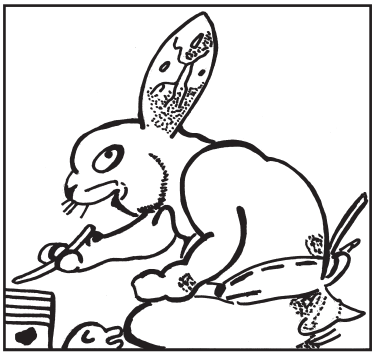
El Palacio

Historiography and new perspectives on a pre-Tarascan city of northern Michoacán, Mexico

Edited by
Marion Forest



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Muy cerca, hacia el oeste de Zacapu, se levantaba una lomería de mal país, quizás de quinientos pies de altura, en cuya cumbre podían adivinarse vagamente los contornos del palacio del rey Caltzontzin.

Carl Lumholtz, 1902, *El México Desconocido*, vol. 2,
C. Scribner's sons, New York, pp. 414.

Contents

Acknowledgements

The present volume is the result of a collaborative effort involving the participation and financial support of many scholars and institutions. I wish to thank them all warmly.

Directed by Grégory Pereira (CNRS UMR 8096 Archéologie des Amériques), the Uacúsecha archaeological project allowed Elsa Jadot and myself to pursue field investigations at El Palacio in 2012 and 2017, with the help of archaeologists Alejandra Castañeda, Osiris Quezada, and Isaac Barrientos, and local participants from the towns of Zacapu and Cantabria, in Michoacán. Beginning in 2010, the Uacúsecha Project is an initiative funded by the French Ministère de l'Europe et des Affaires Étrangères, through the funding instrument of the Commission consultative des recherches archéologiques à l'étranger, the Centre National de la Recherche Scientifique (CNRS) and the University Paris 1 Panthéon Sorbonne, through the UMR 8096 Archéologie des Amériques. All field and most laboratory operations were conducted with the logistical and institutional support of the Centro de Estudios Mexicanos y Centroamericanos in Mexico (UMIFRE 16 MEAE, CNRS-USR 3337 América Latina) and the official permits delivered by the Consejo de Arqueología of the Instituto Nacional de Antropología e Historia.

Between 2015 and 2018, the Mésomobile archaeological project, funded by the Agence Nationale de la Recherche (French national research agency, ANR-14-CE31-0016, Principal investigator: Véronique Darras, CNRS UMR 8096 Archéologie des Amériques) provided critical support for data acquisition and field verification, including the funding of the 91 km² LiDAR survey (2015) of the Zacapu Malpaís. The LiDAR survey flight was conducted by the National Center for Airbone Laser Mapping based at the University of Houston, under the supervision of Juan Carlos Fernandez Diaz.

From 2016 to 2018, I was funded by the Fyssen foundation with a Postdoctoral fellowship and hosted at Arizona State University under the supervision of Michael E. Smith in order to conduct a research project entitled "Spatial practices and urban fabrique at El Palacio: towards an archaeology of generative urban processes". This fellowship allowed me to travel and conduct the 2017 field season, the subsequent material analyses in Mexico, and, finally, to initiate this editorial project. I want to thank Eugenia Fernandez Villanueva for giving me access to the archaeological materials collected in 1992 at El Palacio and the members of the INAH Michoacán in Morelia for welcoming me in their office and laboratory space. I also thank José (Pepe) Ramírez, in charge of technical archives of the Coordinación Nacional de Arqueología del Instituto Nacional de Antropología e Historia.

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Marion Forest

Contributors

Isaac Barrientos Juárez is a physical anthropologist, currently a MA candidate in Mesoamerican Studies at the Universidad Nacional Autónoma de México (UNAM), and associate student at the Centro de Estudios Mexicanos y Centroamericanos (CEMCA). He received his B.A. in physical anthropology from the Escuela Nacional de Antropología e Historia in Mexico. His research focuses on the bioarchaeology of prehispanic populations and in the perspectives brought by archaeo-thanatology to the understanding of funerary practices. He participated as a fisical anthropology specialist in multiples archaeological projects in West Mexico (Barajas, Chupícuaro, Uacúsecha, Tres Mezquites Projects), in the Maya area (Río Bec, Naachtun Projects), as well as in San Luis Potosi (Tamtok Project). He was awarded with the Javier Romero Molina national award (Instituto Nacional de Antropología e Historia) in 2013 for best B.A. thesis in physical anthropology.

Isaac Barrientos Juárez es antropólogo físico, candidato a Maestro en Estudios Mesoamericanos por la Universidad Nacional Autónoma de México (UNAM) y estudiante asociado del Centro de Estudios Mexicanos y Centroamericanos (CEMCA). Licenciado en Antropología Física por la Escuela Nacional de Antropología e Historia. Ha centrado su interés profesional en la Bioarqueología de poblaciones prehispánicas y en estudios de arqueotanatología, generando aportaciones para el entendimiento de los tratamientos funerarios. En estos campos de investigación ha participado en diversos proyectos arqueológicos en el Occidente de México (Proyectos Arqueológicos Barajas, Chupícuaro, Uacúsecha, Tres Mezquites), en el area Maya (Río Bec, Naachtun), así como en San Luis Potosi (Proyecto Tamtok). Fue condecorado con el Premio Nacional Javier Romero Molina a la mejor tesis de Antropología Física en 2013 por parte del Instituto Nacional de Antropología e Historia (INAH).

Véronique Darras is a Research Director at the National Center for Scientific Research in France, and a member of the "Archéologie des Amériques" laboratory (UMR 8096 ArchAm). She received her PhD at the University of Paris 1 Panthéon Sorbonne. Her research focuses on the cultural developments of the Central-west region of Mexico, from the Preclassic through the Postclassic period, with a specific interest in the Chupicuaro culture, and cultural groups that preceded the Tarascan State. Véronique Darras works on reconstructing social and economic systems looking at settlement patterns, specialized craft productions and trade networks, with special interest in obsidian and ceramic materials. Her research is field-oriented and based on a technological perspective integrating the analytical tool of the "chaîne opératoire". One of her main focus is the understanding of the socioeconomical conditions that allowed the development of prismatic blade technology in Central and West Mesoamerica, specifically in the Zacapu region. Recently she has directed various research programs in northern Michoacán and in the Lerma valley. Her later publications include: Identifying household pottery manufacture in the Chupícuaro Formative Culture (Guanajuato, México). Are tools a reliable indicator? (Darras and Hamon 2020), and Family Making of Prismatic Blades. The pecked and ground platform preparation at the beginning of manufacture process: a good indicator of a household organization of production with division of labor (Darras and Pelegrin 2018).

