ARC Regenerative Communities
Study of the IETF Protocols for Protocol Development
Summer of Protocols 2024 Cohort

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Kaliya “Identity Woman” Young

For the past 20 years, Kaliya has led a global community of developers and business supporters to create and adopt a layer of identity for people based on open standards. She co-founded the Internet Identity Workshop (IIW) to bring together technologists who want to develop and deploy user-centric identity protocols. In the past 15 years, our community has created widely adopted internet standards, including OpenID Connect, OAuth(IETF), Verifiable Credentials(W3C), Decentralized Identifiers(W3C) amongst others. She helped define the term unconference and pioneered using Open Space Technology to organize collaborative events in which the participants themselves create an agenda and define their goals. She is the founding partner of a consultancy focused on Decentralized Identity.

Day Waterbury

What gives my life meaning is to serve and protect the living earth and her people. My mission is to equip the regenerative movement at scale at the pace of the polycrisis, connecting place-based systems change initiatives with trust-based funding, and empowering a global network of networks with tools for coordination. I truly believe that for our species to thrive we need to maximize the number of us who are fully prepared and resourced to contribute collaboratively to co-create a regenerative unfolding. I don’t think of this as political, but rather the rational pursuit of my aspirations on behalf of humanity and the greater blossoming of consciousness in the cosmos. He is the founder of Consensual Ventures a venture acceleration firm.
Summer of Protocols is an ongoing research and evangelism effort that aims to catalyze broad interest in the study of protocols as a first-class concept for thinking about the world.

The core summer research program, Protocol Town Hall talk and salon series, and research publication stream all aim to advance our understanding of protocols across a wide range of domains, at all levels from practical to philosophical.

We are in its 2nd cohort and were awarded a Protocol Orientering Grant (POG) to study an existing regenerative community that specializes in the development of internet protocols – the IETF.
ARC Regenerative Communities is about outcome-driven civilizational design. We can apply prosocial patterns to a conscious process of community formation only when we have a clear pattern language and set of protocols for that process.

This summer we are studying a particular existing regenerative community that specializes in the development of internet protocols – the IETF. This institution is not kept alive by:

- money and staff (like the IEEE),
- charismatic leaders people “follow” (like TBL),
- or international treaties that have mandates for an organization to exist (like the ITU).

The IETF is kept alive by the energy of people and their decision to actively contribute their energy to the creation of the protocols they develop there.

They also actively develop and participate in protocols that are generative forming the “community protocols.” It literally is a recursive organization using its protocol processes to develop protocol processes for protocols. The technical protocols it generates are also available for voluntary adoption.
We are looking at the IETF in a different way than many prior researchers.

- Not quantitative analysis of mailing lists/RFC draft history.
- Not doing anthropology about the culture
- Not writing a PhD Thesis either - *this is a summer project*

The IETF has protocols for protocol creation.

We are looking at the **process protocols** with a **regenerative lens** and considering critical points in the evolution of the protocols used to create protocols in the IETF and its antecedents.
We think the IETF is a regenerative community

What is Regeneration?

Regeneration is a characteristic of living systems which both grow (generate) and decay (degenerate).

“The framework emphasizes that regenerative systems maintain positive reinforcing cycles of wellbeing within and beyond themselves.”

Image credit from “The Regenerative Lens: A conceptual framework for regenerative social-ecological systems” by Sam J. Buckton, Ioan Fazey, Bill Sharpe, et al
We are using these two pattern languages as sources of regenerative patterns.

groupworksdeck.org

www.wd-pl.com
What is a Pattern Language? [1]

1st one Architecture & Land Use Focused

Brought into Many other Fields including Computer Programming

PLoP Conference focused on Pattern Languages [2]

A Pattern Language
Towns · Buildings · Construction
Christopher Alexander
Sara Ishikawa · Murray Silverstein
with
Max Jacobson · Ingrid Fiksdahl-King
Shlomo Angel

Design Patterns
Elements of Reusable Object-Oriented Software
Erich Gamma
Richard Helm
Ralph Johnson
John Vlissides

Gets at the QWAN Quality without a Name [3] that make Buildings feel alive.
Flow

Group events have a rhythm and a flow to them. Both in anticipating an event and in response to emerging circumstances, pay attention to energy and pacing; let this influence your decisions on when to do what, how long and how often.

related: Balance Process and Content ~ Balance Structure and Flexibility ~ Closing ~ Divergence and Convergence Rhythm ~ Follow the Energy ~ Iteration ~ Opening and Welcome ~ Preparedness ~ Reflection/Action Cycle ~ Rest ~ Right Size Bite ~ Ritual ~ Subgroup and Whole Group ~ Trajectory

