



Reviews of Exhibitions, Conferences and Books

During 2016 we attended various exhibitions and conferences and also tried to keep up with our reading. Gathered here are our blogs about these.

What might your house look like in the future?

Some thoughts on the RIBA exhibition about [Designing the House of Tomorrow](#)

In conjunction with the BBC, RIBA have created an exhibition on the House of Tomorrow, taking three archetypes – the cottage, the terrace and the apartment – as the basis of its analysis. The BBC4 programmes, hosted by Dan Cruickshank, covered the history of these forms of housing and can be found on iPlayer [here](#).

The Cottage

Originating in the need to provide accommodation for workers on grand estates, the cottage was basically a rural design. In the Domesday Book, most of the population were recorded as living in cottages – they were “cottars” (a new one on me).

By the early 20th century, cottage-living was becoming idealised. The exhibition shows the “Daily Mirror Cottage”, on the Sheerwater Estate, Byfleet from 1910.

Increasing urban encroachment and gentrification has meant that these areas are now very financially attractive. Resisting the call for wholesale demolition and fundamental rebuild, architects in Athis-Mons, near Orly, have been looking at “densification” (ugh!), while in West Barton, Yorkshire, “clustering” of gardens has been the approach.

In Port Sunlight, Lever Brothers, inspired by the Arts and Crafts Movement, looked to build a denser community with cottage-like style. This was a link to the next form of residence:

The Terrace

The terrace as a housing model has many forms, from Coronation Street to Royal Crescent in Bath. Common to both however, is the creation of communal space: from back alleys where children could play in safety to lovely Georgian Squares and the Belgravia private communal gardens. A sense of community is created and sustained by these physical forms.

“Custom build” terrace houses are now being explored. The concept goes back to the 1774 Building Act which defined 4 “rates” of terraced houses – different sizes and forms. Now you can select your house size and format online – just like specifying your new car’s features – and commission the developer to build it for you, within an overall design code.

One exploration in the exhibition is the “Party House”, the beginnings of an approach to communal living. If you are in “halls adjoining” semis, why not take down the wall and create a communal space? The “Granny flat” concept has been around a while – is this a wider approach to multi-generational, multi-family living?



Increasing home-working, where there is less need to commute or move to the city could also lead to more local community living, and need for local services.

Apartments/communities

The exhibition examines how communal living has evolved, from monasteries and colleges, taking as an example St John's College, Cambridge moving from its 15th century origins to its 20th century Cripps Hall with roof terrace. Wolfson College Oxford was also highlighted for its communal staircase.

Art Deco apartments (à la Poirot), 1960's tower blocks (with the Hinckley Point disaster noted) to Dolphin Square are among other examples explored. Communal living seems to be on the rise: from student halls, through young professionals flat/house sharing to sheltered housing for the elderly (and increasingly not quite so elderly – Pegasus Life do a range of housing for the over-60's).

Dolphin Square is one of a number of examples in the exhibition where such communal spaces can incorporate shops, bars, and even swimming pools and squash courts.

Opinion

Is the trend from the individual to communal really that strong? Is the nuclear family unit declining and changing back into a multi-generational or more flexible format? The challenges of affordability and ageing are clearly drivers, but privacy and the concept of personal space surely remain a force. For much of the late 20th century, suburbs were largely dormitories for the central city activity: you worked and socialised in the city centre with colleagues or friends from other suburbs. Was that a passing phase?

I thought one failing of the exhibition was the lack of detailed consideration of the implications of many people working from home. The idea that it would create more local communities was there, but the space implications weren't addressed – maybe there could be a model which integrated the communal residence with small business centres?

Personally I've always thought that a good way to end my days would be as a Fellow at a Cambridge College (if only!). No building or garden maintenance responsibilities, domestic services on hand, communal dining (with an excellent cellar!) with like-minded, interesting people, surrounded by lively young students with stimulating ideas in art and science – plus good medical support!

Written by Huw Williams, SAMI Principal, published 30 June 2016.



LONDON DESIGN BIENNALE – “UTOPIA BY DESIGN”

The first [London Design Biennale](#) opened at Somerset House on the 7th September with the theme of “Utopia by Design”, this year being the 500th anniversary of Thomas More’s book. As well as installations by 37 countries worldwide, there were a series of talks on design and the future by a wide range of eminent speakers – I went to three.