Véronique Darras es directora de investigación en el Centre National de la Recherche Scientifique (CNRS) en Francia y miembro del laboratorio "Archéologie des Amériques" (UMR 8096 ArchAm). Se doctoró en la Universidad de París 1 Panthéon Sorbonne. Su investigación se centra en los desarrollos culturales en el centro-oeste de México desde el Preclásico hasta el Posclásico, con un interés particular en el desarrollo Chupícuaro y en las culturas que precedieron a la sociedad tarasca. Reconstruye sistemas sociales y económicos basándose en el estudio de los patrones de asentamiento, las producciones artesanales

especializadas y las redes de intercambio de recursos naturales y bienes manufacturados, con un enfoque especial en la obsidiana y, recientemente, sobre materiales cerámicos. Su investigación se fundamenta en trabajos de campo y en estudios tecnológicos utilizando la herramienta analítica de "chaîne opératoire". Uno de sus ejes de investigación atañe a las condiciones sociopolíticas que permiten el desarrollo de la tecnología de la navaja prismática en el centro-oeste de Mesoamérica, particularmente en la región de Zacapu. Recientemente ha dirigido varios programas de investigación en el norte de Michoacán y en el Valle de Lerma (México). Sus publicaciones recientes incluyen Identifying household pottery manufacture in the Chupícuaro Formative Culture (Guanajuato, México). Are tools a reliable indicator? (Darras and Hamon, 2020), Family Making of Prismatic Blades. The pecked and ground platform preparation at the beginning of manufacture process: a good indicator of a household organization of production with division of labor (Darras and Pelegrin 2018).

Marion Forest received her PhD in archaeology from the University Paris 1 Pantheon Sorbonne and is currently a postdoctoral researcher and teaching associate at the Department of Anthropology of Brigham Young University. Since 2008, she specializes in ancient urbanism and urbanization processes in western and central Mexico. She has participated in several projects focusing on spatial organization, mapping and remote sensing in West (Zacapu and Patzcuaro Basins), Central (Teotihuacan) and Northern Mexico (Casas Grandes) as well as in the Southwest of the United States (Coal Bed Village, Utah). She also served as a Fyssen Foundation Fellow (2016-2018) at Arizona State University, in which capacity she worked with Dr. Michael Smith to assist with revising our understanding of the residential patterns and demographics at Teotihuacan (Smith *et al.*, 2019). Her last publication in Advances in Archaeological Practices discusses the integration of LiDAR data in archaeological research, using the case of the Zacapu Malpaís urban settlements (Forest *et al.* 2020).

Marion Forest es doctora en arqueología de la Universidad de Paris 1 Panthéon Sorbonne y hoy en día funge como investigadora y profesora postdoctoral en el Departamento de Antropología de la Brigham Young University. Desde 2008, se especializa en el urbanismo premoderno y en los procesos de urbanización en el oeste y centro de México. Participó en varios proyectos enfocados en el estudio de los modos de organización espacial, mapeo y teledetección en el Oeste (cuencas de Zacapu y Pátzcuaro), Centro (Teotihuacan), y Norte de México (Casas Grandes), así como el suroeste de los estados Unidos (Coal Bed Village, Utah). Del 2016 al 2018, obtuvo un contrato postdoctoral auspiciado por la Fundación Fyssen, desarrollado en la Arizona State University, donde trabajó con el Dr. Michael Smith en la revisión de los patrones residenciales y estimaciones demográficas en Teotihuacan (Smith et al. *2019). Su última publicación en Advances in Archaeological Practices discute la integración de datos LiDAR en la investigación arqueológica, basándose en el caso de los sitios urbanos del Malpaís de Zacapu (Forest* et al. *2020).*

Elsa Jadot received her Ph.D. in archaeology from the University Paris 1 Panthéon Sorbonne. She is an associate researcher at the "Archéologie des Amériques" laboratory of the French National Center for Scientific Research (UMR 8096 ArchAm). Her research focuses on ceramic technology in ancient Michoacán from the Epiclassic to Early Colonial periods (IX–XVIth century), in order to link the ceramic production process with the emergence and transformations of the Tarascan civilization. Within this framework, she seeks to characterize the pre-Tarascan populations settled in the Malpaís of Zacapu, including El Palacio, by studying the technology involved in their ceramic production. Her current work focuses on the consequences of Spanish colonization, with an emphasis on the technical and cultural evolution of local ceramic production. Her research has been published in *Ancient Mesoamerica*, *Latin American Antiquity*, S*pectrochimica Acta Part B: Atomic Spectroscopy*, and in the edited volumes *Archéologie de la frontière* (Aniceto *et al.*, eds.) and *Mobility and Migration in Ancient Mesoamerican Cities* (Arnauld *et al.*, eds.).

Elsa Jadot es doctora en arqueología de la Universidad Paris 1 Panthéon Sorbonne. Es investigadora asociada al laboratorio "Archéologie des Amériques" del Centre National de la Recherche Scientifique de Francia. Sus investigaciones se enfocan en la tecnología cerámica en el Michoacán antiguo desde el Epiclásico hasta el periodo colonial temprano (siglos IX–XVI), para poner en relación los procesos de producción de cerámica con la emergencia y las transformaciones de la civilización tarasca. Bajo este marco, ha trabajado en la caracterización de las poblaciones pre-tarascas que poblaron la región de Zacapu. Actualmente, desarrolla un estudio del impacto de la colonización española, desde la perspectiva de la evolución técnica y cultural de la producción de cerámica local. Es autora de artículos publicados en Ancient Mesoamerica*,* Latin American Antiquity*, S*pectrochimica Acta Part B: Atomic Spectroscopy, *y en los volúmenes* Archéologie de la frontière *(Aniceto* et al.*, eds.) y* Mobility and Migration in Ancient Mesoamerican Cities *(Arnauld* et al.*, eds.).*

Aurélie Manin is a zooarchaeologist and biomolecular archaeologist. She completed her Ph.D. in Mesoamerican zooarchaeology at the Muséum National d'Histoire Naturelle (Paris, France) and is currently a postdoctoral research associate in the Department of Archaeology of the University of Oxford, United Kingdom. She started to work on the site of El Palacio during her Ph.D., in 2012. As a member of the Uacúsecha archaeological Project, she undertook the study of animal remains from this settlement and others in the basin of Zacapu in order to reconstruct the evolution of animal exploitation and management along with the demographic movements.

Aurélie Manin es arqueozoóloga y especialista en arqueología biomolecular. Llevó a cabo su tesis de doctorado en arqueozoología mesoamericana en el Muséum National d'Histoire Naturelle (Paris, Francia) y es ahora investigadora postdoctoral en el Departamento de Arqueología de la Universidad de Oxford, Reino Unido. Empezó a trabajar en el sitio de El Palacio durante su tesis doctoral, en 2012, en el marco del Proyecto arqueológico Uacúsecha. Analizó los restos faunísticos de este asentamiento además de otros en la cuenca de Zacapu para reconstituir la evolución de la explotación y la gestión de los animales a lo largo de los movimientos demográficos.

Grégory Pereira received his Ph.D. in archaeology from the University Paris 1 Pantheon Sorbonne in 1997 and is currently a research director at the "Archéologie des Amériques" laboratory of the French National Center for Scientific Research (UMR 8096 ArchAm). Dr. Pereira's research focuses on mortuary patterns in ancient Mesoamerica and on sociopolitical transformations and migrations at the northern Mesoamerican frontier (Michoacán and Bajío regions in western Mexico). He has directed excavation projects at Cerro Barajas, Guanajuato (in collaboration with Gérald Migeon and Dominique Michelet) and he is currently coordinating the Uacúsecha Project in the Zacapu basin, Michoacán. He also collaborates in distinct projects in western (Michoacán Project) and central México (Moon Pyramid Project, Templo Mayor Project), the Gulf Coast (Vista Hermosa Project) and in the Maya area (Balamku and Río Bec Project). He has co-edited several books including *Tradiciones cerámicas del Epiclásico en el Bajío y regiones aledañas: cronología e interacción* (with Chloé Pomédio and Eugenia Fernández Villanueva), *La Ciudad Perdida. Raíces de los soberanos tarascos* (with Eliseo Padilla Gutiérrez) y *Vista Hermosa. Nobles, artesanos y mercaderes en los confines del mundo huasteco* (with Guy and Claude Stresser-Péan).

