The Arts, Humanities and Social Sciences in Horizon Europe

Conference Report
14 Jun 2019
Royal Irish Academy, Dublin
Fig. 1 Dr Mel Farrell, Prof. Patrick O’Donovan, Dr Gabi Lombardo, Prof. Eugene McNulty, Prof. Noel Fitzpatrick, Prof. Anne Fuchs and Prof. Seán Ryder.
Executive Summary

With the EU's current research funding programme Horizon2020 soon coming to an end, and planning for its successor programme Horizon Europe now at an advanced stage – commencement due in January 2021 – there is a pressing need to engage policy makers, national contact points, stakeholders and the humanities research community on how to mobilise humanities expertise in the shaping of the new programme. To this end, the Irish Humanities Alliance organised a workshop entitled 'AHSS in Horizon Europe' in June 2019.

While the Commission has adopted an 'evolution rather than revolution approach to drafting the new programme, Horizon Europe will contain changes that are not insignificant and, looking ahead to its own successor programmes, it is vitally important that the AHSS research community is equipped to adapt accordingly.

Attendees to the workshop received a wide-ranging presentation by Dr Gabi Lombardo, Director of the European Alliance for Social Sciences and Humanities (EASSH) on the current policy landscape at EU level. The new programme is shaped by the Commission's vision for: People, Planet (healthy and clean), and Prosperity. EASSH has been working on behalf of the AHSS community since its establishment in 2015. Dr Lombardo stressed that it is vitally important that the AHSS community remain in dialogue with policy-makers and also the STEM research community. From the AHSS perspective it's about putting in place instruments that can allow us to contribute fully to society's well-being.

After hearing Dr Lombardo's contribution, participants then formed roundtables to consider how best to mobilise humanities research in response to the proposed global challenges that were outlined. Each group was asked to consider the following question:
Roundtable summaries:

How would your research activity respond to the proposed area of research?

As the development of the Horizon Europe programme enters its final stages, attendees called for the mobilisation of the full contribution, cultural as well as social and economic, of the arts, humanities and social sciences (AHSS). Technological 'solutionism'–type approaches were again identified as a problematic aspect of the draft calls. Addressing the grand global challenges facing society will require research that lies between the disciplines and harnesses interdisciplinarity, for example the arts and humanities in dialogue with STEM. Genuine problem-solving therefore requires the full integration of the AHSS disciplines in framing the challenges and providing analysis.

The programme must reflect a strong human and societal perspective and stimulate links between research, innovation and education. Attendees emphasised the distinctive contribution that the humanities make to understanding human behaviour, culture and history. These, and the critical humanities perspective, inform responses to global challenges related to environment, demographic change, health, changing behaviour, mobility, social cohesion and technology.

Participants warned against placing too much faith in narrow, essential technocratic 'solutions' and the quantitative analysis over the qualitative analysis. Insights from humanities disciplines – anthropology, art, cultural and literary studies, ethnology, history, modern languages, philosophy and others – are urgently required if we want to address and influence attitudes and behaviours towards any of the sustainable development goals.

In broad terms, the following areas were identified for humanities participation:

Health
- Historical Perspective on Public Health.
- Creative Practice.
- Medical Education.
- Shaping Public attitudes to medical expertise and health policy.
- Gender.
- Safety risk assessments.
- Quality Assurance tools.
- Medical devices and technologies.
- Ethics and animal rights.
- Personalised medicine: health-care based on the individual's needs.

Civil Security for Society
- Language of security.
- Implications for democracy.
- Ethics.
- Cyber security.
- Privacy.

Digital Industry
- Rapid technological advance and its implications.
- Smart cities. And, what about their opposites – 'rural', 'country', 'nature' and 'non-industrial'.
- Health and the AHSS contribution across these areas – digital, environmental, medical.
- Interdisciplinary research – medical humanities, digital humanities, environmental humanities.

Climate, Energy, Mobility
- Climate Change and communicating climate change.
- Climate change and mobilization.
- Smart and sustainable cities and transport policies.
- Energy infrastructure.
- Mobility.

Culture, Creativity and Inclusive Society
- Education.
- Modern Languages.
- Communication.
- Literary representations.
- Intellectual property and Open Access policy.
- Cultural heritage.
- Policy gaps.
Food, bioeconomy, natural resources, agriculture and environment

- Mitigating the effects of climate change and ensuring global food security.
- Human behavior and tradition.
- Political ramifications.

- Literary representations of food.
- History – learning from the past.
- Education and role of the AHSS.
- Over-exploitation of resources.
- Education and the role of the AHSS.
- Social innovation and the development of new social enterprise policy.