Subgroup and Whole Group

Small subgroups are ideal for involving all participants, accomplishing specific tasks, and creating a safer space for sharing. Convening in the whole group provides context, meaning, and convergence at critical junctures. Strategically shift between the two to take advantage of their complementary natures.

related: Common Ground ~ Mode Choice ~ Nooks in Space and Time ~ Shared Airtime ~ Seeing the Forest, Seeing the Trees ~ Unity and Diversity

Divergence and Convergence Rhythm

Diverging widens perspective, explores new terrain, and opens up options. Converging coalesces collective wisdom in moving toward focused decisions, concrete outcomes, and the end of the session. Good group process naturally cycles between these two, so be thoughtful about which to engage when.

related: Distilling ~ Embrace Dissonance and Difference ~ Generate Possibilities ~ Iteration ~ Trajectory ~ Moving Toward Alignment ~ Seasoned Timing
Balance Structure and Flexibility

Structures, such as a clear agenda, time limits, or raising hands before speaking, can create safety, focus, and a form for the group's energy to pour into. Yet to sustain the life of a group, this must be balanced with a great openness to change, dancing between the two as needed.

Reflection/Action Cycle

Consider. Enact. Debrief. Experiment further. Effective processes that move groups forward often involve cycles of reflection, followed by action, leading to additional reflection, and so on. Alternating in this manner fosters engagement and integration, deepens experiential learning, and promotes adaptive problem-solving.

Balance Process and Content

Content refers to what you are talking about and the results of a session. Process is how the conversation happens. Like two wings of a bird, both are needed for balance, lift, and progress.

Follow the Energy

What does the group really want in this moment? Let your observation of cues and “vibes” guide your response and steering of topics and process. Paying attention to where the life is, you help it flower.

Iteration

Try it a second time, even a third. Outcomes of one round of activity or conversation inform the next, deepening, expanding, and generating new understandings and possibilities. For more powerful effect, repeat.

Preparedness

Anticipate what might happen and be ready for it. Do this both before the event, and in your ongoing alert attention. Think through how the agenda will unfold, and do what you can to ensure the right people and resources are present.

Right Size Bite

Break tasks, processes, and content to be absorbed into chunks that are an appropriate match for the time and people you have. Tackle complex topics and larger goals piece by piece.

Ritual

Ceremony is primal; it grounds, connects, and deeply nourishes group spirit. Use it to mark opening, transition, cycles, milestones, or closing. Ritual is also the formal or habitual repetition of intentional practices that have
Transparency

Be open about what’s real: feelings, experiences, how decisions get made, finances, and more. Transparency arises from a belief that the free flow of information and taking action in direct and honest ways best serves group needs. Handled well, openness nurtures trust, collaboration, and authentic community.

Appropriate Boundaries

As stewards of the process, maintain safety and integrity of the container by drawing lines when needed. Compassionately acknowledge individual suffering to open the group heart, while reaffirming the group’s purpose to keep it on track. Face membership questions with clarity and candour.

Inform the Group Mind

We gather facts, feelings, and perspectives to reveal and deepen the group’s awareness of itself and its world. The most helpful information comes from diverse sources and is accurate, relevant, accessible, and compelling.

Context

Groups tend to develop their own culture over time, based on knowledge, beliefs, practices, and behaviours their members hold in common. Awareness of shared culture builds trust, cohesion, and a sense of safety among the members, thus furthering collaboration.

related: Courageous Modelling
- Inform the Group Mind
- Power Shift
- Self-Awareness
- Taking Responsibility
- Naming
- Shared Leadership and Roles

related: Balance Process and Content
- Follow the Energy
- Holding Space
- Nooks in Space and Time
- Not About You
- Priority Focus
- Witness with Compassion

related: Distilling
- Experts on Tap
- Feedback
- Harvesting
- Inquiry
- Mapping and Measurement
- Whole System in the Room

related: Breaking Bread Together
- Celebrate
- History and Context
- Ritual
- Story
- Tend Relationships
- Unity and Diversity
A group dedicated to its work persists through obstacles, distractions, and lulls. Remind yourselves of your larger purpose and what you really care about. As the group moves toward action, support effectiveness by getting clear on who will do what by when and how to ensure it really happens.

**Intention**

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Seeing the Forest, Seeing the Trees

Shepherding a group discussion includes discerning when the group needs a wider view vs. when to sink down into the details. Zoom out to see vision, patterns, and overall trends; zoom in for examples, specific data, and other particulars.

**Perspective**

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Generate Possibilities

Freedom and stimulation help creativity blossom. Climb out of the box! Shake things up with brainstorming, play, improvisation, art, and unusual questions. What is possible now? Invite an abundant flow.

