Metaphorum 2019
Ctrl Shift Del:
Rebooting Society
Huizen, The Netherlands
November 1st - 3rd , 2019

AGENDA

The weekend will be organised as follows :
On Friday evening we meet, eat, mingle and decide on the details of the conference.
Saturday and Sunday morning we will give talks, ask questions and discuss the issues.
Sunday afternoon we will regroup to decide what to do next, (perhaps create higher level Viable Systems from Metaphorum' Systems One (you and me),) and then hold the AGM.
Please bring with you an artefact, that makes you think of what Stafford might have said to us this weekend if he was here.

Friday, Nov 1st

Participants will arrive during the day at the Nautisch Kwartier Hotel in Huizen
To book your ride from Naarden/Bussum Train Station to Huizen,
call Pieter on +31 6 13607537

The Conference Room will be opened from 5 pm, until dinner time, and there will be drinks available. Dinner is included in the price; you can eat any time until 8 pm.

The Opening Session starts at 8 pm at the Conference Room. We hope to get to know each other informally, and to talk about the Conference.

- Welcome with a poem or two of (and to) Stafford.
- Ctrl Shift Del : why are we here ?
- Who is who ? Group dynamics to meet each other (Lead: David Beatty) (do not forget to bring your artefact or story to this session)
- Presenting the agenda for the weekend
  - We will be doing all the talks during Saturday (all day) and Sunday (morning), there is half an hour for each talk. (with a few exceptions, given the nature of the talks)
  - Anyone who wishes to swap their slot is free to do so as long as someone else wants to swap with them: self-organising final adjustments.

Wolfgang Lassl . "Shift + F5" – Reloading Organizational Viability

Today, executives are confronted with a never-ending avalanche of new organizational and leadership models. Instead of offering comprehensive solutions, these models rather bear witness to the general perplexity of what constitutes the viability of organizations and the general principles thereof. The potential of the VSM in that regard is highly appreciated by its community but not well known to managers or organizational theory scholars.

Two dangers loom: first, that the VSM becomes a theoretical island isolated from current organizational thinking and second, that the attempt to make the VSM better known leads to a superficial interpretation that will disappoint long-term both, practitioners as well as academics. To prevent both dangers, we need to dive deeper to make the VSM sustainably more relevant.

The three-volume compendium, which is being published by the speaker, intends to be a starting point to rediscover what organizational viability might entail from the VSM's perspective. This talk provides an overview of the compendium describing its main intentions as well as its main lines of thought.

Wolfgang Lassl, MALD, MTh, is an associate partner at Pure Management Group and works as a management advisor, author, and educator. He is a specialist in organizational design and transformation processes. He advises organizations in the private, public, and non-profit sector. He is an associate member of the Peter Drucker Society Europe. Apart from his passion for management issues, his second main area of interest is philosophy. He holds a Master's degree in Theology as well as in International Relations (Fulbright scholarship). He looks back at teaching and research assignments at Tufts University, University of Vienna and Salzburg.

Dr. Igor Perko. RE-View the reviewing process, Blockchains as a catalyst?

Purpose: assess the options to design a collaborative reviewing process, where the reviewers and authors are involved in the multi-phase research papers design process. We will create an environment, focused on raising the quality of the research papers with the peer contribution is clearly evident. Blockchains support constructive feedback loops, elaborate the contribution of the partners and preserve the author rights of the participants in the reviewing process.

Methodology: blockchain base reviewing process is documented and clarifies contributions of all the involved peers in the process. The contributions of authors and reviewers are assessed by the reactions to their inputs: authors by the reviewer feedbacks, reviewers by the author modifications to the paper, based on their recommendations. Reviewing loops are multileveled: first reviewers close to the authors are invoked, then reviewers within the research domain, and last multidisciplinary researchers and the wide public. The selection of the appropriate reviewers/audiences invokes AI suggestion.

First prototype solutions can be applied to scientific conferences, where section peers can perform internal reviews.

Results: The implication will reshape the research landscape. Researchers can safely share their work with peers and receive helpful feedbacks with all peers get credits for their involvement in the research papers development. The relevant research state of the art is shared accordingly within and among domains and thus its development progresses. It thereby contributes to the body of knowledge development and representation.

Implications: the proposed model significantly impacts researchers, where the publish or perish competitive concepts are replaced with collaboration and sustainable research processes focused on co-development of knowledge. The new reviewing process helps re-establish the importance of research for the professional and social environments and actively invoking the targeted groups in the research process.

*Igor Perko is an assistant professor at the University of Maribor, Faculty of Economics and Business, Slovenia. He is appointed as a director-general in World Organisation of Systems and Cybernetics (WOSC) and co-editor of Kybernetes, an JCR indexed scientific journal. **His professional backgrounds** include development of information systems in the financial industry, focusing on business intelligence systems, predictive analytics and risk management systems. He integrates information technology-based data processes with the concepts of management, systems thinking and cybernetics. His PhD thesis was "Intelligent agents in management information systems". In **his professional work** with the students, he introduces management information systems, business intelligence tools and concepts based on: OLAP, predictive analytics, balanced scorecards and cyber-systemic thinking. He was running a Jean Monnet funded international summer school: "Big Data EU Business Implications" In **his research work**, he is connecting the use of systems thinking,*

cybernetics, big data, predictive and prescriptive analytics, to provide value added in business, non-profit organisations and people. He is passionately involved in joining active people and organisations in the systems thinking and Cybernetics community through his activities WOSC. He is an author and editor of multiple professional and research publications, among them he co-edited a book "Cybernetics and Systems: Social and Business decisions", based on the WOSC 2017 Congress contributions. More can be found [Here](#)

Dr. Ivo Velitchkov. Essential Balance in Organisations

Management Cybernetics has its models and language. They are extremely valuable when discussing with peers and for the advancement of the discipline. Yet, they limit the accessibility of the wider audience to these ideas. What's more, they limit the spread of the mindset and skills needed for systemic change.

