ARTICLES

EUROPEAN VISITORS IN NATIVE SPACES: USING PALEOGRAPHY TO INVESTIGATE EARLY RELIGIOUS DYNAMICS IN THE NEW WORLD

Alice V. M. Samson, Jago Cooper, and Josué Caamaño-Dones

Recent archaeological fieldwork on Isla de Mona in the Caribbean has led to the discovery of a substantial corpus of early colonial inscriptions inside the darkzone of one of the 200 cave systems on the island. Cave 18, like multiple others on Isla de Mona, was a well-established indigenous spiritual realm in the centuries leading up to European colonization. Christian symbols, individual names, written dates, and Spanish and Latin religious commentaries are located in direct association with preexisting indigenous iconography and activities. This paper applies paleographic (handwriting) analysis to establish the authenticity, authorship, and chronology of the inscriptions and to interpret the nature of this early spiritual encounter. We conclude that these sixteenth-century inscriptions represent visits to the cave by first-generation Europeans, including Spanish royal officials in Puerto Rico, and reflect their reactions to native religious landscapes. The inscriptions on Isla de Mona capture personal, face-to-face encounters with native religion and represent Christian commentaries and reactions to indigenous spaces and worldview in the early colonial period.

A partir del empleo de un acercamiento multi-método que combina la arqueología, la paleografía y la historia, se está arrojando luz sobre las dinámicas religiosas en el período colonial temprano en el Caribe. En este artículo se presentan evidencias sobre la presencia de europeos en los espacios subterráneos indígenas de la Isla de Mona, un pequeño lugar insular que fue un centro de interacción cultural en el siglo dieciséis. La importancia espiritual del mundo subterráneo para los habitantes indígenas del Caribe se hace evidente a partir del estudio arqueológico de las cuevas antillanas y de la información de los cronistas sobre las creencias indígenas. Los recientes trabajos arqueológicos desarrollados en la Isla de Mona establecieron el uso ceremonial de alrededor de 30 de las 200 cuevas de la isla, a partir de la detección de artefactos y de iconografía rupestre en zonas oscuras. Únicamente una de las cuevas, Cueva 18, reveló un ensamblaje de arte rupestre colonial compuesto por una serie de inscripciones históricas en asociación directa con la iconografía indígena preexistente. Las inscripciones incluyen símbolos cristianos, nombres de individuos, fechas y comentarios religiosos en español y latín. Con el fin de establecer la autenticidad, la cronología y la identidad de los autores de las inscripciones, el análisis realizado incorporó elementos de la paleografía (el estudio de la escritura), como ciencia auxiliar de la arqueología. Se plantea que al menos 17 inscripciones fueron hechas en el siglo dieciséis, por individuos europeos. Los trabajos archivísticos indican que algunos de los visitantes eran clérigos, vecinos y oficiales reales españoles de Puerto Rico. Sobre la base de la información arqueológica, los documentos históricos y la paleografía, se interpretaron las inscripciones como resultado de visitas intencionales a esta cueva en particular, únicamente a su área indígena, en diferentes momentos del siglo dieciséis. Las inscripciones de Cueva 18 capturan los encuentros personales de individuos cristianos con la religión nativa. Ese compromiso colonial con el espacio ceremonial indígena, aunque no está representado en los documentos históricos, revela las reacciones personales y las actitudes de las primeras generaciones de europeos en las Américas ante la cosmovisión indígena. Estos datos ofrecen una perspectiva alternativa y a nivel de individuo, al concepto de conquista espiritual del nuevo mundo.

Early Colonial Subterranean Interaction

Recent fieldwork on Isla de Mona in the Caribbean has revealed a substantial corpus of postcontact inscriptions in an underground, indigenous context. The inscriptions are written on the walls of a cave chamber, far inside a subterranean system with a long history of indigenous

Alice V. M. Samson ■ Centre for Historical Archaeology, School of Archaeology and Ancient History, University of Leicester, LE1 7RH, United Kingdom (avms1@le.ac.uk)

Jago Cooper ■ British Museum, Africa, Americas and Oceania, Great Russell Street, London, WC1B 3DG, United Kingdom (jcooper@britishmuseum.org)

Josué Caamaño-Dones ■ University of Puerto Rico-Río Piedras, Centro de Investigaciones Históricas, Río Piedras, PO Box 22802 San Juan, Puerto Rico (josue.caamano@upr.edu)

Latin American Antiquity 27(4), 2016, pp. 443–461 Copyright © 2016 by the Society for American Archaeology DOI: 10.7183/1045-6635.27.4.443

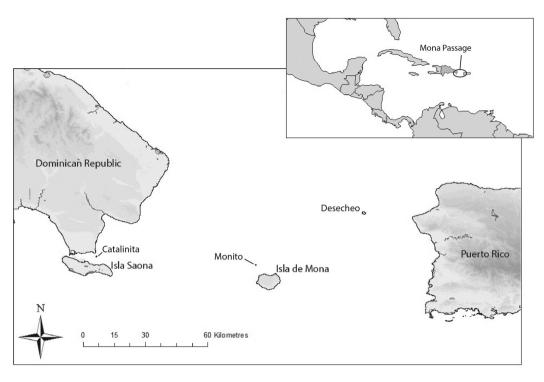


Figure 1. Location of Mona Island, the Caribbean.

ritual use. Names, inscriptions, and Christian iconography in Latin and Spanish are evidence of sixteenth-century visits to the cave by European individuals. The inscriptions on Isla de Mona capture personal, face-to-face encounters with native religion and present Christian commentaries and reactions to indigenous spaces in the context of intense interaction between European and Native American individuals on the island postcontact. These inscriptions, their location, and their intended audience provide a stark contrast to reactions and attitudes recorded in official bureaucratic documents produced throughout the colonial Spanish Indies, often by scribes who never left Europe, or to the chronicles on the conquest written for particular audiences and to political ends. The Mona inscriptions represent a qualitatively different sort of sixteenth-century engagement with intimate and personal acts of writing for and by the first generations of Europeans in a "New" World. They provide an opportunity to explore a different commentary on early colonial religious encounters. This paper sets out the historical, paleographic, archaeological, and archival arguments for the authenticity of the inscriptions, the necessity of interdisciplinary collaboration in the investigation of complex and vulnerable sites of early intercultural interaction in the Americas, and the impact such new interpretive methodologies can have on a reassessment of this crucial period in the history of the region.

Colonial Mona

Isla de Mona (Figure 1), a small and currently uninhabited island between the Dominican Republic and Puerto Rico, was of key economic and political importance in the earliest phase of European arrival and settlement in the Caribbean. In the sixteenth century, Native Americans, Europeans, and Africans interacted on Mona, a busy trans-Atlantic and inter-Caribbean port for commodities and slave trade, and in the second half of the century a hub of the illicit trans-Atlantic economy. In the first half of the sixteenth century, the local indigenous population on Mona was swelled by forced migration of enslaved *indios* (a generic Spanish term for colonial indigenous inhabitants of the Caribbean) from other

Caribbean islands and parts of the Americas under the control of a minority of Spanish overseers ("pocos cristianos y algunos indios," Fernández de Oviedo 1851:(I) 465). A system of forced labor (encomienda) coerced indigenous people into provisioning the colonization of Puerto Rico. Cargo lists, records of enslaved indios and Africans who were traded through Mona, stopovers by ships from many European nations, and the volume of early European material culture in sites on the island offer archival and material evidence that Mona was a hub of intercultural encounter (Dávila 2003; Rouse 1952; Samson and Cooper 2015; Turner 1998). The abundance of European material culture contrasts with the general paucity of European goods at indigenous sites elsewhere in the Greater Antilles (Deagan 2004; Valcárcel et al. 2013). In the second half of the sixteenth century, references to the island in French and English documents indicate that inhabitants were carving out a living for themselves as traders and intelligence brokers (Andrews and Wright 1959; Cardona 1985:42-85; Gourgues 1875:271-72). Individuals on Mona, and those passing through, would have had direct, frequent, and often intense interaction with each other in situations of varying formality, privacy, and inequality, from the exploitative Spanish regulation of indigenous labor and domestic regimes, to the illicit trading relationships between indios, Spaniards, and northern Europeans, to the countless, daily, personal encounters between individuals of different age, sex, class, and origin. The focus of this paper is the arguably more exploratory nature of postcontact encounters in indigenous spaces. In particular we look at a series of inscriptions elucidating spiritual encounters in one cave on the island.

