



I N S C R I B E
at the Roots of Writing

Book of Abstracts

FINAL CONFERENCE

11th – 13th September 2024



I N S C R I B E
INVENTION OF SCRIPTS
AND THEIR BEGINNINGS



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

DIPARTIMENTO
DI FILOLOGIA CLASSICA
E ITALIANISTICA



Carlo Severi, Collège de France

11:00-11:30

Reading Images: Scripts and Icons in Native American Graphic Systems

It is now clear to many scholars that the logic of Native American Indian mnemonics cannot be understood starting from the ethnocentric question of the comparison with western writing systems, but requires a truly comparative anthropology of the many “ways of memorizing” that have been invented in these cultures. In this lecture I would try to get further on this line of research, posing the question of the relationship between Native American graphisms and their relationship to oral traditions. Scholars working on the Mesoamerican Writing Systems (and on other forms of picture-writing among Native Americans) always assume that «glyphs» «meet» with some kind of « oral » transmission of knowledge. To my knowledge, no one has been able to state how this relationship was established. In this lecture, I would like to outline a solution to this problem. I will argue that, even in systems where the representation of the sounds of a language is absent (or partial), we can build a bridge between visual parallelism and verbal parallelism. I’ll try to show how this is doable, first within a single tradition, and then in a more general comparative perspective, including Hopi, Navaho and Nahuatl material.

Alex de Voogt, Drew University

12:00-12:30

Writing System Practice

When a writing system is formed or created there is a secondary development of its implementation or its use, which I will refer to as its practice. This may consist of a gradual process from using the script for words, short phrases, sentences, then texts. For instance, Regulski (2016) notes that the “earliest evidence of phonetic writing in Egypt dates to about 3250 bce; the earliest known complete sentence in the Egyptian language is dated to about 2690.” But this practice may also include individual variation of sign shapes, sign order, and choice of signs, such as the versatile use of Arabic script to write Swahili (de Voogt 2023). A distinction between the development of writing systems and the development of their use or practice allows for a reevaluation of repurposed or adapted writing systems. For instance, writing systems that ‘borrowed’ their signs from another script are in some cases better understood as the same script but with a different practice, or a different script resulting from a specific practice in another script. Also, pseudo-writing may be understood as a writing system practice rather than a writing practice. The distinction between writing system, writing practice, and writing system practice is further explored using examples from Swahili-Arabic, Meroitic, and the Caroline Islands scripts.





Mariagrazia Portera, University of Florence

12:30-13:00

The Enchantment of Beauty: a Possible Role for Aesthetics in the Origin of Writing

It seems that art and beauty were the initial catalysts for the invention of writing. At the dawn of humanity's journey with written language, there was a profound interconnection of images, bodies, emotions, redundancies, and affects. However, what happened as the process of perfecting writing progressed? What role does the aesthetic-artistic component play in the invention, development and functioning of writing? Is it an element to be progressively rid of, or conversely, a dimension that still continues today to energize and infuse writing with its power and vitality? How can Darwinian evolutionary theory, from both phylogenetic and ontogenetic perspectives, elucidate the relationship between images and written signs? My paper aims to explore the intricate intertwining and possible complementarity of art, aesthetics, and writing, with a critical reference to the increasingly disembodied nature of the printed word since modernity.

John Baines, University of Oxford

14:00-14:30

Who Benefited from the Gradual Introduction and Development of Writing, and How?

A generation ago, many scholars assumed that administration was the main driver for the invention of writing. For several traditions, however, that has proved to be an insufficient explanation. Prestige and symbolic/aesthetic aspects, rather than more pragmatic ones, tend now to be given at least equal emphasis in interpretation. While the functioning of administration, and especially its proliferation, may have been aided by the new systems of communication, the earliest writing could convey only minimal information. Oral contexts must have been dominant in its operation. Writing developed into a “full” form over many centuries. In the traditions of Mesopotamia, Egypt, China, the Aegean, and Mesoamerica (in rough chronological order of appearance), half a millennium or more separated complex systems of notation from an encoding of language, its phonology, and syntax. In all clear cases, initial phases of writing were situated among elites, who must have been its main beneficiaries. The early context of its emergence should be explored in order to ask in what ways those elites benefited from the complex systems. A relatively full notation of language is unlikely to have been envisaged from the beginning. Its introduction could have been stimulated partly by extending the potential of the systems, partly by significant societal change in the centuries after their first invention, or plausibly by both. When language came to be notated, this was socially divisive, because a single language was generally chosen in what was in most or all cases a multilingual environment. This paper will discuss questions arising from the points just sketched, with a primary focus on the Egyptian case.