The first was a conversation with Ian Callum, Director of Design at Jaguar Cars. Billed as “A Life in Design”, the discussion began with Ian’s early history: sending a portfolio of drawings to Jaguar when aged 14. It then moved on to his career at Ford, Aston Martin (where he was responsible for the Vanquish – 007’s car in “Die Another Day”) and Jaguar. His philosophy of design-led, rather than modelling-led, development was very strong. Looking to the future, he was clear that Jaguar would be a leader in electric vehicles – having trialled one that did 120mph with dramatic acceleration – but called for more government investment in supporting infrastructure. He was much more sceptical about autonomous vehicles, believing that fall-back driver intervention would be needed for many years, not expecting a radical re-design of cars into an office or sitting-room on wheels. Although he did think “Uber modules” might emerge, his approach was to design cars that people would want to drive. His “design Utopia” was a collaborative team with diverse skills able to produce designs without interference from uninformed Board members!

The second event I went to was a conversation with Lord Richard Rogers, famous for the design of the Pompidou Centre, Lloyds of London, the “cheese-grater” and many other iconic buildings. He argued that we needed to sustain the radical spirit of the sixties with a naïve self-belief. His view of the city of the future was that it be largely a pedestrian city, with rapid transport systems, compact and sustainable, and mainly solar-powered. He was not a fan of the Garden City movement, arguing for denser, but not necessarily high-build cities, citing Barcelona as an excellent example. 3D-printing he saw as mainly useful for building models, rather than for buildings themselves. I asked, given it may be 15 years before a building is built from his design, and it needs to last for say 80 years, how he worked out what the future needs of the occupants would be – he replied that the only constant is change, so one needed to look to flexibility of use.

Very much on the Utopian theme, the last talk I went to was about the “Maker Movement”, where Daniel Charny, Professor of Design at Kingston University, examined whether the noise about was just hype. We usually study technological developments, but this is a cultural change with different dynamics. Prof Charny described how the movement was based on principles of openness and sharing, with examples from the physical – sharing expertise and tools of various crafts – through to online “hackathons”, via 3D-printing. Wired was discussing “[Big DIY](#)” in 2011, and The Economist described Making as “[More than just digital quilting](#)”. “[MakerFaires](#)” have been set up around the world to share expertise, and have even attracted visits from the Presidents of the US, China and Germany, and there are high street presences – eg [Brit Kits Bar](#), [Drink Shop Do](#).



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Daniel suggested that the Movement was associated with hipsters and geeks, and that the Guardian had said we had [“reached peak beard”](#) in 2013 (still got mine – as does Daniel!), at the same time as the creation of knitted bicycles! He suggested that Makers had passed the peak of the Gartner Hype Curve and that MakerSpaces were facing financial difficulties, but the concepts were beginning to emerge from the sub-culture into the mainstream, with mass customisation through 3D-printing. Comments from the audience identified examples of MakerSpaces being used to overcome loneliness for old people through sewing circles, to assist immigrants in Sweden assimilate, and even to provide alternatives to violence for Farc guerillas following the peace deal in Colombia. The concept is as much about the community activity as it is the product itself.

Looking around the installations themselves, I was struck by the Lebanon installation: a typical Beirut street (much quieter than I imagine a real one to be!), regarded as Utopia because it was peaceful, a break from the warfare and strife of the past – a reminder to us to be grateful for what we have. One of the prize-winners.



The Swiss installation won the Jaguar innovation award, but I wasn't taken with the "Utopia of Neutrality", even if it was still intended to represent movement, as typified by oversized watch springs. Russia was the third prize-winner, with lost archives of Soviet design, a period when the designer was not to be identified. I was struck by the Chilean example of the smart city – designed in 1970 by Stafford Beer during the Allende rule, by the VR representation of Santander and by the UAE water systems. The UK contribution, Forecast, a kinetic sculpture that moves with the wind, is intended to evoke Britain's nautical past and its future use of renewable energy – sadly there was no wind when I was there!



The lessons for futurists? The first two talks illustrate that technological developments can take a long time to become reality, and that strategies based on adapting to change rather than trying to predict it may be more fruitful. The third shows that cultural change can be as powerful as technological change – and probably more confusing!

Written by Huw Williams, SAMI Principal, published 5 October 2016.



What if you could see the future today?

