# Transcript of: "Sensemaking Federation: Exploring the Frontiers of Digital Innovation"

# **Authors**

Jack Park, TopicQuests Foundation, 0000-0002-4356-4928, jackpark@topicquests.org

Marc-Antoine Parent, Conversence, 0000-0003-4159-7678, maparent@conversence.com

Aaditya (Sonny) Bhatia, US Military Academy, 0000-0001-9953-8684

Daniel Friedman, Active Inference Institute & Sensemaking Scenius, 0000-0001-6232-9096

Other Sensemaking Scenius participants

# Abstract:

This transcript comes from an event "Sensemaking Federation: Exploring the Frontiers of Digital Innovation" on December 5, 2024: <a href="https://www.youtube.com/watch?v=5R3VmqrE2Zg">https://www.youtube.com/watch?v=5R3VmqrE2Zg</a>, hosted by the Sensemaking Scenius <a href="https://welcome.scenius.space">https://welcome.scenius.space</a>.

The panel was facilitated by Kristen Pavle and featured Jack Park, Marc-Antoine Parent, Aaditya (Sonny) Bhatia, and Daniel Friedman, as well as other participants at the meeting.

This version of the transcript has been lightly edited for readability. For verbatim quotations, please refer to the original recording.

# Transcript:

# [00:00:00]

Kristen: Cool. Well, welcome everybody. Excited to be here today. Welcome to the Sense Making Scenius's first ever panel discussion with guest speakers. Again, just very excited about this opportunity, which actually came up because Daniel must have talked to Jack. Actually, we haven't really pieced together exactly how it happened, but Daniel and Jack ran into each other somewhere. Jack applied to be in the Scenius. I reached out and he said, "I don't want to be in Telegram." And as we were talking, I kind of realized the expertise that Jack had and how long he'd been working in the sensemaking field. And I asked, "Do you want to maybe speak?" And then it turned and snowballed into this panel discussion.

So we're going to be talking today about Sensemaking Federation and how it looks in the world, what it looks like within sensemaking entities, and then also inter-entities - so connecting between different communities or different style groups. And we'll have a full exploration with Daniel moderating for us.

So before I jump into the format and what we will be kind of flowing through, I'm going to introduce our panelists.

First up is Jack Park. Jack was a software engineer at SRI International on the Calo project, the last project in the DARPA Human Augmentation program. He defended a thesis proposal at the Open University on the subject of augmenting boundary infrastructure for sensemaking. He now works together with others on a quest to establish a global open Sensemaking Federation. Great to have you with us today, Jack.

Marc-Antoine Parent is an independent software architect who has contributed to projects in the fields of collective intelligence, natural language, and data visualization. His formation was in mathematical logic and system science. His current focus is models and protocols for federated knowledge. Great to have you with us today, Marc-Antoine.

Sonny Bhatia is a captain in the U.S. Army and an instructor of computer science at the United States Military Academy at West Point. With a background as a software engineer at Yahoo, Dell, EMC and several startups. His research focuses on structuring and visualizing public discourse using AI techniques including large language models. Welcome Sonny.

And then Daniel, our moderator of the panel discussion and co-facilitator of mine. Daniel is a researcher, artist, and officer at the Active Inference Institute. During his PhD and postdoctoral studies, he studied systems biology and the regulation of collective foraging activity, mainly in harvester ants and honeybees.

And I guess I will introduce myself. I'm Kristen Pavle. I often act as an ethnographic researcher and social designer, and I work in organizational and community systems rooted in biological

principles. So everything I do is pretty organic and emergent. I love creating intimate spaces for dialogue and collaboration like this where we can spark innovation and meaningful connection. So this is right up my alley.

And I think with that I will give us a little bit of a lay of the land for what we're getting into today. So we will have a panel discussion with Marc-Antoine, Jack, and Sonny. Daniel will facilitate that. We've got some prompt questions in our back pocket, but it's going to be a bit freewheeling. We'll see how that goes. And we'll do that for about 45 minutes.

Please - any comments, questions? Let's save them for after the panel discussion, but feel free to drop them in the chat. I'll keep kind of a running list of who's asking what so that we can tackle those when we move into the question and answer and discussion phase of the session. And we will have about 30-45 minutes for that. And that will be your opportunity, if you're comfortable, we'll call you up to ask your question so you can be more in conversation. If you're not comfortable, myself or Daniel will be able to articulate your question on your behalf. So yeah, without further ado,

[00:04:48]

Unknown Participant: I was going to sit down and call these people.

[00:04:51]

Kristen: Okay, let's see who's not muted.

I think we're good for now. We'll keep an eye on that as well. Just a friendly reminder to mute yourself if you're not speaking. Okay. I will pass things over to you, Daniel, to kick us off.

[00:05:15]

Daniel: Yeah, a lot of ways to enter/begin. Jack has a slide. Each of you have things to share. But do any of you just want to start?

[00:05:30]

Jack: So the whole topic is that of knowledge federation in the domain of sensemaking. So I've created one logical slide to set the context of the conversation. It could go anywhere at once, but...

If I have the ability, I will share my screen. Hang on. And... There it is. Okay.

Now this is a vision of an ecosystem and it can go any way you want, but logically it consists of a plurality of federation servers. Now, I refer to them actually as digital public libraries where they maintain an indexed and annotated collection of all of the knowledge artifacts that are created in what my diagram calls K-Hubs. But they're technically epistemic communities of all kinds. As long as they can wire into the federation, they are technically, in my terms, a K-Hub.

Some of the K-hubs will be game-based and they will have a lot of guilds, a plurality of guilds attached to them. So there may be many, many K-Hub servers with guilds. In the image of "World of Warcraft meets global sensemaking."

So I don't want people to panic and say I drew a client-server diagram as that's restricting this game. No, it's not. It's a logical diagram that shows the space itself and what the components are.

And with that I'll stop sharing the screen and just say that I got into this game through something called topic mapping. Topic mapping is a way of creating graphs of knowledge artifacts.

Now, you're all familiar with mind maps and concept maps and topic maps go one step further and that is this:

In a mind map, the arcs between the nodes are unlabeled. It's very much system one thinking. You can quickly make a mind map. You just write some notes and draw lines between them.

Concept maps require a little more thinking because they want you to label the arc. They want you to tell what the relation type is. Now, a topic map allows you to turn the relation between the two topics into its own topic. And there's a reason for that, quite frankly. Every relationship in the universe has a biography. And you need to label, you need to connect that biography to the relationship. Every relationship in the universe can be contested.

So you really do want a high powered diagram that allows you to create a roadmap among all of the topics, all of the relationships, and the debates among them.

So that was the basis for Knowledge Federation - we can do it by taking human artifacts of knowledge from blog posts, from PubMed, text, whatever, and create them into a topic map. Now Marc-Antoine will show you how we've gone way beyond that, but that's the core and I will stop there.

#### [00:09:51]

Marc-Antoine: Yes, let me get a bit into it. So yes, <u>SenseCraft</u> is very much inspired by World of Warcraft. It's a thing. It's very early days for the software. We're definitely still brainstorming how it should work.

What we're trying to make it is into a game to help people practice the skills of deep listening, making ideas more rigorous, synthesizing one another's positions. So that way it's supposed to be a competitive game because you're trying to hone your skills, but also a cooperative game because it is about who manages to combine the ideas of all the teams in the most positive and constructive way.

So the idea of federation - and I want to step back a bit - it's very much: OK, we want to federate meaning. What is meaning, how does it work? Understanding is obviously difficult.