Grégory Pereira, doctor en arqueología de la Universidad París 1 Panthéon Sorbonne en 1997, fue director de investigación en el laboratorio "Archéologie des Amériques" en el Centre National de la Recherche Scientifique en Francia (UMR 8096 ArchAm). Su investigación se enfoca en las prácticas funerarias Mesoamericanas y en las transformaciones y migraciones que ocurrieron en la región de la frontera norte de Mesoamérica (Michoacán y Bajío). Dirigió programas de excavación en el Cerro Barajas, Guanajuato (con Gérald Migeon y Dominique Michelet) y coordina actualmente el Proyecto Uacúsecha en la cuenca de Zacapu, Michoacán. Ha colaborado con varios proyectos en el occidente de México (Proyecto Michoacán), en la Costa del Golfo (Vista Hermosa), así como en el área Maya

(Balamku, Rio Bec). Es co-editor de libros, como Tradiciones cerámicas del Epiclásico en el Bajío y regiones aledañas: cronología e interacción *(con Chloé Pomédio y Eugenia Fernández Villanueva),* La Ciudad Perdida. Raíces de los soberanos tarascos *(con Eliseo Padilla Gutiérrez) y* Vista Hermosa. Nobles, artesanos y mercaderes en los confines del mundo huasteco *(con Guy y Claude Stresser-Péan).*

Corey Ragsdale is an Assistant Professor in the Department of Anthropology at Southern Illinois University Edwardsville. His research specialization is the study of migration patterns and population structures through biological distance analysis, particularly with dental morphological data. Past research has primarily focused on Postclassic period populations in Mexico and the American Southwest and has recently expanded unto examining indigenous population structures after Spanish contact. Dr. Ragsdale's dissertation and related work found strong correlations between cultural and biological relationships among Mesoamerican groups. In his most recent work, "Detecting population replacement in Colonial Valley of Mexico and Morelos" published in the *International Journal of Osteoarchaeology*, Corey Ragsdale and his colleagues focused on the powerful influence of indigenous alliances with the Spanish on migration patterns in Central Mexico during the 16th to 18th centuries. As a specialist in biological distance analysis, Corey Ragsdale is interested in better understanding the population history of the El Palacio site compared with previous studies related to Mesoamerican migratory patterns.

Corey Ragsdale es Profesor Asistente en el Departamento de Antropología de la Universidad de Southern Illinois en Edwardsville. Se especializa en el estudio de los patrones migratorios y estructuras poblacionales a través el análisis de distancia biológica, en particular basándose en los datos procedentes de la morfología dental. Su investigación se ha enfocado primeramente en las poblaciones prehispánicas del periodo Posclásico en México y el Suroeste de los Estados-Unidos. Actualmente ha expandido sus estudios a las estructuras poblacionales de comunidades indígenas después de la Conquista. La investigación doctoral de Corey Ragsdale identificó fuertes correlaciones culturales y biológicas entre grupos Mesoamericanos. En un estudio reciente, "Detecting population replacement in Colonial Valley of Mexico and Morelos" publicado en el International Journal of Osteoarchaeology*, el Dr. Ragsdale y colegas se enfocan en la influencia mayor que tuvieron las alianzas indígenas y españolas en los patrones migratorios presentes en el centro de México entre los siglos XIV y XVIII. Como especialista de análisis de biodistancia, se ha interesado en generar un mejor entendimiento de la historia poblacional del sitio El Palacio, a partir de la comparación con otros patrones migratorios en Mesoamérica.*

Juliette Testard received a PhD in archaeology from the University Paris 1 Pantheon Sorbonne and is currently research engineer at the French National Center for Scientific Research, in the "Archéologie des Amériques" Laboratory (UMR 8096 ArchAm). Her research interests are anthropology of art and archaeology, with a focus on the Mesoamerican Central Highlands interaction and exchange processes, and the Epiclassic period. She is currently working on developing a systematic iconographic data analysis protocol for ArchAm's archaeological projects and has published on Mesoamerican iconography (Testard 2014, 2019), especially on figurines (Testard and Serra Puche 2020; Forest *et al.* 2019), as well as on interaction processes (Testard, 2017). She has participated in ArchAm projects in Michoacán since 2010.

Juliette Testard es doctora en arqueología de la Universidad Paris 1 Panthéon Sorbonne. Es ingeniera de investigación en el Centre National de La Recherche Scientifique de Francia, en el laboratorio "Archéologie des Amériques" (UMR 8096 ArchAm). Se especializa en antropología del arte y arqueología, con un enfoque en las interacciones culturales y los procesos de intercambio en el altiplano central mesoamericano durante el período Epiclásico, Actualmente, trabaja en la sistematización del análisis de datos iconográficos de los proyectos arqueológicos de ArchAm. Sus publicaciones versan sobre la iconografía mesoamericana (Testard 2014, 2019), especialmente en figurillas (Testard y Serra Puche 2020; Forest et al. *2019), así como los procesos de interacción culturales (Testard, 2017). Ha participado en los proyectos de ArchAm llevados a cabo en Michoacán desde 2010.*

Seonaid Valiant, the Curator for Latin American Studies for the Arizona State University Library, holds a Ph.D. in History from the University of Chicago with special fields in Latin American and Art History. Her book, *Ornamental Nationalism: Archaeology and Antiquities in Mexico*, *1876-1911* (Brill, 2018) examines international debates over the meaning of indigenous symbols and the professionalization of archaeology in Mexico at the turn of the twentieth century. Her current research project is a biography of the archaeologist and codex scholar Zelia Nuttall (1857–1933), who helped to set the standards for modern archaeology in Mexico.

Seonaid Valiant es Curadora del departamento de estudios latinoamericanos de la biblioteca de Arizona State University. Obtuvo su doctorado en Historia en la University of Chicago, con especialización en Historia latinoamericana y del arte. Su libro, Ornamental Nationalism: Archaeology and Antiquities in Mexico, 1876-1911 *(Brill, 2018) examina los debates internacionales concernientes al valor de los símbolos indígenas y la profesionalización de la arqueología en México durante el siglo XX. Su investigación actual consiste en la elaboración de una biografía de la arqueóloga y especialista de los códices, Zelia Nuttall (1857–1933), quien participó en el desarrollo de los estándares de la arqueológica moderna en México.*

