AI-Enabled Sensemaking "Studios"

Scaffolding
Developmentally <u>How</u> We
Think In Complexity, For
Generative Collective Action

Prototype and Start-Up Presentation



Vision: Evolving from Surveys to "Studios"

We're aiming to be the "Qualtrics/TypeForm" for AI-enabled collective decision making through narratives. Tackling complex organisational applications.



The global online survey software market is projected to expand significantly from around \$3.56 billion in 2024 with a compound annual growth rate (CAGR) of over 14%, reaching \$14.48 billion in 2030*, reflecting sustained interest in data-driven decision-making tools across various industries.

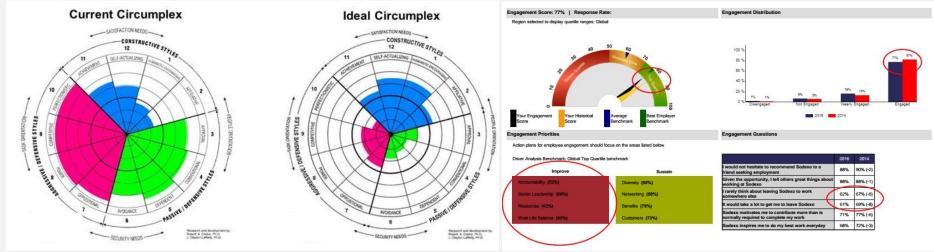
This surge is attributed to improvements in user interfaces, enhanced data security, and the integration of online survey tools with other platforms, making it easier for businesses to collect and analyze feedback efficiently. The top players in the market include Qualtrics (\$1.4b turnover 2023), Zoho Forms (\$1b turnover 2023), and Typeform.

Have you been frustrated with closed-question surveys that attempt to capture what are dynamic, highly contextual situations?





And how meaningful are reports that attempt to summarise complex, dynamic issues, through averages?

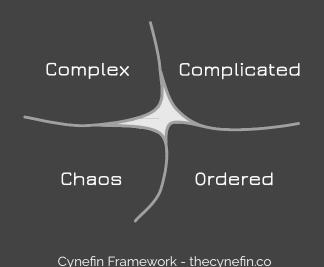


Such 1-10 scale surveys should only be used for "inventory" type applications

- a fundamental lesson from the complexity sciences

Choosing the right methodology for sensemaking is crucial

Based on complexity principles:



Nature of the Change **Data Access Practices System ORDERED** Measure. Surveys Categorise, = Inventories Respond **COMPLICATED Real-Time** Sense, Analyse, Sensing Respond - Monitoring COMPLEX Narratives: = Human Probe, Sense, Respond Sensor Network

For generative "sensemaking" we need to capture the natural and dynamic ebbs and flows of human sentiments, collective meaning-making and subjectivity...



But what might be the next **evolutionary steps** for the current narrative sensemaking market?



2nd Bounce of the Ball: Integrating lessons of the past 15+ years of the narratives sensemaking expert practice community, to imagine a 2nd generation of opportunity.



Ethical Integration of AI: Applying the promises of AI, with deep concern of ethical design, and grounded in first principles of 'meaning-making' processes



Harvesting Unstructured Narratives: Expanding from 'survey' type closed questions, to a far broader range of unprompted and rich media input - giving us access to "leading vs lagging indicators" in complex, dynamic contexts.

Building On Our Previous Client Experiences

Our vision for AI-enabled "Sensemaking Studios" is built on the experience from the organisational development Human-Equity Ltd brand (2009-2020), and visualisation software development (Collective-NavigatorTM), delivering narratives sensemaking projects for multinationals such as IKEA (world group headquarters) and LeasePlan, and VC/Private Equity investors.

Breakthrough methods and solutions were delivered for distributed sensemaking in complex domains in organisational development such as:

- Culture and values surveys
- 360 leadership feedback
- Change management
- Strategy decision making
- Corporate social media







There is an ever growing market opportunity

Collective Meaning Making

- Governance monitoring, ethical reasoning
- Scenario mapping



Organisational Development

- Strategy and change management
- Leadership 360 + continuous learning
- Employee Collaboration and Sentiment

Citizen Engagement

- Community voices
- Political generative dialogue
- Conflict resolution

Market Examples 1: Al and Decision Making: TED Talk by Ray Dalio



"Whether you like it or not, radical transparency and algorithmic decision-making is coming at you fast, and it's going to change your life." (Ray Dalio*)

- Decisions based on algorithms that take people's believability into consideration based on their historical thought and idea patterns eliminates what I believe is one of the greatest tragedies of mankind — people naively holding opinions that are wrong and acting on them and not putting them out there to stress-test them,"
- "Collective decision making is so much better than individual decision making if done well. This is the secret sauce behind our success."