“What if you could see the future today?” was the thumbnail pitch of the New Scientist Live Show at Excel London, 22nd– 25th September 2016. What you could actually see was an array of current research and development in science, technology and engineering, and what you could actually hear were some expert speakers explaining their disciplines in layman’s language and sometimes taking you to the frontier. You might not have been able to see the future, but it certainly made you start refining your vision of it. Here are some of things that attracted this particular visitor.

I shall begin with mathematician Marcus du Sautoy whose talk “Are there things we will never know?” was drawn from his new book on this theme. In Chapter 4 (or “Third Edge” as he presents it), he reviews experiments with electrons. If you fire an electron at a plate through a screen with two slits through which the electron may pass, you cannot anticipate the particular point on the plate at which the electron will end up (something you cannot know) until you observe it. If you try and “cheat” by introducing a detector to see which slit the electron passes through, the act of trying to find out changes the behaviour of the electron. Du Sautoy states, “There have been some experiments in the last decade that have demonstrated the real possibility of using observation to inhibit the progress of a quantum system.”¹

And lo, on the exhibition floor, there was BT demonstrating the latest developments in cyber security using quantum physics. The standard security system today employs keys at either end of the security chain: if you can break one, you can get through the other. The cyber security system they were developing had just one key provided through quantum physics. If you attempted to “measure” (i.e. hack into) the link, it changed and locked you out. Given that I read recently that something like one in ten credit cards has to be replaced during its lifetime, this would seem to be a welcome response to a worrying threat.

Back to Mr du Sautoy. His talk was followed by a conversation with physicist and broadcaster , Jim Al-Khalili (*The Life Scientific, Radio 4*). His initial question about unknowns was set into context by the opposing view of some scientists that ultimately everything can be known. But then again Karl Popper said that it is important that what is known can be falsified, thus leading to further developments. What was interesting about the discussion was the feeling of how close you were to the existing boundaries of knowledge, and the potential that remained to be unleashed.

And this was replicated throughout the event. Here was Robin Dunbar, professor of evolutionary psychology, explaining how our different social networks (family, friends, social, community, national) form a hierarchy, and that there are limits to the numbers we can practically relate to in each category. As social network size increases, the intensity of the relationships decreases. Social science is as important as hard science. Here was Robin Lovell-Badge (*Francis Crick Institute*) pointing out that manipulation of genes was recorded as early as 17,000BC, but that gene editing offered a more powerful way forward. The problem was not knowing what a gene could do, but knowing everything it could do because of possible side effects. Here was Molly Crockett (*Oxford University*) showing how manipulating a person’s brain chemistry could change their morality. In experiments, the application of both serotonin and dopamine changed moral decisions made by subjects. But there is no brain circuitry



dedicated to morality, and the use of either drug to this end in the real world would be the equivalent of taking a sledgehammer to the problem.

Back on the exhibition floor, here were BAE Systems demonstrating a tough but lightweight army jacket that could carry a battery strong enough to power a vast range of equipment and increase sensory perception. Here was the Tesla electric car, now supported by charging points all over the UK, but here also was the first mass produced dedicated hydrogen fuel cell vehicle – “the only emission is water” – from Toyota. And, of course, there was a lot more.

Perhaps the most interesting session was a panel discussion, “Science opens diplomatic doors” on the role of science and innovation on the global stage curated by Wilton Park, an Executive Agency of the Foreign and Commonwealth Office.

A key theme was that international co-operation was necessary for scientific development. Reference was made to SIN (the UK’s Science and Innovation Network) which was operating in thirty-one countries. The issue was not that politicians weren’t interested or couldn’t understand, although different cultures had different approaches. But biology was developing so rapidly that policy makers couldn’t keep up with it. Even intellectual property was not always of primary importance because things were changing so fast. The refrain was repeated: if you don’t have international scientists working together, it won’t be as good. As the discussion drew to a close, there was at least one bright ray of sunshine: a lot of able young people were coming in to science.

In parenthesis, there was no shortage of youth at the event which had clearly attracted more people than could be conveniently accommodated. Despite several capacious open lecture theatres, people were standing four and five deep in the exhibition aisles in order to hear the speakers, giving staff keeping the event compliant with fire regulations a lot to deal with. There were plenty of hands-on “pedagogical” challenges (not just keyboards) for children, and plenty of children too.

As a panellist following up the point about young people said, resilience was coming from the bottom. That was surely the most encouraging thing.

The event website is still up at <https://live.newscientist.com> giving full details of all speakers and exhibitors. Details of forthcoming New Scientist events may be found at www.newscientist.com/events.