Introduction

Marion Forest

During his travels in the Tarascan region of West Mexico, the Norwegian ethnographer Carl Lumholtz was guided by residents of the town of Zacapu, located in northern Michoacán, West Mexico, to the nearby hilltop location where 'bones' could be found. This was in 1896, and for the first time, a foreign explorer visited the *Palacio del Rey Caltzontzin,* and described his findings in his publication, *Unknown Mexico,* first published in 1902. Following Lumholtz, several generations of archaeologists would briefly visit the ruins known as *El Palacio del Rey Caltzontzin* (Caso 1930, 449), also mentioned as *El Palacio* (Fernández Villanueva 1992, Freddolino 1973), *Mich. 23-El Palacio-La Crucita* (Proyecto Michoacán 1983) or *INAH-001* (ENAH 1984), as they seem to be an unmissable attraction while exploring the Zacapu lake basin. In 1984, a test-pit of 2 x 1 meters was excavated at El Palacio by the archaeologists of the Michoacán Project. Although isolated (the next excavation would happen 8 years later), this operation provided critical stratigraphic data and radiocarbon dates that helped establish the chronological sequence for the entire region of central-northern Michoacán (Michelet 1992). On the other hand, the name of the modern town of Zacapu ressembles the toponym *Çacapo* mentioned in the *Relación de Michoacán* (written circa 1541, Alcalá 2008), a transcription of the foundational myth of the Tarascan empire, one of the major polities of postclassic Mesoamerica (A.D. 1350–1521). In the text, *Çacapo* corresponds to one of the earliest milestones in the conquest of Michoacán by the Tarascan dynastic elite, the Uacúsecha. This toponym ressemblance and the direct vicinity of modern Zacapu with the ruins of El Palacio suggests that this latter might be the prehispanic *Çacapo*, and therefore a major landmark in the social and spatial changes that have characterized the formation of the Tarascan State (Espejel Carbajal 2008: 2013). This sector of Michoacán (Figure 1) has been intensively investigated since the 1970s.

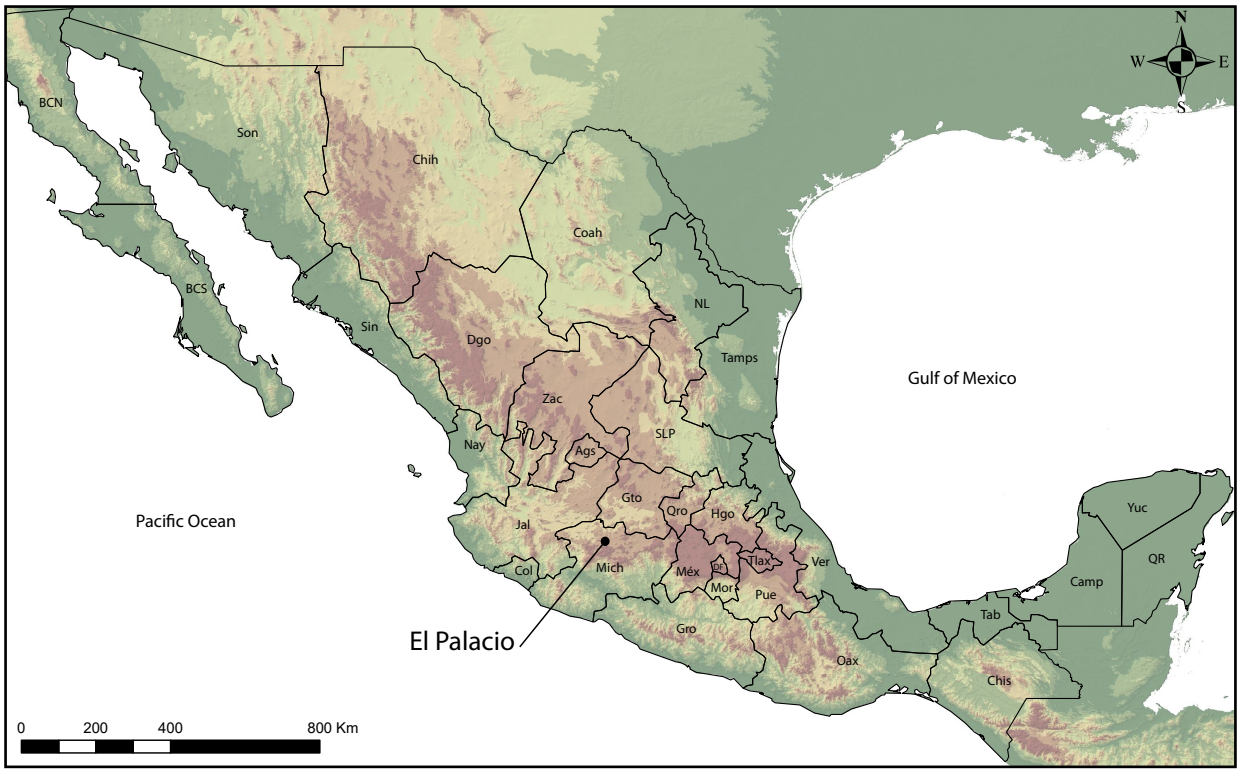

Figure 1. Location of El Palacio in the modern-day State of Michoacán, Mexico.

The Zacapu and Pátzcuaro lake basins have received particular attention due to their importance for understanding the origins and characteristics of the Tarascan State. Within these two areas of interest, archaeological research has generated a relatively high-resolution picture of the prehispanic occupation of the region. Beyond the initial investigation of the history of the Tarascan State, such research has yielded (among other things) information regarding settlement pattern and how it evolved, site and regional chronologies, material culture, residential settings and mortuary patterns. Despite the depth and breadth of research conducted in the region as well as the apparent importance of El Palacio within the local historical landscape, very little is known about the site. This lack of knowledge makes it difficult to understand how and where this site fits within the prehispanic history of the region and, conversely, how it could inform our knowledge about the settlement pattern and social changes that occurred in this region of Mesoamerica.

Environment

El Palacio is located in the southwestern corner of the Zacapu lake basin (Figure 2), in the central sector of the Michoacán-Guanajuato volcanic field. This area exhibits the highest concentration of monogenetic