Market Examples 2: Scaffolding Narratives For Collective Meaning

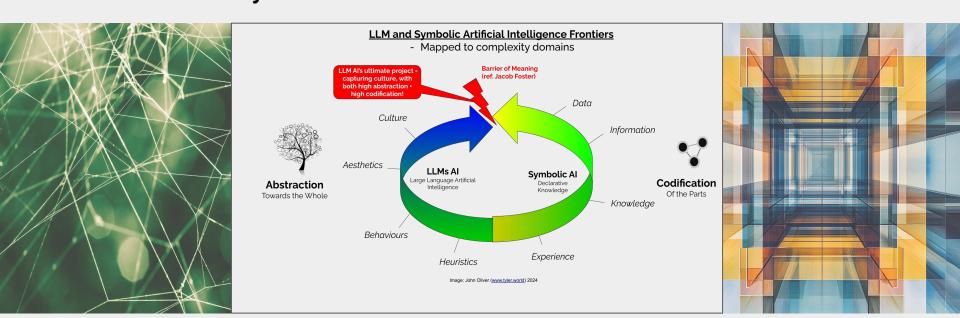


Our toughest challenges in complex, dynamic can only be made sense of through contextual narratives presenting a significant opportunity to integrate Al into these natural conversational processes

- Narrative sensemaking methods provide richer, context-driven insights by allowing individuals to share open-ended stories, revealing deeper motivations and experiences that structured surveys may miss. Unlike static surveys, narrative approaches can adapt to changing contexts, offering a more flexible and holistic understanding of complex human behaviors.
- However, the narratives market has so far struggled to scale due to lack of software development that reduces the project design and setup phases, and low interactivity of the data visualisation.
- All this can now change, thanks to Al...

So what is our unique IP?

1. Integrating LMM and Symbolic AI: Our platform integrates a new approach to AI that addresses the issues of hallucinations in LLMs, through the integration of symbolic frameworks that are specifically relevant for collective meaning-making processes (e.g. developmental psychology, archetypal constructs etc.) - known in AI research as "**Neuro-Symbolic AI**".



So what is our unique IP?

2. Towards a science of sensemaking: How we integrate developmental and change frameworks in sensemaking



Developmental psychology* with over 100 yrs of research in how we continuously evolve as adults, is gaining more and more traction in organisational and leadership domains.

But their notions of vertical stages of development have been widely criticised...

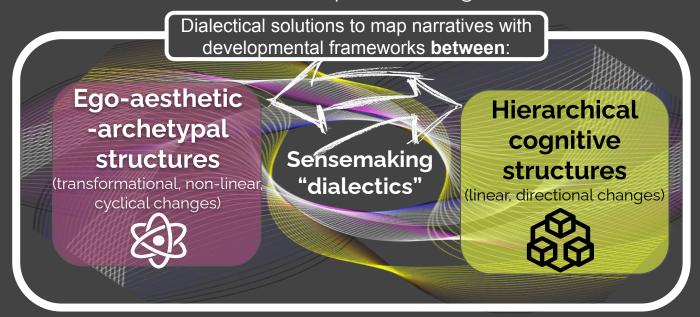


*As distinct from behavioural 'type' psychometrics, developmental psychology builds on Jean Piaget's cognitive work, further developed by leading contemporary figures such as Robert Kegan, Kurt Fischer, Bill Torbert, Michael Commons, Susanne Cook-Greuter, Theo Dawson, Michael Basseches



<u>Solution</u>: Developmental psychology needs to be applied integrating collective systems **Complexity Principles**

And directly address the controversies that by development we mean 'higher is better' in 'vertical developmental stage hierarchies'.