Ivo will share his practice of teaching his version of management cybernetics without using models and without talking about channels, transducers, amplifiers, and attenuators. Without even using the word "system". Instead, he helps leaders to work on their skills for diagnosis and design, by building observational and thinking habits (which also need to be understood cybernetically), related to three organisational balances: autonomy-cohesion, diversity-stability, and exploration-exploitation.

This session will mix highlights from the content of the workshop "[Essential Balances in Organisations](#)" with cybernetics references (old and new) that are not part of the typical content (for the above mentioned accessibility concerns) but might be of interest to the audience of Metaphorum.

> *Ivo Velitchkov is an independent management consultant. He's known for his work in Enterprise Architecture, Management Cybernetics, Data Management, and Business Process Management. He's been involved in these management areas for 23 years in various capacities: entrepreneur, CEO of a software company, university professor, project manager, consultant and researcher. His work is inspired by cybernetics, cognitive and social sciences. Ivo Velitchkov is the author of the blog Strategic Structures (http://www.strategicstructures.com/). He's a contributor to "Enterprise Architecture for Connected E-Government: Practices and Innovations" and author of the forthcoming book "Essential Balances in Organisations". He has PhD in Computer Science.*

Dr. Thomas Swann (Loughborough University). Anarchist cybernetics in and against the institutions

Anarchism and cybernetics enjoy some natural overlap on the topic of self-organisation. While both traditions approach self-organisation in slightly different ways, they share a concern with how self-organising social and political systems can be effectively structured. Some of how anarchist organisational praxis was realised in the Occupy movement, through a range of decision-making forums and mechanisms, can be read through the lens of Beer's Viable System Model as an attempt at what could be understood as effective self-organisation. These anarchistic forms of self-organisation, however, ran into limits imposed on the situation by the temporary nature of the Occupy camps and the transience of much of their participants. Following the end of the Occupy movement, the focus of radical left politics shifted from autonomous, self-organising encampments to elections. Given that both representative democracy and political parties are frequent targets of anarchist critiques of centralisation and structural hierarchy – critiques that may be mirrored in Beer's cybernetics – this raises a question of how much of the legacy and lessons of self-organisation and participatory democracy can be retained in these and similar institutions. Following John McDonnell's characterisation of working 'in and against' the state, this talk attempts to address how institutions like political parties and the state can be reformed – or revolutionised – to embody what Beer's cybernetics teaches us about effective self-organisation and what anarchism has to say about participation and decentralisation. It touches on how the strategic and grand strategic functions identified in levels four and five of the VSM can be opened up to participation and how they can be realised in tandem with the tactical autonomy that is essential to effective self-organisation.

Thomas is currently a Leverhulme Early Career Fellow in Politics and International Studies at Loughborough University. He completed his PhD at the University of Leicester School of Management in September 2015. Prior to that, he gained an MA in Social and Political Philosophy from Radboud University Nijmegen in 2010 and an MA in Philosophy from the University of Glasgow in 2008. Thomas' research examines the connections between anarchism and organisational cybernetics, aiming to develop 'anarchist cybernetics' as a framework for understanding radical left social movement organisation. More broadly, this includes looking at the nature of autonomy in anarchist organisation, the relationship between tactics, strategy and grand strategy and the ways in which communication can be understood in a radical left context. An important element of this work focused on the notion of alternative social media. His current research develops these themes in relation to the concept of participatory democracy and, drawing on an intersectional anarchist analysis of domination, and radical forms of constitutionalising outside and in opposition to the state.

Ian Kendrick. Enabling the coordinated Transformation for our planet using an approach guided by the VSM and delivered with a Multi Sided Platform

"Urgent action is needed to transform our world. The journey starts with our unsustainable civilization, and works towards one that is just, sustainable, ecological and flourishing. There are many initiatives attempting to address this. They lack the coherence, depth, scale and speed to address the urgent situation.".*

The paragraph above covers ground that may be familiar to us all. It is also the introduction to The Sustainable Development Goals Transformations Forum - "The Forum", or "SDG TF". Formed at the conclusion of Transformations 2017 in Dundee, Scotland, The Forum is committed to enabling the development and amplification of Transformations Systems, and the connecting and collaborating between many transformations initiatives, researchers, activists and funders. The SDGs provide an umbrella and foundation for many transformations' initiatives. The Forum recognises that some initiatives operate in silos, sometimes defined by the SDGs themselves. It seeks to promote and enable interworking between focus areas and disciplines. Further, it has researched and identified "deep systems" that individually and collectively generate the surface effects we all see and that must themselves be transformed. The Forum is organised around these deep systems and works to connect them and those working with and in them. This session will explore:

- The deep systems identified by The Forum.
- Explore how the VSM and related ideas are helping to bring coherence to transformations efforts and The Forum itself.
- Explore the kind of multi sided platform The Forum is developing and how ideas from the world of commerce and organisation may be transposed to such an endeavour whilst maintaining and enhancing the shared ethos of transformation. This will have "profit as a constraint", rather than the objective, and shared ownership as a guiding principle.
- Explore how the multi sided platform will seek to generate and amplify variety that we hope may be requisite for the work at hand.

Ian's work with SDG TF is to lead the thinking around it as a Viable System and to connect that thinking with a platform design that can bring such a system to fruition. Ian specialises in facilitating teams to work together to develop and deliver strategic innovation from inception to growth in turbulent environments. He has done this for three decades and uses approaches that include the VSM, innovation diffusion theories and practice, future thinking, dilemma resolution, and others, all supported by visual thinking.   These complexity approaches can be deployed at scale and online as well as co-located. He has worked with leading strategic innovation consultancies and was educated at top business schools in the UK. He has formed and led teams to explore and work with complex issues, with specific remit to help the team develop their skills and collaborative capabilities. Ian works as an independent consultant, as a senior advisor, mentor and manager at not for profit organisations in the UK. He has occupied CEO and VP roles in organisations focused on innovation and change. He led a major research project exploring how technology would enable the emergence of online communities. This work predicted that communities cohered by a shared ethos would emerge and have the potential to generate more variety to address the needed transformation for our world. For the past 10 years, and currently, he works predominantly with such communities and has led the design, implementation and support of them. For Ian the core dilemma we must all address is and working together in the present to build a future that is truly

viable for all, not just us humans. For the last few years has devoted himself to development of transformation efforts, in particular as a co-founder of H3Uni.

