POLISH ACADEMY OF ARTS AND SCIENCES JAGIELLONIAN UNIVERSITY – INSTITUTE OF ARCHAEOLOGY

CONTRIBUTIONS IN NEW WORLD ARCHAEOLOGY

Vol. 3

Special Issue

Proceedings of the 1st Cracow Maya Conference Archaeology and Epigraphy of the Eastern Central Maya Lowlands February 25–27, 2011, Cracow

Edited by

Christophe Helmke and Jarosław Źrałka

Assistant editor:

Monika Banach

Kraków 2012

Illustration on the cover:

The reverse of a Late Classic Maya vase, in the collections of the Boston Museum of Fine Arts (1988.1175) depicting the defunct Maize god in the watery underworld (drawing by Christophe Helmke).

Technical editor Jarosław Brzoskowski

Design and typesetting Artur Kozioł

© Copyright by: Polish Academy of Arts and Sciences and Jagiellonian University – Institute of Archaeology

ISBN 978-83-7676-130-5

Obj.: ark. wyd. 12,50; ark. druk. 10,75; nakład 300 egz.

Oficyna Wydawniczo-Drukarska "Secesja" Kraków, ul. Sławkowska 17 oficynasecesja@tlen.pl

CONTENTS

- 9 Nakum y su importancia en el mundo maya: resultados de los trabajos realizados por el Proyecto Arqueológico Nakum entre 2006 y 2011 Jarosław Źrałka, Wiesław Koszkul y Bernard Hermes
- 49 Hiatus en el fin de Preclásico y retorno de los reyes, Uaxactun, Guatemala Milan Kováč
- 65 Recent Archaeological and Epigraphic Investigations at Tamarindito, Peten, Guatemala Sven Gronemeyer and Markus Eberl
- 91 Mythological Emblem Glyphs of Ancient Maya Kings Christophe Helmke
- 127 Struggle for Supremacy: Armed Conflicts in the Eastern Peten During the Late Classic Period *Harri Kettunen*
- 135 Painting Styles of the North-Eastern Peten from a Local Perspective: The Palace Schools of Yax We'en Chan K'inich, Lord of Xultun Guido Krempel and Sebastian Matteo

FROM THE EDITORS OF THE VOLUME

This volume is the result of the 1st Cracow Maya Conference, held at the Jagiellonian University, in Cracow, between the 25th and 27th of February, 2011. Before we move on to describe its content we would like to provide a short description of the origin and nascent ideas behind the Cracow Maya Conference.

In November 2009 both the Jagiellonian University and the Polish Academy of Arts and Sciences were hosts of the 14th European Maya Conference, the first conference of this type to be organized in Central-eastern Europe in collaboration with the European Association of Mayanists (WAYEB). This event inspired such a great interest in the ancient Maya, and especially in Maya epigraphy that we decided to invite several young and talented WAYEB participants to Cracow once again. The idea was to organise a two-day long Maya hieroglyphic workshop with two different groups representing different levels of expertise (introductory and intermediate levels). While working on organising the event, Harri Kettunen (University of Helsinki) proposed that a symposium session preceding the workshops would be both highly appropriate and useful. Thus, the scope of the Cracow Maya Conference was extended. The topic of the conference was *Archaeology and Epigraphy of the Eastern Central Maya Lowlands* since most of the participants and the organizers were involved in archaeological work and epigraphic study in the central and eastern part of the Southern Maya Lowlands. The present volume is the outcome of this fruitful meeting.

We would like to especially appreciate two Jagiellonian University students: Monika Banach and Magdalena Rusek who came up with the idea and initiative to run a Maya hieroglyphic workshop in Cracow and who worked hard in the organization of the events.

Moreover, it would not have been possible to organize the 1st CMC without the support of the following institutions whom we would like to thank for their financial aid and honorary patronage: the Institute of Archaeology and Faculty of History of the Jagiellonian University, the Polish Academy of Arts and Sciences, the Polish Society of Latinamerican Studies, the Kochanowski Fund, the Bratniak Foundation, Qulinaria Company, and WAYEB.

The volume contains six papers dealing with different subjects related to archaeology, epigraphy and iconography. The first three papers discuss mainly archaeological data whereas the other contributions concentrate on epigraphy and iconography. The first paper: *Nakum y su importancia en el mundo maya: resultados de los trabajos realizados por el Proyecto Arqueológico Nakum entre 2006 y 2011* presents results of archaeological excavations that have been carried out at the Maya site of Nakum since 2006 by a team of archaeologists from Cracow. It summarizes the most important discoveries at the site, including a rare drainage feature, important remains of Protoclassic phase activity, a pyramid with several royal tombs as well as several other discoveries which shed light on the role Nakum played in local geopolitics. The second paper *Hiatus en el Fin de Preclásico y Retorno de los Reyes, Uaxactun, Guatemala*, by Milan Kováč, presents interesting results from recent excavations that have revealed

From the Editors of the volume

the abandonment and hiatus of the Uaxactun Group H at a period more or less contemporaneous with the great collapse of the El Mirador polity. It also reports how this group was re-occupied at the onset of the Early Classic period and discusses the subject of Preclassic collapse and the hiatus at other Maya centres. The following contribution by Sven Gronemeyer and Markus Eberl is entitled *Recent Archaeological and Epigraphic Investigations in Tamarindito, Peten, Guatemala*. It provides a detailed description of the results of archaeological work conducted at the Maya site of Tamarindito (Guatemala) and shows some new clues to the development and collapse of this centre. The paper also presents an epigraphic study of all carved monuments. These data provide a basis for the identification of previously unknown rulers of Tamarindito.

Initiating the epigraphic and iconographic section is a paper by Christophe Helmke, entitled Mythological Emblem Glyphs of Ancient Maya Kings. This paper provides detailed analyses of a sample of paired Emblem Glyphs from Palenque and Yaxchilan, which involve toponyms drawn from mythological times. The implications are that despite the importance of Emblem Glyphs in the reconstruction of historical socio-political landscapes, these mythological emblems provide an alternate model that is highly revealing as to perceptions and conceptions of deep time and the role that myths play in the legitimization of royal power. The next contribution Struggle for Supremacy: Armed Conflicts in the Eastern Peten During the Late Classic Period, by Harri Kettunen, provides a synthesis of the armed conflicts in the eastern Peten, between different Maya sites involved in the great conflict between two powerful dynasties: the so-called Snake and the Tikal dynasties. Particular emphasis is placed on the role that Naranjo played in these conflicts. Finally, Painting Styles of the North-Eastern Peten from a Local Perspective: The Palace Schools of Yax We'en Chan K'inich, Lord of Xultun, by Guido Krempel and Sebastian Matteo, provides a thorough overview of the features that identify the ceramic workshop under the patronage of the royal dynasty at Xultun. The authors discuss the stylistic, epigraphic, iconographic and paleographic traits of the ceramic collection that forms the legacy of Yax We'en Chan K'inich, the ruler whose reign and patronage is widely celebrated in the ceramics produced by this workshop.

Christophe Helmke & Jarosław Źrałka

FROM THE SERIES EDITORS

Starting with the third volume of a new series of "Polish Contributions in New World Archaeology" the range of subjects presented in the peer-reviewed series (see: www.archeo.uj.edu.pl/contributions) has been broadened: it is no longer limited to the publication of results of only Polish investigations in the Pre-Columbian archaeology, anthropology and ethnohistory but the series publishes papers from a broader group of researchers dealing with this subject area. For this reason the title of the series has been modified to: "Contributions in New World Archaeology". The publishers of the series continue to be the Institute of Archaeology of the Jagiellonian University and the Polish Academy of Arts and Sciences.

The new policy, namely the broader range of topics and wider group of authors is realized in this volume which publishes papers presented at the 1st Cracow Maya Conference held at the Jagiellonian University in Cracow, between 25th and 27th of February, 2011.

Janusz K. Kozłowski Radosław Palonka Jarosław Źrałka

Contributions in New World Archaeology 3: 135–172

PAINTING STYLES OF THE NORTH-EASTERN PETEN FROM A LOCAL PERSPECTIVE: THE PALACE SCHOOLS OF YAX WE'EN CHAN K'INICH, LORD OF XULTUN

GUIDO KREMPEL¹, SEBASTIAN MATTEO²

¹ University of Bonn, Germany, ² Independent Scholar

Abstract

Our understanding of Late Classic Maya culture relies in great part on the analysis of a wealth of visual and textual information that appears on polychrome ceramics. When based on hermeneutic arguments, thorough descriptions and reasonable interpretations of these objects, epigraphic and iconographic studies can reveal fundamental insights into the meaning and function, as well as the manufacture, use and distribution processes of elite pottery. In the present work, we seek to gather of Late Classic Maya polychrome ceramics that can be assigned to a single and hitherto underrepresented polity that had its seat at the archaeological site of Xultun (Peten, Guatemala). As will be demonstrated, the case study of Xultun ceramics enables us to define regional and site specific painting traditions as well as paleographic peculiarities that characterize the elite pottery produced for and used by the nobility of Xultun during the Late Classic period. In the process, especially one central figure, the local ruler *Yax We'en Chan K'inich* emerges as a focal point of our investigation. The recognition and description of local stylistic patterns and personal assignments to the court of *Baax Witz*, and their local 'palace schools', allows for the identification of Xultun's interactions with other polities and their corresponding workshop traditions.

Resumen

Nuestro entendimiento de la cultura maya del Clásico Tardío depende en gran parte del análisis de la riqueza de información visual y textual que aparece en la cerámica polícroma. Cuando se basan en argumentos hermenéuticos, descripciones minuciosas e interpretaciones razonables de estos objetos, los estudios epigráficos e iconográficos pueden revelar conocimientos fundamentales sobre el significado y la función, también como los procesos de fabricación, uso y distribución de la cerámica de élite. En el presente trabajo, tratamos de agrupar las cerámicas polícromas del Clásico Tardío maya que pueden ser asignadas a una única, y hasta ahora poco representada, entidad política, que tuvo su sede en el sitio arqueológico de Xultun (Peten, Guatemala). Como se demostrará, el estudio de caso de las cerámicas de Xultun nos permite definir tradiciones pictóricas y las peculiaridades paleográficas regionales y específicas del sitio que caracterizan a la cerámica de élite producida para y usada por la nobleza de Xultun durante el periodo Clásico Tardío. En el proceso, una figura central en especial, el gobernante local *Yax We'en Chan* emerge como un punto focal de nuestra investigación. El reconocimiento y descripción de los patrones estilísticos locales y la asignación de personal a la corte de *Baax Witz*, y de sus escuelas palaciegas locales, ayuda en la identificación de las interacciones de Xultun con otras entidades políticas y con las tradiciones de sus correspondientes talleres.

INTRODUCTION

Skilfully painted polychrome ceramics play a significant role in virtually all fields concerned with Classic Maya culture. Ceramics, be they utilitarian wares or items of specialized labour and education, serve as markers of archaeological dating, are used for scientific typologies and classifications, as well as being desired and admired by art collectors as well as laymen all around the world. Our recognition and understanding of Late Classic Maya culture relies in great part on the analysis of the wealth of visual and textual information that is bequeathed to us through painted texts and imagery on polychrome ceramics. When based on thorough descriptions and reasonable interpretations of these objects, epigraphic and iconographic studies can reveal fundamental insights into the meaning and function of the manufacture, use and distribution processes of elite pottery.

For valuable prestige items, such as elaborately painted polychromes, specialized education was and remains to be a presupposed need. These abilities applied to the artist who manufactured the pieces for securing him participation at royal activities as member of a certain 'palace school'. Furthermore, those who commissioned, gifted, interchanged or received the desired prestige goods were necessary and essential links in the chain of supply and demand.

A drop of bitterness for the modern investigator is the fact that most of such skilfully painted polychromes have not been documented in archaeological contexts, but are the product of recent looting. This fact hampers the possibility of reconstructing forgotten archaeological contexts. Bit by bit looted artefacts appear on international art markets and, in the course, are scattered around private or institutional collections all around the world. An illicit business that, unfortunately, continues to flourish to this day; only a glimpse on the quantity of as yet unregistered artefacts that currently form part of international auctions shall convince any sceptics.

In the present work, we seek to bring together key examples of Late Classic Maya polychromes that can be assigned to a single and hitherto underrepresented polity, having its ancient seat of power at Xultun, a major archaeological site situated in the still little explored north-eastern Peten region (Garrison and Stuart 2004; Saturno *et al.* 2011; Von Euw 1978; Von Euw and Graham 1984). As will be demonstrated, the case study of Xultun enables us to define regional and site-specific painting traditions and palaeographic peculiarities that characterize the elite pottery produced for and used by the nobility of Xultun during the Late Classic period. The recognition and description of local stylistic patterns and personal assignments to the court of *baax witz* (likely a toponymic title pertaining to the administrative centre of Xultun, see Prager *et al.* 2010), and their corresponding local 'palace schools', allows the identification of heretofore unrecognized interactions between Xultun and other polities and their corresponding workshop traditions.

The present chapter is concerned with a general outline and the definition of elite pottery production and a description of our use (and abuse) of already established classification systems for north-eastern Peten ceramics. By favouring a combination of ethno-archaeological and art-historical approaches to formal description, we seek to demonstrate the advantages of combined epigraphic (as well as palaeographic) and stylistic analysis through a focus on the local phenomena of elite painting traditions. These may be best understood, by applying Joseph Ball's (1993) definition, as so-called 'palace schools'. For this purpose, we have chosen samples of unprovenanced ceramics that can be assigned to one particular individual of Xultun, namely the ruler *Yax We'en Chan K'inich* (see also Matteo and Krempel 2011a: 960). As will be shown, the recognition of distinctive patterns of Xultun's painting styles (from which the existence of certain 'palace schools' can, at least tentatively, be established) is of special significance for an understanding of the manufacture and interchange of masterfully painted polychromes in the north-eastern Lowlands. Besides the recognition of hitherto underrepresented patterns and the definition of local ceramic phenomena, the study bears further

implications for an understanding of their context of production, the socio-political and economical setting of Xultun's nobility during the Late Classic, as well as about relations with other polities in the north-eastern Peten region, and beyond.

