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Abstract: In 2018 the Nicholson Museum, The University of Sydney, acquired a small Roman mosaic known as 'The Wrestlers' (NM 2018.135). The mosaic is of North African origin and is almost certainly the product of a local Tunisian workshop during the 3rd century, a period of intense urbanisation and wealthy local patronage in the Roman provinces. The mosaic depicts two athletes in the final stages of a pankratic competition and is framed by a distinctive red and black border, parallels for which are found in mosaics from Gightis near modern Boughrara in southeastern Tunisia. This paper analyses the mosaic within the context of decorative mosaic art and places it chronologically and stylistically within the broader scope of the mosaic industry in Africa Proconsularis.

Introduction

In November 1969, the Apollo 12 space mission became only the second manned flight to land on the moon. In celebration of the lunar-landing the astronauts, Richard F. Gordon, Charles 'Pete' Conrad and Alan L. Bean embarked on a world-wide goodwill tour on behalf of the President, Richard Nixon. When they visited Morocco in early 1970 as personal guests of the king, Hassan II, they were presented with several gifts, including ancient mosaics. Gordon received 'The Wrestlers' (Figure 1) and Bean, a small mosaic depicting a duck and aquatic plants.¹ At the conclusion of the tour, Gordon returned to America with 'The Wrestlers' and later sold it to the Trevino family who commissioned its conservation. In 2018, 'The Wrestlers' was acquired by the Nicholson Museum, The University of Sydney.

The Nicholson Mosaic

The mosaic now in the Nicholson Museum collection (NM 2018.135) measures 57cm (l) x 54cm (w). The individual tesserae vary in size from 7mm for the white background to 6mm for the coloured background and 5mm for the figures. The mosaic is embedded in a layer of approximately 2cm of modern cement and any trace of the original preparatory layers is no longer evident. According to the condition report at the time of restoration, the mosaic had evidence of earlier repairs to the mortar and some detached tesserae which were replaced. The interstitial mortar of the mosaic was coloured in all areas but lead strips which are characteristic of these surface techniques, were not visible (Pickman 2011: 1). No evidence remains, such as a raised lip, to suggest that the mosaic was originally set into a tray for transport, as is often seen in smaller mosaics (Wootten 2012: 212).



Figure 1: 'The Wrestlers' mosaic (NM 2018.135) 570 x 540 x 20. Photo: Courtesy of the Nicholson Museum.

Composition

The mosaic is a polychromatic composition of small, cube-shaped stone tesserae in matt shades of white, brown, yellow, black, green, blue and red. It is framed by two borders, one of red tesserae laid in a single line which is separated by two rows of white tesserae from the outer border of two rows of black tesserae. The scene depicted on the mosaic is of two pankratic wrestlers executed in ochre with the limbs and some muscles delineated by either red or black lines in order to demonstrate the position of the arms and legs of each combatant. The visible facial features are somewhat rudimentary, with black dots for the eyes and white lines for the nose and mouth. White is also used with black and red to show contours of the body, a technique commonly seen in African mosaics of the late 3rd century (Dunbabin 1978: 35). The mosaic has a white background with a strip of approximately fourteen rows of blue tesserae behind and below the figures. Within the blue section are several rows of red tesserae which provide a ground line and perhaps indicate a shadow of one of the wrestlers towards the centre. The blue and red base serves both to anchor the figures against the background, and perhaps to provide a context for the bout in the form of a body of water, such as a river or sea. It may also represent an elevated *skamma*, a pit designed for mud-wrestling as opposed to dry wrestling in sand (Katzoff 1986: 440).

Technique

The main technique used to compose the Nicholson mosaic was *opus vermiculatum*, or ‘worm-like work’ (Marconi 2014: 22). This method of producing ‘paintings in stone’ (Blanchard-Lemée: 11) required a high degree of skill and involved using several rows of tesserae to outline the main motif. It was commonly used to create *emblemata*, smaller mosaics used as the central panel or around the outside of the mosaic to expand upon and draw attention to different aspects of the theme (Westgate 2000: 104). *Emblemata* were often framed by lavish, meandering, non-figural patterns in addition to the initial straight borders. While larger compositions were by necessity laid *in situ*, the smaller *emblemata* offered the opportunity for the craftsmen to create them in a workshop and transport them to the site on trays to be later set into the floor (Boschetti 2008: 22).