Javier Livas-Cantu

(1). 'Capitalism Vs. Socialism: The VSM/UMS7 Criticism of Both'.

Stafford predicted the demise of Capitalism since the very early 1990's. It is under attack by new SOCIALISTs. However, nobody has introduced the Law of Requisite Variety into this debate. When we do so, we can now see both more clearly and it gives us a much better notion of the choices we can make. How to go from each "ism" to the viable solution.

Javier Livas-Cantu (2) ' Rebooting Christianity: Management Lessons from the Bible'

Stafford Beer knew the Bible quite well. He took some of its passages and translated them as part of the structure of the VSM he created. I have done research to show many more connections of the Bible to management cybernetics. The model I use is the UMS7 (Universal Management) to show that the BIBLE describes the Body of Christ as an organization with four recursion levels and each one of the 7 Systemic Functions (Beer's 5 + 2 more) exist in the teachings of the New Testament. What do I know about REBOOTING CHRISTIANITY? It seems that Judeo-Christian values and the Constitution they generated are being questioned. I suggest that this "Software" has been contaminated. The LESSONS would get rid of the noise and provide Christianity with much needed reset.

Javier was born and raised in Monterrey, Mexico. 73 years old. Attended the American School of Monterrey. Graduated in Law & Social Sciences and got an MBA from Monterrey Tech. He has got a Fulbright Scholarship (1979) and an award for the 'Best Juridical Research from the Monterrey Bar Association' (1987). He has been an activist for liberty, democracy and transparency. He is an old-fashioned Attorney & Trouble-shooter. Self-proclaimed Cybernetician. Father of 4, grandad of 8. Happily married (forever) to Alma Nora Garza. He has been Secretary of the City council in the city of San Pedro from 1977-79; President of the PAN Party Municipal Committee in 1990; Contender for the Mexican Presidency in the PAN Party in 1993; Close collaborator of Vicente Fox in the successful 2000 Presidential Campaign; President of First Transparency Commission Monterrey (2001); President Modernization of Justice Commission State of Nuevo León (2003); Editorialist for EL NORTE newspaper since 1981 to the present. He is author of 8 in cybernetics and law (Most Books available in Apple Books), dozens of YOUTUBE videos related to Management Cybernetics (incl. The Universal Manager, 36 Lessons (2:40hrs.); Universo Kubernetes Parts I, II, III. (2:20hrs.) (Spanish & English); Why Trump, Why Now (Oct. 2016). He is the Producer, Writer and Executive Director

of the film KUBERNETES (2018), and Co-writer and producer of "Body of Christ: Management Lessons from the Bible" (Spanish & English) Pending publication.

## Joe and Chris Truss. The One Day Reverberator

The built models above are the Platonic regular polyhedra with their next closest embedding dual spheres. They represent the basis for dramatically shortened protocols that still offer Syntegrity-like reverberation and closest equivalence among participants. In the case we present below - in one day over 10 hours.

Introducing the one-day Hyper-Dual Tetrahedron (shown below) which accommodates 18 people and allows for 2 iterations of meeting sequences and demonstrates reverberation.
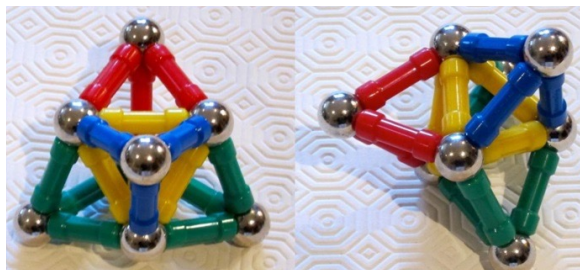

Fig
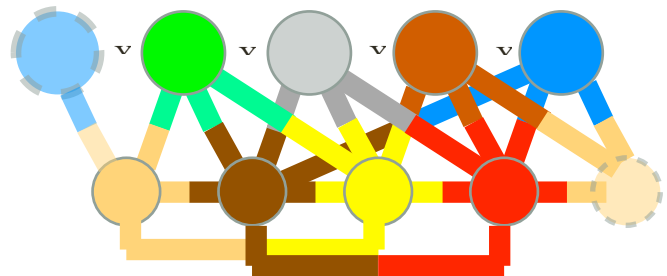
Fig

12 Participants - 4 Topics (outer nodes)
6 Participants - 4 Topics (inner nodes)

The one-day protocol offers an opportunity to deal with two sets of topics – the internal and external topics - which lends itself to applications where there are two logical sets of relationships or topics, and one can be 'embedded' in the other. An example could involve two groups – one representing System 4 (focusing on outside and then) and one representing System 3 (focusing on inside and now) – who need to meet to agree on a set of plans that are both coordinated and comprehensive. This would apply
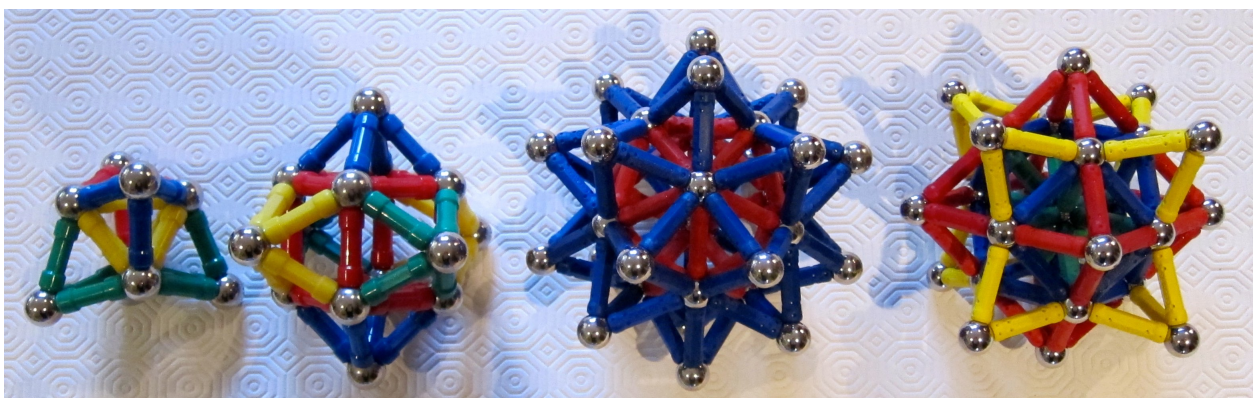
to all organizational levels, especially where there is a hand-off of accountability to an implementation or project management team.