WHO PAINTED FOR WHOM? ON THE PROBLEM OF ASSIGNING UNPROVENANCED ARTEFACTS AND LOCATING PLACES OF CRAFT PRODUCTION

Without a doubt, painted polychrome ceramics figured as essential prestige items, symbolizing status and adherence to certain social segments, thereby helping maintain socio-political interaction as well as social inequality (e.g. Earle 1981). In a complex as well as stratified Late Classic Maya society, division of specialized labour was undoubtedly formalized and access to basic or productive resources can be assumed to have been limited. Access can be restricted by assigning either direct or indirect use rights to particular individuals or groups, often in exchange for products of a particular resource (Beaudry 1984, 1987; Rice 1984). In most cases, the production of pottery involves attached artisans in charge, or favoured by the ruling noble houses. It is generally assumed that gifted Late Classic Maya scribes came with a variable degree of autonomy and control over their products, and probably held high ranks in Maya society (Inomata 2001, 2007). Nevertheless, although occupational specialization is widely agreed to have existed in the Maya lowlands, the nature and degree of specialized labour remains a matter of debate (e.g. Ball 1993; Costin 2007; Foias and Bishop 1997: 282: West 2003). Various small and middle-scale workshops may have been included into residential units, or beyond the site core, and it can be assumed that the production of symbolic goods stood, as Bernier (2010: 22) points it out for Moche craft specialists: "under the direct authority of urban leaders taking advantage of this particular organization of semi-attached craft production in various status-building strategies". Due to often missing archaeological data, specialized manufacture of elite polychrome pottery among the lowland Maya can only be assumed on the basis of high levels of skills involved in producing painting and engraved decorations, and an assumed mastery of writing. Therefore, a comprehensive and thorough description of stylistic traits is in order to help identify and distinguish variations in regional samples, and to cull the patterns of regional and individual craft specialisation on both, macro- and micro-scales. However, as Joseph Ball (in Reents-Budet 1994: 305) pointed out rather straightforwardly: "these techniques provide only limited information. They never can substitute for the proper archaeological excavations of objects".

One central but barely answered question remains: where did the scribes produce their valuable polychromes? Few archaeological indicators or significant samples have been found and subsequently analysed yet. For example, some evidences for production of elite ceramics in the central parts of archaeological sites were found at both Tikal (Becker 2003) and Lubaantun (Hammond 1975, 1983, in Ball 1993: 253). In addition, investigations at other sites, give evidence for elite ceramic production that took place in elite related or sponsored workshops (Coggins 1975; see also Ball 1993: 253). Additional evidence comes from the very centre of Motul de San José, where deposits of unfired and abortive ceramics are known; indicating that at least some workshops were also located in the administrative core of minor centres, and inside elite residences (e.g. Foias 1996, 1999; Foias and Bishop 1997; Inomata 2001, 2010). Such rare findings of unfired ceramic deposits as evidence for fine painted pottery production were also made at Holmul and Buenavista del Cayo, where copies in less sophisticated style were produced. The latter were likely based on the more elaborate products originating from Naranjo's workshops (Ball 1993: 249; Reents-Budet 1994: 303). Similar finds of what Ball termed 'village traditions' (as a folk category parallel to the 'palace school' concept, see Ball

1993: 257) are testified at secondary sites that are located in the vicinity of most dominating centres. In some cases, highly elaborately painted specimen were copied in less specialized workshops and decorated by illiterate scribes with lower skills. Thus, it shall be taken into consideration that specific styles and thematic themes were frequently copied at secondary sites in adjoining hinterlands (e.g. Ball 1993; Calvin 2006; Reents-Budet 2000). In the case of Naranjo's Cabrito varieties, including the famous 'Holmul-dancer-theme' pottery¹, high-ranking members of the local elite produced the most sophisticated examples. On an area-wide level of distribution, however, different major production zones (that is to say separate 'palace- or community schools') are discernible and can be assigned to proper workshops; all capable of manufacturing and painting polychrome ware that archaeologists applying the type-variety system, today classify as, for example, Zacatel Cream-polychrome types (see Figure 6, Reents-Budet 1994: 179 ff.). Similar products of minor quality and 'pseudo-ware' were mainly found at secondary sites under the aegis of Naranjo, for example at Ucanal (Reents-Budet et al. 2000), Holmul (Merwin and Vaillant 1932: Fig. 9b), Yaloch (Gann 1918: Plates 26, 27) and at Belizean sites such as Buenavista del Cayo (Ball 1993; Reents-Budet et al. 2000); all thought to have been dominated by Naranjo's sphere of influence, namely by the ruler K'ahk' Tiliw Chan Chaahk and his successors (Martin and Grube 2008: 74-77; Helmke and Kettunen 2011: 52-57). In these cases, the correlation of political structure and interregional exchange of prestigious ceramics becomes conceivable, although, the idea of elite controlling the interregional exchange and gifting remains tentative. It can be assumed that the noble houses controlled the gifting of goods by means of direct impact on the crafting and execution processes. Thus, interregional exchange of elite ceramics in the central, eastern and northern Lowlands was likely based on a restricted economic role of elites having their nucleus at dominating capitals, but generally controlling a much wider sphere of influence through politically and economically depended allies in their hinterlands. Mostly, the dominating elite residing in the capital can best be understood as consumers of the goods, whereas household- or community 'attached' manufacturers, likely residing in separate household communities (Inomata 2001), were the feeders guaranteeing prestige through highly valuable artefacts; the latter finally used in elite sponsored feasts and burial ceremonies. Nevertheless, the wide distribution of, for example, Zacatel Cream Polychromes: Cabrito varieties depicting the Holmul or Maize Dancer imagery (Figure 8), and other workshops familiar with the Holmul-dancer theme, located as far as sites such as Uaxactun, Tikal, Naranjo, etc. complicate the informative value of interregional exchange for these items and their possible socio-political implications.

Statistical studies at Seibal, Tikal, in addition to other sites, indicate that craft production took place at specialized communities that were trained in the production of certain vessel types, overproduced for and exchanged within local and regional markets (e.g. Fry 1980; Fry and Cox 1974; Foias 1996). In that sense, evidence exists for a high amount of Late Classic polychromes that were mainly exchanged on a community-wide, regional and interregional levels is well attested for the Petexbatun area (e.g. Foias and Bishop 1997) as well as for Naranjo's sphere of influence (Ball 1993; Reents-Budet 1994). Similar patterns for the north-eastern Peten region can therefore be assumed, but archaeological evidence has to be awaited. In general, it is assumed that economics, production and exchange systems were probably "less sharply defined than in some of the later full market economies of Central Mexico and the Postclassic Centers" (Demarest 2004: 165; see also Brumfield 1987). Thanks to previous research at several sites, some areas of production have already been hypothesized on the basis of

¹ In the concerned literature, the so-called Holmul style is designated under various terms, grouping under one appellation what may pertain to different varieties (regional variations are observable, Reents-Budet *et al.* 2000: 107): Zacatel Cream-polychrome: Cabrito Variety (Estrada Belli 2001: 37; Audet 2006: 324) or Cabrito Cream-polychrome: Cabrito Variety (Reents-Budet 1994; Audet 2006: 324; Helmke and Awe 2008: 80).

essentially age-area sorts of arguments: distribution patterns of design micro-styles, distinctive paste or technological characteristics. As such, major ceramic styles (henceforth termed "style groups") have been recognized and investigated in detail, for example the Holmul-dancer group (e.g. Reents-Budet 1985, 1991, 1994: 179*ff*.; Smith 1955: Fig. 2b), the Codex style group (Robicsek and Hales 1981; Reents-Budet and Bishop 1987; Reents-Budet *et al.* 2010), the Black-on-cream group (compare Reents-Budet *et al.* 1994, 2000) or Ik' (Motul de San José) group (Reents-Budet *et al.* 2007; Velásquez 2008, 2010); next to others. Slowly it becomes possible to assign ceramic specimen to specific regional traits within these major classes, while the possibility to identify the provenance of looted material is simplified by advancements in the decipherment of hieroglyphic inscriptions (regional or toponymic titles, linguistic peculiarities, etc., all having the potential of serving as distinctive tracers).

However, there is a need for more explicit archaeological indicators of occupational specialization or types of local production. Next to the study of ceramic environments and the technological study of clays and pottery, this need concerns distinct relative degrees of variability or diversity, that is to say 'quality control' in technological and other properties of pottery through time, and considering increasing social complexity. To make up for the lack of this sort of investigation, attempts should be made to define the 'effective ceramic environment' through analysis of the quantity *and* the quality of available resources. This distinction of quantitative and qualitative aspects of craft production should thereby not only be applied to the study of non-elite ceramic assemblages ('village traditions'), but rather serves likewise for the study of painted polychromes through the recognition of micro-styles and the evolution of 'palace school' traditions. Instead, more attention should be given to distinctive regional patterns and individual styles of elite representation in order to understand the evolution of particular 'palace schools', and to assign them in space and time. Nevertheless, it is worth repeating that "attempts to pigeonhole all known examples of certain painting styles into the Chinos-Black-oncream [or Zacatel Cream-polychrome or any other hypothetical and arbitrarily defined] groups and its consistent types are both inappropriate and erroneous" (Ball in Reents-Budet 1994: 243).

A STYLISTIC APPRAISAL TO NORTH-EASTERN PETEN WORKSHOPS (XULTUN, YOOTZ, AND RÍO AZUL)

The delimitation and localization of production zones of elaborate polychrome ceramics are difficult tasks, especially in those areas that suffered continuously from heavy looting activities. Unfortunately this is exceptionally true for sites like Xultun, located in the still hardly accessible and barely investigated north-eastern Peten region (Figure 1, Von Euw 1987). Situated halfway between Tikal and Río Azul, the city of Xultun surely had a significant impact on political and economic networks in the Three-Rivers-Region and beyond this area, from Preclassic, until Terminal Classic times (Garrison and Stuart 2004; Matteo and Krempel 2011a; Saturno et al. 2011; William Saturno pers. comm. 2012). However, investigations of the region between the neighbouring site of San Bartolo and the site core of Xultun have just recently begun, already bringing astonishing stucco façades and Late Classic mural paintings to light (Saturno et al. 2011). What can actually be deduced for the moment is that next to nothing is known about the more than 16 km² spanning area that probably formed the core area of Xultun. Since the baax witz (Xultun) emblem glyph is attested on local monuments as well as on the newly discovered mural paintings, there can be no doubt that the residence of the Xultun Court was located in the centre of the site. Therefore, it is hoped that currently ongoing excavations and work by independent researchers will reveal more historical narratives in the future, be it due to monumental or pottery finds in situ, or the appearance of more previously looted material in private collections. Until then, the study of Xultun's history will mostly and necessarily rely on its written legacy, that is to say,



Fig. 1. Map of Xultun and sites mentioned in the text (map by Sebastian Matteo).

heavily eroded monuments and unprovenanced ceramics. Based on studies of several pottery samples, the authors recently proposed a preliminary census of Xultun's nobility (Matteo and Krempel 2011). In company with Christian Prager and Elisabeth Wagner (Prager *et. al* 2010), we further proposed a reading for a toponymic title associated with the Xultun polity (belonging to the category of so called "problematic emblem glyphs", see Houston 1986: 8). Thereby, the name of the site core of Xultun has been deciphered as *Baax Witz*, 'Quartzite- or Hammerstone Mountain'.

Concerning the noble house of Yootz, which is of great significance for our present study, as will be illuminated in the forthcoming, we are even lacking any archaeological data, since an archaeological site pertaining to the emblem glyph of Yootz has not been identified yet. The emblem glyph of the Yootz dynasty was initially recognized and described by Erik Boot (1999). Thanks to foreign mentions in the monumental inscriptions of Naranjo, and striking similarities in style of polychrome ceramics associated with Xultun, the residence of the Yootz-dynasty is assumed to have been situated somewhere in the sphere of influence between Xultun and Naranjo (Boot 1999: 41;

Krempel and Matteo 2009, 2010: 1225). The case of Yootz already demonstrates how the ongoing progress in epigraphic research greatly contributes to the understanding of the behavioural and socioeconomic functions of Late Classic polychrome ceramics, and it is by means of comparisons of styles articulating elite representation, by investigating distribution patterns of particular motifs and mentions of their places of origin in foreign inscriptions, that the possible location of not yet localised sites may eventually be detected in the future. However, an archaeological site directly corresponding to a specific polity may, in some cases, never be found, as the majority of ceramics have been sacked out of their original contexts and the ultimate proof in form of an emblem glyph (and other toponymic records) found in situ still stands out in most cases². Furthermore, the lack of monumental inscriptions, especially at seemingly 'minor centres' (Iannone 2004), complicates the assignment of any object to a specific place of origin. Not to mention the fact that some members of royal courts abandoned, moved or re-founded their residences during the course of history. As Joseph Ball (1993: 259) stipulated already two decades ago, "ceramics should be able to provide a portable object complement to Emblem Glyph distributions". Here, we seek to illuminate that both approaches actually serve a complementary purpose when considering the distribution of both, toponymic titles on the one hand, and local stylistic traits of ceramic production on the other. Ball further stated that, "for this to be realized, however, will require greater efforts to identify accurately and associate correctly individual production schools and their centres" (Ball 1993: 259ff.). It is precisely this aim that we are attempting here by focusing on the available ceramic sources that can be assigned to the master scribes of the north-eastern Peten region, their characteristic painting traditions, and the 'palace schools' of Xultun and its hinterlands in particular.

THE DEFINITION AND CLASSIFICATION OF PAINTING STYLES AND CORRESPONDING 'SCHOOLS'

Concerning the identification and classification of painting styles, Maya studies are still in the very beginning, regarding the classification of the great diversity of pottery production during the Late Classic period. Several works already focussed on descriptions and classifications of regional or site-specific samples of painted polychromes. However, given the immense and sometimes bewildering quantity of arbitrarily chosen terms for types and corresponding variants, our field needs better definitions and methods allowing for an identification of, or at least an approximation to, the numerous yet unclassified 'elite' styles that local 'palace workshops' and 'village traditions' manufactured and redistributed during the Late Classic period (AD 700-850).