**Roger Matthews, Barbara Helwing, Amy Richardson,
Heike Dohmann, and Helen Gries**

14:30-15:00

University of Reading and Vorderasiatisches Museum

States of Clay, 3700-2500 BCE: Investigating the Earliest Bureaucracies of the Middle East through Integrated Analysis of Clay Objects

Early societies of the Middle East, especially in Iraq (Mesopotamia) and Iran, used clay as a medium for administration of a wide range of social, political and economic activity. They wrote on clay, they sealed on clay, and they made tokens and counters out of clay. Despite the wealth of material evidence for these ancient bureaucracies, with hundreds of thousands of inscribed clay tablets and sealed objects available for study, there has not previously been an attempt to apply a multi-stranded methodology in order to investigate the material components as representing a coherent system of bureaucracy. In this talk, we present ongoing research into the some of the world’s earliest, and best-attested, bureaucratic systems of Mesopotamia and Iran, at the very dawn of urbanism and the early state.

Sarah Scott, Wagner College

15:30-16:00

Thinking Outside the Box: Uruk Glyptic as Pictorial Organization

The Uruk Period in southern Mesopotamia has long been viewed as seminal in the development of writing. The glyptic tradition leading up to and during the three main phases of the Uruk period existed alongside the earliest ‘proto-cuneiform’ documents. Such documents ranged in complexity from things such as small ‘tags’ bearing single signs to more extensive tablets inscribed with multiple signs and numerical notations in columned and cased compositions. Iconography and composition are two components of visuality common between glyptic and proto-cuneiform. This paper will explore the iconographic and compositional evidence in a group of seal images from the Middle to late Uruk periods from the site of Uruk. In doing so, it will identify an underlying visual system that functioned pictorially to convey and allow access to information in a codified way; it is evidence of organized thinking in an external form prior to the emergence of written language. It will be argued that glyptic, while not a visual representation of language, nevertheless existed as one of many visual systems that contributed to the Kulturtechnik milieu of cognitive, social, and environmental changes that defined fourth millennium BCE Mesopotamia.





16:00-16:30

Andréas Stauder
École Pratique des Hautes Études

Immediate Pre-Histories and Earliest Developments of Writing in Southern Egypt

Recent analyses strongly suggest that the earliest Egyptian writing developed out of an earlier, increasingly sophisticated and exclusionary visual culture strongly focused on power and violence. In no small part, glottography thus emerged initially as an additional exclusionary refinement within that visual culture.

The paper describes the assemblage of graphic forms seen in tomb U-j and the earliest forms of hieroglyphic writing beginning a century and a half later, setting these in perspective with one another. Given the understanding that the relation between the two is neither direct nor deterministic, I discuss and attempt to model the developments that saw the latter emerge.

16:30-17:00

Felipe Rojas Silva and Stephen Houston
Brown University

In Vitro Scriptogenesis: Inventing Writing in a Classroom

For the past ten years, the authors have co-taught a class at Brown University on the history of writing systems. As a final class project, they have required their students to invent their own logo-syllabic scripts. Currently, the authors have an archive of over one hundred newly invented systems produced in this artificial and tightly controlled academic setting.

Using that archive, we analyze patterns and exceptions in the types of scripts produced by students. We also compare these systems to other secondary script inventions, both those logo-syllabic scripts invented in situations of highly asymmetrical cultural contact (e.g., in 19th-century Africa or in the colonial Americas) and so-called “con-scripts”, invented for the fantasy worlds of movies and video-games.





Paola Demattè, Rhode Island School of Design

10:00-10:30

Chinese Writing: Origin or Origins?

Though it is often said that the earliest form of Chinese writing consists of divinatory inscriptions on bones (the so-called oracle bone inscriptions) dating to the Late Shang period (ca. 1300-1045), it is amply clear that there was writing on pottery, bronze, and bone dating to the Early and Middle Shang and even earlier to the Early Bronze Age (Erlitou) and Late Neolithic. What is perhaps less clear is what were the processes that led to the emergence of Chinese writing and where exactly these processes took place. Can we talk about a single geographic-political origin of Chinese writing in the middle Yellow River valley or should we think of a diffuse interaction among different Late Neolithic sign systems that over time was systematized in the context of emerging and competing political entities in a wider territory?