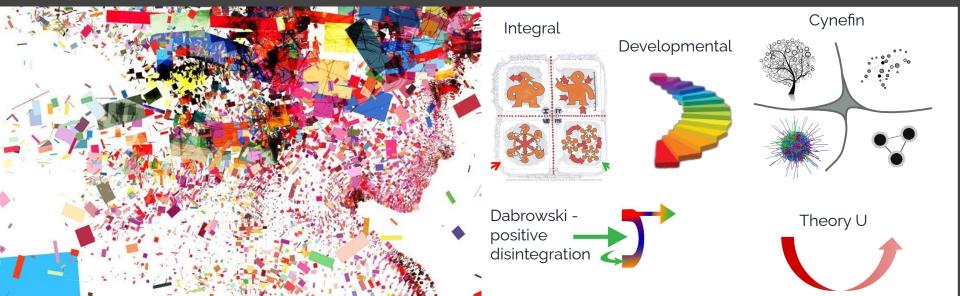
'See these foundational papers on addressing the controversies in developmental psychology, and understanding development within complexity principles: Overton, Willis. (2003). Development Across the Life Span. 10.1002/0471264385.wei0601.; Thelen, Esther & Smith, Linda. (2007). Dynamic Systems Theories. 10.1002/9780470147658.chpsy0106.

Towards a "**Science of Sensemaking**" that makes the narrative experience more engaging and meaningful



Interactive conversational features are at the heart of the platform design:

- 1. Starting with free, open narratives expression, our platform will be conversational based on dynamic prompts based on which 'signifiers' or interpretation prompts most relate to their topic.
- 2. The frameworks come therefore downstream to the process of narrative capture (e.g. reducing filtering by pre-designed questions and prompts).
- 3. The AI platform moves from a 'Principle Component Analysis' of issues arising, to 'Principle Framework Analysis'.



Create Your Sensemaking "Studio"

Studios can be created for any context remotely (e.g. in parallel to live conference call sessions), to in-person events, to continuous capture in your working environment



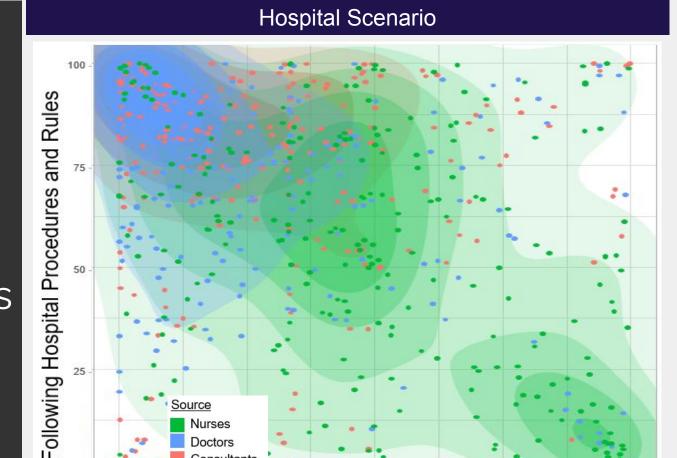
Example 1.

Sensemaking
"**Studios**" for
everyday
organisational
contexts

Hospital Scenario



To continually sense the dynamics in the organisation, as they navigate necessary 'dialectics'

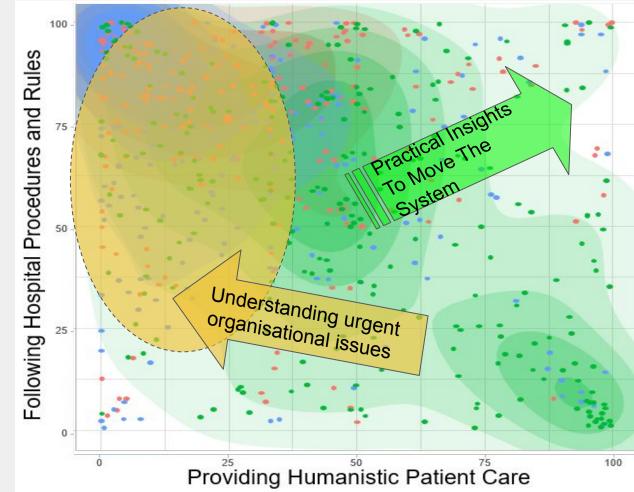


Providing Humanistic Patient Care

Doctors Consultants And identify how and where to nudge the system, the culture, the narratives - as a distributed collective sensemaking process:

-The narratives are developmentally scaffolded by the reflection prompts from the platform