"Doomed to failure" (Adams 2008), the type-variety system was developed by archaeologists in the mid 20th century (e.g. Smith *et al.* 1960), having evolved to the most commonly adopted classification system in Maya archaeology. It is supposed to "afford the mass-handling of data in order to effect chronological series and organize it into categories which can be interpreted according to socio-cultural

 $^{^2}$ Furthermore it should be emphasized that the appearance of an emblem glyph or other toponymic title cannot be interpreted as direct evidence for a place of origin since polities may have moved to other place, an emblem glyph may not necessarily be restricted to one particular place, and in many cases it was a scribe of a distinct polity painting a text according to his proper tradition, but dedicating the symbolic good to a noble from another polity (see vessel K2295 for example, analysed at the end the present publication). In most cases it is the recipient and consumer of the good who is mentioned in the dedicatory formulae, but it is the scribe who left his signature and in rare cases, when courtly scenes are depicted, these are records of events (feasts, ball-games, or tribute sceneries) that took place at foreign sites, most often the place from where the scribe originated (that is not necessarily the home town of the recipient).

significance" (Adams 1971: 6). The quantities of pottery sherds are commonly sorted into types, which are arbitrarily classified by applying the type-variety system, thus specifying regional or local, that is site-specific, samples, divided into types composed of similar decoration and surface finish. However, as Inomata (2010: 159) states, "qualitative data organized into classificatory schemes such as the type-variety system facilitate the extraction of overall patterns, but limit the possibility of analysis from different perspectives". As Donald Forsyth puts it, "although this approach is a common classificatory scheme, other approaches are possible and desirable" (1989: 3). Unavoidably, the type-variety classificatory system implies some methodological problems and inconsistencies (see Smith 1979). One of these, as stated by Richard Adams (1971: 30, 2008), is that the ceramics groups and types cannot appear in different ceramic complexes even if continuity is clearly observable between various artefacts. In this perspective, "genealogically related" artefacts were declared as unrelated by assigning them to inflexible, only site-specific features and therefore useless categories (Smith 1979, Adams 2008). As it has been proposed by several ceramicists (see Forsyth 1989: 3ff.), the type-variety system has to be taken as a preliminary attempt of classification, and not as a static classificatory system, and it certainly does not allow a comprehensive classification of stylistic, qualitative variations.

Another important point to be taken into consideration is the difference between the spheres of pottery pertaining to certain social segments (popular vs. utilitarian ware), surely showing different behavioural patterns of circulation. As such, a significant feature of many elite ceramics is the presence of primary (dedicatory formulas) and secondary texts. Although literacy was probably not restrained to members of the royal elite, it can be taken for granted that most of the highly elaborately painted ceramics bearing hieroglyphic inscriptions, especially the ones presenting names and titles associated with a particular royal elite, were belongings of or at least dedicated to members of the royal court/upper class society.

For that reason, it is necessary to recognize and interpret the written sources that are mainly bequeathed to us by the elaborately painted dedicatory texts, also known as PSS (Primary Standard Sequence, Coe 1973). As Nikolai Grube (1990: 320) formulates it accurately, "The PSS is a highly repetitious text that occurs usually as a rim text on many ceramic vessels from all parts of the Maya Lowlands. The PSS is a glyphic formula that refers to the dedication of a vessel, its method of adornment, the class of vessel involved, its use and content [...] and sometimes the owner or the artisan". Since its first recognition, the general content of the dedicatory texts (PSS) has been progressively deciphered. Epigraphic and linguistic analyses have partially illuminated the semantics of these highly standardized dedicatory texts (Grube 1990; Grube and Gaida 2006; MacLeod 1990a, 1990b). However, thorough investigations concerned with graphic variations of signs within the corpus of dedicatory texts have been underestimated, and the peculiarities of linguistic traits and their geographic distribution were not sufficiently taken into consideration (e.g. Reents-Budet 1994: 135); at any rate, this applies for the numerous unprovenanced polychromes that are assumed to originate from the north-eastern Peten region. Various scholar have already worked on NE-Peten ceramics, including for example Erik Boot's research on calligraphy and regional stylistic traits (e.g.1999, 2000, 2004, 2005a) and Dorie Reents-Budet's studies on painting styles (e.g. 1985; Reents-Budet et al. 1994, 2000).

DEFINING NORTH-EASTERN PETEN CERAMIC SPHERES AND STYLES

For the recognition, definition and description of styles pertaining to the greater north-eastern Peten regions, we rely on the terms and standards that have been established by previous research at nearby sites, such as Smith's (1955, 1966; Smith *et al.* 1960) study of the ceramics at Uaxactun,

Adams research at Río Azul (Adams 1981, 1999) and Altar de Sacrificios (Adams 1971), Forsyth at Nakbe (1989), Coggins's (1975) and Culbert's (1993) work at Tikal as well as Gifford's analyses of the Barton Ramie materials (Gifford 1976). As a matter of fact, such classificatory standards are not yet available for the principal centre of Xultun and neighbouring sites, and it shall be maintained that there is a need for classification and a chronological sequencing of Xultun ceramics that cannot be solved in the scope of our present study. However, the lack of material uncovered in archaeological context forces us to apply already established type-variety terms when necessary, for the sake of simplicity. Alternatively, we chose to group our samples by means of similarities in style (style groups) and verify our assignments by epigraphic evidence³. Some regional stylistic patterns of north-eastern Peten ware have initially been identified and described by Dorie Reents-Budet (1994, Reents-Budet et al. 2000), as specimen of this kind were erroneously considered as Codex style in previous studies (e.g. Robiscek and Hales 1981: vessels 179, 181-5, Tables 2g, 3c, 3e; Kerr n.d. comments on vessels K2324, K3025, K4997, K5629). Despite the remarkable quantity of vessels assigned to the nobility of Xultun (see Matteo and Krempel 2011a), certain elements of the north-eastern Peten styles were also favoured by and produced for rulers of distinct polities, such as Río Azul, Yootz, Los Alacranes and other sites with comparable workshop traditions that are seemingly related to Xultun's 'palace schools' (Boot 2004, 2005a; Helmke in press; Krempel and Matteo 2010; Matteo and Krempel 2011a: 963-964;). Forming great part of the Eastern and north-eastern Peten samples, Chinos Black-on-cream and Zacatel Cream-polychromes turned out to be of major significance in terms of quantity and quality associated with Xultun's production, whilst other painting traditions have hitherto not been recognized as 'styles' originating from Xultun properly-speaking.

THE "CHAÎNE OPÉRATOIRE"

In order to provide a solid framework and general terms for a formal description and classification of our ceramic samples and the "styles" that we are seeking to illuminate here, we follow a combined ethno-archaeological and art historical approach that takes the so called *chaîne opératoire* (e.g. Lemonnier 1976; Leroi-Gourhan 1995: 69) into consideration. The chaîne opératoire comprises the general production steps forming a raw (that is primary) matter (matière première) into a finished product (see Table 1). In our case study, the potters manufacturing the elaborate polychromes unavoidably followed five individual steps of production: 1.clay extraction, 2. paste preparation, 3. elaboration of the vessel, 4. decoration, and 5. firing. Potters of all cultures and ages are concerned with these individual production steps, and the features of the "chaîne opératoire" are universal characteristics that allow for the derivation of useful and plausible generic terms that can be applied to the classification and definition of Maya ceramics and corresponding painting styles. These steps, commonly shared and executed by all potters, are at the same time pertaining properly to each one in their characteristics, allowing thus stylistic classifications using all the analysable characteristics available from a given artefact as it was convincingly exemplified in recent studies (Corniquet in prep.; Leroi-Gourhan 1995; Villaseñor 2010: 69ff.). Hitherto proved useful as analytical approach for study of stone production, we seek to adopt the *chaîne opératoire* to the study of Classic Maya pottery. Sadly, this tool cannot be used to its full extent in the perspective of our study, since the only element left to us of the *chaîne* opératoire is the artefact itself, mute legacy on the processes used for its elaboration. Fortunately,

³ Special thanks to Christophe Helmke for having discussed and commented on the classification and grouping of the ceramics discussed in this paper and who kindly shared his insights with us and reviewed earlier drafts of our paper.

| 1. Clay extraction (and tools) | Pit extraction, surface collection, underground gallery, underwater extraction, etc. | | | | |
|--------------------------------|--|--|------------------------------------|---|--|
| 2. Clay processing | Paste elaboration (or in archaeological terms: chemical profile of the paste) | | | | |
| 3. Elaboration of the Ceramic | Method of elaboration | | | | |
| recipient | Shape/type of the recipient | | | | |
| | Method of decoration | Painting | | | |
| | | Incising | | | |
| | | Modelling | | | |
| | Imagery | Thematic | | | |
| | | Iconographic program(me) | | | |
| | Writing | Calligraphy, composition/organization of the text (horizontal, vertical, or otherwise) | | | |
| | | Type of text | 'Pseudo'-Glyphs | | |
| 4. Decoration | | | Primary Standard Sequence (PSS) | Structure | |
| | | | | Selected Signs | |
| | | | | Selected words (e.g. verbs, titles, etc.) | |
| | | | | Linguistic particularities | |
| | | | | etc. | |
| | | | Secondary Text | | |
| 5. Firing | | | | | |

Table 1. Stylistic criteria for the classification of decorated ceramics, the "Chaîne opératoire"

some of those now extinct elements are partially recoverable through analysis of the proper artefact: paste preparation technique (through chemical analyses) or decoration (study of décor, imagery and inscriptions). Thereby, the consideration of this tool has the advantage of fixing and representing a clear and encompassing list of characteristic elements that were produced (imprinted) by the human behind the artefact, his act being conscious or not, and to allow the creation of future categories or nomenclatures, all based on reasonable material foundations.

Necessarily, our present study focuses on the penultimate production step, the decoration, and the surface finish of the vessels. Due to the fact that our sample comprises artefacts that are not available for close inspection and thorough direct examination, and no data derived from chemical analysis is available to us, the first three individual steps of production cannot be taken into consideration. Here, the subcategories "imagery" and "writing" are our major concern and we are favouring a paleographic approach, including epigraphic, iconographic, and stylistic analysis for the sake of defining distinctive Late Classic painting traditions that were realized by the artists of the NE-Peten region. By doing so, we seek to illuminate the painting styles of Xultun artists in particular in order to distinguish these products from other painting traditions associated with related, but nevertheless distinct "palace schools".

IMPLICATIONS FOR THE STUDY OF REGIONAL PSS VARIATIONS AS STYLISTIC TOOL

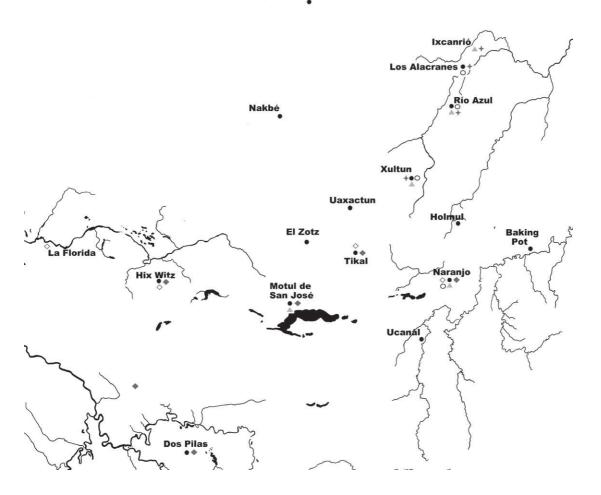
Since we are lacking data concerning the provenance of the majority of looted ceramics, the construction of a systematic tool allowing for qualitative investigations of local stylistic traits and their variations becomes significant for the study of Late Classic Maya ceramics. As it was specified above, the full range of each step of the *chaîne opératoire* has hitherto barely been studied in a systematic way. We also proposed earlier that among the decoration categories, the PSS bears the potential of an extraordinary promising tool that has been largely underestimated in previous studies⁴. This approach makes it possible to conclude upon specific regional traits and to create certain ceramic groups by the help of mentioned categories, reason why we would like to stress the advantages of studying regional PSS variations in the following. Nonetheless, we shall emphasize that no 'tool' will ever provide a recovery of the archaeological context, and it goes without mentioning that it can never substitute for a thorough excavation.

As a matter of fact, the already great amount of known dedicatory texts testifies for significant variations in various aspects: rendering of outlines (calligraphy), the thickness and colour of lines, proper syntax and linguistics, the use of peculiar or regionally signs of limited distribution, etc.. Thereby, each variation pattern serves as a parameter that testifies for, be it intentional or not, regional customs, traditions, aesthetics and individual choices or certain habits of the scribes. Through the recognition of these distinctive variants in each section of the PSS, it is possible to create useful databases allowing for a clustering and systematic sampling of various stylistic features and ceramic groups. In a next step, the isolated groups are then defined as styles and articulated through the axis of macro-styles ~ micro-style; depending on the geographical distribution of selected features and characteristic traits.

For the sake of understanding this approach, the distribution of the common and as yet undeciphered God N verb shall be exemplified (Figure 2). The **GOD.N-yi** collocation appears in virtually the entire Peten region (area wide). In contrast, other dedication verbs, as for example the *k'ahlaj-t'abaay* verbal duet appears only in a limited regional sphere, in the latter case spanning the realm of Ik' (Motul de San José) and Naranjo. Worth noting is the absence of this dual verbal expression in most of the texts from the Codex style region (generally associated with the greater Mirador Basin and sites such as Calakmul, Nakbe, next to others) and PSSes painted in the manner of western Peten styles (associated with sites like, for example, El Peru, El Zotz, La Florida, next to others, see Jørgensen and Krempel in prep.). Another verb is the breath sign, possibly written **UH(-yi)**, to be read *uh(-uuy)* 'to sanctify, made sacred' (Grube and Gaida 2006: 66) that is only attested for scribes originating from Río Azul and Xultun. Yet another regional indicator of the PSS is the 'footprint glyph', T301, with phonetic value **bi**. Indeed, this syllable is exclusively present in hieroglyphic texts appearing on products from the greater north-eastern lowlands. A last example is the *yich/jich* compound that is mostly limited to the western and central Peten.

Appraising a general outline in a first step and a distinction and site-specific assignments of the vessels included in our sample, the general characteristic features that serve to recognize and define the painting traditions of the north-eastern Peten (that are the regional stylistic traditions to which the products manufactured in the 'palace schools' of Xultun and sites in the vicinity can be assigned to) shall be exemplified in the forthcoming.

⁴ We are greatly indebted to Erik Boot for his workshop tutored during the 10th EMC in Leyden (2005), entitled "Classic Maya Ceramics: Regional Variation in Primary and Secondary Hieroglyphic Texts", and numerous personal communications that were major inspirations for our research on regional patterns of dedicatory formulas.



Calakmul

Fig. 2. Map showing the distribution of distinct verbal phrases:

- GOD.N-yi
- ◇ K'AL-ja
 ◆ K'AL-ja GOD.N-yi
- ⊖ T'AB-yi
- UH-yi
- the 'FOOTPRINT' syllabogram with phonetic value **bi** (map by Sebastian Matteo).