The Nicholson mosaic has up to ten rows following the outline of the combatants, thereby emphasising the contrast between the white background and the skin colours of the figures by creating a ‘halo’ around them and an almost two-dimensional effect. The composition is then completed using *opus tessellatum*, tesserae placed in a regular, repeat pattern or lines. The same combination of techniques can be seen in the undated duck mosaic originally gifted to Alan Bean.

The Pankration

Although the Nicholson mosaic is known as ‘The Wrestlers’, the two figures it portrays are almost certainly

pankratiasts. The pankration or ‘all powers’ was a combination of wrestling and boxing with its origin attributed to Theseus, who was said to have used the same technique to defeat the Minotaur in the labyrinth (Meyer 2012: 97). As a sport, pankratic wrestling appears to have been introduced to the Olympics in 648 BCE (33rd Olympiad) where it was regarded as one of the most brutal and challenging athletic pursuits (Kyle 2015: 120). It was described by several ancient authors but in most detail by Philostratus who outlined the rules of combat which allowed striking, wrestling, kicking, armlocks, chokes and boxing (Phil. *Im.* ii. 6). With demonstrations in which all the strength and agility of the fighters needed to be employed in order to overpower the opponent and win, the pankration tournament eventually became a main event, taking place on the final day of the games (Meyer 2012: 19). The pankration, with gladiatorial combat and all pagan festivals, was officially abolished by the Emperor Theodosius I in 393 (Georgiou 2005: 4).

In the pankratic scene portrayed on the Nicholson mosaic the combatants are nude and muscular. They are possibly both wearing skull caps to prevent hair pulling and the



Figure 2: Terracotta Panathenaic prize amphora ca. 500 BC attributed to the Kleophrades Painter, depicting a pankration and judge. H 63.5cm. On display at The Met Fifth Avenue, Gallery 153. Photo: Creative Commons <https://www.metmuseum.org/art/collection/search/249067>.

wrestler on the left seems to also have a neck chain or strap which may have contained an amulet (Molholt 2008: 136). The contest appears to be in its final stages with the wrestler on the left the dominant fighter. He is employing a favoured pankration manoeuvre, the ‘heel hook’ where one opponent’s foot is locked behind the knee of the other (Hollenback 2010: 20). The opponent is in a ‘turtle’ position with his leg grasped tightly under the dominant wrestler’s arm. The first wrestler seems to now be in position either to drive the immobilised wrestler’s head into the ground or execute another move which will flip the opponent onto his back, effectively signalling his submission and ending the competition.

Artistic depictions of the pankration and other athletic pursuits are known from at least the 6th century BCE and accomplished black and red-figured vase painters such as the Kleophrades Painter (Figure 2), the Berlin painter and the Foundry Painter all featured pankratic scenes on their vases (Gardiner 1906: 4-22). A marble sculpture, The ‘Uffizi Wrestlers’ or *The Pancrastinae* (Figure 3) captures a very similar manoeuvre to the one depicted in the Nicholson mosaic and is believed to be a Roman copy of a lost Greek original of the 3rd century BCE (Clark 1990: 184). In Italy, mosaics, wall-paintings and sculptures depicted pankratiasts and wrestlers often in baths or *thermae*, most notably at Pompeii in the 1st century and in the vast Baths of Caracalla in Rome in the 3rd century (Gensheimer 2018: 126-137). At Ostia, where athletic imagery is prolific in *thermae* and elsewhere (Newby 2005: 59), a well-known mosaic shows two wrestlers, named on the mosaic as Alexander and Helix, the latter of whom was a famous pankratiast early in the 3rd century (Jones 1998: 295).

In North Africa, as in the rest of the Western Roman Empire, wrestling and the pankration were popular spectator sports. Organised games and spectacles were an important component of society and were designed to entertain large groups of people on a regular basis. The games incorporated many Greek-style competitions and became widespread around the end of the 2nd century, continuing until the end of the 4th century. Their popularity was reflected artistically in the corpus of mosaics commissioned by wealthy residents, some of whom may well have sponsored the events (Blanchard-Lemée: 181).

