to provide

time-oriented, stream-of-consciousness response interactions, which perform poorly for all of the elements listed.

Now, add into the process the wide range of human variability. The internet is aimed at a very wide audience. That brings many different **personalities** and **logistics issues** into the discussion. Because of the large audience, all of these issues can be expected to be present, simultaneously, most the time. These issues include:

Personal Availability

Most participants will not be available all the time. This includes discussion moderators. They can enter and leave the discussion at any time. Some may check in a few minutes a day. Others only once a week. Most users will be pulled away at times for trips, events or to do in-depth research. This means few, if any, will see and follow the full discussion. So, when they reenter the discussion, they will have missed issues, comments, conclusions reached and the give-and-take of the process.

Complex issues often require a lot of reading and research outside of dialog writing time. Participants vary extensively in the amount of time they have or are willing to contribute.

Personal Background

Participants will have extremely different backgrounds. For each subtopic or detail, they will range from expert, to novice, to clueless. They will have a widely varying range of experience, knowledge, and vocabulary about each detail. This means they will each also interpret the dialog differently and contribute in very different ways.

Personal discussion style

Personal styles vary widely in a number of dimensions. For example:

Overview: Some can understand and envision broad issues. They can quickly grasp interactions between proposed point and aim related discussion towards the target issue. They want the discussion to stay focused and avoid issues that detract from the stated objective. Others are driven to deal with narrow elements of any issue put in front of them. They only want to react to the last statements made. They are easily diverted to side issues and comfortable leaving issues incomplete.

Preparation: Some are willing to review previous comments to understand the larger issue. They are willing to do extensive outside research. Others won't commit the time to review past information or do external reading. For very complex issues, discussions may include hundreds or thousands of comments, thereby making it impractical for any participants to review the entire discussion.

Social style: Some are supportive and try to contribute ideas to make another person's view work. Others are critical and like to poke holes in what others say. Some like to resolve debates; others like to stir up debates.

Writing style: Some tend to write long discussions; some write with sound bytes. Some write prolifically based on memory and intuition, even through it may lack adequate research and thought, or overly generalizing issues. Others focus whole articles on very narrow issues, providing bibliographies that exceed the length of the article.

Purpose: Some focus on discussion as group knowledge gathering of vetted content. They believe that statements they make should convey established knowledge. Others see discussion as group exploration; as a way to explore options and alternatives, or to voice intuitive personal opinions. Still others see

discussion as a personal growth activity, and purposely attack issues as a way of indirectly learning the deeper meanings of the issue.

Sense of time: The range of patience and tolerance of people varies widely.

Personal issues are further complicated by process issues:

Error handling: When misinformation enters the discussion, either intentionally or accidentally, it can cause serious problems. Identifying and correcting misinformation is very difficult, especially when an individual internalizes the correction with their personal esteem.

Supposition handling: When new concepts are being investigated, participants may have to propose hypothetical or “straw man” models for debate or discussion. These require participants to create complex visualizations in their minds of what the models look like, how the parts interrelate, and how implementation of the model might affect external environments. Not many people can do this well without support tools like graphics or reference documents.

In most discussions, while the number of users who have stated an interest in the discussion can be large, only a handful of people will be active at any time. Depending on the current participants, all of the discussion variables will change continuously going from one extreme to the other. When extremes of style are involved simultaneously, and the styles are not clearly acknowledged, the discussion can easily ramble and get tangled in personal disputes with users just focused on the latest posts.

The result is that, for complex issues, these formats essentially result in what communications specialists call the “Internet knowledge landfill”. The landfill analogy applies because most discussions fail to reach new conclusions with significant new knowledge. Eventually, the discussion is forgotten and joins the huge pile of earlier posts filling up Iron Mountain’s archive computers that contain so many posts they are almost impossible to access in any practical way. Any gems of wisdom in the posts are essentially lost.

The discussion of issues in society is a very complex topic. All of the problems listed above directly apply. There are few examples of any process on the internet that handles this or any academic topic well. The only format that goes beyond dialog with even moderate success is Wikipedia. But Wikipedia’s moderate success is still a failure for moving important social issues forward because it fails completely to address the many strong disagreements, errors, and misinterpretation in the main stream doctrine.

(This justification for needing a new approach for group discussions is expanded further for topics in physics in my presentations given at the 2016, and 2017 CNPS conferences. Those presentations were captured on video and can be found on the Chappell Natural Philosophy Society Facebook page at: [Nappi 2016 CNPS Presentation](#) and [Nappi 2017 CNPS Presentation](#) .

