Prostheses in Antiquity

Conference Programme

9.15 am  WELCOME

9.30 am  ‘Prosthetics, Aids and Disability: A Modern View’
Ellen Adams, King’s College London

10.00 am  ‘(Re)making Faces: Form as Function in Facial Prostheses’
Gili Yaron, University of Maastricht

10.30 am  ‘The Prosthetic Service Today’
Ian Massey, Cardiff Artificial Limb and Appliance Centre

11.00 – 11.30 am  TEA & COFFEE

11.30 am  ‘Prostheses and Anatomical Ex Votos in Antiquity’
Alyce-Rose Cannon, University of Sydney

12.00 pm  ‘Objects as Prostheses in Fifth Century Athenian Tragedy’
Anne-Sophie Noel, University of Lyon

12.30 pm  ‘Prosthetic Hair in Ancient Rome’
Jane Draycott, University of Wales Trinity Saint David

13.00 pm – 14.00 pm  LUNCH

14.00 pm  ‘“Unconscious of his arms and his legs”: Perceptions, Prognoses, and the Treatment of Paralysis and Loss of Function Injuries in the Ancient Mediterranean’
Katherine van Schaik, Harvard University

14.30 pm  ‘“An amputee may go out with his wooden aid on Shabbat”: Socio-cultural Dynamics and Medical Knowledge Related to Disabilities and Prostheses in Talmudic Traditions’
Lennart Lehmhaus, Freie Universität Berlin

15.00 – 15.30 pm  TEA & COFFEE

15.30 pm  ‘Evidence of a Late Antique Amputation in a Skeleton from the Hemmaberg’
Josef Eitler, Landesmuseum Kärnten & Michaela Binder, Österreichisches Archäologisches Institut

16.00 pm  ‘The Complex Aspects of Experimental Archaeology: the Design of Working Models of Two Ancient Egyptian Great Toes Prostheses’
Jacky Finch, KNH Centre for Biomedical Egyptology, University of Manchester
16.30 – 17.30 pm  DISCUSSION

17.30 – 18.00 pm  WINE RECEPTION

18.00 pm  Keynote Address: ‘From Head to Foot: an Overview of Prostheses in Antiquity’
Ralph Jackson, British Museum

19.30 pm  CONFERENCE DINNER

The registration fee, which includes conference packs, tea & coffee, lunch, and wine, is £15. To register, and for any other information, please contact Dr Jane Draycott on j.draycott@uwtsd.ac.uk

Conference Paper Abstracts

‘Prosthetics, Aids and Disability: A Modern View’
Ellen Adams, King’s College London
The standard definition of a prosthesis – an artificial body part, such as an arm, foot or tooth, that replaces a missing part – is straightforward on the surface. However, as prostheses are often expected to fulfil the function of a missing physical part, the distinction between these and aids in general becomes blurred. Artificial objects and gadgets have long been used to enhance and support the human body, but these are culturally specific, as are notions of disability. It has recently been argued, for example, that anatomical votives in antiquity were considered ritual prostheses. This paper will explore modern meanings of the terms prostheses, aids and disability in order to clarify the framework from which we then approach the ancient world.

‘(Re)making Faces: Form as Function in Facial Prostheses’
Gili Yaron, University of Maastricht
In my qualitative study on the usage of facial prosthetic devices by people with facial disfigurement, one recurrent theme is that of ‘passing’. Passing, my interview data suggests, may even be the primary function of the facial prosthesis – in allowing users to pass as ‘normal’, the facial prosthesis enables them to face others and interact with them. This overlap between form and function has everything to do with the unique status of the face. Being the primary seat of identity, non-linguistic communication and expressivity, the face is a body part like no other. Indeed, having a face means that one may be recognisable to others, known by them, and even recognised as a fellow human being: one needs a face to face the world. Facial disfigurement may (severely) disrupt these functions of the face, or, in some cases, cause them to fail completely: my interview data offers many examples of respondents being treated by strangers as a curiosity at best, and as less than human at worst. The facial prosthesis aims to alleviate the difficulties that accompany such disruption. Its purpose, therefore, differs from those of other prosthetic devices. Artificial arms, for instance, may be designed to either allow their wearers to remain more or less inconspicuous in their disability, or to enable them to manipulate objects efficiently. In the case of facial prostheses, however, passing and utility cannot be thought apart. In this paper, I will use my interview data in order to explore how the distinctive character of facial embodiment reflects on the
purpose(s) of facial prostheses. In addition, I will discuss what the nature of the face and the purpose of facial prostheses mean for their design, production and usage.

‘The Prosthetic Service Today’
Ian Massey, Cardiff Artificial Limb and Appliance Centre
This presentation will provide an overview of the activities of the NHS Artificial Limb and Appliance Centre based at Rookwood Hospital in Cardiff, one of three such facilities in Wales.