Stephen Houston, Brown University

10:30-11:00

Origin Tales: The Beginnings of Maya Writing

There are two tales for the first writing: external accounts from scholars grappling with sparse evidence, and internal, explanatory ones arising from later makers and users of that writing. Both form their own realities and lend themselves to their own metaphors of "creation" or of organisms that are "born," "grow," and "die." This talk explores, 20 years after a similar exposition by the presenter, current evidence and models, both external and internal, for the inception of Maya glyphs, a system that flourished for close to 2000 years in and near the Yucatan Peninsula of Mexico and Central America. Fresh data augment and sometimes counter earlier narratives. Yet there are many remaining gaps of understanding. With variable success, we still tangle with the meanings or functions of these early glyphs, the "ecosystem" of graphic display from which they arose, the influence of concurrent scripts in the region, the role of grounding materials, the enigma of limited genres or registers of meaning, and the overall relation of graphs to language. How crucial was the play of homophones and rebus, how central were the accounting concerns or political objectives of rulers, how conditioned is scholarship by the allure of teleology or beliefs about cognitive consequences? What principles informed such graphs from their inception, what changed over time, was there a single "system" of script -- above all, to what degree are early signs even readable? Themes that emerge include the relation of spirit to matter, the importance of possession, and the local belief that writing was supra-human, the gift and practice of deities.





Barbara Montecchi, University of Florence

11:30-12:00

The Origins of Writing in Bronze Age Crete and the Conundrum of Documents in Perishable Materials

Writing first appears on the island of Crete towards the end of the third millennium BC, in the so called Prepalatial Period. These earliest inscriptions are carved on bone seals found in tombs, posing the question on whether writing was invented on Crete to write on seals or these inscribed seals are in fact side artefacts of a written Minoan culture largely lost.

During the subsequent Protopalatial period, two scripts were used in Minoan administration, Cretan Hieroglyphic and Linear A. Each script system has its own range of typical administrative documents, e.g. roundels for Linear A and medallions for Cretan Hieroglyphic. Some other sealed document types, as for example direct object sealings and noduli, are common to both systems. Written seals largely remain within the domain of Cretan Hieroglyphic.

The functions of writing in antiquity are often grouped into “utilitarian” communication, mainly represented by administrative documents, and “display”, that however seeks to communicate. When writing is incorporated into display often cannot be read in normal conditions. This is also the case with Cretan Hieroglyphic seals which are too small and mixed with ornamental motifs.

The aim of the present talk is double: to discuss the evidence for the display function of inscriptions on seals and the existence of written documents in perishable materials.

Miguel Valério, Autonomous University of Barcelona

12:00-12:30

Evidence for Morphemic Glyphs in the Rongorongo of Rapa Nui

This presentation will follow the trail of ongoing investigations into the Rongorongo notation system of Rapa Nui (Easter Island). The distribution, shape, and native descriptions of Rongorongo glyphs will be compared with pairs of homophones in Rapanui and closely related Eastern Polynesian languages. This evidence supports the hypothesis that Rongorongo signs, frequently in semanto-phonetic combinations, represented morphemes of the local language rather than syllables, as is nowadays commonly assumed.



Jacob L. Dahl, University of Oxford

14:00-14:30

The Decipherment of Very Ancient Scripts from Iraq and Iran

In this lecture I will first outline the methods for decipherment of the Uruk period texts established by Friberg, Damerow, and Englund, using information from the numerical notations, comparisons with later administrative texts, and knowledge of processes in food production in early societies, while adding some comments on my own work on the proto-Elamite texts, largely based on the same method. I will then discuss current trends and possibilities in the decipherment of very ancient scripts from Iraq and Iran, beginning with my own, simple computer assisted graphotactical analysis of proto-Elamite, before looking at the vastly more complex work by colleagues such as Kelley and colleagues and Sproat. The talk will end with an assessment whether the very ancient scripts of Iraq and Iran developed any sort of phonetic coding, and a discussion of more recent claims about the decipherment of these scripts and what a decipherment of proto-cuneiform and proto-Elamite would look like.