I

Painting Styles of the North-Eastern Peten from a Local Perspective...

Paste elaboration

• Chemical analysis of paste and clay sources from north and north-eastern Peten ware were conducted by Reents-Budet and Bishop through various studies (Reents-Budet 1994, Reents-Budet *et al.* 2000), but unfortunately the primary data concerning paste and clay compoundings are barely accessible; despite the fact that the majority of tested ceramics is not available for a thorough analysis.

Vessel forms (elaboration of the vessel)

• the vessels are generally higher than wide (in contrast to some other styles, e.g. Codex, Chama), prominent vessel types are *jaay* 'clay-bowl', *uk'ib* ('drinking vessels'), *lak* ('plates'), *jawante'*, *ajaljib* ('awakening dishes', see Boot 2005a), also rare and innovative forms such as a *pokolche'hb* ('quill-cleaning bowl') and round-sided bowls with stands (simply named *otot*, Boot 2009b).

Decorations (painting)

• restricted colour palette (background and line frequently rendered in two colours) and few shaded tones

• in contrast to the majority of painting styles, large zones of the pictorial space (the background) can be left blank

Decoration (Imagery)

• 'negative' patterns, that is to say, forms delimited by filled surface instead of lines delimiting uncolored surface (*Hu'unal*, *K'awiil*, 'fleur-de-lis', and Centipede motifs)

• Imagery and text sometimes painted diagonally (e.g. at Xultun K3500, K4387, K4909; Río Azul K2295, K5022, K7459?, north-eastern Peten K3025, K5366)

Decoration (writing)

• an occasional use of the T591sign **WAY**, substituting for the initial sign **ALAY** (K2295 from Río Azul, K5366 and K5722 from the Xultun region)

• the very frequent use of the 'STEP' sign, T843 (**T'AB**), for the verbal root *t'ab*- during the Late Classic Period (attested for Holmul, Los Alacranes, Río Azul. This last title is also frequently present on Codex Style ceramics from the El Mirador Basin. Other titles appear frequently on ceramics from the north-eastern Peten region: *uyul ch'e'n(ab), uxlaju'n tzuk* (Beliaev 2000), and *(chak) lal.* Likewise common are the titles *baah kab, lakam* (Lacadena 2008) and *yok'in* (alternatively *yosoon* or even *yootz'soon* as proposed by Christophe Helmke, pers. comm. 2011), all of which are still barely understood, but constitute distinctive traits of north-eastern Peten ceramic texts, that can be assigned to this greater area (e.g. K4387, K5366, K7149, Boot 2004).

• The presence of names, emblem glyphs and titles clearly related to archaeological sites and their decisive royal courts that are located in the NE-Peten (e.g. *baax witz ajaw* [Xultun], *k'abte' winik* [Xultun], *ho' pet ux haabte' ajaw* [Río Azul], *n...? ajaw* [Río Azul], *bu'k' ajaw* [Los Alacranes], *yootz ajaw* [unknown site], next to others).

THE 'PALACE SCHOOL' OF YAX WE'EN CHAN K'INICH AT XULTUN

In a previous study (Matteo and Krempel 2011a), the characteristics of Xultun products, the analysis of their dedicatory texts, as well as the presence of the *baax witz* emblem (see Prager *et al.* 2010) and

148

Guido Krempel, Sebastian Matteo

other toponymic titles (e.g *uxlaju'n tzuk, k'abte' winik*) led to the identification of various members of the Xultun court (see also Garrison and Stuart 2004). Thereby, one character turned out to be of special importance for the analysis of ceramic styles associated with Xultun: the ruler *Yax We'en Chan K'inich*. Fortunately, a relatively great amount of four vessels attributed to this individual allowed us to isolate a sample for the purpose of studying local ceramic production that supposedly covers only a limited period of time, approximately spanning the midst of the 8th century AD. Henceforth, the characteristics of vessels that were painted in honour of this ruler will be exemplified by a brief comparison of polychromes resembling distinct styles that can all be assigned to this prominent figure and his devoted master artists.

BLACK-ON-CREAM POLYCHROMES

To date, a total amount of four vessels bearing the name of an individual named Yax We'en Chan K'inich, who surely was a Late Classic ruler of Xultun, are known to us so far. Applying the typevariety classification, three of them can be labelled as Chinos Black-on-cream: Chinos variety (K4388, Figure 3a and 4g; Robicsek and Hales 1981: Table 2g, see Figures 3d and 4a; and K2324, Figures 3c and 4b). Each of the three vessels bears the proper name of Yax We'en Chan K'inich; one being a cylinder decorated with "rabbit ear quatrefoil" motifs and shaped by angular creases, whereas the two other vessels are low bowls with outstanding walls. On two of these vessels (Figures 3c-d, and 4a-b) the name of the lord is followed by the *baax witz* emblem glyph, identifying him clearly as Xultun ruler. A strikingly similar bowl, also pertaining to the group of Black-on-cream vessels, is dedicated to another ruler of Xultun (Figures 3f and 4c), nicknamed "Scroll Head" Ti'Kuy (see Matteo and Krempel 2011a: 961). The latter showing clear similarity in shape and decoration compared to the bowl of Yax We'en Chan K'inich (Figures 3d and 4a). Both vessels are flat bowls with outstanding walls, with rims decorated with black bands and a PSS equally painted in black. The outlines of the glyphs are thick and the inner details painted with thinner lines. Due to the similarities in hand writing and style, it is tempting to assume that the artisans who decorated these vessels were either one and the same scribe or trained in the same workshop, manufacturing for at least two consecutive members of Xultun's elite. A comparison of Figure 4a and 4g, both vessels belonging to Yax We'en Chan K'inich, further leads to assume that they originate from the same workshop, as is probably true for a cylindrical vessel (pertaining to the Cabrito Cream-polychrome group, but too uncommon for typological classification, compare to Reents-Budet 1994: 319) that is equally painted in Black-on-cream and can be assigned to the greater Black-on-cream group (K2324, Figure 4b). Noteworthy, the latter is dedicated to the son of Yax We'en Chan K'inich (Matteo and Krempel 2011a: 960). The name of this king, ? Muyal ? *Chan Chaahk*⁵, is partially eroded, but as his father, he can be identified as a Xultun lord, thanks to the presence of the baax witz ajaw title, and additionally discernible by the still elusive but only locally used k'uhul k'abte' yok'in? title. Remarkable is the fact that the parentage statements to his mother (*u baah u ju'ntan*)⁶ and to his father (*u mijiin?*) are preserved in the same text (Figure 3c), thereby

⁵ MUYAL-?-li? IK'-MIJIN?-? CHAN-na-CHAK-ki (K2324: B2-A4).

⁶ The spelling of the word *baah* (**BAH-ji**, usually written **BAH-hi**) on K2324 shows that by the time of production the vessel was produced the difference between the velar spirant /h/ and the glottal spirant /j/ had already been lost. As has been demonstrated by Nikolai Grube (2004b: 79), the absence of differentiation between these two sounds began in the Belize and eastern Peten regions during the 14th katun of the 9th baktun cycle (9.14.0.0.0 ~ 9.15.0.0.0, 711~731 A.D.) as for example, on Naranjo Stela 2 (9.13.5.0.0). This implies, that the vessel discussed herein, was probably not produced before that period.

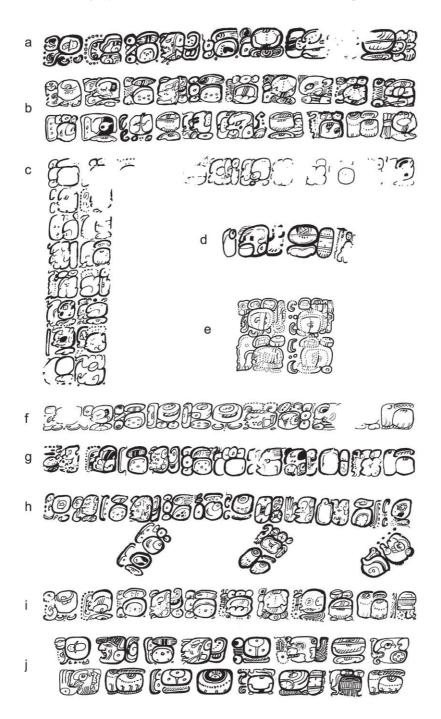


Fig. 3. Examples of 'NE-Peten Style' dedicatory formulae: a) K4388; b) 4572; c) K2324 d) Robicsek & Hales 1981: Table 2g; e) detail of Naranjo Stela 2; f) MFA Boston n° inv.1839; g) K8007; h) K4387; i) K8728; j) The plate of *Taxin Chan* (All drawings by Sebastian Matteo, except b) by Dorie Reents-Budet, e) and j) by Guido Krempel)

offering us the hitherto single clearly expressed kinship relation and familiar nucleus of Late Classic Xultun⁷.

The Chinos Black-on-cream type is widely distributed in the central and eastern Peten and was initially attested at Uaxactun (Smith 1955; Smith and Gifford 1966:156). Furthermore, this style is attested at Belizean sites such as Buenavista del Cayo, Cahal Pech, Las Ruinas de Arenal, Baking Pot, Caracol, Holmul, Chunhuitz, next to others (Gifford 1976; Reents-Budet *et al.* 2000). In addition, similar ware appears in the Guatemalan lowlands, where it is assigned to Naranjo, Holmul, Río Azul, and in considerable amount also associated with Yootz and Xultun (Boot 1999, 2004, 2005a; Krempel and Matteo 2009, 2010; Matteo and Krempel 2011a).

In short, the Black-on-cream group appears to be manufactured by multiple workshops and got distributed from the Central Lowlands up to the Belizean Coast. Only few can be traced back to their workshop of origin, not at least due to the low amount of completely preserved and published vessels. Both, the Chinos Black-on-cream and the Zacatel Cream-polychrome ceramic types encompass the most common open vessel forms, including tripod plates, 'awakening dishes' (*ajaljib*, Boot 2005a), cylindrical vessels (*uk'ib*), out-flared bowls or dishes and round sided bowls, next to other less common and innovative forms (K6882) (see Figures 4 and 5). The great variation in the manufacturing of innovative vessels forms testifies for the fact that several potters originating from the north-eastern Peten region were able to achieve highly elaborately painted ceramics (Reents-Budet 1994: 330).

RED-ON-CREAM POLYCHROMES

In the forthcoming, it will be illuminated that the quality of the painting differs not only regionally, but also locally, as site-specific samples can be distinguished by a thorough comparison of the greater Zacatel- and Cabrito Cream-polychromes and Chinos Black-on-cream ceramics, respectively. The study of these specialized techniques includes macro-scale (area wide) as well as micro-scale (regional, up to site-specific) analysis. On a group wide level, the study provides social and cultural implications for which an understanding and differentiation of specialized production is of crucial significance. A distinctive ceramic variety decorated by applying a low-firing painting technique resulting in different colour shades is generally described as Zacatel Cream-polychrome: Cabrito pottery and comprises diverse varieties of which the most prominent are exemplified in the following, as at least three peculiar styles are intimately related to the workshops of Yax We'en Chan K'inich and consorts (Figure 6).

THE PANELA GROUP

Of the four vessels bearing the name of *Yax We'en Chan K'inich*, one (Figures 3b and 6c) is rendered in a style that may best be designated by means of applying an already established term of the type-variety-mode system, known as Zacatel Cream-polychrome: Panela Variety (see also Reents-Budet 1994: 330). The basic characteristics of the Panela variety are the outlines of the glyphs and iconography rendered in orange colour, while the space between the glyphs in the PSS

150

⁷ This father-son relation is the first attested relationship expression for the Late Classic: earlier kinship ties are testified for the Early Classic Court of Xultun, one with ties to Caracol, while a later record of a father-son relationship on a Early Classic vessel (K5357) is dedicated to a ruler of the *Baax Witz* Court (Garrison and Stuart 2004; Matteo and Krempel 2011a: 959-960).

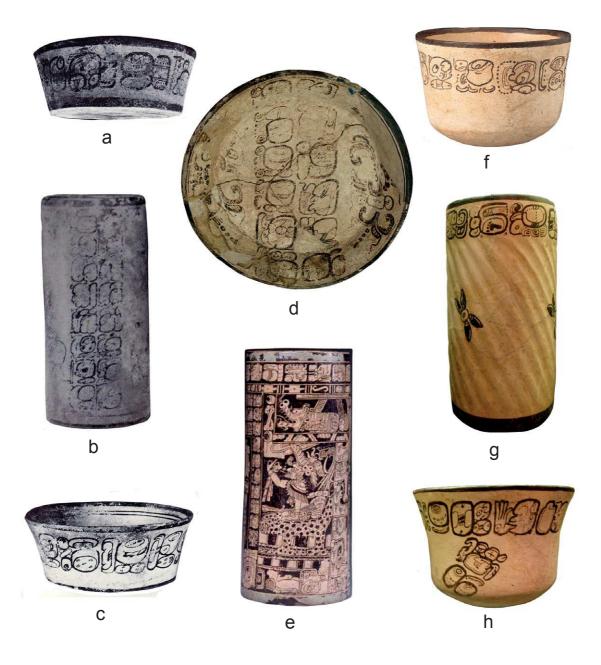


Fig. 4. The Black-on-cream Group: a) the vessel of *Yax We'en Chan K'inich* (adapted from Robiscek and Hales 1981: Table 2g); b) the vessel of ? *Muyal Chan Chaahk* (adapted from Sotheby's auction catalogue May 1985, Lot 223); c) vessel of "Scroll Head" *Ti' Kuy* (adapted from Robiscek and Hales 1981: Table 3e); d) plate in private collection (Photo by Guido Krempel); e) K2796 (photo by Justin Kerr); f) vessel in private collection (photo by Yuriy Polyukhovich); g) vessel mentioning *Yax We'en Chan K'inich*, private collection (photo by Yuriy Polyukhovich); h) vessel in private collection





Fig. 5. The Hu'unal Group: a) K8278 (photo by Justin Kerr); b) vessel in private collection c) K8007, Morley Museum, Tikal (adapted from Eggebrecht *et al.* 1993: 383, Fig. 74); d) K7055 (rollout photograph by Justin Kerr).

