FROM THE EDITORS

The present volume contains papers presented during the 3rd Cracow Maya Conference convened by the Jagiellonian University and Polish Academy of Arts and Sciences in February 2013. The topic of the 3rd CMC was devoted to the writing systems of Pre-Columbian Mesoamerica. During the symposium, which was held on the 21st of February and that opened the event, there were various papers presented by scholars from different countries including Denmark, Finland, Germany, Mexico Poland, Russia and the United Kingdom. The symposium was followed by three-day long workshops concerning writing systems of the ancient Maya and central Mexico with special focus on Teotihuacan and Aztec writing. Subsequent to this event, we invited two more scholars working on the subject at hand, who have kindly accepted our invitation and contributed with their papers to the present volume.

Mesoamerica has the distinction of being one of the cradles of writing systems in the world. The other such cradles are the Middle East (represented by Cuneiform and Egyptian Hieroglyphs), the Indus Valley (as exemplified by the Harappan seal tradition) and East Asia (especially the onset of writing associated with oracle bones during the Shang Dynasty) (*e.g.* Allan 1999; Daniels and Bright 1996; Gardiner 1973; Glassner 2003; Houston 2008; Parpola 1994; Selden 2013; Woods 2010). Whereas debates still rage as to how the different writing systems of the Old World may have spurred analogous developments, it is clear that the writing systems of Mesoamerica represent independent script inventions from those of the Old World.

As is characteristic of such hearths of literacy a series of writing systems are known in Mesoamerica that are to a greater or lesser degree derivatives of one another as daughter scripts of an earlier script, or parallel developments sharing the same underlying structure and constituent units. Undoubtedly, both processes were at play during different time periods, but it is slowly becoming apparent that all writing systems may ultimately derive from a single scribal system devised during the Late Formative period (c. 400 BC-AD 200) (*e.g.* Justeson 1986; Lacadena 2008a, 2011; Marcus 1976; Martínez *et al.* 2006; Ortíz Ceballos *et al.* 2007; Popson 2003). In other aspects it also remains unclear which writing systems represent regional and/or temporal variants of a larger system, since most Mesoamerican writing systems have not succumbed to phonetic decipherment. Thus, for example it is possible that the writing system of Teotihuacan, the Epiclassic and the Aztec each represent successive temporal stages of a single writing system that we might call the central Mexican writing system (see Helmke and Nielsen 2013a, 2013b). At present we recognize a long range of writing systems in Mesoamerica, including the eastern Mesoamerican writing systems of the Maya and the Isthmus of Tehuantepec (also referred to as Isthmian or Epi-Olmec); the writing systems of Oaxaca including Zapotec, Mixtec and Ñuiñe; the aforementioned writing systems of the central Mexican Highlands, which comprise that of Teotihuacan, the Epiclassic and the Aztec (also known as Mexica or Nawatl writing), as well as the related script of the Pacific Coast of Guatemala known as Cotzumalhuapan; the writing system of the Gulf Coast (seen especially at sites such as El Tajin), and the Toltec writing system found at both Tula and Chichen Itza (*e.g.* Berlo 1989; Chinchilla Mazariegos 2011; Helmke and Nielsen 2011; Justeson

and Kaufman 1993, 1997; Kaufman and Justeson 2001; Knorosov 1952; Lacadena 2008b; Love 2011; Moser 1977; Rivera Guzmán 2008; Stuart 1987; Taube 2000; Urcid 2001, 2011a; Velásquez García 2010; Whittaker 1980, 2009; Zender 2008). We are fortunate that many of these writing systems are represented in this volume, but especially those of the Maya, Teotihuacan and Ñuiñe, with additional references made to the scripts of the Formative and the Aztec.