Fig. 2 Prof. Anne Fuchs, IHA chair, 2018–19

Fig. 3 Prof. Eugene McNulty, IHA vice-chair, 2018–19
Introductions

Professor Anne Fuchs MRIA, FBA, Chair of the IHA and Director of the UCD Humanities Institute, opened the event by welcoming the attendees to the Royal Irish Academy. She introduced the event, outlining the critical importance of the humanities at this challenging time. Part of the purpose of today's event is to think through the issues and opportunities at hand for the humanities in the formulation of the next research and innovation framework programme Horizon Europe. The IHA believes that the humanities play a critical role in addressing the grand societal challenges of environmental degradation; the social impact of rapid technological change; the health of democracy; engagement in support of the UN Sustainable Development goals and human health. Today's event would give us an opportunity to outline the areas for humanities participation in the 'global challenges' of pillar 2 within the new framework programme. This event will include a keynote presentation by Dr Gabi Lombardo, Director of the European Alliance for Social Sciences and Humanities (EASSH) and a focused discussion session on how the AHSS can best respond to the new framework programme.

Professor Noel Fitzpatrick, Chair of the IHA Horizon Europe Working Group and Dean of GradCAM TU Dublin stated that today's event was about thinking through how researchers in the AHSS can contribute to the new framework programme's cluster areas. Professor Fitzpatrick believed that we should be confident in the importance of the humanities and their capacity to make a non–technocratic contribution to the pressing societal challenges facing us. Later today the session would be breaking into roundtables to give more detailed consideration to how humanities research can respond to the proposed global challenges. At that point, each group will be asked to appoint a rapporteur who will report back to the meeting with some key points about how AHSS research aligns with the clusters. In order to challenge the group to think a little bit beyond their own particular research area, the Director will assign a specific ‘global challenge’ to each group. This will ensure that our deliberations are productive and give full consideration to the contribution that the AHSS can make in addressing the global challenges.

Professor Sean Ryder, IHA Board member, Professor of English at NUI Galway and Irish national expert to the Programme Committee for Horizon 2020 gave an outline of the development of the new Horizon Europe programme. The programme encompasses mission–oriented research as outlined in Mariana Mazzucato’s Mission–Oriented Research and Innovation in the European Union: A problem–solving approach to fuel innovation–led growth¹ not dissimilar to the "focus areas" in Horizon 2020. At the level sitting below the 'Missions', are the 'global challenges' which roughly correspond to the ‘Societal Challenges' that we are familiar with from Horizon 2020. These are:

1. Health
2. Culture, Creativity and Inclusive Society
3. Civil Security for Society
4. Digital, Industry and Space
5. Climate, Energy and Mobility

It was evident that cluster two, Culture, Creativity and Inclusive Society, directly addresses some of the major concerns of EU citizens and encompassed the clearest AHSS focus. Professor Ryder commended the IHA for its work in this area and for organizing today's event. It is of vital importance that the AHSS community, at national and European level, are mobilized to offer advice and expertise that can feed into the deliberations of all of these clusters.

Fig. 2 Prof. Noel Fitzpatrick, Chair of the IHA Horizon Europe Working Group

Fig. 3 Prof. Sean Ryder, IHA Board Member and Irish delegate to the Societal Challenge 6 Programme Committee for Horizon 2020
Session One:
Horizon Europe Briefing

Professor Eugene McNulty, Vice Chair of the IHA and Associate Dean for Research in the Faculty of Humanities and Social Sciences DCU was delighted to introduce today's guest speaker, Dr Gabi Lombardo. Dr Lombardo plays a vitally important role in promoting the value of the AHSS at a European level while providing a platform to foster the interests of the AHSS community within the EU. She is the Director of the European Alliance for Social Sciences and Humanities (EASSH), the largest advocacy and science policy organisation for social sciences and humanities in Europe, and of which the IHA is an active member. She holds a PhD in Economic History from the London School of Economics (UK) and is an expert in both higher education and global research policy. She will now brief us on the current landscape in relation to the new Horizon Europe programme.

Dr Gabi Lombardo, Director of EASSH gave a presentation on the current policy landscape at EU level and how this is reflected in the programme. At its core, Horizon Europe reflects the current political vision of the Commission for a prosperous future for people and planet. She thanked the IHA for inviting her to address this important event and emphasised the importance of opening up a space for discussion in science policy of how best individual experts from the Arts, Humanities and Social Sciences can be involved in the drafting process of Horizon Europe's thematic clusters.

Introduction

Dr Lombardo began by outlining the work of EASSH, an umbrella organisation with over fifty member institutions, including the IHA, from across Europe. EASSH is committed to promoting the Humanities and Social Sciences across Europe in their own terms and also in dialogue with STEM and other research areas. Dr Lombardo is an Economic historian and has now been working in higher education and global research policy for a number of years. As Director of EASSH, she advocates on behalf of the humanities and social science community in research policy design and discussions at the national, European and global levels. EASSH is a relatively new organisation having been set up in 2015. EASSH provides a platform for the Humanities and Social Sciences at an EU level and works to promote Social Sciences and Humanities research as a resource for Europe and the World. In its advocacy work within the science policy and European research eco-system, EASSH engages with national research systems; European policy-makers; the private sector; the public (outreach) and funding bodies. Dr Lombardo remarked that we in the AHSS community are relative newcomers when it comes to advocacy work at a European level. In comparison, the hard sciences have been organised as a professional lobby with a base in Brussels since the 1960s. We are late to the game in this regard and it is vitally important that we are in dialogue with policy-makers and the STEM research community. We need to be proactive when it comes to shaping the public perception of what we do in order to demonstrate how it can be a resource for Europe and the world.