152

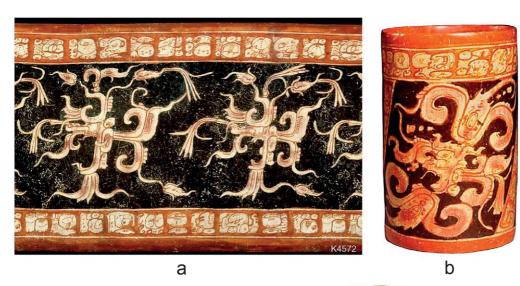






Fig. 6. The Panela Group: a) K4572 (rollout by Justin Kerr); b) K5366 (photo by Justin Kerr); c) vessel in the Janssen Collection, Antwerp Museum (photo by Sebastian Matteo); d) plate in the National Museum Guatemala City; e) vessel in private collection (adapted from Gercke and Schmidt 1992: 359, Fig. 342); f) K9153, private collection (photo by Yuriy Polyukhovych).

l

shows an (reddish) orange fill, and the space between the iconographic motifs (the background) is characteristically painted in black.

Such Panela varieties appear in a remarkable amount of different dimensions and forms (Figure 6). As for our sample, only a single emblem glyph, that is the one carried by Yax We'en Chan K'inich, can be identified so far, allowing for a clear attribution of this ceramic group to Xultun's polity and the 'Palace School' of Yax We'en Chan K'inich in particular (Figures 3b and 6a, K4752). The similarities of several unprovenanced specimens (K4752, 6882, 9153) provide us with a sufficient amount to assume that the majority of the given sample (Figure 6) was manufactured in the very same workshop. However, as is true for the before mentioned Chinos Black-on-cream or Zacatel Cream-polychromes, different loci of origin or "palace schools" producing Panela varieties can be assumed. This is supported by similarities in calligraphy, the painting composition and the choice of motifs (depictions of the deity K'awiil, the 'Jester god' motif, henceforth called "Hu'unal") that are in many cases rendered in similar style. Note, for example, that the central K'awill motif depicted in the centre of a plate rendered in Panela variety (Figure 6d) (Muñoz et al. 1999: Cat.No.210/MNAE inv. N° 16.299), constitutes the headdress of the human figure depicted on a plate in similar painting style (Sotheby's 2004: lot 92, compare also to K1837). In contrast, the four zoomorphic creatures depicted on the rim of the same plate resemble very much the vegetal Hu'unal motifs (probably a stylised ficus tree, Boot 2005a; Krempel and Matteo 2009: 245) that is likewise painted on the cylindrical vessel of Yax We'en Chan K'inich (K4572, Figure 6a). In fact, the Hu'unal motif substitutes frequently for K'awiil and appears to be the most prominent motif of Xultun imagery.

THE HU'UNAL GROUP

The painting composition and rendering of the zoomorphic head of the Hu'unal entity, that is frequently present on Panela ceramics, appear in a similar way on two cylindrical vessels of equal dimensions (K7055, Figure 5d; K8728, Figure 5a), but of distinctive style and different choice of colour. Because these Red-on-cream cylinders are too uncommon to assign them to a specific variety. they are labelled as Zacatel Cream Polychromes: Cabrito Varieties, following an already established term, but assigned to the "Hu'unal group", as we like to stress the iconographic similarities and diversity. In contrast to the Panela varieties, the blank space between the two Hu'unal heads is not filled with black colour, but shows a deep red colour instead. Another difference can be illuminated by a comparison of the dedicatory texts, the background of which was left blank on K7055 (Figures 5a, c, d). The text and iconography are painted with a black outline, whereas the text and imagery of the vessels of Yax We'en Chan K'inich are rendered in red. Attested by this vessel as well as the three before mentioned vessels of the Black-on-cream group (Figures 4a-d), all ascribed to Yax We'en Chan K'inich (K4572, Figure 6a), we certainly know that he was a member of Xultun's nobility. However, from the other pair of Hu'unal vessels (K7055, K8728, Figures 5a-b), only one individual called Taxin Chan Ajaw (Figures 3i and 5a), can clearly be identified by a toponymic title (Krempel and Matteo 2009, 2010: 1221-1222). Interestingly, this toponym is not associated with Xultun, but rather constitutes the emblem glyph of a distinct site: Yootz (see Boot 1999). Here, even more interesting is the fact that the Yootz title is specified by the agentive prefix aj- 'he from', instead of a 'complete' emblem glyph (vootz ajaw) in order to describe the recipient's place of origin. This leads to suggest that the owner of the vessel was perceived as a foreigner by the Xultun artist who painted this vessel. Thus, we are provided with an exotoponymic reference that was intentionally rendered by an artist who was in charge of a particular 'palace school' at Xultun. Most likely it was the local ruler, Yax We'en



Fig. 7. Vessels dedicated to members of the Yootz nobility: a) K7786; b) K4669; c) K8728 (photos by Justin Kerr); d) the plate of *Taxin Chan*, Ethnologisches Museum Berlin (photo by Guido Krempel).

l

Chan K'inich, who arranged the production of the vessel by allotting his devoted artist to dedicate the vessel to a high ranking ally originating from or living at the Court of Yootz.

Just recently, a hitherto unpublished vessel belonging to the very same set of 'Hu'unal-theme' cylindrical vessels was surprisingly found on the Internet platform Flickr (Figure 5b). Unfortunately, only one image of the vessel is available to us yet, but enough information can be discerned to assign the vessel to a high ranking noble, a 'worshipper' or *ajk'uhu'n* (see Jackson and Stuart 2001; Zender 2004), who was capable of realizing this seemingly localized painting tradition. This vessel appears to be the missing link between the before mentioned sets of Hu'unal vessels with black and deep red backgrounds respectively (see Figures 5a, d, and 6a). The recipient of this vessel may well have been the artist of the object at the same time. It is tempting to assume that the same artist who painted this cylindrical Hu'unal vessel was also responsible for the decoration of the whole set of Hu'unal vessels, including the vessel dedicated to *Yax We'en Chan K'inich* (K4572, Figure 6a), the ones gifted to the noble house of Yootz (K8728, Figure 5a), and comparable artefacts (FlickR vessel and K7055, Figures 5b and d). In other words, this master artist was a noble of high rank, most probably himself member of the royal court, and devoted to the local ruler of Xultun. Unfortunately, the name of this artist remains unknown, but his characteristic hand writing, his distinct sign inventory, regional linguistic traits and his proper set of Hu'unal motifs lead to recognize his proper legacy.

The name of *Yax We'en Chan K'inich's* assumed ally, *Taxin Chan* from the noble house of Yootz, also appears on a highly elaborately painted polychrome plate (Figure 7d) that, to date, is exhibited in the Ethnological Museum of Berlin, Germany (Krempel and Matteo 2009). Several titles assign *Taxin Chan* to the Yootz-dynasty as his long titular sequence states that he was a *baah kep?/kelem, baah kab*, and the *lakam* of *K'ahk' Yohl K'inich*, the divine ruler of Yootz. This plate differs greatly from the before mentioned styles that are associated with *Yax We'en Chan K'inich* and consorts, as the plate does closer match in style to the production of the central and eastern Peten region, comparable to artefacts originating from, for example, Naranjo. Thus, the Hu'unal motif, as common as it may appear at Xultun, is likewise represented on this plate from Yootz, and furthermore, on many other vessels clearly originating from distinct painting traditions.

Approximately during the same period of time (AD 725~775), vessels of the Chinos Black-oncream type were also dedicated to the nobility of Yootz. As Erik Boot (1999) recognized, two such vessels (K7786, K4669, Figures 7a-b) were painted by one and the same scribe, and dedicated to *Ahkul Nikte*', who was the *ajk'uhu'n* (lit. 'worshipper', Zender 2004) of *K'ahk' Yohl K'inich*, the ruler of Yootz. The name of the latter is also present on the plate of this rulers' servant, *Taxin Chan*. As a strikingly similar plate from a private collection in Guatemala exemplifies (Figure 4d) (Boot 2005a), the same (Chinos) Black-on-cream painting tradition was likewise common at other places. A comparison of this tripod plate with K4669 illuminates the production of this style by two distinct individuals, who shared a common painting tradition, but can be distinguished by their characteristic hand writing and distinctive sign inventories.

Considering the remarkable amount of both, the Chinos Black-on-cream and Zacatel Creampolychrome connected types associated with individuals from Xultun, or those that were in close contact with an elite workshop in charge of its nobility, we assume that *Yax We'en Chan K'inich* and his successors had a significant impact on the production of these highly specialized 'palace workshops' and the redistribution of their outcome. Next to Xultun and Yootz, other major players such as Naranjo's workshops at Maxam, the rulers of Río Azul, as well as rulers from secondary sites, such as Los Alacranes, Buenavista del Cayo, and the yet unprovenanced house of *Kokom*, profited from the redistribution of Zacatel (and Cabrito) Cream-polychromes and Chinos Black-on-cream ware (see e.g. Reents-Budet and Bishop 2000). Some elite groups surely had their own 'palace workshops', and even 'village traditions' familiar with these painting traditions. Worth mentioning in this context

| Table 2. Approximated placement of rulers from Naranjo | , Yootz, Xultun and Río Azul; | grey sections indicate | | | | |
|--|-------------------------------|------------------------|--|--|--|--|
| similarities in style and shared painting traditions | | | | | | |

| AD | Naranjo | Yootz | Xultun | Rio Azul | |
|------------|--|---|--|--|--|
| 700 | K'ahk' Tiliiw Chan | attacked by Naranjo (AD 706, NAR Stela 2) | ? Chan Ahk ? (Stela 4) | ? | |
| 710 720 | Chaahk (AD 693-728>) + Ix Unen Bahlam from Tubal | Yajawte' K'inich put in office as subject ruler of K'ahk' Tiliiw Chan Chaahk | ? | ? | |
| 730 | 2 | (AD 712<, NAR Stela 22) | (Stela 15) | | |
| 740 | ? | K'ahk' Yohl K'inich , (+Ahkul Nikte') | ? (Stela 14) | ? | |
| 750 760 | K'ahk' Ukalaaw Chan Chaahk (son of K'ahk' Tiliiw Chan Chaahk) (AD 755-780>) | Taxin Chan Ajaw (+ Ix Ch'e'en?)? | <u>Yax We'en Chan</u> <u>K'inich</u> (+ Ix K'uk' ?) | Ajpitzil K'inich | |
| 770 | "Bat" K'awiil; Ajmaxam (son of Aj Tok' Ti') (AD >775) | ? | "Scroll head" Ti' Kuy ?; Muyal Chan Chaahk (son of Yax We'en Chan K'inich) | ? | |
| 780 | Itzamnaaj K'awiil (son of Aj Tok' Ti') (AD 784-810) | ? | Buk'a' (Los Alacranes) captive taken by Xultun (Stela 21) | Tz'ahkaj K'awiil (AD <790, Stela 2) | |

are additional examples of similar painting traditions (of Chinos Black-on-cream, Zacatel Creampolychromes and other related, but less common and undesignated specimen) at Tikal and Uaxactun (e.g. Smith 1955: Fig.61, 1b1). These styles were distributed in a greater scale ranging an area that encompasses both sides of the border crossing of modern Guatemala and Belize (Reents-Budet *et al.* 2000). However, the ceramic distribution around the central lowlands does not yet provide us with sufficient data to conclude upon economic or even political networks, and must not necessarily mirror the political landscape that can, step by step, be reconstructed by epigraphic evidence of sociopolitically motivated (# *tzuk* titles, Grube and Schele 1991; Beliaev 2000) or kinship-related (# *y-ok'in/ yosoon*, Helmke in press) land divisions.

IMPLICATIONS FOR A HISTORICAL SETTING OF XULTUN'S 'PALACE SCHOOLS'

Through the comparative study presented above, it can be surmised that at least four prominent Late Classic painting traditions (ceramic groups or "styles") can be assigned to master artists manufacturing

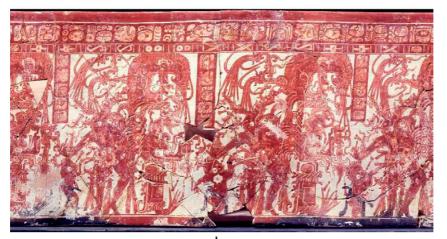
symbolic goods commissioned by or for the king Yax We'en Chan K'inich (the Black-on-cream, Panela, Hu'unal and K'awiil groups). Probably the same artists, and certainly the same workshops also worked for his son, and for yet another ruler of the same polity named "Scroll Head" Ti'Kuy. Thus, it can be assumed that the skilled artists of Xultun's palace schools manufactured for three consecutive rulers (each one bearing his proper baax witz ajaw title) and that their production of symbolic goods, be it for members of the local royal court or for the purpose of gifting symbolic goods to members of other polities, spanned generations through time. Without a doubt, all vessels included in our sample can roughly be dated to the Late Classic period (AD 650-850). However, a more thorough dating requires a historical setting of the here defined "palace schools" of Xultun. To date, we are only aware of one significant monumental record bearing an absolute date, that is the incised text on Stela 2 of Naranjo (Figure 3e), serving us as indirect indicator to place the painting traditions of Xultun in time. This crucial passage records the inauguration (joyaj ti ajawlel) of a Yootz ruler, subject lord (y-ajawte') of K'ahk' Tiliw Chan Chaahk, in AD 712 (Martin and Grube 2008: 76). Here, we propose a reading for the name of this newly inaugurated king as Yajawte' K'inich (ya-AJAW-TE'-K'INICH yo-YOTZ-AJAW). Since the not yet located site of Yootz was attacked already six years before, it is assumed that it was subsequently dominated by Naranjo thereafter, and ruled by Yajawte' K'inich. The focus on Yajawte' K'inich provides us with an anchor for a dating and a chronological setting of the Yootz polity and its consecutive rulers. In turn, the lifetime of the artisans who painted the polychromes for the courtly members of Yootz, commissioned by the rulers of Xultun, can be approximated, thanks to their striking similar painting traditions. In short, an absolute date from Naranjo, placing the Yootz dynasty in time, enables us to correlate the information gathered from our ceramic analyses with previously established chronologies and historic time-spans of other sites, such as Naranjo, Xultun, and neighbouring Río Azul (Table 2). As already demonstrated, the vessels dedicated to members of the Yootz polity can roughly be estimated in time to the middle of the 8th century. Therefore, we assume that the painting traditions associated with the scribes of the Yootz ruler K'ahk' Yohl K'inich were actively manufacturing goods shortly after the reign of our newly identified king Yajawte' K'inich (one or two generations after AD 712). Now knowing that Taxin Chan was a contemporary, a lakam (see Lacadena 2008; see also Krempel and Matteo 2009, 2010) and a likely successor of K'ahk' Yohl K'inich, we can accumulate a preliminary list of three successive Late Classic Yootz rulers: Yajawte' K'inich, K'ahk' Yohl K'ihnich, and Taxin Chan. Since we are able to assign three different painting traditions to the latter two members of the Yootz Court, and keeping the similarities of these products compared to vessels dedicated to Xultun nobles in mind, the products coming from the 'palace schools' of Yax We'en Chan K'inich and his consorts can, in turn, be estimated in time as well.