Zev Handel, University of Washington

14:30-15:00

The “Contact Matrix” as a Model for Understanding Logographic Script Borrowing and a Tool for Decipherment

Because most graphs in a logographic script represent spoken morphemes, each graph is tightly associated with a pair of attributes: pronunciation and meaning. In a contact situation, speakers of another language who learn the script will associate each graph with a filtered pair of attributes: a localized pronunciation and a translated meaning. These associations form what I call a “contact matrix”, which is the basis for semantically-adapted and phonetically-adapted applications of the graphs to write linguistic units of the second language. The contact matrix is therefore a useful model for understanding how logographic scripts that are used to write one language are repurposed to write other languages, as in the adaptation of Sumerian cuneiform to write Akkadian or the adaptation of Chinese characters to write Korean, Vietnamese, and Japanese. In this talk I will illustrate how the contact matrix functions, and explore how it might be used to attempt decipherment of Sinoform (Chinese-like) scripts like Khitan, Parhae, and Tuyuhun. (Decipherment results are not guaranteed!)





Nisha Yadav, Tata Institute of Fundamental Research

15:00-15:30

Enigma of the Script of the Indus Valley Civilization

Deciphering the Indus script has remained an enduring challenge, with numerous attempts yielding inconclusive results and no consensus on its content. The lack of precise knowledge about its structure has hindered the objective evaluation of proposed decipherments. To address this gap, we've employed computational techniques to explore the structure of the Indus script without presuming its content. This presentation will offer insights into our computational studies of the Indus script.

John Bennet, University of Sheffield

16:00-16:30

“A Frivolous Digression” – Did the Decipherment of Linear B Transform the Aegean Late Bronze Age?

In theory the decipherment – by Michael Ventris, building on work by Alice Kober, Emmett Bennett and others – should have transformed the way we study the Aegean Late Bronze Age, moving it from a wholly prehistoric to a historical era. Despite the brilliance of the decipherment itself, the ability to read the documents caused a degree of disappointment. The tablets were – as Evans himself had already made clear – primarily accounting documents. Particularly missed were written predecessors to the epic poetry of Homer, which had formed much of the basis for interpretation in the first half of the 20th century, before the decipherment. There were two immediate effects on our ‘reading’ of the Aegean Late Bronze Age. First, the reality of the texts generated a reaction against ‘Homeric’ readings of Late Bronze Age society and a call to employ comparison with similar systems in the contemporary Near East, championed particularly by Moses Finley. Second, there was an appreciation of the texts’ value in documenting the history of the Greek language some five centuries before Homer. The latter, however, had the unfortunate effect of cementing an ‘essentialist’ view of Greek identity attached to language, linking the achievements of the Classical age to the Late Bronze Age. Meanwhile the other two major Aegean scripts – Cretan Hieroglyphic and Linear A – remained (and remain) undeciphered.

With this as background, the current paper explores – 70 years on – the reverberations of the decipherment of Linear B within the field of Aegean Late Bronze Age Archaeology and offers a brief coda contrasting the implications of the non-decipherment of the other two Aegean scripts.




Enrico Benelli, Roma Tre University

16:30-17:00

The Decipherment of the Etruscan Alphabet. A Tale of Enlightenment Thinkers and Neverending Misconceptions

In 1789 Luigi Lanzi (1732-1810) succeeded in understanding all the most common Etruscan letters, except one. This decipherment, which required a major paradigm shift, was an outstanding achievement of the Italian Enlightenment. The missing letter was finally deciphered some decades later, while the understanding of the less common graphemes had to wait until the twentieth century. Despite all this, "the decipherment of Etruscan" is often listed, even in the present day, among the future goals of research; this is due, at least partially, to a lasting confusion between "deciphering" a writing system and "translating" a language. Long-lived misconceptions about the "spirit" of Etruscan civilization and the "national character" of the Etruscan people make it difficult to accept that they developed a relatively unexceptional alphabetic script, closely related to Greek and Latin.



Anna Foka, Uppsala University

17:00-17:30

Mapping Ancient Descriptions of Space and Place: The Digital Periegesis Project

Spatial analytical methods predate the field of digital humanities, most notably through cartography, the practice of drawing and studying maps. More recently, the spatial analysis of texts via Geographic Information Systems (GIS) is trending as a research method. Mapping pre-modern space is rarely a matter of documenting toponyms or establishing precise coordinates. Rather, space becomes place through interaction with historical agents and the human footprint left on the ground in the form of monuments, religious sites and other infrastructures. While contemporary geographic information science and historical modes of describing space often appear to have disparate, even incompatible, viewpoints of the world, there is a growing ecosystem that seeks to remedy the complexity of ancient space. This ecosystem of tools, content and communities about historical place and space illustrate how collaboration within the field of digital humanities can be an opportunity for scientific discovery.