Cave 18

Caves are persistent locations of extraordinary human activity through time and often feature as symbolically and ritually significant realms in popular culture globally (Moyes 2013). This is the case in the extensive karst regions of the Caribbean, throughout Mesoamerica, and in the southeastern United States, where caves have a long history of human use (Brady and Prufer 2005; Hayward et al. 2009; Simek et al. 2013). In the

past, indigenous people in the Caribbean frequented caves for a variety of religious and economic purposes. The first treatise on indigenous religion in the Americas, written by a Hieronymite friar at the end of the fifteenth century, describes the cosmological significance of caves for the people of northern Hispaniola (Pané 1999:5). Similar to Mesoamerica, in the Caribbean caves were places of ancestral and celestial emergence and frequented for a variety of mortuary and depositional practices (Morales and Quesenberry 2005). The use of subterranean realms in Vodou and Santería in the Caribbean today (López 2011) continues this legacy.

Cave 18 is one of more than 30 cave systems on Isla de Mona with evidence for indigenous use identified to date as part of the El Corazón del Caribe research project (Samson et al. 2015). This large cave is located within a short but arduous hike along and up the cliffs from the main colonialera settlement, Sardinera, on the west coast of Mona. Multiple entrances along the cliff face lead into kilometers of cave tunnels, lofty caverns, low rooms, and interconnecting spaces of various dimensions. At approximately 50 m into the cave, as one advances into the darkzone (no natural light), a series of large adjoining caverns display some of the most extensive and remarkable indigenous iconography in the Caribbean. Research has revealed that indigenous individuals and groups frequented darkzones of the cave to participate in ontologically significant activities. These activities involved the representation of ancestral beings, deities, and narrative scenes on the cave walls, frequently in association with pooled water. Such activities have left an astonishing legacy of finger-drawn iconography (Lace 2012; Samson et al. 2013). Mark-making includes animal and human figures, especially facial imagery, drawn with multiple fingers and fingersized tools, and meandering finger-drawn designs located in alcoves, on ceilings, and adjacent to water pools. Indigenous pottery and the remains of charcoal from wooden torches used to illuminate the caves are also found throughout the cave system in proximity to mark-making. Radiocarbon dates from the charcoal deposits found on the untrammeled floor surfaces in different parts of the cave system with indigenous iconography reveal that they were frequented between the thir-

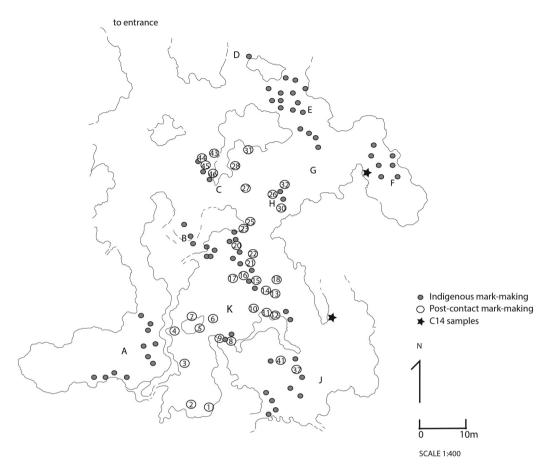


Figure 2. Map of chambers of Cave 18 showing the location of indigenous mark-making and early colonial inscriptions. Numbers relate to Table 1 and figures. Map credits M. Lace, J. Cooper, A.V.M. Samson.

teenth and fifteenth centuries. Both cave use and iconography tie Mona into networks of shared indigenous cave practices seen widely across the archipelago in precolumbian times (Dubelaar 1986; Dubelaar et al. 1999; Gutiérrez 2014; López 2003; Pagán 1978; Roe 2009; Rouse 1992; Wilson 1997). Nevertheless, the extent and variety of designs, the means of expression afforded by the unusual softness of the cave wall substrate, and the level of preservation of past human activity make Mona an exceptional cultural landscape within the indigenous Americas.

Entirely contained within the central area of indigenous activity, distributed throughout 10 interconnected cave chambers, is a concentration of more than 30 postcontact inscriptions, including names, dates, Christograms, and phrases in Latin and Spanish. Spatially, the inscriptions are

surrounded by indigenous iconography, and their location is clearly determined by the indigenous use of the cave (Figure 2). The next section of this paper will examine these inscriptions in detail.

Inscriptions in the Cave

In Cave 18, 17 inscriptions on the cave surfaces are stylistically diagnostic to the sixteenth century, and in terms of their content and context represent a series of activities and visits by mid-sixteenth-century visitors. Cave wall texture and morphology, the use of diverse non-pen tools, and standing body positions of the authors meant that the writing conditions imposed different constraints from manuscript writing conventions (Caamaño-Dones 2006a). Nevertheless, paleographic analysis provides critical insights into the dating, authorial

Table 1. Postcontact Inscriptions from Cave 18, Mona Island.

Monne	Transarintian	Gloss	Languaga	Commentery	C16th palagographic feature	Example from dated Caribbean
Map no. 45, 46	Transcription entra	Gloss	Language Spanish	Commentary Enter! (imperative 2nd pers	C16th palaeographic feature Cavallini 1986: a (2)/single letter	manuscript
-rJ, 40	chda	chaa	Shamsu	sing.)	Cavamini 1700. a (2)/single letter	
32	††† IES U S	†††IESUS	Latin	Jesus. Representation of the Calvary		
28	plura fecit deus	plura fecit deus	Latin	God made/did more things	Cavallini 1986: r (110)/single letter; n (u in deus = table p. 35)/single letter	*(r), AGI 1544a; *(n = u), AGI 1544b
27	a°l pz rroldan el mozo año 1550 agosto	Al[onso] P[ére]z Roldán el Mozo año 1550 agosto	Spanish	Al[onso] P[ére]z Roldán the Younger, year 1550 August	Cavallini 1986: a°l (23, 24)/abbreviation; pz (455)/abbreviation g (60)/single letter	*(rr), AGI 1569 ;
26	Myguel Rypoll 1550 // [**]	Miguel Ripoll 1550 // [**]	Spanish and Latin	Miguel Ripoll 1550 // possibly followed by a Latin abbreviation	Cavallini 1986: n (u, table p. 35)/single letter; Cappelli 1912:5 (p. 426, 1st column, line 8, 2nd example)/single arabic numeral	(Myguel), AGI 1513 (cit. Turner 1998:113); *(n = u), AGI 1569
25	JHS † XPS	Ihesu Christo	Latin	Jeus Christ; Alt. IHS/IHU † XPO	Cavallini 1986: JHS † XPS (288, 289)/abbreviation	(Ihu Xpo), AGI 1548: folio 1r; (xpo), 1585, Millares and Mantecón 1955: lámina XXVII
24	Alegría	Alegría	Spanish	Alegría = name or "happiness"	Cavallini 1986: a (2)/single letter; g (60)/single letter	*(g), AGI 1528
15	Canonio Snrio f	Canonicus Henricus f(ecit) [**]	Latin	Canon Henry made this/alt. † [**]	Cappelli 1982: ⊃ (p. 13)/abbreviation – us	
14	dios te perdone	Dios te perdone	Spanish	God forgive you	Cavallini 1986: z (r = 108)/single letter; d (table p. 35)	*(te), AGI 1528
10,11	IHS	Ihesus [Jesus]	Latin	Jesus. Alt. IHU/JHS	abbreviation	
21	a°l de Contreras 1554	Al[onso] de Contreras 1554	Spanish	Alonso de Contreras 1554	Cavallini 1986: a°1 (23,24)/abbreviation; Cappelli 1912:5 (p. 426, 1st column, line 8)/single arabic numeral	(a°1), 1539, Millares and Mantecón 1955
37	Dios	Dios	Spanish	God	Cavallini 1986: d (table p. 35)	
41	Petrɔ †	Petrus	Latin	Peter, followed by cross keys or upside down crucifixion, a reference to St. Peter	Cappelli 1982: 5 (p. 13)/abbreviationus; Cavallini 1986: tr (423)/nexus	
4	1554 hebrero	1554 hebrero	Spanish	1554 February	RAE 2015: accep. 2, obs. [febrero] ^a ; Cappelli 1982:5 (p. 426, 1st column, line 8, 4th example)/single arabic numeral	(xx de hebrero de 1561), Leland 1989:27
5	veRbū caro factū est bernardo	Verbum caro factum est, Bernardo	Latin	And the Word was made flesh and dwelt among us (Vulgate Evangelium Secundum Iohannem 1:14)	Cavallini 1986: est (191)/ nexus; Cappelli 1982: \bar{u} (p. 7)/abbreviation – um	
7	capitan frco alegre	Capitán Fr[ancis]co Alegre	Spanish	Captain Francisco Alegre	Cavallini 1986: a (2)/single letter; z (r = 108)/single letter; g (60)/single letter; fr (215)/nexus; co (80)/nexus	(frco alegre), AGI 1550/1551, folio 2v
1	Finis †°	Finis Christus	Latin	The End, Jesus Christ	Cappelli 1982: ° (p. 13)/abbreviation, - us	†°, Leland 1989:128

^{*} Examples taken from sample alphabets or transcriptions from the Spanish Palaeography Digital Teaching and Learning Tool, an open-source project of the CUNY Dominican Studies Institute (http://spanishpaleographytool.org/).

identities, motivations, and meaning of this rare and uniquely preserved writing on the wall. We limit the discussion here to the securest inscriptions for which we have the most supporting evidence. The inscriptions in Table 1 are in the order in which

they appear when walking through the cave, from the nearest possible entrance, through a series of chambers. The date-name inscriptions are discussed first, followed by the religious commentaries, and lastly, a series of Christian symbols. Table data can

^{**} Denotes parts of inscriptions or letters that are undeciphered or illegible.