Unfortunately, the majority of Mesoamerican writing systems have not succumbed to phonetic decipherment, but the logo-phonetic properties and structure of Maya and Aztec writing are no longer in doubt (*e.g.* Houston *et al.* 2001; Knorosov 1952; Kettunen and Helmke 2011; Lacadena 2008b; Nicholson 1973; Stuart 1987; Zender 2008; Whittaker 2009). The phonetic decipherment of these writing systems is not only due to the genius of the epigraphers that have decoded them and their collaboration with talented linguists, but has also been brought about by the fact that these two writing systems exhibit the largest written corpora, biscripts or "Rosetta Stones", and the relationship between the script and the language they record has been beyond doubt from the onset. These are some of the most fundamental criteria for the successful decipherment of any writing system (*e.g.* Coe 1992; Coe and Houston 2004; Nielsen and Helmke 2011) and fortunately these are fulfilled in the case of Maya and Aztec writing. The other Mesoamerican writing systems have very restricted corpora, lack complete or comprehensive signaries, and there is little consensus even as to candidate languages that these scripts may record, and worse still, there is little to suggest that biscripts exists or are liable to appear in the foreseeable future. As such, whereas many researchers who have worked with these undeciphered writing systems have approached them from either an atomistic vantage (*e.g.* Urcid 2011b; Valdés Bubnova 2008), or have languished in lengthy and unproductive discussions of terminology and parsings of terms pertaining to writing (*e.g.* Langley 1986, 1992; Michel de Guerrero 2005, 2014), more recent work undertaken by trained epigraphers suggests that the underlying structure of all Mesoamerican writing systems is logo-phonetic and follows precisely the same functioning as that which is known for deciphered Mesoamerican writing systems (*e.g.* Helmke and Nielsen 2011, 2013a, 2013b; King and Gómez Chávez 2004; Lacadena 2011; Nielsen and Helmke 2011; Taube 2000, 2011; Zender 2011). Considering the temporal and spatial distance that separates the writing systems of the Maya and the Aztec, their shared features, and even the few shared signs, suggest that these are inherited from the earliest writing system in Mesoamerica (*e.g.* Lacadena 2011; Langley 2002; Zender 2011). In contrast, their differences reside in the realm of phonograms, since this is the area where the scripts are tied to different language families.

The protracted phonetic decipherment of scripts in Mesoamerica has provided a fertile intellectual milieu wherein a variety of theories and scenarios pertaining to scripts could be devised. One model that is still prevalent in some academic circles is that several Mesoamerican writing systems are "semasiographic", which is to say that signs are not directly coded to language at all, but operate more freely and somehow represent semantic information without direct recourse to language (*e.g.* Boone 2008; Boone and Mignolo 1994; Colas 2011; Wright Carr 2009). This model, is especially prevalent in studies of writing systems of Western Mesoamerica, including the scripts of the central Mexican Highlands, and surprisingly even the writing system of the Aztec continues to be regarded by some as such. Evidence that writing systems are tied to and encode specific languages is naturally afforded by the fully-phonetic spellings of terms as well as the phonetic complements that accompany many logograms. In addition, as far as we are aware all writing systems serve to encode language and what makes semasiography as a category of writing particularly suspect is that there is no clear evidence of a kindred writing system elsewhere on the globe, despite the many writing systems that humans have devised over millennia (*e.g.* Daniels and Bright 1996; Pope 1999). Nevertheless, despite the wide range of views taken by scholars in the field and the great variety of writing systems known, the field of Mesoamerican epigraphy is clearly at a very interesting juncture in its history since this is a time that is seeing increasing attention and documentation of writing systems by an ever expanding

group of epigraphers who are beginning to examine writing systems from a comparative perspective (*e.g.* Lacadena 2011; Helmke and Nielsen 2013a, 2013b; Zender and Davletshin 2011). In many ways this volume is the product of this trend and provides a snapshot of current research in Europe, presenting summaries of diverse and stimulating studies. In structuring the volume we have decided to present the more general treatments at the start of the volume, before going on to introduce papers in a chronological fashion, from the incipience of writing, to the modern orthographies of Amerindian languages, via the writing system of Early Classic Teotihuacan, Maya writing of the Classic, and the early Colonial period in Mesoamerica.