Reference

1 Du SAUTOY, Marcus, “What we cannot know”, Fourth Estate, 2016, p. 151.

Written by Tony Diggle, SAMI Associate. He is also a playwright. His most recent play, “A Kingdom for a Stage”, a celebration of the four hundredth anniversary of the death of William Shakespeare, was performed at the Chelsea Theatre in April / May, 2016. A radio version is in preparation. Published 12 October 2016



“Engineering the Future” – the IET’s “Future Festival 50”

As part of their first “[Engineering the Future](#)” event, the IET arranged a series of talks at Savoy Place as the “Future Festival 50”, so I went along to hear what new developments they thought were important.



The event was hosted by Professor Danielle George from the University of Manchester. Unfortunately I missed the opening session featuring Jerry Chow of IBM on Quantum Computing, so the first talk I heard was by Noel Sharkey, Professor of AI and Robotics at Sheffield, and perhaps better known as a judge on BBC2’s “Robot Wars”. He recounted how the media picked up on stories about sex robots and weaponry, and described some advances in autonomous vehicles: cars, planes, ships, submarines, military and police drones. But his key emphasis was on the ethics of these systems. Sex robots can damage young people’s experience of intimacy; military robots killing people autonomously breaks the first Asimov robot law; police robots breaking up demonstrations raise other human rights issues. And even autonomous cars have the ethical problems of who to kill or injure in the event of an accident (and as he pointed out, no-one would buy a car where the answer was “the driver”!). His company “[Responsible Robotics](#)” campaigned on these issues. Questions from the audience addressed insurance of AVs and the impact on jobs: Prof Sharkey was not optimistic on the latter, saying we maybe needed a Universal Income.

Next was Maneesh Januja, a health futurist. His focus was on the use of VR and AR in health. He talked about the Google Pixel and 360 Photos on Facebook, and demonstrated how 360 cameras are an accessible and affordable way of people creating their own VR. But I didn’t think his health industry examples were that exciting. Education, notably of surgery, obviously; as a way of informing patients what they would be experiencing; and as a way of developing empathy – showing the doctor what it feels like to have my condition. More bizarre was showing stroke patients what was going on in their own heads – not sure how this helps. One nice example was of a young woman with tunnel vision being able to replay what was going on around her. There was also the use of VR as a social community to address depression and social isolation. I felt there ought to be more powerful applications somewhere. Questions examined the impact on one’s vision and the dangers of increased social isolation.

The last talk of the morning was a shift of gear. Eleanor Stride, Professor of Engineering Science at Oxford explained how sophisticated use of bubble technology could deliver cancer killing immunology treatment to the exact heart of the tumour.



Micro-bubbles of gas, surrounded by a surfactant that attached to the proteins given off by tumours, and magnetised, so that they could be controlled and directed, can be used to deliver the cancer-killing drug directly to where it is needed, rather than being dispersed around the body and causing side-effects. One of the benefits of this approach was that it evaded the body's own immune system.

After lunch we were treated to the dynamic and entertaining Ed Gillespie, a futurist with an interest in sustainable development, beginning with a quote: "We are not blindly opposed to progress; we are simply opposed to blind progress". He rattled through a range of statistics – e.g. there are five times as much fossil fuels discovered than we can afford to burn if we want to hit carbon emission targets – and examples of absurd inconsistencies: if you bought Tesco low-energy light bulbs to reduce power consumption, they would give you airmiles!! He advocated local community solar systems, underground hydroponic agriculture and radical recycling – there is enough energy in waste coffee grounds in London to power 15,000 homes. He ended with a joke illustrating that we may not be successful in managing the threat.

Two planets were walking along, when one started scratching and looking very uncomfortable. "What's the matter?" asked the other. "I've got a bad case of Homo Sapiens" was the reply. "Oh well, don't worry, it doesn't last long".

The last talk I went to was by Mark-Olivier Coppens, Professor and Head of Chemical Engineering at UCL. He was studying how to draw lessons from nature to engineer innovative solutions. His first example was the femur-like structure of the legs of the Eiffel Tower, designed that way because of the balance of forces it provides. His important point that the approach was not simply bio-mimicry, but based on an understanding of why the natural system was the way it was and adopting a similar structure. His example was comparing fuel cells to the structure of the lung – at one level there are fractal, branching systems, but deeper down the flow of oxygen through cell walls; his design for fuel cells is structurally similar.