The A3 Discussion Structure for email discussions

The proposed new A3 Discussion Structure applies to **post and comment or email discussions**. The approach attempts to overcome most of the listed problems. The term **A3** refers to a much larger communications model of which discussions are just one small element. (More information can be found at the [A3 Society](#) website.) Here are its main elements:

A. Goals

The goals for an A3 structured discussion are:

1. Present knowledge related to a specific topic through emails or comment strings.
2. Capture and organize the knowledge to eliminate the limitations of time sequenced discussion.
3. Add wisdom to the knowledge by applying intuitive or expert analysis using structured models.
4. Draw new conclusions that advance the state of knowledge in the world.
5. Capture the knowledge, wisdom and flow of the discussion for future use.

B. Brief overview of the discussion structure

The new discussion structure will consist of the following elements:

1. Q&A: These are the email posts or the comments made for a specific topic post.
2. Tracking and Summarizing: With discussion strings that can exceed 100 comments, and include dozens of sub topics, we need a way to continuously capture significant observations. This will allow new people to enter discussions without having to read through all the previous posts. It will allow active members to easily catch up on missed postings or switch from one subtopic to another.
3. Organizing: The tracked information needs to be organized in a way that the organization can be easily understood and the discussion reviewed.
4. References: Participants come into the discussion at all levels of experience. To bring novices about each topic up the learning curve quickly, we need a veritable encyclopedia of static references that can be referred to. These references are also needed by experts to assure that the discussion is being true to factual material. The references will also include a section for participant graphics.
5. Knowledge and Wisdom Retention: To prevent the wisdom of the discussion from being lost, the “lessons learned” during the discussion process need to be identified and then saved in a structured place.
6. Coordination: What makes a society greater than the sum of its members is the ability of members to work together. Coordination is information that turns individuals into a SYSTEM.
7. Moderation: Is defined as the “avoidance of excess or extreme”. The problem with conventional moderation is that it is subject to interpretation and authoritarianism. A new approach to moderation is used in the A3 Discussion Structure.

C. Details of the A3 Discussion Structure elements

1. Q&A

The comment format of posts and emails currently used for discussion will continue. However, the following new structure would be applied:

- a. The discussion will be started by an **identified author** with a statement of a specific topic and the objective the author is seeking. The author should select and get agreement of a person to be the moderator of the discussion. The author may also be the moderator if they have experience with the A3 method. Both the author and the moderator may participate in the discussion.
- b. The title of the discussion should be short and descriptive of the topic. The title should also include a **suffix** with the following format: -A3:<author last name / moderator last name>. “A3:” tells the reader that this discussion is being conducted using the A3 method.
- c. A post soon after the author post will be made by the moderator. It will affirm the moderators acceptance and that the discussion is being conducted using the A3 Discussion Structure. In that post, instructions

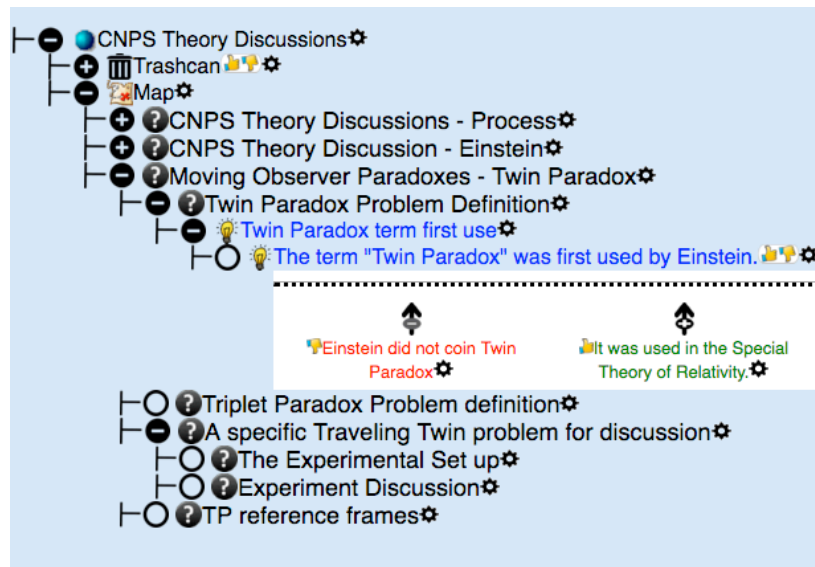
will be provided that describe how participants can find guidance to use the A3 method. It will include things like: a link to this overview document, the Deliberatorium discussion MAP URL, the Deliberatorium User Guide and the discussion REFERENCES. (explained below)

- d. Participants will begin the discussion in the conventional way.
- e. The moderator or moderators will capture **significant** contributions made in **each** comment and add them to software that creates a tree-structured OUTLINE.
- f. The captured material will be ORGANIZED by the discussion moderator.
- g. Participants will be encouraged, and coached by the moderator if needed, to construct each new comment to achieve the following goals:
 1. To respond to a currently posted question or statement, or to start a relevant new thought
 2. To fit within the structure of the Outline
 3. To respect the knowledge already in the Outline
 4. To make a significant contribution to the knowledge of the discussion topic

2. Tracking and Summarizing

One major change to the discussion process is the addition of an Outline. For purposes of this presentation, an outline tool call “The Deliberatorium”, developed by professor Mark Klein at MIT, will be used as a model.

