MAY 2016

NOVA

THE JOURNAL OF THE FRIENDS OF ANTIQUITY

ROMAN PUBLIC TOILETS AT OSTIA

PLAGUE, FILTH AND GARBAGE IN THE ANCIENT WORLD
ANCIENT HISTORY DAY 2016

ALUMNI FRIENDS OF ANTIQUITY
THE UNIVERSITY OF QUEENSLAND

In this Issue[1]

Editorial 3
Ann Scott

News from the Discipline 3
Alastair Blanshard

Overseas study tours 4
Caitlin Raymond
Dr Amelia R. Brown
Dustin McKenzie

Ancient History Day 2016: 'Plague, Filth and Garbage in the Ancient World' 9

Plagues and Diseases in the Ancient Near East 9
Trevor Bryce

Thucydides and the Plague at Athens, 430 BCE 11
Bob Milns

Pollution and Uncleanliness in Ancient Greece 12
Alastair Blanshard

Concepts of Disease and Public Health in Ancient Greece and Rome 14
Brad McCall

Victorian medicine in London - the Great Stink debunking Miasma 17
Ann Scott

When the Black Death came to Brisbane 18
Pamela Rushby

The Antiquities Museum event for donors and supporters 20
John Ratcliffe

Dennis Pryor: a versatile Classicist 21
Robert Braun

In Honour of the Bard: April 23rd 22
Bob Milns

The Abduction of Persephone (Part I) 22
Bob Milns

What's in a Word? 23
Bob Milns

Membership of FoA and Alumni Friends 23

Friends of Antiquity Executive Committee 23

2016 Friends of Antiquity Program 24

Contributors

- **Professor Alastair Blanshard** is the Inaugural Paul Eliadis Professor of Classics and Ancient History.
- **The Rev Robert Braun** is a member of the Friends of Antiquity, and regular contributor to *Nova.*
- **Dr Amelia Brown** is Senior Lecturer in Greek History & Language in Classics & Ancient History
- **Professor Trevor Bryce** is an Honorary Professor in the School of Historical and Philosophical Inquiry.
- **Dr Brad McCall** is an Adjunct Professor in the School of Public Health, University of Queensland.
- **Dustin McKenzie,** student, University of Queensland, was the RD Milns Antiquities Museum Summer Scholar 2013-2014.
- **Emeritus Professor Bob Milns**, a founder member of the Friends of Antiquity, was Professor of Classics & Ancient History, University of Queensland, from 1970-2003.
- **Dr John Ratcliffe** received his doctorate from UQ in 2015, on 'Cornelius Celsus and and surgery in the first century'.
- **Caitlin Raymond** is a student at the University of Queensland.
- **Pam Rushby** is a Brisbane writer, and a member of the Friends of Antiquity Executive.
- **Dr Ann Scott** is an Adjunct Professor in the School of Historical and Philosophical Inquiry. She has been editor of *Nova* since July 2009.

---

1 Since 2011 electronic versions of previous years' issues of Nova have been put on the Friends of Antiquity website at: http://www.friendsofantiquity.org.au/index.php?id=2.

Editorial

Ann Scott

This issue of *Nova* contains a selection of papers from the Friends of Antiquity program so far this year. Not all can be reproduced - especially those consisting of readings, or those that are primarily visual. The year began on Sunday 7 February with the Adrian Heyworth-Smith Memorial Lecture, 'Pliny the Younger: the original Sir Humphrey' readings presented by Emeritus Professor Bob Milns and FoA President Denis Brosnan. Both Adrian's widow Jenny and their daughter Robyn were present. On 6th March Dr Andrew Sneddon gave a fascinating talk on his archaeological research in Cyprus. On 3 April Associate Professor Tom Hillard talked to us about 'Augustus and Time' (his talk will be in the July *Nova*).

We also had presentations by students who had travelled on study tours over the break, either to Italy with Dr Janette McWilliam, or Greece with Dr Amelia Brown. The Friends of Antiquity provided some financial assistance to the students to help cover their costs. The Executive takes decisions on behalf of members about how the funds we raise will be used. We are sure you will agree that helping students to be able to afford such study tours is money well spent. The staff involved put a great deal of work into preparing these tours, and it is clear that they offered their students a remarkable experience. The students' presentations are included in this *Nova.*

Dr John Ratcliffe writes about donations, in particular focussing on the celebration for donors and supporters of the RD Milns Antiquities Museum, many of whom are members of the Friends of Antiquity, at which he gave a talk on the extraordinary gift by the late Owen Powell's family of a set of rare Roman surgical instruments.

The other main focus of this *Nova,* is on the talks given at Ancient History Day 2016 'Plague, Filth and Garbage in the Ancient World'. Our thanks to all the speakers and helpers who made the day a great success.

News from the Discipline[2]

Alastair Blanshard

I am happy to report that almost all courses have either met or exceeded their enrolment targets for this semester. Particularly pleasing is the number of students taking 3rd semester Greek.

This semester Lesley Burnett began her period of leave prior to her eventual retirement from the School. A morning tea was held for Lesley which a number of former staff members as well as members of the FoA attended. Lesley has given many years of service to the discipline and she will be much missed.

On the 16-18 March the discipline, in conjunction with Princeton University and the UQ Art Museum, held a three day workshop on 'Classics and Contemporary Art'. Invited speakers included Polina Kosmadaki (curator for paintings and contemporary art at the Benaki Museum), Professor Brooke Holmes (Princeton), Professor Richard Fletcher (Ohio), Professor Christan Blood (Yonsei University, Korea), Dr Jane Griffiths (Monash), and Asad Razza (Artist). An evening public roundtable held at the UQ Art Museum and a day lecture at GOMA in association with the workshop proved very popular.

Professor Nancy Worman, of Columbia University, has agreed to be the Milns visiting lecturer for 2016 and she will be with us for the final couple of weeks in July.

It has been agreed to invite Professor Rhiannon Ash (Oxford) to be the 2017 Milns lecturer. It is intended that the 2017 lecturer will be the keynote speaker at a conference on Roman imperial power and politics: 'The Once and Future Kings: Roman Emperors, Empresses, and European Political Culture from Antiquity to the Present', being organised by Caillan Davenport.

[2] Presented to the Friends of Antiquity Executive Committee on 3 April.

OVERSEAS STUDY TOURS

Ancient World Study Tour of Greece

Caitlin Raymond

My name is Caitlin Raymond and I am currently a second year student at the University of Queensland. I am studying a Bachelor of Arts with an extended major in Ancient History, and a Bachelor of Science with an extended major in Archaeological Science.

Ever since I first learned about - and fell in love with - Ancient Greece, aged 8, I feel like my life has been one big journey culminating with ANCH2050.[3] My very own Odyssey, if you will; The Caitiad. Full of gruelling tasks and villainous foes; here I will recount a very, very short version of this epic.

When I first learned that ANCH2050 was being offered in the summer semester of 2016 I had just moved out of home. I knew I wouldn't be able to afford to make my dream of 13 years a reality on my own, so I applied for a loan from the University, the eligibility conditions of which required me to have passed a year's worth of units. You would think that this would be the easy part. But alas, no. Naturally semester 2 was the semester I'd chosen to sit the beastly STAT1201 course, infamous for its high fail rate. I was as ill-equipped for the unit as Jason was on his quest for the Golden Fleece. Unsurprisingly I failed it, but instead of wallowing in re-runs of 'My Life in Ruins' and 'My Big Fat Greek Wedding', I took inspiration from Jason and found myself a witch princess - in the form of a grizzled PhD student completing a thesis on neuroscience. I seduced him with two weeks worth of my grocery shopping allowance and whatever remained of my meagre savings in order to get a week of intensive statistics tutoring, just in time for the supplementary exam.

The gamble paid off and I received news of my pass on Christmas Eve - it felt like the most expensive Christmas present I'd ever bought myself. I am forever grateful to my statistics tutor. Confirmation of my place on the tour arrived on New Year's Eve. My tears were inevitable upon seeing the generosity of the Friends of Antiquity when I received a grant from them.

Not long after this, I was packed and at the airport. Nervousness, curiosity and excitement pooled in my stomach as I gazed around my fellow travel companions, these utter strangers that would soon become my family for three weeks and beyond. Athens greeted us all with a balmy 5°C when we landed after the 25+ solid hours of commute. I was transfixed by the views out of the bus window as we left the airport, watching the landscape transform from the ashy grey-brown of unpopulated mountains and plains into warm whites and oranges of the city of Athens. As far as the eye could see, the land was patchwork-quilted under the vast architecture of modern Greece. And so, a volume of Pausanias in each hand, we were bright-eyed and ready for our road trip and the best adventure of our lives.