Dr Lombardo then discussed the current research policy landscape. Global spending on Research & Development has reached a record high of almost $1.7 trillion. As part of the UN's Sustainable Development Goals countries have pledged to substantially increase public and private R&D spending and the number of researchers by 2030 with demography; natural resources and energy; climate change and environment; globalisation; the role of government; economy, jobs and productivity; society; and health, inequality and well-being identified as the megatrends affecting science. The full contribution of the humanities and social sciences to these objectives must be acknowledged and supported. Dr Lombardo was glad to see that the IHA has emphasised the role that the humanities play in addressing societal challenges. These cannot be 'solved' by STEM alone but will require the human-focused approach of the arts, humanities and social sciences.

Horizon Europe

Dr Lombardo then moved on to discuss the development of the post-2020 framework programme for research and innovation. In the process of developing Horizon Europe, EASSH has been putting forward constructive, concrete proposals and hopes that during the final phase of Horizon Europe's development there will be further opportunities for dialogue with the Commission. EASSH has been advocating for a broader focus that does not concentrate undue attention on technical solutions. EASSH has pursued a two-pronged approach by advocating for inclusion of the issues that are of greatest concern to EU citizens at the
heart of Horizon Europe (e.g. democracy, education, social transformation, cultural heritage and societies etc.), and for the human and social perspectives to have their place in other clusters such as Health, Food, etc.

When Horizon Europe launches in 2021, there will be much that remains familiar to us from Horizon 2020 (the Commission did not wish to drastically change a process that it deemed a success). The main difference between the programmes is that Horizon Europe is framed in a different political context at Commission level. Its skeletal structure resembles that of Horizon 2020 but the language has changed somewhat on account of that different context. Horizon Europe represents an evolution rather than a revolution and builds on its predecessor, Horizon 2020. Therefore, Horizon Europe will retain the three-pillar structure of its predecessor:

**Three-pillar structure**

<table>
<thead>
<tr>
<th>Pillar 1 Excellent (Open) Science</th>
<th>Pillar 2 Global Challenges and European Industrial Competitiveness</th>
<th>Pillar 3 Innovative Europe</th>
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<tr>
<td>• European Research Council (ERC)</td>
<td>• cluster 'Health' Health throughout the life course</td>
<td>• European Innovation Council (EIC)</td>
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<td>• Marie Skłodowska–Curie Actions (MSCA)</td>
<td>• cluster 'Culture, Creativity and Inclusive Society'</td>
<td>• European innovation ecosystems</td>
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<tr>
<td>• Research Infrastructures</td>
<td>• cluster 'Civil Security for society'</td>
<td>• European institute of innovation and technology</td>
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<td>• Proposed budget of €25.8 billion</td>
<td>• cluster 'Digital, Industry and Space';</td>
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<td>• cluster 'Climate, Energy and Mobility'</td>
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<td></td>
<td>• cluster 'Bioeconomy, Food, Natural Resources, and Environment'</td>
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<td></td>
<td>• non-nuclear direct actions of the Joint Research Centre (JRC).</td>
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The principle of open science will become the modus operandi across the whole programme and not just in pillar 1. It will, moreover, go beyond the open access policy of Horizon 2020 and will require open access to publications and data (with robust opt-out for the latter), and to research data management plans. The programme as a whole will foster the widespread use of FAIR (findable, accessible, interoperable, and reusable) data. Moreover, it will support activities that enhance researchers' skills in open science and support reward systems that promote open science. Ethics too will be promoted with a relevant and prominent role across all type of research and innovation programmes, and must be taken in duly consideration.

**Pillar 2 in detail**

The second pillar focuses on Global Challenges and European industrial Competitiveness. With a proposed budget of €52.7 billion, pillar 2 is designed to fund research and innovation tackling societal challenges and reinforce technological and industrial capacities. While these research areas are connected to the lives of the people of Europe, very few of the intervention areas in these clusters reflect the social dimension of the more technical challenges, which are being addressed. EASSH has recommended the inclusion of two or more intervention areas that are driven by relevant social and humanities research perspectives and pursue social solutions rather than just technical ones.

As we have heard, Cluster 2 – ‘Culture, Creativity and Inclusive Society’ – is the only cluster which directly addresses some of the major concerns of citizens across the EU. Yet it is allocated the lowest budget. If Horizon Europe is to be relevant to citizens, adequate funding and collaborative research, which addresses the issues of
fundamental concern to citizens are a necessity. However, AHSS scholars should not be limited to the cluster areas that align most closely to our research but rather pursue areas of interests in all clusters and identify opportunities across all areas of research and innovation.

The integration in clusters is designed to incentivise a systemic approach with cross-disciplinary, cross-sectoral, cross-policy and international collaboration, thereby achieving higher impact and better seizing the innovation potential that is often greatest at the intersection of disciplines and sectors. Here we also introduce one of the new features In the Horizon Europe programme: the research and innovation missions.