I had worked on a major collective intelligence tool called Assembl. I have my fork called <a href="LdeaLoom">LdeaLoom</a>. And then I decided to totally move beyond that up to a point in that - we are trying - there's so many opportunities for misunderstandings between people. And if we want to do better at thinking in teams than individuals - when we have a shared goal, there's actually research on that. But in a bigger number of people, you get basically a cacophony of voices and very little cross understanding.

One of the reasons is: we don't know what we're talking about most of the time. Because there's not enough - the language is ambiguous, we think we agree, we don't really, or we use different words to speak about the same thing. So these are problems with language. And language is not quote unquote "composable". They're not legal bricks.

We can do composition in software, we can do composition in data, but not so far in meaning and the basic ideas. Knowledge is not data bricks, it's not words. These are all things we use to point to ideas. And ideas are - we don't necessarily even - the idea is not necessarily even that clear in our head, when we're trying to communicate.

We're using language to triangulate together and negotiate. "Oh, I think we're speaking about the same thing." And in doing so, usually the idea changes in our own mind as we're trying to communicate it. So this - if we have these knowledge hubs, islands of epistemic communities that have done their internal knowledge negotiation - how do we negotiate across the epistemic communities? And that's really the problem.

Jack told me about topic maps, which is one way of negotiating knowledge. And it got me thinking about this and I just want quickly to give where I'm at in this meaning. It doesn't mean I have the answer, but I think there's - there's a there there. very much.

[Using these slides]

Is it knowledge graphs? Is it RDF? But all of those are still - and it's true of what I'll show as well - they're still formalizations of a snapshot of knowledge. And what we want is a way to represent very evolving knowledge.

What I'm proposing - for a long while I spent time actually thinking about recursive knowledge graphs and hyperknowledge - sorry, hypergraphs. Recursive hypergraphs.

Because it is important when you're negotiating meaning to be able to point to different representations of knowledge and say, well, this part corresponds to this part and this part corresponds to this part. And that means making a link to a link, which you cannot do in a traditional graph. And this is what I mean by recursive hypergraph. There's no good tooling for that. RDF STAR is starting to get there, but it's still early days.

And then I decided, let's simplify this. So now what I'm proposing is frames as unit of knowledge. Now, you may know frames from Minsky. It was basically a structure - think of up to

a point of adjacent, in the sense you have a structure with slots with key-value pairs. But the slot could have more information, could have constraints, could have default values, could have a lot of things. So basically it's a schema language.

But the reality is: Minsky took it from Fillmore's linguistic action frames. And frames exist at many levels. Like linguistic action frames is, you know, "John gives a ball to Mary." That's the giving linguistic action frame. It's very simple. It's already ternary. RDF is just binary links - it's not quite good enough to capture that.

So Marvin Minsky had these structures, and I'm saying they need to be recursive. Lakoff went also into metaphorical frames, how our linguistic frames are based on embodied metaphors. Walton speaks a lot about argumentation schemes and these are basically frames of reasoning.

And what is really interesting about the way Walton does frames is he has critical questions. For example, argument of authority is not necessarily bad or necessarily good. It's a heuristic. It can be - if the authority is the best authority, it's perfectly valid to point to that rather than go through the whole reasoning, which may take time. However, there are situations where you should not just rely on the authority when it's contested within the field and so on.

So the critical question then is somebody else with the same expertise contesting that idea. Each reasoning has its own points of weakness. And I didn't put it in that slide and I regret it sincerely since this is published so I won't change it - think of design patterns. For those of you who remember the Gang of Four design patterns. Each pattern had forces about when is this pattern a good idea to use or not.

And I think it's really interesting to think about frames as having inherent the notion that it could be part of other frames that contradict it. And I really want to get you to think about frames as having levels. So argumentation schemes are higher level than linguistic action frames because you go from - you can say, for example, this action is a reason why I think this person is a bad person. And I could use the argument of morality arguments, for example, which is an argumentation scheme.

George Kelly, I'm less familiar with. Jack brought this to my attention. But it's the idea that we all have our own theories of the world that we're testing all the time. And in a way this is being extended... There are new ways this is being extended... we're all Bayesian machines, right?

Goffman thought of frames, dramaturgic frames. Very interesting research about how we all have a scenography to justify our actions. And Lakoff came back actually and spoke about the political framing of his frame lab work. And again, this is within the presentation of self to others that justifies our action.

But these are at different layers. And this is why I insist on nesting. Each frame contains subframes. When I say "Jack gave a ball to Mary" to go to the tiniest level - well, this actually contains a frame that Jack used to own the ball and Mary now has the ball. And it could be part

of for example a selling transaction or a corruption transaction. If it's something a bit more important than a ball, this giving frame could be embedded in other frames. And once you have contained embedded frames then you can put it into a story and a rationale.

So nesting frames I think is both familiar to our mind and its structures. They're frames, they're schemas. We know how to do schemas in computer science. And I think it's one way at least to express this missing link between the informal knowledge of stories, and the formal knowledge of data.

And it's really what I want to propose - that if we're going to federate, we should be able to federate across storytelling and data because we each have a data representation that is our own community's data representation. But we all have stories that are easier to understand one another with. I mean not everybody is trying to use data and I think it's really important to be able to create that literacy for "Can I view this as a story? Can I view this as something more formal, rigorous?"

And this is where I want to bring SenseCraft to get people to practice getting their ideas into data, knowing that there's no one data that totally solves, accounts for the whole situation. And people should be able to just say "Oh, I think this scheme would work better" and make it up on the fly. It doesn't matter because it's made of these sub-schemes that we may still have in common and we can embed it into another scheme and see how that goes. So it's still something that can be exchanged and talked about between us, but allows for cross reference.

Now when we say cross reference there's so much more to say and I don't want to take all the time. [...].

One thing that's really important is the ambiguity of language. I spoke about it. So indirection is key in computer science. We need to be able to say "Well this is my understanding of this at this point." And then at some point I'll realize "Oh, this was ambiguous to this person. Some people understood it this way, that or that way." And this is the critical distinguishing question that says whether it's this meaning or that meaning.

So the knowledge object at time *t* that says "This is my description of my understanding of this concept" should, if I access it, have "Oh, by the way, this is now obsolete. There's a distinguishing question and two branches." And whenever whoever used this concept should think about "Was I using it in this sense or in that sense?" And the notion of forking meaning as a way to - and there is a kind of update cascade there, but I think it's a very healthy update cascade to reduce ambiguity in the federation. And of course same with merge.

So this is something else I'm proposing as part of the nitty gritty mechanism of federating knowledge. How do we do it? We need to have representations for it. These representations have to be sensitive to concept evolution because concepts always evolve, they're always negotiated and sometimes they fork and merge in unpredictable ways. So this is where I'm at in my thinking. How do we federate knowledge?

Sorry, I'm being extremely precise in the details, but I think those details matter. Over.

[00:22:03]

Daniel: Thank you. Sonny, what does this bring up for you?

[00:22:10]

Sonny: So from my perspective, the biggest thing is that critical thinking is desperately needed in schools and colleges. So I'm teaching right now. And the biggest problem we're having is that AI is being used to do everything, and that's being pushed too far. So a tool along the lines of SenseCraft, or something along those lines, would be wonderful to get students to actually participate in real-time activities and deliberate and think about things. AI is okay as long as students understand what it's generating and what they're using coming out of it. But other than that, a lot of the critical thinking is getting lost in the AI tools that make a lot of work very easy but also really plummet the quality of things. So that's the challenge I'm facing right now. I'm happy to continue talking about it in detail, but I'll pause here for now.