Mosaics in Roman North Africa

Key publications

In 1881 Tunisia became a French protectorate and from this period onwards French scholars and antiquarians were integral to the development of historical and archaeological research in Northern Africa (MacKendrick 2000). A considerable amount of archaeological investigation was conducted and published during the 19th and 20th centuries, mainly in French and Italian, with most attention focused upon the classical period (Diaz-Andreu 2007: 271).



Figure 3: *The Uffizi Wrestlers or The Pancrastinae.*
Photo: Courtesy the Uffizi Gallery Inv. 1914 no.216

As a specialised subject, the study of North African mosaics owes much to the research of Katherine Dunbabin whose publications, in 1978 and 1999 have made a significant contribution to our understanding of Roman mosaics from modern Morocco, Algeria, Tunisia and Libya. The *Corpus des Mosaïques de Tunisie* (CMT), a project led by Margaret Alexander, sought to catalogue and locate mosaics within their original architectural settings. The CMT was published in four volumes from 1973 to 1999 and included detailed pictorial representations and aerial photography of over one thousand mosaics from Tunisia including the cities of Utica, Thuburbo Majus, El Jem and Carthage (Alexander 1973). In the 1980s, several International Colloquia on Ancient Mosaics were published which featured North African material (Johnson 1987).

More recently, the most significant work on North African mosaics both in terms of conservation and publication has been a collaboration between the J. Paul Getty Museum and the Institute National Du Patrimoine in Tunisia. Several publications have emerged as a result of this project including a catalogue, *Stories in Stone: Conserving Mosaics of Roman Africa: Masterpieces from the National Museums of Tunisia* which coincided with an exhibition at the Getty Villa in 2006. The twenty-seven mosaics in the exhibition came from Tunisia’s leading museums, including the Bardo Museum in Tunis, the Sousse Museum, and the El Jem Museum (Ben Abed 2006b) (see Map Figure 4).

Dating

Although North African mosaics are plentiful and often well-preserved, dating and contextualising them is extremely problematic. Apart from those published



Figure 4: Map of Roman North Africa. Map adapted from Google Earth.

in the CMT, the mosaics are commonly lacking any confirmed provenance or archaeological context. Many were removed from their original architectural position without record, resulting in the absence of their primary format and with it, the important perception of how the viewer may have interacted with the mosaics. Other vital information including spacing, lighting and function were also lost, as well as the opportunity to examine the strata beneath for dating. Establishing a chronology on the basis of iconography and stylistic comparisons is therefore largely subjective, relying on the few mosaics which have been accurately dated through stratigraphy. Unlike Pompeii, for example, where the eruption of Vesuvius in October 79 CE provides a *terminus ante quem* for the dating of buildings, wall paintings and mosaics, North Africa provides few datable events which can be applied directly to the manufacture of mosaics. There is also considerable variation in the timelines for the adoption of styles and techniques between regional workshops which developed their own distinctive characteristics at different rates and at different times (Dunbabin 1978: 33). In-depth studies have been further limited by earlier published images of the mosaics which tended to focus only on the central panels, creating difficulties for those attempting to compare significant details such as distinctive borders for example, which are often omitted from photographs and are now considered as possible stylistic indicators of individual artisans and workshops (Fatta 2019: 96). Until more research and publications come to hand, the dating for most mosaics must therefore remain general in nature.

Workshops

Regional North African schools and workshops for the design and creation of mosaics were probably initially founded by Italian mosaicists and then evolved into distinctive schools (Dunbabin 1978). An early workshop was almost certainly centred in El Djem (Tidemann 2009: 142) with another branch at Hadrumetum (Sousse) (Dunbabin 1978: 18). By the end of the 2nd century most of the

larger cities of *Africa Proconsularis* had a local workshop (Dunbabin 1978: 21), almost certainly in response to the massive urban boom which occurred in the western provinces between the late 1st to early 3rd centuries (Dufton 2019: 269). In Mauretania (modern Morocco), workshops existed in Banasa, Lixus and Volubilis by the late 2nd and into the 3rd century. The designs and execution of these mosaics show local characteristics (Dunbabin 1999: 124) and possibly owe more to nearby Spain than Tunisia (Ben Abed 2006a: 43). The influence of these workshops eventually became evident outside Africa as attested by the grand and extensive mosaics dated to the 4th century at the Villa of Piazza Armerina in Sicily, some of which have been attributed to African workshops (Belis 2016: 2; Catullo 2000).