As part of this pillar, Horizon Europe will also fund activities pursued by the Joint Research Centre, which supports EU and national policymakers with independent scientific evidence and technical support. It is impossible to address global challenges without a cross-sectoral approach. The aim is to provide a strong integration of research and innovation activities, reflecting the complexity and multi-dimensional nature of the challenges, which should help to increase impacts. At one level the clusters are a combination of the fields covered by the Societal Challenges and Leadership in Industrial Technologies parts of Horizon 2020, updated to reflect new challenges and opportunities. Dr Lombardo emphasised that these activities are in alignment with the United Nations Sustainable Development Goals which are highlighted in the Commission's proposal text.

Innovation in Horizon Europe
The European Innovation Council is one of the key novelties in Horizon Europe (aiming to support breakthrough innovation) and the R & I Missions are another. The indicative areas for R & I Missions are:

- Adaptation to Climate Change, including Societal Transformation;
- Cancer;
- Healthy Seas, Oceans and Natural Waters;
- Carbon-Neutral and Smart Cities; and
- Soil Health for sustainable food.

The humanities and social sciences in Horizon Europe
From the AHSS perspective it's about putting in place instruments that can allow us to contribute fully to society's well-being. For example, citizens are concerned about the rise of the new right. What role can the AHSS play in society? In order to strengthen the scientific contribution of humanities and social science research, a better access must be given to academics and experts in the AHSS in all aspects of the Horizon Europe implementation processes, e.g. advisory board, strategic programming, programme committees, evaluation panels, and especially on the Mission Boards. It is vitally important that there is wide AHSS participation as evaluators, peer-reviewers etc in the various schemes. Dr Lombardo advised those present to register to be available as evaluators in order to provide enough choice for those who convene the panels. In addition to that, it is important to provide fora, where researchers and policy makers can meet and exchange across the boundaries of disciplines and the various sectoral policy areas. Indeed, today's event is a good example.

Dr Lombardo concluded by looking ahead to the future research landscape and the Framework Programme beyond Horizon Europe. In this regard, she emphasised the language of research networks and collaborative partnerships. This is, really, a six or seven year agenda looking ahead to Framework Programme 10 so strategic planning is of critical importance to the humanities research community. Going forward, this will represent a paradigm shift for the AHSS community and a change from the idea of the sole scholar working alone. The community will need to learn how to build strong networks, identify priorities in research communities and how to submit applications as part of large international consortia. For its part, the IHA and its members ought to continue to participate in institutional, national and European, policy development. We should encourage a multi-level approach to research (collaborative, infrastructures, etc.) and also ambitious projects. Within the HEIs, it is a strategic necessity that there be investment in strong research development teams.
The clear message is for all researchers to get involved in both understanding the debate around research policy and research priorities but also to be active members of large research communities to ensure that the Humanities and Social Sciences make a strong and loud contribution in the main concerns of European citizens and policy makers.

Fig. 4 Dr Gabi Lombardo, Director of EASSH
Session Two:
**Shaping Horizon Europe**

In session two, participants formed roundtables to discuss how to mobilise humanities research in response to the proposed global challenges that were outlined. The roundtable session was chaired by Professor Noel Fitzpatrick (TU Dublin).

The areas of research and potential research topics that were identified by each group, and outlined below, can be understood as key contributions or interventions that AHSS research can offer under each cluster area. These AHSS contributions are integral to the success of *Horizon Europe* if it is to

a) support a research programme that is relevant to all EU citizens; and
b) fund cross-disciplinary, cross-sectoral, cross-policy and high impact innovative and excellent science that is international collaborative.

These lists should not be thought of as exhaustive but may be used as a starting point by national delegates, national contact points and experts, as well as AHSS researchers themselves, to promote the contribution of the arts, humanities and social sciences.

To stimulate discussion, each table was provided with discussion points related to one of the following six research clusters:

1. Health
2. Culture, Creativity and Inclusive Society
3. Civil Security for Society
4. Digital, Industry and Space
5. Climate, Energy and Mobility
6. Food, bioeconomy, natural resources, agriculture and environment.

Each group was asked to consider the following question:

**How would your research activity respond to the proposed area of research?**

The findings of each group are identified below:

1. **Health**

   **Discussion points**

   - Scientific and technical policy support for improved public health and health care systems, including medical devices and health technology assessments, databases, digitisation including for accelerating interoperability;
   - Safety assessment methods for potential health and environmental risks posed by chemical substances and pollutants;
   - EU Reference Laboratory for Alternatives to Animal Testing;
   - Quality assurance tools such as certified reference materials for health biomarkers;
   - Research on newly emerging health issues and health threats.

