LEARNING JOURNAL FOR STSRT VANCOUVER 2024

(Reflections by Carolyn Ordowich, November 2024)

Attending STSRT 2024 in Vancouver was an exciting opportunity, as it was designed to embody what I call the *three orders of Open STS Designing*—an approach akin to Single, Double, and Triple Loop learning. This promised a rich, immersive learning experience that went beyond a traditional conference format. I deeply appreciate the stewards and the 2024 Design Team for their efforts to translate our complex Open STSD approach into an experiential learning environment.

In many ways, this design was a success. I am writing this journal to share my reflections on why this was the case and what I learned. These reflections draw from my 40+ years of practicing Open STSD, as well as recent research on shifts in the "designing" realm and the broader societal context shaping our work. My hope is to spark a rich exchange among attendees to deepen our collective understanding of Open STSD's role in shaping the future.

Open STSD Approach As Three Orders of Designing

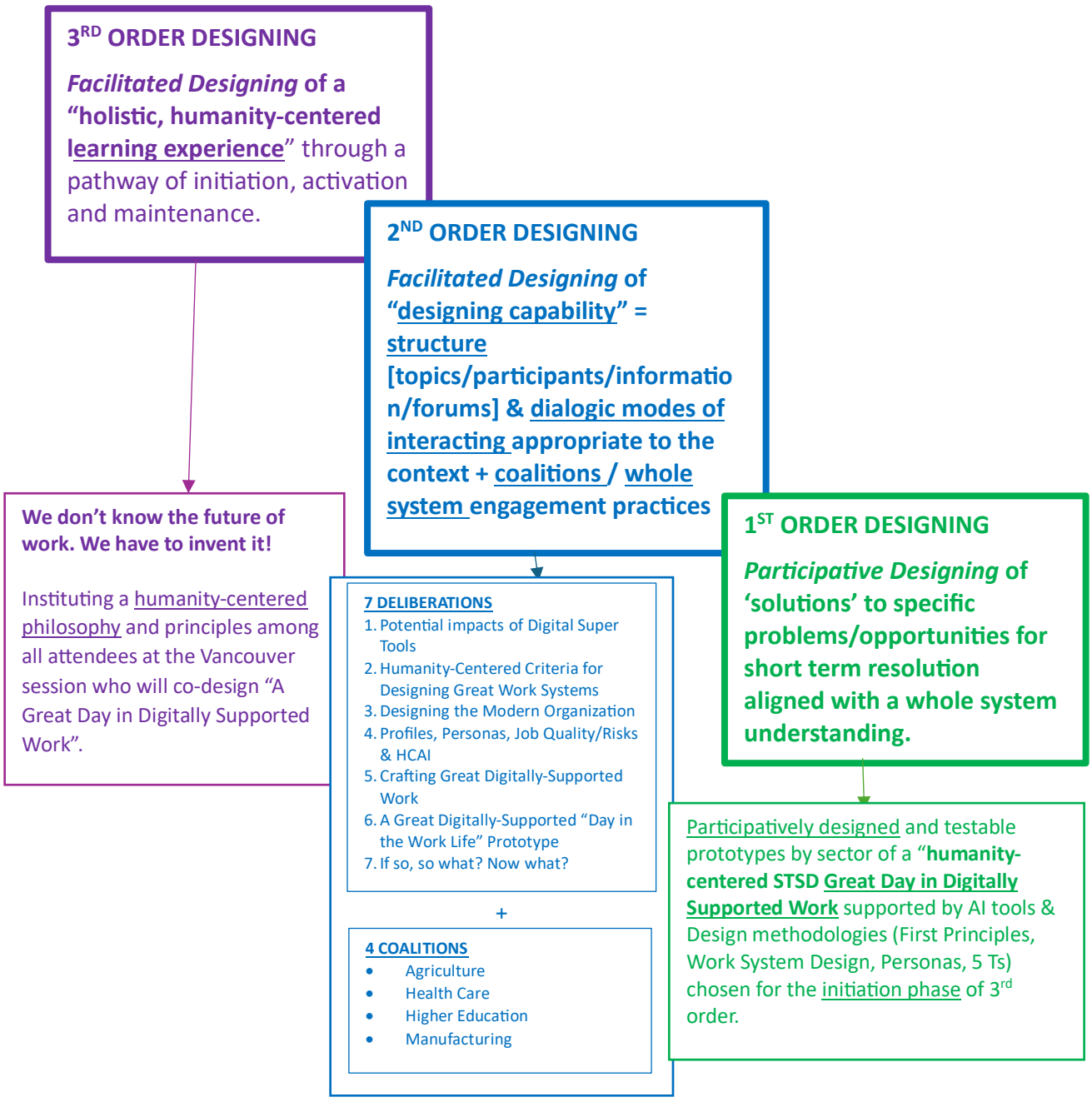
Our community has long distinguished between three orders of Open STS Designing:

- **Values** (Third Order): Instituting a humanity-centered philosophy and principles among all stakeholders who will become the designers (committing to the holistic mindset that results in action learning: *We don't know the future of work. **We** have to invent It.*
- **Participatory Process** (Second Order): Embedding collaborative designing capability as the new way of interacting as a whole system.
- **Work Design Methodology** (First Order): Applying systemic designing methods (our own Open STSD Classic and Modern and complementary ones) to achieve organizational outcomes like self-managing teams, good work/jobs, high-performing value creation systems, positive people practices, and steward leadership, etc.

The Open STSD approach has never been about applying a one-size-fits-all framework. Instead, it addresses complex system problems in turbulent environments through context-specific, human-and humanity-centered designs. This approach relies on iterative hypothesis testing and knowledge creation by those embedded in the system. It acknowledges the complexity of organizing work, aiming not to simplify it but to make complexity understandable and navigable in healthy ways that reduce confusion and friction and make complex work enjoyable, challenging and productive.

Despite this nuanced approach, the broader marketplace continues to favor templated, turnkey solutions—often ignoring unique cultural contexts, readiness for change, and specific business needs. This misalignment contributes to the reported 70% failure rate of transformation initiatives.

I have codified my learning from the Vancouver session according to these three orders of designing. The graphic below illustrates for each order named in the box above, the design elements used in the Vancouver session.



CAROLYN'S LEARNING FROM 3 LEVELS OF DESIGNING

Third Order Designing: Humanity-Centered Philosophy

Third-order designing focuses on collective learning about the philosophy and principles of Open STSD. Based on Emery & Trist's action learning paradigm, this approach emphasizes the human perceptual system's capacity to interpret the informational structure of its environment. The foundation of participatory designing lies in recognizing that all individuals are equipped to generate and share knowledge, fostering a collective intelligence. The initial collective intelligence that is generated is about the philosophy and designer empowerment. This requires considerable "**unlearning** of the old ways of thinking and working" as much as "**learning** new ways of thinking and working".

I see this learning experience as three-phases:

1. **Initiation of the philosophy**: Articulating the shared values and principles in participants' own language, tied to the design opportunity or challenge.
2. **Activation of the Philosophy**: Translating it into actionable change structures, resourcing, and communication strategies—living the change we aim to create.
3. **Maintenance of the Philosophy**: Developing practical workplace solutions that align with and perpetuate the philosophy.

The 2024 session succeeded in initiating this learning by framing a common challenge of AI adoption in knowledge work that attendees were facing either personally or with clients. However, survey feedback suggested gaps in educating newcomers on Open STSD philosophy and principles before diving into the Design Lab. For me, this raises two important questions:

- How might we effectively convene and orient diverse ecosystem members in a session?

- How might we balance specialist and generalist contributions in cooperative ventures?

The further phases of activation and maintenance would emerge from **Deliberation 7** - *What have you learned? What are you going to do with what you have learned, and with whom? How can the STS Roundtable support you going forward?*

Second Order Designing: Collaborative Designing Capability

This level of designing transfers the skills necessary for ongoing collaboration designing to those within the ecosystem. The aim is to ensure participants can sustain iterative, context-fit designing once facilitators step away.

The 'Design Lab' offered an opportunity to explore this designing the collaborative design space capability by engaging participants in using nonlinear open STSD called deliberations and coalitions (see appendix for more detail).

While the session built connections and generated trust, feedback from the survey indicated that this collaborative designing capability was not well understood and perhaps some pre-education about it could have been done ahead of time. The feedback on the design noted:

- Not enough "whole system interaction" across the sectoral groups or exchanges of members between groups to share learning. It was astonishing to the AG Team that there was someone in the Higher Education Team that had knowledge of picking apples using platforms that we didn't learn about until the last day. Although we didn't face this in the session, it did raise the question for me of how might we design if the participants had both reductionist and holistic viewpoints?
- Lack of coherence in the design of the Lab: Some participants were unclear about the flow of topics. The design of the Design Lab needed more reflection and learning time as it is such a key element of the Open STSD approach. I understood deliberation topics one through six were to provide an overview of the key steps of the designing process.
    1. Understanding Philosophy of Choice provided by Ben's Talk, The 1st deliberation was to position the challenge in its largest context (organization, industry, society) so as to reflect whether the potential impacts of digital super tools were being implemented from a reductionist or holistic perspective.
    2. Generating sectoral design criteria from the 1st Principles to make them your own.
    3. Learning the Open STSD framework from Stu Winby for designing the modern organization so we understand the whole before designing parts.
    4. Learning specific methodologies such as *Personas* to shape job quality with HCAI and *5 Ts* to understand how to apply the systemic perspective to a challenge using a simple heuristic
    5. Co-designing what Digitally Supported Work means for each sector- affordances & constraints
    6. Generating a prototype of "A Great Digitally-Supported Day in the Work Life for each sector

Making time for reflection in 2.5 days was difficult to accomplish. Maybe there are innovative ways to do this we haven't explored?