The larger mosaic workshops appear to have employed a variety of craftsmen with specialised roles, skills and pay levels (Bernard 2017: 80).² They included the *calcis coctor* who was responsible for preparing the mortar, the *pavimentarius* who prepared the floor by setting the lower layers of the mosaic and the *tessellarius* who made the simpler parts of the mosaic such as geometric frames. The master artist, (*pictor musivarius*) executed the most elaborate sections based on drawings made by the designer, (*pictor imaginarius*) after the *pictor parietarius* had enlarged and transcribed the design drawing on to the floor or wall (Ben Abed 2006a: 38). It is likely that pattern books were used to transfer designs from one workshop to another (Ling 1998: 13).

Provenance

In North Africa, Tunisia in particular has an enormous number and variety of Roman-era mosaics, many of which are displayed in the Bardo Museum in the old city of Carthage. An identical version of the Nicholson mosaic is part of the Bardo Museum collection (Figure 5). This mosaic differs from the Nicholson example only in subtle variations of colour and technique. The



Figure 5: *Wrestlers mosaic from from the 'tepidarium' Gightis, 3rd century, Bardo Museum, Tunisia. Artist Unknown. Image: adapted from Ben Abed 2006b*

Nicholson mosaic shows the two combatants with similar musculature and skin colour but in the Bardo example the defeated combatant is depicted with much darker skin and may represent a member of the native Berber population or an older fighter (Molholt 2008: 136). The lower background upon which the battle takes place is the same in both compositions but executed in different coloured tesserae. Where the Nicholson scene appears to take place by the water, the Bardo background is green and brown, perhaps indicating a land-based battle. The execution of the Bardo mosaic is also less refined and careful than the Nicholson example which employs the *opus vermiculatum* technique to far greater effect. In contrast, the Bardo mosaicist has used only two rows around the main figures, thus diminishing the 'halo' as seen in the Nicholson example. The Bardo example also displays the same distinctive red and black border arrangement seen in the Nicholson mosaic.³

The Bardo mosaic is well-provenanced and originated from the coastal port city of Gightis near Rass el Bacha on the Boughrara Gulf in Tunisia (Ben Abed 2006b). The city's foundation dates to the Punic period after which it was annexed to the territory of King Massinissa of Numidia and in the 1st century, integrated into the province of *Africa Nova*. The Roman era city plan included the baths and a palaestra complex near the main entrance as well as a temple to Serapis and Isis, a treasury and several other temples and sanctuaries (Constans 1917).

The Bardo mosaic is one of at least two which were part of a much larger mosaic on the floor of the *tepidarium* in the bath house at Gightis (Ben Abed 2006b: 82-86). The mosaics are dated to the 3rd century and they were clearly derived from the same workshop. The second

mosaic (Figure 6) shows a darker skinned man pinned to the ground by his opponent who is clasp his neck in a movement called the 'neck' or 'ladder grip', where the wrestler who has been forced into the 'turtle' position is subjected to the opponent's legs being wound around his back and then around his neck in what becomes a choke hold (Wright 2012). The dominant wrestler has his opponent's left arm held in his left hand and makes a fist with his right hand as if he intends to punch the prone man in the head or back. The lower man is trying to brace himself using his right hand but clearly to no avail. The upper man's face has been badly damaged, but the lower man is clearly wearing a skull cap. The technique and colours used in both mosaics are identical, as are the red and black borders. There is a third mosaic from Gightis which does not have a specific provenance but almost certainly belongs to the same workshop as the two wrestlers from the baths. This mosaic depicts Venus talking to Mercury framed by an identical red and black border and is also dated to the 3rd century.