In terms of protocol development, with the regular hyper-duals, there are clearly delineated embedded levels where, unlike Syntegration where the connectivity is all on the surface, there are two interconnected spheres which can be treated as distinct information domains to meet organizational or logical distinctions. The strength is not all on the exo-skeleton, where it is required to have 'away-from' node relationships in order to create reverberative spaces – we are now dealing with levels of embedment that permit reverberation in the closest direct coupling of any system with recursive sub-system. What this calls to mind is the suitability of these embedments to applications that require iterative feedback between two levels of logical hierarchy, organization or categorization, such as a System 4/3 interaction or interchange, or for strategic and operational planning and implementation. The structure also would be useful in a learning context where 6 experts are configured with 12 to 24 others to conduct intensive briefings, etc.

A singular advantage of the symmetry of these forms is that a two-iteration tightly coupled set of team interactions can be completed in one intensive day. The outer sphere meetings can take place simultaneously, in this case, four at a time. Because the connectivity is so highly interactive, two iterations are all that is needed to ensure robust information distribution and reverberation. Bucky Fuller's 'tensegrity', or tensile integrity is a balance of tension and compression through orthogonal forces in a single structure. It is the basis of synergistic integrity or the 'Syntegrity' of Team Syntegrity forms. The dynamics of the Hyper-Dual forms differ in that tension and compression are dictated by omni-directional forces that derive from both the structure and its dual form.

A unique selling proposition has to do with providing the client with results in one day that would otherwise take many days with any other process. The size of the group and engineered high interactivity means that the event can be run in-house, at the client's site, reducing or removing all outside residence expenses. It is also much easier to sell highly profitable one-day sessions where the client's down time and expenses are dramatically reduced and where the client would be far more likely to take a chance rather than commit to a full Syntegration. Any client who would be interested in Syntegration but worried about the time and expense would be a viable candidate for the new protocol.

Joe Truss was a co-founder of the company Team Syntegrity Inc. with Stafford Beer the inventor of Syntegration. I worked closely with him during the last twelve years of his life. I contributed to his book "Beyond Dispute - the Invention of Team Syntegrity" and developed the other Syntegration forms which allowed for protocols for smaller numbers of people. I was President and Board Director from the formation of the company in 1991 and took over the Chairmanship from Stafford in 1996. The company was moved to Switzerland, in partnership with Fredmund Malik and his firm MZSG, now called Malik Management. Fredmund is the Chairman of Team Syntegrity Int'l AG, based in St. Gallen, Switzerland. I continue in the role originally held by Stafford Beer of Chair of the Development Directorate.

Christine Truss (formerly Cullen) was involved with Joe Truss and Stafford Beer from the early 1990s until Stafford's death in 2002 and since then with Malik Management (MZSG). Chris was key to developing the logistics systems in the early days of Syntegration events. She helped to develop the roles of organizer, facilitator and logistician. Chris' background before and beyond Syntegration includes management consulting, contract work in sales and leadership training and delivery, process mapping, event management, and systems analysis. Chris serves as Director for Team Syntegrity Int'l AG

Stephan Verveen & Dr. David Beatty. Sharing results from an experiment in online group conversation for empowering crewmembers of spaceship earth
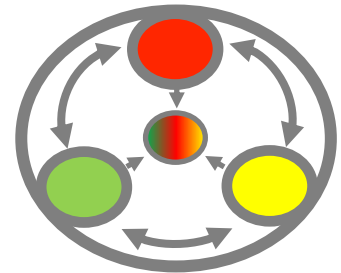
Stephan Verveen & David Beatty joined forces in November 2018 to design & pilot an online *Trimtable* experience. Fifteen participants from across Spaceship Earth convened online for 3,5 hours to explore a shared question that was prepared by three hosts: "*How do we empower ourselves, and each other, to take personal responsibility in transforming our communities on spaceship earth?*

> *Dr. David Beatty arrived in Montreal in 1943, grew up (pretty much) with 3000 other people in Fergus, Ontario ,joined the World YMCA Leadership Training Program in Lebanon, Gaza in 1965,-66 , escaped Michigan State University in 1970, with a PhD in Communication . Met Stafford at a high variety lunch in Toronto 1978, smuggled him into Canada in 1984 as a " national heritage ", lucked out on the start-up team of Team Syntegrity 1989-2000, jumped continents to launch the Millennium, ,currently World Syntegrity Project Co-ordinator at. www,world service.org*
> *Stephan Verveen (43) is based in Utrecht, the Netherlands and works as an independent consultant. In 2000 he received an MSc in Industrial Engineering and Management Science from the Eindhoven University of Technology with a focus on 'Group Intelligence' and Group Decision Support Systems. Today, he has over two decades of working experience in the development of software, infrastructure and media to support distributed collaboration and collective intelligence. Working environments include start-up, global corporate, grassroots NGO and scientific. After leading a large scale online crowdsourcing experiment with the Dutch national government, he participated in a 3-day Syntegration in Amsterdam in 2011 that was co-organised by David Beatty. Since then, David Beatty has become a dear friend with whom Stephan has engaged in a variety of boundary spanning experiments. Stephan is very curious about the continued evolution of Syntegration, the field of cybernetics, artificial intelligence and systems thinking in a time of pressing global challenges and underdeveloped capacities for planetary learning and decision making.*

Dr. Gary Alexander. PlaNET: A prototype platform for a global commons based on viable systems principles

Gary will be describing the Planetmakers project (see planet.coop for more details), for which we have a prototype up and running, with a structure such that groups using it can learn to function as viable systems, but without needing to understand the theory. The platform will be presented at the community level as "having your own local community-controlled equivalent of FaceBook, Amazon, eBay all rolled into one, based on trust, supporting volunteering, with a gift economy dimension, with all profits funding community activities." We have applied for a €1 million EU Prize for this (see planet.coop for details), and are seeking other funding too. We are looking for experienced viable systems practitioners to help as facilitators.