How do I even begin to describe what came next? The legacy of Ancient Greece infiltrates all corners of her cities. For the first few days I was utterly convinced that there was no road in Athens from which you could not see the Parthenon. Of course my rude awakening came shortly after Bonnie and I made the naive decision to walk home from the National Archaeological Museum, only to find ourselves hopelessly lost in the one place in Athens we were told to avoid - Syntagma Square - the so-called 'dodgy part'. From Athens we saw

[3] Ancient World Study of Greece (see Dr Amelia Brown's article on p.6.

Eleusis, Corinth, Messene, Sparta, Vergina, Thermopylae, Kalamata and so much more! We covered a grand total of 24 places in 21 days, and it would have been more if not for the stir caused by the farmers' strikes that coincided with our travels.

Each student on the trip was required to have prepared two speeches, on two features of Ancient Greece, be it a place, monument, battle, or sculpture. At each relevant location we had the honour of presenting our speeches. I spoke on the Oracle of Delphi in Delphi and the Olympic Games in Olympia. To me, history has always been a vivid world in my mind, but nothing brings history to life to such an extent as physical presence. To be so immersed in the world of the Ancients brought goosebumps to my skin every day that I was there and every day that I've thought of it since.

When asked about my favourite moments or places of the trip I have one of two reactions: one - to 'fish mouth', because I simply don't know where to start, or two - to call forth 'verbal vomit' … because I still don't know where to start. Fortunately, I've had time to consider this question, unfortunately, I still cannot choose. But I have tried to narrow the list down to these:

- Climbing the Acrocorinth and being rewarded with the most glorious views over land and sea. It was no wonder this was the chosen home for Aphrodite, goddess of Love and Beauty. Furthermore, we got the chance to explore the Upper Pyrene Fountain, a site that had been left open to her (one can only assume) few visitors' adventuring pleasure.

Acrocorinth

- Standing on the tallest point of Mycenae; a palace my dad described to me over and over as I grew up. A place that demanded your belief in the gods and monsters of the ancient world.

- Bus rides through the mountains (such as from Sparta to Messene or on our way to Kalamata).

- The lunch we 'shared' with the University of Western Australia's Architecture students when we caught up with them in Nemea, and the ensuing drunken joy that lifted the bus afterwards.

- Seeing the boars-tusk helmet that Odysseus himself is described as wearing during the Iliad.

- Indulging our inner Indiana Jones and jumping the fence to climb part-way through the secret tunnel under the Temple of Apollo at Delphi.

Temple of Poseidon at Cape Sounion

- Getting stranded at Sounion when our bus broke down on the last day of our road trip and we sat on the rocks with hot chocolates, watching one of the most beautiful sunsets of my life. The sight of Sounion was so beautiful that I still hear orchestral music when I think of it (namely the orchestra at the end of 'How Big, How Blue, How Beautiful' by Florence + The Machine).

- Last but not least was the view of the Parthenon (Oh, be still my beating heart!) at

dinner on our final night in Athens after we'd finished our exam. So magnificent, so commanding, so immutable over her ever-growing city.

This trip to Greece has irrevocably changed my life. It sounds so flippant, but it's true. In Greece I felt such an affinity for the land and culture that I know I will never be able to turn away from it. I felt my truest self in Greece among the ruins. Never in my life have I felt such affirmation that everything I'd done to that point had been oh so worth it.

I want to be an Archaeologist. I want to be an historian of Ancient Greece. These are my aspirations. Before experiencing Greece, these were merely wants, now they are needs. I need Greece like oxygen. The trip was an intoxicating, tantalising taster of the rest of my life and a heady reminder of the lives of thousands upon thousands of people that lived and died there over 2,000 years ago.

I want to thank all of the members of Friends of Antiquity from the bottom of my heart for helping me achieve my dream and for being a part of something that is now so integral to my identity. I'd also like to thank Dr Amelia Brown, our trip leader, and Annabel Florence, Dr Brown's right hand woman, for this incredible learning experience and their unwavering support.

Greece is my passion beyond all other things in my life. It took 13 long years, six months of which were possibly the hardest of my life to date, but I made it and for that, I can never thank the University of Queensland and the Friends of Antiquity enough.

Dr Amelia R. Brown

Over summer semester, I led the 4th Ancient World Study Tour of Greece (ANCH2050) for 15 undergraduate students, mainly from Ancient History (but also Museum Studies, Architecture and Communications). Classics PhD student Annabel Florence provided welcome assistance as tutor for the course as we traveled around Greek sites and museums central to the study of ancient history between January 22 and February 12 (students prepared presentations on 30 monuments in advance).

We started in Athens, of course, with visits to the Theatre of Dionysos, Acropolis and New Acropolis Museum, as well as the Classical and Roman Agoras, Kerameikos, Olympieion and National Museum. A highlight was a tour of the Royal Stoa and current Painted Stoa excavations by Dr John McK Camp, director of excavations in the Athenian Agora for the American School of Classical Studies at Athens. Some students attended optional evening lectures: Dr Adamantia Vasilogamvrou of the Greek Archaeological Service spoke at the British School at Athens on her excavations in the newly uncovered Bronze-Age Mycenaean Palace at Sparta (Agios Vasileios), and, at the Australian Archaeological Institute at Athens, British Museum curator Dr Alexandra Villing revealed new work sponsored by the British Museum on the Greek port of Naukratis in the Nile Delta of Egypt, previewing Sunken Cities: Egypt's Lost Worlds exhibit opening at the Museum in May.

We then moved into the Peloponnesus, in the footsteps of our 2nd-century guidebook, Pausanias' Guide to Greece. At Corinth we visited the Agora, the summit of Acrocorinth and the Sanctuary of Poseidon at Isthmia. At Corinth's western port of Lechaion, we had a tour of the largest Early Christian basilica church in Greece and the newly surveyed harbor from Dr Guy Sanders, director of excavations at Corinth for the American School of Classical Studies at Athens. We then visited the Sanctuary of Asclepius (and Theatre) at Epidaurus, along with the ancient cities of Argos and Mycenae, and the Sanctuary of Zeus at Nemea, the latter with an Architecture summer course of students from UWA. In Sparta we climbed to the sanctuary of Helen and Menelaus, toured the Theatre and (low) Acropolis, and crossed over Mt Taygetus, seeing our first snow. In Messenia, we stayed at the harbour of Kalamata (not just an olive!), and toured the new Messenian Museum, and the extensive civic ruins of Hellenistic and Roman Messene below Mt Ithome.

We spent a whole day at the site of the ancient Olympic games, the sanctuary of Zeus with its

extensive Museum at Olympia. In the original Olympic stadium, the winners of the stadion race were Yannan Cai (for the men) and Brianna Sands/Amanda Chambers (tie) for the women. It was then time to leave the Peloponnesus and Pausanias' track behind, crossing over the gulf of Corinth on the new Rio bridge, and dodging the tractors of protesting farmers at Messolonghi. Over three days in Aetolia, Acarnania and Epirus, we visited Augustus' Nikopolis and Victory Monument at the site of the battle of Actium, the spectacular Classical ruins of Cassope (depopulated to settle Nikopolis), and the oracle of Zeus at wintry Dodona. After crossing the snowy Pindus mountains into Macedonia, we spent 2 days in the ancient and modern capital of Thessalonica, climbing to the Heptapyrgion castle, and touring the ancient Agora, Christian Basilica of St Demetrius, and Palace of Tetrarch Galerius, as well as the Archaeological and Byzantine Museums. Emeritus Ephor of Byzantine Antiquities Dr Charalambos Bakirtzis discussed healing cult in St Demetrius, and the spectacular 4th-century mosaics in the Rotunda of Galerius (Church of St George) were clear of scaffolding for the first time in over 30 years.

Sadly more farmers on tractors were moving to block the Vale of Tempe, so we missed Pella, but we did enter the rebuilt royal Tumulus at Vergina, and gazed upon the golden treasures and painted facades of the tombs which (probably) once housed King Philip II and his family. In Thessaly we went to the Volos Museum and climbed the hill of the last stand of Leonidas and his 300 Spartans at Thermopylae. The end of the tour took us at last to the majestic oracle of Apollo at Delphi, then back to Athens via Chalcis, Eretria, Marathon and finally the temple of Poseidon at Sounion. There was time in Athens for visiting new excavations at the Library of Hadrian, and Plaka shopping, as well as the final exam, before we headed home to Brisbane with much heavier bags and bid 'Yeia sas' to our dear bus driver Michalis, and to Greece.