[00:23:15]

Daniel: What is being federated and what is being done? How does what is being passed support what different communities and different fractal layers will be doing?

And where is it at as it is, and where do you see it, using these structures?

[00:23:52]

Marc-Antoine: As it is, there is a lot of work on sharing data. And, for example, I'm a big fan of the Ink and Switch Cambrian platform which is basically using data lenses for JSON.

It's useful to translate between JSON, but I think it's important to go beyond translating data which is inert structure and translate it, go towards what is the semantic interpretation of that data and accept that there's always many interpretations.

Even when we're ultra precise with RDF, we are kind of agreeing that this reference resource corresponds to that real world or mental world entity. And this is what we need to - this is really what teaching is about up to a point. What do these words refer to? What are we talking about? How does it feel to work with these things?

And that way that's another point actually totally away from data. It has to become an experience. What I love about the <u>SenseCraft</u> project, why Jack brought me into it - the guilds are very much like old style learning guilds. They should be, you know, it's a place where you learn from shared practice and you used to be a journeyman, apprentice, journeyman, and master on your trade, on your guild's trade.

And I think knowledge craft or SenseCraft... Sensemaking craft is also something that we need to hone our experience at, and this is something we'll do in communities.

# [00:25:43]

Sonny: Fascinating. So I'm watching the chat explode. There's a lot of questions popping up. It's actually definitive track. So we could pick one of those questions and talk about that potentially.

#### [00:25:54]

Daniel: That's the comical microcosm with the linearity and the turn taking and synchrony, the human being and the forking and branching paths of decentralized or asynchronous or simultaneous systems. And what is our own attentional thread and experience and wellbeing, and how do we have that? Are we just building a factory? And so... Being a factory engineer is different than designing a party for people to go to. So what are these... You can pick a question in the chat if you find an exciting one or I can ask one too.

But I always return to this dialectic or tension between the synchronous continuous first person experience that individuals have and then a sort of ecosystemic at some horizon or scale more niche modification-like process where there's more books in the library than anyone will read and all these sorts of things. And so what guides and shapes that's the sensemaking, as opposed to just the federation being or something like that, just the information environments. But if we don't also hold up that first person experience for humans in their different situations and for non-human situations as well, then what is it even built for? That's just a Dungeons and Dragons speculation... Marc-Antoine?

# [00:27:43]

Marc-Antoine: These are great questions, I am not sure we will address them all. I saw, going through the chat, you wrote "Ambiguity in Language not as a hinderance, as a Golden Thread"". I think that's related to what we are saying right now, if I am not mistaken.

My answer was, it is going to be rhythmic. Ambiguous language allows economy and bridging. Sometimes you need to narrow down what we are saying when it is the same thing, other times we need to narrow down the "we might be talking about the same thing, maybe not". You need the exploration. So it is always an expansion-contraction of meaning.

To what you are saying just now, the rhythmicity in the joint interactions, the collective interactions, and across generations. The big big question is, transmission is more difficult than ever before. Because, with the speeding up of the technical and cultural... culture and civilization, it is more and more hard for the younger generation to see the relevance of the experience of previous generations. We need to be able to see both, what can be transmitted and what has become obsolete, because some have.

Sensemaking is always going to be exploration, and crystallization. But it will be so much more efficient, if we can have access to, across communities, to a shared pool of knowledge. Right now, so much knowledge is being lost by isolated experiments. And people trying things out, failing, but there is learning there, which is usually forgotten and that is terrible.

[00:29:44]

Daniel: Where do you see trust, in all of this?

[00:29:49]

Marc-Antoine: Anyone wants to take this first? I am talking a lot...

[00:29:53]

Sonny: I can give it a shot.

Trust is very tricky, it depends on how much control we have over the organizations that are federating in the first place.

I happen to work in organizations, where there is a benevolent dictator that drives everything ultimately. So there is a final decision authority. So with that, when you have sub-organizations trying to collaborate or work together, trust is pretty much given. It's a lot easier to establish trust, when you already have a set of protocols and you know how everyone is going to act. And there is a moderating factor, there as well.

But when that's not present, it completely changes the landscape. In the case of communities that are ad hoc and just working together, just groups coming together, trust has to be built, it takes a lot of time and effort. That is one of the first obstacles to overcome.

A great parallel would be, a lot of these new decentralized social media platforms, like Mastodon, where you can create your own server and start publishing content. But that content is only as good as the trust you've established in the system. So if others trust you enough, they'll follow your feed. You will actually get the content out there. If not, it is just pure personal syndication that may or may not get out there. I think that's drawing a parallel to how we federate knowledge.

[00:31:27]

Jack: I chose to use the game platform, in 2010, right after defending a thesis proposal, when a professor from Carnegie-Mellon West asked the question, "How can we have civil conversations online about politics?".,

My answer was, World of Warcraft plus Global Sensemaking. And I want to explain why. This is critical to this thing called trust.

When you are talking politics, you've got a number of dimensions in play, most happen to be personal identity related. I have my opinions and you have yours, and I'm right and you're wrong, and there's nothing you can do to prove me right, blah blah, and it goes on and on.

A second dimension is this: if I make a comment, in a public space like this, and someone opens fire on me, I need the trust that's not going to happen. I need to feel comfortable speaking my mind.

What we really want, in a World of Sensemaking, is a complete plurality of worldviews. And their justifications. And we want them in front of us, well-organized, so that we can each make our own decisions based upon what we see, what we've studied, and how we feel about it, how we relate to it.

Now, if you go to Theory U - Theory U says you do the sensemaking before the decision making. But Theory U also instructs you to be present with yourself - your biases, your angst, your feelings, your aspirations as you hit the bottom of the U before you climb the other side and start doing the decision making.

So, the idea of SenseCraft, grew out of this idea that the guilds in World of Warcraft provide a social environment where you are hidden behind an avatar. Now, this isn't the whole story, but there's a lot of scholarship on what happens when people are behind avatars. And so the idea is as you are moving them away from an ego-centric... or you're moving them away from their personal identity to the ecology and the eco of the system itself. That is to say, they are becoming a part of the guild. The guild is a place where you learn a skill, you level up, you get rewards for it, and eventually you can take on new skills, new activities.

In SenseCraft, you can level up all the way to being a guild leader. And once you're a guild leader, you can create your own guilds, you can do things your way. But the point of this is that inside of a guild, you can feel comfortable that nobody's going to slam you for your worldview. You get to articulate it, you get to be heard. And everybody does want to be heard. So the federation allows, in theory, everybody to be heard. That's the basis of what the SenseCraft vision was about.

# [00:35:13]

Marc-Antoine: I'll add a bit to that last point because I think it's primordial. There's the trust of, do you trust the person not to lie to you, to know what they're talking about? And I think there's been a lot of great work on, for example, evaluating the quality of expertise. I'm thinking of Tetlock's work on forecasters where he can evaluate people's forecasting ability numerically. And I think people having forecasting scores, sensemaking scores, synthesis scores - these are all scores you'd want to be able to carry with you.

But what Jack was just saying was about the other side of trust. Can I express a half-baked idea and trust that I won't be pounced on for it? And I think it's very important to be able to do that. Ideas need this kind of hidden composting time. Nora Bateson speaks of <u>Aphanopoiesis</u>, for this notion that the idea needs to stay a bit hidden before it emerges more fully formed. And you need to have people you can go to say "I have this idea, it may be totally stupid but let's work through it together." And that's another form of trust.