^a Real Academia Española 2015, http://www.rae.es/.

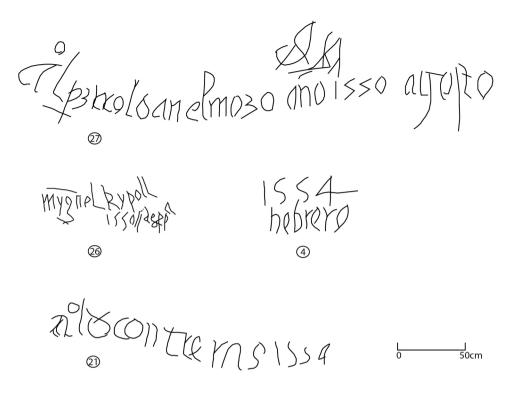


Figure 3. Name and date inscriptions from Cave 18. Al[onso] P[ére]z Roldán the Younger, year 1550 August (map no. 27), Myguel Rypoll // 1550 [**] (map no. 26), a°l de Contreras 1554 (map no. 21), 1554 hebrero (map no. 4).

be correlated with map data (Figure 2) for the spatial context of the inscriptions.

The longest inscription (Figure 3) is a namedate combination that reads "a°lpzrroldan el mozo año 1550 agosto" (Al[onso] P[ére]z Roldán the Younger, year 1550 August). The inscription stretches 3.5 m across a vertical ceiling protuberance in chamber H, and over 2 m off the cave floor. 1 This is a carefully executed inscription with a monogram or rebus above it made using a bluntedged tool, with uniform letter size and incisions 15 to 20 mm wide and ca. 1 mm deep. The inscription is plainly visible as one enters the chamber. In keeping with the 1550 date, the abbreviations of the Spanish names Alonso (a°l) and Pérez (pz) are characteristic sixteenth- and seventeenthcentury conventions (Cavallini 1986:50, abbreviations [23], [24]; p. 65 [455]). The doubling of the consonant "rr" of Roldán is common at the start of words in this period (Leland 1989:46). The g (Agosto) is made with three strokes and is characteristic of the sixteenth century (Cavallini

1986:36 [60], and table p. 35, 1st G, 2nd col).

On the same part of the ceiling, adjacent to the first inscription, is the name-date combination "Myguel Rypoll 1550" (Figure 3), followed by a break signified by two oblique lines (//). This is followed by what appears to be a Latin abbreviation that may be a variation on in propria persona, or "written in person" (P. Linehan, personal communication 2014; see Millares and Mantecón 1955:2, special signs [56], [58], [62], [63]). The inscription is over 2 m off the floor, and less than 1 m long in neat, uniform writing executed with a fine-edged tool in strokes ca. 4 mm wide and 2 to 4 mm deep. The inscription cuts through indigenous finger-fluting and is also flanked by an extensive area of finger-fluting. The use of y instead of an i in both the first name and the Catalan surname is an antiquated spelling variation current in the sixteenth century (e.g., 1513, Pre-sailing manifest, cit. Turner 1998:113, "myguel"; Millares and Mantecón 1955:V2, lámina XII, "mygll"). The u (Myguel) is open at the bottom and has a horizon-



Figure 4. Capitan Fr[ancis]co Alegre (map no. 7).

tal bar at the top, resembling the letter n. This is consistent with sixteenth-century conventions (Cavallini 1986:u = n, Table, p. 35). The same can be said of the shapes of the numeral 5 (Cappelli 1912:426, 1st column, line 8, 2nd example). The physical proximity of the inscriptions and the same year date (1550) may indicate that both Myguel Rypoll and Alonso Pérez visited the cave together.

"a°l de Contreras" (Alonso de Contreras) is another individual whose name is written in chamber H (Figure 3), using the same abbreviated form of the name Alonso (a°l) as in Alonso Pérez (Cavallini 1986:50 [23], [24]). The name is followed by a date, 1554, the last digit of which is only faintly discernible and partially deformed due to the morphology of the cave wall. The S-shaped numeral 5's are characteristic of the sixteenth century (Cappelli 1912:426, 1st column, line 8, 4th example). This inscription is over 2 m off the cave floor, 1.9 m long, and 20 cm wide, using a tool that made strokes of varying width 3 to 30 mm wide and less than 2 mm deep. Again, the inscription is on a vertical surface of a cave ceiling protuberance and adjacent to indigenous iconography.

A fourth dated inscription is "1554 hebrero" (1554 February) (Figure 3). This inscription, in chamber K, is ca. 2 m off the cave floor, 70 cm long, and made with a wide tool with a pointed center leaving strokes 9 to 15 mm wide and .5 to 2 mm deep. Patches of soot related to nineteenth-century guano mining cover parts of the inscription. Again, the S-shaped numeral 5's are characteristic of the sixteenth century (Cappelli 1912:426). The obsolete spelling of *h*ebrero (*f*ebrero) with the use of an initial *h* is also characteristic of the sixteenth century. The letters *f*

and *h* were interchangeable, even in words with no Latin derivation (Real Academia Española 2014:accep. 2, obs.; Leland 1989:27, 123).

The title-name combination "capitan frco alegre" (Captain Fr[ancis]co Alegre) in chamber K is 2.1 m long and 1.8 to 2.4 m off the floor, although, if made standing on a nearby large boulder, it is 1.2 to 1.5 m from standing height (Figure 4). The inscription is made with a tool with a sharp central edge and wide diffuse edges. The stroke dimensions of the word "capitan" (9 to 15 mm wide and 1 to 3 mm deep) are smaller compared to "Frco Alegre" (12 to 16 mm wide and .5 mm deep), perhaps indicating that the title was an afterthought or written during a separate visit. This name is very visible when walking through the cavern. The inscription has four features diagnostic of the sixteenth century, particularly in the use of the nexus "fr" (Cavallini 1986:43 [215]) and the nexus "co" in Frco (Cavallini 1986:40 [80]). In terms of single letters, the first a in "capitan," and the a and r (Cavallini 1986:36–37 [2], [108]) in "Alegre" are all consistent with a sixteenth-century date for the inscription.

The word "Alegría" (Figure 5) in chamber K is deliberately incised below an elaborate indigenous motif depicting a face with ear ornaments and a crying eye, made with two to three fingers in the soft wall deposits at the opening of a wall alcove. This inscription is 63 cm across and about 1.5 m off the floor, made with a sharp-edged, fine tool 3 to 4 mm wide and 1 mm deep, very distinct from the motif it overlaps. The word "Alegría" is more likely to be a name, as it is relatively common, rather than a reference to the abstract noun "happiness." In terms of both writing style and content, it is similar to Francisco Alegre and may be a variation on his name. Both

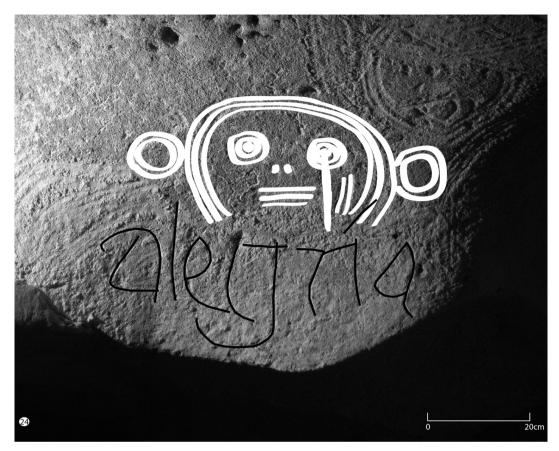


Figure 5. Alegría (map no. 24). An example of the close proximity of indigenous designs and written inscriptions. Note this inscription partially overlaps an indigenous face motif.

the initial a and the g are characteristic of the sixteenth century (Cavallini 1986:36 [2], [60]).