   **Group Conclusions**

   There was consensus that the AHSS have a major contribution to make in relation to health. At their core, the humanities adopt human centred, altruistic approaches which are of critical importance in the domain of health (and how it relates to the individual and wider society). Participants found that the humanities make a
vital contribution in this research area by providing a fuller picture of what it means to be human. The humanities help us to illustrate complex and subtle concepts such as the positivities of ageing, health-care based on the individual's needs, medical ethics, pain, or resuming life with disability. There needs to be a critically engaged, historical perspective on research in this area with a strong emphasis on the development of public health systems over time, exploration of societal attitudes to disease and public health policy and a robust challenge to those who popularise conspiracies around vaccination and health-care more generally. Consideration was given to the following areas:

**Historical Perspective on Public Health:**
- Exploring the development of public health systems over time, and the evolution of public health systems in varying national and international contexts.
- National variations in policy.
- Successes and failures: what has worked, what has not worked and what lessons we can take forward in the development of policy. Revisiting previous solutions or models.
- Public Health policy and the historic role of institutions: infectious diseases; mental health; ageing.
- Who receives treatment? Exploration of responses to epidemics and other public health emergencies.
- Analysis of public health campaigns and their impact, for example: TB in Ireland; the AIDS epidemic in the 1980s.

**Creative Practice:**
- The role of the Creative Arts in Alzheimer’s and Dementia care. Theatre; music
- What are the implications for health care systems?

**Medical Education:**
- Developing humanities contributions to training of medical practitioners.

**Shaping Public attitudes to medical expertise and health policy:**
- The need to challenge ‘alternative facts’ and the ‘anti-vaccination’ cohort.
- There were issues here to do with persuading the public to seek information in a discerning manner and to make positive lifestyle changes – diet; alcohol; self-medication; lifestyle. There is overlap here in relation to:
  - Health policy;
  - Environmental policy; ecological risks; disaster resilience.
  - Inequality and ill-health.

**Gender:**
- Gender and the body. The female body.
- Sexual health.
- LGBTQ

**Safety risk assessments:**
- Historical research explaining previous events.
- Ethics and legal regulations.
- Humanitarian relief and legal framework underpinning
- Coping with disaster and disaster resilience.

**Ethics and animal rights:**
- Philosophical approaches - Ageing, anti-ageing.
- Animal ethics and who is treated?
- Importance of research in the area of animal rights.

**Quality Assurance tools:**
- Assessing medical tools.
- Importance of contextualising debate, decisions and policies.
- Cultural awareness of burial practices and the containment of infectious disease.

**Medical devices and technologies:**
- Health infrastructures.
- Technologies of the self and technologies of the state.
- Influenced by human/computer interaction.
- Philosophies of technology.
- Tech and the intersection of place and space.
- National variation.
- AI and robotics and challenging the ‘God Like’ nature of same.
2. Culture, Creativity and Inclusive Society

Discussion points

Research on inequality, poverty and exclusion, social mobility, cultural diversity, and skills; migration, assessment of social, demographic and technological transformations on the economy and on society;

Research on good governance and democracy;

Support to the safeguarding, preservation and management of cultural heritage;

Knowledge centre for migration and demography

Conclusions

The group felt that the arts, humanities and social sciences make a strong contribution in these areas. Humanities disciplines are human-centred, promote values that are intrinsic to the functioning of open democracy and play a critical role in understanding the human experience through history, culture and language. Moreover, European cultural richness and diversity is particularly evident in the diversity of languages that are spoken in the EU.

Education

- The group believed that education was central to this global challenge. Education was critical in combating inequality.
- 'Edu-tainment' and engaging students.
- Mature students may not be as digitally literate as students who have grown up with technology. This is a challenge.

Language and Communication

- Language was identified as a central element within this cluster.
- Again, the group felt that communication was central to this challenge but was not mentioned in the discussion points.
- Developing more inclusive government by communicating with more audiences (for example, native Irish speakers).
- Moreover, communicating (also in broader cultural sense) with speakers of the over 50 other EU and non-EU languages in Ireland (Poles, Estonians, Lithuanians, Mandarin etc.) is an imperative and could form part of the cultural remit of Humanities.
- European cultural richness and diversity is particularly evident in the languages spoken in the EU.
- In a post-Brexit scenario, the percentage of the EU population who do not speak English as their mother tongue will increase from 80% to 98.5%.

Policy gaps:

- The group identified a number of policy gaps in terms of algorithmic governance; institutional design and human rights
  
  **Data**
  - What type of data is accessible and being used?
  - Representation and visibility and how that feeds into policy: where is our human right to our own data?
  - Algorithmic governance applicable at state and corporate level?

  **Institutional design and accessibility**
  - Requirements that text be given in plain English.
  - Dementia patients and form filling.

Cultural heritage:

- Digitisation preserves, safeguards and protects cultural heritage.
- Intellectual property and Open Access policy:
  - Balancing Open Access policy with institutional requirements in closed journals.
  - How inclusive is Open Access publishing given the cost to the researcher?
  - How do students interact with e-resources?
3. Civil Security for Society

Discussion points

Knowledge centre for disaster risk management;

Support to security policies in the areas of protection of critical infrastructures and public spaces, CBRN–E (Chemical, Biological, Radiological, Nuclear, and Explosive materials) and hybrid threats, border protection and document security, and information and intelligence for countering terrorism;

Technologies for CBRN–E materials detection, biometric systems, and intelligence-gathering techniques;

Support to the EU's security position in the world; assessment of competitiveness and innovation of the Union security industry; exploitation of security-defence synergies;

Research for reinforced Cybersecurity capabilities, cyber-resilience, and cyber-deterrence.

