

Joint Programming Initiative on
Cultural Heritage and Global Change

Strategic Research and
Innovation Agenda 2020



Self-portrait by Van Gogh at the Rijksmuseum in Amsterdam, the Netherlands. Photo: Shutterstock/Jaroslav Moravcik.

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Photo: Le Robert, 2018/Martin Fichez, 2018.

Foreword

Developing a new research and innovation strategy is an important stage in the life of a European Project such as the Joint Programming Initiative on Cultural Heritage and Global Change (JPI CH). It is a unique opportunity to look to the future, whilst drawing on past achievements. For its part, the JPI CH can be proud of what it has achieved over the last 10 years from the creation of the consortium in 2010 under Italy's initiative, up to France's takeover of coordination activities in 2019. In terms of research, new avenues have been opened with six calls launched, many ground-breaking projects funded and several international events organised.

The JPI CH has set up efficient trans-European governance for research on cultural heritage, gaining the long-term commitment of ministries and funding agencies in 18 Member States to a strategic agenda and a multi-year financial plan with the support of the European Commission.

Furthermore, the numerous, regular and high-level exchanges between members of the JPI CH have greatly contributed to establishing a common understanding of what research on cultural heritage should be, the worldwide challenges it must address and its contribution to shaping future cultural, social, economic and environmental policies.

Finally and probably most importantly, the JPI CH has been a driving force in the creation of a new field of study: heritage science. Heritage science is a very broad and totally transdisciplinary field that brings together the wide range of sciences (social, experimental, engineering, digital, humanities) that participate in and enable the identification, understanding, conservation, restoration and transmission of heritage, be it cultural, tangible, intangible, digital or natural. It consists of a highly collaborative ecosystem of researchers, heritage professionals, non-governmental organisations and associations that transcends national visions and interests, whilst falling within the scope of Europe's open science policy.

Over the past 10 years, due to the constant evolution of the heritage field, some of the major structural themes identified in our first Strategic Research Agenda (SRA) have changed and new ones have emerged.

Throughout 2019, the 18 members of the JPI CH held stimulating discussions that have resulted in this new, bold and far-reaching Strategic Research and Innovation Agenda (SRIA). Organised around the following four Priority Areas, it fully takes into account the changes that have occurred in the cultural heritage field and our 10 years of experience:

1. A reflective heritage for a resilient society
2. Sustainable management of cultural heritage
3. Cultural heritage in a changing context
4. Cultural heritage facing climate and environmental change.

Each Priority Area comprises several non-exclusive themes that focus on new avenues and possibilities for research and innovation in the field of heritage science. It is expected that their outcomes will significantly help the formulation, implementation and monitoring of public policies. They will also have a major impact on the management of cultural heritage and on how our societies address cultural, social, economic and environmental issues. In that respect, this new SRIA is more than a work programme. It is designed to contribute to current European and worldwide reflection on cultural heritage, on research and development needs, and more broadly, on the role of heritage in today's and tomorrow's society.

Because it possesses a vast, varied and outstanding heritage and can count on the high quality and numerous skills of its citizens, Europe is in the right position to become the world leader in cultural heritage research and innovation. It has the capacity to defend and protect its own past and also to offer technological solutions for the management and planning of cultural heritage assets in a transparent, ethical and democratic manner to the benefit of all, inside and outside its boundaries.

The JPI CH is fully committed to contribute to the understanding of our past and to the building of our shared future in a worldwide context.



Pascal Liévaux
Chair of the JPI Cultural Heritage
May 2020

Executive Summary

Context

In 2014, following consultation with its participating countries, the Joint Programming Initiative on Cultural Heritage and Global Change (JPI CH) produced a Strategic Research Agenda that identified relevant research areas, gaps and needs. The agenda was implemented through joint member-led activities and operational instruments such as workshops, conferences and publications, as well as through the transnational funding calls which derived from the priority research areas.

Strategic Research and Innovation Agenda 2020 builds on SRA 2014 and reflects the political, economic, sociocultural and technological changes that have occurred in recent years. It capitalises on the increasing policy developments both within Europe and beyond which demonstrate the intrinsic and instrumental values of heritage.

- climate change and other environmental threats
- United Nations (UN) Sustainable Development Goals
- threats to heritage due to conflict risks
- pandemics and their consequences
- digital innovation and access
- politicisation of heritage
- participatory governance and citizen involvement
- well-being.

These changes can be grouped into the following overarching categories:

- **cultural heritage, society and politics**
- **cultural heritage and the environment**
- **cultural heritage, digital and artificial intelligence.**

Research and Innovation Principles and Priority Areas

Overarching research principles have been agreed which will underpin the future joint activities of the JPI CH. They reaffirm that the initiative promotes a holistic approach to cultural heritage and encourages collaborative, transdisciplinary, interdisciplinary, innovative, basic and applied research, to meet societal challenges and contribute to sustainable development. Public participation and engagement should be at the heart of the joint activities, and education and training opportunities should be developed. SRIA 2020 aims to ensure that the JPI CH supports digital innovation within the heritage sector and contributes to the UN Sustainable Development Goals.

To meet future-orientated challenges, four Priority Areas were identified through consultation with the JPI CH's Advisory and Scientific Board and National Consultation Panels:

- **A reflective heritage for a resilient society** – this Priority Area focuses on cultural heritage as an empowering force and a collective good for society
- **Sustainable management of cultural heritage** – this Priority Area focuses on participatory governance, the added value of cultural heritage and emerging technologies
- **Cultural heritage in a changing context** – this Priority Area focuses on urban and rural development, globalisation, demographic change and tourism and will explore both the positive and the negative implications for cultural heritage
- **Cultural heritage facing climate and environmental change** – this Priority Area focuses on the impact of climate and environmental changes on cultural and natural heritage and how cultural and natural heritage could be as resource for Sustainable Development.

Implementing the Strategic Research and Innovation Agenda 2020

To maximise the impact of joint funding, more flexible approaches must be developed further. These could include small-scale or pilot-project calls which lead to larger-scale projects, early-career researcher calls and calls with specific budgets for exhibitions, publications and conservation.

As well as directly linking to SRIA 2020 Priority Areas and themes, JPI CH activities will address the UN Sustainable Development Goals. SRIA 2020 will be implemented through joint activities by JPI CH members, and new opportunities will be sought with other JPIs, European initiatives and third countries.

Dissemination and communication of the JPI CH activities and of the impact of the funded projects were identified as a priority for the successful implementation of the SRIA 2020. JPI CH management will work to create a communication plan which better reflects the needs of its stakeholders as well as the technological landscape, and which will provide a common and up-to-date social media and web presence. This would include the continuation of award-holder networking events as well as the production and dissemination of project videos.

JPI CH partners will work together to ensure that project outputs and programme deliverables associated with both SRA 2014 and SRIA 2020 are not lost or forgotten, and that new activities and projects prioritise accessibility and longevity of findings, data and tools.





Looking to the Future

Reflecting on the rich legacy of its first 10 years, the JPI CH looks forward to the next decade, confident that SRIA 2020 will enable it to be at the heart of the forthcoming exciting and challenging times for Europe's cultural heritage.

With SRIA 2020, the JPI CH will continue to provide future-orientated added value, and to protect and strengthen Europe's cultural heritage through research and innovation in order to meet societal challenges and contribute to sustainable development. It will continue to increase European cohesion and cooperation. It will continue to enable transnational projects which produce societally relevant and high-impact research. It will further develop international impact, ensure inclusion, provide education and training opportunities and contribute to the UN Sustainable Development Goals, in particular in the face of climate and environment emergency. All of these have grown in importance since the development of SRA 2014.



Ålesund, Møre and Romsdal, Norway. In 1904 the original wooden town was totally destroyed in a fire. Today the town centre has an unusually consistent Art Nouveau architecture as most of the buildings were built between 1904 and 1907.
Photo: Guri Dahl and property of Riksantikvaren (The Directorate for Cultural Heritage).

2010-2020: A Decade of Safeguarding Cultural Heritage and Advancing Research

Overview

The JPI CH is an intergovernmental and strategic partnership of countries addressing the need to enhance the sustainability of cultural heritage through coordinated research and innovation. Established following a 2010 European Council recommendation, the initiative was formally launched by the Council in 2011. The benefits of joint programming lie in its structured and strategic process whereby countries voluntarily agree to work in partnership towards common visions, encapsulated in a strategic research and innovation agenda and implemented through joint actions.