"veRbu caro factu est" (Verbum caro factum est) (Figure 6) is a biblical citation from the Latin Vulgate version of the Bible, John 1:14 ("And the Word was made flesh and dwelt among us"). On the line below, the name "bernardo" is written, and is most likely the name of the person who wrote the inscription. This inscription is in chamber K, on the opposite side of the large boulder from Francisco Alegre, and measures 1.8 m long and is 1.80 to 2.05 m off the cave floor. The same tool has been used throughout, making a fine striated stroke, with a consistent 6 mm width and 1 mm depth. The first part of the words "verbum" and "factum" have been written out fully, whereas an abbreviation mark in the form of a bar above the *u* replaces the final written letter. Marks of abbreviation are common in Medieval Latin paleography in use in the sixteenth century. The combined form of the letters of the word "est" is a characteristic nexus in Spanish handwriting of the sixteenth and seventeenth centuries (Cavallini 1986:43 [191]).

One of the first inscriptions encountered as one enters the cave via chamber H is the Latin "plura fecit deus" (god made more things) (Figure 6). This inscription is ca. 1.8 m off the floor and .6 m in length, made with a blunt-edged tool up to 1 cm thick and leaving incisions 2 to 4 mm deep. There is a discrepancy in the care with which "plura" is executed, as compared to "fecit deus" on the line below, which is lighter and more haphazardly scratched, possibly an indication of the challenges of the writing conditions inside the cave. In terms of temporally diagnostic features, the u of deus is open at the bottom and possibly closed at the top to resemble the present-day letter n. This is a fifteenth- to sixteenth-century convention and similar to the *u* in Myguel (number 26), with a 1550 date.



Figure 6. veRbū caro factū est bernardo (map no. 5). plura fecit deus (map no. 28). Dios te perdone (map no. 14). Dios (map no. 37).

The Spanish inscription "Dios te perdone" (God forgive you) is written at a height of 2 m off the floor in chamber K on a ceiling vault and is 95 cm in length, made with a fine but bluntedged tool 3 to 5 mm thick and leaving marks 2 mm deep (Figure 6). This is a neatly executed inscription with occasional retouches to improve the shape of the letters on the cave surface. An extensive area of finger-fluting covers the cave ceiling immediately adjacent to this inscription, suggesting reference to it. Both instances of the letter *d* in this inscription are sixteenth- to seventeenth-century lowercase forms (Cavallini 1986:Table, p. 35).

A separate inscription of the word "Dios" (Figure 6) in chamber J to the south shares a similar initial d to "perdone." This raises the possibility that these inscriptions are written by the same person. Again, the writing style is consistent with the sixteenth century.

A large panel in chamber G, above head height, at a maximum height of 3.12 m consists of a series of three crosses, the central cross placed higher and bearing the Latin inscription "IESUS," Jesus, underneath (Supplemental Figure 1). This is a representation of the hill of Golgotha or the Calvary, the place of Christ's crucifixion as documented in the Christian Bible. The panel is 2 m long by

80 cm high and drawn with a flat, blunt, slightly ragged-edged tool. The strokes vary in width between 6 and 15 mm and are 2 mm deep. This Calvary dominates a large cavern and is prominently executed on the vertical surface of a roof vault, hung with cascading stalagmites, with flowstone columns flanking either side, forming a natural arch. The barred crosses on bases are consistent with sixteenth-century depictions of Calvary crosses (Algarra and Berrocal 2010; Barrera 2011; McCarthy 1990), as is the use of Latin and the θ for the name of Jesus.

Following the Christ-centric theme, the cave contains two examples of IHS (Ihesus), which is the most common Christogram in Latin-speaking medieval European Christian tradition, derived from the first three letters of the Greek name of Jesus, and in use from the medieval period to the present day (Supplemental Figure 2). Both are in chamber K, ca. 2 m off the cave floor and around half a meter in length, made with an edged tool between 1 to 2 cm wide that makes incisions 2 to 3 mm deep. Both are positioned above areas of indigenous finger-fluting. The use of the Christogram is consistent with the sixteenth century.

Similarly, "JHS † XPS" (alt. IHS † XPO) is another Christogram, or contraction of the name Jesus Christ (Supplemental Figure 2). "JHS" is followed by a cross, followed by "XPS," or chi-rho-sigma for Christ. The Christian symbol is made with a pointed tool with wide tapering edges leaving incisions 10 to 30 mm wide and less than 3 mm deep. It is prominently positioned over 2 m off the cave floor and 1.6 m long, placed on a vertical ceiling vault that one has to walk directly underneath when moving through the cave from chambers H to K. The Christogram is immediately adjacent to an area of indigenous finger-fluting. The H has a cross above it, common in late medieval Christograms. In terms of dating, this Christogram is characteristic of the sixteenth century (Cavallini 1986:59 [288], [289]).

Several of the inscriptions end with a symbol of Latin abbreviation, which resembles an outsize comma, often written above the line and always at the end of a word or symbol. In documents written in Latin, signs like these generally stand for the endings -us, -os, -is, and -s (Cappelli 1912:3.0, III). Inscriptions using this abbreviation

are religious in content or refer to religious offices. This occurs in "Petro," Petrus, which is probably a reference to the biblical apostle St. Peter, accompanied by a cross directly above it. The bottom of the vertical arm of the cross ends in a circle. The circle may represent either the upside-down crucifixion of the saint or his saintly attribute, the crosskeys (Figure 7). The name of St. Peter occurs in chamber J, close to "dios," accessible through a low tunnel off the main G, H, and K thoroughfare where the majority of the inscriptions are located. The inscription is written 1.5 to 2 m off the cave floor, half a meter in length, and incised into the wall at a depth of .5 mm. The P is made with wider incisions (6 mm) in comparison to the 2.5 mm incisions of the rest of the name and the cross. Some surface preparation has taken place to make the wall smoother, as this whole alcove is covered with indigenous finger-fluting. St. Peter is therefore written on top of finger-fluting. The inscription, in turn, is partially covered with sooting attributed to nineteenth-century mining, providing a sequence of distinct activities over time.

A similar abbreviation mark appears in chamber K, at the end of "canonicus" (canonicus), a church office, followed by what is probably the canon's name, perhaps Snricus or Enrique/Henry, the ending of which is declined to agree with the preceding title by the use of the same sign (i) (Figure 7). An additional letter or symbol terminates this inscription, which may be either an f for "fecit" (3rd pers. sing. perfect tense; P. Linehan, personal communication 2014) or a crucifix. This inscription is ca. 2 m off the cave floor, 1.75 m in length, and made with an increasingly lighter touch as the letters progress (from 12 to 3 mm wide, and 5 to 2 mm deep), especially after canonicus. Several of the letters show corrections possibly meant to improve their shape, although this inscription remains challenging to interpret with confidence at this stage.

The same abbreviation occurs in "finis" (the end), after the symbol of the cross (†°) meaning christus (Figure 7). Under 2 m off the cave floor, and 38 cm long, the same fine-lined tool is used throughout with a consistent 1.5 mm width and .5 mm depth. This inscription is fittingly located on the furthest back wall of the cave chamber. It may also be a biblical reference to Romans 10:4 ("finis enimlegis Christus ad iustitiam omni



Figure 7. Petr > † (map no. 41). Canoni > **nri > f (map no. 15). Finis † (map no. 1). Entra (map nos. 45, 46).

credenti" [For Christ is the end of the law for righteousness to everyone who believes]).

Forming a complement to "finis" is the Spanish second person singular imperative "entra" (enter!), which is written three times, twice adjacent and the third opposite, on the walls of one of the entrance passages, C, to the main chambers G, H, and K (Figure 7). All three occurrences of "entra" are written ca. 1.75 m off the cave floor. They are just under half a meter in length, written with the same blunt tool, and due to their similarities in terms of size and style, probably by the same person. All are written on top of indigenous finger-fluting, which has removed the wall deposits from large parts of this tunnel. All the

single letters of "entra" are consistent with the sixteenth-century writing style.

These inscriptions are all located within the chambers with extensive and elaborate indigenous iconography, and there are no colonial-era inscriptions found elsewhere in this cave system. Neither have early colonial inscriptions been identified anywhere else on Mona to date.