‘Prostheses and Anatomical ex votos in Antiquity’
Alyce-Rose Cannon, University of Sydney
This paper will consider the similarities and dichotomies between ancient anatomical ex votos and prostheses in the iconographic, archaeological and literary records. It shall treat their physical similarities in order to inquire whether artificial limbs were conceptualised as practical responses to the lack of divine intervention. The aim of this research is to study the material remains of ex votos in order to shed light on a religious and social practice that bore emotional significance for the dedicator. The dedications transcended social boundaries, and also demonstrate the historical reality of disability and disease in antiquity. This examination will also suggest that although ex votos and prostheses do share physical similarities, the votives embody a detached portion of the body which can also be interpreted as dismemberment. The scope of this inquiry shall be broadened to include crutches as a form of prostheses. Examining the concept of crutches as an addition and assistance to the body shall highlight the theoretical issues regarding the definition of what constituted prostheses in ancient thought. The paper shall argue that, in comparison to the detached ex votos, prostheses and crutches were supplements which both augmented and assisted ancient bodies in their daily lives. The overall aim of this research is to elucidate the daily realities of disability in the ancient world in which disabled bodies were not collectively considered different or excluded, and to demonstrate that ancient perceptions of prostheses and disabilities are far more nuanced than has hitherto been attested by the deficit of research.

‘Objects as Prostheses in Fifth Century Athenian Tragedy’
Anne-Sophie Noel, University of Lyon
In this talk, I will question the existence of a poetic exploration of the prosthetic experience in fifth century Athenian tragedy. Did the medical prosthetic treatment give birth to a metaphoric way of thinking relations between humans and nonhuman things? To explore this subject, I will examine a series of theatrical objects which seem to complement the bodies of their possessors as prostheses (Clytemnestra’s net in Aeschylus’ Oresteia; shields in Aeschylus’ Seven against Thebes, Euripides’ Heracles and Trojan Women). After inquiring into the denominations of these objects and their potential association with prostheses, I will show that they are described as extensions of their possessors’ bodies, and act as metaphorical prostheses. A mutual exchange of energy results from this interaction between body and object: the character’s power is extended by an object that he/she uses as a prosthesis of his/her body, but in doing so, he/she communicates to the object a vitality that transforms it into a living thing, which acquires movement, and even emotions or speech. This enquiry into the relationship between the medical and the theatrical may help to outline a poetic imagination of the prostheses in fifth century Athens. Were the prostheses thought of as inert and passive devices used to replace a missing body part, or things infused with nonhuman agency, interacting with the body in a dynamic way? To answer these questions, a close philologological reading of the tragic plays will be crossed with the theoretical perspectives of
the New Materialism, which emphasise the agency and vitality of nonhuman things, and their psychosomatic impact on humans.

‘Prosthetic Hair in Ancient Rome’
Jane Draycott, University of Wales Trinity Saint David
Numerous ancient authors attest that thinning hair and baldness were considered to be highly undesirable in ancient Rome, while shaven heads were associated with invalids and slaves. Consequently, hair pieces were frequently utilised. Should we perhaps view these hair pieces as prostheses? Depending upon the nature of the hair piece, its purpose was not necessarily to disguise the loss of hair, but rather to both draw attention to it and to create an entirely new, preferably positive image. In this paper, I will apply disability theory to hair loss in the Roman world and set out a methodology for viewing hair pieces as prostheses rather than simply as fashion accessories. I will consider the source of the hair used for hair pieces, primarily the ‘captured’ hair of the inhabitants of the newly conquered provinces of Britannia, Gaul, and Germania, who are identifiable as ‘barbarians’ in Roman works of art precisely because of their abundant ‘natural’ hair, and who subsequently self-fashion themselves as Roman citizens in part through their hair styles, and explore how the use of this barbarian ‘captured’ hair, a highly visible sign of Roman superiority and dominance, was subverted when used to supplement and reconfigure an imperfect Roman body.

“Unconscious of his arms and his legs”: Perceptions, Prognoses, and the Treatment of Paralysis and Loss of Function Injuries in the Ancient Mediterranean’
Katherine van Schaik, Harvard University
Prostheses have been used throughout history for cosmetic and functional purposes. They replace eyes, limbs, ears and other absent parts of the body, and can permit an individual with congenital or acquired injury or deformity to regain, to maintain or to obtain a certain measure of dignity and functionality. But what happens when the limb is not injured, congenitally malformed or misshapen in any way, but has become useless through irreversible nerve injury? How were such injuries treated by healthcare providers and perceived by patients in the ancient Mediterranean? In most cases, sensation remained intact, even if motor control did not, rendering removal of the disobedient and gradually wasting limb – in order to facilitate use of a prosthesis – impractical. Consideration of evidence from Egyptian medical texts (the Edwin-Smith Surgical Papyrus), Babylonian medical texts, Hippocratic texts (On Joints and On Fractures) and Galenic texts reveals recognition of the link between spinal injury and paralysis and acknowledgement that this affliction was untreatable. Paralysis secondary to spinal injury was one of the few medical problems that physicians across time and space generally refused to treat, noting that additional harm could come to the patient if he/she were treated in this case. Consideration of additional literary, epigraphic and archaeological evidence – from the patient’s perspective – reveals that patients could adapt to their new life circumstances with devices prosthetic in function, if not in appearance. Patients’, caregivers’ and healers’ frustrations with the intractability and irreversibility of paralysis are shared by similar suffers today, and the adaptability and resilience of such patients – past and present – provide insight into broader conceptions of ‘function’, ‘disease’ and ‘normality’.