Conclusions

Concerns were raised in relation to the use of language in the above discussion points – whose security is referred to? The framing here reveals quite a technocratic way of thinking about the issue of civil security for society. It was felt that the aspects of human behavior, privacy and ethics were absent and that the AHSS disciplines had a role to play in making an intervention in this regard. The group advocated a critically engaged and historical perspective on the headings and orientation of research in this domain, guided by the following questions and topics:

- Examination of the foundations of securitisation, both conceptually and historically. What is security and how has 'securitisation' been established as a mode of governance?
- What are the languages of security and what are its implications?
- What are the geographical and territorial models of security/securitization? What roles do borders play in them?
- Examine the politics (and rhetoric) of threats. What are the conceptual and historical conditions of states of emergency?
- What are the security implications for democracies in the era of fake news interventions and social media manipulation?
- Given the data-driven orientation on security, what is the fate of the individual in this moment?
- What questions of privacy are at stake in this approach to security?
- What forms of cyber literacy are required for public understanding of security and security management?
- What are the ethics of security and data accumulation predicated on security?
- The security implications of climate change.
- Exploration of the implications for international relations of security threats (cooperation between states and agencies; diplomatic and political issues; e.g. the Huawei controversy).
- What historical and contemporary case studies are available to examine regimes of security? E.g. STASI and the current Chinese social credit system.
- What are the implicit assumptions made in regard to data acquisition?
- How has fiction enabled the pre-inhabiting of these spaces through the literary imagination?
- How are crisis narratives composed and received?
- What are the implications of shocks for the management of security?
4. Digital, Industry and Space

Discussion points

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<tr>
<th>Implications of digitisation, with a focus on new and emerging ICT technologies such as machine learning and artificial computing, distributed ledgers, Internet of Things, and High-Performance Computing;</th>
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<tbody>
<tr>
<td>Digitisation in individual sectors, such as energy, transport, construction, service industry, health and care and government;</td>
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<tr>
<td>Industrial metrology and quality assurance tools for smart manufacturing;</td>
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<td>Research on Key Enabling Technologies;</td>
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<td>Research on best available techniques and environmental management practices, techno-economic analyses and life cycle assessment of industrial processes, chemicals management, waste management, water reuse, raw materials, critical raw materials and quality criteria for recovered materials, all supporting circular economy;</td>
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<tr>
<td>Analysis of security of supply of raw materials, including the critical raw materials, in relation to primary and secondary resources information and data update of the Raw Materials Information System;</td>
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<td>Implementation of Copernicus actions;</td>
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<td>Technical and scientific support for applications of the EU Global Navigation Satellite System Programmes.</td>
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Conclusions

There was a consensus that this is an area where there was a real opportunity for AHSS perspectives. As a future orientated cluster, it involves imagination and creativity – both of which are central to the humanities. Moreover, the AHSS disciplines have an opportunity here to engage with STEM through such interdisciplinary fields as the medical humanities, the environmental humanities and the digital humanities, which addresses the implications of rapid technological advance. The group believed that the digital humanities can make a particularly strong contribution across these areas.

Rapid technological advance and its implications.
- AHSS disciplines can put forward alternative understandings in relation to technological change.
- Smart tech – analytical tools.
- System errors for example, Revenue ROS system.
- Further implications of rapid technological advance – GDPR; ethics.
- To what extent AI amplifies the pay gap?
- Machine currency.

Health
- Tech for use in clinics and by clinicians particularly in regard to Diagnosis.
- Integrated Health and associated problems – Sláintecare
- Care in the community
- Collaborations with neurologists
- Expertise in diagnostic technologies issue.
- Clinicians and AI.
- Ageing populations and employment.

AHSS contribution in the health space
- Positive health outcomes.
- Research on management and techniques.

Environmental humanities.
- Hazardous environmental change through the texts of culture.
- Literary studies: floods in history and culture.

Interdisciplinary research –
- Who is evaluating the proposals and projects?
- Proposals for interdisciplinary internships that could be funded by bodies such as the Wellcome Trust.

Smart cities
- This area involves many issues that the humanities regularly tackle, all the more if we include the opposites ‘rural’, ‘country’, ‘nature’ and ‘non-industrial’.
- Under the broad rubric of Modern Languages – the literature of the city, utopian/dystopian writing, science fiction, literature of travel and migration.
- Transport related issues.
- Distribution of resources across the city.
5. Climate, Energy and Mobility

Discussion Points

Support to implementation of the EU climate, energy and transport policies, transition to a low-carbon economy and strategies for decarbonisation towards 2050; analysis of integrated national climate and energy plans; assessment of decarbonisation pathway in all sectors, including agriculture and Land Use Land Use Change and Forestry;

Assessment of risks in vulnerable ecosystems and critical economic sectors and infrastructure, with focus on adaptation strategies;

Analysis of the R&I dimension of Energy Union; assessment of EU competitiveness in the global clean energy market;

Assessment of deployment potential of smart energy technologies and sector coupling solutions to enable smooth and cost efficient energy transition.