For example, when calling back in mind the similarities between the cylindrical vessels of *Taxin Chan* of Yootz (K8728, Figures 5a and 7c) and *Yax We'en Chan K'inich* of Xultun (K4752, Figure 6a), we can confidently consider them as contemporaneous. Another indicator serving to reconstruct the chronology of Xultun is the already mentioned record of *Muyal Chan Chaahk*; the son of *Yax We'en Chan K'inich* (K2324, Figures 3d and 4b). The latter, likewise being a *baax witz ajaw*, must have been a successor (or at least followed the reign of) his father. Comparing this preliminary sequence of consecutive Xultun rulers with the better known timeline of royal successions at Naranjo, the Xultun ruler *Muyal*? *Chan Chaahk* must also have been a contemporary of Naranjo's master artist, *Ajmaxam*⁸ (whose grandfather installed *Yajawte' K'inich* at Yootz in 712 AD, see Table 2). 'He of Maxam', as first identified by David Stuart (1985, 1987), is well known to Mayanists as the son of a Yaxha princess

⁸ Editor's note: Although the element aj- is an agentive prefix and should technically be affixed to the start of the nominal sequences in which it occurs (i.e. Ajmaxam, Ajtok' Ti', etc.), the authors of the present article prefer to treat it as an independent particle, a choice that has not been amended by the editors.



а



b

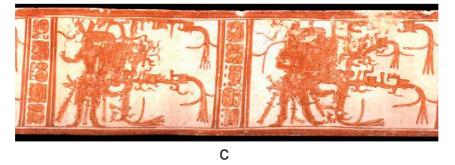


Fig. 8. The "Maize Dancer" Group: a) K5976; b) K633 c) K7720 (photos by Justin Kerr).

159



а



Fig. 9. unprovenanced vessels and foreign mentions of Yootz and Xultun: a) Vessel painted by an Ik' artist for a Río Azul ruler (K2295, rollout by Justin Kerr); b) the 'Composite Vessel of Sak Bolay', property of Fundación La Ruta Maya, Guatemala City (photo by Sebastian Matteo); c) Ik' Style vessel showing nobles from Xultun (adapted from Taylor 1976: 119, Fig.12, digitally enhanced by Guido Krempel).

and Naranjo's ruler K'ahk' Ukalaaw Chan Chaahk (AD 755-780>), the latter being the offspring of a woman from Tubal and the mighty K'ahk' Tiliiw Chan Chaahk (Martin and Grube 2000: 80; Grube 2004a). Without a doubt, Ajmaxam was a skilled artist, trained in various painting techniques and styles (e.g. Reents-Budet 1994: 49-50). Only a sample of his impressive production includes elaborately painted Chinos Black-on-cream ware (K2796, K635, see Figure 4e) and a likewise sophisticated Zacatel Cream-polychrome vessel (K633, Figure 8b). Certainly, Ajmaxam was an extraordinary skilled scribe, able to surpass the common standards by leaving his personal touch on each of his works. An outstanding example of his talent is the vessel K633 (Figure 8b), a cylindrical vessel in 'Holmul Style' showing the 'Maize Dancer' theme. The dedicatory formula shows the outlines of the glyphs and iconography rendered in orange colour, while the space between the glyphs is likewise filled, but with a slightly differing Red-and-Orange tone. The realization of different styles (in the case of Ajmaxam comprising Black-on-cream as well as Red-on-cream Cabrito varieties) by one and the same hand is not only testified by the prominent outcome of Ajmaxam, but it appears that scribes of other regions were also capable of realizing ceramics in various styles, and likewise achieved a matching level of highly sophisticated painting standards and skills. Impressively, this phenomenon is likewise testified by the products of Xultun's master artists.

The combination of different painting styles went even so far as resulting in a combination of two distinct styles decorating one and the same product, as is testified by a vessel dedicated to an individual bearing the title 'the Guardian of Sak Bolay' (Figure 9b). This astonishing composite vessel forms part of the Foundation La Ruta Maya, Guatemala City, and was recently exhibited for the first time as part of the exhibition "Mayas: de l'aube au crépuscule" at the Musée du Quai Branly at Paris, France (Michelet 2008: 170, IDAEH n°1.2.144.651). Even if already a glimpse at the object in its pre-restoration state reveals that it became sinfully overpainted in modern times (Matteo and Krempel in prep.), this vessel is unique and outstanding in many ways. It actually combines two distinct vessel bodies of different shape and style: a flanged dish with outstanding walls, painted in Chinos-Blackon-cream Style, and a tall Cabrito Cream Polychrome cylinder exhibiting distinctive 'Holmul dancer' imagery. Nevertheless, it remains unclear if the bodies of the two vessels had already been combined in Late Classic times, or if this composite shape is the result of a modern forgery (Matteo and Krempel in prep.). For example, the 'waterbands' decorating the rims of the bowl and the cylinder are near equally composed of repetitive black K'AN and circular motifs. Also eve-catching are the similarities of these waterbands compared to another famous work made by the hands of Ajmaxam: the 'Vessel of the Nine Gods' (K2796, Figure 4e). In fact, Ajmaxam painted a great amount of Black-on-cream vessels (K7296, see also K635 for a related style not exemplified here, see also Reents-Budet 1994:) as well as 'Holmul Style' vessels, some bearing his proper signature (K635), while other can be assigned to him by his characteristic hand writing and proper sign repertoire (Figures 4e and 8b, K633, K2796). Additionally, 'Holmul Style' vessels showing typical cormorant motifs were dedicated to his father K'ahk' Ukalaaw Chan Chaahk (Helmke and Awe 2008: 79ff., Fig. 13). Returning to the 'Composite Vessel of Sak Bolay' (Figure 9b), it was the similarity in style with Ajmaxam's œuvre that motivated the modern restorer of the vessel to use K633 as a template for the repainting of the imagery and texts of this extraordinary artefact (archives of the Fundacion La Ruta Maya). However, the assignment of the 'Composite Vessel' to a specific local workshop remains tentative. Note that the dedicatory text also resembles elements that are characteristic of Xultun's 'palace workshop', as for example the 'BREATH'-verb (here rendered as UH?-[yi]), the u chan ch'ok title, and the 'negative painting' (by using a sophisticated low-firing technique resulting in watercolour like, shaded colour tones) that constitutes the dedicatory formula. Obviously, the fact that it was sinfully repainted complicates the study of the original state of the object and its authentication. Nevertheless, enough details of the PSS



а





I



Fig. 10. The K'awiil Group: a) K3500; b) K3525 (photos by Justin Kerr); c) vessel found at Uaxactun (adapted from Smith 1955: Fig. 38b, No.40); d) K7459 (photo by Justin Kerr).

162

remain for a confident assumption that it was produced in the north-eastern Peten region; the greater Xultun territory (maybe directly associated with *uxlaju'n tzuk* 'the thirteenth partition', or 'province') being a likely candidate.

CONCLUSION

The study of the great diversity of vessels originating from the north-eastern Peten allows us to isolate a set of ceramic samples (ceramic groups) that can clearly be assigned to the workshops of Xultun. As part of these groupings, one individual turned out to be of special importance for the study of this local phenomenon (ceramic sphere). For this central figure, named Yax We'en Chan K'inich, a great diversity of styles was produced, some of which are directly dedicated to him proper (Figures 4a-b, 4g and 6a). The comparison of these painting traditions opens the possibility to widen our perspective to a greater scale and, in the course, to describe the corpus of Xultun and derived socio-political implications in more detail as has previously been accomplished. The vessels shown here represent the major stylistic repertoire of Xultun's production of painted polychromes⁹ that is yet recognizable based on unprovenanced material. In many cases, the low amount of such specimen does, for the time being, not permit a satisfying scientific designation, and in fact, attempting to enforce such assignments would necessarily lead to erroneous and even misleading classifications when randomly based on single specimen. Furthermore, the study is limited by the fact that most of the ceramics presented here cannot be investigated thoroughly as they form part of private collections that are mostly not accessible. However, the study gives us an idea of how the different polities, in this case the nobility of Xultun, chose to represent their noble houses by means of coordinating the production and redistribution of symbolic goods in form of elaborately painted pottery. In sum, it is possible to identify several distinct painting traditions (namely the Black-on-cream group, the Panela group, and the Hu'unal group, see Figures 4-6)10 associated with the 'palace workshop' of Yax We'en Chan K'inich who probably commissioned a great amount of the mentioned works. The comparison of clear stylistic similarities to the before mentioned styles, leads to propose a minimum of three additional painting schools (ceramic groups) that are discernible, and can thus indirectly be associated with the workshops of Xultun. These are Zacatel Polychromes rendered in characteristic Red-and-Orange colouring, here called the K'awiil group, as the head of this deity is the most frequently depicted (Fig.10, K3500), while yet another vessel of similar style is a regional variant of the Holmul Dancer theme (K5976). Thus, the Holmul group as well as the K'awiil group are certainly related to the palace school of Xultun.

That the Maize Dancer Theme in 'Holmul Style' in fact forms part of the stylistic repertoire of Xultun's palace schools is evidenced by a cylindrical vessel that is dedicated to a woman named *Ix Kalaawte' Ix We'om Yohl Ch'e'n* (K5976, Figure 8a). This vessel bears striking resemblance in composition and choice of motifs compared to "Holmul Dancer" vessels assigned to Zacatel Creampolychrome: Cabrito variety (compare to Figure 8b-c), but represents a local interpretation of this mythic imagery. When comparing K5976 with K7720 (Figures 8a and 8c), the latter being dedicated

⁹ Carved specimen that seemingly originate in great amount from Xultun as well (see e.g. Grube and Gaida 2006: 201, Fig. 33.3), have not been taken into consideration in the present study as this distinctive craft specialization deserves a separate and more detailed study by its own.

¹⁰ Chinos Black-on Cream: Chinos (K2324, Boston Museum of Fine Arts n°1339, see Figures 4a-b), Zacatel Cream-polychrome: Panela (K4572, Figure 6a) and different Zacatel Cream-polychrome varieties (K7055, K8007, K8728, FlickR vessel, compare Figures 5 and 7).

to an *uxhaabte' ajaw* (Río Azul lord) and likewise member of the thirteenth partition, the sharing of painting traditions between the palace schools of Xultun and Río Azul, once more, becomes evident (e.g. Boot 2004; Matteo 2007).

Yet another variety can be associated to Xultun's production. It can be described as Red-and Orange (or lighter shaded red)-on-cream and is attested in an archaeological context at nearby Uaxactun (Figure 10c; Smith 1955: Fig. 38b, 40). Thanks to the record of the ruler nicknamed 'Scroll-Head' *Ti' Kuy* bearing the *baax witz ajaw* title on K3025 (Figures 9a and 4c), this "K'awiil group" can confidently be assigned to Xultun's palace schools. As has been shown above, the same individual is mentioned on a vessel of the Chinos variety (Figures 3e and 4c); once more providing evidence for the fact that the 'palace workshops' of Xultun had a diverse stylistic repertoire and were used to produce several symbolic goods of different styles for the members of their local nobility.

Striking are the similarities of these Red-and-orange-on-cream vessels (Figure 8) compared to the K'awiil and Hu'unal imagery depicted on the aforementioned Panela varieties assigned to *Yax We'en Chan K'inich* (Figure 6a-f). The artist trained in these two painting traditions tended to use the same templates for the imagery, similar linguistic traits, a distinct local sign inventory as well as similar hand writing, leading us to assume that the K'awiil group (Fig.10) and K5976 (Fig.8c) originated from the 'palace schools' of Xultun and were dedicated during the reigns of *Yax We'en Chan K'inich*, and his son, "Scroll Head" *Ti'Kuy*. Based on these stylistic similarities, it can be concluded that "Scroll Head" *Ti'Kuy* reigned either shortly before or after our protagonist *Yax We'en Chan K'inich*. However, the great amount of vessels painted in this style that are dedicated to rulers of Río Azul (*uxhaabte'*, Figure 8c) complicates the assignment of this painting tradition to the 'palace schools' of Xultun; they may likewise have been produced by artists working at Río Azul or at another location in the vicinity (compare for example to K7459, painted by a Río Azul artist, Figure 10d).

As for the economic role of these workshops and the political organization of the NE-Peten sites, the frequent appearance of the 'thirteenth partition (*uxlaju'n tzuk*) title' on products manufactured in the workshops of Xultun and Río Azul is of great significance. While members of the 7th partition (*wuk tzuk*) are mentioned at Naranjo and Yaxha, the 9th partition (*baluun tzuk*) may be associated with a distinct area in modern Belize, as suggested by recent findings at the archaeological sites of Cuychen and Dos Hombres, (Robichaux and Houk 2005; Helmke in press). For the present study, the division between the *wuk tzuk* and *uxlajun tzuk* regions is of crucial significance, as it implies a connection, the nature of which remains elusive, between Xultun, Naranjo and Tikal dominating impact and the political organization of land divisions of smaller centres in the north-eastern and eastern lowlands (Grube and Schele 1991; Beliaev 2000).

As can be illustrated by the vessel K2295 (Figure 10a), the typical traits of Xultun's and Río Azul's painting traditions were also adapted by the artists of Motul de San José (pertaining to the seventh province, *wuk tzuk*). Here, an artist originating from the Ik' Motul de San José polity, who is clearly associated with the '7th partition', dedicated a vessel to a '13th partition lord' from Río Azul called *Ajpitzil K'inich* (for a description of the similarities between another vessel dedicated to *Ajpitzil K'inich* and a vessel dedicated to a ruler of Xultun, K7149, see Matteo and Krempel 2011b). Once more, the similarities underline the close relation between Xultun and Río Azul on the one hand, and Motul de San José as interactive polity on the other.