Revolutions in Writing in the Sixteenth-Century Spanish Americas

The bureaucratic demands of Spanish-American colonies in the early modern period meant that handwriting evolved rapidly (Belén and Domínguez 2000; Caamaño-Dones 2006a; Cavallini de Arauz 1986; Galende 2000; Millares and Mantecón 1955; Tanodi 1971). Letter shapes and the way that they were written underwent great changes developing out of the medieval gothic tradition into the rounded forms of the modern cursive, which itself can be divided into different styles throughout the fifteenth to eighteenth centuries: the humanistic (itálica), courtly (cortesana), and judicial (procesal). The former developed out of Renaissance Italian manuscript traditions. The latter traditions followed a trajectory from the elegant cortesana to the heavily elided and almost illegible (even to people of the time) procesal style. Writing style depended on the class and education of the writer and the function of the text, i.e., whether written for professional or private purposes. Not unlike the effects of digital media on fashions of communication in society today, in fifteenth- and sixteenth-century Spain and the Spanish Americas, expediency drove handwriting changes. Because scribes tried to avoid lifting their pens from paper until the ink ran out, there was increased use of abbreviated words, the use of conventional marks such as dots and dashes, the use of superscript, and the combination of multiple letters into one character, known as a nexus. There was no standardization in the use of lower- and uppercase letters, nor in the application of punctuation, all of which were used indiscriminately. Neither was there standardization in the writing of numbers or dates, which could be spelled out in full, written in Roman or Arabic numerals, or in a combination of all of these (Cappelli 1912; Leland 1989:24-25). Critically, this means that writing in the early modern period has distinctive chronological markers, and writing styles can be divided into periods. Paleography, or the science of writing, contributes to establishing the authenticity or otherwise of historic writing (Caamaño-Dones 2006a). It can also contribute information relating to the social status and identity of writers.

In addition to the subterranean, indigenous context of the inscriptions, and their personal and devotional content, paleographic evidence relating to the handwriting styles, diagnostic writing conventions, and the Spanish and Latin traditions in which they are written places this body of inscriptions most credibly within the mid-sixteenth cen-

tury. This is within several decades of Spanish colonization of the Caribbean. Multiple authors, some writing within years of each other and in different styles and languages, nevertheless all have handwriting consistent with a sixteenth-century date. The use of abbreviations, nexuses, and the style of single letters are comparable with script styles in American Spanish colonial documents between the sixteenth and seventeenth centuries (see Table 1). Moreover, the writing styles contain many elements of shorthand. Examples of these include truncation and abbreviation common in Medieval Latin writing and used in documents written by those with a Latin education up to the sixteenth century, with some conventional forms, such as Christograms, still in use today. All the inscriptions are consistent with the mid-sixteenth-century dates that appear on the walls.

Authorship

Only a minority of people were literate in the sixteenth-century Indies. Some, but not all, were members of religious orders and ecclesiastics, and some, but not all, were members of the elite, professional scribes, and working professionals (Caamaño-Dones 2006b). The degree of literacy and the writing tradition would also have varied according to gender and class. Furthermore, many indigenous individuals acquired European languages through the rapid transculturation process. On the question of indigenous literacy, Franciscan Bernardino de Sahagún, who ran a seminary for indios in Mexico, remarked that, after two or three years, native individuals understood, spoke, and wrote Latin, even composing heroic verses in it (Hanke 1974:2). Moreover, the Iberian origin of the names on the cave walls is not necessarily proof of European authorship. Indios adopted Spanish names and titles by various means and for different reasons after the European encounter, in name-exchanging ceremonies (quaitiao), through baptism, or by imposition (Oliver 2009; Rodríguez 2010). This happened on Mona, where new names included appellations applied unilaterally by colonial administrators for ease of reference, such as Alonso Pescador (Alonso the fisherman), or the flippant Calabazas (calabash). In other cases, individuals retained their indigenous names, which referred to their origins or to the name of their cacique (leader) (Tanodi 1971:110-112, 121-123). Often, indigenous individuals would adopt a Spanish-autochthonous name combination (e.g., Alonso Ayoa, in Tanodi 1971). Titles also expressed rank, such as the Mona cacique Adelantado Camillas and his adjunct Capitán Fernándo. It is possible that, within a few years of colonial interaction, indigenous people on Mona could have been experimenting with the new forms of spoken and written communication available to them. This agrees with descriptions of the Mona inhabitants in 1561 as "indios entendidos" (AGI, Santo Domingo, 899, L.1, folio 235), which refers to indios who were conversant in Spanish and with an understanding of European culture.² Therefore, names and ranks may equally belong to indigenous or Spanish persons unless there are historical documents to indicate otherwise. Moreover, transculturation of preconquest traditions, such as the production of colonial rock art in which indigenous people depicted novel objects, animals, and individuals or native converts recharacterized their religious spaces, are known from various parts of South and Central America (Martínez 2009; Recalde and González 2015; Rivet 2013; Tarble 2012: Figure 9.4). With regard to gender, although women participated in some of the earliest European voyages to the Americas, men outnumbered women among migrants, and the majority of the names are male. In other words, there is a range of potential authors of the inscriptions in Cave 18 as a consequence of the complexities of identity in the New World (Deagan and Cruxent 1993; Moscoso 2010; Valcárcel 2016). If we are to understand colonial relationships in the Caribbean, it is important to identify the individuals and further investigate their ethnicity, gender, status, age, and role. Given this context, we undertook detailed recording, mapping, and comparative analyses of all the markmaking in Cave 18 to investigate issues of authorship.

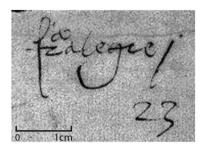
Named Individuals

Examination of the available documentary sources, such as passenger lists to the Indies, documents of the Real Hacienda de Puerto Rico, and searches through the Archivo General de Indias in Seville, led to a convincing match between at

least one of the named individuals in Cave 18 and historic documents of the sixteenth century. Francisco Alegre, argued to be the same individual as Capitán Francisco Alegre on the wall of the cave (Figure 4), emigrated to the Indies with his father in the early 1530s from a small village in Spain. He became a vecino or citizen of San Juan, Puerto Rico, and served as a royal official holding a number of posts on the island, including those of factor (treasury official), alcalde ordinario (magistrate), and regidor (colonial administrator) (AGI 1561; AGI 1548; AGI 1550). As factor, Francisco Alegre would have been in charge of the postencomienda cassava trade with the indios on Isla de Mona in the mid-sixteenth century (AGI 1554/1573; AGI 1573/1594). It is therefore plausible that he visited the island on multiple occasions on Crown business, or to defend Spanish interests against French attacks. Compellingly, two incidences of Francisco Alegre's name, written in the margins of one of the archival documents, bear a close resemblance to the name on the cave wall and share the same abbreviations and letterforms (Figure 8). The name in the documents and that on the cave wall are most likely written in Francisco's own hand.

Tools, Technique, and Position

The materiality of the inscriptions provides various guides to authorship. In terms of technique, composition, content, and implied body position, the inscriptions are distinct from the majority of the indigenous designs. Indigenous designs are drawn with a combination of two to four fingers, at lower levels, and on planes of various orientations. They contrast with the written inscriptions and Christian symbols, such as crosses and Christograms, which are generally executed on vertical, flat surfaces, at head height, and made with tools. On average, the postcontact inscriptions are placed at a full 30 cm higher than the indigenous mark-making. In general, the individual inscriptions start off being neatly made with deeper and more careful strokes than the increasingly haphazard execution toward the end of the phrase or name (e.g., plura fecit, canonicus). This may indicate the effort of writing on the cave wall, which, although soft, is uneven and required tensed body positions. Similarly suggestive of the unfamiliar medium and context is the disrupted flow in the





-falegrej.

Pa (CTZP

Francisco Alegre

Francisco Alegre

Figure 8. Comparison of Francisco Alegre's name written in a sixteenth-century document and on the wall of Cave 18. Despite the difference in size, writing surface, tools, and writing techniques between manuscript and cave, note the similarities, e.g., in the execution of the abbreviated form of the name (Frco), and the g and r.

inscriptions in which letters within the same word or phrase are sometimes written differently (compare the u's in plura fecit deus or the o's in Alonso Perez). The brevity of the inscriptions, the multiple hands, and the inconsistencies within the same words are considerable challenges to the paleographic method, which relies upon finding similarities across a body of text within the same document. This contrasts with indigenous design execution in which similar motifs are known from cave sites across the entire Caribbean, part of an established tradition displaying familiarity with the technology of mark-making on rock surfaces. In other words, the orientation, tool use, bodily techniques, and greater height of the inscriptions all suggest majority European authorship. It remains possible that the addition of crosses to indigenous schemes, especially in the case of finger-drawn Latin crosses, may have been the work of native converts. Nevertheless, we are of the opinion that the majority of the names and inscriptions in the cave belong to men from the Iberian peninsula, or people of European descent.