So there's the evaluation to the public, and that's really important. At some point you want to meet reality. But at some point, no, you want to stay in ambiguity and exploration and trust that you're allowed to be wrong. So both are important. It's a balancing act and this is why also I

think the guild federation by fractal groups is really important. You need to be able to let something percolate in a smaller trusted group before you move it on. But I think it is also important to be ready to say, OK this is ready to expose it, and be ready to expose the full reasoning that was there. It makes you more trustworthy, because you are exposing what is actually your decision basis.

One crazy application I thought of, of having everyone's reasoning be made into explicit structures, was: think of a ISO-9000 for how I make decisions. Then if two companies were to do a joint venture, do they trust that the other company won't double-cross them? Well, the whole rationale for any action is visible and exposed to the partner, then you could have trust. This is a bit ridiculously crazy and out of there.

But on the other hand, I think, in terms of global world governance, we would like, any governance decision, to have a chain of rationale. That anybody could contribute to. Radical transparency is what we should ask for, at the political level. And that's... that may be a real Utopian...

# [00:38:24]

Daniel: Let me ask a question and a half from the chat. Artem wrote: "Can you talk more about the ontology of sensemaking? I guess it includes knowledge management, games, mapping, deliberation and other stuff.

And I append: how has that come to be seen as different and itself changed in the digitalization over the decades, and organizations that are hundreds of years old?"

# [00:38:52]

Jack: So first of all, let me respectfully criticize the premise. There is no "the" ontology for sensemaking. The ontology community has for years tried to invent the upper ontology that would satisfy all the universe. It's not happening. Because we all have worldviews and ways of expressing them. So what we look at is a plurality of ontologies that are engaged in the sensemaking ecosystem.

I'll give you an example. Knowledge management is a part of that. That's where topic mapping came in, for example. The structured conversation platform that we use in SenseCraft is called IBIS - Issue Based Information Systems. It gives pretty good Google and it has its own ontology, its own node types. In a conversation there are questions, there are answers and there are pro and con arguments, just to name a few. And then the arcs between them define exactly how those nodes are used. And there's an ontology for the relations.

In SenseCraft, it really is a concept map. The arcs are labeled, but they aren't visible. They're there, but they don't show. We then read SenseCraft out into harvesting tools such as my OpenSherlock platform and <a href="https://example.com/hyperKnowledge">https://example.com/hyperKnowledge</a> and all of these others. And we then create the topic maps or the knowledge structures that Marc-Antoine talks about. So there are many, many different kinds of ontologies in this space and I don't think we can name them all today.

# [00:41:01]

Marc-Antoine: Yes, sorry, I do want to say more about this. As I said, it's multilayered. Some of the basic ontologies are obvious when we're speaking about, for example causality. When we're speaking about arguments we're speaking about, it is a kind of epistemic layer. I used to speak very much, a bit less now. But there's the causal layer: if we do this, what will happen? There's prediction, markets and so on. There's the epistemic, what is the evidence for this? And then there's all the multiple evaluation criteria you might apply to any consequence of any decision. That's the basic level of the governance epistemology. And of course then you have the other kind of part of that's classic.

But what I think is really important is interpretation is a fundamental. You know, this person said this is how I got it. This person did this. This is what I think their motivations are. The whole intersubjectivity is a fundamental part of human thought. We keep evaluating and being able to... Okay, I think insisting too much on "this person did this because whatever" it can get into name calling very quickly and I don't think that's healthy. But being able to abstract that and say what are the possible consequences of this action and could it be part of a strategy of self serving strategy and imagine again what are the likely outcomes. And having the conversation about the outcomes is I think extremely important to be able to have the community sensemaking of why are we doing what we're doing. And that's part of the ontology.

[00:43:04]

Daniel: Thank you, Sonny.

[00:43:08]

Sonny: I think Jack and Marc-Antoine covered it pretty well.

[00:43:14]

Kristen: Kristen, where does this take you?

[00:43:22]

Kristen: I've been immersed in the chat. To be honest, there's a lot going on. Do we want to open the floor up now and bring in more voices? Does it feel like a good time?

[00:43:35]

Daniel: Yeah. Also I hope that we'll have fun follow ups. So whoever in Scenius, or beyond would like to collaborate. I'm just thinking of a two column layout with the transcript and the chat because it can only be interpreted alone so much and then there's several direct cross references and several indirect cross references and we've all... There's so many other pieces and footnotes we could bring in and other things that I know that we could ask about sort of as a, you know, not a proof of concept but an imperfect presentation of concepts in progress.

[00:44:25]

Sonny: Are you recognizing, are you proposing developing a tool for that?

[00:44:33]

Daniel: We may have what we need. We may find some gaps that we can build into.

[00:44:40]

Sonny: I'm all about it because tool building and problem solving is what I really care about. So I think yeah, I'm all in.

[00:44:47]

Daniel: And there's enough transcripts of meetings and chat logs and maybe there's stuff out there and that's sort of the discovery that we always delight in Scenius, somebody brings something random up and then it's whether they know a link or whether somebody's working on something relevant just right there or whether it's a co-adjacency so perhaps in the chat or Kristen, however you like.

[00:45:50]

Marc-Antoine:One thing I am trying to do, right now as a first brick of this architecture is something that can take natural language and one frame description and say okay, how would you fit that conversation in that frame? How much does it, how well does it fit? And as a way to attempt extracting sensemaking from natural language. Let's see where I get with that. That's my next step. Somebody mentioned Artem's facilitation protocol. I think I want to hear more about this.

[00:46:03]

Kristen: Yeah, Artem, do you want to unmute?

[00:46:10]

Artem: Yeah, sure. Thank you very much. I wasn't expecting that you would give me the microphone. But yeah, I'm super interested in this idea of basically protocolizing something the pattern language of facilitation. What are the common techniques or maybe the building blocks that enable a group of people to find common meaning? Can you turn that into a protocol that could be used by different tools, products? And can we try to do this together? Basically an open source project.

[00:47:13]

Marc-Antoine: Interesting. I don't know if facilitation has been made into a pattern language. Is anybody aware of that? I've studied a lot of facilitation techniques because consensus is what I'm looking at. And some of it is indeed the communication choreography. And there's a lot of patterns.

But at some point you need to step away from the communication choreography and look into people choosing and synthesizing. And I think this is still better done by humans. Though of course, AI can have suggestions. But yes, I agree that the communication choreography is

something that is being encoded by a lot of people. And there's certainly space for more in that space. Remembering an old effort in that direction. Anyway, sorry, I should try to find it.

[00:48:14]

Daniel: As with so many rocks we turn over, there's this balance or two eyes open, with the space of the possible, which semantically is somewhat unbounded. And then the particulars that a given group and relationships engage in, like having the biggest recipe book in the world doesn't make one meal. Having all these facilitation patterns is not one meeting.

[00:48:40] Kristen: Yep.

#### [00:48:41]

Daniel: And as you think at higher orders of sensemaking and message passing and deeper time and all of that, and the space of plausible meanings to be included expands in a way that we already know, we don't know. And then that confronted with the finiteness of our hard drives and attention and all of that, and then that kind of just brings it all crashing or landing back to earth, with people's implicit or tacit skills or feelings with how they choose to facilitate in a moment. Or, what comment you annotate on the paper. But then we know that at certain scale you would need to have flexible meta/post-ontologies for paper annotation and all these other kinds of externalizations.

But again, what is the purpose of that meta factory specification if people just confront the artifact and don't feel that their voice is going to matter or that they have something to say or ask?