The JPI CH's main objective is to promote the safeguarding of cultural heritage in its broader sense, including tangible, intangible, natural and digital assets. The initiative promotes a joint multidisciplinary approach to cultural heritage sustainability through research and innovation.

The formation of the JPI CH has led to the establishment of a Coordination Unit (based in Italy from 2010 to 2018 and in France from 2019 to the present), a Governing Board, a Steering Committee and an Advisory and Scientific Board. Eighteen countries currently participate in the JPI CH partnership as members and seven countries have joined as observers.

The JPI CH has defined its Vision Document (2010), its Terms of Reference (2010, revised 2019), a monitoring and evaluation framework (2013), its Strategic Research Agenda (2014), an Action Programme (2015) and a Long-Term Strategy (2017).

Between 2010 to 2020 the JPI CH has:

- published the Strategic Research Agenda in 2014
- developed a website (<http://jpi-ch.eu/>) and Heritage Portal
- established a programme management and governance structure
- coordinated policy alignment between JPI CH partners, and completed the first evaluation of the JPI CH alignment process in 2017 and the second evaluation of the implementation of the alignment of common research programmes in 2019
- implemented five joint calls for research and innovation projects, spending approximately 26.4 million Euros of public investment and engaging more than 18 funding agencies
- funded 49 projects involving more than 300 project partners
- leveraged 6.06 million Euros in funding from the European Commission. Two Coordination and Support Actions (CSAs) were successful: the Joint Heritage European Programme (JHEP) (2011-2015), the Heritage Plus Project (2013-2018) and JHEP2 (2016-2019); the Heritage Plus Project was co-funded through the European Research Area Network (ERA-Net) Cofund scheme
- organised a variety of scientific and policy conferences, workshops and dissemination activities for strategic and thematic exchange, as outlined in its Action Programme and elsewhere
- established relationships with other regional, European and international networks, programmes and initiatives.

Cube houses designed by Piet Blom, Rotterdam, the Netherlands.
Photo: Shutterstock/VanderWolf.





PANAUDOTUS ORGANIŠĀUS
TĪRĪKĻUS I KRĀSĀKĻI PĪTI
DRAUŠĪDAMA III
ORGANIŠĀUS TĪRĪKĻUS ĪPĪTI
I ATĪERĀ BUTELĪŠUS III

SMĒLIS



2010 Vision¹

Apart from natural ageing, Europe's cultural heritage is exposed to many threats such as climate change and pollution, increasing urbanisation, mass tourism, human negligence, vandalism and even terrorism. Protection of cultural heritage in the face of global change is thus becoming a major concern for decision-makers, stakeholders and citizens in Europe. Research into strategies, methodologies and tools is needed to safeguard cultural heritage against continuous decay. Before irreversible damage is done, concerted actions, based on sound science, are needed to protect, strengthen and adapt Europe's unique cultural heritage.

A concerted research action is needed to allow Member States to maximize and exploit at best their research efforts. Joint Programming provides a framework within which Member States address jointly areas where public research programmes can respond to major societal challenges.

¹ Source: Vision Document: http://jpi-ch.eu/wp-content/uploads/Vision-Document_17-June-20101.pdf



SRIA 2020: Background

Strategic Research Agenda 2014

SRA 2014 was developed with the aim of presenting cultural heritage as a holistic, integrated research area and overcoming the diverse and potentially conflicting approaches used by the cultural bodies and institutions responsible for Europe's cultural heritage. Using the JPI CH 2010 Vision Document as a starting point, input was requested from a wide range of stakeholders across Europe, reflecting the three key facets of cultural heritage: the tangible, the intangible and the digital. SRA 2014 highlighted that the different types of cultural heritage cannot be seen as separate entities. The tangible, intangible and digital facets are just as important as one another, as evidenced by the digitisation of material, web technologies and the increasing amount of born-digital material, which present numerous opportunities and challenges for cultural heritage research. SRA 2014 recognises the importance of values and how cultural heritage research should reflect values in society. This is addressed by encouraging researchers to ask the core questions in terms of what is worth preserving and how choices can be made.

The four priority research areas outlined in the SRA 2014 were:

1. Developing a reflective society

This priority was broadly based on the recognition that the world is changing and that research questions, approaches, methods and reporting need to reflect this continuous process. What are the consequences for cultural heritage in the light of demographic changes as well as changes due to conflicts or rapid development? What represents 'our heritage'? How might this change over time? Who is capturing the cultural heritage that is being created today?

The main research areas were: identity and perception, values, ethics.

2. Connecting people with heritage

This priority concentrated on access by addressing themes and issues relating to the way people and communities are enabled to connect with heritage. There are implications for the broader tourism and transport industry as well as the social and cultural capital (for example, through volunteering it provides), as well as issues around sustainability. This also applies to developments in technology and their impact on cultural heritage in an increasingly digital age. Who owns the digital forms of cultural heritage and who decides who can create, access and use it, how can it be protected from copyright infringement and how is intellectual property assigned in a digital world?

The main research areas were: protection through use, sustainability, security, heritage information.

3. Creating knowledge

This theme focused on deepening our understanding of the context in which cultural heritage exists and is formed, and developing innovative approaches, applications and tools that create added value for society from cultural heritage.

The main research areas were: linking information, change, methods and measurements, integrating risks.

4. Safeguarding our cultural heritage resource

This theme focused on how we can protect our heritage and the related research that is required to support it. What measures are needed to safeguard tangible, intangible and digital cultural heritage as a whole? Environmental and anthropogenic effects including climate change will have an impact on cultural heritage in the 21st century, and research is required to identify and manage the vulnerability of cultural heritage to environmental and other changes.

The main research areas were: conservation, adaptation, mitigation.

Creating the Strategic Research and Innovation Agenda 2020

The starting point for the review of SRA 2014 was the need to understand how the transformation of the heritage research landscape affected the priority research areas, using the document as a baseline to reflect on social, political, economic, environmental and technological changes. The review comprised consultation with the JPI CH Advisory and Scientific Board as well as partner countries who worked with National Consultation Panels to provide a national response.

Climate change is understood to be an increasing threat to heritage, which is subject to a number of environmental risks summarised within the UN's Sendai Framework for Risk Reduction² and its Sustainable Development Goals³. SRIA 2020 identifies climate change as a distinct priority, as well as the need for an additional emphasis on research which responds to the increased politicisation of heritage in Europe and threats to cultural and natural heritage around the world, including urbanisation and mass tourism. There is a reinforced relationship between cultural heritage and society, reflecting the current mindset, which encourages research into participatory governance and innovative business management models, and focuses on well-being. Digital technology is a strengthened priority theme, as well as issues of copyright and the protection of heritage data.