My warmest thanks for supporting this tour go to the staff of the School of Historical and Philosophical Inquiry, and to my tutor Annabel Florence, as well as the Friends of Antiquity and the Australian Archaeological Institute at Athens.

‘

Alberese Archaeological Field School

Dustin McKenzie

This January gone, a group of UQ students, studying a mixture of Classics, History, Archaeology, and Art History, were fortunate enough to spend five weeks in Italy, four of which were spent in Grosseto, Tuscany. Our Field School began in Rome. We spent a week staying at the British School at Rome, which year after year kindly boards a group of jet-lagged Australians. During this week, we were able to see much of the city, both old and new, including site visits to the Colosseum, the Forum and Palatine hill, the Capitoline Museum, and the Vatican (from the Roman Necropolis to the Dome). While it is well nigh-impossible to see everything Rome has to offer in one trip, that didn’t stop us from trying, and many of us found ourselves back in the city on one of our weekends off.

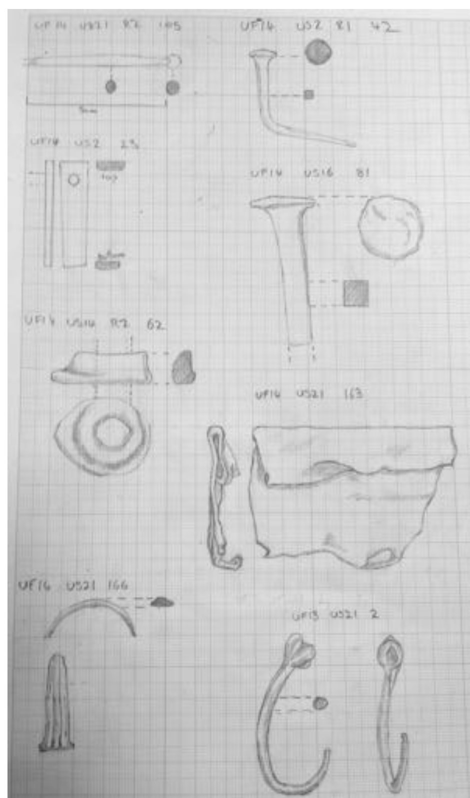
Group shot. Far right are Drs Matteo Colombini and Sandro Sebastiani

After Rome, we came to the real meat of our time abroad: Four weeks at the University of Siena Grosseto Campus, undertaking archaeological lab work for the Alberese Archaeological Project.

The UQ Field School has been working in co-operation with the Project for a few years now, and we were fortunate enough to be handling objects first-hand that had been excavated from the temple area of Diana Umbronensis and the

river port at Rusellae in the prior dig season. Each week, we came to terms with the cataloguing and documenting of new materials, led by a team of experts in their fields: glassware, ceramic, bronze, and finally, bone. While some of us, particularly those involved with the Archaeology faculty or the RD Milns Antiquities Museum, had prior experience in handling artefacts and fragments, the wealth of material that was available to us in Grosseto was nothing like any of us had experienced. Indeed, I have spent the last four years involved with the Museum and Archaeology faculty, and never before have I been able to handle such a variety of material in so great detail.

Our first week at Grosseto is a perfect example of this, to my mind, as we were introduced to the world of Roman glass. As can be expected from such naturally fragile material, we do not have many examples of Roman glass in Australia to enable us to gain hands-on access, so the opportunity to manipulate and physically understand these materials was quite special. Mr Thomas Decker and Dr Chloe Duckworth, the glass experts on the project, were incredibly approachable and, like all experts that guided us through our work, powerfully aware of their topics.

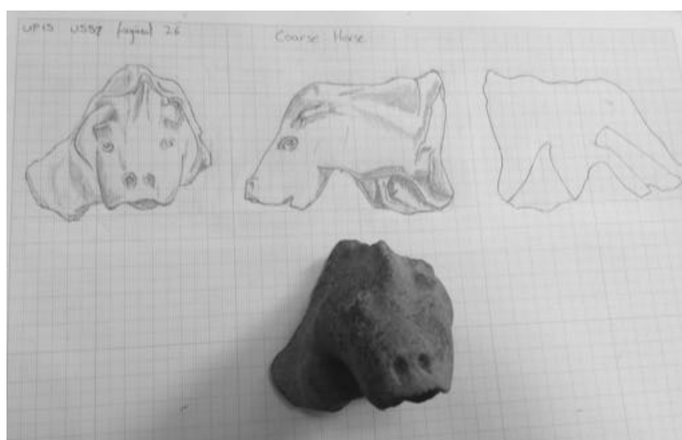


Sketching finds on a site

The second week re-introduced us to Dr Massimo Brando, who had guided us first through the Colosseum and the Palatine hill in our week in Rome, and now through pottery. While I thought I was familiar with Roman ceramics from my time at UQ, it became quickly apparent that I was standing at the edge of a much deeper pool than I had ever anticipated. Dr Brando's knowledge of Roman ceramics is fiercely comprehensive, and it was a great experience to be taught by him.

Our third week revolved around small finds with Ms Valentina Pica, and it was an intriguing four days. Working in a similar fashion to the previous weeks, it was a refreshing change to be able to handle bronze and lead objects, materials that, like glass, I have been unable to work with before at this level, but make up a great proportion of the archaeological record.

The final week at the Field School was spent with Ms Victoria Aniceti, being guided through the relatively unknown world of Zooarchaeology and animal bone analysis. This last week was a change of pace from the previous ones, containing no archaeological drawing; instead, we were given an extensive crash course in bone identification, with particular regard to the presence of human activity.



A curious ceramic horse (or possibly hippo?) head figurine- the experts weren't entirely sure what it was

The site visits we were taken on by the Alberese Archaeological Project team were also incredibly interesting, as we were able to see lots of locations that we may have never otherwise. Sites like Vulci and Cosa offered great insight into the Etruscan and Roman periods, and like Rome itself, expanded all of

our understanding of how an old country like Italy evolves over time. Additionally, the lectures delivered to us on various topics by the staff of the University of Siena were consistently engaging, with one in particular, delivered by Dr Carlo Citter, being immediately and unexpectedly relevant for my MPhil. Coupled with the opportunity to explore Tuscany on our weekends off, the Alberese Archaeological Field School was not only an education in archaeological lab work, but in the history of Italy, from the Etruscans to the Renaissance and into the modern day.

Two final thoughts come to my mind, thinking back on our time away. Firstly, it wasn't until seeing the ash layers at Etrusco-Roman sites that indicated where the towns had been razed during the Marian-Sullan and Social Wars that the link between literary sources and archaeology became tangible to me, and it is a moment that I don't think I'll ever forget.

Secondly, enough thanks cannot be given to Dr Janette McWilliams and everyone involved with the Alberese Archaeological Project, for providing a genuinely unique experience for all of us that were lucky enough to attend.

The sooner I am able to get myself back to Italy, and again come face to face with the ancient world I have fallen for, the better.

Hard at work

Ancient History Day 2016: 'Plague, Filth and Garbage in the Ancient World'

Plagues and Diseases in the Ancient Near East

Trevor Bryce[4]

Map of the Near East

In 1322, the Hittite king Suppiluliuma died, a victim of the plague brought to his homeland by the thousands of prisoners captured in a Hittite military expedition against Egypt's subject states in Syria-Palestine. The plague ravaged his kingdom's population for many years, as illustrated by the 'Plague Prayers' of his son and second successor Mursili:

> What is this, o gods, that you have done? A plague you have let into the land. The Land of Hatti is dying; so no-one prepares sacrificial loaves and libations for you. The ploughmen who used to work the god's fields god are dead ... O gods, whatever sin you behold, either let a prophet rise and declare it, or let the priests learn about it, or let ordinary people see it in a dream! O gods, take pity again on the Land of Hatti! (after A. Goetze)

Mursili's prayers do not indicate the nature of the plague. But it may have been comparable to the affliction which in biblical tradition befell the Philistines in a war with the Israelites. Samuel 1:5-6 relates the Philistines' seizure of the Ark of the Covenant and the vengeance the Israelite god took by afflicting the offenders' cities with an epidemic of tumours. Finally, the Philistines returned the Ark, sending with it a 'guilt-offering' of five gold models of tumours and five of gold rats. This 'offering' leaves little

[4] Professor Bryce's most recent book, Bryce T, and Birkett-Rees J, *Atlas of the Ancient Near East: from prehistoric times to the Roman Imperial period*, Routledge, March 2016, was launched on Ancient History Day.

doubt that the affliction was a form of bubonic plague.