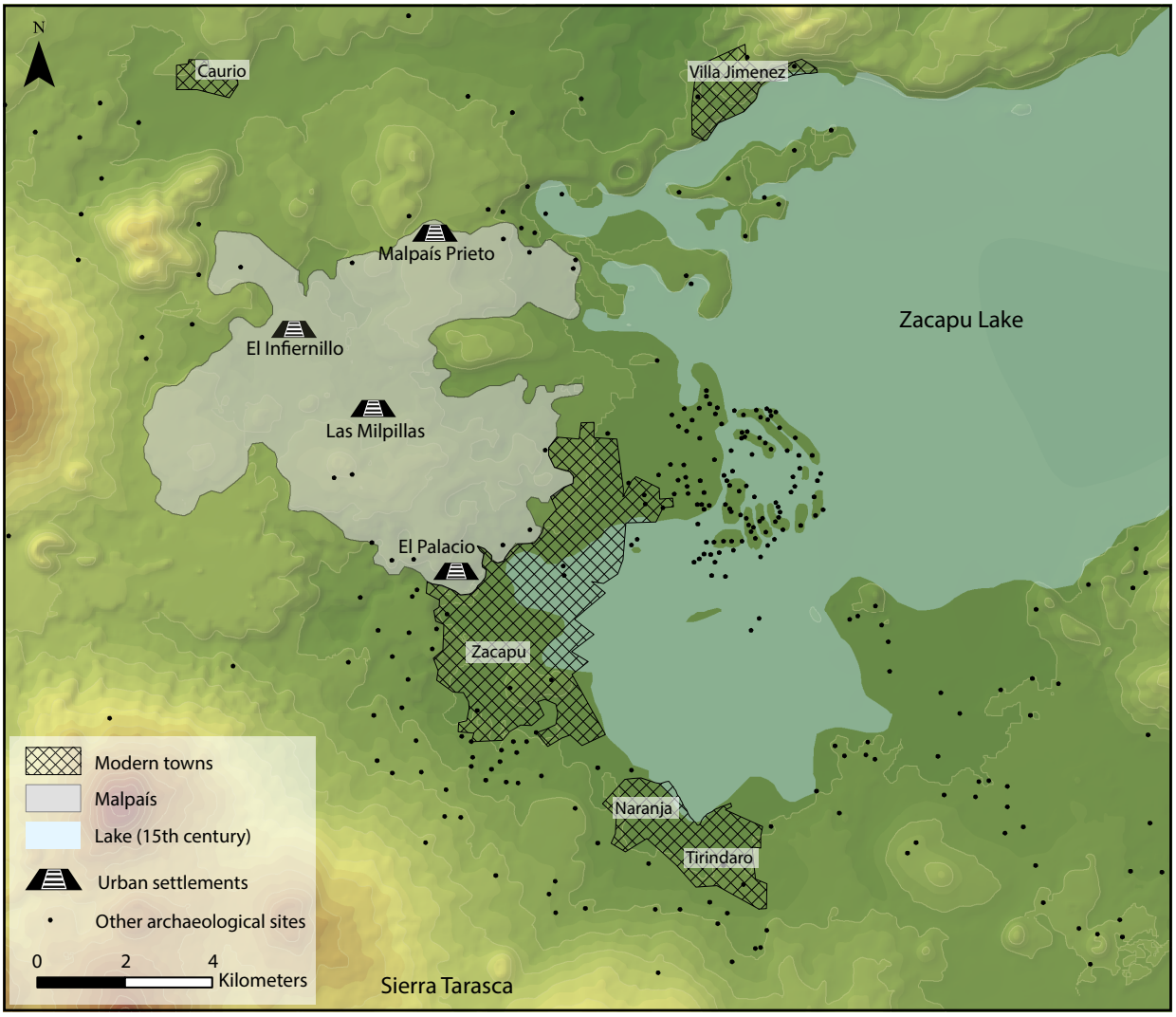

Figure 2. Map of the western sector of the Zacapu lake basin with the location of the Milpillas phase urban settlements within the general archaeological map.

volcanic edifices of the Trans-Mexican Volcanic Belt (Siebe *et al.* 2014). Since the Tertiary, the landscape and relief of this region have been continuously modified by volcanic activity (Demant 1981; Ferrari *et al.* 2012), with a series of eruptions occurring contemporaneously with human occupation (Dorison 2019). Formed by these volcanoes, whose cones sometimes disappeared under thick and chaotic lava flows, important complexes are found throughout northern Michoacán and referred to as "malpaíses". The Zacapu Malpaís, resulting from successive quaternary volcanic episodes, forms the western limit of the Zacapu lake basin. The most recent volcanic event occurred sometime between A.D. 830 and A.D. 960, with the eruption of the Malpaís Prieto volcano (Mahgoub *et al.* 2017). This event had a significant impact on the formation of the landscape and likely the settlement strategy for the local populations. Despite the significant transformations that attended such events (e.g., changes in topography or lake levels), this lacustrine and volcanic environment, coupled with a sub-humid temperate climate, undoubtedly offered many advantages and resources for settlement and the development of the different cultures that occupied the region. Such resources include rich farming land, lacustrine goods (e.g., plants, animals, clay), and volcanic minerals including obsidian, andesite, basalt, rhyolite and dacite stones. Located on top of the southwestern edge of the Zacapu Malpaís, El Palacio (2050–2180 m.a.s.l.) was built on top of an andesitic bedrock generated by the eruption of the El Capáxtiro volcano during the Late Pleistocene, circa 200–80 B.C. (Mahgoub *et al.* 2017). This location overlooks a large portion of the lacustrine basin and provides easy access to its resources. Dorison estimates the extension of the lake to 120 a 170 km², with high variations in level and extension over time. The lake was drained in the 1900s and only a small lagoon remains north of Zacapu (Dorison 2019), as presented in Figure 3. Nevertheless, the site itself would have been confronted with many environments and resource constraints. The andesitic subtract and recent soil formation at the site would have been neither hospitable nor farmable and only the importation of soil from the plain could have provided the farming capacity observable today (Dorison 2019). Further, the chaotic relief of the underlying malpaís had to be intensively leveled for human activity and there is no natural source of water available on site.

Today, the West and North sectors at the site remain very abrupt, with thin layers of soil overlying the andesite block terraces (foreground in Figure 3). In contrast, the lower portion of the site is farmed: the prehispanic terraces and platforms are used as *milpas*, and the architectural structures have been partially dismantled to construct fences around agricultural plots (central plan in Figure 3). While tall trees have either been planted or developed in the Southeast sector at the site, the majority of the vegetation consists

Figure 3. View from the West sector at El Palacio facing east towards the ancient Basin.

of bushes, small trees, and cactuses, characteristic of the recent *malpaís* flora (Labat 1992, 1995). The description made by Lumholtz in 1904 suggests that the farming activities taking place today at the site have existed since at least the nineteenth century.
The recent addition of agave and avocado trees to the local agricultural system has had a dramatic impact on the subsoil and the integrity of the archaeological remains. Long-term, opportunistic looting and its use as a recreational area for the inhabitants of the town of Zacapu has also affected the preservation of the site.

Archaeological context

The Zacapu lake basin and the northern adjacent area of the Lerma southern watershed have been studied in depth since 1983, through a series of archaeological initiatives: the INAH Atlas Arqueológico Project (1983–1984), the Michoacán project (3 phases, 1983–1996), the Uacúsecha Project (2009–present), the Tres Mezquite project (2012–present) and the Mésomobile project (2015–2018). Although El Palacio has not been the object of systematic archaeological work, the nearby sites of El Malpaís Prieto (Mich. 31), El Infiernillo (Mich. 38) and Las Milpillas (Mich. 95–96), also located on the top of the Malpaís hills, have been extensively studied (e.g., Michelet 1998, 2000; Michelet *et al.* 1988; Migeon 1990, 2015, 2016;

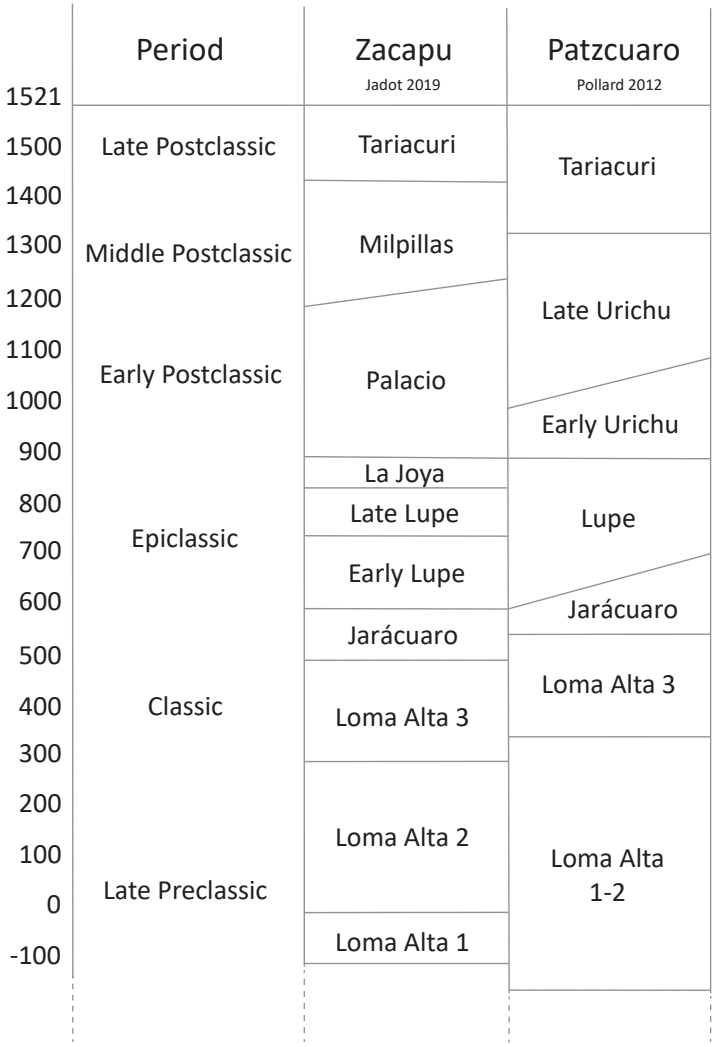

Figure 4. Regional chronology.