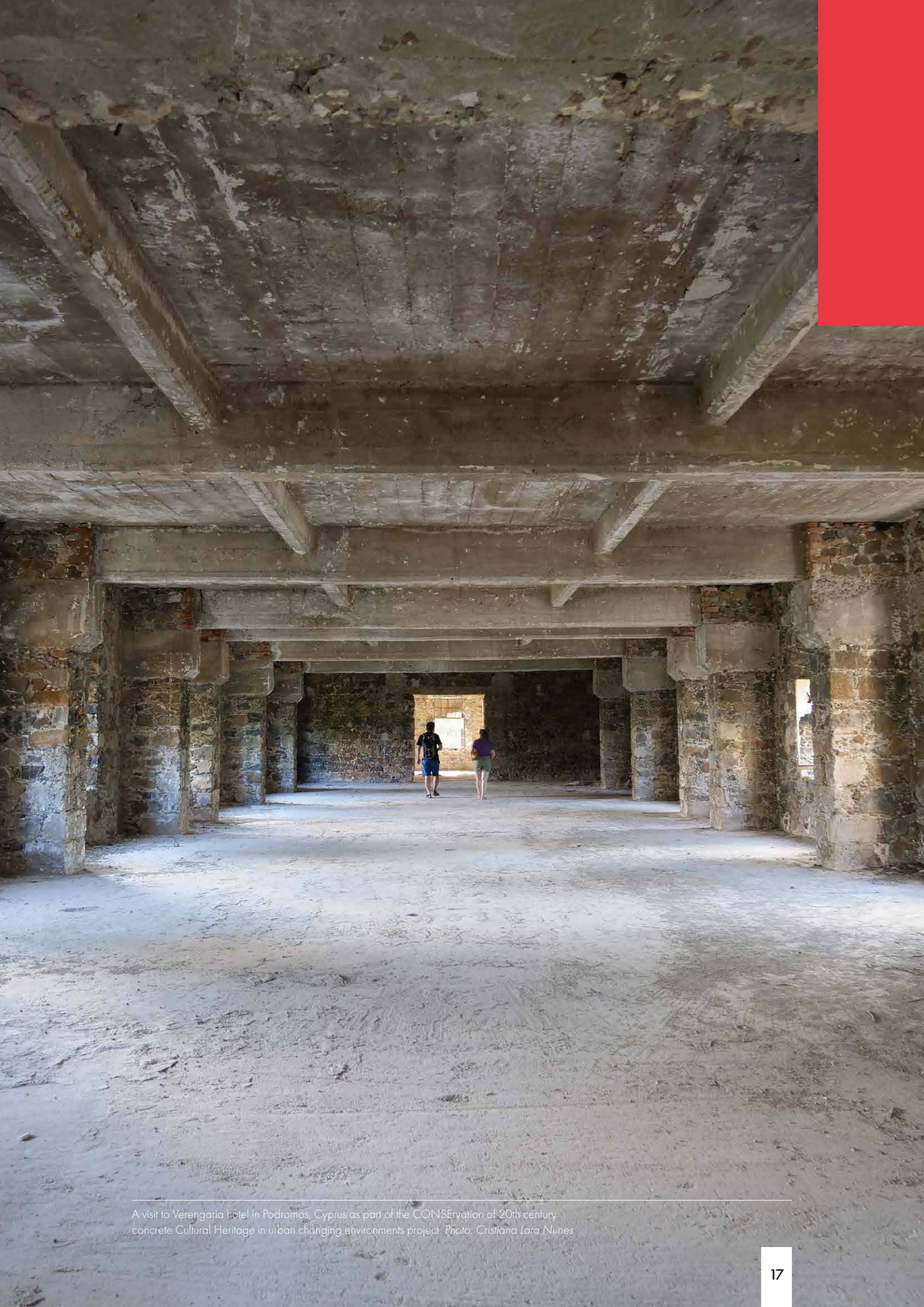
SRIA 2020 defines cross-cutting research and innovation principles which will not only guide the activities of the JPI CH but also provide a framework for research and innovation projects funded through transnational calls. There should be no artificial division between cultural and natural heritage, nor between tangible, intangible and digital heritage. Research projects should be inter- or transdisciplinary, provide opportunities for education, skills development and training, and have communication and dissemination at their heart, especially with regards to young generations. Public-led research and engagement (co-creation and crowd-sourcing) should be a catalyst for impact and innovation, and the importance of discovery-led research is stressed. In particular, SRIA 2020 emphasises that research should address wider societal challenges, including contributing to the UN Sustainable Development Goals.

SRIA 2020 process



² <https://sustainabledevelopment.un.org/frameworks/sendaiframework>

³ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>



A visit to Verengaria hotel in Podromos, Cyprus as part of the CONSErVation of 20th century concrete Cultural Heritage in urban changing environments project. Photo: Cristiana Lara Nunes

The European and International Environment and Policy Context

Since the launch of SRA 2014, the international policy scene on heritage has changed considerably, with the publication of several important documents and the launch of events emphasising the core value of heritage to our societies, within and beyond Europe. The main outcomes of this rich period for cultural heritage are set out below:

2015 saw the publication of three major documents:

- **Getting cultural heritage to work for Europe⁴**, by the Horizon 2020 Expert Group on Cultural Heritage. The report provided a roadmap for the EU Research & Innovation Policy in Cultural Heritage and promotes “cultural heritage as a production factor and an investment opportunity for the economy as well as a catalyser for social cohesion and environmental sustainability.”
- **Cultural Heritage Counts for Europe⁵**, by Europa Nostra, ENCATC, Heritage Europe, the Heritage Alliance, the International Cultural Centre (Krakow) and the Raymond Lemaire International Centre for Conservation (University of Leuven). This report provides detailed analysis and evaluation demonstrating the multiple benefits of heritage for Europe’s economy, society and culture and for the environment.
- **Transforming our World: The 2030 Agenda for Sustainable Development⁶**, by the United Nations Educational, Scientific and Cultural Organization (UNESCO). This sets out a very ambitious and far-reaching plan of action for the years up to 2030, with a set of 17 universal and transformative goals (known as Sustainable Development Goals, or SDGs) to achieve sustainable development with respect to the economy, society and the environment. Target 4 (Strengthen efforts to protect and safeguard the world’s cultural and natural heritage) of SDG 11 (Making cities and human settlements inclusive, safe, resilient and sustainable) is particularly relevant to the JPI CH. As is illustrated in the Implementing the United Nations Sustainable Development Goals section, most of the other SDGs also include entries that should generate new research financed through JPI CH calls.
- **Global Report on Culture for Sustainable Urban Development⁷**, by UNESCO. This report proposes “a reflection on managing change in cities with culture as a lever for development.”

2016 saw:

- the **Towards an EU strategy for international cultural relations⁸** recognise “cooperation in cultural heritage” as a priority in this area.

4 <https://ec.europa.eu/programmes/horizon2020/en/news/getting-cultural-heritage-work-europe>

5 <https://www.europanostra.org/our-work/policy/cultural-heritage-counts-europe/>

6 <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>

7 <https://unesdoc.unesco.org/ark:/48223/ptf0000245999>

8 https://ec.europa.eu/culture/policies/strategic-framework/strategy-international-cultural-relations_en

2017 saw:

- the International Council on Monuments and Sites (ICOMOS) **action plan: Cultural Heritage and Localizing the SDGs⁹**, demonstrate how the sector is working towards “the recognition, mainstreaming and effective contribution of cultural heritage as a driver and enabler of sustainable development”.

2018 was the European Year of Cultural Heritage.

It enabled a concerted focus by EU institutions, stakeholders and Member States on cultural heritage policy.

The subsequent policy momentum resulted in the publication of two important documents:

- **The Berlin call to action - Cultural Heritage for the Future of Europe¹⁰**, which outlined five main principles:
 - 1) recognising cultural heritage as a strategic and cross-cutting priority for European policies and funding;
 - 2) bridging local, national and European policies and actions;
 - 3) preserving and transmitting cultural heritage;
 - 4) investing in quality heritage-led regeneration; and
 - 5) promoting better knowledge and deeper understanding of cultural heritage.
- **The first-ever European Framework for Action on Cultural Heritage¹¹**. One of its five pillars focuses on knowledge and research, namely ‘Cultural heritage for an innovative Europe: mobilising knowledge and research’.

During the European Year of Cultural Heritage, over 6.2 million people took part in more than 11,700 events organised across 37 countries, and the Horizon 2020 programme invested around 66 million Euros in heritage-related research and innovation projects.

At the start of 2018, the European Commission’s Directorate-General for Research and Innovation published a policy review **Innovation in Cultural Research: for an integrated European Research Policy¹²** assessing the potential and the challenges of EU-funded cultural heritage research. It includes suggestions for an appropriate European heritage research framework after 2020. The report proposes the following potential themes to frame future research on European cultural heritage:

- comparative research on the notion of cultural heritage and on the reception of international (EU and UNESCO) discourses on national, regional and local levels
- European varieties of intangible heritage and their significance
- the current re-institutionalisation of monument/tangible heritage protection in Europe
- the historic urban landscape in Europe (in small, medium-sized and big cities)
- urban intangible heritage and its relationship to creative industries
- network-based territorialities of migration or cultural diffusion generated cultural heritage versus homogeneous territories of national cultures
- the actorship in the processes of cultural heritage in the digital age
- co-creative methods to bring heritage stakeholders, practitioners and academics together in the definition and recognition of European cultural heritage
- rural heritage and European approaches to the cultural landscape
- democratic practices in the appreciation of the societal significance of cultural heritage
- participatory practices in the formation and recognition of cultural heritage to fight against social and cultural inequalities
- the impacts of the institutionalisation of cultural heritage on social sciences and humanities (European cultural heritage chairs and studies from a comparative and interdisciplinary perspective).