Gary retired after 37 years at the UK's Open University, where he was at times, the Director of the Energy Research Group, Director of the Electronic Media in Education Research Group, a pioneer in developing online courses using collaborative learning techniques, an author of many courses on environment and electronics. He has been involved in many community projects, including setting up the Diss Community Farm, was active in the Transition Network and was on its Board of Trustees for 4 years. In his books, papers and conference contributions over many years he has developed detailed visions of a collaborative, sustainable future, especially in his book, eGaia, Growing a peaceful, sustainable Earth through communication. See his website for more details.

Dr. Teodora Ivanuša. A Reflexive Look at several 3rd Order Cybernetics
(Teodora Ivanuša & Matjaž Mulej)

In our chosen aspect of the treatment, the authors (TI & MM) will perform an reflexive look at several types of the 3rd order cybernetics, including the search for synergies or the absence of them in view of: (Mulej, 2019) "The essence of current (and former and predicted) problems of humanity is also in education, which is urgently training for a narrow specialization and therefore equally urgently needs methodological training for creative interdisciplinary cooperation." At the same time, the authors eloquently / rather loudly justify the de facto unnatural divide between the natural sciences and the

social sciences, which, he/she insists, is not narrowing, becoming a dangerous void, in which System Theory + Cybernetics = Synergy Science is not generated, but inhibited. Mulej (2019) wrote: "Synergy makes systemic behaviour which makes systems thinking, systems approach and systems and cybernetic theories make sense."). We are talking about a lack of sufficient and necessary integrity / requisite holism, and fictitious use of cybernetics.

Teodora Ivanuša, is a Tenured Professor at the University of Maribor, Slovenia, for the scientific field: Security Studies. She holds a Ph.D. in Diagnostic Imaging and a Ph.D. in System Theory. She is an OF-5 Military Specialist, former National Representative in NATO/CNAD/AC225/JCGCBRN, and former Advisor for Education and Special Tasks in Slovenian Armed Forces. Her main activities for the Slovenian Armed Forces covered Doctrine, Development, Training and Education Command, and especially Weapons of Mass Destruction (CBRN). She was awarded Bronze Medal for scientific achievements at Slovenian Armed Forces and Bronze Medal for distinguish scientific achievements at Faculty of Criminal Justice and Security, University of Maribor, Slovenia. She is also a former Member of the NATO Science for Peace and Security (SPS) Programme's »Independent Scientific Evaluation Group« (ISEG), and active Representative of Rector's Conference of Republic of Slovenia in Government's Council for natural and other disasters. She is an author and editor of multiple professional and research publications, among them: The Cybernetics of Security and Defence Systems (Ivanusa, 2016, Nova Science Publishers); member of WOSC and President of Slovenian Society for System Research.

Severin Deutschmann. "Decentralized Autonomous Organizations (DAO), a new tool in the cyberneticians toolbelt?"

A DAO is a digital organization that runs on a decentralized infrastructure like a blockchain. Many in the crypto-community belief DAOs to be the holy grail of what blockchain can accomplish, ranging from improving 'broken' legacy organisations to revolutionizing the way we organize as a society on a global level. But how serious should one take these claims? What can we do today, what is likely to be possible tomorrow? In this talk we will explore the brief history of DAOs, some examples of DAOs that exist today and what are the tools used today to create DAOs.

Founder of the Opentelos GmbH and professional with working experience in software-engineering and product development loves to see the big picture. He started his career studying business administration in Duisburg but decided to change his path into software engineering, motivated by exploring the edge of technology. While looking into IoT, microcontroller, and working as a back-and front-end developer, he became Blockhain Ambassador (and IT-consultant) sharing his knowledge and expertise by giving workshops in academic institutions or international corporations. His future projects are on the potential and limits of cybernetics in organizations."

Trilly Chatterjee. Adaptive State Podcast - Season 1 – Synopsis

Elevator pitch:

Adaptive State explores the intersection of organisation, technology and culture in government and public service in order to answer the question: what does 'government' mean in the 21st century?

What's different about it?

Adaptive State offers an insider's perspective on the hidden challenges behind the headlines of government work - revealing new ideas and mindsets that might better equip public servants to deal with society's most pressing problems.

Episode 1 - The Machine & The Mandarin

What can the history of the UK civil service tell us about its future?

A brief and pointedly incomprehensive history of the UK's permanent civil service since its creation in the mid-19th century - the historical forces and pressures that brought it into being, and their parallels with the greatest challenges we face today.

Episode 2 - The Representation Trap

How do government's ways of thinking and organising need to improve to address complex 21st century policy challenges?

As technology accelerates society, our world has become increasingly complex and interdependent - with governments worldwide struggling to meaningfully respond. Has the world's complexity become fundamentally too great to manage? We explore how the forgotten science of cybernetics offers us the keys to creating more responsive and effective government in an increasingly unpredictable world.

Episode 3 - The Invisible Hand

Do faulty beliefs about value constrain the kinds of services and policy that public servants create?