Forest 2014, 2016). Together, these four sites formed a large urbanized network spanning hundreds of hectares and where a dense population (over 20,000 people) settled circa A.D. 1200/50 before completely abandoning the Malpaís circa 1450 (likely related to the formation of the Tarascan State in the nearby Pátzcuaro lake basin (see Fisher *et al.* 2003, 2019 and Pollard 2000, 2008). These dates bracket the local Middle Postclassic phase, *Milpillas*. The formation of these sites is interpreted to result from the sudden and massive aggregation of populations in these locations, likely representing the relocation of both local (already settled in the basin and/or adjacent areas) and non-local (from the northern areas of the Bajío region and southern Lerma watershed) groups (e.g., Faugère-Kalfon 1991, 1996; Pereira *et al.* 2001, 2005). The material culture associated with the Milpillas phase exhibits many characteristics observed in Tarascan assemblages and seems to represent an early expression of the Late Postclassic Tarascan tradition (Migeon 1990; Darras 2012; Pereira and Gutiérrez 2018). Although Malpaís Prieto and several other smaller, peri-urban sites have been identified as completely new settlements that were founded as a direct result of this urbanization episode (Forest 2014; Michelet 1992; Pereira *et al.* in press), Las Milpillas and El Infiernillo exhibited evidence – although limited to a few structures and terraces – of earlier occupations (Michelet 2008; Pereira *et al.* 2016). This massive urbanization process resulted in a dramatic redistribution of the population within the region. The northern settlements occupied during the Epiclassic (phases *Lupe* and *La Joya*) and Early Postclassic (Phase *Palacio*) were abandoned, likely to the benefit of the Zacapu Malpaís settlements (Arnauld and Faugère-Kalfon 1998; Pereira *et al.* 2005).
Little is known, however, about the pre-Milpillas phase occupation of the Zacapu lake basin itself, and, more specifically, about the occupation of the southeastern sector of the Malpaís, including El Palacio. Consequently, our understanding of the long-term population structure and developmental dynamics in the region, including the spatial, social, economic, and political impacts of this relatively sudden urbanization phenomenon, remains limited.

Research Questions

As one of only a handful of sites within the Zacapu lake basin that was continuously occupied throughout the Postclassic period (at least A.D. 850–1450), El Palacio can provide data to document these successive transitions. Identifying the role that El Palacio played within the regional archaeological sequence is therefore critical. Much of the site's prehispanic history, however, has yet to be documented. For example, when was El Palacio founded? What are the morphological and organizational characteristics of the site? Did El Palacio change in form, size and function over time? If so, when and under what circumstances? Was El Palacio a religious center? A residential site? An economic or political center? A city? What type of subsistence and resources supported the inhabitants, and did they change over time? Where are these resources, and through what strategies are they procured? Is there evidence of social complexity at El Palacio and how does this inform the processes of state emergence from the perspective of the Zacapu lake basin? What mortuary practices, religious settings, and ceremonial paraphernalia can be documented at the site? What are the goods produced and used by El Palacio's inhabitants and what do they tell us about the technology of these societies? Can we perceive changes in production practices and, if so, what do they mean? Each of these questions must be addressed in order to develop a more nuanced picture of the human occupation of El Palacio in the past and its role at the regional scale.

Volume organization

Initiated after the recent work conducted at El Palacio between 2010 and 2017, this monograph has three main objectives: 1) to compile all available data pertaining to the site (both the dispersed legacy documentation and data acquired through recent investigations); 2) to use these datasets to offer a series of in-depth analyses of the material culture and chronological sequence at the site, and 3) to provide a revised picture of El Palacio and its place within the history of societies and spatial dynamics of Northern Michoacán.

Background and recent work

In Chapter One, Seonaid Valiant presents the initial and decisive first exploration of El Palacio by Lumholtz in 1896, providing some perspective concerning the historical and political contexts in which this early excavation and description of the site were conducted. Following this essay, in Chapter Two, Marion Forest presents a detailed account of all subsequent studies conducted at the site and the data generated by them prior to the start of the Uacúsecha Project in 2009. This review emphasizes that, despite their dispersion and the frequent absence of post-fieldwork analyses, these projects generated a significant amount of data. In many cases primary data could be reevaluated (e.g., collections curated at the American Museum of Natural History, Centro de Estudios Mexicanos y Centroamericanos, researcher personal archives) or partially re-analyzed (e.g., INAH Michoacán); other datasets were inaccessible within the scope of this editorial project. These collections provided critical data for the analyses presented in this volume, demonstrating both the potential and necessity of integrating legacy archives and collections in contemporary research designs and questions.

In Chapter Three, Elsa Jadot and Marion Forest present in detail the results of their recent fieldwork conducted at El Palacio in 2010, 2012 and 2017, including remote-sensing, traditional survey, mapping, and limited excavation. These field seasons generated a large amount of archaeological materials and significantly increased the available information concerning different aspects of the site, including site chronology. Through the excavation of a series of test-pits extending beyond the limits of previous archaeological explorations, chrono-stratigraphic contexts across the site were extensively documented, providing a framework for dating ceramic complexes. These excavations also enabled the authors to refine the chronology of El Palacio by both recalibrating radiocarbon dates obtained during the 1980s and obtaining a new series of AMS dates. The result is a more robust sequence of construction and occupational events at El Palacio.

Settlement pattern and site transformation

Chapter Four presents a complete reevaluation of the settlement patterns and built environment at El Palacio, based on the production of the first complete map of the site, analyses using LiDAR-derived data, and field-observations. Despite the modern alterations of the archaeological record due to farming, the analyses delimit the spatial extent of the site, describe the architectural typology and its evolution over time and identify different functional spheres, including religious precincts and residential networks. In turn, these results enable inferences regarding differences in social status among the inhabitants of El Palacio as well as the delineation of a series of morphological transformations occurring throughout the Epiclassic and Postclassic periods. This work represents a significant reassessment of urbanism and site function during prehispanic times.

Material analyses

Specialized analyses of artifacts and ecofacts yielded critical information regarding economic and technological practices at the site and their potential transformations over time. In Chapter 5, Elsa Jadot examines ceramic production during the Epiclassic and Early Postclassic phases to characterize both population composition and cultural affiliation as well as changes in production practices. Using a technological approach (the reconstruction of the different *chaînes opératoires*) in concert with compositional analysis (INAA), she reassesses the continuity and change of the ceramic tradition during the Epiclassic and Postclassic sub-phase transitions.