Dating, Written Dates, and Relative Chronology

There are four written dates in the cave, all within the 1550s. The numbers are written in a style consistent with the sixteenth century with their Sshaped and angular number 5's (Cappelli 1912:426, 1st column, line 8, 2nd and 4th examples; Leland 1989:26-27). In terms of relative dating, all other mark-making, whether guanomining related or, lamentably, recent graffiti, overlaps the postcontact inscriptions, supporting its pre-nineteenth-century date. Where there is overlap between the inscriptions and indigenous markmaking, the inscriptions overlap, and therefore postdate, indigenous marks. In general, inscriptions do not efface indigenous mark-making but occur adjacent to it or placed vertically above it. In contrast, there are no indigenous designs overlapping written inscriptions. This reinforces the observation that indigenous cave use was the impetus for the inscriptions and that, secondly, colonial cave use represented a break with indigenous mark-making traditions.

Content

In terms of content, most of the non-name inscriptions are Christian in character, from the Christograms to the biblical citation to the commentaries. There are clear textual and liturgical models for the phrase "God forgive you," a common utterance made during every mass or confession, and the passage from John's gospel, which would have been familiar to those with a modicum of Christian education (Cooper et al. 2016). The Latin phrase "God made more things" is more enigmatic. Similar phrases occur in a number of neo-Latin texts, such as the thirteenthcentury encyclopedia Speculum Maius by the Dominican friar Vincent of Beauvais, which enjoyed wide circulation in early modern Europe (Vincentius 1624:Bk. 31, Ch. 84). The "things" referred to in these texts are invariably miracles or signs (Michael Reeve, personal communication 2015). If indeed these were the textual models for the phrase, our underground author makes the implication by omission, and the words are an expression of wonderment at the indigenous ceremonial space. If, on the other hand, the phrase is a spontaneous reaction, its very brevity and inarticulateness may be a genuine expression of awe. In general, all three commentaries are a reaction to the native space and imply separation between subject and object, either linguistically ("you" and "things") or through the use of a biblical filter. Again, this implies non-indigenous authorship.

Writing Style

In terms of the status of the individuals visiting the cave, although writing one's name is something that can be learned without being literate, many of the names have additional information such as dates, which implies a minimal ability to use the written word flexibly. Several of the inscriptions, such as Francisco Alegre and Alonso de Contreras, show roots in the cortesana style, the writing of official royal documents, again implying a European education. The use of Latin and Latin abbreviations also supports European authorship of individuals of elevated social status, as it implies a humanistic education, something not afforded the indios in the Caribbean.

Transculturation

The archaeology of Cave 18 reveals continuity in the use of indigenous ceremonial space into the colonial period, the replacement of traditional indigenous visual language with Christian visual codes, and direct commentaries on European experiences of native sacred places (Cooper et al. 2016). In terms of the impact on colonizer attitudes, it is clear that Euro-American individuals, some with significant political agency, visited and were moved to react to native spaces. By implication, these experiences laid the psychological and geographical groundwork of religious creolization. A simplistic interpretation of the replacement of indigenous iconographic schemes by Christian and written schemes is to suggest European visits started after the cave had been abandoned locally. We propose that this transculturation was a two-way process, and that indigenous Mona inhabitants were agents in the process of resignification. A plausible context in which this happened was in the company of indigenous inhabitants. We know from radiocarbon dates that indigenous people frequented the chambers in the fifteenth century, merely decades before the Conquest. Native converts ran a church at Sardinera in the sixteenth century (Dávila 2003:33). In addition, local knowledge was required to access this particular cave out of many, and especially to find the relevant darkzone chambers. It is clear that the target of visits was the indigenous space, and that this was not a one-off event but involved multiple visits by different individuals. The transformation of Cave 18 was, therefore, likely a joint, albeit, precarious and heterogeneous, project.

European Visitors in Native Spaces

This paper has tested the application of paleographic analysis to non-manuscript sources, in this case a newly discovered series of postcontact inscriptions written on the walls of a cave in the indigenous heart of the Caribbean and in one of Spain's first colonial possessions in the Americas. The choreography, medium, tools, and physical technique of writing on cave walls are distinct from manuscript forms of writing. Nevertheless, the conformities in form and style allow one to

draw positive conclusions about the dating and identity of the activities and inferences on the identities of the authors.

The inscriptions on Isla de Mona represent a series of visits to a particular cave, a prehispanic ceremonial native space, by a diversity of people of likely Iberian origin, holding both official royal and ecclesiastical offices, in different years and seasons in the mid-sixteenth century (i.e., minimally between August 1550 and February 1554). The presence of Europeans within this subterranean domain indicates that the immigrants were cognizant of the significance of the cave to the indigenous population. There are tantalizing indications from other islands, such as Haiti, that early European visitors were attracted by native caves (La Selve 1871), and certainly Pané's description of "painted" caves, the first description of rock art in the Americas, shows that their ritual significance was recognized from the earliest encounters (Pané 1999:17; Morales and Quesenberry 2005). Typically, visits to native spaces may have been one of the novel experiences sought by early modern travelers, including new immigrants (Montaigne 1823). Complementary to this, visits to caves and marking the walls may have found resonance with contemporary European practices of shrine formation in natural places (Nolan 1991) and the tradition of making apotropaic marks and devotional inscriptions in traditional gathering sites (Bahn 2010; Champion 2015; Curteis and Luxford 2014; Rivera-Collazo 2006).

Based on the juxtaposition of indigenous and European mark-making, we posit a relationship and exchange of religious knowledge between the colonial-era visitors developing a material dialogue on the commensurability or otherwise of Christian and indigenous worldviews (Cooper et al. 2016). This was not a coherent religious treatise. The spiritual conquest in the Caribbean was conducted expediently and haphazardly at the behest of the Spanish Crown by pecuniarily motivated laymen, qualitatively different from the humanist missionary zeal that characterized conversion in Spanish second-wave, mainland conquests (Graham 2011). These inscriptions represent individual accounts of European engagement with New World alterity and show us spiritual engagement as it was most commonly experienced and lived as a series of heterodox,

engaged encounters in local places. Although not unambiguous, these encounters stand in contrast to official accounts of the European spiritual conquest of the Americas, which emphasize the disregard of indigenous beliefs and practices by the newcomers (Greenblatt 1991; Todorov 1984).

What was the significance of these encounters on the subsequent colonial process and in the making of the Americas today? Whether encounters across cultural differences have lasting impacts on cultural traditions, eventually evolving into normativeness, or whether such syncretic moments are "fleeting phantoms" (Silliman 2015:285) depends partially on where we look. From a historiographical perspective, we might be inclined to say that these cave encounters had minimal impact in the scheme of generalized European intolerance toward indigenous culture in the Caribbean. However, if we turn to the diversity of subterranean practices, the use of indigenous material culture, and even the conceptual origins of certain beliefs in Caribbean religious communities today, we observe a deep, yet neglected, vein of prehispanic influence running through contemporary religion (Hainard et al. 2008; López 2011; Whitehead 2011:39–43; and see, for example, the India de Agua Azul in the Museo del Hombre Dominicano, Santo Domingo). This example of religious transformation on Mona, in which caves, rather than being abandoned or prohibited, retained and developed new meanings for visitors of both indigenous and European ancestries in the first decades of colonial interaction, provides insight into the ways that new religious practices and identities emerged and persisted.

Acknowledgments. This research was conducted with the support of the D.M. McDonald Grants & Awards Fund, University of Cambridge, the British Museum Research Committee, the Centro de Investigaciones Históricas, University of Puerto Rico-Río Piedras, the Instituto de Cultura Puertorriqueña, the Departamento de Recursos Naturales y Ambientales de Puerto Rico, the Centro de Estudios Avanzados de Puerto Rico y El Caribe, and a British Academy Postdoctoral Fellowship grant. Invaluable insights into the inscriptions, translations, and speleology were provided by Peter Linehan, Michael Reeve, Lucy Wrapson, Matthew Champion, Richard Rex, Alex Mullen, Leida Santiago, Michael Lace, Patricia Kambesis, and the Mona Cave Mapping project. Fieldwork was conducted by members of the archaeological field team, Delise Torres, Victor Serrano, Tiana García, Alex Palermo, Angel Vega, David Redhouse, Lucy Wrapson, and Gen Madgwick. Thanks especially to Osvaldo de Jesús and Rolf Vieten for their archaeological intuition.

Data Availability Statement. The names and precise locations of sites are not disclosed for the purposes of protection of vulnerable cave contexts. Digital data in addition to that disclosed in this manuscript may be made available for research purposes by contacting the authors.

Supplemental Materials. Supplemental materials are linked to the online version of the paper, accessible via the SAA member login at www.saa.org/members-login.

Supplemental Figure 1. Representation of the Calvary, IESUS (map no. 32).