Trilly Chatterjee is a Deputy Head of Profession for Product at NHS Digital. His background is in design research and public sector service development. He helps teams understand their goals, think collectively and organise effectively to build services that truly meet the needs of users. Trilly developed HMRC's formative 2014 digital strategy, and co-led a cross-departmental team (DWP/HMRC) to conceive and deliver the award-winning 'Check Your State Pension' digital service. He now supports developing product managers and shepherds a growing community of them in the health and social care system. Trilly knows service design is fundamentally a people game. He's passionate about open, collaborative problem solving and multidisciplinary culture; fascinated by the principles of successful service design - and

Jon Li Brazil's Path to a Healthier Global Future: Community Clinic Health Systems

Over a century ago, Brazil had an epidemic. Oswaldo Cruz, M.D. emerged as a hero and became the national health officer. A smallpox epidemic broke out, and Dr. Cruz mandated universal vaccination; there were riots, and the vaccination became voluntary. 9,000 people died, and the country became vaccinated. Ever since, Brazil has had a social movement for health nationally. In 1988, Brazil's new Constitution made "health care a right, and the government's duty." Brazil has the best designed comprehensive health care delivery system. I wrote 200 systems scientists around the world in April, asking for help in writing a paper on going from medicine to health, from technology and pharmaceutical emphasized hospitals with high cost centers to effective, efficient community clinics. Stella Lobo M.D., a physician in Rio de Janeiro with an MPH in epidemiology and a Ph.D. in operations research responded that Brazil has problems, but it has that basic design. Stella's experience was with whole systems analysis; I taught her VSM; she tried to apply the VSM analytical concepts all on one piece of paper – it made my head hurt almost as much as it made her head hurt. I taught her hierarchy theory. Stella taught me enough about the Brazilian health care delivery system that I was able to design our 14 layer model for any health care system in the world; then Stella filled in all the details: the culture, the national government, the national health system, the state, the city, the clinic, the health team, the patient. At whatever level you are at, create an Office of Epidemiological Accountability to use the VSM at its layer, the layer above and below it, and identify the key variables to improve performance. We apply the VSM model of health care delivery system analysis to Brazil, NHS (England), California/USA and China. The day we gave our paper to the International Society for the Systems Sciences, the Economist had an article saying the English General Practitioner (GP) must become part of a clinic, following Brazil's lead: Economist, June 29, 2019: "Britain: The future of health care: What's up doc? St Austell: The role of the family doctor, front line of the NHS, is being reinvented"

Jon Li earned his BA in Economics and Political Science at the University of California, Davis, 1971. Jon worked in county mental health administration and for the California legislature in health, mental health, public assistance and social services policy. Jon Li is a health administrator who has been advocating decentralization, sustainable communities of 10,000 people globally, health clinics over sickness hospitals, Stafford Beer's Platform for Change (and implicitly the Viable System Model) and ecotopia since 1975, Jerry Brown's first year as California's Governor. Jon was a systems student of John Van Gigch. He has been active in the Society for General Systems Research (SGSR became International Society for the Systems Sciences) since 1979.

Peter Tuddenham. VUCA – Volatility Uncertainty Complexity and Ambiguity Revisited.

VUCA was a term created by the US Department of Defense over 30 years ago to describe the operational and political environment that they had to operate in at that time and the foreseeable future. That was before the Berlin Wall came down. It was also a very forward-looking perspective projecting developments over a 20-30-year period. This was appropriate to consider when organizing training and development for future leaders who would be in senior positions in 15-25 years from their mid-career training and education occurring at that time, 1988-1993. Also, over 30 years ago, to research and address "VUCA", the US Army initiated multiple research projects to examine organization structure, leadership and leadership development at the very highest levels (3 and 4 Star). I participated in one of these research projects which was organized by the U.S. Army Research Institute for the Behavioural and Social Sciences, the U.S. Army War College and the National Defense University. We were tasked with examining the qualities demanded of 3- and 4-star leadership as well as the requisite organizational structuring. The interrelation of organizational structure, process and individual capability were an integral part of the research. The work I was primarily involved with was researching instructional technology for developing metacognition and creative thinking skills as one way to understand and deal with "VUCA" in operational and societal settings.

In the past few years there have many trainings on how to deal with VUCA. One I saw recently suggests that to "thrive" in VUCA today senior executives only need to complete a two-day certificate program on "Complex Systems Science" represented as this:
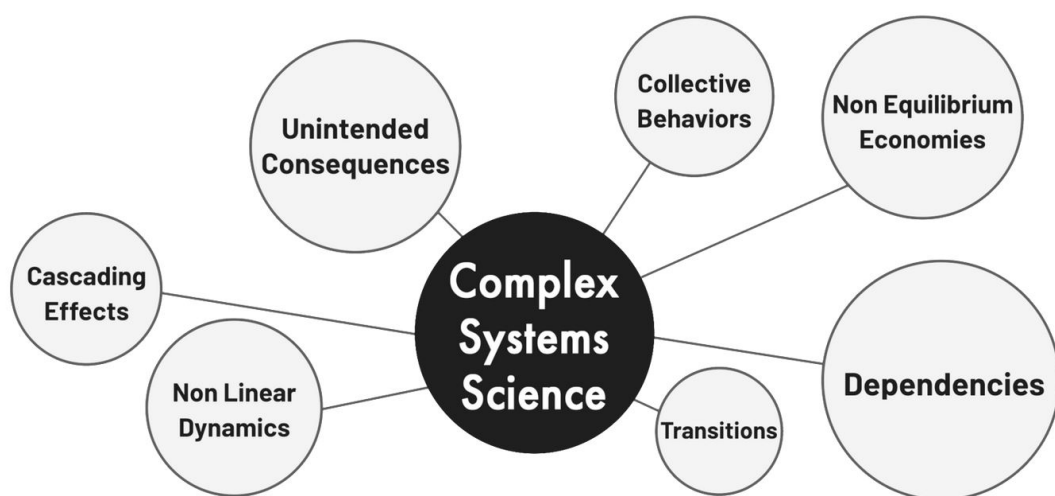
Peter will give a brief overview of the work they did 30 years ago. Discuss it relation to VSM and then facilitate a discussion about training and education today to deal with "VUCA".

Peter D. Tuddenham was the President of the International Society for the Systems Sciences 2018-2019. He is a trustee of the American Cybernetics Society and member of the International Council on Systems Engineering. In 1991 he co-founded the College of Exploration, an online learning platform focused on bringing cutting-edge ocean, earth, space and social science to educators at all levels, which has reached over 15,000 students globally. He was co-organizer of the U.S.A. Ocean Literacy and Earth Science Literacy projects. As Managing Director of CoExploration Limited in the United Kingdom he was a participant in a pan-European multi-partner Horizon 2020 project on Ocean Literacy in Europe.