Briefly, the Outline is an on-line software tool that all participants can access for **read-only** interaction through a web browser. The Outline captures all significant information posted in separate but related email discussions, and reformats that information in outline form, which is often referred to as a topic Map. The organization of the outline is directed by the moderator. A screen shot of a section of an earlier Map capturing the discussion of Einstein’s *Theory of Relativity* is shown here.



To understand what has been discussed during the entire history tracked by the Map, a participant would click on any heading of interest (shown in black type). Each heading identifies a branch on the tree structure. That will expand that branch and show comments made in relation to the heading. The software would also track where each comment in the outline came from. The original source comments can then be accessed through a separate viewing panel.

As a short example, consider an email comment that referred to the “Twin Paradox”. The comment made a statement that the phrase “Twin Paradox was first stated in Einstein’s Special Relativity paper.” The Outline has an appropriate heading: Twin Paradox Problem Definition. The moderator (or automated moderation software) would expand the topic heading and enter the comment. In the Map, under “Twin Paradox Problem Definition”, there is a subheading: Twin Paradox term first use in blue type. Under that is the abbreviated statement from the email comment: “Twin Paradox was first used by Einstein”.

For someone who knows the Relativity paper well, they might want to jump in and point out that, in fact, Einstein, himself, never actually used the term “Twin Paradox” in his paper. Notice that there are a number of graphic icons on the Map. These allow things like voting agreement or disagreement, and entering pro and con comments.

Notice, this one tool implements 4 of the 5 original structured goals: 1. Presents topic knowledge; 2. Captures and organizes the knowledge; 3. Adds wisdom by applying structure; and 5. Captures the knowledge, wisdom and flow of the discussion for future use.

3. Organizing

Since the goal of the Outline is organization for clarity and easy indexing, it would be done as a user-wide process. The basic structure would be provided by a moderator. If any person believes an alternate organization for information would be better, they can work with the moderator to move or cross reference the entry. For very complex issues, cross referencing becomes a major process. There are software tools to help with this.

4. References

Participants come into the discussion with all levels of experience. To bring novices to each topic up the learning curve quickly, a veritable encyclopedia of static references should be available that they can refer to. These references are also needed by experts to assure that the discussion is being true to factual material and that primary references are being used. Here are some types of references that should be addressed:

- a. Primary references to both current and historic documents.
- b. Original research data where available.
- c. Encyclopedia summaries like Wikipedia.
- d. Websites with articles.
- e. Summary works that discuss major historical transitions for a topic - like how “science” dropped alchemy.
- f. Graphic material related to topics being discussed.

It’s obvious that most organizations can’t possess all of this material directly. So, a lot of intermediate **annotated** indexes are needed. Note, at the top of the sample Deliberatorium Map above, there is a heading titled, “Theory Discussions – **Process**”. If that section was opened, there was a subheading titled “Reference”. People submitting comments were expected to base their comments on documents that are **traceable** through the reference section. If the reference wasn’t traceable through referenced documents, the comment was expected to include a path of documents that made it traceable. This was the primary method of building the “local” reference list.

5. Knowledge and Wisdom Retention

To prevent the wisdom of the discussion from being lost, the Outline should automatically capture the contributed knowledge and wisdom of new conclusions reached. What may not be obvious is the large

benefit a society with a common interest, like physics, will gain by reuse of portions of Outline created earlier for similar discussions. The sample MAP is a good example. It was originally started to discuss relativity broadly. The Twin Paradox discussion was an extract from a larger Map that directly drew on things previously discussed. This is especially important for novices.

One of the goals of the A3 Structured Discussion effort is to establish “Specialized Knowledge Encyclopedias” for specific topics. They would have 2 parts:

- a. Short **summaries** of most of the critical terms used in the discussions. Included with the summaries would be URL’s that reference more complete explanations.
- b. Since most current “mainstream reference material” - like Wikipedia - ignores the critical thinking that forms the motivation behind current discussions, along with general summaries, the Specialized Knowledge Encyclopedia should include a short discussion of all disagreements that challenge mainstream material.

6. Coordination

What makes a society greater than the sum of its members is the ability of members to work together. “Coordination” means process information that turns individuals into a **system**. With the Outline acting as a “roadmap” for discussions, a good moderator can turn into a good facilitator by pointing out loose ends or special opportunities for action. This guidance should be placed in the “Theory Discussions – Process” section under the subheading “Coordination and Planning” for every Outline.