First Order Designing: Prototyping Solutions

At this level of designing, participants developed prototypes addressing the challenge of 'humanity-centered digitally supported work.' These prototypes serve as tangible examples of how Open STSD principles can address sector-specific challenges while aligning with larger ecosystem goals. I applaud the 2024 Design Team for their successful collaborative design – The Design Lab (2nd order) that produced both interesting prototypes AND team energy for creating and presenting them.

My AG Team's platform design exemplified Open STSD by balancing autonomy, system coherence, and long-term adaptability. What really helped the AG Team was leadership by Erik,

Emily and Kenton who have deep farmwork expertise that they used to describe a typical day that then the Ag Team could design as a "great day". This was necessary as we didn't have farmworkers in our team. This tells us how important real-world expertise is for future Design lab recruitment.

Our PLATFORM DESIGN was both a physical and conceptual design:

- **Physical Platform**: Addressed immediate safety concerns in apple-picking practices that helps to incentivize more in-depth change.
- **Conceptual Digital Platform**: Provided a farm knowledge base (strategic/financial/operating) so that field employees could tap into the latest information about the crop to fix problems and/or contribute understanding to farm-wide problem resolution. This provides much more **autonomy** to the farm worker role than s/he has today and provides a pathway for expanding this role in the future. The field digital platform is connected into a larger system of platform architecture about farm performance (**system coherence**) to allow farm management to enhance their ability to assess and manage operating risks. This collaborative work among all farm employees and stakeholders enables **long-term adaptability** because short-term fixes are always aligned with total system performance and adaptability. The platform concept ensures alignment with humanity-centered organizational values, business needs and regulatory requirements over time. I am sure my fellow team members can embellish this story further.

I would have liked to see the other sector prototypes described in the same way of balancing autonomy, system coherence, and long-term adaptability so we could learn about the differences and commonalities across sectors.

Sharing these stories could strengthen our collective narrative - **Great Workplaces that Work Great Integrating People & Technology** - and demonstrate the real-world applicability of our Open STSD approach.

I learned some new methodologies such as Personas and 5 Ts to add to my repertoire of humanity-centered Open STSD. Survey feedback indicated that not everyone appreciated the value of these methodologies. In my own designing experience, I built a large repertoire of "humanity-centered methodologies" from which to choose those appropriate to a client's culture and context of the opportunity/challenge. This benefited me with the client by being able to integrate other frameworks they were using such as BPR, Lean, Six Sigma, etc. with the Open STSD approach. It also opened up personal networking opportunities as rather than seeing these other methodologies as competitors, I saw them as complementary methodologies to add to my repertoire and partners to co-consult with.

Carolyn's Reflections on Using AI

The opportunity to incorporate AI into group design work was eye-opening. While AI proved useful in summarizing discussions and saving time, deeper deliberations revealed its limitations:

- **Human Intuition and Creativity**: AI outputs often missed the nuances of human insight and domain expertise. All the groups presented both the CHATGPT summaries and their own Post-Its to express their full learning.
- **Collaborative Synergy**: Relying solely on AI summaries risked homogenizing outcomes, reducing the richness of team collaboration. AI may allow teams to gain insights that enables them to act more quickly, but if teams learn to rely on the AI insights alone, it may decrease interactions with peers and lose the human perspective and ability to pick up on underlying tones or expectations that is vital to collaborative designing.

- This experience reinforced the need for **intentional design** when integrating AI into work processes. AI has the potential to augment human creativity and efficiency but must be carefully tailored to fit the specific work context.

CONCLUSION

The 2024 U.S. presidential election has underscored the fragility of societal systems. In this context, our work as organizational designers is more important than ever. By applying the three orders of Open STS Designing, we create *islands of coherence*—prototypes of the world we want to build.

I am grateful to the STS Roundtable stewards, the 2024 Design Team, and all Vancouver participants for enriching my learning. I look forward to engaging further and continuing this vital work.