Curing Diseases I: Avoiding the polluter or pollutant

While many diseases and epidemics originated from divine wrath, there was also an appreciation in ancient Near Eastern societies of the close connection between certain types of illness and the use of dirty eating utensils and food preparation areas. Thus, instructions for Hittite temple officials insist on the thorough cleanliness both of those who prepared the gods' food and of the areas where it was prepared:

> Those who prepare the daily loaves must be clean. They must be bathed and groomed, and their hair and nails removed. They must be clothed in clean garments. The bakery where the loaves are baked must be swept and scrubbed. Further, no pig or dog is permitted at the door of the place where the loaves are broken (after A. Goetze).

Anyone guilty of serving the gods from an unclean vessel was made to drink urine and eat excrement as a punishment. More severe were the penalties for those who prepared the gods' food while in an unclean state, as a result of having had sex the previous night. An official who spent the whole night with his wife and thus came before the god in an unclean state forfeited his life.

Moral as well as physical pollution was regarded as a severe risk to the health and wellbeing of both an individual and a whole society. A number of clauses in the Hittite Laws deal with sexual offences, including bestiality. The imposition of the death penalty – otherwise extremely rare in The Laws – for intercourse with pigs, dogs, and sheep, reflects Hittite society's repugnance at this form of sexual activity. A man who commits murder may suffer no more than a fine. A man who has intercourse with a sheep is executed. The difference in the severity of the penalties can perhaps be explained thus: murder may have but one victim, an act of illegal sex may put at risk an entire community; it not only defiles the person who so indulges but is likely to infect all those with whom he comes in contact.

Curing Diseases II: The use of a substitute

The concept of substitution is embodied in many ancient Near Eastern rituals. Sir James Frazer in *The Golden Bough* traced this concept back to primitive humankind. The 'savage', he said, recognized that he could relieve himself of a physical burden by getting someone else to carry his load for him; by extension he thought he could also transfer to someone or something else other kinds of burdens and afflictions – physical ailments, grief and pain. In its sophisticated forms, substitution often possessed a distinct moral and ethical element, involving the belief that not only one's physical afflictions but also the burden of one's sin or guilt could be transferred to another being.

Babylonian and Hittite texts indicate that a king could be held responsible not only for offences which he himself had committed, but also for offences committed by his subjects. Sometimes omens or dreams revealed that the king might have to die to atone for these offences. Hence the appointment for a short period, when the real king's life was in imminent danger, of a 'substitute king', perhaps a prisoner-of-war who would take on all the trappings and liabilities of kingship, including the surrender of his life if the gods so ordered.

On a broader level, there was a substitution ritual designed to protect a king threatened by an outbreak of plague while returning home from a military campaign. The ritual prescribed that a prisoner from the enemy land be seized and brought before the king. The king removed his clothes and they were put on the prisoner:

> If any god of the enemy land has caused this plague, thus I have given him a man suitably attired as a substitute. May you be fully satisfied with this man thus attired, and henceforth be well disposed to the king, the lords, the army, and the land of Hatti, and may this prisoner take the plague upon himself and carry it back to the enemy land! (after A Goetze)

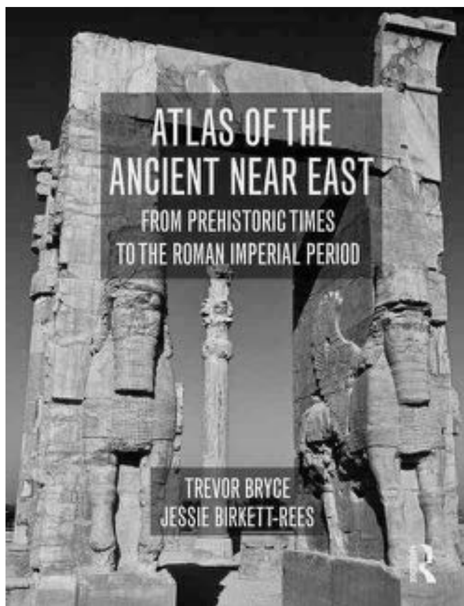
Curing diseases III: The holistic approach

Babylonian and Hittite medicine, often involved a comprehensive, 'holistic' approach to the treatment of patients. The more straightforward ailments, like reparable physical injuries caused

by assault, probably required no more than basic medical treatment and the application of the appropriate medicinal products. But complex illnesses were often attributed to malevolent forces, whose influence could only be fully negated by other means. In these cases, practical medical procedures were complemented or replaced by rituals, which included the application of spells and incantations, and sometimes also by direct appeals to the gods.

The dividing line between doctor and priest was often a very fine one. Indeed, doctor and priest frequently collaborated in the treatment of a patient, sometimes travelling together to a foreign land for this purpose. Babylonian physicians and incantation priests were despatched to the Hittite court to apply their healing skills, and the pharaoh Ramesses II sent both a physician and an incantation-priest to the Hittite land to assist (probably unsucessfully) an ageing Hittite princess to bear children.

Throughout the ancient world, Egyptian and Babylonian doctors were highly esteemed. Thus Homer tells us that 'In medical knowledge, Egyptians are supreme among men. They are the true sons of Paeeon (physician of the Olympian Gods) the Healer.' (Odyssey 4: 231-2).



Thucydides and the Plague at Athens, 430 BCE

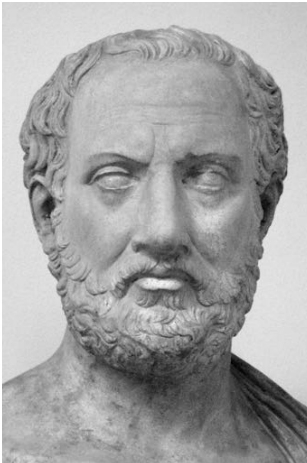
Bob Milns

It is interesting that European literature begins with an account of a plague. At the beginning of the Iliad of Homer, the god Apollo sends a plague upon the Greek army at Troy to punish them for Agamemnon's abusive treatment of his priest Chryses. Apollo is called by his epithet Smintheus, the Mouse God. Mice and rats are often associated with the spread of disease.

Thucydides was an Athenian historian who lived from about 460 to 400 BCE. His history is a contemporary account of the war between Athens and allies and Sparta and allies, known as the Peloponnesian War (431-404 BCE). Thucydides' work is incomplete, with the narrative breaking off in the middle of Book 8 in the year 411 BCE. He is generally praised for his apparently unbiased narrative, which avoids all superfluous material.

The Athenian plague is described in Book 2, chapters 47 to 54 and follows immediately his version of the Funeral Speech of Pericles, delivered at the ceremony honouring those Athenians who had died in the first year of the war. The speech is a praise of the institutions of Athens in defence of which these men died. The great contrast between the glory of Athens and the devastation of the plague and its effects is most startling and almost certainly deliberate. Thucydides, who himself caught the plague, has been generally praised in later times because of his clinical and objective description which became the model for later writers of accounts of plague. Such were the Roman T. Lucretius Carus (c. 95-55 BCE) who, in his great poem *De Rerum Natura* (*On the Nature of Things*) Book 6, describes the Athenian plague following Thucydides closely. Thucydides is also the model for Virgil (70-19 BCE) in Book 3 of his Georgics, when he describes the causes of an imaginary plague in livestock in Noricum (most of modern Austria). The poet Ovid, in his *Metamorphoses* Book 7, also draws on the model of Thucydides in his mythical account of plague on Aegina at the time of the legendary Aeacus.

What was the plague at Athens as described by Thucydides?



Thucydides
(Wikicommons media)

There have been many suggestions made by scholars and medical specialists on the basis of the symptoms described by Thucydides. Among the 'favourites' are: smallpox; bubonic plague; measles; influenza; scarlet fever; typhus and typhoid fever; haemorrhagic plague; Rift Valley fever; and ergotism, with typhus possibly being the most supported and likely. Others argue that the plague of Athens is now extinct or that it has changed its clinical manifestations over 2400 years and cannot now be recognised.

As to the number of people who died and the percentage of the Athenian population that this formed, there have been many estimates, with some going as high as a third of the population dying. But such figures can only be regarded at best as "guesstimates".

Finally, here are a few words used by the ancient writers to mean 'plague'. Thucydides himself refers to the plague simply as nosos, the disease, but does use the word loimos, plague, in quoting the words of an oracle. In Latin the usual words for plague are pestis and pestilentia. In his account of the Athenian plague in Book 6, however, Lucretius uses pestilitas on several occasions. He is the only known user of this word and seems to have made it up especially for this account.

