The Seventh Annual Marshall McLuhan Symposium
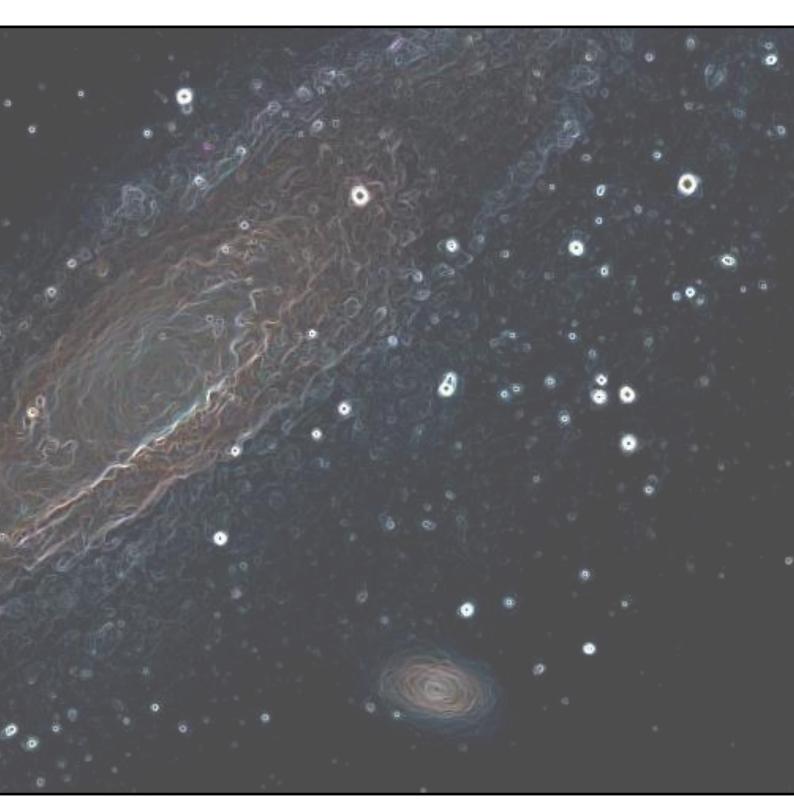
ABSTRACT BOOKLET

All abstracts are listed in their categories in the order of appearance on the day.

20 MINUTE PRESENTATIONS

Martin Walker (PhD Candidate in Engineering)
'Creased shells: the future of space structures?'

Structures made from thin sheets of metal, generally referred to as 'shell' structures, are one of the most efficient ways of enclosing space. Aircraft fuselages, car body panels, space stations and many other structures are made from thin sheets of metal in order to minimise weight. Unfortunately, since these structures are so thin, they are very weak when bent. For example, if an object strikes a car body panel damage often occurs, even in relatively minor collisions. In order to strengthen these structures, additional reinforcing material is often added, thereby increasing the weight and reducing the efficiency of the structure.

My research investigates how adding creases to a thin sheet of metal can strengthen a structure without the need to add any material. Just as adding a crease to a sheet of paper can dramatically affect its behaviour, so can adding a crease to a sheet of metal. I will describe these effects and how understanding them could lead to more efficient space-enclosing structures.

Kevin Kay (PhD Candidate in Archaeology)
'Of bones, homes, and dirty clothes: the archaeological study of domestic space and gendered lifestyles'

Traditionally, archaeologists considering the role of gender in domestic space have used symbolist or structuralist approaches, whereby abstract concepts of "maleness" and "femaleness" correspond to different rooms or parts of physical houses – as in, for example, the Western association of kitchens with womanhood and garages with manhood. Such interpretations can rarely be substantiated with much direct physical evidence from real excavated houses. I argue that the association of gender with domestic spaces requires situating those spaces in individual lifestyles – routine patterns of movement, activity, thought, and emotion. Spaces become associated with men or women, not in exclusive conceptual correspondences, but by being implicated differently in gendered lifestyles. It is by inhabiting the same spaces, but experiencing them differently, that men and women come to perceive one another as different kinds of person. Drawing on examples from industrial-era England, classical Greece, and the prehistory of Europe and the Near East, I illustrate how an approach that situates space and activity within human lifestyles and experiences better comprehends the manner in which gender roles, and their spatial components, are negotiated.

Lewis Kopman (MPhil in History and Philosophy of Science)
'The kitchen and the laboratory: molecular gastronomy, haute cuisine and the demarcation of science'

Molecular gastronomy was born out of an academic impulse to apply the eye of scientific rigor to the world of the kitchen. The term, however, has not remained in the academy. Increasingly, "molecular gastronomy" has been used to describe a new culture of haute cuisine, in which chefs are informing their work with the knowledge and techniques created by the new laboratory science. Both parties, academics and chefs, have called this application of the term a mistake. But, the categorical vagueness that has arisen in the intersection between molecular gastronomy and modernist cooking has created a uniquely transparent nexus of cultural tradition and scientific practice. What exactly about and in what ways is 'cooking' being studied and innovated within molecular gastronomy laboratories, and in what meaningful ways do these processes and goals differ from the emphasis on precision and novelty which has taken hold in modernist kitchens? What truly differentiates the new science of molecular gastronomy from industrial food science? When the reviewer of El Buli, Alinea, or The Fat Duck identifies the "science" of these kitchens, what exactly are they referring to? Where do we draw the line between kitchen and laboratory? Such questions represent a subtle clash in which a traditionally analytic concern with demarcation has come into contact with concerns over cultural and artistic identity. In other words, molecular gastronomy has thrown into question exactly what we talk about when we talk about science.

HISTORY PANEL

Alfie Cheesman (MPhil in History and Philosophy of Science)
'Global perspective and visual spaces in the British Enlightenment'

We live in a time when our traditional understandings of represented space are being transformed. European mapping since the sixteenth-century has been primarily about centralisation, about representing space in order to mediate the control of peripheries. Our contemporary Global Positioning System, while facilitating centralised control, is not merely a technology of representation, but the living synthesis of mapping and navigational tools. It forms a 1:1 matrix in which both the space of everyday life and the representational space of the map are flawlessly integrated.

It is perhaps only now that we may fully address our historical relationship with the globe and its allegorical legacy. What once arose to answer the problems of the order of things, the discovery of new continents, the determination of astronomical time, the charting of national borders, now sits in the recesses of our assumed knowledge as a background for the communicative integration of the global present. Being on earth is simply a matter of transit, of successful navigation; it is no longer a matter of enchantment. If there is a centre of the world, it is forever receding away from us.

The eighteenth-century was "the age of the globe", when the use of the terrestrial and celestial globes saturated polite conversation and the general education of the European intelligentsia. I will discuss how, in the British context, visual modes of representation were deployed to construct a global perspective in which distant spaces could be networked, and how people learnt to understand their place in the world.

Tom Smith (PhD Candidate in History)
'The Pacific Ocean: writing the history of the globe's largest space'

The Pacific Ocean covers around 63 million square miles, and occupies a greater area than all of the world's landmass put together. It is perhaps, therefore, unsurprising that whereas a relatively coherent body of historical literature exists discussing the Atlantic Ocean, historians have struggled to develop an integrated approach which captures both the geographical connectedness and the human and environmental diversity of the enormous space of the Pacific. Spatial terms such as Polynesia, Melanesia, Micronesia, Oceania, South Seas, Pacific Rim, and Asia-Pacific all illuminate some elements but obscure others, while Chinese, Japanese, American, and Australian spatial imaginings of the region, for example, look very different to the 'sea of islands' identified by Fijian anthropologist Epeli Hau'ofa. My own research deals with the notion of the 'American Pacific' – a spatial construct named in response to what has often been viewed as the expansion of the United States' western frontier out into the Ocean after 1890, especially through the annexation of a number of islands. Such a label as 'American Pacific' tends to flatten out the diversity and dynamism of the Ocean, but if we look at the array of cultural encounters that it encapsulates, between Americans and various different peoples of the Pacific, we can begin to paint a nuanced picture that appreciates the Pacific as a space, but highlights the creative ways in which various American, Asian, and Islander worldviews came into contact on it.

Merve Fejzula (PhD Candidate in History)
'Political space and imagined communities at the First International Congress of Black Writers and Artists, 1956'

This paper will examine the dialogue surrounding the imagination of political space and community at the First International Conference of Black Writers and Artists in Paris, held from 19-22 September 1956. Inspired by Bandung, the Society of African Culture and the editors of Présence africaine assembled over sixty delegates from across the black diaspora, ostensibly with the goal to define what they called "Negro-African" culture. However, in a world-historical moment gripped by decolonization, the central question facing the congress was the future of postwar black liberation struggles.

Delegates included Léopold Senghor and Aimé Césaire, Richard Wright, and Frantz Fanon. Their addresses highlight the positioning of their political engagement in direct line with their aesthetic sensibilities: art provided a route for alternative political constructions and language. Yet while beginning from similar aesthetic and cultural starting points, they could end up at vastly different imaginaries of political community. Their proposals varied from the diasporic and socialist internationalist, to the independent nationalist, to the postcolonial federalist. Yet key to understanding their interventions is the shared belief that black cultural identity was a way to assert a political identity. This paper not only seeks to contribute to the recovery of an obscured historical moment; it also proposes that we see the conference as an example of the drive to create a new political space and language, that would fulfill visions of equality for oppressed peoples everywhere.

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SCREEN MEDIA PANEL

Ellen Davis-Walker (Alumna, MPhil in Screen Media and Cultures)
'Hidden pasts, spectral spaces: re-mapping present day Paris through digital cartologies in the Raspouteam project'

The digital projects created by the virtual street-art collective Raspouteam reconfigure the cartography of Paris via the creation of virtual sites of memory. Strategic placement of QR codes across the city encourages participants (and their smart phones) to come closer: to traverse historically significant sites and to remember. This visible legacy of France's "disavowed" colonial past (McNeill 2010:36) seem more relevant than ever before, inviting us to reflect on strategies employed by Daesch in the wake of November's attacks. My paper will investigate how new technologies, and the digital artefacts they produce, can offer alternative readings of pressing post-colonial legacies: a stance which is vital in the wake of Paris's most recent terrorist attacks. My work will extend Henri Lefebvre's 'The Production of Space' (1991) exploring how the physical structures of land marks around Paris have come to impose on the digital space of the internet and social media (and vice versa). I will question how this break down between digital and architectural space influences the geopolitics of Paris's streets, arguing that the convergence of the digital, historical and architectural allows a spectator to become "a voyageur, a passenger who traverses a haptic, emotive terrain' (Bruno 2007: 16).

Jules O'Dwyer (MPhil in Screen Media and Cultures)
'Passing' through the passageways: Vincent Dieutre's urban cartographies of desire'

Sara Ahmed's Queer Phenomenology exploits the semantic flexibility of the term 'orientation', gesturing to the productive dialogue between the spatial and the sexual. Indeed, from Marc Augé's non-lieux to the Foucauldian heterotopia, French though has explored an interesting preoccupation with how lived space can become imbued with other vectors of subjective experience including sexuality. In this paper, I offer an introduction to the films of Vincent Dieutre, which can be situated within my broader investigation of how the thematic concerns of the space/sex nexus might be cinematically inflected.

Occupying a slippery space between autoportrait and documentary, Dieutre's intimate essay films discuss themes of sex, drugs, love and loss woven in amongst a heady collage of art historical motifs, socio-political commentary and street scenes detailing everyday life.

Considering his 2013 film *Jaurès*, I note how Dieutre leads us towards an investigation of exterior space (principally, the cityscape) to grapple with the psychogeographic undertones of urban queer existence. His vision, I argue, leads us to ask how 'margins' can be topographically, sociologically and subjectively constituted.

Xanthe Gilmore (MPhil in Screen Media and Cultures)
''Immediate' and 'hypermediated' spaces in three international films on remnants of the past'

One of the most remarkable aspects of the eclectic mix of films that I will be thinking together, Patricio Guzmán's Nostalgia de la luz (2010), Werner Herzog's Cave of Forgotten Dreams (2010) and James Cameron's Titanic (1997), concerns their intriguing depiction of the relics of a historical space, recent or ancient. All three directors personally voyaged to makeshift graveyards for human and nonhuman remains (the imprintations of Pinochet's "desaparecidos" left in the Atacama desert in Chile, the Paleolithic paintings in France's Chauvet Cave, and the famous ship entombed at the bottom of the North Atlantic Ocean since 1912 respectively), experiencing these sites in the flesh. However, their footage does not reach the spectators in such an "unmediated" mode, but is "mediated" on several levels, frequently flickering between the authentic and the poetic. Even more curiously, it appears to be precisely due to the "mediated" configuration of these three films that they offer an "unmediated" access to the real. Whereas a mimetic simulation of reality which obscures the cinematic apparatus may generally be considered the most effective strategy for engendering an immersive space, might this "hypermediated" representational technique paradoxically act on a more "immediate" or "direct" level owing to its heightened visceral impact?

Greg Hinks (MPhil in Screen Media and Cultures)
'Archive fervour'

The BBC documentary strand 'Arena' stages several opportunities for fresh encounters with previously staid archival spaces. Throughout its history, the series has challenged barriers between 'high' and 'low' cultures with essay films on such diverse topics as Robben Island, The Third Man and the culinary life of Elvis Presley. Now, as the Arena archive is in the process of being moved to Wolfson College, Cambridge, the production team are breaking down oppositions including the 'arche' and 'archive' as defined by Derrida. Re-animations of the archive such as 'Night and Day' (a film which was streamed live to several open-air locations in Cambridge over a 24-hour period) and the 'Arena Hotel' allow us to navigate the archive as we would a modern city. Twenty-first century film scholarship all too often ignores the spaces in which films are watched and consumed, as the increasing number of distribution channels makes it harder to conceptualise communal viewing spaces: on the contrary, it is precisely because of this crisis of space that these questions, and the tentative answers offered by projects such as the expanded Arena archive, become all the more primordial.

POSTERS

Dr Joshua Kaggie (Postdoctoral Research Fellow in Radiology)
'**Sodium magnetic resonance imaging**'

Standard clinical Magnetic Resonance Imaging (MRI) is done by measuring the abundance of hydrogen atoms in the human body, although other atoms can be measured with MRI. Hydrogen MRI is excellent for determining anatomy, but higher disease specificity may be possible by using MRI to image other atoms, such as sodium. For example, in vivo sodium concentrations decrease with osteoarthritis and increase in malignant tumours.

Sodium MRI is more difficult than hydrogen MRI due to sodium's lower natural abundance, requirement for different hardware, and fast signal decay. Our group has developed techniques to acquire sodium MRI's and is currently evaluating the effectiveness of these techniques in a patient study group.

Alina Kozlovski (PhD Candidate in Classics)
'**Pillars of time: fragmenting the past and present in the ancient Roman landscape**'

In this poster I examine ancient Roman columns and their role as objects linked to perceptions of time, both in history and myth. For the ancients, as architectural features, they held up the roofs of temples, bordered passageways and served as a canvas for all sorts of messages, made both by the state and individuals. Their ornate capitals and the fluting of their shafts encouraged ancient viewers to gaze upwards and to feel dwarfed by their monumentality. Their form, however, was almost paradoxical – heavy and long, often tapering, they reflected an inevitable fragility. The toppling of one through slow decay or deliberate destruction could mean the toppling of many others, creating the ruined landscape with which we are so familiar. I argue that since the ancient city was so littered with broken columns, and their crumbling pieces were so present in people's experience, for the ancients there was no concept of the past without them. This fragmented present meant that scenes from myth in art, which had no linear chronology, were depicted in a similar landscape of ruins and the past came to be viewed as a palimpsest of broken objects that never came from completed wholes. In turn, in the physical world, the shattered remains of buildings lost their historicity and made the landscape of the city into a space of myth as well as history.

Anat Messing Marcus (PhD Candidate in German and Dutch)
'**Space, body and architecture**'

In this poster presentation I will trace the relations between the body and the built environment. Architecture has always been engaged in setting up a boundary, boundary between the interior and the exterior, between what is private and what is public. Primarily meant to shelter us from nature, architecture has also always been related to our collective identity, a space designed to house our rituals and habits. In this visual and textual poster presentation I will show the ways in which the human body has shaped the creation of architectural forms and how the body has served in different cultural and philosophical

paradigms as a reference to the ways and means architects and artists have conceived material space. By unfolding the embodiment of the human body within spatial and architectural representations I will ask what are the relations between the physical body and physical spaces or their representations, and how in turn, the latter have shaped our bodily perception in space.

Jessica Soltys (PhD Candidate in Linguistics, Submitted)
'Would you like "a cup of coffee"? An empirical exploration of indirect speech'

The poster focuses on off-record indirectness (ORI), a linguistic strategy through which a speaker intentionally conveys two related meanings – a literal, direct meaning and an indirect meaning, the latter of which arises, in context, through implicature. ORI utterances are pragmatically ambiguous between the two meanings and are, therefore, plausibly deniable.
Several accounts of ORI have been proposed, each of which attributes different motivations to ORI and assumes different functional, contextual, or interpersonal conditions under which ORI is ideal. The poster is centred on two accounts, Politeness Theory (PT) and the Strategic Speaker approach (SS). Under PT, ORI is a politeness strategy and is used primarily to respect the hearer's face wants. The decision to use ORI is function of three sociological factors – the differences in power (P) and social distance (D) between the speaker and hearer and the degree of imposition placed on the hearer (R), with the likelihood of ORI use increasing as P, D, and R increase. In SS, ORI is a means of balancing and the potential risks and rewards – legal, financial, social, and emotional – associated with controversial acts such as bribes and sexual propositions. The decision to use ORI is based on game-theoretical logic and the speaker's desire to protect his own interests. It is unrelated to P, D, or R or other politeness factors.

The poster reports three related empirical studies that investigate the use of ORI. Experiment 1 is a qualitative study in which participants recount both their experiences with ORI and their intuitions about why ORI is used. Responses are coded according to which of the theories, PT or SS, they best fit.

Experiment 2 describes the use of ORI in scenarios depicting bribes and sexual propositions (where ORI use is predicted by SS) and favours (where ORI use is predicted by PT). Open-ended responses are coded and analysed both quantitatively (for the use of ORI and the influence of P, D, and R) and qualitatively (for the use politeness markers and other discoursal features).

Experiment 3 is a judgement task in which participants are shown ORI utterances produced by the participants in Experiment 2 and are asked to infer the reasons why the speakers used ORI in each scenario. Responses are coded according to which of the theories, PT or SS, they most reflect.

The poster concludes with a discussion of the implications of the empirical findings on the two accounts of ORI, with the aim of determining which of the theories best explains the participants' intuitions, production, and understanding. A modified version of SS is proposed to accommodate the data.

Dr Zhong-Nan Wang (Postdoctoral Research Fellow in Engineering)
'A stable non-dissipative numerical scheme and its applications to noise predictions of jet noise using LES and FW-H methods'

A stable and non-dissipative numerical scheme is developed by preserving the discretised kinetic energy. It is validated over a series of canonical cases and shows great benefits in the eddy resolving simulation. Then the non-dissipative scheme is used to predict the near-field turbulence and acoustics of a subsonic heated jet using Large-Eddy Simulation (LES). The radiated sound in the far field is calculated using Ffowcs William-Hawkings (FW-H) integration over the cylindrical surfaces in the near-field acoustic region. Agreements with the experiment data are obtained in both flow field and far-field sound. Further applications are being performed on the flow and acoustics prediction of industry-relevant installed engine jets with serrated nozzles.