7. Moderation

Moderation has often been a difficult issue in controlling discussions. A3 research into the root causes of these communications problems found major flaws in the **foundation beliefs** underlying modern society’s most cherished democratic processes. By applying this knowledge to the A3 Discussion Structure, most of the problems seen throughout current society should be eliminated. Let me be specific.

Moderation has traditionally been founded on an **authoritarian** model. The moderator’s role was to pass judgment on what participants could and could not do. With any authoritarian model, conventional moderation is subject to personal bias and intolerance. Society sees this, doesn’t like it, but believes there is no other way to handle it. In this new A3 approach, the **authoritarian hand** in moderation is **broken**. The participants would conduct discussions in one context – the email string - while the substantive information flow is handled in a second – the information Outline. The structure and wording of the Outline is completely transparent to the email participants. The moderation process should be established to give all participants direct “process” corrective input to the Outline. The results are:

- a. Conduct guidelines would still be used. But it is up to the individual participants to learn to moderate their own participation, not the moderator. When a moderator steps in, it should first be done on a personal basis with the guideline offender. If action is taken against the offender, it should be through recommendations to “ignore” the offender.
- b. People who post with abusive language will find it has no bearing on the content that enters the Outline. It should be removed by the moderator.
- c. When differences of opinion occur, in the new approach, it is the moderator’s task to capture **all** opinions in a neutral way, each opinion clearly traced to its source, and scrutinized for traceability to primary references. There is **no longer** any benefit for interpersonal conflict. All that remains is each person’s personal integrity for their statements in the face of much future scrutiny.
- d. While the email string will still appear to be a stream of discussion, that becomes only a small focus of the new process. With the new process, the **primary discussion** is between people with knowledge and

the Outline.

A familiar model for this is the Olympics. Assume runners are competing where the fastest gets a gold medal. For that model, attempting, even through deceit, to slow other runners down seems like a good strategy. This is called **predatory competition**. But, what if the rules are changed. What if only runners who break the existing world record get a gold medal? Furthermore, what if every runner that breaks the existing world record gets a gold medal? If runners don't break the old record, they just get "honorable mention" awards. Then what happens? Deceit no longer has any value. In fact, supporting others to high performance becomes the new goal because that kind of "competition" has been shown to produce better results for all participants. This is called **cooperative competition**. Using the A3 approach, winning interpersonal challenges no longer has any benefit. The only "gold medals" come from moving knowledge forward.

- e. Because the Outline is essentially a self-existing list of questions and challenges, participants can address comments directly to the Outline. If another participant replies in a way that a member feels is abusive, they can simply ignore it and continue posting discussion to the Outline. If other participants reply constructively, they can start working as a group on the new focus issue and ignore any abusive disruption.
- f. Because the moderator is always, and only, viewing the posts as information to grow or reorganize the Outline, it would then be possible to handle multiple subtopics simultaneously. This resolves one of the biggest problems with internet discussions – leap-frog dialog. So participants can direct their posts specifically to specific subtopics, and also to other participants that they feel are **cooperating** with them, forming small subgroups.

NOTE, "cooperating" does not automatically imply **agreeing**! With no disagreement, there won't be any progress. But, again, "winning" only means achieving a knowledge breakthrough. So, finding other participants that a person can work with is the key.

It would be the task of the moderator to steer subtopic discussion back to the main topic. It would also be the job of the moderator to guide participants to sections of the Outline that their subtopic should draw from if they haven't already figured that out.

- g. The skills of the moderator will, of course, be a big factor in how much progress is made. So far, only human moderators are readily available. So mistakes will get made. If any member believes a comment was misplaced or its header does not accurately represent it, etc. here's what they should do:
 1. Send a private message to the moderator explaining the problem.
 2. The moderator is expected to reply with a proposed solution.
 3. If the proposed action is not satisfactory, a follow-up message to that effect should be sent to the moderator. The moderator should then privately contact 3 of the most prolific commenters for that topic focus and ask for their support to resolve the issue.
 4. A new action should be proposed based on the new input.
 5. If the new action is still not satisfactory to both the initiator and the moderator, a summary of the process should be posted to a section of the Outline called, "Unresolved Process Issues". The initiator will then be able to create content for that item that the moderator will apply minimal editing to.

References:

The Deliberatorium is a software application, developed by Mark Klein at the MIT Center for Collective Intelligence. It is aimed at enabling more effective discussion and deliberation about complex problems. A short 10 minute video introduction is available at https://youtu.be/31lpjh_Zsg (The Deliberatorium may no longer be available for public use.)