“An amputee may go out with his wooden aid on Shabbat”: Socio-cultural Dynamics and Medical Knowledge Related to Disabilities and Prostheses in Talmudic Traditions’
Lennart Lehmhaus, Freie Universität Berlin
Disabilities of all kinds have been steady companions to human life throughout the ages and across different formations of societies and cultures. While nowadays the public discourse on disability has shifted into the direction of scientific, genetic or technical solutions of all sorts (prostheses, medical aids, technical devices, prenatal diagnosis, genetic screening etc.), for the longest period in history the issue was a socio-cultural, religious and philosophical one, as ‘ability’ and ‘disability’ are culturally constructed categories, shaping and shaped by social realities in different cultural contexts and historical periods. This categorisation could ensure the determination of social norms, encompassing inclusive attitudes as well as explicit strategies of boundary drawing and identity-making. However, even in antiquity people sought to invent technical aids of different sorts in order to bypass a certain bodily dis-function, hide a blemish or even highlight a certain disability for various reasons (for example war-wounds or prostheses made of gold or gems). This paper discusses some of these points with regard to the medical knowledge integrated and produced in Talmudic literature. Also in Talmudic traditions one can find several examples of prostheses used by a larger population. While the information on invention, production and technical utilisation of these physical aids (crutches, artificial legs or feet, prostheses for hands and arms, teeth and eyes) is rather scanty, most discussions concentrate on wider socio-cultural implications of disability and the usage of such technical devices in theological and ritualistic contexts. Furthermore, the paper will explore some aspects related to surgical and therapeutic approaches in Talmudic sources when dealing with disabilities and physical impairments.

‘Evidence of a Late Antique Amputation in a Skeleton from the Hemmaberg’
Josef Eitler, Landesmuseum Kärnten & Michaela Binder, Österreichisches Archäologisches Institut
Hemmaberg in Carinthia is widely known as a Late Antique pilgrimage centre. The possibility of a Roman sanctuary on its summit led to excavations in the years 2009–2013. A surprise for everyone involved was the discovery of another church. This one was built during the short Frankish dominion over the former province Noricum Mediterraneum (AD 536–610). A group of 29 graves was connected to the church. This one was built during the short Frankish dominion over the former province Noricum Mediterraneum (AD 536–610). A group of 29 graves was connected to the church. Due to the distribution of 7 adults, 1 juvenile individual and 21 children, it seems to have been a family group. The burials were mostly without grave goods. However, grave number 9 was an exception: in addition to the costume-related buckles and a fibula, the man was buried together with a short ax. But that was not the only special thing about this grave: the man’s left foot had been removed by amputation. He survived this procedure for at least 2 or 3 years, as the callus shows where the tibia and fibula had grown together because of an inflammation of the marrow. The wound was covered by some kind of prosthesis in the form of a cup, with wooden slats held together by an iron ring. This construction was not suitable for putting weight on it, but rather to hold in place a compress absorbing pus. This paper will present and discuss this unique archaeological discovery.

‘The Complex Aspects of Experimental Archaeology: the Design of Working Models of Two Ancient Egyptian Great Toes Prostheses’
Jacky Finch, KNH Centre for Biomedical Egyptology, University of Manchester
Examination of human remains from ancient Egypt provides evidence for a large variety of restorative techniques being practised by the embalmers. Such restorations often appear to be crude constructions made from a combination of mud, plant material and linen with the addition of resin. In 1881 the British Museum acquired the Greville
Chester great toe EA 29996, dated to before 600 BC. This beautiful example of the art of cartonnage showed distinct signs of wear. In 1999 a second example of a ‘prosthetic great toe’ (c. 950–710 BC) was discovered on a fragmentary female mummy in a Theban tomb, TT95. Constructed in three parts its complex design also suggested that it was intended for pre mortem use. The rarity of both these artefacts precluded their use in laboratory trials, thus to clarify whether these objects could be classified as functioning limb prostheses the construction of replicas was undertaken. Recreating and testing objects provides a powerful alternative perspective to studying the past, co-opting people with the relative knowledge to provide working solutions becomes essential. As a consequence this multidisciplinary approach also stimulates scholarly discussion about the original materials and techniques employed. This paper will outline the many processes involved in constructing two replica toe prostheses and provides an insight into the complex and challenging nature of experimental archaeology.

‘From Head to Foot: an Overview of Prostheses in Antiquity’
Ralph Jackson, British Museum
This paper will offer a survey of the ancient literary, documentary and archaeological evidence for prostheses in antiquity.