Pollution and Uncleanliness in Ancient Greece

Alastair Blanshard

> A fried egg on a plate is a sign of a good breakfast. A fried egg on the floor is a sign of poor housekeeping. (Anne Carson: 'On Dirt')

Notions of clean and unclean vary tremendously. They vary from culture to culture, and even within cultures something that may be regarded as clean at one point in time may be regarded as filthy at another. Consider, for example, the religious law from 4th-century Cyrene that decreed that a man who made love to his wife at night was considered clean, but that if he slept with her during the day, he needed to undergo a purificatory wash.

There is perhaps no better example of the ways in which cultures can vary in their attitudes to filth than to compare ancient and modern attitudes to excrement. For us, there are few more revolting substances. Our sewage and ablution systems are designed to remove it from our sight as quickly as possible. Dog owners are compelled to pick up after their pets through harsh financial penalties, not to mention the stern looks of passers-by. We really don't like faeces.

Yet this attitude towards dung is very modern, a by-product of our highly urbanized society. Pre-modern cultures such as the Greeks had a very different attitude. In many parts of the world, dried dung is an important fuel source.

Even more importantly, given the bareness of much Greek land, it was a precious fertilizer. Excrement was not something that you wasted. Public slaves in Athens were commissioned to collect dung from the streets so that it could fertilize state-owned property. Lease documents for agricultural land routinely had specific clauses that required the tenant to manure the fields. These clauses were often very detailed, specifying the amount and regularity of the application of manure. In Hellenistic marriage contracts, we see dung listed amongst the assets that a bride might bring as part of her dowry. There was even a village in Attica named Kopros ('dungtown'). The village is mentioned twice in Aristophanes

and, for a long time, scholars refused to believe that a village with such a name could exist. However, in the middle of the 20th century a number of inscriptions were discovered that proved its existence.

Figure 1: Girl carrying dung to be used as fertilizer and fuel 1942: Life Magazine (WikiCommons)

While the Greeks were more relaxed about excrement than we are, other bodily fluids did cause them concern. The correct disposal of urine seems to have been a concern from the earliest periods of Greek history. In Hesiod's Works and Days, there is a lot of discussion about the correct way to urinate. He advises that men should not urinate facing the sun lest it be seen as an insult to the gods. Instead, they should wait until the sun has set or crouch down to urinate or urinate against a 'sturdy wall'. Certainly - and one would have thought that Hesiod really didn't need to provide this advice – you should never urinate into a sacred spring.

Fluids relating to sex and childbirth were equally problematic. Women were considered highly unclean after giving birth, so much so, that they received no visits from relatives, often including their husband, until three days had passed. Pregnant women and midwives were forbidden in a number of Greek cities from holding the office of priestess. Numerous laws declared it illegal to give birth in a sanctuary. The most famous of these interdictions was the law that forbade anyone to give birth on the sacred island of Delos, the birthplace of Apollo and Artemis.

Miasma

However, far more troubling to the Greek mind than any of these fluids was the invisible, intangible pollution that attached to you when you violated one of the sacred laws. Called 'miasma', this pollution attached to a person when they committed crimes such as murder, theft of sacred property, breaking of solemn oaths, incest, the mistreatment of suppliants, or the sexual violation of women in temples or sanctuaries.

Miasma was highly contagious. It could be transferred by touch. Even breathing the same air as the polluted individual was dangerous. It seems to share properties very similar to a noxious gas, and in the post-classical world the term comes to refer to any poisonous vapour. It is for this reason that the lawcourts in Athens that handled murder cases were built open to the air lest the presence of the murderer infect the jurors. Miasma could attach not only to individuals, but also inanimate objects. For this reason, if any object accidentally killed someone (e.g. a roof-tile falling down onto a by-stander below), the object was ritually tried for murder and then suffered the same penalty as a murderer, namely exile from the community.

The consequences of infection by miasma were serious. Miasma brought disease and plague onto the individual and everyone around him. The opening of Oedipus Rex shows Thebes beset by plague because it harbored Oedipus, the unsuspecting perpetrator of murder and incest. The elements turned against the infected individual. People infected with miasma were thought to be unable to undertake sea-voyages because their presence on a boat would cause it to sink. So widespread was this belief that we even have a defendant in a murder trial citing his successful sea-voyage to Athens to face trial as proof of his innocence. Other symptoms included sterility, insomnia, wasting away, and an inability to perform sacrifices.

Curing yourself of miasma was a complicated business. One first needed to supplicate a recognized sacred authority (e.g. god, king, priest, religious magistrate) and ask them to purify you. They were under no obligation to do so. Famously, the Pythia at Delphi refused to

purify Heracles when he returned for the umpteenth time to beg for purification for yet another murder.

On hearing of the refusal, Heracles seized the tripod of the Pythia and took it away in order to establish his own oracle, one who would be more agreeable to purifying the hero (figure 2). Apollo naturally objected and the hero and the god entered into an undignified scrap until Zeus intervened and convinced Apollo to agree to purify Heracles.

Figure 2: Heracles stealing the tripod from Apollo, Neck-amphora, 470-450 BC

Once the polluted individual had secured agreement for purification, they underwent a ritual cleaning with water taken from either fast running rivers or springs or even better sea-water.

'The sea washes away all evils from among men,' says Euripides. In addition, there was always a blood sacrifice to atone for the crime. Routinely, this involved the sacrifice of a puppy, but we also have references to the use of eggs and bitter and poisonous plants.

Concepts of Disease and Public Health in Ancient Greece and Rome

Brad McCall

Roman latrines at Ostia
(courtesy Wikicommons)

Ancient Greek and Roman societies understood the importance of collective measures to protect public health. Although they lacked modern scientific knowledge, they did produce many sound public health practices that can be regarded as worthy predecessors of modern public health measures. In these societies, poverty, urbanisation, overcrowding, water supply, waste disposal, infectious disease, high maternal and infant mortality, high birth rates and diverse health care paradigms were important determinants of public health.

This essay reviews the practice of public health in ancient Greek and Roman civilisation by considering concepts of disease and health, health care, the measures taken to provide food and clean water and dispose of waste and the policy and legislative framework to provide and protect the basic essentials of public health.

From the earliest civilisations strong magic-religious theories emerged about health and disease. Disease was attributed to the divine disfavour and interventions were based on restoring the balance between people and gods through incantations and supplications. The Lectisternium, a purificatory rite first practiced in Rome in 399BC is one example. By the fifth century BC the emergence of rational theories of health and disease demonstrated an improved

understanding of the influence of environment on health. In these often diverse theories, health is understood as a balance of factors/ powers which can be disturbed or restored through various dietary or environmental changes. Disease was the result of an imbalance of these factors.

The Hippocratic writings provide early evidence of attempts to explain the cause of disease in terms other than divine intervention. Through observation the Greeks understood the association between obesity and premature death (Aphorisms, II, 44), or the association between pestilence and the 'noisome smells' of a nearby river (Diogenes Laertius, VIII, 69-71).

The response in the latter case was to divert the river away from the town of Selinus to protect the health of the population. The relationship between environment and disease of individuals and populations was well described in the Hippocratic Airs, Waters, Places. Although purely observational, often erroneous and lacking any modern understanding of the pathogenesis of disease, these findings derived from the empiric approach which was characteristic of Greek (Hippocratic) medical practice. This and the 'clinical method' contributed to the popularity of this particular form of health care, (over religious or magic treatments) at least among those who could afford it.

Hygieia
Marble statue from the Temple of Asklepios at Epidaurus.
c.370 BC

The provision of health care took place in a largely unregulated diverse environment. Health practitioners were often itinerant, surviving on their skills, reputation and results. They ranged from practitioners of Hippocratic (or Hellenic) medicine, to folk medicine, magic cures, drug sellers and religious temple cults (Asklepieia). It is not possible to compare or evaluate these various forms of health care in any meaningful way. It is likely that most forms of health care were of limited benefit to their recipients and made limited overall contribution to public health. Interestingly, regardless of the empiric approach, practitioners of Hellenic medicine maintained a strong association with the cults of Asklepios, Hygieia and others.

Governments did not intervene in health care except in unusual circumstances such as the prosecution of severe malpractice or in the appointment of iatroi demosioi (public doctors) who appear to have been contracted to provide services in a particular (Greek) city. In Roman times the Archiatri were appointed as chief doctor to a city or district but in both circumstances it appears that governments sought these doctors not to provide free publicly funded care (a more recent concept) or to regulate other doctors but more to subsidise the presence of a doctor of a certain skillset or reputation to provide services (at a fee) to all who could afford them within the city.