Against this backdrop, this paper examines the affordances and challenges in interdisciplinary collaboration between researchers, projects and contemporary digital research infrastructures for the analysis of ancient narratives- including writing and descriptions of space. The case study is a well-known historical narrative of space: namely the 2nd century Pausanias’s Periegesis Hellenica (Description of Greece), a ten-volume description of Greek towns, villages, monuments, works of art and their histories from Attica to Phocis, following a circuit around the Peloponnese. The Digital Periegesis project, funded by the Marcus and Amalia Wallenberg Foundation (MAW 2017.0057; 2018–2021), and comprising an interdisciplinary team of scholars builds on existing digital spatial research infrastructures, using maps as visual portals into narratives, as a means to interrogate rather than merely illustrate such early writings of spatial and material information. In the second phase of the project that is financed by the Swedish Research Council from 2022 to 2026 (Vetenskapsrådet 2021-02799) the Digital Periegesis project is set out to investigate descriptions of time and people and to incorporate this to the ongoing Digital Periegesis’s visualisation.





10:00-10:30

Lorenzo Lastilla & Roberta Ravanelli,
University of Rome "La Sapienza"

3D Modeling of Undeciphered Scripts

Recent technological and methodological advancements in digital humanities have significantly improved paleographical approaches aimed at deciphering ancient scripts. In this regard, 3D modeling provides the most comprehensive solution for documenting these scripts, due to the three-dimensional nature of most of them. 3D models enable virtual inspection, measuring, and analysis of textual sources and of the epigraphic media in which they are inscribed, allowing for the assessment of the geometry and topology of the inscriptions, and, potentially, their remote transcription.

Here we present the results of the effort for the 3D digitization of 166 inscriptions from four undeciphered ancient scripts within the INSCRIBE (INvention of SCRIPts and their BEginnings) ERC project, based at the University of Bologna and led by Prof. S. Ferrara. Three of them were used in the second millennium BCE Aegean, i.e. Cretan Hieroglyphic, Linear A, and Cypro-Minoan; the last one, Rongorongo (of uncertain dating), was used, instead, on Easter Island.

Due to the high variability in shape, size, material, color, and sign depth, of the objects surveyed, close-range photogrammetry and structured-light scanning were adopted and occasionally adapted, being able to produce measurable digital-twins of the inscriptions with sub-millimetric geometric accuracy, high resolution, and high-quality texture. In addition to the review of all the objects digitized during the project, and of the methodologies adopted, this work provides several examples of the countless applications of such detailed and accurate 3D products. The 3D models are being progressively uploaded on the INSCRIBE 3D Interactive Web Viewer (www.inscribeproject.com).





Michele Corazza, University of Bologna

10:30-11:00

Investigating the Signs of Cypro-Minoan with Deep Learning

In recent years, the state of the art in computational linguistics, as well as other fields, has been dominated by machine and deep learning methods. These methods have clear advantages for natural language processing, as they do not rely on a set of predetermined rules in order to perform their tasks. Instead, they operate by learning from examples how to perform various tasks, with a higher flexibility than classical methods. In this context, bigger models requiring more data are commonplace and they often produce the state of the art in terms of performance.

While the usage of machine learning methods for computational linguistics is an established practice, the same can't be said for the study of ancient, undeciphered, writing systems. The reasons for this discrepancy are plentiful, but among those one of the more challenging aspects is the scarcity of available data, since most undeciphered scripts have limited attestations, especially for data-hungry models. Another challenge is the fact that for some scripts, even the inventory of signs is not agreed upon by experts, meaning that the graphical aspect of signs should also be considered. Additionally, since no gold standard can be obtained in the case of undeciphered scripts, the models can only be unsupervised, as we aim to test hypotheses without biasing the model.

In the emerging field of computational paleography, this presentation regards the development of a deep learning model that was successfully used to investigate non consensual instances of allography in the Cypro-Minoan script, as well as the development of this method on another closely related writing system from Cyprus, namely the Cypriot-Greek syllabary. The resulting approach, which sits at the intersection of multiple disciplines such as paleography, computational linguistics and computer vision, is one of the first of its kind and it also useful results for the field of paleography.