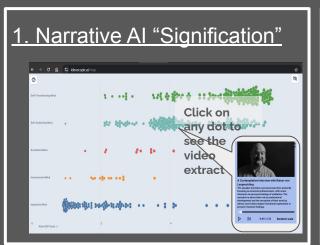
Example 2: Create Your Sensemaking "**Studio**" - Video Example

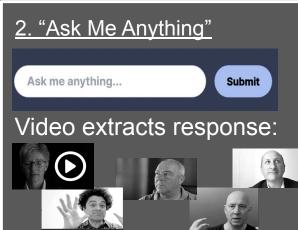
Our AI demo platform has processed (in multiple languages) approx 10hrs of video portrait content, into 'narrative moments' or chunks (Chat GPT 4.0 based)

Based on a body of 120+ video narratives from:



Three Studio Key Features:









youtube.com/@interiortruth



InteriorTruth.com Witnessing soul



InteriorTruth

@interiortruth · 86 subscribers · 123 videos

I'm an independent filmmaker based in France, with a background in organisational develo...

interiortruth.com

Customize channel

Manage videos

Home Videos Playlists Community

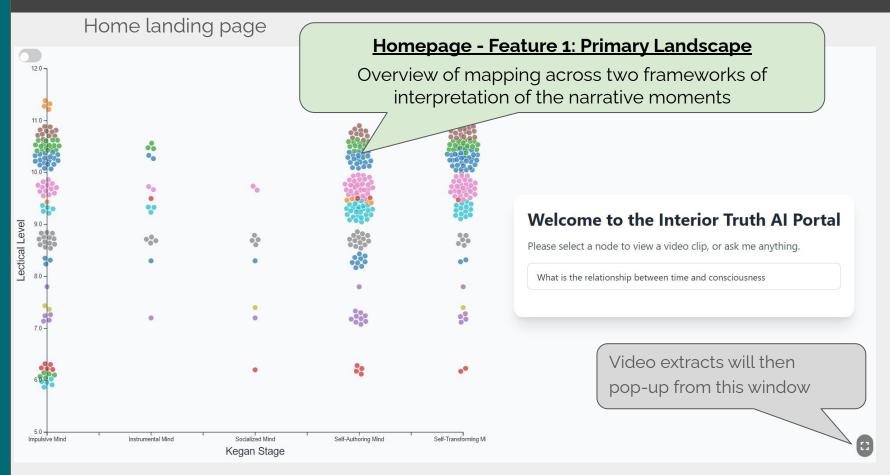


Introducing the 'Primary Narratives Landscape'

Each dot is a narrative moment, that has been signified in terms of a range of interpretive scales

The promise of narrative sensemaking comes from Click on any dot to reflection) see the video extract being able to visualise at a depth of narrative macro-scale the clusters and outliers of narratives.... II 0:25 / 2:26 without losing access to the original narrative Socialized Mind Self-Transforming M Instrumental Mind Self-Authoring Mind Kegan Stage Ego-construct stage (Kegan)

Homepage - **Developmental** Landscapes - 1



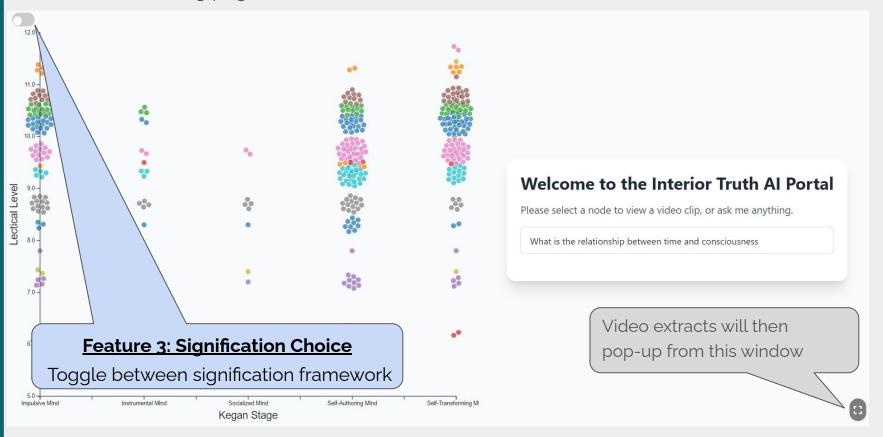
Homepage - **Developmental** Landscapes - 2