Even more evidence for the close contact between the seventh and the thirteenth provinces comes from a vessel that can be assigned to an artist who painted in the so called Ik'-Style pertaining to the workshops of Motul de San José (Figure 9c; see Taylor 1982: Figs. 11-14). The imagery shows an enema feast that took place at the court of Xultun. The historic scene shows two members of the royal court seating on a bench and preparing an enema ritual. While the sitting ruler refills the enema from

a huge bowl standing in front of him, a woman sitting behind him serves the ruler with a small bowl with outstanding walls. The female is clearly identified as members of the *baax witz* polity through the use of the local emblem glyph. Furthermore, the inscription accompanying the sitting ruler (*ka-ik? uhtiiy baax witz* 'our ?, it happened at *baax witz*), informs the beholder of the vessel that the recorded event actually did not take place at the hometown of the Ik'-scribe, but rather at a foreign residence situated within Xultun's administrative centre. In this case, the combined study of regional painting styles, varying patterns within the dedicatory formulae as well as epigraphic and iconographic approaches, enable us to identify the scribe as originating from Motul de San José who painted this vessel for his local urban leader. The reason behind the commission of this vessel may have been the memorial of a past event that happened at Xultun, not at least for the sake of strengthening the ties between the two courts.

If the percentage of pottery types shared among sites (or corresponding polities) forms a trustworthy basis for defining a "ceramic sphere" and concluding upon cultural ties, be it trade or other socio-political or religious interactions, it can confidently be stated that the artists working in the "palace schools" of Xultun, the ones in charge of painting the vessels of *Yax We'en Chan K'inich*, were intimately related to the artists of Río Azul and Yootz. These painting traditions can, for instance, be distinguished from the painting styles of Motul de San José's artists, from those working for the rulers of Naranjo, and many other noble houses (*Kokom, Buk'/Buk'a'*, etc.); all commissioning their proper symbolic goods. Sometimes the decoration and choice of motifs was adapted to the preferences of other folks, such as the courts of Xultun or Río Azul, and *vice versa*. A possible scenario can be reconstructed thanks to the many of Hu'unal vessels that were seemingly painted by one and the same artist with religious duties (*ajk'uhu'n*) of *Yax We'en Chan K'inich* (Figures 5a-d and 6a). He did not only paint the vessels for his urban leader (Figure 6a), but likewise painted the vessels for other Xultun nobles, and at the same time, created symbolic goods commissioned for the nobility of Yootz (Figure 7).

However, it would be premature to conclude upon the reason or nature of these relationships as only scarce historical information has been uncovered so far. More archaeological evidence needs to be awaited in order to verify or refuse our preliminary results that are solely based on unprovenanced artefacts; and each vessel surely worth investigating in more detail in order to illuminate their elusive background. However, it turns out that the workshops in charge of manufacturing symbolic goods for Yax We'en Chan K'inich and his allies were among the most sophisticated artists of the Late Classic period and shall be considered equal in terms of creativity and elaboration when judged from the perspective and compared to the outcome of the more prominent painting traditions. During the course, the nobility of Xultun turns out to consist of elites controlling and commissioning the local production and gifting of prestige items on a local and area-wide level. Seen as a status-enhancing form of 'cultural capital', the knowledge involved in the creation of symbolic goods allowed the artisan a certain autonomy and control over their products. By means of commissioning and gifting these products of local identity to other elites at foreign courts and provinces, such as the rulers of Río Azul, Los Alacranes, Yootz, next to others, the rulers of Xultun used to entertain a complex network of ceramic exchange for ritual purposes and feasting, resulting in extraordinarily skilled artisans whose outcome formed the peak of Late Classic painting traditions in the north-eastern MayaLowlands.

ACKNOWLEDGEMENTS

We would like to thank the organizers of the 1st Cracow Maya Conference, namely Jarosław Źrałka, Monika Banach, Beata Golińska, Magdalena Rusek and Katarzyna Radnicka for their kind invitation to the conference, and for the publication of our contribution in the present volume. Furthermore, we

are greatly indebted to Erik Boot, Claire Corniquet and Inga Calvin for useful comments on earlier drafts of our manuscript that greatly improve the final version. Kind thanks also to Christophe Helmke for time spent helping us to grapple the intricacies of the type-variety system and for his type-variety assignations of the vessels examined in this paper. Special thanks go to Christian Prager for having pointed us to a link that led to the discovery of the Hu'unal vessel on the FlickR webpage; Sofia Paredes for presenting us the "composite vessel of Sak Bolay" as new acquisition of the La Ruta Maya collection and for having shared the pre-restoration photos and documents related to this artefact, Donald Hales for valuable comments and his permission to reproduce the still views in Figs 4c and 4d respectively, and Yuriy Polyukhovych for having kindly shared and given permission to use his photos of ceramics that form part of a private collection. All contents, mistakes and copyright issues are the sole responsibility of the authors.

REFERENCES

ADAMS, RICHARD E. W.

1971 *The Ceramics of Altar de Sacrificios*. (Papers of the Peabody Museum of Archaeology and Ethnology, Vol.63, No.1). Cambridge: Harvard University.

1999 Rio Azul: An Ancient Maya City. Norman: University of Oklahoma Press.

2008 Comment. The Type:Variety-Mode System: Doomed to Success. *Latin American Antiquity* 19 (2): 222-223.

AUDET, CAROLYN MARIE

2006 Political Organization in the Belize Valley: Excavations at Baking Pot, Cahal Pech and Xunantunich. Ph.D. dissertation. Vanderblit: Vanderbilt University.

BALL, JOSEPH W.

1993 Pottery, Potters, Palaces, and Politics: Some Socioeconomic and Political Implications of Late Classic Maya Ceramic Industries. *Lowland Maya Civilization in the Eighth Century A.D.: A Symposium at Dumbarton Oaks* 7th and 8th October 1989, pp. 243-272, edited by Sabloff, Jeremy A. and John S. Henderson. Washington D.C.: Dumbarton Oaks Trustees for Harvard University.

BEAUDRY, MARILYN P.

1984 Ceramic Production and Distribution in the Southeastern Maya Periphery. The Classic Painted Serving Vessels. (BAR International Series 203. British Archaeological Reports) Oxford: Archaeopress.

1987 Southeast Maya Polychrome Pottery: Production, Distribution, and Style. (BAR International Series 345. British Archaeological Reports). Oxford: Archaeopress.

BECKER, MARSHALL J.

2003 A Classic-period *barrio* producing fine polychrome ceramics at Tikal, Guatemala: Notes on ancient Maya firing technology. *Ancient Mesoamerica* 14 : 95-112.

BELIAEV, DMITRI

2000 Wuk Tsuk and Oxlahun Tsuk: Naranjo and Tikal in the Late Classic. *The Sacred and the Profane: Architecture and Identity in the Maya Lowlands*, edited by Colas, Pierre R., Kai Delvendahl, Marcus Kuhnert, and Annette Schubart. pp. 63-82 (Acta Mesoamericana 10). Markt Schwaben: Verlag Anton Saurwein.

BERNIER, HELENE

2010 Craft Specialization at Moche: Organization, Affiliations, and Identities. *Latin American Antiquity* 21(1): 44-66.

BOOT, ERIK

1999 A New Naranjo Area Toponym: yo:ts. Mexicon 21 (2): 39-42.

2003a The Hieroglyphic Texts of Kerr No. 7786, 4669: Performance and Competence of a Late Classic Maya Master Scribe. *Mesoweb*: http://www.mesoweb.com/features/boot/4669-7786.pdf.

2004 The Legacy of Three Kings from the Northeastern Petén: Some Comments on Kerr Nos. 3744, 5241, and 7524. Unpublished manuscript in possession of the authors.

166

2005a A Short Epigraphic Analysis of the Hieroglyphic Text on a Tripod Plate in a Private Collection (Guatemala). *Maya Vase Database*: http://www.mayavase.com/guatplate.pdf.

2005b Further Notes on the Initial Sign as /alay/. *Wayeb Notes* 18. http://www.wayeb.org/wayebnotes/archive.php 2005c A Preliminary Overview of Common and Uncommon Classic Maya Vessel Type Collocations in the Primary Standard Sequence. *Maya Vase Database*: http://www.mayavase.com/BootVesselTypes.pdf

2009a The Updated Preliminary Classic Maya - English, English - Classic Maya Vocabulary of Hieroglyphic Readings. Mesoweb. http://www.mesoweb.com/resources/vocabulary/index.html

2009b Otot as a Vessel Classification for a Footed Bowl: Short epigraphic note on a Bowl in the Collection of the Museum of Fine Arts, Boston. *Mesoweb*. http://www.mayavase.com/otot.pdf

BRUMFIELD, ELISABETH

1987 Consumption and Politics at Aztec Huexotla. American Anthropologist 89: 676-686.

CALVIN, INGA

2006 Between Text and Image: An Analysis of pseudo-glyphs on Late Classic Maya pottery from Guatemala. Ph.D. Dissertation. Boulder: University of Colorado.

COE, MICHAEL D.

1973 The Maya Scribe and his World. New York: The Grolier Club.

COGGINS, CLEMENCY C.

1975 Painting and Drawing Styles at Tikal: An Historical and Iconographic Reconstruction. Ph. D. Dissertation. Ann Arbor: University Microfilms International.

COSTIN, CATHY LYNNE

2007 Thinking about Production: Phenomenological Classification and Lexical Semantics. *Rethinking Craft Specialization in Complex Societies: Archaeological Analyses of the Social Meaning of Production*, edited by Hruby, Zachary and Rowan K. Flad. pp. 143-162. Archaeological Papers of the American Anthropological Association, No. 17:. Arlington: University of California Press.

CULBERT, T. PATRICK

1993 The Ceramics of Tikal: Vessels from the Burials, Caches, and Problematical Deposits. Tikal Report 25, Part A. Museum Monographs 81. Philadelphia: The University Museum, University of Pennsylvania.

DEMAREST, ARTHUR

2004 Ancient Maya. The Rise and Fall of a Rainforest Civilization. New York: Cambridge University Press.

EARLE, T.K.

1981 Comment on Evolution of Specialized Pottery Production: A Trial Model, by Prudence M. Rice. *Current Anthropology* 22(3): 230-231.

EGGEBRECHT, ARNE, EGGEBRECHT, EVA, NIKOLAI GRUBE AND WILFRIED SEIPEL

1993 Die Welt der Maya. Hildesheim/Wien/Mainz: Philipp von Zabern.

ESTRADA BELLI, FRANCISCO

2001 Archaeological Investigations at Holmul, Guatemala. Report of the First Field Season, May-June 2000. Foundation for the Advancement of Mesoamerican Studies, Inc.: http://www.famsi.org/reports/98010/ 98010EstradaBelli01.pdf

FOIAS, ANTONIA E.

1999 Proyecto Arqueológico Motul de San José: Informe no.2, temporada de campo 1999. Guatemala: Instituto de Antropología e Historia,.

FOIAS, ANTONIA E., JAMES BRADY, AND STEPHEN HOUSTON

1996 La producción e intercambio de la cerámica impresa del Clásico en la región del Petexbatun, Peten. *IX Simposio de Investigaciones Arqueológicas en Guatemala, 1995*, edited by Juan Pedro Laporte, and Héctor Escobedo, pp. 93-114. Guatemala City: Museo Nacional de Arqueología et Etnología.

FOIAS, ANTONIA E. AND RONALD L. BISHOP

1997 Changing Ceramic Production and Exchange in the Petexbatun Region, Guatemala.

Reconsidering the Classic Maya collapse. Ancient Mesoamerica 8: 275-291.

2007 Pots, Sherds, and Glyphs. Pottery Production and Exchange in the Petexbatun Polity,

Petén, Guatemala. *Pottery Economics in Mesoamerica*, edited by Christopher Pool and George J. Bey III, pp. 212-236. Tucson: University of Arizona Press.

FORSYTH, DONALD W.

1989 Ceramics of El Mirador, Petén, Guatemala. (El Mirador Series, Part 4. Papers of the New World Archaeological Foundation, n°63). Provo: Brigham Young University.

FRY, ROBERT E. AND S. C. COX

1974 The Structure of Ceramic Exchange at Tikal, Guatemala. *World Archaeology* 6: 209-225.

GANN, THOMAS W.F.

1918 Maya Indians of Southern Yucatan and Northern British Honduras. U.S. Bureau of American Ethnology Bulletin 64. Washington D.C.: Smithsonian Institution.

GARRISON, THOMAS G. AND DAVID S. STUART

2004 Un análisis preliminar de las inscripciones que se relacionan con Xultun, Petén,

Guatemala. XVII Simposio de Investigaciones Arqueológicas en Guatemala, 2003, edited by Juan Pedro Laporte, Barbara Arroyo, Héctor Escobedo y Héctor Mejía, pp. 829-842. Guatemala City: Museo Nacional de Arqueología y Etnología.

GERCKE, PETER AND ULRICH SCHMIDT (EDS.)

1992 Von Küste zu Küste. Prä-Kolumbische Skulpturen aus Meso-Amerika. Kassel: VerlagWeber und Weidemeyer.

GIFFORD, CAROL A. AND MURIEL KIRKPATRICK.

1996 Ceramica de la Cultura Maya et al.: An Informal publication for the exchange of information concerning prehistoric and ethnographic Middle American culture. Philadelphia and Tucson: Department of Anthropology, University of Arizona, Laboratory of

Anthropology, Temple University.

GRUBE, NIKOLAI

1990 The Primary Standard Sequence on Chocholá Style Ceramics. *The Maya Vase Book, Volume 2*, edited by Justin Kerr, pp. 320-30. New York: Kerr Associates.

1991 An Investigation of the Primary Standard Sequence on Classic Maya Ceramics. *Sixth Palenque Round Table, 1986*, edited by Virginia M. Fields, pp. 223-232. Norman: University of Oklahoma Press.

2004a La Historia Dinástica de Naranjo. *Beiträge zur Allgemeinen und VergleichendenArchäologie* 24, pp.195-213. Mainz am Rhein:Verlag Phillip von Zabern.

2004b The Orthographic Distinction between Velar and Glottal Spirants in Maya Hieroglyphic Writing. *The Linguistic of Maya Writing*, edited by Søren Wichmann, pp.61-81. Salt Lake City: University of Utah Press. 2008 Monumentos Esculpidos: Epigrafía e iconografía. *Reconocimiento arqueológico en el sureste del estado de Campeche, México: 1996-2005.* edited by Ivan Sprajč, pp.177-232. (BAR International Series 1742). Oxford: British Archaeological Reports.