Previously he was Chief Learning Officer for Metasystems Design Group where he developed online networked organization transformation and education programs on the MetaNet for government, organizations, scientists and educators and universities. He has served as adjunct faculty at George Mason University for Distance Learning and the University of Maryland for Problem Based Learning, Education and Project Evaluation, and Using the Internet in Education. As a Senior Systems Research Scientist at the Allen Corporation, later CAE-Link, he researched cognitive and affective development for executive development in the U.S. Army and as part of that work served as guest faculty at the U.S. Army War College in Carlisle, PA, for Creative Problem-Solving Courses.

While Executive in Residence at the Center for Ethics at Arizona State University he used Soft Systems Methodology to document and describe changes in the US telephone industry and challenges of regulation and representation. He was Strategic Issues Manager for Arizona Public Service in Phoenix Arizona. He was Corporate Communications Systems Manager, Compensation Analyst, and Technical Recruitment Representative for Coors Brewing Company in Golden Colorado. Before moving to the USA in 1980 he was an Engineer Officer in the British Army's Royal Corps of Engineers where he served in Germany, USA, and Northern Ireland. He was commissioned as 2nd LT from the Royal Military Academy Sandhurst. He is a Member of the Institute of Royal Engineers. He studied Systems Design towards a PhD with Bela Banathy at the Saybrook Institute and Systems Behaviour at the Open University in England in 1979. He has a BSc in Business Administration from Regis University in Denver.

Michael Bewick, Seán Conlan and David Somekh. The Power of Social Networks. Can we harness or facilitate activity here and could a collaboration between Metaphorum and EHFF be a fruitful option, seeking to move from system 2 to system 3 mode?


This would be the third consecutive occasion that EHFF representatives have attended Metaphorum conference as presenters. We have attempted to provide a narrative of the development of our network organisation which seeks, as does Metaphorum, to support major changes in Western societal systems and culture. In Düsseldorf last year, the message we came away with from our interaction with the group was that, rather than seek to increase the size of our organisation further, we should look to

synergies with other, like-minded organisations as a direction of growth. Both Metaphorum and EHFF are interested in the spontaneous emergence of social movements, both locally and in networks. Their potential to influence society for the better by working together, we believe is hampered by their tendency to remain locally focussed and to fear collaboration as something that potentially endangers their autonomy. We're fascinated to see how, working with Metaphorum, we might study and/or find ways of facilitating such necessary cooperation. The session would invite discussion around this challenge with contributions to a potential action plan. A related theme is how commercial inputs could provide synergistic support to bottom up social support systems. We provide a case study as illustration. In parallel with our interest in bottom-up social change we have had an abiding interest in how, where possible, health, education and business might work together to change society. The 'care rooms' case study provides a potential link between the two themes.

Dr David Somekh. was a forensic psychiatrist, psychoanalyst and experienced clinician in management for many years who retired from the UK NHS eighteen years ago. He has been involved in healthcare quality since 1988. He was a member of the Executive of the European Society for Quality in Healthcare since it was founded in 1998, was President 2005-7 and Vice-President 2007-9 and was engaged as an accredited expert in EC health policy development. David and three colleagues set up EHFF, the European Health Futures Forum, as a not-for–profit network organisation in 2013 and he is currently Network Director. EHFF, as the website elaborates, is interested in five areas all related to a holistic view of health and healthcare and in seeing how society might develop more sustainable systems. The five areas are: environment, human networks, citizen empowerment, innovation (including digital) and knowledge management.

Seán Conlan (Seán Ó Conláin) was Born and educated in Dublin Ireland as an Electrical Engineer. Worked in engineering roles in Africa, Ireland and several countries in Europe before specializing in quality management, transformation, change management, education and more recently land-use and woodland management. Seán is actively involved FEASTA (The Foundation for the Economics of Sustainability) and the EHFF (European Health Futures Forum). He is also currently Chair of a National Forestry Stakeholder Panel, and an Executive committee member of ProSilva Ireland as well as a variety of community activities, and projects. Past positions have included: Chief Executive of Excellence Ireland (the national independent quality association), President of EOQ (European Organization for Quality); Online academic with the Institute of Technology, Sligo and Board member of the ESB (Electricity Supply Board).

Dr. John Raven. Beyond Stafford Beer?
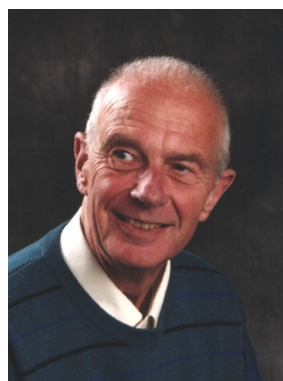
In his session, John will attempt to elaborate on the observations Beer (1993) made in the course of *World in Torment* about the problems which need to be solved if we are to move toward a sustainable society. The first set have done with the problems posed by a centralised governance system having little resemblance to that required for a VSM. The second is a pervasive disposition to hierarchy, which he terms triage. I do not understand his suggestions for a way forward - something to do with Syntegrity. Perhaps other participants can help me with this. But, if there is time, I will elaborate on the observations we made in relation to all three issues in *The New Wealth of Nations: A New Enquiry into the Nature and Origins of the Wealth of Nations and the Societal Learning Arrangements Needed for a Sustainable Society.* (http://eyeonsociety.co.uk/resources/fulllist.html#new_wealth) and later publications stemming from Bookchin's *Ecology of Freedom: The Emergence and Dissolution of Hierarchy.*

> *John Raven's early work included studies of the effects of television on children and evaluations of Primary and Secondary education. In mid-career he studied values, attitudes and institutional structures associated with economic and social development, replicated and extended his educational surveys, took part in two international studies of civics education and an international study of adult political culture. Since returning to Scotland he has studied the effects of a pre-school educational home visiting programme, evaluated environmentally based, competency-oriented, educational activities in primary schools, and extended his studies of the competencies required in the workplace and society. His work also includes studies of the workings of economic and politico-bureaucratic systems. Most recently, he has focussed on the networks of invisible social forces which primarily determine individual and collective behaviour – a domain which has become known as Sociocybernetics. His work can be reviewed via the links available in www.johnraven.co.uk*

Dr. Pedro Pablo Cardoso-Castro. Viability Analysis of Public Water Supply Policy using Institutional Analysis Development Framework and Viable System Model
(with Nircele Leal; Nirvia Ravena & Juanita Roqueta).

