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'Television Discourses': how the University of London's Audio-Visual Centre professionalised and democratised the televisual lecture for postgraduate medical students*

Angela Saward

Abstract

The focus of this article is on a discrete group of videos that are, for the most part, held at Wellcome Collection in the United Kingdom. It is a case study of a 'hidden' archive – one that was almost lost, and certainly overlooked, of the closed-circuit television output from a university department. This department, the University of London Audio-Visual Centre, produced a large corpus of postgraduate medical educational video programmes from 1971–1991. The article looks at the initial technological optimism, the 'ideology' and passion behind this endeavour through the lenses of an influential governmental report and those archives relating to this department. These documents reveal the myriad problems in meeting their original objective. The legacy of two decades of media production, represented by a small selection of videos, had long-term impacts in the educational sector and, arguably, democratised audio-visual education for postgraduate students engaged in the medical disciplines.

closed-circuit television, postgraduate education, medicine, medical humanities

^{*} The author wishes to acknowledge the kind assistance of former staff of ULAVC, namely Peter Bowen, Pat Gulliford, Martin Hayden, and Trevor A. Scott; Murray Weston, former Chair of British Universities Film and Video Council; The Special Collections team at Senate House Library, University of London, for their assistance in accessing departmental archives.

Introduction

This article investigates the physical and intellectual legacy of a university department devoted to audio-visual pedagogy and televisual media production. The sources used include 310 titles which are catalogued and available via Wellcome Collection of which 150 have been digitised, transcribed and are available online with the remainder planned to be digitised as part of a major video project run by the British Film Institute. The case study is supported by extensive archival materials held at both Wellcome Collection and Special Collections, Senate House Library, University of London. The use of televisual technology was novel in the British educational sector of the early 1970s and examples of early forays into media production are little known because the video sources that survived were recorded on currently obsolescent analogue tape formats. In 2016, all analogue videotape formats were deemed obsolescent barring two (BetaSP and BetacamSX). Furthermore, no professional equipment was being manufactured (these were the conclusions of a European consortium of major audio-visual archives organisations).² Due to recent digitisation, the material is newly available for research and can now form part of the history of medical education especially in the context of mediating the body.

From its inception in 1968 to its demise in 1991, the University of London Audio-Visual Centre (ULAVC) engaged in a large-scale audio-visual post-graduate educational programme. Taking advantage of the availability of new television technology and synthesising this with pedagogy, the Centre was in part established to anticipate the demands of a rising student population, which in the 1960s in the UK had doubled in seven years to more than 50,000.³ Medical sciences and medical humanities videos, as will become clear, became by far the bulk of the Centre's output as the University represented a number of both nationally and internationally recognised centres of medical excellence. In 1975, production output was 34 television videotapes; 29 titles were medical; two examples are, 'I Want You To Take These Tablets' and 'The Microbioassay of Hormones'.⁴

For the University of London, the impetus for establishing a university department at the physical and intellectual heart of London's vibrant post-

¹ Edited excerpts from the videos discussed in this article are available to view online at https://youtu.be/gjhYWwdH9K0 (accessed 6 September 2019).

² https://kennisbank.avanet.nl/wp-content/uploads/2019/07/preservation_guide_main_preservation_guide_-_overview_of_preservation.pdf_(accessed 6 September 2019).

³ Bolton 2012.

⁴ Michael Clarke, Document D, from a list of Productions Completed, 1975, UoL/AV/1/7 DPAV, University of London Archive, Senate House Library (hereafter UoL).

graduate educational sector dedicated to the creation of audio-visual pedagogy came from an influential report compiled by Dr Brynmor Jones. The report included a detailed survey of educational provision across the UK, France, Germany, Japan and the US, where the practice of using audio-visual tools in teaching was well-established. The significance of the report is highlighted in the archives of ULAVC and is mentioned in the unpublished memoir by a former Senior Producer who worked there. The report forms a key source for the analysis.