Wrestlers and pankratic scenes are found on several other mosaics from Tunisia. A mosaic from Thaenae (modern Thyna) for example, depicts four pairs of wrestlers in various stages of combat including prize giving which includes crowns and a palm frond (Blanchard-Lemée: 190). Another wrestling mosaic, currently in the Bardo Museum was found in the threshold of the *Maison des Lutteurs*, in Utica (Alexander 1973: 11) (Yacoub 1969: 119). These combatants have neck chains and hair fashioned into top knots which was the favoured hairstyle of Roman wrestlers⁴ (Papakonstantinou 2013; Perrottet 2004). There is a pair of wrestlers on either side of a table. On one side the wrestlers are beginning their match while on the other side the contest is already in progress.



Figure 6: *Wrestlers mosaic from from the 'tepidarium' Gightis, 3rd century, Bardo Museum, Tunisia. Artist Unknown. Image: adapted from Ben Abed 2006b*

The table between them bears the competition prizes of a crown and two palms. The mosaic is also dated to the 3rd century (Ben Abed 2006b). The pankration also appears on a large 4th century (4.65 x 4.65m) mosaic from the floor of a bath house at Capsa, modern Gafsa, a prominent inland Roman military stronghold approximately 250km inland from Gightis. The mosaic depicts a dozen or more athletic games in fourteen scenes which represent the sequence of the events from the bout being umpired, followed by prize giving ceremonies and finally the athletes with their awards (Ben Abed 2006: 87). In the pankratic scene, the dominant wrestler has his opponent in a leg hold while simultaneously forcing his head to the ground. The protagonists are wearing top knots and are being observed by an umpire brandishing a palm frond (Blanchard-Lemée: 190-191).

Discussion

The Nicholson mosaic is well-executed and demonstrates the mosaicist's skilful use of *opus vermiculatum*. It was probably the work of a master artist who was proficient in the technique which he has employed to create a distinctive and pronounced 'halo' effect around the two pankratists. Although this technique is common, it is rarely used to such an extent. In fact, the Nicholson example is the only one found to date which shows so many rows around the main figures. As it was clearly of superior craftsmanship, the mosaic was most likely a central panel and was almost certainly a private commission by someone of wealth. It was probably placed in either a bathing or palaestra building or perhaps in the private residence of a patron interested in or involved with wrestling or games. Although it is highly unusual to find pavements which are identical (Ling 1998: 133) the Nicholson mosaic has an almost exact parallel in the mosaic from Gightis which is known to have come from the baths of the city. Another two mosaics are almost certainly from the same workshop and all are dated to the 3rd century. The Nicholson mosaic is of superior quality and may have been made by a more experienced craftsman and copied either contemporaneously or later by the Gightis workshop, perhaps from a shared prototype. The possibility that itinerant craftsmen were responsible for all the mosaics or that the design may have been purchased from elsewhere also cannot not be discounted.

In seeking to place the Nicholson Mosaic in its chronological and stylistic context, it was necessary to consider as many published mosaics as possible from across the North African provinces. Although the mosaic was gifted by King Hassan II to Richard Gordon in Morocco, there is as yet, no archaeological or stylistic evidence to link Gordon's 'The Wrestlers' mosaic to that area. Research into Moroccan mosaics with particular attention to the grand city of Volubilis, with its numerous examples, has to date, not yielded any comparable mosaics, either in terms of subject matter or style.

As to how the mosaic came to be in the possession of the King of Morocco there are several possibilities. As *emblemata* the mosaics were small enough to be sold and easily transported and therefore could have been traded or gifted between the provinces at any time since their initial production. The illegal trade in antiquities from all areas of the Mediterranean in the 19th and 20th centuries is well attested and North Africa is no exception. The mosaics of Hamman Lif in Tunisia for example, were discovered by a French soldier in 1883 and quickly removed. Over the next fifty years the mosaics apparently travelled from Tunisia to France where they were sold by a dealer (Biebel 1936). They finally resurfaced at the Brooklyn Museum, New York in the 1930s, where they are now part of the museum collection (Stern 2008: 244). In terms of the Nicholson mosaic, it would therefore not be unusual to find that it originated in one country but emerged publicly in another.⁵

Conclusion

In summary, the Nicholson mosaic, when considered in the overall context of the stylistic and chronological development of African mosaics generally and coupled with the parallels provided by the Gightis mosaics, was almost certainly produced in Tunisia, probably in the vicinity of Gightis during the 3rd century.