Roman policy was certainly to encourage the presence of Greek doctors, an association that began with the introduction of the Greek doctor Archagathus to Rome in 219BC with the provision of 'citizen rights and a surgery bought with public money'. Later, Julius Caesar extended citizenship to all foreign resident medical practitioners in Rome. In the later empire imperial patronage of Hellenic practitioners took the form of immunity from civic and military duties. Overall, though, health care in ancient Greece or Rome was a privately funded privilege and not seen as the responsibility of government.

Governments did play a role in the response to epidemics although the options were limited to prognostics and management of symptoms rather than prevention or cure. The concept of

contagion was well understood (as evidenced by the high mortality of doctors during the plague of Athens). At an individual level, people responded to epidemics by avoiding contact with the sick, following advice on behaviours to avoid infection (documented by Celsus) and purification (avoiding inhaling polluted air by the use of incense and aromatic herbs).

Examples of government ‘interventions’ during epidemics, include bounties on mice and provision of relief to communities in the form of funds or food, especially during the Principate. Governments retained a lead role as mediators to the gods through public supplication, dedication of temples to Apollo and other forms of public sacrifice.

Throughout these civilisations there was a well understood role for government in the provision of the essentials of food and water supply and waste disposal. Since Mycenean and Minoan times the archeological evidence points to a high degree of sophistication such as separate systems for piped and storm water and flushing toilets. Although Greek civilisation produced some fine examples of engineering, such as the aqueducts of Samos and Pergamon, the peak of engineering for public health occurred during the Roman period. The Roman method was to bring sufficiently high volumes of water to a population to ensure an adequate supply, not just for consumption but also for personal hygiene (the baths) and for waste disposal through constant flushing of streets and a network of public toilets.

In the area of public health policy, legislation and resources, the important role of local government is evident from the earliest times. The Agoranomic law from 4th century BCE Piraeus is an example of city regulations which prohibited individuals from piling earth and other waste on the streets and compelled an offender to remove it.

Later on there are much more developed regulations such as the Astynomic Law (Pergamon) which included penalties for unauthorised interference with the public water supply, forbade the dumping or piling up of earth or the mixing of mortar on the streets of the city. These regulations were supported through an infrastructure of Astynomoi (city wardens), Amphodarchai (street governors) to individual responsibility to maintain areas. The Koprologoi were responsible for the removal of waste from the confines of the city.

The Roman empire saw significant improvements in publicly funded efforts to protect public health. Examples include the roles such as the Curator aquarum publicarum with an attendant staff and resources to provide and maintain the enormous infrastructure that provided water to Rome. A similarly important role was the Curator alvei Tiberis et riparum et cloacarum urbis responsible for the cleanliness of the ‘bed and banks of the Tiber and sewers of the city’. In cities keeping the streets clean and functional was a key component of public health measures. Leadership was with the quattorviri viarum curandarum in Rome and with aediles or duoviri elsewhere. The municipal charters are the key local legislation for public health and are explicit about protecting the public water supplies and preventing the accumulation or unsafe disposal of waste. These statutes are also clear about the importance of individual responsibility for maintaining a clean environment.

Some examples of roles or programs that contributed to public health in a broader sense include the praefectus annonae (responsible for ensuring the grain supply to Rome), the praefectus vigilum (fire and later police), the alimenta (assistance to children of poor citizens) and congiarium (gifts of money to citizens).

It is clear that ancient Greek and Roman societies recognised the importance of public health and made significant organised efforts to prevent disease. The knowledge base to support public health measures was limited but was used to support improved living conditions. It is not possible to evaluate the outcomes of these measures and it is worth remembering that the average life expectancy in these times was up to 30 years.

For all the efforts and infrastructure to provide for the basic amenities of water, food and waste disposal the life of the urban poor in crowded Rome would have had very different outcomes

to those of the wealthy. The contribution of the ancient Greeks and Romans was a well-developed civic approach to public health which included infrastructure for water and sanitation, regulations, and a bureaucracy to plan, fund and administer it. Ancient Greek or Roman efforts to prevent or control disease are worthy predecessors of modern public health.

VICTORIAN MEDICINE IN LONDON - THE GREAT STINK DEBUNKING MIASMA[5]

Ann Scott

Father Thames introducing his offspring to the fair city of London
(*Punch, or The London Charivari,* 2 June 1858)

Great advances in public health and disease control took place in the 19th century, many of them in London. Just before the turn of the century, Edward Jenner (1749-1823), the 'father of immunology' developed a smallpox vaccination which he applied successfully to a boy with the disease in 1796.

John Snow (1813-1858), a leader in anaesthesia and medical hygiene, is best known for tracing the source of a cholera outbreak in Soho in 1854, a discovery which led to fundamental changes in the water and sewerage systems in London and around the world. Snow was sceptical about the still-dominant miasma theory first identified in Ancient Greece. He did not understand the mechanism by which the disease was transmitted, but the cholera outbreak gave him the opportunity to test his theory that cholera could be spread via contaminated water or food. Snow recorded the location of cholera deaths and demonstrated that the majority were clustered around one particular public water pump in Soho. He convinced officials to remove the handle to the pump. He could not prove the theory conclusively because by the time the handle was removed the worst of the epidemic had actually passed.

In 1858, central London was hit by the 'Great Stink'. 1858 was an usually hot summer, the heat making an already fetid Thames smell worse. Evaporation exposed more of the mud, exacerbating the smell of untreated human waste and industrial effluent on the river banks.

Queen Victoria was forced to curtail an outing on the river. The smell from the Thames was so overpowering that the curtains of the House of Commons were soaked in chloride of lime in a vain attempt to protect the sensitivities of MPs. Members were 'seen fleeing from the Chamber, handkerchief to nose, complaining loudly about the 'Stygian Pool that the Thames had become.'

'The silent highwayman : Death rows on the Thames, claiming the lives of victims who have not paid to have the river cleaned up, during the Great Stink'
(Punch, 10 July 1858)

[5] This paper is based on the author's research for Scott A, Eadie M and Lees A *William Richard Gowers: Exploring the Victorian Brain* (OUP 2012). It did not feature on Ancient History Day, but is offered as a link between antiquity and Pam Rushby's paper on the cholera outbreak in Brisbane in the early 20th century.

A bill was rushed through Parliament and became law in 18 days, to finance a massive new sewer scheme for London, and to build the Embankment along the Thames in order to improve the flow of water and of traffic. England finally caught up with the Romans in linking public infrastructure and public health.

Building the Thames Embankment 1865

WHEN THE BLACK DEATH CAME TO BRISBANE

Pamela Rushby[6]

In 1900 a very unwelcome visitor arrived in Brisbane. It was the plague, the Black Death, carried by the fleas on rats, and although its arrival was not unexpected, little seems to have been done to prepare for it. The city was in crisis, as victims and their families and contacts were packed off to isolation 'hospitals', which were, in fact, more like camps. The disease died down after a time, but then it returned, again and again.
The plague reached Australia – Sydney – on 19 January, 1900. It was expected it would come: it had been in Hong Kong in 1894, and had reached Bombay and Japan by 1895.

Australia had tried to prevent the plague arriving. Ships were quarantined offshore for twelve days, and any rats discovered were destroyed. The quarantine campaign wasn't enough. In January 1900 a man in Sydney was found to be suffering from the plague. The ship the disease arrived on was never identified.

Brisbane was just 36 hours sailing time north – and ships arrived in Brisbane from Sydney frequently.

Rat extermination

The Queensland government held a meeting in February 1900. It was decided it would be wise to start a campaign of rat extermination. Dead rats delivered to Council depots would be paid for at the rate of two shillings a dozen.

By June approximately 12,000 rats had been destroyed in Brisbane. But – that didn't stop the plague.

On 27 April, the first case in a human in Brisbane was reported. The victim was James Drevesen. He was a carter, who worked moving goods on the wharves, and he lived at Woolloongabba.

James Drevesen would have been bitten by a flea. The spread of the disease to humans begins with a diseased rat and is spread by the flea, which lives on the rat.

As soon as James Drevesen was diagnosed, swift – and drastic – action followed. He was taken to the Colmslie Plague Hospital, about eight kilometres from the middle of the city. Along with James Drevesen went 22 contacts, family and neighbours, in a closed horse-drawn bus.

[6] Pam Rushby is author of *The Ratcatcher's Daughter*, HarperCollins, 2014.