**Creativity**

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Trust the Wisdom of the Group

When the path is uncertain, seek intelligence, intuition, and direction from the collective. No matter the problem, with patience and good listening a group usually generates the needed solution, options, or route forward.

**Faith**

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WISE DEMOCRACY PATTERN LANGUAGE

Three Dimensions of Democracy

POWER

PARTICIPATION

WISDOM

POTENTLY ENLIGHTENED CO-CREATIVITY

WISE PARTICIPATORY POWER

EMPOWERED PUBLIC WISDOM

WISDOM

www.wd-pl.com
The Wise
Democracy
Pattern Language
in the Three
Dimensions of
Wise Democracy
Metabolizing Polarization

Polarization is a compelling illusion. There are never just two sides, unless people’s consciousness and choice are being manipulated. So show polarized people thinking and working together. Or instead of polarized people, choose people at random and reveal how unique and complex their thinking becomes, once informed into the big picture.

Some related patterns
1 All Concerns Addressed 33 Feeling Heard 39 Generative Interactions 56 Multiple Perspective View 78 Sortition 80 Story 85 Transpartisan Inquiry

Sortition

Random selection by lot replaces human agency with chance (the modern view) or supernatural agency (the view of Italian city-states and ancient Athens). It can help democracy be just, clean, and efficient. So use it mindfully to thwart corruption, to produce legitimate deliberative cross-sections of a population, and to fairly distribute social goods or burdens.

Some related patterns
18 Consulting and Abiding by Willingness 26 Diversity 28 Equity 48 Integrity and Authenticity 54 Multi-Modal Intelligence 76 Safety First, Then Challenge 81 Synergies Between Part and Whole

Deliberation

Wisdom explores, discerns, weighs, creates and envisions; it avoids jumping to conclusions and getting trapped by assumptions. Anything which helps us raise and care-fully consider a healthy range of factors, perspectives and options before and as we act, qualifies as deliberation. So utilize and institutionalize diverse forms of such potent consideration.

Constraints on Concentrated Power

Concentrated power—while necessary for certain functions—tends to corrupt and ossify, undermining collective wisdom. So counter those tendencies with transparency, openness to critique, and constitutional answerability to—and oversight by—those whom concentrated power affects. Limit its scope and term and balance it with other power centers.

Some related patterns
10 Civil Rights 12 Collective Wise Oversight of Governance 28 Equity 40 Glocal Subsidiarity 45 Holistic Leadership and Governance Dynamics 74 Rich Feedback Dynamics 78 Sortition

Proposals and Outcomes Emergent

Proposals usually promote arrival at particular outcomes. This often prematurely narrows attention into pro/con responses, amendments and decisions. So, when possible, start with the situation, issue, or inquiry and treat proposals as data about possibilities en route to greater understanding—until a proposal finally triggers a group ah-ha!
Questions we are considering in our research:

How can the organization have no official membership and clear coherence?

What patterns are present to make this work?
How are those patterns instantiated?
How do the patterns weave/work together?

How does it cultivate a group mind/collective intelligence?

Could the IETF and its antecedents be considered the original “DAO” (Decentralized Autonomous Organization)?
We are thinking about:

*What can other organizations who are working on protocols take away from our research?*

There are organizations that are concerned about how the internet is governed and how the IETF does its work. Our hope is that this research can help them see the value of and unique and innovative structure of the IETF.

*Can the IETF community learn from our research to understand itself better?*
If you have a story to share or know someone who does about a key point in the process innovation within the IETF please reach out.

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Summer of Protocols 2024 CoHort [Description of our Project]  
Summer of Protocols 2024 [Original Research Proposal]  
Summer of Protocols Forum where you can [follow our progress]  
If you want to review a draft or get a final copy of our research let us know.
Research Jury

**Tim Beiko**
Tim is one of the core organizers of Summer of Protocols. He works for the Ethereum Foundation and runs the core protocol meetings for Ethereum. He is software developer and Ethereum client maintainer based in Vancouver. He has 74 repositories on GitHub, including projects related to Ethereum, Solidity, Python and JavaScript.

**Kei Kreutler**
Her work explores how cultural narratives of technology shape what worlds we can build. My research centers on philosophy of technology, and recent fellowship work explored the concept of memory in relation to protocols, in particular, how the concept of memory changed with the advent of computing. This culminated in my upcoming book Artificial Memory, which will be announced in more detail soon.

**Rosa Zubizarreta, PhD**
Is the founder of Diapraxis and has a PhD in Organizational Development. She works with leaders who are committed to organizational health and transformation, and consults with professionals who design and manage:
- public participation projects
- stakeholder collaborations
- community planning processes