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Bibliography

- Alexander, M. & M. Ennaifer 1973 *Corpus des Mosaïques de Tunisie*, Tunis: Institut National d'archéologie et d'arts. <https://www.doaks.org/resources/online-exhibits/clearing-to-cataloging/project-history>
- Belis, A. 2016 *Roman Mosaics in the Getty Museum*, Los Angeles: Getty Publications.
- Ben Abed, A. 2006a *Tunisian Mosaics: Treasures from Roman Africa, masterpieces from the national museums of Tunisia*, Los Angeles: Getty Conservation Institute.
- Ben Abed, A. 2006b *Stories in Stone: Conserving Mosaics of Roman Africa, GCI Scientific Program Report Ser.*, Los Angeles: Getty Publications.

- Bernard, S.B. 2017 Workers in the Roman Imperial Building Industry, in K. Verboven & C. Laes eds *Work, Labour, and Professions in the Roman World*, Leiden & Boston: Brill, 62-86.
- Biebel, F. 1936 The Mosaics of Hammam Lif, *The Art Bulletin* 18 (4), 541-51.
- Blanchard-Lemée, M., M. Ennaifer, H. Slim & L. Slim 1996 *Mosaics of Roman Africa: floor mosaics from Tunisia*, London: British Museum Press, 1, 181-191
- Boschetti, C., C. Leonelli, M. Macchiarola, P. Veronesi, A. Corradi, & C. Sada 2008 Early evidences of vitreous materials in Roman mosaics from Italy: An archaeological and archaeometric integrated study, *Journal of Cultural Heritage* 9, e21-e26.
- Catullo, L. 2000 *The Ancient Roman Villa of Casale at Piazza Armerina: Past and Present*, Messina: Avvenire.
- Clark, K. 1990 *The Nude: A Study in Ideal Form*, Princeton, N.J.: Princeton University Press, 184.
- Constans, L.A. 1917 La ville antique de Gighthis, en Tunisie. Gighthis, Étude d'histoire et d'archéologie sur un emporium de la petite Syrie, *Journal des Savants* 7, 289-99.
- Diaz-Andreu, M. 2007 Ch. 9, Classical versus Islamic Antiquities in Colonial Archaeology: The Russian Empire and French North Africa, in *A World History of Nineteenth-Century Archaeology: Nationalism, Colonialism and the Past*, New York: Oxford University Press, 245-77
- Dufton, J.A. 2019 The Architectural and Social Dynamics of Gentrification in Roman North Africa, *American Journal of Archaeology* 123, 263-90.
- Dunbabin, K.M.D. 1978 *The Mosaics of Roman North Africa. Studies in Iconography and Patronage*, Oxford: Clarendon Press.
- Dunbabin, K.M.D. 2012 *Mosaics of the Greek and Roman World*, Cambridge: Cambridge University Press.
- Fatta, F. & D. Mediati 2019 Geometric References of Roman Mosaics in North Africa, *Nexus Network Journal*, 22, 91-111.
- Gardiner, N. 1906 The Pankration and Wrestling, *Journal of Hellenic Studies* 26, 4-22.
- Georgiou, A.V. 2005 Pankration: An Olympic Combat Sport; Volume 1: Xlibris Corporation.
- Gensheimer, M.B. 2018 *Decoration and Display in Rome's Imperial Thermae: Messages of Power and Their Popular Reception at the Baths of Caracalla*: Oxford University Press
- Hollenback, G.M. 2010 Understanding ancient combatives: the 'heel manoeuvre' in Philostratus' Heroicus 14.4-15.3, *Akroterion*, 55, 19-23.
- Johnson, P., R. Ling & D.J. Smith 1995 Fifth International Colloquium on Ancient Mosaics (Bath 1987), *Journal of Roman Archaeology Supplementary Series* 9, 2 Volumes, Ann Arbor, MI.
- Jones, C.P. 1998 The Pancratiasts Helix and Alexander on an Ostian Mosaic, *Journal of Roman Archaeology* 11, 293-8.
- Katzoff, R. 1986 Where did the Greeks of the Roman period practice wrestling? *American Journal of Archaeology* 90 (4), 437-40.
- Kyle, D.G 2015 *Sport and Spectacle in the Ancient World*, John Wiley & Sons, ProQuest Ebook Central.
- Ling, R. 1998 *Ancient Mosaics*, London: British Museum Press.
- MacKendrick, P.L. 2000 *The North African Stones Speak*, Chapel Hill NC: UNC Press Books.
- Marconi, C. & K. Lapatin 2014 The materials and techniques of Greek and Roman Art, in C. Marconi ed. *The Oxford Handbook of Greek and Roman Art and Architecture*, Oxford University Press.
- Meyer, T.C. 2018 *Fighting Rhetoric and Training Composition: Theory and Pedagogy of Mixed Martial Arts Argument* (Doctoral dissertation), Retrieved from <https://scholarcommons.sc.edu/etd/4641>
- Molholt, R. 2008 *On Stepping Stones: The historical experience of Roman mosaics*, Columbia University, New York: ProQuest Dissertations Publishing.
- Newby, Z. 2005 *Greek Athletics in the Roman World: Victory and Virtue*, Oxford: Oxford University Press. <http://ebookcentral.proquest.com/lib/usyd/detail.action?docID=422679>
- Papakonstantinou, Z. 2013 *Sport in the Cultures of the Ancient World: New Perspectives*, Hoboken: Taylor and Francis.
- Perrottet, T. 2004 *The Naked Olympics: The True Story of the Ancient Games*, New York: Random House Publishing Group.
- Philostratus et al. *Imagines*. Cambridge, MA: Harvard University Press, 2014.
- Pickman, S. 2011 *Treatment Report. Conservation of Mosaic (The Wrestlers)*: Unpublished.
- Stern, K.B. 2008 *Inscribing Devotion and Death: Archaeological Evidence for Jewish Populations of North Africa*, Boston: Brill.
- Tidemann, S. 2009 Birds and Artisans of the Roman Mosaics of Tunisia: Species, Symbolism and Origins, *International Journal of the Humanities* 7 (6), 141-56.
- Westgate, R. 2000 Pavimenta atque emblemata vermiculata: Regional styles in Hellenistic mosaic and the first mosaics at Pompeii, *American Journal of Archaeology* 104 (2), 255-75.