Supplemental Figure 2. IHS (map nos. 10,11). JHS \dagger XPS (map no. 25).

References Cited

Algarra Pardo, Victor M., and Paloma Berrocal Ruiz

2010 Los graffiti del Castillo de Alaquàs, memoria científica de la tercera campaña de intervención arqueológica en el castillo-palacio de Alaquàs. Conselleria de Cultura de Valencia. Dirección General de Patrimonio Cultural Valenciano, Valencia.

Andrews, Kenneth R., and Irene A. Wright

1959 English Privateering Voyages to the West Indies, 1588–1595: Documents Relating to English Voyages to the West Indies from the Defeat of the Armada to the Last Voyage of Sir Francis Drake, including Spanish documents contributed by Irene A. Wright. Vol. 2nd ser., no. 111. Hakluyt Society, London.

Archivo General de Indias (AGI)

1528 Receipt by Three Officials of Casa de la Contratación of Seville. Justicia, 12, núm. 1, ramo 2. Archivo General de Indias. Seville.

1544a Audit of La Española's Royal Treasury Accounts. Contaduría, 1051, folio 2r. Archivo General de Indias, Seville.

1544b Accounting Records of La Española's Colonial Treasury Office. Contaduría, folio 10v. Archivo General de Indias, Seville.

1548 Informaciones de oficio y parte: Francisco Alegre, Alcalde Ordinario, Vecino de San Juan de Puerto Rico. Santo Domingo, 10, N. 44. Archivo General de Indias, Seville.

1550 Informaciones de oficio y parte: Francisco Alegre, Alcalde Ordinario, Vecino de San Juan de Puerto Rico. Con Peticiones y Testimonios. Santo Domingo, 10, N. 51. Archivo General de Indias, Seville.

1561 Real Carta Al Licenciado Hochagoyan (sic), Oidor de La Audiencia de La Isla Española. Santo Domingo, 899, L.1, folio 235. Archivo General de Indias, Seville.

1569 Proceedings of Record of Law-Suit over Property of Land, Santo Domingo. Escribanía de Cámara, 1-B, folio 390r. Archivo General de Indias, Seville.

1554/1573. Caja de Puerto Rico. Cuentas, Contaduría 1074. Archivo General de Indias, Seville.

1573/1594. *Caja de Puerto Rico. Cuentas*, Contaduría 1075. Archivo General de Indias, Seville.

Bahn, Paul G.

2010 Prehistoric Rock Art: Polemics and Progress. Cambridge University Press, New York.

Barrera Maturana, José Ignacio

2011 Barcos, peces, estrellas y otros motivos en los muros del Castillo de Almuñécar (Granada). In Actes Du XVIIe Colloque Internationale de Glyptographie de Cracovie, pp. 27–46. Braine-le-Chateau.

Belén Sánchez Prieto, Ana, and Jesús Domínguez Aparicio 2000 Las escrituras Góticas. In *Introducción a la pale*ografía y la diplomática general, edited by Angel Riesco Terrero, pp. 111–147. Editorial Sintesis, Madrid.

Brady, James Edward, and Keith M. Prufer (editors)

2005 In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use. Linda Schele Series in Maya and Pre-Columbian Studies. University of Texas Press, Austin.

Caamaño-Dones, Josué

2006a Paleografía: Ciencia auxiliar de la archivología. Un comentario desde la historia. In *Custodios de memoria: Un acercamiento a la archivística puertorriqueña*, pp. 231–251. ArchiRED (La Red de Archivos de Puerto Rico), Fundación Biblioteca Rafael Hernández Colón, Fundación Luis Muñoz Marín, Centro de Investigaciones Históricas, Universidad de Puerto Rico-Río Piedras, San Juan de Puerto Rico.

2006b Cultura, poder y vida cotidiana en Puerto Rico, 1520– 1530. Unpublished Master's thesis, Universidad de Puerto Rico, Río Piedras.

Cappelli, Adriano

1912 Dizionario di abbreviature latine ed italiane. Manuali Hoepli, Milan.

Cardona Bonet, Walter A.

1985 Islotes de Borinquen: Notas para su historia. Oficina Estatal de Preservación Histórica, San Juan.

Las Casas, Bartolomé de

1875 [sixteenth century] *Historia de las Indias*. Vol. I. IV vols. Imprenta de Miguel Inesta, Madrid.

Cavallini de Arauz, Ligia

1986 Elementos de paleografía hispanoamericana. Editorial de la Universidad de Costa Rica, San José de Costa Rica. Champion, Matthew

2015 Medieval Graffiti: The Lost Voices of England's Churches. Ebury Press, London.

Cooper, Jago, Alice V. M. Samson, Miguel A. Nieves, Michael J. Lace, Patricia N. Kambesis, Caroline Cartwright, Laura del Olmo Frese, and Josué Caamaño-Dones

2016 The Mona Chronicle: The Archaeology of Early Religious Encounter in the New World. *Antiquity* 90:1054–1071.

Curteis, Tobit, and Naomi Luxford

2014 Royston Cave: An Holistic Approach to Conservation. Journal of Architectural Conservation 20:170–183.

Dávila, Ovidio

2003 *Arqueología de la Isla de la Mona*. Instituto de Cultura Puertorriqueña, San Juan.

Deagan, Kathleen A.

2004 Reconsidering Taíno Social Dynamics after Spanish Conquest: Gender and Class in Culture Contact Studies. American Antiquity 69(4):597–626.

Deagan, Kathleen A., and José María Cruxent

1993 From Contact to Criollos: The Archaeology of Spanish Colonization in Hispaniola. In *The Meeting of Two Worlds: Europe and the Americas 1492–1650*, Volume 81, edited by Warwick Bray, pp. 67–104. Oxford University Press, New York.

Dubelaar, Cees N.

1986 South American and Caribbean Petroglyphs. Vol. III. Koninklijk Instituut voor Taal-, Land- en Volkenkunde. Foris Publications, Dordrecht. Dubelaar, Cornelis N., Michele H. Hayward, and Michael A. Cinquino

1999 Puerto Rican Rock Art: A Resource Guide. Panamerican Consultants for Puerto Rico State Historic Preservation Office, San Juan de Puerto Rico.

Fernández de Oviedo y Valdéz, Gonzalo

1851 [sixteenth century] Historia General y Natural de las Indias, Islas y Tierra-Firme del Mar Océano. Vol. 1. 5 vols. Real Academia de la Historia, Madrid.

Galende, Juan C.

2000 Los ciclos escriturarios. In *Introducción a la pale- ografía y la diplomática general*, edited by Angel Riesco Terrero, pp. 33–48. Editorial Sintesis, Madrid.

Gourgues, Dominique de

1875 La Reprise de la Floride par le Capitaine de Gourgue. In *Historical Collections of Louisiana and Florida*, pp. 271–272. Albert Mason, New York.

Graham, Elizabeth

2011 Maya Christians and their Churches in Sixteenth-Century Belize. University Press of Florida, Gainesville. Greenblatt, Stephen J.

1991 Marvelous Possessions: The Wonder of the New World. Clarendon Press, Oxford.

Gutiérrez Calvache, Divaldo A.

2014 Catastro Nacional Del Arte Rupestre Cubano. Electronic document, http://www.cubaarqueologica.org/document/gciar_catastro.pdf, accessed November 19, 2015.

Hainard, Jacques, Phillippe Mathez, and Olivier Schinz (editors) 2008 *Vodou: Kunst En Mystiek Uit Haiti*. KIT, Amsterdam. Hanke, Lewis

1974 All Mankind is One: A Study of the Disputation between Bartolomé de Las Casas and Juan Ginés de Sepúlveda in 1550 on the Intellectual and Religious Capacity of the American Indians. Northern Illinois University Press, DeKalb.

Hayward, Michele H., Lesley-Gail Atkinson, and Michael A. Cinquino (editors)

2009 Rock Art of the Caribbean. University of Alabama Press, Tuscaloosa.

Lace, Michael J.

2012 Anthropogenic Use, Modification and Preservation of Coastal Caves in Puerto Rico. *Journal of Island and Coastal Archaeology* 7(3):378–403.

La Selve, Edgar

1871 La République d'Haïti, ancienne partie française de Saint-Domingue, par M. Edgar La Selve, Professeur de Rhétorique au Lycée National Pétion, Du Port-Au-Prince. Electronic document, http://www.manioc.org/gsdl/collect/patrimon/archives/SCH13105.dir/SCH13105.pdf, accessed November 5, 2015.

Leland Dunaway, Margaret

1989 Paleographic and Orthographic Characteristics of Certain Sixteenth-Century Spanish American Letters. Unpublished Master's thesis, Hispanic and Classical Studies, Rice University.