#### [00:50:03]

Kristen: Yeah, I think this is a really interesting topic. I'm a facilitator and I'm in a facilitation commons and we were just talking about, apropos of this meeting, the nature of how context will change how you're facilitating. So even in the process of organizing and holding the space for this call, it's so different than being in a physical room with people because of the technology and so this tool as an extension or augment to human abilities.

And then I was posing to the facilitation group, is this technical facilitator? Someone suggested could there be a technical role for someone to help you drive the machine so that you can just attune to like the human felt sense of what's going on? And I liked that idea of a technical facilitator.

And at first there's this pushback, but that's not a facilitator. And I reflected, well, but isn't it in a technical and a digital milieu? It is, they are. And she kind of backed off, saying, oh, you're right. There is an attentiveness and responsiveness and then an ability to manipulate and change the field. So I think it's fascinating thinking about context and specifically digital context and then digital tooling and then AI and all of that.

# [00:51:34]

Daniel: Great comments. Yes, Artem. And then anyone else with their hand raised.

# [00:51:43]

Artem: Yeah, sure. I know that both Jack and Marc-Antoine are already on the MetaGov community and probably some of you as well. And I just wanted to let you know that this is something that I've started discussing with Joshua Tan, one of the co-founders of MetaGov. So basically this could be one of the new projects of MetaGov and I would like to use this opportunity to invite everyone on this call to collaborate on this. If you want to do this, you know, to use MetaGov as the partner. Maybe.

# [00:52:26]

Marc-Antoine: There was someone in the metagov community at some point. Jack was in that conversation. Who was saying oh, we'll stay with the people we have now or we'll look for the solutions we have now. And we were both actually very surprised. Of course it might be just one person, but I was a bit surprised and disappointed.

It's a big, big problem. There's so many communities interested in collective intelligence who seem to not come together. There's something ridiculous happening there.

## [00:53:09]

Daniel: There's more insect species that did not become obligately eusocial than lineages that did, same as multicellularity. And so as we develop these really expressive analytical and technical frameworks for bottom up and top down and just conceptually it just seems right there, yet it's a delicate co-evolutionary dance. And how, for example, just in the sensemaking setting and to Francisco's comment too about MetaGov and things like that - how to have there be a source, energy and a generativity on the bottom up. And it's hard enough to get people to read short messages, let alone a book. There isn't some top down crane that can show up and stimulate authentic relationships or novel contributions and innovation or even just meaningful engagement with a scientific paper - "If only we just had a stronger top down hand, you know, a softer glove around the iron fist, then maybe people would be more creative in their sensemaking". So how to really hold with all of that when it can feel both a far off luxury but also kind of like a rate limiter or a blocker in a really disastrous situation at the same time.

#### [00:55:55]

Jack: On the MetaGov Slack, if you search for herding cats, you'll find my comment. Somebody was concerned that it didn't seem like we're gelling. And I said fundamentally, overachievers like all of us are cats and somebody needs to herd us. And we don't really have the meow mix yet that does that.

#### [00:55:33]

Daniel: But the algorithmic catnip, it's the landscape.

# [00:55:39]

Jack: I tend to think that it's going to include LLMs, but I'm going to be bold here, and say it is also going to include Bayesian Active Inference. I don't think that we have the whole story when we turn our minds over to LLMs. I don't think we're making a real step forward when we do that. I think we really do need to find the cognitive architecture that allows computers to be the mental prosthesis, if you'll forgive my French, the Viagra for brains. That changes the way humans work. And I think we can do it. MetaGov is going to be a part of it. I don't think they'll be the whole story. CDL is trying to be a part of it. Jerry Mikalski's tribe, Open Global Mind, is trying to be a part of it. Again, it's all about a bazillion cats and we don't yet have that algorithmic catnip. Daniel, let's patent that name or something.

#### [00:56:55]

Daniel: It has trusting connections with seeking relevance realization, salience, all of those kinds of things. Re-understandings of dopamine and of reward. Moving to precision and ambiguity rather than maximizing utility. Opening to the epistemic, what that really takes and gives and how that is kind of partially, sometimes aligned with legacy measures. And then how there's a yearning and at least a preparation we hope for what could be outside of that.

Perhaps, anyone who raises their hand, or...

# [00:57:49]

Kristen: I have a couple jumping off points. There's a few interesting comments, but two big threads. One about AI tools augmenting our critical thinking versus making us or drawing us towards bullshit. So this movement - can we look at AI tools as a way of moving towards wisdom and collective intelligence instead of this reductive move towards social media, what we've seen before. So we can bring that into the field. And I might bring Tom up and Shahar, because Shahar had a comment here as well about: "Does using LLM services like ChatGPT defederate meaning?". So we could use this as a launch pad, I think this arena is interesting. So, Tom and Shahar, if you have anything else you'd like to chime in, please feel free.

# [00:58:53]

Thomas: I could make a... Someone had mentioned AI, and so what came up was, sort of the worst case scenario where AI does the same thing to our reasoning capacity, as what "social media" did to our being social. It debrades the process, as opposed to enhancing it. That was kind of my thinking, which is my question. At this very moment, I am in a very cynical mood.

The other thing that came up for me, when Jack was talking was, which might lay this up in a slightly different direction, still on topic about AI is - because it seems like it should be, could be, great addition to the facilitation process, potential with all the issues that come with that, bias and so on.

There is an enhancer of human capacity, where does AI fit into the sort of transpersonal nature of our humanity and who we are? And it clearly has an application from our sort of pure rational cognitive enhancement capacity, left brain stuff. But where does it interact with and enhance

without or potentially degrade the right brain transpersonal aspects of who we are? Small question

#### [1:00:33]

Marc-Antoine: Small question. Let me see a bit. I think first, I'm both among AI users and I think there's definitely a role for AI and among the AI skeptics, I think AI has been overhyped. But let's be more concrete.

AI, in its generative AI, let's be specific, is a black box. And I think there's something very dangerous about using AI to take decisions, governance decisions, to be implicated in governance. That said, it's because for me, what's important to us humans as social animals is to be able to be heard. We said be heard, have the conversation. And I think it's important for that reason that we understand the reason. And there's perfectly a good role for AI to come up with explanations. Now when AI introspects, it confabulates, but humans do that too. So it's not that important that AI has a good accurate introspection analysis. It's important that it comes up with discussable reasons for any decision, and that we don't use the AI to take the decision, but to give us the elements so we can take the decision.

And there I totally see a point. Let's use the black box to create the white box. It has to be a white box in the end, otherwise nobody will trust it. There's a loss of trust right now in government because the workings of government are too opaque. And opaqueness is a huge, huge issue. And I think making the reasoning and the reasons and the whys of any decision more visible, more explicit, including when they're very complex, we're dealing with more and more complex decisions, it's hard for the layperson to understand them. But let's make it as visible as possible so at least people will say okay, I understand this much. Again, the fractality is very important here and that much makes sense. And my opposition is here, but I see it's been taken into account and answered and refuted. Maybe I don't agree with the refutation and I can counter refute if I want to, you know, but I see that it's not been just ignored. Many people feel ignored.

And so the visibility of the decision structure I think is absolutely primordial. And yeah, AI can contribute to building that edifice of reason. It will absolutely contribute to the edifice of bullshit and firehose of lies. That's a reality. The whole aspect of AI that we need all to consider also is it's a big technology. It's demanding to build an AI model. It means it will be used by power, "it will be me". People have an interest introducing bias and we have to be aware of that and never let AI take a decision. Also for that reason, there's a lot of adversarial polluting the data set to introduce bias, research already. I would never trust AI for anything decisive. But as a contributor, as part of the diversity cacophony, that's perfectly fine.