GRUBE, NIKOLAI AND MARIA GAIDA

2006 Die Maya Schrift und Kunst. Berlin and Cologne: Ethnologisches Museum Staatliche Museen zu Berlin. GRUBE, NIKOLAI Y LINDA SCHELE

1991 Tzuk in the Classic Maya Inscriptions. *Texas Notes on Precolumbian Art, Writing and Culture* 14: 1-7. HAMMOND, NORMAN

1975 *Lubaantun: A Classic Maya Realm.* Cambridge: Peabody Museum of Archeology and Ethnology, Harvard University.

HELMKE, CHRISTOPHE AND JAIME AWE

2008 Organización territorial de los antiguos mayas de Belice Central: confluencia de datos arqueológicos y epigráficos. *Mayab* 20: 65-91.

HELMKE, CHRISTOPHE, JAIME J. AWE, SHAWN G. MORTON AND GYLES IANNONE in press The Text and Context of the Cuychen Vase, Macal Valley, Belize. *Maya Archaeology*, Vol. 2.

HELMKE, CHRISTOPHE AND HARRI KETTUNEN
 2011 Where Atole Abounds: Naranjo during the Reign of K'ahk' Tiliw Chan Chahk. (1st Cracow Maya Conference). Cracow: Department of New World Archaeology, Jagiellonian University.

HOUSTON, STEPHEN D.

1986 Problematic Emblem Glyphs: examples from Altar de Sacrificios, El Chorro, Río Azul, and Xultun. *Research Reports on Ancient Maya Writing* 3: 1-11.

IANNONE, GYLES

2004 Problems in the Definition and Interpretation of "Minor Centers" in Maya Archaeology with Reference to the Upper Belize Valley. *The Ancient Maya of the Belize Valley*, edited by James F. Garber, pp. 273-286. Gainesville: University Press of Florida.

INOMATA, TAKESHI

2001 The power and ideology of artistic creation: Elite craft specialists in Classic Maya society. *Current Anthropology* 42 (3): 321-349.

2007 Knowledge and Belief in Artistic Production by Classic Maya Elites. *Rethinking Craft Specialization in Complex Societies: Archaeological Analyses of the Social Meaning of Production*, edited by Zachary X. Hruby and Rowan K. Flaud, pp. 129-142. (Archaeological Papers of the American Anthropological Association, Number 17). Hanover: American Archaeological Association.

2010 Introduction to the Ceramic Study of Aguateca. *Burned Palaces and Elite Residences of Aguateca: Excavations and Ceramics. Monographs of the Aguateca Archaeological Project First Phase, Volume 1*, edited by Inomata, Takeshi and Daniela Triadan, pp. 157-162. Salt Lake City: The University of Utah Press. JACKSON, SARAH, AND DAVID STUART

2001 The aj k'uhuun title. Deciphering a Classic Maya term of rank. *Ancient Mesoamerica* 12: 217-228.

KREMPEL, GUIDO AND SEBASTIAN MATTEO

2009 Nauzugang: Ein polychromer Tonteller aus Yootz. Baessler Archiv, 56: 244-248.

2010 La nobleza y el estilo cerámico de Yootz, Petén, Guatemala. XXIII Simposio de

Investigaciones Arqueológicas de Guatemala, 2009, edited by Arroyo, Bárbara, Adriana Linares Palma and Lorena Paiz Aragón, pp. 1219-1234. Guatemala City: Ministerio de Cultura y Deportes Instituto de Antropología e Historia, Asociación Tikal.

LACADENA GARCÍA-GALLO, ALFONSO

2008 El título lakam: evidencia epigráfica sobre la organización tributaria y militar interna de los reinos mayas del Clásico. *Mayab* 20: 23-44.

LEMMONIER, PIERRE

1976 La description des chaînes opératoires: contribution à l'analyse des systèmes techniques. *Techniques et culture (Bulletin)* 1: 100-151.

LEROI.GOURHAN, ANDRÉ

1995 Préhistoire de L'art Occidental. Art et les grandes civilisations. Editions d'art. Paris: Citadelles & Mazenod.

MACLEOD, BARBARA

1990a The God N/Step Set in the Primary Standard Sequence. The Maya Vase Book, Volume

2, edited by Justin Kerr, pp. 331-347. New York: Kerr Associates.

1990b Deciphering the Primary Standard Sequence. Ph.D. dissertation. Austin:

University of Texas at Austin.

MARTIN, SIMON AND NIKOLAI GRUBE

2008 Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya. Second Edition. London: Thames & Hudson.

MATTEO, SEBASTIÁN

2007 Sobre la propriedad original de dos vasos maya del Clásico tardío. *Maya Vase Database*: http://www. mayavase.com/rioazullord.pdf

MATTEO, SEBASTIÁN AND GUIDO KREMPEL

2011aLa nobleza y el estilo cerámico de Xultun, Petén, Guatemala. *XXIV Simposio de Investigaciones Arqueológicas de Guatemala, 2010*, edited by Arroyo, Bárbaba Lorena Paiz Aragón, Adriana Linares Palma and Ana Lucía Arroyave, pp. 957-971. Guatemala City: Ministerio de Cultura y Deportes Insituto de Antropología e Historia, Asociación Tikal.

2011b Un vaso cilíndrico polícromo de la región de Río Azul, Guatemala, en una colección privada. *Mexicon* 33 (6): 142-146.

in prep. A Look beneath the Surface: Comments on a rare "Composite-Vessel" and the "Guardian of Sak Bolay". Manuscript in preparation.

MERWIN, RAYMOND E. AND GEORGE C. VAILLANT

1932 *Ruins of Holmul, Guatemala.* (Memoirs 3(2)). Cambridge: Harvard University, Peabody Museum of American Archaeology and Ethnology.

MICHELET, DOMINIQUE

2011 Maya: de l'aube au crépuscule. Collections nationales du Guatemala. Musée du Quai Branly: Paris. MUÑOZ COSME, GASPAR, CRISTINA VIDAL LORENZO AND JUAN ANTONIO VALDÉS GÓMEZ

1999 Los Mayas. Ciudades Milenarias de Guatemala. Ministerio de Educación: Ayuntamiento de Zaragoza, Spain.

PAREDES, SOFIA

1996 Sobreviviendo en la Selva: Las realidades del saqueo en las Aldeas Rurales de El Peten, Guatemala. Foundation for the Advancement of Mesoamerican Studies, Inc.: http://www.famsi.org/cgi-bin/print_freindly. pl?file=96096es

PRAGER, CHRISTIAN, ELISABETH WAGNER, SEBASTIAN MATTEO Y GUIDO KREMPEL

2010 A Reading for the Xultun Toponymic Title as B'aax (Tuun) Witz 'Ajaw "Lord of the B'aax-(Stone) Hill". *Mexicon* 32 (4): 74-77.

REENTS-BUDET, DORIE

1985 The Late Classic Maya Holmul Style Polychrome Pottery. Ph.D. dissertation. Austin: University of Texas at Austin,.

1991 The "Holmul Dancer" Theme in Maya Art. Sixth Palenque Roundtable, 1986, edited

by Virginia M. Fields, pp. 217-22. Norman: University of Oklahoma Press.

1993 Acercamiento integrado a la cerámica pintada Clásica Maya. *VI Simposio de Investigaciones Arqueológicas de Guatemala, 1992*, edited by Laporte, Juan P. and S. Villagrán de Brady, pp. 64-99. Guatemala City: Museo Nacional de Arqueología y Etnología.

REENTS-BUDET, DORIE (ED.)

1994 Painting the Maya Universe: Royal Ceramics of the Classic Period. Durham and London: Duke University Press.

REENTS-BUDET, DORIE AND BISHOP RONALD

1987 The Late Classic Codex Style Polychrome Pottery. *Memorias del Primer Coloquio Internacional de Mayistas*, edited by Mercedes de la Garza, pp. 775-789. México D.F.: Universidad Nacional Autónoma de México.

REENTS-BUDET, DORIE, BISHOP, RONALD AND FEDERICO FAHSEN

1994 Una cerámica Maya negro-sobre-crema del periodo Clásico Tardío de la región oriental de Petén y Belice. *VII Simposio de Investigaciones Arqueológicas en Guatemala, 1993*, edited by Juan Pedro Laporte, pp. 39-53. Guatemala City: Museo Nacional de Arqueología y Etnología.

REENTS-BUDET, DORIE, BISHOP, RONALD, TASCHEK, JENNIFER T. AND JOSEPH BALL

2000 Out of the Palace Dumps. Ceramic Production and Use at Buenavista del Cayo. *Ancient Mesoamerica* 11: 99-121.

REENTS-BUDET, DORIE, SYLVIANE BOUCHER LE LANDAIS, YOLY PALOMO CARILLO, RONALD L. BISHOP, AND M. JAMES BLACKMAN

2010 Codex-Style Ceramics: New Data Concerning Patterns of Production and Distribution. *Maya Vase Database:* http://www.mayavase.com/codex.pdf.

REENTS-BUDET, DORIE, ANTONIA E. FOIAS, RONALD L. BISHOP, M. JAMES BLACKMAN AND STANLEY GUENTER

2007 Interacciones políticas y el Sitio Ik' (Motul de San José): Datos de la cerámica. *XX Simposio de Investigaciones Arqueológicas en Guatemala, 2006*, edited by Juan Pedro Laporte, Barbara Arroyo and Héctor Mejía, pp. 1416-1436. Guatemala City: Museo Nacional de Arqueología y Etnología.

RICE, PRUDENCE M.

1984 The Archaeological Study of Specialized Pottery Production: Some Aspects of Method and Theory. *Pots and Potters: Current Approaches in Ceramic Archaeology*, edited by Prudence M. Rice, pp. 45-54. (UCLA Institute of Archaeology Monograph No. 24). Los Angeles: University of California Press.

ROBICHAUX, HUBERT R. AND BRETT A. HOUK

2005 A Hieroglyphic Plate Fragment from Dos Hombres, Belize: Epigraphic and Archaeological Evidence Relating to Political Organization in the Three Rivers Region of Northwestern Belize and Northeastern Guatemala. *Mono y Conejo* 3: 4-12.

ROBISCEK, FRANCIS AND DONALD HALES

1981 The Maya Book of the Dead. The Ceramic Codex. Norman: University of Oklahoma Press.

SATURNO, WILLIAM A., LUIS ALBERTO ROMERO, BORIS BELTRÁN, AVIVA CORMIER, MÓNICA DE LEÓN, DAVID DEL CID, PATRICIA RIVERA, FRANCO ROSSI, JONATHAN RUANE, ASTRID RUNGGALDIER, AND JENNIFER WILDT

2011 Del Preclásico Tardío al Clásico: Cambios, Continuidades y Nuevos Hallazgos en la región San Bartolo-Xultun. *XXIV Simposio de Investigaciones Arqueológicas de Guatemala, 2010*, edited by Arroyo, Bárbaba, Lorena Paiz Aragón, Adriana Linares Palma and Ana Lucía Arroyave, pp. 71-85. Guatemala City: Ministerio de Cultura y Deportes Instituto de Antropología e Historia, Asociación Tikal.

SATURNO, WILLIAM, BORIS BELTRÁN, PATRICIA RIVERA, LUIS ROMERO, FRANCO ROSSI, AND JANATHAN RUANE

2011 Del Preclásico Tardío al Clásico Temprano: cambios, continuidades, y nuevos hallazgos en la región San Bartolo-Xultún, Guatemala. Paper presented at *Sociétés mayas millénaires: Crises du passé et résilience*. Paris: Musée du Quai Branly, July 1st.

SMITH, ROBERT E.

1955 Ceramic Sequence at Uaxactun, Guatemala, Volume II. (Publication No. 20). New

Orleans: Middle American Research Institute, Tulane University, and Carnegie Institution of Washington D.C.

SMITH, ROBERT E. AND JAMES C. GIFFORD

1966 Maya Ceramic Varieties, Types, and Wares at Uaxactun: Supplement to "Ceramic Sequence at Uaxactun, Guatemala". New Orleans: Middle American Research Institute, Tulane University.

SMITH, ROBERT E., GORDON R. WILLEY AND JAMES C. GIFFORD

1960 Type-variety concept as a basis for the analysis of Maya pottery. *American Antiquity* 25(3): 330-340. STUART, DAVID

1985 A New Child-Father Relationship Glyph. Research Reports on Ancient Maya Writing 2: 1-2.

1987 Ten Phonetic Syllables. Research Reports on Ancient Maya Writing 14: 1-52.

TAYLOR, DICEY

1982 Problems in the Study of Narratives Scenes on Classic Maya Vases. *Falsifications and Misreconstructions of Pre-Columbian Art*, edited by Elizabeth Boone, pp. 107-124. Washington D.C.: Dumbarton Oaks.

VON EUW, ERIC

1978 *Xultun* (Corpus of Maya Hieroglyphic Inscriptions, Volume 5.1). Cambridge: Peabody Museum of Archaeology and Ethnology at Harvard University.

VON EUW, ERIC AND IAN GRAHAM

1984 *Xultun, La Honradez, Uaxactún.* (Corpus of Maya Hieroglyphic Inscriptions, 5.2). Cambridge: Peabody Museum of Archaeology and Ethnology at Harvard University.

VELÁSQUEZ GARCÍA, ERIK

2008 Los señores de la entidad política de 'ik'. Estudios de Cultura Maya 34: 45-64.

2010 Gobernantes Simultáneos en el señoría de Ik': evidencia epigráfica de un sistema atípico de organización política en la región del Lago Petén Itzá. *XXIV Simposio de Investigaciones Arqueológicas de Guatemala*, *2010*, edited by Arroyo, Bárbara, Lorena Paiz Aragón, Adriana Linares Palma and Ana Lucía Arroyave, pp. 45-64. Guatemala City: Ministerio de Cultura y Deportes Instituto de Antropología e Historia, Asociación Tikal.

VILLASEÑOR, ISABEL

2010 Building Materials of the Ancient Maya. A Study of Archaeological Plasters. Saarbrücken: Lambert Academic Publishing.

WEST, GEORGIA

2003 Ceramic Exchange in the Late Classic and Postclassic Maya Lowlands: A diachronic Approach. *Ancient Maya Economies*, edited by Masson, Marilyn and David Freidel, pp. 140-196. Walnut Creek: Altamira Press.

ZENDER, MARC

2004 A Study of Classic Maya Priesthood. Ph.D. dissertation. Calgary: Department of Archaeology, University of Calgary.

172