Logan Born, Simon Fraser University

11:30-12:00

Quantifying the Past: Insights from Mathematics and Accounting in the Ancient Near East

This presentation explores the proto-Elamite and proto-cuneiform corpora through the lenses of mathematics and accounting. We discuss the challenges associated with interpreting ambiguous numeral notations in these documents, and demonstrate applications of digital tools to make our analyses of these notations more efficient and thorough. Our explorations reveal discrepancies which prompt a reassessment of existing hypotheses about certain sign meanings, and uncover mistakes or inconsistencies which appear to offer insights into the original scribes' understandings of their numeration and writing systems. Descriptive surveys of the numeric content in both corpora provide insights into higher-level patterns, illuminating similarities and differences in the associated accounting traditions. Motivated by the sheer amount of numeric information in both corpora, we argue that a thorough understanding of these texts requires a nuanced comprehension of their numeric content, which this work aims to contribute.

Clélia Paladre, Louvre Museum, Paris

12:00-12:30

Proto-Elamite Script and Seals: A Visual System Involving Several Trades

In Iran, while a number of sites were facing an original proto-urban phenomenon at the end of the 4th millennium B.C.E, the so-called proto-Elamite one, we witness the emergence of a complex multi-level visual system including script, images and symbols. Focusing on cylinder seals and notably on the “classic style”, we will examine the role of craftsmen, administrators, scribes and elites to better understand how this brand-new information system worked and to whom it was addressed.





Svenja Bonmann, University of Cologne

14:00-14:30

Historical-Comparative Linguistics and the Decipherment of Ancient Scripts

When there may be no direct descendants of the language underlying an undeciphered script, the study and comparison of its relatives might nonetheless eventually result in a successful decipherment. Linguists use the Comparative Method (CM) to reconstruct concrete lexical material of unattested (proto-)languages – i.e., roots, stems, inflected/finite words, whole phrases. Linguistic reconstruction may also help in determining possible word forms of an as yet unknown member of an otherwise well-known language family. If relatives are known, reconstructed lexical items of the last common ancestor of the relevant languages may be experimentally substituted to particular character sequences previously identified in the course of the distributional analysis. In my talk, I will demonstrate this procedure with the recent decipherment of the Issyk-Kushan script (Bonmann et al. 2023). In this particular case the noun phrase ‘king of kings’ provided the key to the decipherment. This phrase has a repeated stem, namely ‘king’, whose length and phonological constitution is characteristic for different linguistic phyla. Only a Middle Iranian noun phrase matched a repeated character sequence in two Issyk-Kushan inscriptions hypothesized to write down ‘king of kings’ – remarkably, however, a phrase or rather sequence of phonemes deduced from linguistic reconstruction. Without an application of the CM the decipherment of the Issyk-Kushan script would have been impossible. Future successful decipherments of other ancient scripts may therefore likewise depend on an application of the CM by professional linguists.



Lucrezia Milillo, University of St Andrews

14:30-15:00

Not Just Knots: On the Role of Materiality in Andean Khipus

In its quintessentially three-dimensional nature, the Andean knotted string device known as the "khipu" conveys meaning through its entire material essence. Despite this, the constituent elements of khipus have remained unanalysed and unidentified until now (specifically colours and any fibre beyond cotton and animal fibre). I posit that khipu materials were deliberately chosen by their maker(s), not only for their sensory qualities but also for their independent symbolic values within the broader Andean cultural context. By conceptualizing the khipu as an assemblage of Andean knowledge, I propose for an initial departure from the paradigms of symbolic anthropology, preferring instead the approach of the anthropology of technology and integrating it with the material-focused branch of social semiotics. The former unveils the meaningful potential of human practices, while the latter emphasizes that materials inherently serve as semiotic resources within their cultural utilization. Subsequently, I will explore how this perspective can illuminate aspects of the information encoded in khipus through two case studies. The first examines an unidentified vegetal fibre systematically used in some Inka-style khipus, drawing on ethnobotanical insights from fieldwork in San Andres de Tupicocha, Peru. The second delves into the realm of colour, presenting it not just as a visual sign but as a material and technological component of the khipu medium. Data collected during my analysis of khipus in European ethnologic museums, coupled with collaborations with heritage laboratories, will provide the first-ever insights into the use of colours in khipus.

Andrew Robinson, Author of Books on Writing and Decipherment

15:30-16:30

Epilogue

My concluding talk will review the unity and diversity of writing over more than five millennia from its ancient origins to today, as discussed by the conference’s speakers. In doing this, I shall also draw on my books about writing.