#### [1:04:02]

Thomas: I want to start with you - follow up question - what role do you see narrative playing even in explaining the Al's thinking process and then just the broader sensemaking narrative versus rationality and reason?

# [1:04:20]

Marc-Antoine: Yeah, I don't think it's that important for people to understand how/why the AI came to a decision. I mean, I think it's very important for people to understand why AI can't be trusted, that's important. But being able to say, okay, AI proposed this decision or this reason - why can we make that part of the conversation as one proposal among others? And let's look at the reasoning behind it.

There's a question in the chat about knowledge composition. Can I take that quickly? Because that's primordial. If you have a lot of people saying "we should do this, we should do this" - it is entirely possible, and this is something Sonny has done and kudos, to find clusters and try to have a kind of AI-generated synthesis of the clusters and you'll get "okay, these are the main themes that are coming around." And that's brilliant and necessary. I believe in that. But we still don't have iteration. What I think is important for collective intelligence is iteration. There's this proposal, there's conflicting forces - can we find about the downsides of this one and the upsides of this one and the downsides of the upside of that one and come up with something new and iterate, have a few cycles of iteration to improve from what everybody's proposing.

And this is where, that is composition. If it is just sentences, or even clusters of sentences, it is harder in my mind, to know, What are we really combining? Data structures, we know how to do some average, anything on database rows. Now, if you think of proposals as knowledge objects, well, combine proposals, well maybe the proposal has sub-parts. Can we take this part of this proposal and this part of that proposal, and combine them? Can we find, this proposal may have this side effect, but there is this mitigation in this other proposal. Can we re-use that? And having plans, as quote-unquote, the composable-recomposable LEGO elements, for improving the proposal. And that's what I mean by composition. Or, at least at one level. And also, just the aggregation. If we want, say, most people believe this or most people believe that, again, if you're basing it on survey questions are often ambiguous, which is often the case. And with user-contributed sentences, where the same word may be used in different ways or understood differently by different people. You don't know if you can combine and aggregate and say people agree on that because, what did it mean really? Like so many people, I'm in front of somebody making a comment - "oh, this is bad." Do I say thumbs up to say yes, it is indeed bad, or you know, no, this is a good idea? Most of the time I know what to do, but...

And I mentioned TESCREAL. There's a lot of collective intelligence that dreams of a unifying mind. And this can be scary. I think diversity is important there. There's a noosphere subcurrent that is totalitarian and there's a noosphere subcurrent that is diversity-friendly and about giving everybody a voice. And I stand very strongly on this - this needs to be an inclusive process.

Over. I don't know if I answered your question about AI, though. Thomas.

[1:08:25]

Thomas: Yeah, I was just giving Shahar a moment to jump in.

[1:08:31]

Shahar: Oh yeah... What I meant was in the context of students using AI and not being critical of whatever result they get. So it's kind of these very generic GPT4 and etcetera, they've been trained on these vast corpus of data without any kind of fine tuning towards a specific thing. I can imagine in a federated sensemaking ecosystem, right, you have many different LLMs maybe. Each federation might have its own. There might be models that can act as connecting tissue between the different instances. But, as I say right now, the services we have are just so generic and they're just flattening everything.

There's no... in general, I feel everything is becoming so generic because of AI somehow. Recommendations I get on YouTube or Netflix movies - everything is just becoming more and more generic and less unique. So in this sense, what I thought about is... defederating meaning in a sense that creates this totalitarian sensemaking. But like you mentioned before, Marc.

#### [1:10:37]

Daniel: The classic in math - n equals 1 and n equals infinity are the simple ones and then everything in between.

Or that's where it's clearly a hub and spoke model, full centralization versus lattice complete decentralization. Well, small world, but the space of all the small worlds, worlds, is the biggest. So what is that Goldilocks zone, which is the widest but it's also the richest?

# [1:11:23]

Sonny: Fascinating. So, Shahar, one of the points you just made - the AI is producing so much content that now you said the recommendations are becoming more generic. The whole idea of AI was that it'll give you more tailored, more specific recommendations, not the other way. So it's just there's too much content being generated but there's not enough managing that. So yeah, it's just a very unique and different issue we're dealing with now.

#### [1:11:55]

Daniel: And there's sort of a "don't look down" moment with generative AI where we moved from what we still had not really adjusted, to with targeted recommendation. But we're moving into targeted generation where there won't necessarily even be shared reference. So then it's not just that there are people who are sharing certain artifacts and experiences at some disproportionate way, but it's leading to, complete generative bubble. Having both the tighter and looser weavings.

And again that just pulls us back to, What is the Sensemaking Federation? Are we welding ourselves together? But then, the car's not even going to be able to drive. Or is it just so loose to be nothing. And how does that get managed, when the attention, and the bandwidth, and all of these things becoming increasingly personalized.

#### [1:13:12]

Sonny: I wanted to add, the LLMs, the big problem we are having is that we are applying them to everything. They are not the right tool for everything. They do certain things very well.

Summarization, the LLMs are great. Filling in the blanks, they're great. But when you start using them for cognition, it is not a good model. So there has to be a separate layer of tools to do those things. LLMs do those specific things, only use them for that. But throwing LLMs at everything, is not the right way to do it. And I am seeing a lot of that pop into the chat as well.

# [1:13:49]

Daniel: Yeah. From the cognitive science side, the obvious generativity of advances in synthetic intelligence, have forced the hand, on one side, and more frame orientation differences to diverse intelligences in nature. Are leading to some exciting and open possibilities.

There is always the joke about the brain being the metaphor of the day: the brain is a steam engine, it is a telecommunications network, then it is a computer. As that turns into its next metaphorical turn, how that works, when; everything is cognition, then what is it? Thomas

#### [1:14:39]

Thomas: There was a thing from Artem, about the Sensemaking stack, then Jack said, "work in progress". That would be interesting to hear thoughts about. The thing I like about that, is that it could be modular. There are certain parts of people's sensemaking stack, that others are not interested in. So is there some way to a sensemaking stack, that can be articulated and useful, is part of what you're looking at.

# [1:15:21]

Marc-Antoine: The question of this. Sorry. Go ahead.

# [1:15:24]

Jack: I wanted to say that. I'm going to be bold and guess that the cognitive styles of everyone in this Zoom are inherently different. We have deep backgrounds of our own - where we were born, where we were raised, how we were raised. All of our life's experiences mean we are not the same. So there is no one cognitive style, which means there's no one sensemaking style. And so you talked about modularity - I think you're nailing it. That's where we have to go. Modularity and composability and federability are the keys.

When I said work in progress, what I meant to say was it will always be work in progress. We will always be looking for the next insanely great thing to put into the federation for more people to be attracted to it and more people to contribute. Because not everybody is going to go and play SenseCraft. That's a given. And not everybody's going to want to play with Polis. That's a given. And not everybody else is going to want to use Kialo, which is just a debate hub. I think everybody has a different way of approaching this.

Many of us will just write stories and if we annotate our stories and we put our citations in, that's federal material. So this is a work in progress. I used to think that we could take the IBIS protocol and wire up all the blogs on the web into a giant structured conversation. That's one way to do sensemaking - wiring them up. He said he was talking about this subject. That guy

was talking about that subject. Here's where they agree, here's where they disagree, etc. That's sensemaking - it's putting together what people are thinking, the worldviews and why they believe them. I'll stop.