- Wootten, W. 2012 Making and meaning: The Hellenistic mosaic from Tel Dor, *American Journal of Archaeology* 116 (2), Making and Meaning: The Hellenistic Mosaic from Tel Dor, *American Journal of Archaeology* 116 (2), 209-34.
- Wright, F.A. & S.J. Instone 2012 Pankration, *The Oxford Classical Dictionary*, Oxford University Press.
- Yacoub, M. 1970 *Le Musée du Bardo*, Tunis: Ministère des affaires culturelles.

Endnotes

- 1 The mosaic gifted to Bean was sold in Washington in 2010 as a 'Byzantine mosaic probably from Volubilis'.
- 2 The price Edict of Diocletian (c.301 CE) lists the different wages paid to mosaicists and related professions.
- 3 For complete images showing the red and black borders and other comparable wrestling mosaics see Ben Abed, A. 2006b Stories in Stone: Conserving Mosaics of Roman Africa, *GCI Scientific Program Report Ser.*, Los Angeles: Getty Publications.
- 4 The *cirrus* or top knot is perhaps a mark of Roman boy athletes or possibly an indication of status or rank within a particular sport. Skull caps were often made of leather and fastened under the chin.
- 5 As with all unprovenanced material the issue of authenticity must be considered. In this case it seems unlikely that 'The Wrestlers' mosaic is not genuine, given the quality of the craftsmanship, the use of a distinctive (and therefore easily identifiable) technique, the specific nature of the subject matter and the prevalence of genuine North African mosaics on the antiquities market.