The Plague Hospital was by no means ready for occupation. When Drevesen and his contacts arrived, the ‘hospital’ was represented only by an old house in a paddock on the Brisbane River, and the frames of other buildings.

Tents were hastily pitched for the patient and his attendants. Contacts were stripped of their clothing, bathed in disinfectant and issued with clean clothing. Then they waited … to see if they would develop the disease.

Back in Woollongabba, three houses were quarantined, fenced off, and the street partially closed.

The bodies of those who died of the plague had to be disposed of quickly. They were wrapped in antiseptic-soaked sheets and placed in a rough coffin, packed with quicklime. They were not allowed to be buried in a normal cemetery. They were taken downriver to an isolated mangrove island, Gibson Island. There is no trace of the burials today.

The public was not happy about the plague situation. It was felt the government was not doing enough, and the press was quick to say so. Cartoons criticising the government were published in *The Worker* on 14 April and 12 May.

Treatment and preventive measures

Early in the epidemic, the public were offered protective inoculation with Haffkine's serum. This gave a very mild dose of the plague, which was then believed to offer protection. About 2000 people took advantage of this offer initially, but after that numbers dwindled considerably.

Once a victim had the disease, there was little treatment available, apart from lowering the temperature by cold-water sponging. Small doses of cocaine, by mouth, eased vomiting. Morphia was given for insomnia and delirium. Heart failure was a danger, so severe cases were given injections of strychnine. If heart failure nevertheless occurred, brandy or champagne was believed to help. Incisions were sometime made in buboes to drain the pus.

A new serum, Yersin's serum, from the Pasteur Institute in Paris arrived in Australia in July. This was administered to people who already had the disease and was apparently very effective.

Entrepreneurs and rumours

But some entrepreneurs took advantage of the situation and preyed on the frightened public. Businesses produced patent medicines and advertised them in newspapers: such as Dr Morse's Indian Root Pills; Metzlers Protective Anklets; Alok Tonic Bitters.

And this brings me to a point for which I can find little solid evidence, but many rumours. Word began to get around that the well-to-do were using their influence to persuade doctors to diagnose other conditions than ‘plague’ – and funeral directors to arrange burial in regular cemeteries. This probably did not occur for an extended period, but it may well have happened, at least in the early stages of the epidemic.

In reality, burials were soon taking place in normal cemeteries. In all, fourteen victims of the plague were buried on Gibson Island, but after April 1901 there were no further burials there.

The plague epidemic of 1900 drew to a close towards the end of the year. There had been 136 cases of the plague in Queensland, and 57 people had died. It seemed the epidemic was over. But it wasn't. After 1900, the plague returned for the next nine years, mainly in the months of April and May.

After 1909, there were no cases of the plague for twelve years. Perhaps surveillance became less stringent, because in 1921 the plague returned, with 115 cases and 63 deaths. The last case of the plague in a human occurred in Queensland in 1922. The plague has not returned since that time.

However, according to the World Health Organisation, plague is still killing people around the world. In 2013 there were 750 cases worldwide, with 128 deaths.

An epidemic of the plague in San Francisco in the early 1900s spread into wild chipmunks in areas of California. It has continued to spread in the USA.

In 2015, Yosemite National Park was closed temporarily. Squirrels in the park had plague. Between April and September 2015 twelve cases of plague were reported in the USA, with four deaths.

And that could have happened here. In 1902, the plague spread to animals in Sydney's Zoological Gardens. There were 500 animals in the zoo, and 52 died – kangaroos, wallabies and pademelons. Plague was suspected or proven in at least 13 of the 45 animals autopsied. What if it had spread to the wild population?

THE ANTIQUITIES MUSEUM EVENT FOR DONORS AND SUPPORTERS

John Ratcliffe

On 26 February an afternoon tea was organised by the R.D. Milns Antiquities Museum to thank all donors to the Museum (many of them members of the Friends of Antiquity).

The main focus of the event was the generous gift by the family of the late Owen Powell OAM [7] of a rare set of Roman surgical instruments. The function was attended by members of the Powell family, senior academic staff, and also by sculptor Rhyl Hinwood who, since 1976, has completed many grotesques, coats of arms and figures on the walls of the Great Court.

Owen Powell was a well-known Brisbane physician who in his retirement studied Greek at the university and then translated 'On the Properties of Foodstuffs' (what we would now call digestion) by the ancient Greek physician, Galen.[8]

The main speech was given by Ms Clare Pullar, Pro Vice Chancellor (Advancement), who pointed out that one of the principal roles of a university was to be a repository of the historical knowledge by which our future may be directed. The University of Queensland has a proud record of both celebrating the past and planning for the future. This is epitomised not only in the work of university scholars but also in the heritage of the preserved structure and environment of the university.

The architecture of the Great Court, she said, served as a metaphor for The University of Queensland as a centre of learning, with its pavilions of knowledge, each representing separate academic disciplines linked by open, but shaded, colonnades; these structures are decorated with scholarly quotations and grotesques representing many past and some present scholars who have contributed to the University's current enviable prestige.

Ms Pullar was followed by Dr Janette McWilliam, Director of the RD Milns Antiquities Museum, who recalled how her continuing interest in ancient medicine had been fired by her fascination with the ancient medical instruments in the Cambridge University Classics museum when she was studying there.

The speeches were followed by a presentation I gave in which I explained the significance of this magnificent set of Roman surgical equipment.

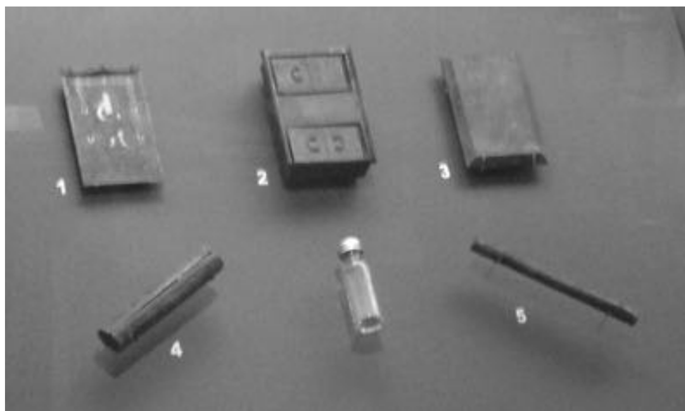
The Owen Powell collection

Modern society, with all its digital 'gismos', seems to have forgotten that there is a very long history to the practice of medicine and surgery which may even predate the Trojan War by thousands of years. More recently, in the first century AD, many surgical operations were described by a Roman writer, Cornelius Celsus giving a short-list of only 25 surgical procedures described by Celsus. This showed the diversity, complexity and sophistication of first century Roman surgery. In order to perform these procedures the Roman surgeon needed purpose-designed and carefully made surgical instruments.

[7] See also Ratcliffe J, 'Uvula forceps and other items donated to the RD Milns Antiquities Museum, *Nova*, January 2016.
[8] *Galen: On the Properties of Foodstuffs* (trans Powell, O), Cambridge University Press, 2007.

The Powell collection consists of three bronze medical containers and twelve separate instruments. Most of the surgical instruments are made from copper alloy (bronze) and are well preserved. The iron components, the scalpel blades and the two arms of what is probably a bone lever, are heavily rusted. All the instruments are elegantly designed and clearly designed as 'fit for purpose'. Some objects, particularly the main container and two forceps, are very elaborately decorated and aesthetically very pleasing. All these features indicate that the instruments and their containers were prestige items, presumably having once belonged to a high ranking, possibly imperial, physician.

The Powell collection of Roman surgical instruments is not only the best in Australia but rivals and surpasses the collections of many museums overseas. We must thank Owen Powell's family for their great generosity in making such a claim possible.



The Owen Powell Collection of Roman Medical Equipment in the RD Milns Antiquities Museum

DENNIS PRYOR: A VERSATILE CLASSICIST[9]

Robert Braun

Those who enjoy those rare programs Radio National presents to entertain lovers of history and the classics would recently have been surprised to hear some characteristically caustic remarks by the late Dennis Pryor about famous lovers in history (a subject yet to be addressed in our Ancient History Day programs?). It was like hearing a ghostly voice from the past. I wonder how many Friends of Antiquity remember Dennis? Seven years after his death he still apparently commands notice in the circle of classics lovers who tune in to the ABC.