## [1:17:46]

Marc-Antoine: So the question of sensemaking stack - I mean this is why I got into the weeds early in the call, right? What is important - I don't think it's going to be one solution to rule them all and it has to be an ecosystem because there will always be community-specific UX conceptual concepts that have to be. I mean people use jargon not just to keep people away, it's because it's efficient. So we need community-specific sensemaking tools.

But what's important is that every knowledge object in a sensemaking tool is referable from the outside. And I'm a big fan of linked open data for that. But it's beyond that, beyond linked open data it's about saying what I think that this frame in this system might be related to that frame and that system. And then no, I changed my mind.

Hence the notion of not only reference but evolving reference because the concept changes in time as it's being used and the reference has to be aware that, hey signal - this concept is now obsolete. We've replaced it with two concepts or we've merged it. We've done whatever. It's become something else. So that whoever is making the bridge between these two knowledge hubs gets notified: "hey, you were using that concept. That community has decided against it. What will you do with that?"

And so if we want to have quote-unquote "learning organization", but learning society we need to be able to federate across our data silos and be aware when things change. And this is why I've got into the weeds of why frames as the hybrid, or the bridge, between natural language because storytelling is still part of this. Some people will only understand the stories. And that's fine because they're more emotional and some people will need the firm data that they can do operations on. But that's too rigid to be knowledge.

We need to be constantly bridging and constantly revising the bridge because knowledge evolves, that's its nature. And so references, evolving references and bridging between the informal and formal - for me, that's what allows global federated ecosystem of sensemaking. That's the pith version.

And yes, reference to reference, because interpretation means being able to talk about - that's the base of topic mapping. Anything is a topic, anything you can talk about is a topic. And that means the statement is a topic and a statement about a statement is a topic. So there's this level of - you can do it with recursive hypergraphs, you can do it with nested frames, but yes, infinite semiosis. Exactly.

Why are we into this? Why are we so interested? It's because we're negotiating. Sensemaking is part of negotiating shared goals and shared actions. And we can't negotiate shared goals and shared actions without shared meaning. And again, the goal is not to totally agree on meaning because that's totalitarian. But the goal is to understand one another's motivations enough that we can at least negotiate shared actions.

# [1:21:17]

Daniel: Yeah, fun even lead up. I know about traces and all this idea of the traces of sensemaking with all the perils of solipsism and more, but that trace being an artifact that, you know, like a Git history, all these kinds of things. Kristen.

#### [1:21:40]

Kristen: I was just gonna say one of my experiences now, and I don't know if I'm getting saturated, is I've hit a fork state where I'm asking, what even is sensemaking and why are we so interested? It was this strange, almost emergent experience and just the meta on the meta was voicing that and asking the question was really helpful and having people come forward. And so it's - I mean, it's sensemaking in action then. And it's just a nice feeling.

And part of the answer that I was receiving too, why are we so concerned with sensemaking? Why are we attracted to this topic? Why are we working in this field? Is context. For me, the context of the reality that we live in as humans right now is increasingly complex. It's harder to navigate your life because things are changing so rapidly. And then to Marc-Antoine's point, if we are trying to wayfind and also have connection with one another because we're social species, to find meaning in what we're doing. That's why sensemaking.

So I don't know, it was just - yeah, I'm moved by the pattern of this conversation that got me to that point. And then it was just kind of this bubbling up and then, yeah, it continues. So it's almost like that, allowing for this plurality and then this emergent sensation to come up. People attract to it. It becomes a focal point and then things will fade out again and that will just keep happening. These waves and crests. Yeah, it's fascinating.

#### [1:23:30]

Marc-Antoine: There's a rhythmicity to sensemaking. Absolutely. Also because every generation has to do it anew.

# [1:23:42]

Kristen: Yep.

#### [1:23:42]

Marc-Antoine: And if you don't think of this as intergenerational transmission, you're also missing one of the key dimensions of sensemaking.

## [1:23:52]

Kristen: Glenn.

# [1:23:57]

Glenn: Yeah, this has been great. Thank you guys. So in trying to kind of make this a little bit more concrete for myself, I'm thinking about how I could apply this to a specific use case right now. And so I'm thinking about how in particular to ground this. So I live in Oakland, California. So I think I'm in community with a bunch of people in Oakland. I think about, where does Oakland exist online? Where is sense being made about Oakland? And it exists in all these different corners - it's the Yelps, it's the Twitters, the Blueskys, it's all over the place. But it's all out there.

I think, to Jack's point, plugging together blogs that already exist and kind of the community-specific things we can do for Oakland. I'm thinking about, how do we start? What are the steps? Or how would you think about starting to apply some of what we've talked about? If I think about what's available on AT and on ActivityPub today, say, or what's loadable from Oakland, or the set of data that I have out there that I could start making sense of for something different for Oakland and the people in this community and the context of this community, rather than the context of other sense makers and other discords. I'm just curious, with that provocation - how would you think about that problem? What are the things that I could start imagining doing today with the tools we have today?

# [1:25:17]

Jack: I'd like to tell you the story of Temecula, California, which is way south from you. When the state of California managed by decree to legalize cannabis, the mayor of our town - we're fairly dark pink - conducted a poll and asked, "Should we legalize the sale of cannabis in our town?"

55% of our town voted no. That's the pink part. The green part, the blue part, whatever, voted yes, 45%. He correctly recognized that as, not marching orders. That was a conversation. And it was a conversation that desperately needed to be had. Now, when you have any kind of poll that's a yes or no, you didn't invite a conversation, you invite a pissing contest. And that's not what we want. We want to say what are the issues surrounding the sale of cannabis in our town? And let the people speak, let them be heard, let them tell us why they believe it.

I asked him why he didn't do that in a town hall meeting and he said because state law or legal precedent doesn't allow him to silence the crazy people. And so the town just stopped doing town halls. Now Oakland, I'm aware, has gone through a lot of its own little issues with mayors and so on and so forth. Jerry Brown attempted to clean it up, I don't know if he did. But town halls are face to face and they're in your face. And so you have the person that says "over my dead body you'll do this" that turns out to be wicked.

So here was my suggestion to the city of Temecula. Let us conduct one of our game-based quests. This was back in 2018, right after I had given a TEDx talk in this town and the mayor came to me and he said "Yeah, I can find you some money, we'll do it." But what he ran into was, he couldn't find a city manager who thought it was important.-This is the nature of living in

a pink, dark pink town, virtually a purple town - there are people who have beliefs and they don't want to hear anybody else's beliefs.

And so if SenseCraft was online, you could create a server of your own in your town. Your city hall could mount the servers and you could run Sensecraft on your own. It's open source and you could have all of your city members, anybody who wants to join the guilds and talk about issues. That's where this needs to go.

Face to face is egocentric. Guilds are eco-centric. We really want people to be in a place where they are thinking about the big picture, not about themselves. And so what can you do? Anything that isn't face to face is inherently problematic, but done rightly, yes, you can do face to face.

IBIS was invented specifically to facilitate town hall meetings. And in town hall meetings, you would have people shouting and somebody would be making the conversation graph, the dialogue map it's called, of what they were saying based on some initial question "Should we put the freeway through this town?" And what you do as a facilitator is you stop the group and you say, "Look, I've been capturing what you're saying. Tell me if I captured it correctly."