Homepage - Developmental Landscapes - 3

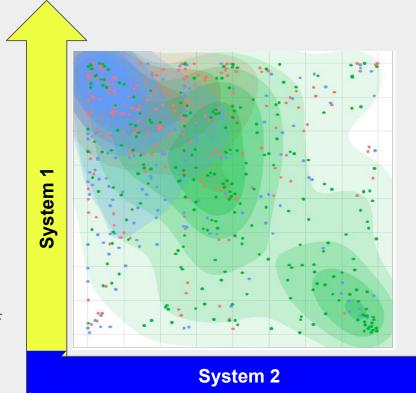




Sensemaking is a Dialectical Process... sensing the "Whole"

The school of sensemaking (Weick, Derwin, Kurtz, Snowden) builds on the contextual interpretations of dynamics between polarities - helping us see how we are continually navigating tensions and trade-offs

Progressing from "expert" coding of narratives, to self-signification of narratives, to now the far more dynamic possibilities of Al signification



Horizontal Axis: Robert Kegan's Ego Construct Scale

Robert Kegan's "Ego Construc" Scale

	Developmental Stage/ Order of Mind (typical ages)	What can be seen as object (the content of one's knowing)	What one is subject to (the structure of one's knowing)	Underlying Structure of Meaning-Making	
	5th Order: Self-Transforming Mind (typically > ~40, if achieved)	self-authorship, identity, ideology	the dialectic between ideologies	System of Systems	
	4th Order: Self-Authoring Mind (variable, if achieved)	interpersonal relationships, mutuality	self-authorship, identity, ideology	Systemic	
0	3rd Order: Socialized Mind (post-adolescence)	one's needs, interests, desires	interpersonal relationships, mutuality	Across Categories	
	2nd Order: Instrumental Mind (~6 years-old through adolescence)	one's impulses, perceptions	one's needs, interests, desires	Catégories	
	1st Order: Impulsive Mind (-2-6 years-old)	one's reflexes	one's impulses, perceptions	Single Point	

Adapted from Kegan, Robert. In Over Our Heads: the Mental Demands of Modern Life. Cambridge: Harvard University Press, 1994. pp. 314-315.

Based on the Constructive Developmental Framework



See also:

https://en.wikipedia.org/wiki/Constructive_developmental_framework

Vertical Axis: The Klein EXP Focusing Scale

Klein/Gen dlin "Focusing Scale"

1	2	3	4	5	6	7
Speaker as subject, relating externalities			including	as object, emotions, pection	as object, o	constructs juestioning, ng new ectives



The EXP Scale (Klein et al., pp 56-63): Klein, M., Mathieu, P., Gendlin, E. T., & Kiesler, D. J. (1970). The Experiencing Scale: A Research and Training Manual (Vols. 1–2) Wisconsin Psychiatric Institute

The Klein EXP Focusing Scale - detailed

Klein/Gendlin
"Focusing
Scale"
Detailed
descriptions

Level	Description
1	The content is not about the speaker. The speaker tells a story, describes other people or events in which he or she is
	not involved or presents a generalized or detached account of ideas.
2	Either the speaker is the central character in the narrative or his or her interest is clear. Comments and reactions serve to get the story across but do not refer to the speaker's feelings.
3	The content is a narrative about the speaker in external or behavioral terms with added comments on feelings or private experiences. These remarks are limited to the situations described, giving the narrative a personal touch without describing the speaker more generally.
4	Feelings or the experience of events, rather than the events themselves, are the subject of the discourse. The client tries to attend to and hold onto the direct inner reference of experiencing and make it the basic datum of communications.
5	The content is a purposeful exploration of the speaker's feelings and experiencing. The speaker pose[s] or define[s] a problem or proposition about self explicitly in terms of feelings [and] explore[s] or work[s] with the problem in a personal way. The client now can focus on the vague, implicitly meaningful aspects of experiencing and struggle to elaborate it.
6	The subject matter concerns the speaker's present, emergent experience. A sense of active, immediate involvement in an experientially anchored issue is conveyed with evidence of its resolution or acceptance. The feelings themselves change or shift.
7	Experiencing at stage seven is expansive, unfolding. The speaker readily uses a fresh way of knowing the self to expand experiencing further. The experiential perspective is now a trusted and reliable source of self-awareness and is steadily carried forward and employed as the primary referent for thought and action.