This research aims to explore the integration of the Viable System Model (VSM) and the Institutional Analysis Development Framework (IAD) to analyze the viability of public water supply policy in Belem. The study adopted an organizational cybernetic (VSM) approach for the structural analysis of governance, combined with the IAD framework. Four RESEX conservation areas were analyzed in the area on Belem - Brazil. In these areas interviews with residents and officials were made to collect information for the VSM-IAD diagnostic. The combined VSM-IAD diagnostic identified the relevant institutional actors at different organizational levels. At community level, mechanisms of self-organizations where identified as partially viable; whereas at higher organizational levels, the key variables identified didn't show homogeneous

profiles of viability. The research is focused in some aspects of the public water supply policy of four protected areas of Para-Belem. Methodologically, the paper introduced the VSM as a valid methodology for the analysis of public administration structures. It also explores the potential of the integration of two frameworks (VSM-IAD) to assess the viability of aspects of public management related with collective actions related with the water supply of Belem in Brazil (Para).

> *Pedro Pablo Cardoso is a Colombian Marine Biologist and Merchant Marine Officer who after several years of work in research (Colombian Marine Research Institute – INVEMAR) and sailing in the pacific as international observer; changed his professional path, initially working as international consultant in south America for ORBIMAGE/ORBITAL and then for NAUTICAL TRANSOCEANIC. After this period performing as regional manager he did his Master in Environmental Auditing (Malaga) and Industrial Management, followed by the beginning of his academic career in Colombia and the completion of a second Master (MBA) with emphasis in International commerce (Madrid) after leading the successful program: Colombia-Japan business-match for Hi-tech SMES. In 2007 he got an ESPRC scholarship and did his PhD in complexity management and self-organisation at the University of Hull (UK). Since 2012 he has working as senior lecturer at the Business School/Strategy subject group at Leeds Beckett University and has been involved in research projects related with sustainability, governance, Higher Education and social enterprise; using always principles of complexity management and the theory of viability.*

Dr. Angela Espinosa & Dr Jon Walker. (Ctrl Shift Del): Rebooting society: The nature and scale of the required global systemic change and how we can help it ?

This opening session is an invitation to explore the nature and scale of the required global systemic change and to share your contributions for rebooting our societies. We will share our perspective on why we urgently need massive, and dramatic system change at all levels and why by developing Stafford's work we may contribute and inspire new forms of economic, political and social systems.

Angela is a Reader in Cybernetics, (Hull University, and several Latin-America Universities), with more than 30 years' experience educating, consulting and publishing about Stafford Beer's approach to systemic change and its implications for sustainability and self-governance. 'A complexity approach to sustainability: Theory and Applications (2017), with Jon Walker, summarise their approach to systemic change towards sustainability, from individuals to institutions, communities, and networks; and presents multiple applications in the European Union and Latin America. Her most recent work is focus on deepening into these issues and in further exploring the need for re-thinking the education and the political systems.

Jon Walker has over thirty year's experience working in the co-operative business sector. He has established and co-managed a range of businesses including retail outlets, a small-scale manufacturing plant, a warehouse and a chain of supermarkets dealing mainly with whole-food, organic and fairly-traded products. Concurrently, Jon has lectured, published, consulted and provided training courses in both private and public sectors, on organisational structures. In particular Jon has pioneered the use of innovative organisational techniques known as the Viable Systems Model, in both large cooperatives and an eco-community. The resulting organisational changes have resulted in working practices which are both efficient whilst at the same time being based on principles of participation and individual creativity and autonomy. Jon is based in Yorkshire where he continues to have direct involvement with the co-operative food sector there, in particular in developing food networks that serve local communities. Nationally, he is working with the Transition Network, the Permaculture Association, the Plunkett Foundation and the Cooperative Group.

Dr. Leonie Solomon. Relevance arising from Connecting the Dots … Leading to Presidential and Parliamentary Elections in Sri Lanka

Besides holding a PhD in Cybernetics under the supervision of Prof Dr Stafford Beer, I have a substantial career in the Australian banking sector, at Commonwealth Bank of Australia, (CBA) where I was a Strategic Planner, charged with discerning CBA's Information Technology strategy to meet its spectrum of business and market trends. Today, I run my own future focused businesses. Language Matters is developing 'large implementation scale' quality OCR for the Sinhala language. Next, to be developed will be OCR for the Tamil language characters. Digitization of legacy records (e.g. title deeds) is almost inevitable for certain records, as missing it will be the loophole for corruption and unlinked work processes. The questions are, which records warrant digitization and whether that digitization will be automated (using high quality OCR) or done manually. Learning Matters (one of my other businesses) has translated into Sinhala and Tamil, Ecopolicy, an educational 'interconnected network thinking' computer game designed by Prof Federick Vester. Learning Matters piloted that game with nearly 100 students at a private university and the Foundation of Goodness in Seenigama. In Sri Lanka the purpose of the pilot is to understand the grade where Ecopolicy fits given the government's senior school curriculum. Also modelled is Ecopolicy to run on Excel and thus gained design experience in dynamic modelling using a very affordable and user friendly modelling tool. In 2020, the intention is to run an Island-wide Master Ecopolicy

Championship and offer winners university scholarships in computer based modelling & simulation. In line with my vision for Sri Lanka, I now seek to draw upon my skills as a cybernetician and my corporate experience as a strategist to help Sri Lanka address its complex national issues. One such example is to improve the service provided by our Public Service and to provide an attractive career path for Public Administration staff, particularly lower rank officers, who languish doing very little work that nurtures their own spirit. Another contribution, is being involved in the design of campaigning for national government elections.