Now, they weren't looking at the screen of the graph, the picture of their conversation. They were yelling at each other. And frequently you'll have somebody in the room say, "My God, Joe, I didn't realize that's what you were thinking." Suddenly the conversation changes and now you can talk. That's the nature of facilitation, and I'm sure Kristen knows a lot about that. This is the whole point. If you have a good facilitator, you can do things face to face, not in large crowds, smaller crowds. Over

# [1:30:23]

Kristen: Yeah, I think just to riff on facilitation and sensemaking, one of the things that I dropped in the chat, and I don't know that it got any traction - I'm really curious about embodied sensemaking in the sense of us as individuals and what we need to do. And actually, Spencer, if you want to chime in here, you brought this up in the Scenius Telegram recently. The individual practices that we have for our own wisdom practices, embodiment practices, they're all part and parcel, what you do to know yourself. So this kind of Socratic notion of "know thyself" and where that comes into play and how that interfaces with this collective practice as well, and how you bring that into group culture, I think is a big question that I've had for years.

Because when people aren't doing their own personal practices, it becomes harder to do the intense, egocentric conversations because people will get lost up in their own bullshit, their own blind spots. And it's not necessarily their fault. There's no blame or judgment per se. It just makes things more difficult. And a facilitator can pick up on these things. So those are some thoughts that are percolating. And yeah, Spencer, I don't know if you have anything to chime in here.

Spencer: I think that was pretty much it. The point there that I'm still coming to terms with is how you can develop a sense of self awareness that's really attuned to some group identity and how those conversations tend to go and where value needs to be added and avoiding adding unnecessary complexity to a given social arrangement.

#### [1:32:17]

Marc-Antoine: I know Jack is big on Theory U for that very reason. Because of the embodiment. I was into focusing at some point in some traditions of collective focusing and I've been studying a lot of social meditation techniques for that reason.

This is something that will necessarily happen in small groups, and that's fine. I don't think that my aim to have social level sensemaking makes small groups irrelevant. Quite the contrary. And this is why Jack had this hierarchical diagram at the very beginning. We have to practice taking a distance.

And this I think is something we also want to favor in Sensecraft as a practice. As a pedagogical practice is being able to take a distance from what you know - the deep listening aspect of craft is "Can I rephrase what you said in a way that you'll agree with?" Is part of the deep listening.

It's true that we're mostly thinking of SenseCraft right now as a digital artifact and I would love to have a non-digital version of that. I mean maybe we should do a paper board game because frankly there is such a thing as doing it in person with people that is totally different. But making it part of the - somebody said "oh that sounds like fun." I don't think SenseCraft is fun yet, but God, we're trying to. Making sensemaking into a fun activity.

I mean there's a lot of community who got into recreating the Glass Bead Game, right? And trying - can we make it a game? I don't think anybody fully succeeded, but there's definitely been a few very honorable efforts. And yeah, we need to have these games where we're trying to reach across. One practice that really fascinated me is something called Wise Democracy - trying to understand if somebody opposes something, really try to get into the why and get deep into what's the identity opposition to a proposal and how do you react internally. But that's practice and yes, it has to be done in person, though it's surprising what some people managed to get with Zoom gurus. So who knows?

# [1:35:08]

Kristen: I love the idea of sensemaking games. I mean we haven't played one in a while. We've played some games in the Scenius, one of the more basic ones that can be played is you drop a topic into the center of a community. And we've done some - I guess it's co-research across sync and async platforms. Yeah, that one - the first game we played, what was the topic? We had a prompt and then everybody created their own media in response to the prompt. And then Spencer and I have also co-hosted a call for a topical newsletter. So everybody created a piece of media on a topic and then those were curated. So even these low-lying, they're pretty simple but it's very fun. And then we have a shared brain on something and it's interesting to see the different perspectives that pop out and then also the collective emergent perspective that's continuously being formed.

[1:36:19]

Sonny: Research, shared brain. Is that a repository somewhere where you're actually putting things or is that just conceptual at this point?

[1:36:29]

Kristen: Conceptual at this point.

[1:36:30]

Sonny: So on that point is there a repository where we collect these say Zoom transcripts or other artifacts like that?

[1:36:38]

Kristen: We have a Notion, but we haven't... We... I mean we have them all. I was just going to... And I put it off to the side. One of the biggest things that I get frustrated about Zoom and was thinking this would be an interesting contribution to the field of sensemaking - I'm sure they exist, but for our context, creating some sort of export for the chat so that it's easier to view the chat in a threadable way because the text file right now is... It's a hot mess. So it's feasible there. I guess there is an API with Zoom, so things like that. We have a lot of content. Yeah. What do we do with it? If we could have something like a more staged process and a feeling of accessibility and interactivity with it, I think we would use it way more...

[1:37:30]

Daniel: A federation where they shared certain parts of their sensemaking...

[1:37:38]

Jack: So I was going to suggest creating a GitHub account. Let me tell you why I say that. There's a company in Seattle, a foundation, which gave a talk where they were asking science researchers, biologists, to do their research in GitHub repos. And I raised my hand and I said, are you suggesting that I could take a given repo and fork it and try my own experiments? And they said that's exactly what we're saying. And that's why you use something like a GitHub or a GitLab or whatever. The point being that now people can take our chat sessions and videos and whatever you can put up there and... They could fork the repo or they can just branch it and start playing with it. They can do things, they can run analysis on it. And this is exactly what Marc Antoine's HyperKnowledge is about, is taking input streams and branching them and mutating them and playing with them and running a Zillion kinds of agents on them and putting it all back so others can profit from it.

[1:39:07]

Kristen: Thank you so much for your time, Sonny. Appreciate it.

[1:39:15]

Sonny: Thank you.

# [1:39:20]

Kristen: Seeing more people sort of drop off. How are we feeling? Do we want to start slowing things down? We can keep going. We've got time. But we can also start winding down a bit.

## [1:39:35]

Marc-Antoine: I think there's been a lot and...

# [1:39:37]

Kristen: Safe to say are there. I guess my question are there any parting comments or thoughts from you, Jack, Marc Antoine, Daniel, from your perspective?

#### [1:39:55]

Jack: I will offer this - in all of the Zooms I've ever been invited to speak and participate, this is the brightest, the most intelligent, the liveliest audience I have ever met. And it leaves me completely hopeful that we can come together and basically move away from the sensemaking of the sensemaking space into the action side of building it out. And that's... It's as if this event has done a very good job of herding some cats. That's how I see it.

#### [1:40:44]

Marc-Antoine: Definitely second this. It was great fun to chat with you all and I definitely hope we can make some of this happen. We're definitely still thinking things through. We don't have all the answers and we love to have people to think things through with. So yeah, I did make specific invitations but do reach out. You have our emails and they're in the chat somewhere. I know the chat is guite the proverbial haystack at this point.

#### [1:41:15]

Kristen: We can circulate email addresses easily.

#### [1:41:19]

Daniel: I would give a last comment. Thank you, Kristen for all the amazing work before and during as well. And to the panelists for their time and with new connections within Scenius and outside and giving us a new view on the cats caring about each other and how that prepares and in some ways already is the space of federation amongst sense makers. So it's been a very special and fun time.

#### [1:41:53]

Kristen: Yes. Thank you so much Marc Antoine, Jack, Daniel, it's been a blast and I think we'll do something like this again. Now that we have the relationship, we can design whatever we'd like together. Lovely.

# [1:42:11]

Marc-Antoine: Thank you all. Yes.

[1:42:14] Kristen: And thank you to the Scenius. Thanks for showing up and doing your thing. You guys are awesome.

[1:42:21]

Participant: Thank you so much.

[1:42:22]

Kristen: Take care.