In the first paper, *Agnieszka Hamann*, faces the daunting task of explaining why it is that the linguistic information recorded in hieroglyphic texts pose so many problems in their potential translations and interpretations. It is precisely at this juncture that one can assess the degree to which a decipherment is successful or the incoherent product of a failed attempt, especially since amateur decipherments tend to produce readings that are incomplete, ungrammatical and to speak plainly, nonsensical gibberish. Clearly the script imposes a series of limitations as to how faithfully linguistic material can be recorded, but grappling with a dead language outside of its social and cultural context emerges as one of the greatest challenges if not *the* defining obstacle. As such Hamann aptly comments on the variety of processes at play in languages especially concerning the fluid breadth or restraint of semantic domains that are carried and conveyed by lexical items and pivotally, their relation to lived cultural experience.

The following paper, by *Harri Kettunen*, examines Maya writing from a broad analytical and synthetic perspective. Breaking with tradition and looking to a new approach, emphasis is placed not on the single glyph or text, but on the results of an ambitious project that seeks to assess the underlying properties of Maya writing from a global perspective, that of the corpus. The corpus of Maya writing encompasses all texts from all periods in the Maya area and is a detailed database that can shed light on a whole series of metadata that have a range of applications, not the least of which are didactic and pedagogical.

The third chapter by *Katarzyna Mikulska* starts off the chronological review of Mesoamerican writing systems, since it tackles the advent and development of writing in Mesoamerica. An underlying premise is that Mesoamerican writing systems inherently exhibit shared features due to shared inheritance from the earliest attestations of writing in the Americas. This sound premise focuses on the interplay of numerals and calendrical signs, but goes on to stipulate that the use of logographic signs across cultures and linguistic boundaries is an indication that these signifiers are disassociated from a particular phonetic realization, a speech subjects or even a linguistic signified. Whereas most epigraphers would contend that logograms have a propensity to polyvalence and are to be read as words in the language that they record, irrespective of their origin or paleography, the paper is a welcome addition to the on-going debate that is engaging scholars of Mesoamerican writing systems.

Thereafter, *Christophe Helmke* and *Jesper Nielsen* go on to present the results of their most recent research on mountain signs and their qualifying elements as recorded in Teotihuacan writing. Thus, whereas the writing system of this great metropolis has long been at the centre of debates concerning the identity and nature of Mesoamerican scripts, concerted work is now revealing that this writing system was no different than any other in Mesoamerica and exhibits the same principles and types of signs as the successfully deciphered scripts. Although Teotihuacan writing has not yet been phonetically deciphered we are in a position to be able to identify place names, propose approximations of their meanings as well as rough translations and note the persistence of comparable place names in the central Mexican highlands.

In the fifth chapter, *Jesper Nielsen* and *Christophe Helmke*, continue their foray into Teotihuacan writing and identify a range of named buildings that were recorded in this script. Based on analogies drawn to Aztec writing it is apparent that the names of structures served as the basis of titles for

individuals tied to these buildings and the associated tasks and activities that were performed there, the edifice denoting the responsibilities of the charge. The authors also note that the roof combs that decorate the typical flat roofs of central Mexican structures, known as *almenas*, are frequently adorned with motifs and glyphic elements. Based on parallels between the names of structures and the elements represented on *almenas* it is concluded that these architectural elements prominently served to record the names of structures, for all to see.

Ángel Iván Rivera Guzmán continues the diachronic review by introducing us to the little studied Ñuiñe writing system of the Mixteca Baja of western Oaxaca and parts of adjoining Puebla and Guerrero. Here, Rivera Guzmán examines a fascinating artefact fashioned from a human mandible that was modified by the addition of glyphs and perforations serving as suspension holes. The artefact may have been worn to cover the lower part of one's face, thereby emulating known death deities and conveying the propensity to communicate with the ancestors. The glyphs that adorn this object appear to show alternating sets of year bearers as if to underscore the cultural context of Ñuiñe writing, straddling the dominant script traditions of central Mexico and Oaxaca.