Assessment of deploying renewables and clean energy production technologies;

Analysis of energy use of buildings, smart and sustainable cities, and industries;

Technical and socio-economic analysis of energy storage, particularly sector coupling and batteries;

Analysis of the EU's energy security of supply, including energy infrastructure, and energy markets;

Support to energy transition, including the Covenant of Mayors, clean energy for EU Islands, sensitive regions, and Africa.

Integrated analysis for deployment of Cooperative, Connected, Automated and Mobility;

Integrated analysis for development and deployment of electric driving, including the next generation of battery technologies;

Harmonised test procedures and market surveillance for CO2 and air pollutant emissions from vehicles, assessment of innovative technologies;

Assessment of smart transport, traffic management systems and congestion indicators;

Analyses of alternative fuels and related infrastructure needs.

Conclusions

The group were concerned that the human element was almost absent in the discussion points given the serious implications of climate change for humans. Convincing people to change their behaviour, and accept shared responsibility for the planet, would be key to addressing environmental degradation and climate change (nudge theory – an area central to the humanities and social sciences). Instead, the call is framed in the language of seeking ‘technical solutions’ without acknowledging the role of interdisciplinarity. Furthermore, the group concludes that, as currently framed, the document does not consider the human ramifications of technical solutions. The humanities, in their own right or in dialogue with STEM and other areas, foster creative and innovative solutions (through the mobilisation of concepts such as the Anthropocene) to environmental challenges and this needs to be reflected in the call.
Smart and sustainable cities and transport policies.
- Relevant to urban Studies, urban histories, urban politics, education.
- What are the unintended consequences?

Energy infrastructure.
- Urban planning and the human ramifications.

Climate Change.
- Investigating the human impact and sensitivities to diverse cultures and cultural groups.
- Persuading people to accept responsibility and change their behaviour. Nudge theory.
- The impact of climate change on citizens can only be understood fully by utilising AHSS scholarship.

Communicating climate change.
- How to communicate, to multiple audiences, the implications of:
  - Continued environmental degradation;
  - The need for responsible behaviour;
  - Moving away from fossil fuels;
  - The consequences of climate change action and climate change inaction.
- Visual representations of climate change as part of a communications strategy – art, photography, mapping, cartography. Wales and the sea was given as an example.

Political and ideological mobilisation around climate change.
- Social movements mobilised on the issue of climate change. The school strike for climate action.
- Energy security – political and social dimensions.
- Vested interests and climate change denial. How to tackle those.

Human ramifications.
- Technical approaches are so vague and do not have the human need at their core.
- The requirement for contextualisation – historical, anthropological, sociological.

Mobility
- Transport policy – planning
- Energy security – politics
- Congestion and associated issues.
- Social cohesion dimensions to mobility
- Isolation and associated problems for individuals.
- Cooperation – cooperative movements.

6. Food, bioeconomy, natural resources, agriculture and environment

*Discussion Points*

Research on land, soil, forests, air, water, marine resources, raw materials and biodiversity to support the effective preservation, restoration and sustainable use of natural capital, including sustainable resources management in Africa;

Knowledge centre for global food nutrition security;

Assessment of climate change and potential mitigation and adaptation measures for agricultural and fisheries policies, including food security;

Monitoring and forecasting of agricultural resources in EU, enlargement and neighbourhood countries;

Research for sustainable and economically thriving aquaculture and fisheries, and for Blue Growth and the Blue Economy;

Validated methods, laboratory proficiency tests and new analytical tools for implementing food safety policies;

EU Reference Laboratories on Feed Additives, Genetically Modified Organisms and Food Contact Materials;

Knowledge centre for food fraud and quality;

Knowledge centre for bioeconomy.
Conclusions
The group found that the key challenges here relate to: environmental degradation, demographic growth, unsustainable economic growth, food security and urbanisation. Human activities – driven by a rapidly growing global population and consumption – are creating mounting pressures on ecosystems (on land and sea) and on natural resources such as soils, water, air and biodiversity. History, Geography, Education, Sociology, Psychology, Cultural Studies, Literary Studies Folklore, Heritage and Culture were all deemed relevant here.

Critically reflecting on the topic, there is a fundamental question about the premise of the call.

Mitigating the effects of climate change and ensuring global food security
- Environmental humanities
- Demographic change.

Protection for traditional knowledge and behaviors.

History, learning lessons from the past.
- Folklore, heritage, culture, history. Superfoods. Ethics.

Literary representations.
- The issues and concerns of comparative literature. The literature of the city, utopian/dystopian writing, science fiction, the literature of travel and migration
- Representations of food in literature.
- Marketing, Packaging and recycling and the need for behavior to change.

Politics
- Socio-political aspects; global birth rates.
- Inheritance and farm-holdings. Ownership of resources, livestock and crops.
- Intellectual property.
- Pressure not to ask fundamental questions.
- Distinction between policy and practice.
- Implications for privacy. Genuine privacy concerns.
- Ethics, philosophy.
- Policy and practice.

Education and role of the AHSS:
- Combatting ‘fake news’.
- ‘Turmeric cures cancer’.
- ‘Anti-vaxers’ and fears about antibiotics.

Over-exploiting resources and the sustainability of agriculture.
- Intensive agriculture, forestry and fishing practices.