In Chapter Six, Elsa Jadot and Juliette Testard analyze all non-utilitarian objects collected at the site including ceramic figurines and small objects like pipes and spindle whorls. Their systematic examination of these artifacts, often left unconsidered within archaeological publications, sheds light on critical aspects of the ritual and communal life at the site. In addition, these analyses provide important data regarding

long-distance exchange between El Palacio and other cultural spheres in West and Central Mexico.
In Chapter Seven, Véronique Darras addresses the question of technological continuity and change at El Palacio, this time through the lens of lithic industries. Based on the systematic analysis of obsidian tools and debitage in conjunction with Energy Dispersive X-ray Fluorescence, her analysis reveals that contexts and materials found provide insights as to the introduction of the prismatic blade industry to this region of Mesoamerica. Her results also shed light on important shifts in raw material procurement strategies that occurred over time, both in this part of Michoacán and within the wider context of West Mexico.
In Chapter Eight, Aurélie Manin presents the results of her analyses of the faunal remains collected during the excavations conducted at the site. She examines the use of animal resources comparing both spatial and chronological patterning at El Palacio. This analysis generates important data regarding subsistence and ritual strategies in relation to animal consumption practices. By providing new information about changes in patterns of animal use and foodways at El Palacio, this study helps to provide a better understanding of human interactions with the environment and how they changed over time in the Zacapu basin.

Religion, rituals, and mortuary practices

the examination of mortuary remains also contribute to a new picture of the religious and ritual activities conducted at El Palacio. In Chapter Nine, Grégory Pereira presents the latest developments in his study of grooved human bones collected by Lumholtz from the site in 1896. The author examines the artifacts curated at the American Museum of Natural History (New-York) using a macro-trace analysis. These observations enable his discussion of the functions and meaning of these peculiar objects within both the context of the site and, more broadly speaking, Postclassic Mesoamerica. Through this reanalysis of the Lumholtz legacy collection, the author offers a new perspective on rituals, warfare-related practices, and mortuary patterns at El Palacio.
In Chapter Ten, Grégory Pereira and Isaac Barrientos Juárez present their analysis of a series of burials pertaining to cremation practices at El Palacio. Combining legacy data and the analysis of recently excavated burial contexts (including both infant and adult individuals), the authors shed light on this specific mortuary pattern and its characteristics at the site. Finally, they discuss their findings and conclusions about El Palacio in light of documented mortuary practices throughout prehispanic Michoacán.

Population structure

In Chapter Eleven, Corey Ragsdale discusses the important demographic changes that occurred at El Palacio during the Postclassic period. The author utilizes dental data collected on the skulls and mandibles excavated by Lumholtz in 1896 and brought to the American Museum of Natural History and compares them to datasets from other regions of western, central and southern Mexico in order to evaluate the phenotypic distance between these different populations. This biodistance analysis helps to contextualize the individuals interred at El Palacio within the population history and patterns of mobility in both West Mexico and the rest of Mesoamerica, from the Classic to the Postclassic period.

These different approaches to the material culture of El Palacio collectively build a new understanding of this settlement and its role in the history of the Zacapu lake basin. Their results are synthesized and discussed in the Conclusion of this volume.

References

Alcalá, Jerónimo de. *Relación de Michoacán*. Zamora: Colegio de Michoacán, 2008.
Arnauld, Marie-Charlotte, and Brigitte Faugère-Kalfon. “Evolución de la ocupación humana en el centro-norte de Michoacán (Proyecto Michoacán, CEMCA) y la emergencia del Estado Tarasco”. In *Genesis, culturas y espacios en Michoacán*, Véronique Darras (ed.), pp. 13–34. Mexico City: Centro de Estudios

Mexicanos y Centroamericanos, 1998.
Darras, Véronique. “Development of Pressure Blade Technology in North-Central and Western Mexico”. In *The Emergence of Pressure Blade Making: From Origin to Modern Experimentation*, Pierre M. Desrosiers (ed.), pp. 417–463. New-York: Springer Science & Business Media, 2012.
Demant, Alain. L’axe néo-volcanique transmexicain. Etude volcanologique et pétrographique; signification géodynamique. Unpublished Ph.D. dissertation. Université Aix-Marseille III, 1981.
Dorison, Antoine. Archéologie des système agraires préhispaniques de la région de Zacapu, Michoacán, Mexique, VIIe-XVe siècle apr. J.-C. Unpublished Ph.D. dissertation. Paris: Université de Paris 1 Panthéon Sorbonne, 2019.
Escuela Nacional de Anthropología e Historia. Atlas Arqueológico Nacional, primera etapa: cedula de registro “El Palacio”, clave E14A11-16001. Mexico City: Instituto Nacional de Antropología e Historia, 1984.
Espejel Carbajal, Claudia. *La justicia y el fuego: dos claves para leer la Relación de Michoacán*. 2 vols. Zamora: El Colegio de Michoacán, 2008.
— La Relación de Michoacán. Narraciones históricas de los purépecha. *Arqueología Mexicana* XXI, no. 123 (2013): 68–75.
Faugère-Kalfon, Brigitte. “San Antonio Carupo (centro-norte de Michoacán, México): nuevas evidencias de ciertas transformaciones en el inicio del Postclásico”. *Journal de la Société des américanistes* 77, no. 1 (1991): 45–61.
— *Entre Zacapu y Río Lerma: culturas en una zona fronteriza*. Cuadernos de estudios michoacanos 7. Mexico City: Centro de Estudios Mexicanos y Centroamericanos, 1996.
Fernández Villanueva, Eugenia. Arqueología de la ciénega de Zacapu. *Anales del Museo Michoacano* Tercera época, Suplemento al no. 4 (1992): 11–34.
Ferrari, Luca, Teresa Orozco-Esquivel, Vlad Manea, and Marina Manea. “The dynamic history of the Trans-Mexican Volcanic Belt and the Mexico subduction zone”. *Tectonophysics* 522–523 (2012): 122–149.
Fisher, Christopher T., Anna S. Cohen, Rodrigo Solinis-Casparius, Florencia L. Pezzutti, Jason Bush, Marion Forest and Andrea Torvinen. A Typology of Ancient Purépecha (Tarascan) Architecture from Angamuco, Michoacán, Mexico. *Latin American Antiquity* 30, no. 3 (2019): 510–528.
Fisher, Christopher T., Helen Perlstein Pollard, Isabel Israde-Alcántara, Victor H. Garduño-Monroy and Subir K. Banerjee. “A reexamination of human-induced environmental change within the Lake Pátzcuaro Basin, Michoacán, Mexico”. *Proceedings of the National Academy of Sciences* 100, no. 8 (2003): 4957–4962.
Forest, Marion. L’organisation sociospatiale des agglomérations urbaines du Malpaís de Zacapu, Michoacàn, Mexique [1250–1450 après J.-C.]. Unpublished Ph.D. dissertation. Paris: Université Paris 1 Panthéon Sorbonne, 2014.
— “Urbanismo y sociedad en Malpaís Prieto, norte de Michoacán. Reflexiones acerca de la estructura espacial de un sitio prototarasco (1250–1450 d. C.)”. In *Nuevas contribuciones al estudio del antiguo Michoacán*, Hans Roskamp and Sarah Albiez-Wieck (eds.), pp. 19–50. Zamora: Colegio de Michoacán, 2016.
Freddolino, Marie Kimball. An investigation into the pre-Tarascan cultures of Zacapu, Michoacán, Mexico. Unpublished PhD dissertation. New Haven: Yale University, 1973.
Labat, Jean-Noël. “Fitogeografía de la región de Zacapu”. In *El Proyecto Michoacán 1983-1987, medio ambiente e introducción a los trabajos arqueológicos*, pp. 75–111. Cuadernos de estudios michoacanos 4. Mexico City: Centro de Estudios Mexicanos y Centroamericanos, 1992.
— *Flora del Bajio y de regiones adyacentes: Fasciculo complementario. Végétation du nord-ouest du Michoacán Mexique*. Patzcuaro: Instituto de Ecología A.C., Centro Regional del Bajío, 1995.
Lumholtz, Carl. *El México desconocido*. Translated by Balbino Dávalos. Volumen 2. Nueva York: Scribner’s sons, 1904.
Mahgoub, Ahmed Nasser, Nanci Reyes-Guzmán, Harald Böhnel, Claus Siebe, Gregory Pereira, and