The presentations, including ones I missed, are available on iet.tv.

Written by Huw Williams, SAMI Principal, 16 November 2016.



Finding A Way To The Future

This review of [4 Steps to the Future](#) by Richard Lum and [Future Infused Strategy Development](#) by Maree Conway was first published in the October 2016 edition of [Compass](#), the newsletter of the Association of Professional Futurists, and was republished as a SAMI Consulting blog with their permission.

These two books have a similar provenance and a similar ambition. Both are written by futurists; both seek to explain to non-futurists what futurists do and how futures thinking can improve organisational outcomes. In the process, perhaps, both also hope to create better customers for futures work.

Of the two, Richard Lum's book focuses on the process an organisation goes through when it executes a foresight project. Maree Conway's focuses more on the process an individual needs to follow to get their "foresight switch turned on." Both books are valuable assets for getting more people to understand the value of — and therefore the use of — foresight. I tried to read them with my corporate hat on, through the eyes of the intended audiences.

[4 Steps to the Future](#) is intended for potential clients who don't have a huge budget for foresight but still need to think about the future(s). It is set up to help them to feel more comfortable with foresight concepts and to ask the right questions both of their colleagues and potentially of their consultant. It isn't an exhaustive description, rather a short explanation, that will get them to a shared understanding and some action.

The 4 steps Richard speaks of are a guide to the process that can be followed to achieve the holy grail of understanding how the future is different from today and how it might look, so that you can develop a vision and strategy.

The steps are:

Past

Present

Futures

Aspiration

At each step Richard provides questions and worksheets that can be used to stimulate thinking, along with a valuable discussion. Since it is written with (potential) clients in mind, he reminds them that we can't predict the future, that there are many possible futures, and that we co-create the future, whether we understand this or not.

It is written in an approachable, informal style and is free of jargon. It can be hard for an 'expert' to remember what it was like not to know about their subject, and therefore to deconstruct it to the point that they can lay out the steps that someone who is just beginning should follow. Richard does this very well—I really liked his list of everyday practices and ground rules for people just starting out into foresight thinking, as well as his checklist of indicators to help the reader to test if their organisation will be supportive of futures work.

This isn't a book for foresight professionals: it is for potential clients who don't know what foresight is about. In that light it is often simple — I think this is on purpose to make it more accessible. You could argue about this (thinking it *too* simple), but I think it gives a clear trajectory of the path that a foresight project takes from start to finish —



you could add more detail, but one basically follows his four steps in most foresight work.

The book is short (87 pages) and clear, easy to read and follow. Even a busy executive ought to be able to find the time to read it. With my corporate hat, I found it an excellent how-to book, if quite US-centric. In a short book Richard has provided good, structured suggestions – things like making sure that scenarios have both good and bad in them, paying attention to the focal issue, identifying stakeholders and looking at how they will react to a change (to help you explore threatening dynamics) — the kinds of things that make it something that can be used, straight out of the box.

The focus of Maree Conway's [Future Infused Strategy Development](#) is on how to help and encourage individuals to “turn on their foresight switch.” As with 4 Steps, it is informal, easy to read and designed for the non-practitioner who wants to find out more about strategic thinking.

She makes the point that using foresight is *personal*. It is about changing the way a person thinks about the future. And it is a process best understood by experiencing it.

Maree's own foresight journey, shared in the book, started when she was asked to run a foresight project at the university where she worked. She learned by doing many things wrong as well as many things right (the way we all learn). She found out the hard way that the organisational context — the seedbed for the process of foresight — needs to be properly prepared and nurtured in order for the process itself to flourish.

She starts with the conceptual framework around Foresight — with guiding principles and with assumptions and worldviews which may need to be challenged. She points out that “We are responsible for future generations — the future we create today is for our descendants.” In other words, we need to think about being good ancestors.

Maree uses a framework which combines Richard Slaughter's Social Foresight development model to describe the stages of development of organisational foresight capacity and Ken Wilber's Four Quadrant model for making sure that all four quadrants have been considered when exploring an organisational change. She uses this framework to help identify how futures ready an organisation is.

She then explores foresight and strategy and the relationship between the two. Foresight is how you think about the future, strategy is about positioning an organisation to be ready for the future. Stumbling blocks along the way: people seek certainty, they are afraid of change, they want to use quantitative data (which is about the past, not the future), and they feel uncomfortable involving staff/larger groups of people.