A Cambridge man, Dennis arrived in Brisbane in 1951, and fronted up for a job with the Queensland Education Department. He was asked what he could teach. 'Latin and Greek' he said. 'But there may not be much call for those in Brisbane. I could also teach German, French, English and History.' The interviewer frowned. 'Can you teach maths or science?' Dennis shook his head. 'Pity' responded the interviewer. 'We like our teachers to be versatile.' Those who frequented the repertory company productions in Brisbane in the 1950s and early 60s remember Dennis treading the boards at the old Albert Hall in Shakespearean dramas, as an amateur thespian.

He took up a lectureship in Classics at Melbourne University in 1966. By then he had established himself as an academic, an actor, a television and radio personality, and contrary to the opinion of the Queensland Education Department, a versatile man of wide-ranging sympathies and interests.

His career at Melbourne University lasted until his retirement in 1990. Teaching at the Council of Adult Education and many community groups followed until his death in 2008 at the age of 83.

But remarkably, only a few weeks ago, he seemed to be still alive and well, on Radio National.

Many were the tales of his interaction with the pompous and over-confident. Taking the mickey out of people was one of his hobbies. One such story involved two men in white shirts who turned up at his door wanting to know if he read the Bible. 'Of course' he said loftily, and quite truthfully. 'I read the ancient Greek texts of the Gospels and Epistles, but my wife prefers the Hebrew. Which would you like to discuss?'

One of his former students said that he had the ability to make his students rethink their views

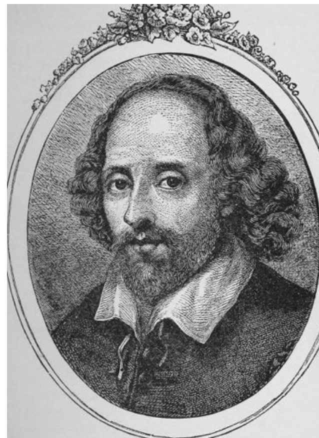
[9] Dennis Pryor held a senior lectureship in the Department of Classics at UQ in the 1950s.

of the world when he talked about ancient literature. 'We'd all be leaning forward to listen to him' she said. 'I'd be working all day in electrical engineering, go to his lecture, and find myself crying because it was so moving. You don't expect to be crying half an hour out of electrical engineering.'

Such is the power of the ancient writers, and those few remarkable teachers who are able to make them speak to us anew in contemporary language. Dennis Pryor certainly had that rare gift.

In Honour of the Bard: April 23rd

Bob Milns



William Shakespeare
(illustration from *The Story of English Literature for Young Readers*, 1879

Greatest poet of the English tongue,
Your praise for ever will be sung.
In modest Stratford given birth,
Your fame encircles all the earth.

The Abduction of Persephone (Part I)10

Bob Milns

From Persephone's face did beauty shine,
A lovely girl, of form divine;
Demeter was her mother.

One sunny day, on Henna's plain,
She wandered with her nymphic train,
A joy like to no other.

The girlish group beguiled the hours
By gathering bouquets of sweet flowers
With naught to fear or dread;

When suddenly from out the ground
Burst forth with an horrendous sound
Hades, monarch of the dead.

Sarcophagus with the Abduction of Persephone by Hades

Excited by her girlish charms,
He seized the maiden in his arms
And in his chariot thrust her.

Ignoring all her piteous calls,
He rode back down to Hell's dark halls
With godly pride and bluster.[11]

Persephone and Hades
illustration on vase in the British Museum

[10] The story of the abduction of Persephone (Proserpina to the Romans) is told in the Homeric Hymn to Demeter and in Ovid, Metamorphoses, Book 5.

[11] To be continued.

WHAT'S IN A WORD?

Bob Milns

The problem with being a compulsive seeker of word derivations, especially Greek and Latin, is that you will compulsively search at the drop of a hat, as the saying goes – but usually with fascinating results. Thus the other day I'd been reading something that used the word 'quinsy'. I thought I knew what kind of an illness it is, but decided to check it out in my good old faithful etymological dictionary – and was amazed with what I found.

Quinsy or 'inflammation of the tonsils and surrounding tissue with the formation of abscesses' is actually what has emerged from an ancient Greek word kynankhe, meaning 'dog strangler', and is the name given in the Greek medical writers to our disease, which also affected dogs. I found in my Greek lexicon a really interesting piece of information, viz. that in the 6th century BCE satiric poet Hipponax the god Hermes, patron, inter alia, of Thieves, is called kynankhes, the Dog Strangler. Why is he so called? The most probable explanation is that he used to throttle guard-dogs so that his beloved thieves could enter houses unnoticed. If one thinks of how Hermes is said to have invented the lyre (by killing a tortoise and using its shell strung with sheep-guts), he would not be the god one would choose as patron of the RSPCA.

Another interesting word is 'vice', which in English has three quite different meanings: (a) an instrument for gripping an object tightly; (b) a moral defect; (c) somebody deputising for another person, as in Vice-President. How can one word have such different meanings? The answer is that in the parent-language, Latin, they are three different words with different spellings.

The first vice is the Latin vitis, meaning a vine, and is so called because the vine wraps itself tightly around its support; the second vice is the Latin vitium, meaning a fault, defect, blemish (including moral); and the third vice is the Latin vice, meaning 'in place of'.

I hope that you find these words and their origin as interesting as I do.

MEMBERSHIP OF FOA AND ALUMNI FRIENDS

Alumni Friends single membership is $38.50 (joint membership is $49.50).
Friends of Antiquity membership is $16.50 for each member of the Alumni Friends;
Full time student membership is $5.50.

Correspondence should be addressed to:
Friends of Antiquity
Building 91c, Alumni House
50 Walcott Street
St Lucia 4067

or
email: alumni@uq.edu.au
telephone: 3365-1562

Friends of Antiquity website:
http://www.friendsofantiquity.org.au/

FRIENDS OF ANTIQUITY EXECUTIVE COMMITTEE

President: Denis Brosnan
d.brosnan@duchesne.uq.edu.au

Deputy President: Emeritus Professor Bob Milns
lmilns@bigpond.net.au

Secretary: Associate Professor Don Barrett
don.barrett@optusnet.com.au

Treasurer: Margaret Mapp
margaret.mapp@hotmail.com

Editor of *Nova*: Adjunct Professor Ann Scott
aemscott@icloud.com

Executive Committee members
Professor Alastair Blanshard (ex officio)
Llynneth Crawford
Dr Paul Eliadis
Desley Loch
Dr Janette McWilliam (ex officio)
Lyn Milns
Dr Steve Papas
Dr John Ratcliffe
Pam Rushby
Emeritus Professor Roger Scott (ex officio) I
Dr Dorothy Watts
Jason Yu (ex officio) President of AFUQ

2016 Friends of Antiquity Program[12]

Wednesday 25 May
11.30am

Literary Luncheon

Catullus: The passionate poet who insulted Julius Caesar

Mr Don Barrett

Chislehurst Room
Women's College

luncheon at 12:30 - $32 for the meal
(see enclosed flier for booking and other details)

Sunday 5 June (NOTE CHANGE OF VENUE)
2pm

400th anniversary of Shakespeare's death
Shakespeare's Romans

On Sunday, June 5 as part of the University's celebration of the 400th anniversary of Shakespeare's death, the School of Historical and Philosophical Inquiry together with the Friends of Antiquity will be hosting a lecture and film screen on the topic of Shakespeare's Romans. In this public lecture, Professor Alastair Blanshard and Dr Shushma Malik will explore Shakespeare's debt to classical antiquity through a discussion of the Roman plays and their sources.

A highlight of the event will be the screening of a couple of silent films based on Shakespeare's Roman plays, with live musical accompaniment.

ENTRY FREE

Room E109
Forgan Smith Building
St Lucia campus, UQ

Sunday 3 July
1.45pm

Friends of Antiquity
Annual General Meeting
(see enclosed invitation and nomination form)

2.30pm

Mithridatums and Theriacs – Toxicology and Brand Recognition in the Roman World
Dr Yvette Hunt

Sunday 14 August
2pm

The Antikythera Mechanism
Emeritus Professor Bill Caelli
(Faculty of Science and Engineering QUT)
+
Betty Fletcher Memorial Scholarship Award announcement

Sunday 11 September
2pm

Mr Michael Turner
Senior Curator, Nicholson Museum, Sydney
(topic to be announced)

Sunday 9 October
2pm

Dr Rashna Taraporewalla
(topic to be announced)

Sunday 6 November
2pm

Aristotle: 2,400 years on
Emeritus Professor Bob Milns

[12] The Sunday Series lectures will be held in Room E302 in the Forgan Smith Building. An entry donation of $10 includes refreshments.