Antoine Dorison. “Paleomagnetic constraints on the ages of the Holocene Malpaís de Zacapu lava flow eruptions, Michoacán (México): Implications for archeology and volcanic hazards”. *Holocene* 28, no. 2 (2017): 229–245.

Michelet, Dominique. “El centro-norte de Michoacán: características generales de su estudio arqueológico regional”. In *El Proyecto Michoacán 1983-1987, medio ambiente e introducción a los trabajos arqueológicos*, pp. 55–72. Cuadernos de estudios michoacanos 4. Mexico City: Centro de Estudios Mexicanos y Centroamericanos, 1992.

— “Topografía y prospección sistemática de los grandes asentamientos del Malpaís de Zacapu : claves para un acercamiento a las realidades sociopolíticas”. In *Génesis, culturas, y espacios en Michoacán*, Véronique Darras (ed.), pp. 47–59. Mexico City: Centro de Estudios Mexicanos y Centroamericanos, 1998.

— “‘Yácatas’ y otras estructuras ceremoniales tarascas en el Malpaís de Zacapu, Michoacán”. In *Arqueología, historia y antropología: in memoriam, José Luis Lorenzo Bautista*, Jaime Litvak and Lorena Mirambell (eds.), pp. 117–137. Colección Científica. Mexico City: Instituto Nacional de Antropología e Historia, 2000.

— “Vivir diferentemente. Los sitios de la fase Milpillas (1250-1450 d. C.) en el Malpaís de Zacapu (Michoacán)”. In *El urbanismo en Mesoamérica/Urbanism in Mesoamerica*, Alba Guadalupe Mastache, Robert H. Cobean, Angel García Cook and Kenneth G. Hirth (eds.), volumen 2: 593–620. Mexico City: PennState University Press, Instituto Nacional de Antropología e Historia, 2008.

Michelet, Dominique, Alain Ichon, and Gérald Migeon. “Residencias, barrios y sitios posclásicos en el Malpaís de Zacapu”. In *Primera reunión sobre las sociedades prehispánicas en el Centro-occidente de México*, pp. 177–191. Cuaderno de trabajo 1. Querétaro: Instituto Nacional de Antropología e Historia, Centro regional de Querétaro, 1988.

Migeon, Gérald. Archéologie en pays Tarasque: structure de l’habitat et ethnopréhistoire des habitations tarasques de la région de Zacapu (Michoacán, Mexique) au Postclassique Récent. Unpublished PhD dissertation, Université Paris 1 Panthéon Sorbonne, 1990.

— *Residencias y estructuras civico-ceremoniales posclásicas Tarascas de la Región de Zacapu (ichoacán, México)*. British Archaeological Reports International Series, Paris Monographs in American Archaeology 40. Oxford: Archaeopress Publishing, 2015.

—*Patrones de asentamiento del Malpaís de Zacapu (Michoacán, Mexico) y sus alrededores en el Posclásico*. British Archaeological Reports International Series, Paris Monographs in American Archaeology 46. Oxford: Archaeopress Publishing, 2016.

Pereira, Grégory, Marion Forest, Elsa Jadot, and Véronique Darras. “Ephemeral cities? The longevity of the Postclassic Tarascan urban sites of Zacapu Malpaís and its consequences on the migration process”. In *Mobility and Migration in Ancient Mesoamerican Cities*, Marie-Charlotte Arnauld, Christopher Beekman, and Grégory Pereira (eds.). Boulder: University Press of Colorado, 2020.

Pereira, Grégory, and Eliseo Francisco Padilla Gutiérrez. *La ciudad perdida: raíces de los soberanos tarascos*. Mexico City: Museo Nacional de Antropología, Centro de Estudios Mexicanos y Centroamericanos, 2018.

Pereira, Grégory, Dominique Michelet, Antoine Dorison, Brigitte Faugère, Osiris Quezada, Karine Lefebvre, Marion Forest, Isabelle Medina, Isaac Barrientos, Hemmamuthé Goudiaby, Luis Barba, Jorge Blanca, Agustin Ortiz, and Céline Gillot. Proyecto Uacúsecha. Informe técnico sobre los trabajos de campo llevados a cabo en el Malpaís de Zacapu y en areas vecinas, Michoacán, Temporada 8 (2015-2016). Unpublished technical report for the Consejo de Arqueología del Instituto Nacional de Antropología e Historia. Mexico City: Centro de Estudios Mexicanos y Centroamericanos, 2016.

Pereira, Grégory, Gérald Migeon, and Dominique Michelet. Archéologie du massif du Barajas. Premières données sur l’évolution des sociétés préhispaniques du sud-ouest du Guanajuato, Mexique. *Journal de la Société des américanistes* 87 (2001): 265–281.

— “Transformaciones demográficas y culturales en el Centro-Norte de México en vísperas del Posclásico : los sitios del Cerro Barajas (suroeste de Guanajuato)”. In *Reacomodos demográficos del clásico al*

posclásico en el centro de México, Linda R. Manzanilla (ed.), pp. 123–136. Mexico City: Universidad Nacional Autónoma de México, 2005.

Pollard, Helen Perlstein. "Tarascans and their ancestors: prehistory of Michoacán". In *Greater Mesoamerica: The Archaeology of West and Northwest Mexico*, Michael S. Foster and Shirley Gorenstein (eds.), pp. 59–70. Salt Lake City: University of Utah Press, 2000.

— "A Model of the Emergence of the Tarascan State". *Ancient Mesoamerica* 19, no. 2 (2008): 217–230.

Proyecto Michoacán, Cedula de registro arqueológico : Mich. 23 "El Palacio-La Crucita." Document on file. Mexico City: Centro de Estudios Mexicanos y Centroamericanos, 1983.

Siebe, Claus, Marie-Noëlle Guilbaud, Sergio Salinas, Pooja Kshirsagar, Magdalena Oryaëlle Chevrel, Juan Ramón de la Fuente, Athziri Hernández Jiménez, and Lourdes Godínez. "Monogenetic volcanism of the Michoacán-Guanajuato Volcanic Field: Maar craters of the Zacapu basin and domes, shields, and scoria cones of the Tarascan highlands (Paracho-Paricutin region)". In *Field guide, Pre-meeting Fieldtrip for the 5th International Maar Conference (5IMC-IAVCEI) Querétaro),* pp. 13–17. 2014.