In the following paper, *Jerome A. Offner*, provides a cogent analysis of the pictorial manuscript known as the *Mapa de Metlatoyuca* (alternatively known as the Lienzo de Metlatoyuca or even the Codex of Huachinango) in the collections of the British Museum, but housed in the British Library. As the name implies, the manuscript was painted on cotton cloth and shows a series of named individuals, place names and calendrical notations, in a simple landscape of sinuous rivers and paths marked by footprints. Careful scrutiny of the materials relating to the acquisition history as well as a detailed analysis of the *Mapa* and matching these up with the distribution of toponyms on topographic maps indicates that this manuscript in fact stems from Taxco in Puebla, which is to say 95 km south of the place of origin to which it has traditionally been attributed. Offner thereby clearly demonstrates that researchers should exercise greater care in assessing the origin of such documents and the importance of properly reading the glyphic materials recorded on these maps.

In the penultimate paper *Justyna Olko* broaches the transition of Mesoamerican literacy from the Pre-Columbian hieroglyphic writing systems to the alphabetic literacy of the earlier Colonial period. Olko examines the ways in which the European alphabet conditioned, and was conditioned by, social circumstances, with texts composed by the nobility as well as individuals of lesser social segments. Whereas one might at first be tempted to perceive the use and adoption of the European script as the wholesale destruction of Pre-Columbian institutions, traditions, beliefs and literacy, it is clear that the Native American individuals who wielded the newcomers' writing were in a position to preserve and transcribe all manners of indigenous cultural knowledge and to navigate the complex administrative, judicial, political and religious relations brought about by colonization, thereby fostering the syncretism and *mestizaje* of New Spain.

In the final chapter *Victoriano de la Cruz Cruz* tackles the difficult task of orthography, in this case focusing on the phonemic orthographies of Nawatl, the most prominent language of the southern branch of the Yuto-Nawan language family. As readers of this volume will note there are several orthographies in use and rather than imposing one standard orthography on the whole of the volume, we have instead opted that each contribution should be coherent internally and reflect the views and preferences of their authors. One such orthography is that used in the Colonial period, which is preserved in documents of the time and in large measure survives unaltered in the placenames of Mesoamerica. The other is a revised orthography that accounts for glottalization, but only occasionally accounts for vowel length and preserves some digraphs and other conventions of the Colonial orthography. The author wisely favours orthographies that pose the least impediment to the group that is fostering revitalisation, or more plainly, the orthographies that are most "legible". As a result it is best not to include specialised characters from the International Phonetic Alphabet (IPA) even though some orthographies that make use of these sign are paradoxically referred to as the "Practical System",

an orthography promoted among others by the Summer Institute of Linguistics. A third orthography is that designed by linguistic Terrence Kaufman as part of the *Project for the Documentation of the Languages of Mesoamerica* (PDLMA), which uses standard ASCII-based orthographies with a minimum (ideally an absence) of non-linear diacritics. This orthography has been adopted by Native American linguists in Guatemala and has already had much success in Maya revitalisation movements and is also the standard orthography for most epigraphic work in Mesoamerica.

With this overview completed, we would like to extend our warm and sincere thanks the sponsors of the 3rd Cracow Maya Conference, for without their generous support the event would not have been possible. We therefore convey our thanks to the Institute of Archaeology and Faculty of History of the Jagiellonian University, the Polish Academy of Arts and Sciences, the Foundation for Students and Graduates of the Jagiellonian University "Bratniak", the Jan Kochanowski Fund, the Qulinaria Company, the Embassy of Mexico in Poland and the Embassy of Guatemala in Berlin. The persons that made the event happen are: Monika Banach, Magdalena Rusek, and Magdalena Krzemień. Thank you each and all for all your hard work and effort and making this event a success.

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