APPENDIX

With Self-Organizing, what is the Role of the Organization Designer?

I see organizational designers as orienting learners towards a wider system context and long-term time span for their specific opportunity/challenge; emphasizing discovery of multiple perspectives to understand the opportunity/challenge; and inviting them to try an experimental iterative approach to designing. This allowed the insiders in the ecosystem to adapt change frameworks and processes in a self-organizing way without seemingly contradicting my expertise.

Action learning defines the boundaries in which effective action (i.e. organizational change) can be activated and maintained. The outcome of 3rd order designing is that we have not entered fully into whatever final design outcomes await us (1dt order), but we are energized to take on

the opportunity/challenge because we can see the outlines and possibilities but not the defining features of the complex adaptive system we strive for.

Reframing Open STSD as 3D Approach to an Uncertain World

Designing productive collaboration (using our Open STSD methodologies) becomes a skill everyone needs to have (versus offering Open STSD solutions that become quickly outdated, e.g. the self-managing design of yesterday needs updating today). Equipping everyone in an organization with the ability to improve team interactions within a larger ecosystem, and sustain this performance in a highly volatile environment, will lead to more innovation faster, the measure of success today. I believe 'Collaboration Design' is still in its infancy in the marketplace, but I see more and more consultants describe their offerings as "Collaboration Design. It is now seen as more than just a nice-to-have soft skill; it is becoming a future skill that all leaders and teams will need to function in modern workplaces. It also offers connections to other groups like Relational Coordination to understand our complementarity and differences within the organizational design ecosystem.

Carolyn's View of the Capability of Open STSD Collaboration Designing

Cal Pava saw this capability as key to resolving the fundamental paradox of organizing – i.e. ***robust autonomy/self-management occurs best when bounded by whole system coherence and long term perspective, the essence of Open STSD theory as I see it. Resolving it is a choice between what Fred Emery called "genotypical design principles.*** According to Emery, every organization, whether it is a family, a government, voluntary group or a workplace, is governed by one of these design principles. In workplaces the relationships between employees (whether they are board members, management or workers) is either **autocratic** (DP1) or **democratic** (DP2). In my work, I renamed these DP1 and DP2 principles as a state of perceiving humanity as follows:

1. A reductionist view of humanity sees humans as simply the sum of their parts, meaning that all human behavior, thoughts, and experiences can be explained by breaking them down into individual actions, essentially ignoring the complex interplay of social, cultural, and psychological factors that contribute to human experience. [Emery Redundancy of Parts]
2. A holistic view of humanity emphasizes the inherent worth and potential of each individual, believing that people have the capacity to make conscious choices, strive for self-actualization, and find meaning in life through their own actions and contributions to society. The whole of human experience is greater than the sum of its parts, meaning that factors like social interaction, environment, and personal meaning must be considered alongside biological mechanisms to fully understand human behavior. [Emery Redundancy of Functions]

Pava realized the 'equivocality' of the collaborative designing task at two levels:

1. In the **choice** of reductionist or holistic views

2. In the **balancing of the paradox**, i.e. the degree to which each element – autonomy, whole system, and long term adaptation – fit the context in which the opportunity/challenge occurred.

So he chose the terminology of **deliberation/coalition nonlinear designing** to reflect the deep thinking and careful reflection to make very conscious, well-thought-through choices in organizational design that would have lasting implications (2nd and 3rd order effects or risks).

Deliberations go deeper than just conversation among people or facilitation of meetings. There are structural components such as topics, parties with differing perspectives, unstructured/ structured and asynchronous/synchronous forums for convening people, information sources and dialogic process to be designed so as to generate trust and psychological safety, a sense of purpose and enthusiasm and excitement, to achieve a truly collaborative design capability.

Coalitions refers to the different social groupings who need to deliberate in ever growing alliances that work together harmoniously and effectively to achieve the evolutionary purpose of the ecosystem of which they are a part. (see Rob Cross, Amy Edmonson, and Wendy Murphy research on the type and quality of collaboration in an organization).

It will take more intentional effort and energy to create the enabling conditions for humanity-centered learning and designing. I believe our 3 orders of designing activate the capability for collaboration designing of this emerging future. Otto Scharmer calls it **islands of coherence** and Margaret Wheatley calls it **islands of sanity.** Our design efforts generate these islands as prototypes of the world we want to create.

An Emerging Third Option: Reclaiming Democracy from Dark Money & Dark Tech | by Otto Scharmer | Field of the Future Blog | Nov, 2024 | Medium

https://www.psychologytoday.com/us/blog/from-functioning-to-flourishing/202008/in-the-midst-of-uncertainty-can-you-be-an-island-of