López Belando, Adolfo

2003 El arte en la penumbra: Pictografia y petroglifos en las cavernas del Parque Nacional del Este, República Dominicana. Grupo BHD, Santo Domingo.

2011 Arte rupestre y vudú en el Parque Nacional el Conde. Rupestreweb. Electronic document, http://www.rupestreweb.info/vudu.html, accessed November 5, 2015. McCarthy, Michael R.

1990 Carlisle Castle: A Survey and Documentary History. Archaeological Report English Heritage. Historic Buildings & Monuments Commission for England, London. Martínez Cereceda, José Luis

2009 Registros andinos al margen de la escritura: El arte rupestre colonial. Boletín del Museo Chileno de Arte Precolombino 14:9–35.

Millares Carlo, Agustín, and Ignacio Mantecón

1955 Album de paleografía hispanoamericana de los siglos XVI y XVII. Vol. III. Manuales de Técnica de la Investigación de la Historia y Ciencias Afines. Pan American Institute of Geography and History, Mexico D.F.

Montaigne, Michel de

1823 [sixteenth century] IX. De La Vanité, in *Essais de Michel de Montaigne*, 5 vols. Lefèvre, Paris.

Morales, Reinaldo, Jr., and Melisa A. Quesenberry

2005 A Niche in Time: JD-5, Caribbean Cave Art, and the Fourth Dimension. American Indian Rock Art 31:34–56.

Moscoso, Francisco

2010 Composición criolla puertorriqueña: 1508–1540. In Los procesos de la colonización: raíces de las culturas iberoamericanas, pp. 805–817. Actas del Congreso de Academias Iberoamericanas de La Historia, San Juan de Puerto Rico.

Moyes, Holley (editor)

2013 Sacred Darkness: A Global Perspective on the Ritual Use of Caves. University Press of Colorado, Boulder.

Nolan, Mary Lee

1991 The European Roots of Latin American Pilgrimage. In *Pilgrimage in Latin America*, edited by Ross N. Crumrine and Alan Morinis, pp. 19–52. Greenwood, Westport, Connecticut.

Oliver, José R.

2009 Caciques and Cemí Idols: The Web Spun by Taíno Rulers between Hispaniola and Puerto Rico. University of Alabama Press, Tuscaloosa.

Pagán Perdomo, Dato

1978 Nuevas pictografias en la isla de Santo Domingo, las cuevas de Borbon, Ediciones del Museo del Hombre Dominicano, Museo del Hombre Dominicano Santo Domingo.

Pané, Ramón

1999 [fifteenth century] An Account of the Antiquities of the Indians: A New Edition with an Introductory Study, Notes, and Appendixes by José Juan Arrom, trans. by Susan C. Griswold. Duke University Press, Durham, North Carolina.

Recalde, Andrea, and C. González Navarro

2015 Colonial Rock Art: A Reflection on Resistance and Cultural Change (16th and 17th Century-Córdoba, Argentina). *Journal of Social Archaeology* 15:45–66.

Rivera-Collazo, Isabel C.

2006 Historical Ship Graffiti on the Walls of San Juan's Spanish Defence System: An Interim Report. *International Journal of Nautical Archaeology* 35:41–52.

Rivet, María Carolina

2013 Cruces e iglesias en un contexto chullpario. Arte rupestre colonial en las Tierras Altas Atacameñas. *Nuevo Mundo, Mundos Nuevos*. Electronic document, https://nuevomundo.revues.org/64960, accessed November 19, 2015.

Rodríguez López, Miguel

2010 Crónicas Taínas (cuatro ensayos de lucha e identidad). Editorial Nuevo Mundo, San Juan de Puerto Rico. Roe. Peter G.

2009 The Mute Stones Speak: The Past, Present, and Future of Caribbean Rock Art Research. In *Rock Art of the Caribbean*, edited by Michele H. Hayward, Lesley-Gail Atkinson, and Michael A. Cinquino, pp. 198–239. University of Alabama Press, Tuscaloosa.

Rouse, Irving B.

1952 Porto Rican Prehistory: Introduction; Excavations in the West and North, Scientific Survey of Porto Rico and the Virgin Islands. New York Academy of Sciences, New York.

1992 The Tainos: Rise and Decline of the People Who Greeted Columbus. Yale University Press, New Haven and London.

Samson, Alice V. M., and Jago Cooper

2015 History on Mona Island: Long-term Human and Landscape Dynamics of an "Uninhabited" Island. New West Indian Guide 89(1–2):30–50.

Samson, Alice V. M., Jago Cooper, Miguel A. Nieves, Reniel Rodríguez Ramos, Patricia N. Kambesis, and Michael J. Lace

2013 Cavescapes in the pre-Columbian Caribbean. Antiquity 87(338). Electronic document, http://antiquity.ac.uk/ projgall/samson338/, accessed November 19, 2015.

Samson, Alice V. M., Jago Cooper, Miguel A. Nieves, Lucy J. Wrapson, David Redhouse, Rolf-Martin Vieten, Osvaldo De Jesús Rullan, Tiana García López de Victoria, Alex Palermo Gómez, Victor Serrano Puigdoller, Delise Torres Ortiz, and Angel Vega de Jesús

2015 Indigenous Cave Use, Isla de Mona, Puerto Rico. In Proceedings of the 25th International Congress for Caribbean Archaeology, pp. 414–444. San Juan de Puerto Rico.

Silliman, Stephen W.

2015 A Requiem for Hybridity? The Problem with Frankensteins, Purées, and Mules. *Journal of Social Archaeology* 3:277–298.

Simek, Jan F., Alan Cressler, and Joseph C. Douglas

2013 A New Overview of Prehistoric Cave Use in the Southeast. In Sacred Darkness: A Global Perspective on the Ritual Use of Caves, edited by Holly Moyes, pp. 195– 210. University Press of Colorado, Boulder.

Tanodi, Aurelio

1971 Documentos de la Real Hacienda de Puerto Rico. Volumen I (1510–1519). Vol. 1. Centro de Investigaciones Históricas, Universidad de Puerto Rico, Río Piedras.

Tarble de Scaramelli, Kay

2012 Effects of Empire: Gendered Transformations on the Orinoco Frontier. In *The Archaeology of Colonialism: Intimate Encounters and Sexual Effects*, edited by Barbara L. Voss and Elinor Conlin Casella, pp. 138– 155. Cambridge University Press, New York.

Todorov, Cvetan

1984 The Conquest of America: The Question of the Other, translated by Richard Howard. University of Oklahoma Press, Norman.

Turner, Samuel Peter

1998 Inter-Island Trade and Spanish Colonial Expansion from Espanola 1512–1517. Unpublished Ph.D. dissertation, King's College, London.

Valcárcel Rojas, Roberto

2016 Archaeology of Early Colonial Interaction at El Chorro de Maíta, Cuba. Florida Museum of Natural History: Ripley P. Bullen Series. University Press of Florida, Tuscaloosa.

Valcárcel Rojas, Roberto, Alice V. M. Samson, and Menno L. P. Hoogland

2013 Indo-Hispanic Dynamics: From Contact to Colonial Interaction in the Greater Antilles. *International Journal* of Historical Archaeology 17:18–39.

Vincentius Bellovacensis

1624/1964 [thirteenth century] "Speculum Historiale," in Speculum Quadruplex Sive Speculum Maius, digital version, Universitäts- und Landesbibliothek, Düsseldorf, 2010, 4 vols. Electronic document, http://digital.ub. uni-duesseldorf.de/ihd/content/titleinfo/1357637, accessed November 6, 2015.

Whitehead, Neil L.

2011 Of Cannibals and Kings: Primal Anthropology in the Americas. Latin American Originals. Pennsylvania State University Press, University Park.

Wilson, Samuel M.

1997 *The Indigenous People of the Caribbean*. Ripley P. Bullen Series. University Press of Florida, Gainesville.

Notes

1. All reported heights take into account the height of the loss of cave floor due to nineteenth-century mining.

2. Both Fernández de Oviedo and Las Casas use the term "entendido" to refer to people with understanding of and experience in foreign languages or certain skills, regardless of origin or ethnicity ("los viejos e más entendidos dellos son ya muertos," Fernández de Oviedo 1851:Bk. 5, Ch. 4, p.142; "hombres entendidos y expertos mineros," ibid. Bk. 3, Ch. 7, p. 75); ("latino y muy entendido en todas las cosas de hombres," Las Casas 1875:Bk. 1, Ch. 29, p. 224). Also, Klaus Zimmerman, personal communication 2014.

Submitted August 17, 2015; Revised November 20, 2015; Accepted August 26, 2016.