⁹ https://www.icomos.org/images/DOCUMENTS/Secretariat/2017/ICOMOS_Action_Plan_Cult_Heritage_and_Localizing_SDGs_20170721.pdf

¹⁰ <https://www.europanostra.org/wp-content/uploads/2018/09/Berlin-Call-Action-Eng.pdf>

¹¹ https://ec.europa.eu/culture/content/european-framework-action-cultural-heritage_en

¹² <https://op.europa.eu/en/publication-detail/-/publication/1dd62bd1-2216-11e8-ac73-01aa75ed71a1>



PICM project meeting in Trondheim, Norway.

2019 was an important year in terms of policy-making publications. The centrality of cultural heritage to the European identity and the necessity to keep it at the heart of Europe’s political agenda were reaffirmed and emphasised by:

- **the Strategic Agenda 2019-2024 for the EU¹³**, a significant milestone as, for the first time, heritage was an explicit priority; this new agenda proposes to “invest in culture and our cultural heritage, which are at the heart of our European identity”.
- **the Bucharest Declaration¹⁴ and the Paris Declaration¹⁵**, by EU Culture Ministers, following the European Year of Cultural Heritage and the Notre-Dame fire in April 2019; these declarations reaffirmed the importance of collaboration in order to preserve European cultural heritage, included a commitment to keep cultural heritage at the heart of the political agenda and delivered a call to action for the mobilisation of a network of experts, youth involvement and existing funding models.

The strengthened common approach to cultural heritage management and capacity building was also made evident by the **Declaration of cooperation on advancing digitisation of cultural heritage¹⁶** signed by 24 European countries in April 2019, the ICOMOS/European Commission’s **European Quality principles for EU-funded interventions with potential impact upon cultural heritage¹⁷** and **Fostering cooperation in the European Union on skills, training and knowledge transfer in cultural heritage professions¹⁸** (June 2019), written collaboratively by experts from EU Member States.

This policy overview set out above demonstrates the significant role cultural heritage has to play in addressing societal challenges, as well as the wider value of cultural heritage now recognised and advocated within the European political community. SRIA 2020 builds on this European and international context and aims to reaffirm how JPI CH activities can support policy-makers and sector stakeholders.

13 <https://www.consilium.europa.eu/en/eu-strategic-agenda-2019-2024/>

14 <https://www.consilium.europa.eu/media/39209/190416-bucharest-declaration-on-the-role-of-culture-in-building-europes-future.pdf>

15 <https://www.diplomatie.gouv.fr/en/french-foreign-policy/europe/news/article/declaration-adopted-during-the-informal-meeting-of-european-union-member-state>

16 <https://ec.europa.eu/digital-single-market/en/news/eu-member-states-sign-cooperate-digitising-cultural-heritage>

17 http://openarchive.icomos.org/2083/1/European_Quality_Principles_2019_EN.PDF

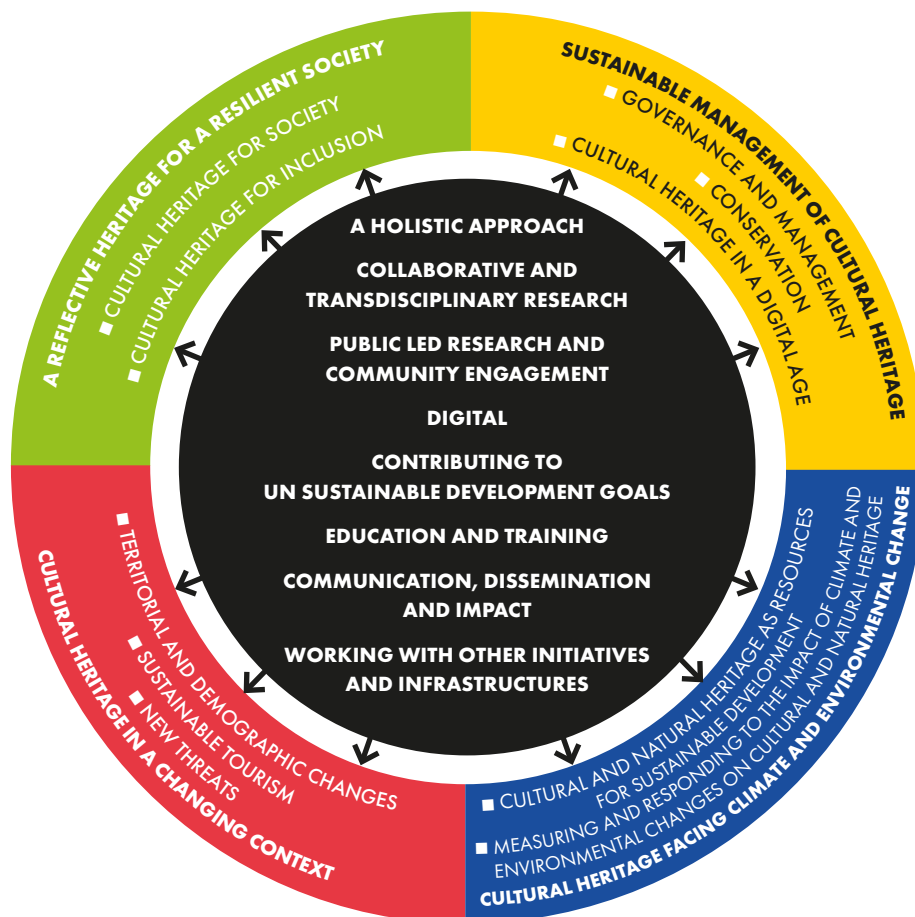
18 <https://op.europa.eu/en/publication-detail/-/publication/e38e8bb3-867b-11e9-9f05-01aa75ed71a1/language-en>



Creating and Exchanging Knowledge

Research and Innovation Principles and Priority Areas

SRIA 2020 outlines key policy developments and identifies research and innovation gaps and opportunities, underlying research principles and revised priority research areas. It will be complemented by SRIA 2020 implementation and communication documents. Each new Priority Area includes research and innovation theme descriptions, aims and objectives, and describes how it contributes to the SDGs.



Research and Innovation Principles

These underlying principles enable an advancing and deepening of our understanding of the context in which cultural heritage exists and develops, as well as the development of innovative research approaches, applications and tools that will enhance its preservation and transmission and create added value for the whole of society.

A holistic approach

Cultural heritage has long been considered without regard to its environment, whilst the impact of human activities on natural areas has been neglected. It is therefore relevant to consider the links between cultural and natural heritage more closely than has been done in the past. Today, we talk about cultural landscape and consider heritage at a territorial level. Cultural heritage exists in combinations of tangible¹⁹, intangible²⁰ and digital²¹ forms. It is being produced continuously and contributes to the creation of identities.



Collaborative and transdisciplinary research

Collaborative research with heritage professionals, NGOs, associations and a broad range of heritage institutions and management bodies (public and private) is encouraged. The priority research areas identified within SRIA 2020 should provide the space for investigator-led and curiosity-driven research across all disciplines within the JPI CH remit. Research should be truly integrative and provide opportunities to explore all forms of cultural heritage (tangible, intangible and digital) alongside its many interfaces with natural heritage and the environment. It should involve collaboration and work across disciplinary, conceptual, theoretical, methodological and international boundaries.



Public-led research and community engagement should be a catalyst for innovation and guarantee greater impact

Citizen science and the co-design and co-production of research are advocated. Knowledge sharing and co-creation are essential and a range of methods and educational tools to engage the broader public should be developed. Public and community engagement as well as participatory approaches should be at the core of activities and thought should be given to who creates knowledge, narrative and the role of communities in identifying, understanding and caring for heritage.



Digital

Heritage researchers, whenever and wherever possible, should be applying and embedding new and emerging technologies and tools and exploring new methods for identification, knowledge, conservation and transmission as well as data gathering and analysis. Researchers should explore the role of artificial intelligence and new non-invasive, remote imaging and non-destructive measurement and testing techniques for archaeology, heritage and art. A critical digital studies approach should be taken which ensures that digital tools and outputs are accessible and sustainable.



19 Tangible heritage includes artefacts (for example, archaeological finds, objects, paintings), buildings, structures, landscapes, cities and towns including industrial, underwater and archaeological sites. It also includes their location, relationship to the natural environment and the materials from which all these are made, from prehistoric rock to cutting edge plastics and electronic products.

20 Intangible heritage includes the social and festive practices, representations, expressions, knowledge and know-how that communities, groups and individuals create, use and transmit from generation to generation. It stimulates spontaneous and participatory initiatives in inventing, education and safeguarding and demonstrates the contribution of intangible practices to the challenges of contemporary societies (sustainable development, social cohesion or cultural diversity).

21 Digital heritage includes texts, databases, still and moving images, audio, graphics, software and web pages. Some of this digital heritage is created from the scanning or converting of physical objects that already exist, and some are created digitally, or born digital.

Education and training

The JPI CH aims to inspire a new generation of cultural heritage research and innovation actors across Europe through capacity building and formal and informal learning opportunities, in particular for young people. Research should provide opportunities for the provision of training to enable researchers to work across disciplines and all forms of heritage, and to support researchers at different stages of their careers. The JPI CH promotes inclusive research and diversity in researchers' gender, socio-economic and ethnic background.



Communication, dissemination and impact

The JPI CH aims to build a culture that enables researchers to share their findings and demonstrate cultural, social, environmental and economic impact. They should be shared with and disseminated to researchers (including those in other disciplines), as well as to international stakeholders such as NGOs and users of cultural heritage, other industries, creators and the wider public including young people and hard-to-reach communities. There should be greater support for research to underpin the development of policies and guidelines for the preservation and use of cultural heritage.



Working with other initiatives and infrastructure in Europe and beyond

The JPI CH encourages collaboration and the use of existing networks to avoid duplication, whilst also considering which new initiatives and infrastructure developments are needed. Research activities should link into existing infrastructure initiatives such as European Research Infrastructure for heritage science (E-RIHS), Digital Research Infrastructure for the Arts and Humanities (DARIAH) and Europeana and European policies, laws and regulations. They should also build on and collaborate with funding initiatives such as Humanities in the European Research Area (HERA) and the other JPIs and future EU research partnerships. The JPI CH aims to be a key actor in strengthening the heritage science²² community and promoting heritage science as a field of research in its own right.



²² "Heritage science is the interdisciplinary domain of scientific study of heritage. Heritage science draws on diverse humanities, sciences and engineering disciplines. It focuses on enhancing the understanding, care and sustainable use of heritage so it can enrich people's lives, both today and in the future. Heritage science is an umbrella term encompassing all forms of scientific enquiry into human works and the combined works of nature and humans, of value to people." As defined by E-RIHS consortium partners.

The Four Priority Areas

Priority Area One:

A reflective heritage for a resilient society

This Priority Area is broadly based on the recognition that cultural heritage is a dynamic and responsive phenomenon, in a changing world, society and environment. Research in this area explores questions, approaches and methods in a wide and holistic manner, addressing how heritage science can contribute to developing a more reflective cultural heritage for a more resilient society.

It should investigate a paradox: people are at the core of cultural heritage – they use, interpret and value it – but they may also pose a risk to its conservation. Extensive and profound public care towards cultural heritage is the basis of a sound and reflective society that may serve as a deterrent against abuse of power, politicisation and economic speculation.



Priority Area 1, Theme 1: Cultural heritage for society

How do we capture and make the case for the wider benefits of cultural heritage to society through policies and governance? How can society be empowered through cultural heritage, whilst ensuring that it is not used and abused in the context of complex identities, ethnicities, politics, citizenship and the nation state?

This theme aims to:

- explore how the relationship between cultural heritage and societies can foster citizenship models and the process of transmitting and sharing democratic values through participatory governance and management, as well as circumstances in which this relationship challenges and detracts from such values
- study, interpret and better understand the potential conflict between cultural values and economic profit, whilst acknowledging the importance of reaching a fair, albeit potentially difficult, balance between them
- better understand how cultural heritage is used politically in different territorial and social contexts
- assess the consequences of conflict and crime for cultural heritage and develop methods to prevent or mitigate these risks
- study the interfaces of cultural heritage, conflicts and democracy, distrust of media, science, political parties and bureaucracies
- promote how research should enable a greater reflective and nuanced understanding of history and challenge nationalist and populist narratives
- critically research heritage narratives and perspectives
- better understand the challenges and processes behind restitution, and develop an evidence base for positive action by European museums and cultural institutions.

Priority Area 1, Theme 2: Cultural heritage for inclusion

How do we maintain people at the core of cultural heritage and reaffirm cultural heritage as a collective good? How is cultural heritage identified and selected for preservation and how might this change over time?

This theme aims to:

- facilitate the bringing together of citizens and practitioners in co-creation processes and develop more cross-sectoral research with a bottom-up perspective, as well as promoting participatory governance and exploring its benefits, preconditions for effective governance and limits
- involve local communities in the production, circulation and reflection of culture, particularly cultural diversity
- understand the different meanings of cultural heritage for people and how we can build and adapt narratives
- better understand how cultural heritage, which is being produced continuously, contributes to the creation of identities
- demonstrate the impact of cultural heritage on human well-being, for instance by studying its relationship to social cohesion, economic development, quality and sense of place, health, gender and quality of life
- consider intra-generational relationships and explore how cultural heritage can contribute to more sustainable societies designed for the young and future generations
- better recognise and exploit the contribution of digital applications and social networking to the well-being of citizens, to education and the transmission of knowledge to younger generations, and to avoiding the loss of memory within societies.

Priority Area Two: Sustainable management of cultural heritage

This Priority Area focuses on managing heritage in a sustainable way and the governance needed to enable this. What future-oriented management strategies and innovative methods for conservation are required to safeguard and develop cultural heritage? Research and innovation should enable people and communities to engage with heritage and ensure social and cultural equity. How can new knowledge contribute to intersectoral development and a holistic management?

Today the public is generally recognised as a stakeholder in cultural heritage; too often, in the actual decision-making process, its role is still limited to 'being informed' rather than 'being involved'. Policy-makers, private organisations, and not-for-profit organisations should all be stakeholders in both heritage management and heritage research.



Priority Area 2, Theme 1: Governance and management

How can we ensure that institutional, organisational and economic structures are in place to enable cultural heritage to be managed efficiently and effectively? How can we ensure that cultural heritage is safeguarded and managed in a sustainable way which balances use and protection? This theme aims to:

- develop ways to put cultural heritage on the agenda and convince decision-makers in the political and private sectors of the added value of cultural heritage
- assess the consequences of various political frameworks and legal interventions and develop recommendations to optimise them
- develop successful ways of collaboration in heritage management including public-private-third sector partnerships and citizen participation, and promote heritage as a source of diversity and creativity
- develop an evidence base of new forms of participatory governance and their impact
- develop alternative business models.

Priority Area 2, Theme 2: Conservation

How can we develop innovative materials, technologies and procedures for long-term maintenance and preventive and curative conservation of cultural heritage? This theme aims to:

- formulate and assess alternative strategies for sustainable development of cultural heritage including adaptive (re)use and curated decay
- develop cutting-edge technologies and methods for maintenance and conservation
- create new methods and tools for long-term real-time monitoring
- stimulate innovative research on materials and technologies used in heritage
- enable opportunities to learn from past errors: for example, research on improper repair, inadequate conservation treatments, improper archaeological excavations, improper intervention methodologies.

Priority Area 2, Theme 3: Cultural heritage in a digital age

This theme addresses the unprecedented opportunities and challenges provided by digital technology and artificial intelligence for cultural heritage, including conservation, restoration and management, engaging new users and developing creative and accessible content. It builds on the increasing policy coordination on, and research into the use and value of digital cultural heritage, including digital literacy and participation. How can emerging technologies connect new audiences with heritage? What is needed to integrate, scale-up and enable capacity building within the heritage sector? How do these new forms of digital access lead to the inclusion and exclusion of different groups? This theme aims to:

- highlight and develop the two-way relationship between cultural heritage and artificial intelligence
- explore digital production tools, virtual reality and augmented reality which allow new forms of access
- identify new forms of non-invasive and non-destructive diagnostic tools and methods
- explore issues of intellectual property and copyright
- develop new techniques for the conservation of and long-term access to heritage data and born-digital heritage
- address the democratic implications of emerging digital technologies for societies
- develop new methods of crowd-sourcing information data on cultural heritage
- explore how open access of data and increased accessibility through digital technologies can lead to new ways of involvement
- consider the impact of digital technologies on the transformation and shaping of cultural heritage values and visitor experience.

Priority Area Three: Cultural heritage in a changing context

Cultural heritage is faced with a rapidly and widely changing physical, demographic, social, environmental, economic, political and cultural context. How can sustainable management and use of cultural heritage respond to these challenges and also enable social inclusion, social justice, diversity, access, co-creation and co-production? This Priority Area encourages research into the following themes:



Priority Area 3, Theme 1: Territorial and demographic changes

How are urbanisation, population increase and decline, industrialization and de-industrialization, land under pressure, changing environments and intensive farming practices putting pressure on and challenging conservation of built heritage, cultural landscapes and local traditions? How do demographic changes influence the forming and management of cultural heritage over time? This theme aims to:

- better understand the value of cultural landscapes and explore the impact of rapid development on them, such as extensive agriculture, deforestation, desertification, water security, mining, infrastructures and dam construction
- address, through cultural heritage, the impact of geographic mobility, overpopulation and depopulation
- inform urban and rural development policies and cultural heritage
- increase our understanding of migrations through research on the cultural heritage of minorities and the acculturation of migrants
- consider the relationship between private ownership and preservation of cultural heritage.

Priority Area 3, Theme 2: Sustainable tourism

Among the most important changes over the last 10 years is the huge increase in demand for access to certain heritage objects and sites due to tourism. This is a challenge on many levels: the physical capacity of museums and historical sites is limited by risk of damage, climate control, security issues and other factors. On the other hand, some heritage sites remain underexploited and so might be at risk. Consequently, culture and nature-based solutions for sustainable tourism need to be developed. What are the drivers and how can the sector respond to them? This theme aims to:

- develop a greater awareness of the imbalance between high and low demand for heritage assets and develop strategies for spreading pressure, whilst maximising the territorial and economic benefits
- consider the balance between the positive impact of mass tourism and its negative impact as a long-term, permanent and slow-onset deterioration agent
- better understand the various challenges for historic cities and centres arising from tourism, tourist accommodation and gentrification.

Priority Area 3, Theme 3: New threats

Heritage is increasingly facing new threats, such as cultural terrorism, illicit trafficking and, more recently, pandemics. These are not completely new phenomena but they have gained far greater importance with globalisation and the surge of cultural terrorism throughout the world. This theme aims to:

- understand how stealing or destroying the cultural assets of a community, a population or a nation denies it any historical depth and, thus, its identity
- understand the multiple consequences (particularly the long-lasting ones) of a pandemic for the cultural heritage of a community or a region but also on a larger scale
- develop preventive policies to counteract, when possible, these threats.

Priority Area Four: Cultural heritage facing climate and environmental change

Climate and environmental change are having an increasing and lasting impact on cultural and natural heritage. We need risk assessments and strategies to adapt to the effects, mitigate the causes and find creative ways of living with them. Heritage is also a resource for sustainable development and can contribute to climate action through understanding past resilience and adaptation and its role in a post-carbon economy.



Priority Area 4, Theme 1: Measuring and responding to the impact of climate and environmental changes on cultural and natural heritage

It is important to consider how cultural heritage can address the negative impacts of climate change, land use and demographics, as well as expanding the knowledge base for addressing the changes society is facing. Knowledge among stakeholders about the use and safeguarding of cultural environments in the face of climate-related, environmental and societal challenges should be developed. This theme aims to:

- develop rapid risk-assessment methodologies which use best-available information and are transparent, repeatable and applicable across different types of heritage, and which take into account the qualities of the heritage at stake
- prioritise risks and responses according to scale and severity of impact and develop decision frameworks for adaptation of historic resources in the face of climate and environmental change
- learn from the history of long-term human-environment adaptive strategies, including traditional and indigenous knowledge and skills, to reduce vulnerability and develop resilience.

Priority Area 4, Theme 2: Cultural and natural heritage as resources for sustainable development

This theme aims to:

- learn from history and the study of cultural heritage to elaborate sustainable development policies and to aid the design and planning of post-fossil environments
- study the impact of climate adaptation, water safety and energy transition measures on urban and rural cultural heritage landscapes, and develop knowledge and policies on how cultural heritage characteristics can be valued and taken into account and inform the design of these measures
- explore the possible positive impact of cultural heritage on environmental challenges and the role of heritage in disaster risk reduction/mitigation and adaptation
- explore the creative opportunities which emerge from the acknowledgment of inevitable changes: how will these changes create new forms of cultural heritage, and how could these creative opportunities be used to raise awareness and build resilience in affected communities?

The Three Operational Instruments



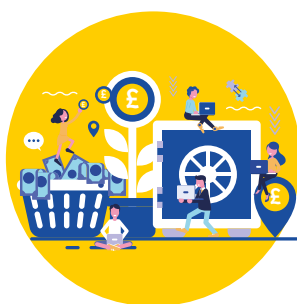
OPERATIONAL INSTRUMENT	PRIORITY AREA 1	PRIORITY AREA 2	PRIORITY AREA 3	PRIORITY AREA 4
Priority Area theme call				
Impact accelerator call				
Targeted call e.g. Early Career Researcher call/ Professional development	ECR	Conservation professionals	Heritage managers	ECR
International networking call				
National research grants call				
Workshops, conferences, exhibitions, outreach activities				
Research presentations				
Heritage Research Hub				
Mapping exercises/Scoping reports				
Cultural diplomacy				
Advisory Group				
National Consultation Panels				
Knowledge networks				
Steering Committee and Governing Board				
Advisory and Scientific Board				
Pillars and Task Forces				
Calls Roadmap and Action Programme/ Implementation Strategy				
Communication Strategy				

Highlighted cells in dark are areas of recommendation.

The operational instruments of the JPI CH will allow the implementation of SRIA 2020. These instruments are collaborative activities and processes developed by the JPI CH partners. Transnational joint activities provided the framework for SRA 2014 and a much larger suite of targeted and inclusive operational instruments are now proposed for the management of the JPI CH and implementation of SRIA 2020.

The following three sets of alignment instruments are incorporated within the JPI CH's operational instruments:

1. Funding instruments allow for financial resources from the participating national programmes to be pooled to launch joint funding calls which will provide a better use of public resources, add value and avoid duplication.
2. Networking instruments centre on knowledge exchange, communication and dissemination across funding programmes and promote joint activities between JPI CH partners and in cooperation with other instruments.
3. Management instruments comprise activities, processes and mechanisms to support the governance and overall management of the JPI CH.



1. Funding instruments

Participating countries collaborate in creating call documents, call management and the joint assessment and selection of transnational interdisciplinary research projects. From the Priority Areas identified, five large transnational research calls have been successfully implemented. With this new SRIA 2020, we will build on experiences from the previous calls and further develop the model of a transnational call based on one or more of the research priority themes.

To further maximise the impact of the JPI CH and enable the most inclusive opportunities for the projects and the researchers, different funding instruments will be considered:

- impact accelerator calls to develop new knowledge exchange and engagement activities
- targeted calls to underpin mobility and integration of new researchers and established researchers in academic, research and heritage institutions, small and medium-sized enterprises (SMEs) and industry
- international networking calls to enable discussion and exchange between heritage researchers from participating countries and stakeholders from outside the JPI CH both within and beyond Europe could be considered
- better coordination between JPI CH calls and national calls/national research grant calls in order to maximise the financial contributions of JPI CH partners to joint funding calls
- mini calls: shorter calls might be a stepping-stone to longer calls, enable the involvement of younger generations, policymakers and civil society, and answer the challenges of inclusion, co-creation and participation

A new five-year roadmap will be developed along with an action plan/implementation strategy to allow for transparency, thorough monitoring and evaluation of the joint activities, and make specific plans for different funding instruments, mentioned above.



2. Networking instruments

In the first 10 years of the JPI CH, its coordinators organised parades presenting the research results; these events brought together award holders from the transnational calls. They have been an important cornerstone in the communication and dissemination of research impact.

Alongside this, workshops, conferences, seminars and exhibitions formed part of collaborative activities of the JPI CH programmes. Again, these outreach activities brought together heritage researchers and stakeholders from across Europe and were essential knowledge exchange and networking opportunities. For the implementation there will continue to be research presentations as well as further outreach and training activities focused on the Priority Areas.

The Heritage Portal will be updated to ensure that it becomes the focus for knowledge exchange, as a hub for collating the outputs from the funded research projects and documents from the JPI CH joint activities, as well as a skill, knowledge and resource portal for the whole cultural heritage community. To that effect it will be renamed Heritage Research Hub.

Knowledge networks will be developed in partnership with other JPIs and networks, such as JPI Urban Europe for Priority Area 3 or JPI Climate for Priority Area 4. They will comprise a series of networking activities which will result in joint actions.

As part of the prioritisation of the international reach of the JPI CH, beyond the development of knowledge networks there will be an increase in cultural diplomacy initiatives. For example, the JPI CH coordinators will work strategically with European and international organisations as well as governmental agencies and will identify future areas for increased international collaboration and new partnerships.

The Advisory and Scientific Board of the JPI CH was redesigned in 2019 so that it may better advise and better contribute to the implementation of the networking activities. It is hoped that the National Consultation Panels, which were mobilised for SRIA 2020 consultations, can be continued in order to strengthen the community of European heritage and heritage science researchers and cultural heritage managers which the JPI CH has brought together. The JPI CH will promote the transformation of these National Consultation Panels into national mirror groups, improving inclusive and participative processes in the construction and formation of cultural heritage policies. As the Advisory and Scientific Board does, they will play an important role in bringing researchers from different career stages, disciplines and institutions to the JPI CH events and activities of each of the Priority Areas, as well as cultural heritage managers.

3. Management instruments



JPI CH Pillars and Task Forces are at the heart of the implementation of priority research areas and instruments. To ensure their relevance, the Steering Committee and the Governing Board will make sure that they remain efficient and effective in the light of the evolving priorities and challenges, and will review their content and missions when necessary.

Impact indicators and a communication strategy will be developed in order to maximise the impact of the research projects and joint activities and to raise the profile of the JPI CH. These management instruments will enable the JPI CH to continue to develop joint foresight capabilities, through concerted research actions and policy coordination, and support the creation of a common action framework to reduce the fragmentation of cultural heritage research and to build a European heritage science community.



Increasing the Role of the JPI CH on the European and International Scenes

The work that the JPI CH has conducted over the last 10 years, in particular its involvement in major international programmes and its support for policy-making at the European level, has contributed to strengthen the position of Europe as an international leader in cultural heritage research. The work done by the JPI CH has also helped to raise public awareness and increase and strengthen international coordinated action through the creation of a European Research Area in cultural heritage.

Moving forward, the JPI CH aims to foster and develop further cooperation and coordinate joint actions with transnational initiatives, networks, partnerships and programmes. The JPI CH will continue to act as a hub, developing à la carte approaches to address priorities and challenges and involving the relevant stakeholders of the global cultural heritage research landscape. These stakeholders include in particular: 1) other JPIs, and public-to-public (P2P) networks and partnerships; 2) research infrastructures; 3) local/regional/national and global funders; 4) large projects and networks; 5) international organisations and NGOs. In addition, 6) the JPI CH will strive for continuity with the achievements of the Horizon 2020 European framework programme for research and innovation, and for complementarity with the orientations of the Horizon Europe programme on cultural heritage research, but also with the wider European policy landscape.

1. Other JPIs, P2P networks and partnerships

Since it was established in 2010, the JPI CH has been a member of the High-Level Group for Joint Programming (GPC), which seeks to foster synergies between the 10 JPIs. The JPI CH has regularly attended the GPC's meetings and workshops and took part in the international conference to mark the 10 years of the JPIs held in September 2018. Whether the JPIs remain as they are or become partnerships or missions, these synergies will continue in the coming years, in order to reach common approaches to the Grand Societal Challenges that gave birth to them. As a result, the JPI CH will build on the possible synergies which were already identified in its 2017 Long-Term Strategy but also, when appropriate, on new ones: JPI FACCE – landscape, traditional food; JPI OCEANS – coastal planning and management, underwater cultural heritage; JPI WATER – extreme events and risks resilience of cultural heritage; JPI URBAN EUROPE – urban cultural heritage, urban regeneration and cultural heritage resilience; JPI CLIMATE – climate services, resilience to climate change; JPI HEALTHY DIET – Mediterranean and other traditional diets; JPI MORE YEARS, BETTER LIVES – well-being, citizen's quality of life; JPI NEURODEGENERATIVE DISEASE – memory and identity.

The JPI CH will also intensify the other international collaborations it has initiated, such as with the P2P network HERA. It will also seek to develop new ones, such as with BiodivERsA, with the objective of reinforcing the synergies between cultural and natural heritage, and protecting natural assets and biodiversity in cultural landscapes and ecosystems.

2. Research infrastructures

In October 2019, the JPI CH signed a declaration with E-RIHS aiming to join forces to promote a research and innovation partnership for the future of cultural heritage. E-RIHS is a European Strategy Forum on Research Infrastructures (ESFRI) project which is currently in the process of establishing a European Research Infrastructure Consortium (ERIC). This preparatory phase should end in 2020. The JPI CH and E-RIHS represent highly complementary projects for the structuring of the cultural heritage research community, and both involve long-term collaborations and provide services that go beyond national interests. As a result, the expectations in terms of possible collaborations, synergies and sharing of priorities in the research agenda are high. By contributing to cutting-edge services (such as access, training, expertise and capacity building) for the heritage science community and enabling joint innovative research for improved interoperability of data, sample and reference materials, methods and instruments, E-RIHS will greatly facilitate the implementation of the JPI CH's SRIA 2020.

The JPI CH will also investigate possible collaborations with DARIAH, which aims to enhance and support digitally-enabled research and teaching across the arts and humanities.

3. Local, regional, national and global funders

New avenues for local, regional, national and global funding opportunities will be explored with a view to increase the implementation of JPI CH activities. JPI CH members are already active in exploring such opportunities for cultural heritage and for the JPI CH, including with Belmont Forum and Structural and Cohesion Funds. Participation in and contribution to Belmont Forum calls will be considered, especially for the implementation of Priority Areas 3 and 4 of this SRIA and, in return, to ensure the inclusion of cultural heritage and humanities and social sciences in the activities of Belmont Forum.

4. Large projects and networks

The JPI CH will pursue its objective to act as a hub connecting and streamlining different scale projects, thus contributing to the coordination and rationalisation of heritage science and of research on cultural heritage. In this context, a joint declaration was drafted in September 2019 between the JPI CH and the Time Machine network. Time Machine currently involves around 500 European institutions from 32 countries. It builds on a long track record of highly innovative projects across the EU, in order to design a large-scale digitisation and computing infrastructure that will enable Europe to turn its long history, as well as its multilingualism and multiculturalism, into a living social and economic resource. The JPI CH and Time Machine share the common aim of better mapping competences, support institutions and promote the exchange of tools and best practices for improved conservation and protection of cultural heritage in Europe and beyond.

Furthermore, the JPI CH also participates in the newly formed Resilience of Cultural and Natural Heritage Working Group of the Urban Agenda Partnership for Culture and Cultural Heritage, with the aim of fostering complementarity of actions, especially within the framework of three main pillars: 1) better regulations: research conducted by JPI CH-funded projects can constitute a solid basis for improved knowledge, further analyses, regulation, preservation and planning policies; 2) better funding: recognising the need to use more efficiently the existing resources for heritage management by creating synergies between advantages for a greater number of actors; 3) better knowledge: reinforcing the knowledge transfer process, fostering the relevance of research and contributing to a sustainable improvement of practices within the public bodies in charge of managing cultural heritage.



5. International organisations and NGOs

International organisations and NGOs must remain important partners for the future activities of the JPI CH. The JPI CH has already drawn up concept papers to further strengthen heritage research beyond Europe. These included papers on 'Cooperation with International Organisations and NGOs' (2014) and 'Conclusions for Future Cultural Heritage Research Policy-Making' (2015). A similar paper will be drafted as an additional document to SRIA 2020, setting the framework for possible and relevant collaborations with the members of the JPI CH's Advisory and Scientific Board, and for complementarity in the implementation of the SRIA research priorities.

In 2020, 15 international organisations were elected members of the renewed Advisory Group: ICOMOS, the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the International Council of Museums (ICOM), the pan-European Federation for Cultural Heritage (Europa Nostra), the Council of Europe, the Europeana network, the International Union for Conservation of Nature (IUCN), the European Confederation of Conservator-Restorers' Organisations (ECCO), UNESCO, the ECTP Heritage and Regeneration Committee, the Architects' Council of Europe (ACE), infrastructure projects E-RIHS and DARIAH, HERA and the Time Machine initiative.

6. Horizon Europe

A number of challenges and drivers of the 'Orientations towards the first Strategic Plan for Horizon Europe' are in line with and complementary to the JPI CH SRIA research priorities, especially in Cluster 2 (Culture, Creativity and Inclusive Society), but also in Cluster 3 (Civil Security for Society). The JPI CH activities will be designed to meet a large number of Cluster 2 targeted impacts: "help tackle political extremism and polarisation and restore trust to governance" (SRIA Priority Area 1); "help protect historical sites and monuments, cultural landscapes, artefacts, museums, archives, as well as languages, customs, traditions, and values" (all SRIA Priority Areas); "assess and respond to the social, ethical, political and economic impacts of drivers of change in the wide variety of social, economic and territorial contexts in Europe" (SRIA Priority Areas 1 and 4); "create high quality new knowledge, foster its diffusion and improve its take up in policy making" (SRIA Priority Areas 1 and 2). Moreover, the aims of Cluster 3, which are notably to build more disaster-resilient societies and to contribute to fighting crime and terrorism, are also widely shared by the SRIA priorities.

In addition to this, the JPI CH will contribute to the achievement of the objectives of the Green Deal. As a result, Priority Areas 3 and 4 of the SRIA will: explore the effects of climate and environmental change on cultural heritage, as well as new innovative and sustainable ways to protect cultural heritage from these effects; demonstrate the relevance of cultural heritage as a precious resource for sustainable development and climate change mitigation. Particular attention will be given to anthropogenic changes to the environment – intentional or unintentional.

In its contribution to the implementation of these different orientations, the JPI CH will help to create new and sustainable ways of managing and financing, using new technologies and digital possibilities, and engaging all generations of citizens through participatory approaches. It will also reaffirm the essential role of research in the development of more innovative and competitive cultural and creative industries and in sustainable economic growth and job creation in Europe and beyond. The JPI CH is convinced that, with its wealth of cultural heritage assets and its advanced institutional, organisational and technological systems, Europe can demonstrate global leadership in cultural heritage protection and innovation. As a result, the JPI CH will continue to promote coordination among Member States, in order to build a Partnership on Cultural Heritage in the next three to four years.

This construction will also be carried out in connection with other Directorates-General (DGs) of the European Commission, in particular with the DGs Education, Youth, Sport and Culture (EAC) and Communications Networks, Content and Technology (CONNECT), but also with the DG for Regional and Urban Policy (REGIO) and the DG for Internal Market, Industry, Entrepreneurship and SMEs (GROW). The aim of the JPI CH will be to enhance the social and economic role that cultural heritage research and innovation can play in collaboration with local and regional actors, and its concrete applications on the ground.

A concept paper positioning the JPI CH in relation to the wider European policy landscape will be produced after publication of the final Horizon Europe programme, as an annex to this SRIA.

Implementing the United Nations Sustainable Development Goals

The 17 SDGs, commonly referred to as the Global Goals, were adopted by 193 UN Member States in 2015. They address a wide range of complex, interlinked and pressing issues, including extreme poverty, education for all, gender equality, climate change, and health and well-being. Culture and heritage are specifically associated with goal 11 (Sustainable Cities and Communities- target 11.4) and goal 4 (Quality Education- target 4.7) but can make important contributions to all of the SDGs, for example health and well-being and economic growth.

SRIA 2020 highlights the SDGs as an underlying research principle for JPI CH activities. Research funded through the JPI CH should be challenge-led and focus on how heritage science contributes to addressing the SDGs. This prioritisation of the SDGs reflects a clear demand, amongst JPI CH members, for greater alignment between JPI CH activities and the implementation of the SDGs.

Below, the most relevant SDGs are mapped against each of the Priority Areas. This mapping does not rule out the possible contribution of JPI CH activities towards the other SDGs.



SDG 3: Good Health and Well-Being

In response to the consultation, well-being has been given greater prominence and is now explicit in Priority Area 1: "demonstrate the impact of cultural heritage on human well-being, for instance by studying its relationship to social cohesion, economic development, quality and sense of place, health and quality of life". This mirrors SDG 3 which states that promoting well-being at all ages is essential to sustainable development.



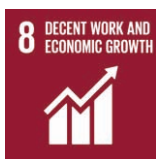
SDG 4: Quality Education

SRIA 2020 is placing a greater emphasis on education and training, as this is now an underlying principle for the JPI CH activities and research projects. Through the four Priority Areas, the JPI CH will ensure inclusive and equitable education and promote lifelong learning opportunities for all, in particular by addressing target 4.7. For example, Priority Area 1 explicitly aims to "consider intra-generational relationships and explore how cultural heritage can contribute to more sustainable societies designed for the young and future generations".



SDG 5: Gender Equality

SDG 5 should be addressed by JPI CH research and activities from all four Priority Areas as inclusive research and diversity in gender, socio-economic and ethnic background are part of the underlying principles.



SDG 8: Decent Work and Economic Growth

Target 8.9 states: “by 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products”. Priority Area 3 (specifically theme 2 on sustainable tourism) will promote research and support activities that directly address this target.



SDG 9: Industry, Innovation and Infrastructure

Priority Areas 2, 3 and 4 will address SDG 9. SRIA 2020 will seek greater innovation through research projects and the JPI CH operational instruments. Priority Area 2 re-emphasises research in cultural heritage and emerging technologies but also includes a new focus on copyright and data protection. Working with existing infrastructure initiatives is also a strengthened underlying research and innovation principle and will therefore address the SDG in developing quality, reliable, sustainable and resilient infrastructure.



SDG 10: Reduced Inequalities

SDG 10 should be addressed through JPI CH research and activities from all four Priority Areas as inclusive research and diversity in gender, socio-economic and ethnic background are part of the underlying principles. Specifically, Priority Area 1 aims to explore the uniting and dividing abilities of cultural heritage including citizenship, digital inequalities and populist narratives.



SDG 11: Sustainable Cities and Communities

SDG 11 target 4 is to “strengthen efforts to protect and safeguard the world’s cultural and natural heritage”. It reflects the JPI CH’s position set out in its 2010 Vision Document. All four Priority Areas specifically take into account this target along with the broader goal of sustainable cities and communities. In particular, Priority Area 3, with its focus on urban and rural change, and Priority Areas 1 and 2, with their increased emphasis on participatory management.



SDG 12: Responsible Consumption and Production

SDG 12 should be addressed through Priority Area 3 with its focus on tourism. Target 12.b to “develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products” will be met through the activities and research linked to the associated Priority Area theme.



SDG 13: Climate Action

SRIA 2020 has a new Priority Area which specifically addresses the relationship between cultural heritage, the environment and climate change is directly relevant to SDG 13 on climate action. Resilience, adaptation and capacity building are at the heart of both the Priority Area and the SDG.



SDG 16: Peace, Justice and Strong Institutions

Priority Area 1 directly addresses SDG 16 as it aims to develop a resilient society and reflect on the relationship between heritage and conflict, ethics and citizenship.



SDG 17: Partnerships for the Goals

SDG 17 is about promoting inclusive partnerships between governments, the private sector and civil society which have a shared vision and goals. The first 10 years of the JPI CH have demonstrated how it has already mobilised partnerships to address sustainable development and protect Europe’s cultural heritage. SDG 17 will be addressed through all the Priority Areas as partnerships are not only an underlying principle of SRIA 2020 but also the essence of the JPI CH.

UNESCO’s Thematic Indicators for Culture in the 2030 Agenda²³ (UNESCO 2019) provide a further framework for the process of demonstrating the role of cultural heritage and its contribution to the implementation of the SDGs. The document develops four transversal thematic dimensions: (i) Environment and Resilience, (ii) Prosperity and Livelihoods, (iii) Knowledge and Skills and (iv) Inclusion and Participation, grouping the SDGs.

23 <http://whc.unesco.org/en/culture2030indicators/>



Martinique “yole” (skiff) training, an example of French intangible heritage. The crew is leaning out on the “bwa dressé” (wooden poles). This requires the synchronisation of the “yoleurs” for the boat to remain stable. The number of crew depends on the coxswain or “boss”. The wind force and the sail used are the key elements in the choice of the number of crew.

Photo: Le Robert, 2018/Martin Fichez, 2018.