The time is now
The challenges facing heritage in the global and digital age are multifaceted and complex. Consider how nations should deal with contested heritage, for instance questions about the repatriation of heritage to their country of origin or the representation of repressed or enslaved people in museums. In addition, heritage today is increasingly a collective experience, building on the participation of citizens, scholars and other stakeholders. Moreover, recent technological advances offer myriad new opportunities to study, display and experience heritage, ranging from augmented reality to AI applications in the art market. As a result, new skill sets are required for the 21th century heritage professionals. The Zuid Holland LDE area is home to several heritage expert centres, which focus on distinct, yet complementary, aspects of cultural heritage (economic, technical, digital, context/origins, legal), and presents a unique opportunity to create synergy.

This cluster promotes the education and training of students and professionals at the crossroads of (materials) science, technology, the humanities and cognitive and social science, with the aim of preparing engaged global citizens ready to tackle current international issues. The cluster will also act as an incubator for transdisciplinary research, where the general public, experts and students from all academic fields meet, learn and create. We thereby pursue an holistic approach, combining the methodologies of the various disciplines in relation to the heritage ecosystem at large.

The relevance of our initiative is underscored by the European Framework Convention 199 or the Faro convention, which presents heritage participation as: “both as a resource for human development, the enhancement of cultural diversity and the promotion of intercultural dialogue, and as part of an economic development model based on the principles of sustainable resource use”. As a future signee of the convention, the Netherlands would be bound to create an inclusive concept of heritage; everyone has an equal right to part-take in defining and managing cultural heritage. The convention is echoed in the Dutch Research Agenda (NWA), and especially the route Living History. The three NWA ‘game changers’ or research pillars 1) Sustainability and temporality of a changing society, 2) Expert citizens, 3) Contested heritage, leads to questions such as: What museological practices may help reconcile the interests of different stakeholders in order to create more sustainable and equitable (re)distribution of heritage? Such questions can only be resolved with a transdisciplinary approach involving experts from different fields and a meaningful interaction with the stakeholders in the cultural sector. Art, Heritage and Science will fast-track this development in the Netherlands.

Mission statement and vision
To bring about breakthroughs in scientific, public and professional perception, participation and research. To train engaged global heritage scholars able to make meaningful and sustainable contributions to society. We want to be at the forefront addressing research questions set by international agenda’s and shaping the future of heritage research and practice.

The cluster consists of art and architectural historians, cultural historians, anthropologists, archaeologists, cultural economists, sociologists, bibliographers, material scientists and data scientists. We adhere to a
broad definition of heritage that encompasses transmitted material and immaterial aspects of current and ancient cultures. Besides visual art, architecture and monuments, it also covers archaeological excavations, books, manuscripts and intangible (living) heritage such as oral histories.

**Strategic goals**

Through teaching and research we seek to nurture transdisciplinary science cases and develop new methods to accelerate heritage studies and go beyond the current paradigms. The science cases and methodological innovations are direct inspiration for LDE-wide Bachelor’s and Master’s courses that provide a broad and innovative perspective on heritage: from original makers to cutting-edge methods and museum visitors. Of particular interest are the possibilities of digitization and AI. These fields will soon open up new vistas in keeping art collections accessible and meaningful in a technologically and demographically quickly changing society. Art, Heritage and Science will thus be a breeding ground for collaborative projects where cutting-edge methods are used to address current research questions and societal challenges, many of which resonate internationally. Furthermore, we aim to develop a LDE Minor Program (Science, Art and Society) by September 2023.

Drawing from our education and research, the cluster will focus on seminal themes, among others:

- **Understanding & Observing heritage**
  - Visual and technical analysis: characterising heritage
  - Experimental analysis/process, skill, (embodied) cognition
  - Multiperspective materiality (e.g. maker, user, conservator, legislator, buyer, visitor)
  - Forgeries, heritage crimes
  - Biographies of (in)angible heritage

- **Presenting & Experiencing heritage**
  - Digital reconstructions/technical application (museum, AI, game industry)
  - Materiality and meaning
  - Agency of objects
  - Ethics and ownership
  - Temporal changes of heritage experience (e.g. origins and development of the sense of heritage; reuse of places and objects; monumentality and destruction)

- **Managing heritage**
  - Legislation, ownership and stakeholdership
  - Life-histories of heritage
  - Corporate, academic, governmental and public responsibilities
  - Cultural entrepreneurship
  - Heritage industries, e.g. the art market and cultural economy
  - Sustainability: including economic and societal