This is followed by discussion of how to manage these challenges. She goes into some detail about the Generic Foresight Process Framework and how to use it, then briefly describes several further foresight frameworks and their process steps so that you get a feel for the choices available.

The next four chapters are about using foresight in anger, each one a step on the way. In *Getting Started* Maree provides a table of 10 questions to help you position yourself, which I found useful and insightful. She discusses the prerequisites for a successful project — including the organisational context questions that need to be considered to give the project a chance of success. These might seem basic to a practitioner, but it covered all the areas that one needs to consider.



The following chapter is a methods overview organised using the Generic Foresight Process Framework with descriptions and graphics of each method described, followed by a chapter on scanning. There are examples throughout the book from Maree's experience, successful and less successful, with some great ones in this chapter. A novice might want a bit more information about some of the methods in order to feel comfortable with trying one.

A chapter on Strategic Thinking ties it all together — analysing and making sense of the information that came out of the foresight process to develop a plan for the organisation to thrive in the short, medium and long term. The final chapter, Lessons from the Field, has great tips from years of experience to enable a really successful project.

I found it an easy and interesting read, accessible for people just starting out. I liked the examples and that Maree was willing to share those that didn't work — or didn't work so well — as well as those that did.

Of the two, I'd say that Richard's book was written for a more senior manager who was looking for greater structure, while Maree's was more suited to someone who was really open for exploration. Both are valuable additions to the available books out there in our field, and both are deserving of a round of applause — plaudits to both for being simple, short and sweet.

Written by Tricia Lustig, SAMI Associate, Managing Director of Unlocking Foresight and European futurist and author, published 14 December 2016.



ESPAS Conference 2016

ESPAS, the European Strategy and Policy Analysis System, is a unique inter-institutional project aimed at strengthening the EU's efforts in the crucial area of forward planning. ESPAS brings together the European Commission, the European Parliament, the Secretariat General of the Council of the European Union and the European External Action Service to strengthen the Union's collective administrative capacity to identify and analyse the key trends and challenges, and the resulting policy choices, which are likely to confront Europe and the wider world in the decades ahead.

I was invited to the second ESPAS conference, on Global Trends to 2030 – Society and Governance, held in Brussels on 16th and 17th November.

The first day was held in Berlaymont and was exceptional – arrangements, presentations, participants. Outstanding presentations from Geoff Mulgan of Nesta and Aaron Maniam from Singapore. The thrust of the day was: we are living in uncertain times – no longer Business As Usual – so what can we do to understand what is happening and act effectively? The video can be found at <https://www.youtube.com/watch?v=Zmz6YIzM8hQ>

One contribution I particularly picked up on was from Nic Gowing, who with Chris Langdon has interviewed leaders globally and found a disturbing lack of capability to tackle uncertain times – they suggest that having the conformity that gets you to the



top prevents you being able to see change, or to deal with it. The analysis of the interviews is in a number of reports on their web site

<http://www.thinkunthinkable.org/>. This reminded me of the work we did for the book “Beyond Crisis” in which we analysed the behaviour of leaders under the headings of (borrowed from Isaiah Berlin and Greek Mythology) hedgehogs and foxes. *The Fox knows many things, but the Hedgehog knows one big thing.* In the book we also developed a framework for harnessing the

foxes in the organisation to drive change.

The second day was held on the fifth floor of the European Parliament, in the Library Reading Room.

One session interested me in particular, on cities in the 21st century, picking up as it did on some of the ideas in “In Safe Hands”, www.longfinance.net which asks – how might our society reconfigure after a crisis, maybe into city regions with very individual brands, or maybe into amorphous geographies populated by Affinity Groups with strong ethnic, religious or language ties across the globe.



The second day finished with contributions from Klaus Welle, Secretary General of the European Parliament, and James Elles, a



former MEP and chairman of ESPAS, both of which are on YouTube:

<https://www.youtube.com/watch?v=wSW1HjpJRUs> ,
<https://www.youtube.com/watch?v=u0hcc2Ra75M>

In conclusion, asking how ESPAS should tackle the new world order, the discussion also revisited Foxes and Hedgehogs!

With that thought, I wish all our readers a Happy Christmas and a New Year that starts to tackle the challenges thrown up by 2016.

Written by Gill Ringland, SAMI Fellow and CEO, published 21 December 2016