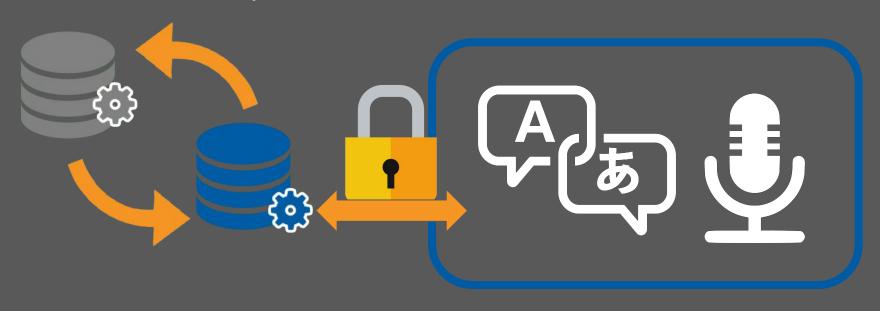
How Might AI Take Sensemaking Methodological Leadership Further?

	Standard Survey Practices	Focus Groups	Narrative Sensemaking Breakthroughs	AI-enabled Sensemaking
Input Processes Issues	Closed question Likert-scale responses (for lower complexity topics)	Dynamic, conversational content that is recorded and then transcribed	Open-ended story capture: Reducing bias of group facilitator or closed question surveys	Wider Input Possibilities: Possibility to process wide range of text, audio and video content,
Interpretation / Signification Process Issues	Typical reporting process of statistical analytical reports	Usually coded and summarised by expert coders (ethnographers, consultants etc.)	Offers high levels of alignment to context, culture and language, thanks to the 'self-signification' processes.	Dynamic / Flexible / Comparative Frameworking: Highly dynamic* - choose your framework of interpretation Ability for comparing self and Al signification deltas. *Applying awareness of Al-bias
Sensemaking of Outputs	Contextual nuances get collapsed into quantitative analytics	Highly contextually dependent, anchored in the meaning making framing of the researcher	Ability to map at macro level (to observe clusters and outliers AND maintain direct access to the original narrative) - opening up more distributed interpretation by local groups	Mixed Method Exploration: Ask any open question of the narrative data set. Explore theme clusters.

Product Roadmap

Platform Feature Roadmap - 2

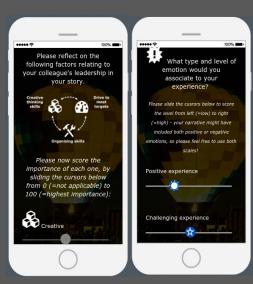
Privacy: Guaranteeing total privacy of narratives data, where all narratives are locally stored and the AI processing is handled via an asymmetric codification transfer

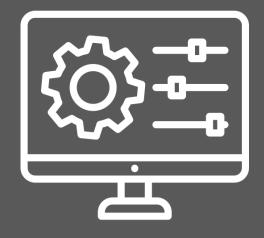


Platform Feature Roadmap - 3

Instance Studio Session Design Al Wizard: Intuitive narratives capture, analysis and visualisation set-up, for clients to design and configure their own studio projects.

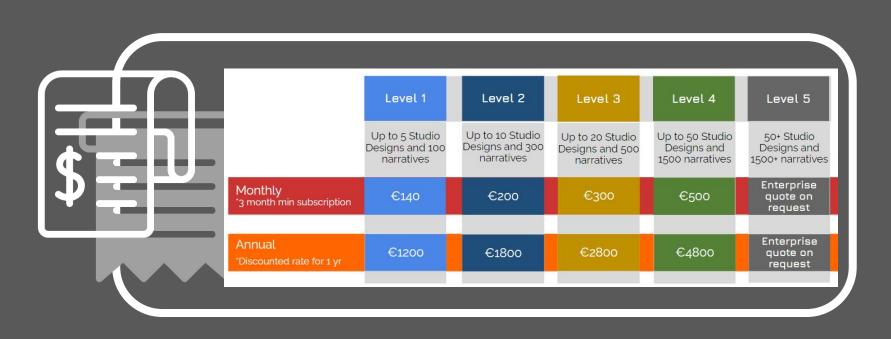






Platform Feature Roadmap - 4

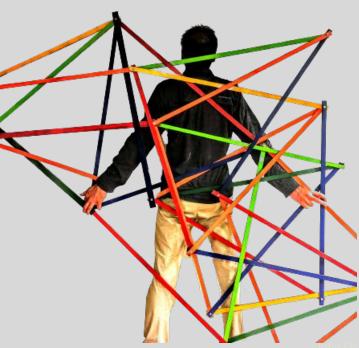
Billing Engine: Flexible pricing model, subscription or per-project options



About - John Oliver



Adventures across the Good, True and Beautiful



Having worked over the past 15+ years in organisational development consulting (and with my own brand from 2009-2020), I have been committing to an artistic practice since 2020 to both ground myself in the principles in embodied creative processes (art as a technology, art as a spiritual practice), and de/re-constructing ego.