Social innovation and the development of new social enterprise policy.
- In movements: IFA, Fisheries and Enterprise.

Fig. 5 Dr Mel Farrell, IHA Director, in conversation with Prof. Sean Ryder
Conclusions:

Dr Eavan O’Brien, Assistant Director of the Irish Research Council (IRC) thanked Dr Gabi Lombardo for outlining the current research–policy landscape at European level. Dr O’Brien then also commended the IHA for organising the thought-provoking event. She noted the excellent and insightful points raised by the AHSS community in relation to development of the Horizon Europe programme, and she looked forward to further dialogue with researchers as the programme develops.

Professor Noel Fitzpatrick, Chair of the IHA Horizon Europe Working Group and Dean of GradCAM, TU Dublin thanked attendees for their contribution to today’s event. The round-table discussions had brought forward a wealth of constructive suggestions about the potential for the humanities in the Horizon Europe framework and creates a solid basis for further discussion in these areas. We had challenged invitees to think beyond their own research areas and the stimulating discussion this generated has demonstrated that the event was a productive exercise. Our discussion shows that while there are considerable opportunities for the humanities to benefit from the development of the Horizon Europe programme, we should be concerned about the ‘technical solutionism’ underlying much of its assumptions. This is something that we need to challenge.

Professor Fitzpatrick acknowledged that much of what we had heard today represented a paradigm shift and posed a significant challenge for our research community. As the landscape changes, building collaborative networks outside our disciplines and submitting funding applications as part of large international consortia will become a core requirement of what we do.

He believed that it would be beneficial, as we move through this process, to develop humanities research clusters aligned with the global challenges that have been identified. These could take the form of IHA Working Groups in the interdisciplinary fields of the digital humanities, environmental humanities and medical humanities. These areas are already strengths in terms of the humanities research community and the IHA is keen to demonstrate the humanities perspective on these global challenges and the UN Sustainability Development Goals. As the Horizon Europe programme develops, colleagues engaged in these areas can think through how humanities can be represented more effectively.
Contributors

Dr Gabi Lombardo is the Director of the European Alliance for Social Sciences and Humanities (EASSH), the largest advocacy and science policy organisation for social sciences and humanities in Europe. She has a first degree and MA in Philosophy and History from Rome University La Sapienza (Italy) and a PhD in Economic History from the London School of Economics (UK). She is an expert in both higher education and global research policy, and has extensive high-level experience operating at the interface of strategy, science policy, research support and funding. Gabi holds a senior level experience in strategic and ‘foresight’ planning in elite higher education institutions, international research funders and associations as she worked with the London School of Economics (LSE) the European Research Council (ERC) and Science Europe (SE). As Director of EASSH, Gabi advocates for social sciences and humanities research in science policy design and discussions at the national, European and international levels. She advocates also for the need of a strong evidence-based approach to policy-making, and the inclusion of researchers in science policy development for strategic and broad-based research funding. In 2018, Gabi received the Young Academy of Europe Annual Prize.

Prof. Sean Ryder is Established Professor of English at the National University of Ireland, Galway. He has served as a member of the Irish Research Council, as chair of the HERA funding consortium (Humanities in the European Research Area) and as Irish delegate to the Societal Challenge 6 Programme Committee for Horizon 2020.

Prof. Noel Fitzpatrick (doc ès lettres, Paris VII) is the Dean of GradCAM and Head of Research at the College of Arts and Tourism at the Dublin Institute of Technology. He is currently serving as Chair of the IHA Working Group on Horizon Europe. He is a leading member of the Digital Studies Network, European Artistic Research Network, SHARE and European Society of Aesthetics. He has a central interest in Hermeneutics, the interpretation of text, text as a performance, and the relationship between text and image. His research spans different disciplines and domains from contemporary French philosophy to performance theories and philosophy of technology.

Prof. Anne Fuchs (MRIA, FBA) is Professor and Director of the UCD Humanities Institute. Prior to her post which she took up in October 2016, she was Professor of German Studies at the University of Warwick, Professor and Chair of German at the University of St Andrews and Professor of Modern German Literature and Culture at University College Dublin. She has published widely on German cultural memory, modernist literature, contemporary German literature and, more recently, on modern theories of time and temporality. Her monographs include After the Dresden Bombing: Pathways of Memory, 1945 to the Present (Macmillan Palgrave, 2012), Phantoms of War in Contemporary German Literature, Films and Discourse — The Politics of Memory (Palgrave Macmillan 2008, 2nd paperback ed. 2010) which won the CHOICE Award in the US, and Die Schmerzensspuren der Geschichte: zur Poetik der Erinnerung in W. G. Sebalds Prosa (Böhlau 2004). Her next monograph Precarious Times, Precarious Lives: Time and History in Modern German Culture will appear with Cornell University Press in 2019.
Professor Eugene McNulty is based in the School of English, Dublin City University, where he is also the Faculty of Humanities and Social Science’s Associate Dean for Research. He is the Vice-Chair of the IHA 2018–19 and the incoming Chair for 2019–20. His current research focuses on the links between the cultural sphere and legal discourse.
Fig. 6 Dr Gabi Lombardo