When the Centre was dismantled in 1991 after what had been a turbulent decade both politically and technologically, the Audio-Visual Resources Manager at the Wellcome Institute Library (now known as Wellcome Collection), negotiated the transfer of the ULAVC collection from the university. Michael J. Clark (not to be confused with Michael Clarke, former Director of the Centre) rescued a sizeable number of the videos and production materials created for postgraduate students in clinical medical and medical humanities as it appeared that most of the videos would be lost. (The rest of the collections were split between several institutions, including the British Medical Association.) Sir Henry Wellcome had been collecting audio-visual medical material from the 1910s alongside books, manuscripts and examples of visual culture such as prints, drawing and paintings. After his death, the organisation continued this activity by the creation of a library dedicated to the history of medicine and the public understanding of science (An example of audio-visual material acquired by Henry Wellcome is a sound recording from Florence Nightingale on the plight of veterans from The Crimean War, 1890). Wellcome Trust, the charity funding research into biomedicine formed as a result of Wellcome's will when he died in 1936, continues with this work and supports Wellcome Collection, the museum and library created as part of his legacy.8

Michael Clarke, the by then retired first director of the Centre, communicated in correspondence what he believed to be the legacy of the Centre's output:⁹

Taken together, they represent the first large-scale, systematic use of videotape in British postgraduate medical education, and certainly the largest and most varied body of medical film and video produced in any British university in the period from the mid-1960s down to

- 5 Jones 1965.
- 6 Scott 2012; revised 2017. Attached in email correspondence Trevor A. Scott to Angela Saward 20 November 2017.
- 7 For an account of institutional history and nomenclature: https://en.wikipedia.org/wiki/Wellcome_Library (accessed 22 June 2019).
- 8 James 1994, 359–60.
- 9 GC/170 acc. 401, Wellcome Collection.

the early 1980s. As such, the collection constitutes an audio-visual archive of considerable historical importance and a major resource for the history of twentieth-century medical sciences, whose future preservation is surely highly desirable.

Given the significance that Clarke outlines, it was important not just to rescue the collection, but also to emphasise its standing in audio-visual history of medicine in the twentieth century. Paradoxically, in 1995, in an article for the British Universities Film and Video Centre's (BUFVC) handbook, Clark surveying the twentieth century output of medical films and videos, noted the difficult task to both inform and engage the audience, deciding that the efforts of the ULAVC to put the spirit of the Brynmor Jones report into practice "were not terribly inspiring". By which he appears to have meant that the model of the televised lecture did not portray contemporary medical practice attractively with comparatively small (and even meagre) production budgets. He added that centralised audio-visual units in universities as advocated by Brynmor Jones were probably doomed to failure. These statements were made prior to the Centre's demise and, it's only through the passage of time, the Centre's true impact has become evident.

As a curator faced with a large volume of videos on obsolescent media formats with a limited administrative history, building a case for the historical and research value for a collection which has been mothballed for 30-odd years is challenging: these media 'texts', both words and images, have long been out of circulation and re-contextualising them requires a significant effort of research especially as medical practice evolves so rapidly. Some of the titles, on the surface, do not sound appealing ('The Properties of Mucus', no date, springs to mind). This problem is addressed by contextualising and historicising the video materials through the lens of the Centre's archives, the videos or media 'texts' themselves and the personal testimonies of the people who worked there.¹¹

Access to knowledge about our health has traditionally been held by the medical profession: television and, latterly, the internet have disrupted this paradigm. Much of the output of the Centre sits on the cusp of the acceptance of medical and 'tele-education' becoming a cultural and societal norm.¹² Also, the discourse around what is a 'healthy' and a normal body versus an 'unhealthy' and abnormal body has changed: analysing the output of the Centre provides one of the overlooked evolutionary steps in the way

¹⁰ Clark 1995, 22–29. At the time of writing the article, Clark was Audio-Visual Resources Manager at the Wellcome Centre for Medical Science and later negotiated the transfer of the ULAVC collection in 1999.

¹¹ Michael Clarke, the first Director of the Centre, died in 2005.

¹² Young 1999, 65-7.

healthy or unhealthy 'bodies' and behaviour were mediated in the service of postgraduate medical education before becoming the 'norm'.

Brynmor Jones' Report

The report published in the UK in 1965 by a committee comprising of the University Grants Committee, Department of Education and Science and Scottish Education Department, led by Dr Brynmor Jones, Vice-Chancellor of the University of Hull, was the fruition of an extensive survey of the audio-visual educational landscape around the World carried out in 1963–64. It outlined the difference in adoption of audio-visual aids, with the US significantly ahead in this pedagogical 'arms race':

... they have raised the efficiency of communications almost in proportion as they have increased their audiences. The skill and expertise in the presentation of some programmes rest on especial care in preparation, meticulous selection of relevant data, and on an understanding of the educational load as well as the pace required in a particular unit of communication.¹³

The report described television as "a powerful and influential medium of mass communication", devoting a chapter solely to the medium.¹⁴ It was recognised as an increasingly popular leisure activity as domestic television set ownership had grown exponentially: in 1959 58.38% of UK domestic households owned a television set; in 1969 92.34%; in 1979 97.53%; in 2019, it is 96.11%.15 Initiatives to introduce television into the classroom in the service of education had been led by several of the broadcasters (BBC Schools and Colleges and Granada TV in particular). However, the report identified that in 1964 only 7% of British universities were using closed-circuit television and overall the practice of using audio-visual technology was still in its infancy.¹⁶ The report indicated that one of the factors behind the US developing and adopting this technology had been much larger student populations in each institution and the need for greater capacity at universities and colleges. Student numbers attending American universities were considerably larger than in the United Kingdom: The University of California had 24,000 students on campus in 1962 which was 48% of the entire student population studying first

¹³ Jones 1965, 3, Section 24.

¹⁴ Jones 1965, 57, Section 263.

¹⁵ Broadcasters' Audience Research Board, "Television ownership in private domestic households 1956–2018 (millions)". https://www.barb.co.uk/resources/tv-ownership/ (accessed 21 June 2019). BARB commissions audience data and has historically included television ownership.

¹⁶ Jones 1965, 57, Section 265.

degrees full-time in the UK at the time.¹⁷ In the US, the approach to increases in the student population had been to create both larger lecture theatres and connect overflow theatres – rather than hiring more lecturers.

The report was evangelical; it was believed that media literacy would increase in emerging student cohorts who would become "picturate" and more receptive to images (rather than written text):¹⁸

The view of the controlled and disciplined utterances of film and television may lead to the realisation that these media have a significance for us comparable with that of El Greco, Titian and Michael Angelo in a less literate world.¹⁹

This has turned out to be prophetic: what we understand to be media 'literacy' has only happened through the paradigm shift television technology created, especially the speed between image capture, transmission and receipt, freeing media producers from the cumbersome film production process.²⁰ Television production was also revolutionised by the ability to relay images 'live' and in real-time on video. Two television broadcast models became possible; 'open-circuit' television (to the public) versus 'closed-circuit' television (to specific audiences). Closed-circuit television (or cctv) was defined as

[...] television which is restricted to, and can be received only by, specific audiences [...] a system of private television using a highly-directional transmission link, either in the form of a very narrow beam of radiation which can be received only by means of a highly-directional receiving system designed for the purpose, or a coaxial cable linking the camera directly to the receiver. ²¹

Both models became conduits for educational programming: to begin with the 'open-circuit' broadcasters (BBC, ITV, Granada etc) only scheduled educational programmes for when their audiences were available (during school or late at night for adult learners) and 'closed-circuit' broadcasters aired their programmes to their 'captive' audiences, timetabled during lecture periods, for instance. Later these models merge as audiences timeshifted programmes to watch when most convenient due to the domestic video-recorder. Programmes become more like books on a library shelf available to anyone.

¹⁷ Ibid, 23, Section 23.

¹⁸ Ibid, 2–3, Section 24.

¹⁹ Ibid, 2-3, Section 21.

²⁰ Boon 2008, 192-3.

²¹ Ibid, 57, Section 263.

Setting up the Centre

The report led to the re-positioning of visual aids in education across the university sector and the ULAVC became the 29th department of its kind in the UK. When the Centre was set up, it was alongside what was described as an 'active department of new media' and a Research Unit into methods of university teaching (neither of which are mentioned again in the departmental archives). Clarke compared the Centre to what was considered to be the core purpose of the university by citing a comment made by Lord Annan (who was Vice-Chancellor of the University 1966–1978). In Clarke's words, "in a federal university the television system can help to provide the essential 'Spielraum of scholarship'". By this he means that the university and, thus by extension, its television service might create scope – or a literal space – to be able to develop academic thought freely. This was a bold statement to make but was illustrative of the 'ideology' behind the televisual endeavour.

The documentary evidence in the department archives demonstrates the commitment and passion for the moving image within the department and a desire to proselytise about it:

... there has been a welcome tendency, by both academic contributors and producers, to exploit the illustrative and demonstrative capacities of television in greater measure, using the resources of location recording and graphic design in full measure, and the possibilities offered by videotape editing. To use television superficially demands more time in research, design and production, but a consequent increase in clarity and force.²⁶

However, there was strong resistance to tele-education and what was regarded as 'canned' teaching.²⁷ Concern in the University was expressed that using television technology itself could be a barrier for the student to access real bodies for their clinical experience as the approach to postgraduate medical education had traditionally been based on the "apprentice model".²⁸ Television lecturers had to be better prepared for their broadcast lectures – they had to be conducive to lecturing in this medium *and* appropriately trained: the Centre's archives point to 60 hours of preparation accounting for

²² Clarke 1970, 2, Section 1. UoL/AV/1/3 DPAV.

²³ Clarke 1968, 2. UoL/AV/1/1 DPAV.

²⁴ Annan chaired the Committee on the Future of Broadcasting in 1977 as well as sitting on the committee advising on the setting up of The Open University in 1966 with Dr Brynmor Jones.

²⁵ Clarke 1971, 7–8, Section 3.3. UoL/AV/1/3 DPAV.

²⁶ Clarke 1974, 1, Section 2. UoL/AV/1/7 DPAV.

²⁷ Clarke 1970, 11, Section 5.6. UoL/AV/1/3 DPAV.

²⁸ Young 1999, 57.

one hour of finished television.²⁹ In one instance, a university in the US reported 200 hours of preparation to make one hour of programming.³⁰

The first of what would be regular reports by the Academic Council and of the Collegiate Council contextualises the setting up of the department and its television capability.³¹ The University was offered shared use of a closed-circuit cable broadcast channel, Channel 7, from ILEA (Inner London Education Authority) for its college network. The line and cable channel were leased from the General Post Office (GPO) who had a monopoly on telecommunications services in the United Kingdom at the time. Fifty terminals were cabled into university lecture theatres located in Central London so they could receive television programmes.

The University of London had a federated and geographically dispersed college infrastructure particularly in relation to the dispersal of its medical departments. The idea that content/knowledge could be 'transmitted' around the 'network' rather than the students and lecturers had originated in Jones' report:³²

Geographical separation of units in one medical school entails loss of time in travelling from one unit to another whenever students wish to attend special lectures and demonstrations in other centres. A link of this type might well improve teaching methods and save a considerable amount of travelling.

Television offered an opportunity to improve educational standards by being more scientific by standardising and systemising the pedagogical load. Quality control and modernisation of educational outputs could reduce stereotyped or dull teaching and free some of the lecturers for other work (especially in Medicine where lecturers could also be engaged in their own clinical research). Programme capture and re-transmission meant that students could be repeatedly exposed to the 'distinguished' lecturers in the institution in a virtuous educational circle.

Trevor A. Scott, probably one of the most prolific producers of postgraduate videos across all disciplines, in his unpublished memoir, has written a detailed account of his career at the University and played an instrumental role in the inception of the Centre – he was in post a year before the Centre was established before Michael Clarke was appointed Director. Scott already had links with Clarke who had been his former tutor and supervisor at the Royal College of Arts. Clarke was well connected professionally with founding members of the British Documentary Movement such as John Gri-

²⁹ Clarke 1971, 1, Section 2 (i) (a). UoL/AV/1/3 DPAV.

³⁰ Jones 1965, 12, Section 63.

³¹ Clarke 1968, 4, Section 8. UoL/AV/1/1 DPAV.

³² Jones 1965, 69.

erson, Paul Rotha, Edgar Anstey and Sir Arthur Elton having worked at British Transport Films and the Shell Film Unit.

In 1971 Michael Clarke and Ian Gilliland, Assistant Director of the British Postgraduate Medical Federation, published a 'manifesto' relating to the department.³³ There were three aims; to advance the use of audio-visual materials and methods for the furtherance of the co-ordination and research within the University of London; to establish a library of audio-visual materials; to produce films and television records and teaching programmes.³⁴

There was the ambition to extend the university's reach beyond London to other major centres of training, to communicate the 'benefits' of its research too (chiefly it seems through an exchange of material), to provision an active audio-visual unit including a self-sufficient film production facility, a very small TV studio (suitable for lecture or discussion-type programme) and a mobile outside—broadcast TV Unit and, in the future, expand to a large TV studio, an 'insert' studio for model work, cine-microscopy and special effects.

An unexpected issue which proved initially troublesome was copyright in these media works – an entirely new sector of media production. This was a new frontier and illustrated the complexities of trying to create a parallel model of television production alongside the broadcast model. Cited in the committee's minutes is an article, "Writing on CCTV", by Alan Griffiths (general secretary) and N. J. Crisp (chairman) of The Writers' Guild of Great Britain,³⁵ outlining their unease about 'amateurs' (i.e. The lecturers) entering the field of writing for educational television when there was already a trained (and unionised) body of professional writers available for hire. The lecturers were not (or were highly unlikely to be) members of the Guild because they were not considered to be professional writers and, therefore, were perceived to be unqualified and could financially undercut the Guild's members for whom writing was a remunerated profession. In terms of labour relations, this potentially created conflict between the unionised versus the non-unionised sectors. Although there was an incipient threat of industrial action, labour relations appear to have remained amicable.

The selection of what subjects and lectures to produce was decided behind closed-doors at a committee attended by Clarke and Dr Iain Gilliland,

³³ Clarke/Gilliland 1971, 108-9.

³⁴ Clarke 1968. 2, Section 3. UoL/AV/1/1 DPAV.

³⁵ The Writers' Guild of Great Britain, established in 1959, is a trade union which represents professional writers in TV, film, theatre, radio, books, comedy, poetry, animation and videogames. It negotiates better rates of pay for its members and the media sectors in which its members operate are constantly evolving. https://writersguild.org.uk/about/ (accessed 21 June 2019).

the former representing the University of London and the latter the British Postgraduate Medical Federation,³⁶ there was also an advisory body, chaired by Professor Norman Ashton of the Institute of Ophthalmology, which met several times a year to provide oversight for the department's activities. The role of the production team was to facilitate the transformation of these suggestions into television productions, by turning 'lectures' into recognisable television programmes, lecturers into television presenters, and their research material into comprehensible and effective visual aids (as in data, slides and graphs). Martin Hayden, a senior producer, summed up the nature of this task:

On the face of it, these might seem mere cosmetic tasks, but in fact often resolved into touchy and tricky processes, demanding a fine balance of professionalism, assertiveness, diplomacy, flattery and counselling to get anything approaching a "performance" in the end.³⁷

Concerns were raised by the University General Council Sub-committee on Educational Technology in March 1971 after a visit to the department; Michael Clarke asserted that "requests are carefully scrutinised not only for their effectiveness in the learning process but for their federal value".³⁸ A trend was emerging in the perceived bias in the completed video productions with science and medicine very well represented with the 'impoverished arts' significantly less so due to the lack of cross-departmental contributory funding as well as other difficulties relating to the costs of outside broadcasting (in the case of theatre productions).³⁹

The observation that there was an 'over'-representation of medical departments was significant; the Centre had managed to secure various grants from schools of Science and Medicine which could be leveraged towards purchasing new equipment and funding members of staff to provide production support for these disciplines. (In 1969, a grant was received from the Regional Metropolitan Hospital Boards via the BPMF for £6000 towards capital equipment and £8000 for staff, combined and adjusted for inflation, this could be worth over £160,000 in 2019.)⁴⁰ In effect, this created a virtuous circle of research, development and production. In the early years, the programmes which were made were demand-led, and arguably might well have lacked 'federal planning' in terms of being truly 'strategic' which would

³⁶ BPMF ran from 1943–1997. For an account of the nature of support provided by BPMF for medical students engaged in advanced study: https://www.bmj.com/content/2/5096/619.2 (accessed 21 June 2019).

³⁷ Email from Martin Hayden to Angela Saward, 29 April 2019.

³⁸ Clarke 1970, 4, Section 1.7. UoL/AV/1/3 DPAV.

³⁹ Clarke 1970, 10, Section 5.3. UoL/AV/1/3 DPAV.

⁴⁰ Figure arrived at using "Moneysorter", https://www.moneysorter.co.uk/calculator_inflation2. html#calculator (accessed 21 June 2019).

have led to a portfolio of programmes reflecting the University's full range of disciplines. Decision-making was doubly under suspicion because the Centre received central funding in competition with other departments and may have appeared less accountable.

Becoming more "publicity conscious" and aware that the output of the department required a higher profile both internally and externally, the Centre organised previews of some of its newer programmes (although not always in postgraduate medicine), distributed information leaflets and sent out press releases to various journals and promoted the television service which aired at regular times, just like terrestrial television, by creating and distributing provisional timetables with broadcast listings.⁴¹ The 'Television Bulletin' was a A4 document, either a photocopy or printout with a table of screenings pinned up on noticeboards outside the lecture theatres where the lectures were screened. A 'discourse' was broadcast each week of the term; it was transmitted at different times on four successive days (for example, 17:30 Mondays, 13:00 Tuesdays, 11:00 Wednesdays, 17:00 Thursdays).⁴² Other organisations assisted in the effort to promote the programmes to external institutions such as the BUFC (the British Universities Film Council as it was then) by distributing information sheets. Other medical institutions were able to borrow videotape copies and this facility was critical for some of the colleges in the Federation which were too far away to be cabled into the network (like Royal Holloway in Surrey and Westfield in Hampstead).43

Professionalising Television Production

Recruiting, training and retaining personnel is a major theme in the departmental archives and this emphasis points to the legacy of the Centre in terms of its wider impact on the sector. When fully operational, the output of ULAVC was managed with a staff of 21 with five of these being producers. The lack of qualified technical staff was a problem throughout the lifespan of the department, although there was a core of established and experienced producers (the latter making up the senior levels of the production unit and many stayed until its demise) – the BBC in particular proved an attractive employer for junior technical members of the team with its structured (and unionised) pay scales and training (junior staff were often poached). Sala-

⁴¹ Clarke 1976, 5, Section 3. UoL/AV/1/8 DPAV.

⁴² GC/170/4/1, Wellcome Collection.

⁴³ Originally the material was distributed on ½" video, a precursor of VHS.

ries in the Centre were graded as academic positions and were lower than in the commercial broadcast sector. Specialist training had to be provided in front and behind the camera. Addressing the issue of what to shoot and enlarge the pool of available presenters at the university, the Centre created a series of academic television workshops in 1973 when for two hours over nine Monday evenings participants devoted themselves to production. On this occasion, 24 university lecturers took part (with a small cohort of female participants). The course composition was technical, creative and critical analysis.⁴⁴

There was an awareness that educational technology training was necessary alongside the ability to deconstruct the ingredients of a successful media production. Trevor A. Scott was part of this initiative; prior to joining the ULAVC he had attended a lecture course in which one component of the teaching was the 'Anatomy of Television' (although no further details exist). Later in 1985, Scott wrote a report which underpinned the significance of the Centre's "missionary role" in "clearly defined teaching and training", advocating for teaching and training provision in educational technology, which might include workshops, training courses and summer schools.⁴⁵

Democratising Media and Medicine

Broadcast television in the 1960s had struggled with ways to articulate science to the general public and its endeavours had met with criticism. ⁴⁶ In light of the University's academic standing in science and medicine, Michael Clarke was well-placed to lead the Centre: he was an experienced writer/producer documentarist and had made a number of films with science and technology as their focus for Shell, BP and ICI. ⁴⁷ Briefly, he had worked with Paul Rotha, BBC Documentary Department 1953–1955, and also Edgar Anstey, British Transport Films. ⁴⁸ The migration of many documentary leviathans into television broadcasting had opened the debate on appropriate presentation styles (whether vernacular or academic) and the nature of scientific television. ⁴⁹ With this in mind, there was an ambition for the Centre to create a new style of televisual education, perhaps even a new 'genre' of documentary

⁴⁴ Clarke 1973. UoL/AV/1/5 DPAV.

⁴⁵ Scott 1985. UoL/AV/6/6.

⁴⁶ Boon 2008, 225.

⁴⁷ http://bufvc.ac.uk/newsonscreen/search/index.php/person/1424 (accessed 6 September 2019).

⁴⁸ http://www.screenonline.org.uk/people/id/446796/index.html (accessed 6 September 2019).

⁴⁹ Boon 2008, 224.

production.⁵⁰ Tellingly, the subtitle of the Centre's inaugural series, *The Scientific Basis of Medicine*, was "television discourses", which appear to illustrate this desire. The history of the 'discourses' series harked back to a programme of actual lectures before their televisual iteration,

A series of reports by leading British (and sometimes) American 'authorities' on the current state of medical research intended specifically for post-graduate medical audiences, which were initiated by Sir John McMichael in the mid-1960s and continued as televisual lectures until the early 1980s.⁵¹

Arguably, it is only in medicine that ULAVC made genuine in-roads in creating a unique and distinctive production style: four titles have been selected to illustrate this and cover the medical production arc of the Centre showing how production capability evolved and matured to create televisual lectures integrating 'talking' heads, visual aids, demonstrations and drama (the 'playlet') to deliver messages about health and how the body and mind can interrelate.

As can be seen from Table 1, although there are clearly defined series, the extant productions at Wellcome largely cover the first decade of programming which was mostly in black and white. From a subset of the 150 productions which have been digitised and transcribed, four have been chosen as part of the analysis.⁵² (All programmes will be available for study across all the holding institutions in due course.) A close comparison of all the productions is not easy: as well as the patchy retention of titles (no examples of a topical series *Medicine This Week* have been retained, for example), there are many idiosyncrasies as the videos differ widely in duration with the shortest being eight minutes, the longest 58 minutes and a median duration of around 30 minutes. This is anomalous with comparable production types, where programmes are more homogenous in duration to fit around broadcast schedules. Certain medical specialities are present in number such as neurology and obstetrics/gynaecology and anecdotally, this related more to the media proficiency of individual lecturers rather than an overarching strategy. The duration of each lecture was led very much by the individual lecturer, conforming to a typical lecture unit and lending itself to the lectures being introduced and mediated. An approximation of the audience cctv viewing experience can be imagined in an illustration extrapolated from Brynmor Jones' report.

⁵⁰ Boon 2008, 3.

⁵¹ M/IMA 14/5/91, Wellcome Trust.

⁵² The selection of videos was also made in response to how the social forms and functions of television stage health behaviour. For more examples, see ERC BodyCapital Project, http://bodycapital.unistra.fr/en/?no_cache=1 (accessed 29 September 2019).

Table 1: Wellcome Collection ULAVC Video Holdings

ULAVC Series/ Description / Sample Titles	Date Range		Wellcome titles held
The Scientific Basis of Medicine: Series of reports by leading British and American authorities on the current state of medical research intended for post-graduate medical audiences, initiated by Sir John McMichael in the mid-1960s and continued until the early 1980s. Sample titles: 'Fever'; 'Hypertension'; 'Muscle Fatigue'; 'The EMI Scanner'; 'The Biology of the Heart Muscle'.	c.1971–1977	4/80	84
Uptodate: Programmes on current research in half-a-dozen medical specialities, notably clinical nutrition, cardiovascular disease, obstetrics and gynaecology and respiratory diseases. Sample titles: 'Modern Management of Angina'; 'Atherosclerosis: epidemiology'; 'The Causes of Obesity'; 'Rickets'; 'Intersexual Disorders'.	c.1971–1979	0/65	65
Not noted (pending detailed cataloguing)	1971–1988	13/33	47
Clinical Medicine (including Clinical Neurology, Clinical Procedures and Studies in Clinical Neurology): Sample titles: 'Cardiac Arrest'; 'Alcoholism: what are the causes'; 'Severe Asthma: Assessing Severity and Monitoring Recovery'; 'Breast Feeding: practical problems of technique'.	1971–early 1980s	10/36	46
GPTV: (pre-cursor of British Medical Television): Sample titles: 'The Elderly Patient in General Practice'; 'I Want You To Take These Tablets'; 'The Battered Child Syndrome'; 'An Introduction to Acupuncture'.	c.1972–1982	11/33	44
Current Research in Obstetrics and Gynaecology and Dialogues in Clinical Obstetrics: Sample titles: 'Hormone Replacement Therapy'; 'The Management of Pre-eclampsia'.	c.1979	0/14	14
Evolution of Community Medicine: Sample titles: 'The Rise of the Public Health Movement'; 'Destruction and Reconstruction / From Public Health to Community'.	1984	0/7	7
n/a: test tapes and production material not for broadcast	1970s	0/22	22

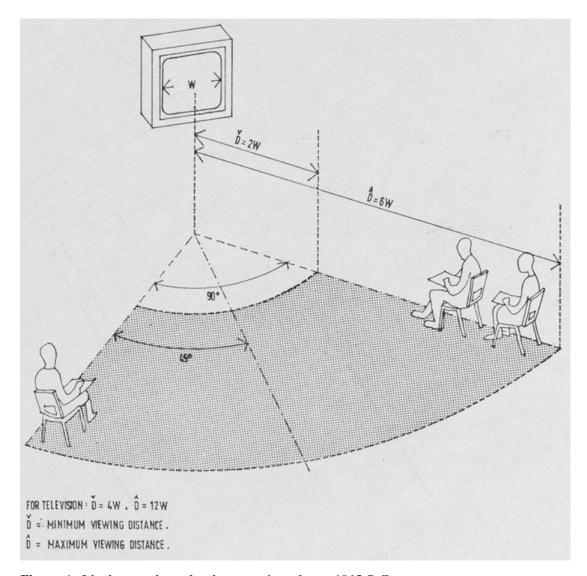


Figure A: Ideal room shape for the reception of cctv. 1965 © Crown.

ULAVC's programmes include many televisual conventions which match our understanding of what broadcast television should be such as distinctive programme credits with music, a presenter or anchor person and closing credits. Beginning with 'talking heads' and a limited number of visual aids, the production of the earliest series reveals the craft of television being learnt. Only later did the Centre's television production output become more sophisticated and engaging.

'Fever', is an exemplar of a television discourse from 1971 of 31 minutes duration; it is one of the earliest to survive.

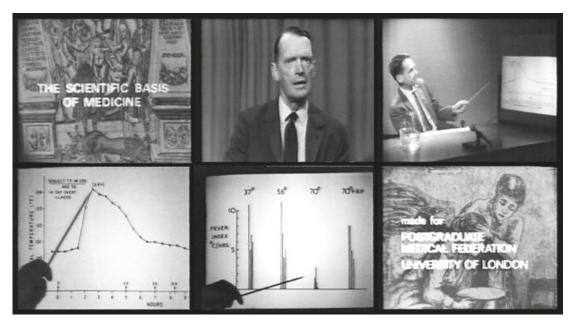


Figure B: From 'Fever', presented by W. I. