THE BENEVENTO CHARTER

PRINCIPLES FOR THE USE OF ARTIFICIAL INTELLIGENCE CONCERNING CULTURAL HERITAGE ASSETS AND ACTIVITIES*

1. Decisions on cultural heritage: identification, transparency, accountability

CONSIDERED

a) that the use of artificial intelligence systems in the cultural field affects fundamental rights, collective interests, individual and community identities, and can influence public decisions, selection processes, value attribution, visibility, and access to cultural property;
b) that the increasing technical and epistemic complexity, and sometimes the opacity, of the models used can make it challenging to understand the criteria guiding results, classifications, recommendations, forecasts, or content generation;
c) that, in the cultural sector, information asymmetry can create imbalances in control and limit the capacity to contest automated decisions or processes, and the adoption of AI systems by public entities or organizations involved with cultural heritage comes with specific obligations for transparency, proportionality, and accountability;
d) that the identification of the assets that deserve to be formally included in the cultural heritage, whatever the way in which it is conducted, must in any case be based on reliable and solid assumptions, clear, in-depth and conscious motivations, relating to the criteria recognized and attested also at the international level, To ensure even greater consistency in the reasons for identification, as well as in the subsequent use and understanding of the values and testimonies they represent;
e) that it is always desirable to participate in the identification procedures not only of those directly affected, but also of groups and communities that feel the importance of safeguarding, maintaining and restoring tangible and intangible cultural heritage, also in consideration of the contribution to the enrichment of cultural diversity and human creativity, encouraged by broad participation in the identification processes, study, interpretation, protection, conservation, fruition;
f) that AI models and systems are undoubtedly able to help these paths, both in finding investigative materials and in detecting widespread perceptions, strengthening and making decisions in this regard more reliable;
g) that, however, the contribution of AI in this regard must therefore not only be reliable in turn, but must not hinder, alter, or make less relevant the participatory contributions, and decision-making processes must maintain, even more than in other areas of its application, an anthropocentric orientation

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

1.1. that any use of artificial intelligence systems in the cultural sector, particularly when it influences public decision-making, since the design stage incorporates cultural and ethical impact assessments, specific transparency measures, and independent audits, especially when it pertains to the conservation, the distribution of public funding or resources, as well as forecasts or large-scale recommendations;

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1.2. that the final decision regarding the identification of the assets, for the purpose of declaring them to belong to the cultural heritage, be reserved to humans, equipped with the necessary skills and adequate experience;
1.3. that these decisions are always taken on the basis of established and verified scientific criteria, including those recognized internationally, and after careful scrutiny of all the elements that support them, also with the contribution of all those who are concerned, including individuals, groups, and associations, who have demonstrated to acknowledge its values and wish to support it within the framework of public action, and that they are explicitly, appropriately, and fully motivated. To achieve this goal, pleadings, observations, documents, and any other information provided by the interested parties must be evaluated in order to contribute to the identification of the assets and the historical-artistic, urban, landscape, and environmental context in which they are inserted;
1.4. that, even if this decision is backed by specially trained, supervised, and verified AI systems, it must allow and consider the broadest forms of participation and the contributions of human individuals, whether they act alone or in groups, even in the motivations of the measure, that should also clearly outline how the AI has influenced the preliminary assessment and evaluation conducted by the public office;
1.5. that the decision is explicitly, appropriately, and fully motivated, especially regarding the technical and scientific criteria used to identify the best alternative for protecting cultural heritage, and addressing how all relevant public and private interests were taken into account, considering the contributions from interested parties;
1.6. that the rights to be informed about the existence of automated processing that significantly affects cultural heritage or its use, as well as to request clarifications, and human review, are also guaranteed to heritage communities, as defined by law, also in the light of international conventions;

2. Reliability of AI in the cultural field: Digitization and metadata

CONSIDERED

h) that the whole world has been investing in digitisation for years, including in relation to cultural heritage;
i) that the digitization of cultural heritage and its dissemination play a crucial role in shaping the pool of materials that AI draws from to act, and that digitized materials, derived from cultural heritage, can be processed by AI systems in various ways, and therefore a digitization too simplistic, elementary, risks consigning to automatic apprehension elements that are poor, scarce, incomplete, culturally irrelevant, or in any case lacking some of the cognitive, ethical, aesthetic and innovative capacities brought by cultural heritage, increasing the risk of improper processing by AI systems;
j) that AI systems are now also utilized to "label" data, and the outcomes of their work are already circulating, ready to be learned and used, in a loop resembling a sort of autophagy;
k) that trustworthiness in the cultural field is particularly due to the robustness and reliability of the knowledge that is dealt with, along with the data that represents and measures it;
l) that the value aroused and set in motion by cultural heritage and activities relates first and foremost to the growth of those who engage with them, and this is the main reason for the significant attention paid to the recognition, conservation, and passing down of cultural heritage elements across generations;
m) that the digitization of cultural heritage, in itself, is a necessary operation, but not sufficient to guarantee the quality of fruition, the dissemination of knowledge, the raising of people's awareness, the tone of public discourse;

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

2.1. that the "population", i.e., the sets of activities aimed at constituting and making available digitized elements taken from cultural heritage, is always carried out by adding any element

of knowledge concerning the assets and activities represented, enriching with extensive forms of metadata the digital objects that refer to cultural heritage;

2.2. that artificial intelligence models and systems targeting or used on cultural heritage are designed, selected, trained, and supervised, in a way that ensures they always cite and reference their sources, and distinguish verified data from hypothetical ones, and metadata of human origin from that generated by other artificial intelligence tools, or in any case, automatically;

2.3. that, in particular, in carrying out these operations, artists, curators, art historians, experts, and heritage communities are widely consulted.

3. Creation

CONSIDERED

a) that, although it is challenging to provide a complete and indisputable description of Culture, it is undeniable that it exists, is learned, passed down through generations, permeates our daily lives, and plays an important role in shaping our beliefs, convictions, and behaviours, often more significantly than genetics, and, additionally, is inherently tied to the human experience, one of the distinctive features of our species, among those that most distinguish it from other known life forms;

b) that AI systems are capable of generating creative products, in the sense that, while using existing elements, they can combine them in new, even original, forms and guises, and therefore it is possible, and will increasingly be, to use them for the creation of cultural works;

c) that the use of AI for cultural creation can, however, also help in the identification, recognition, classification, conservation, restoration, and handing down of cultural works, and can contribute to intensifying inherent research capabilities;

d) that a distinction is needed between native digital cultural goods and culture-based digitised ones, in particular by means of mere image reproduction of analogue content, which is not an original creation;

e) that the possibility of original creation, and authorship, with the contribution of AI systems, should not be questioned, but it must be the result of an instrumental use, in which human intervention determines the fundamental expressive choices that can be identified, verified, and not replaceable;

f) that it is necessary to understand at what point in the creative process the intensity and significance of human intervention can be assessed, as generative AI works on a multi-level supply chain, which includes data collection, curation, model training, potential fine-tuning, and the interaction between the user and the model, ultimately leading to the final output

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

3.1. that every intellectual creation with a cultural matrix, including works of visual art of all kinds, musical and sound compositions, literary, poetic, theatrical and musical texts, choreographies, photography and all sorts of moving images, speeches given in lessons, seminars, conferences, conventions, the products of scientific research, be regulated in the sense of protecting the work and the ownership of the rights that derive from it, both moral and economic, only when a human being is the author of the creation;

3.2. that when artificial intelligence systems are used in the creation, the authors are required to declare this, without affecting in any way their exclusive and integral ownership of the consequent moral and material rights;

3.3. that clear and explicit parameters be defined for the authorial protection of creative products that have arisen also thanks to the use of artificial intelligence systems, which takes into account the decisive human contribution involved in selecting data, providing instructions, and the final choices regarding the output;

3.4. that the principle of fair compensation be extended to any use, even in mere training, of protected inputs for intellectual creation by generative models;
3.5. to develop multiple tools that can certify and ensure, also through the supervision of independent experts, the genuine "humanity" involved in the creation of cultural products, even using, in a preparatory way, data and information appropriately examined, reworked, and made their own by the author;
3.6. that products entirely generated by automatic, robotic or AI systems, due exclusively to business purposes, even when they consist of forms usual for works of a cultural nature, are invariably treated as merchandise, whose legal regime, even if it provides for rights, remains like that typical of industrial and commercial products, and cannot contemplate any benefit or incentive provided for cultural goods, or authorial protections;
3.7. that a special regime of recognition and protection is also granted to handicrafts that are entirely due to human labour, without any contribution of automatic, robotic, or AI systems;
3.8. that the appropriative uses of freely accessible culture are being prohibited.

4. Re-use of intangible elements and knowledge brought by cultural heritage

CONSIDERED

a) that the elements of cultural heritage possess peculiar characteristics, which pertain to the knowledge and spiritual, sensorial, and intellectual cultivation of the human being, of which they constitute testimony and the highest expression of civilization and evolution;
b) that, especially for those belonging to public bodies, it is therefore necessary to allow their widest fruition also in their digital dimension, which can enable personal use and creative reuse, considering that, in addition to enriching people and communities, they can improve existing goods and services to meet human needs better and lead to the creation of new ones, all while minimizing potential negative impacts;
c) that the reuse of intangible elements of cultural heritage for artistic, research, and teaching purposes must be limited solely to protect the moral and economic rights of the author, remaining free and immune from any restriction for any other reason;
d) The use of digital technology and the application of methods, models, and systems involving artificial intelligence enhance the natural tendency of knowledge and experience derived from cultural heritage to exist in a non-rivalrous manner, and tt is essential to counteract, within terms of proportionality, both the potential for exclusive appropriation in any form and any use that improperly threatens the dignity, cultural value, and decorum of cultural heritage and activities, without infringing upon the freedom of thought and expression, particularly in scientific, artistic, and critical spheres.

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

4.1. that the reuse of intangible content and knowledge brought by the elements of cultural heritage, and of the data and metadata that represent them, remains completely free, immune from constraints and vetoes, preventive or subsequent, even when it contributes to the generation of new assets, in any form. Without prejudice to respect for copyright, this regime therefore also concerns the use of digital images of cultural heritage, and data relating to them, at least:
  4.1.a) in journals and publications, regardless of medium, whose scientific nature is recognized, even if they have commercial aspects, when published in open access;
  4.1.b) for the generation of original works of art and cultural practices of all kinds;
  4.1.c) for educational purposes, including in market products, if published in open access;
  4.1.d) to provide support for critical analysis and studies, in any format;
  4.1.e) for personal, non-profit use;
4.2. that the reuse of digital reproductions of cultural goods, along with the associated data and metadata, must be stimulated and made easily operable even when intended for the creation of other market goods and services, in particular for items that are publicly owned, in which

case the use of automatic or tacit authorisation tools, as well as fostering collaboration and partnerships, is desirable, to encourage innovation and creativity, while respecting the dignity, cultural value and decorum and the goods involved, also with fair and reasonable compensation;

4.3. that, however, should be considered the economic valorisation due to the demand for sophisticated data, such as that which can be retained by the attendance of cultural places and goods, and of the digitalized goods and services based on culture, which allow for a combination of fruition, free reuse and economic fertility, with adequate and up-to-date regulation governing the management of licences;

4.4. to establish specialized public offices responsible for promoting, assessing, and enhancing proposals for reuse from economic operators, and for participating, with appropriate skills, in market operations, and in the distribution of the resulting profits, entirely aimed, to the widest reasonable extent, for protection, enlargement, increased utilization, and enhancement of public cultural heritage.

5. AI Education

CONSIDERED

a) that the need for people's awareness and predisposition to a world that is preparing to use AI pervasively is widely felt, and therefore literacy and training courses in the use of artificial intelligence systems are spreading;

b) that this undoubtedly requires the strengthening of the dissemination of scientific, technological, engineering, and mathematical knowledge and skills, also to strengthen the amount of specialist work needed for the digital transition policy agendas;

c) that, however, AI education must be aimed at acquiring a critical approach, understanding its ethical implications, developing skills to detect and prevent biases and falsehoods, enhancing the ability to express and understand, as well as contemplating the randomness, contradictions, varieties, diversities, and complexities of the world;

d) that to have an effective command of technological methods and systems, to provide directions, establish boundaries, and use them with awareness, and, in essence, to contribute to an evolution of AI that serves human cultural development, as well as its technical improvement, so that the instrumental aspect of AI, undisputed in its classic versions, is not surpassed by its strong capabilities, which are already very powerful today in terms of speed, breadth and quantity of computation, and therefore maintain the approach commonly defined as "anthropocentric" in the development and use of AI, eminently humanistic skills are needed as well as technical ones, especially when designing and utilizing technological systems that directly impact people's lives;

e) that, as for the humans of the second half of the twentieth century the ability to "understand the text", both written and spoken, has been considered fundamental, today it seems necessary to develop skills in "understanding images", and the greater knowledge of visual language is deeply rooted in the extensive human experience connected to art in all its forms of expression, as well as in our broader cultural heritage;

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

5.1. that AI education be disseminated at all levels, considering knowledge from various cognitive subjects and disciplines, particularly those of a humanistic nature, in addition to quantitative aspects;

5.2. encouraging the collaboration of the research community in the establishment, preparation, and maintenance of regulatory experimentation spaces for AI, and in the training and surveillance of methods and systems;

5.3. that the cultural background to be passed down to new generations includes the legal aspects related to the regulation of AI systems, as well as the rights and freedoms - particularly the fundamental and intangible ones - that are involved in their use;

5.4. that in the educational offerings at all levels, particularly in school curricula, knowledge about the understanding and expressive use of images is included;
5.5. that at least part of the current training obligations provided by law for public employees focuses on skills related to the use of AI systems;
5.6. that in the training courses dedicated to AI in the cultural field, skills related to the understanding of the algorithmic mechanisms of selection, recommendation, and content generation are contemplated, to strengthen critical capacity, and awareness of automated processes that influence cultural fruition.

6. Sustainability and accessibility

CONSIDERED

a) that the use of artificial intelligence methods, models, and systems in relation to cultural heritage assets and activities involves the utilization of material, energy, technological, and cognitive resources, and significantly impacts the conservation, use, interpretation, and transmission of the heritage itself over time;
b) that sustainability, which includes environmental, economic, institutional, cultural, and cognitive aspects, is essential for ensuring that technological innovation does not undermine the ability of current and future generations to know, understand, and enhance cultural heritage;
c) that digital accessibility is an essential prerequisite for the effective exercise of cultural rights, and that digital representations of cultural heritage, as well as the AI systems that process them, must be accessible, understandable, and usable by as many people as possible, regardless of their geographical, physical, sensory, cognitive, social, or economic conditions;
d) that sustainability and digital accessibility cannot be considered mere effects of innovation, but must be taken as the foundational and intentional criteria for the design, evaluation, and use of artificial intelligence systems in the cultural field;

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

6.1. that the use of artificial intelligence systems in relation to cultural heritage be assessed, from the design phase, based on overall sustainability criteria, weighing the balance between technological methods and cultural objectives;
6.2. that the use of artificial intelligence systems considers the environmental and energy impacts related to their training and operation, favouring technological choices that prioritize resource rationalization and responsible use of digital infrastructures;
6.3. that the design and use of AI systems and digital representations of cultural heritage ensure conditions of effective accessibility, eliminating technological, informational, or cognitive barriers that may restrict people's usage, understanding, and participation, and avoiding their creation or reinforcement;
6.4. that digital accessibility be ensured not only in terms of mere contact to content, but also with respect to its intelligibility, contextualization, and interpretative quality, so that the use of cultural heritage mediated by AI systems is neither reductive, distorting, nor exclusionary.

7. Languages, idioms, dialects, and cultural pluralism

CONSIDERED

a) that the plurality of local languages, idioms, and dialects represents one of humanity’s great riches, and that many of them are at risk of disappearing, as has already occurred in the past;
b) that AI systems, especially natural language processing applications like machine translation and voice assistants, can significantly influence both endangered languages and the subtleties of human expressions;
c) that extensive use of AI systems can lead to uniformity and standardization, diminishing the rich diversity of human linguistic and cultural expressions;

TAKING ALL THIS INTO ACCOUNT, IT IS DESIRABLE

7.1. to consider and address the cultural impact of artificial intelligence systems, especially in natural language processing applications like machine translation and voice assistants, acting on the design and implementation of strategies that maximize the benefits of these systems, filling cultural gaps and increasing human understanding, as well as tackling negative implications such as reduced usage, which could lead to the disappearance of endangered languages, local dialects, and the tonal and cultural variations associated with human language and expression;

7.2. that AI systems are designed to preserve, enrich, understand, promote, manage, and make accessible tangible, documentary and intangible cultural heritage, including endangered languages, as well as indigenous languages and knowledge, for example by introducing or updating educational programs related to the application of AI systems in these areas, when appropriate, and ensuring a participatory approach, involving both institutions and the public;

7.3. that diversified AI offerings and plural access to cultural expressions are promoted, in particular to ensure that algorithmic recommendations improve the visibility and discoverability of local content.