I am passionate about integrating the schools of **narratives sensemaking** with **developmental psychology,** in the context of both cultural and cognitive evolutionary anthropology.

Dialogue projects, where we can find artistry in the coordination of our constructs and in the dance between dialectics (essentially in the competing 'truths' of the good, true and beautiful / the arts, sciences and faith traditions), is where my heart is leading me.

Rather than AI being seen as a threat, I'm exploring the domain of 'developmental AI' that allows for scaffolding and the coordinate of both our cognitive constructs and our aesthetic, embodied meaning making.

John Oliver Bordeaux, France



www.tyler.world Curriculum Vitae

Relevant Initiatives and Start-Ups

Citizen Tech

- o <u>pol.is</u> <u>Computational democracy</u>
- o cortico.ai Conversation Platform civic networks
- <u>ethelo.com</u> Transform Community Engagement Through Consensus
- o <u>decidim.org</u> Free Open Source Democracy
- o Radical Exchange Institutional innovation
- MetaGov Lab for digital governance
- <u>Democracy Routes</u> Inclusive decision making software

Organisational Applications

- <u>hunome.com</u> Making sense of the world's complexity
- <u>loomio.com</u> Collective Intelligence
- o <u>contextdriven.ai</u> 'Frameworking' with AI (Integral Life CEO's platform)
- Other corporate start-ups: Glint, OfficeVibe, Valence.co, Quan (wellbeing surveys)

Qualitative Research

- <u>Discuss.io</u> Al based
- Remesh.ai Al based

Research References - 1 Ethics of **Developmental Psychology** Interpretation Frameworks

- Rosenberg, Shawn W.: <u>Rethinking Democratic</u>
 <u>Deliberation: The Limits and Potential of Citizen</u>
 <u>Participation</u> 2007 Polity 335-360 V 39 N 3
 10.1057/palgrave.polity.2300073
- John Oliver paper and LinkedIn Post: <u>Stairways to</u>
 <u>Heaven? Reframing The Controversies In</u>
 <u>Developmental Psychology Models Through</u>
 <u>Integral "Developmental Sensemaking"</u>

Stairways to Heaven? Reframing The Controversies In Developmental Psychology Models Through Integral "Developmental Sensemaking"

John Oliver



Oct 2022

Abstract and Introduction Sections Extracts

"I suppose it comes from this edge identity, this frontier conversation that I talk about, but it's in many of our great traditions. The understanding is that there is a conversational nature to reality," David Whyte

"Reality is a constant movement between opposites."

William Irwin Thompson

Research References - 2 Al and the Barrier of Meaning

John Oliver LinkedIn Posts:

- Mapping Al across the spectrum of cognition LLM and Symbolic Al as representations of the polarity between abstraction and codification - April 2024
- Understanding the "Barrier of Meaning" in AI from the perspective of the complexity sciences February 2024
- My Notion Page on notes from the 2023 course by JF Martel on "Art in the Age of Al"

Video Resources:

Workshop on Al and the Barrier of Meaning 2, April 24-26, 2023 Santa Fe Institute

• Research Papers:

- LLMs Can't Plan, But Can Help Planning in LLM-Modulo Frameworks Proceedings of the 41 st International Conference on Machine Learning, Vienna, Austria. PMLR 235, 2024
 - Comparing LLM and Symbolic AI designs to Daniel Kahneman's "System 1" (intuitive abstraction cognition)
 and "System 2" (analytical codified cognition)
- What are human values, and how do we align Al to them? Oliver Klingefjord, Ryan Lowe, Joe Edelman. Meaning Alignment Institute 17 Apr 2024
- Large Language Models Need Symbolic AI Northwestern and Indiana Universities NeSy 2023, 17th International Workshop on Neural-Symbolic Learning and Reasoning, Certosa di Pontignano, Siena, Italy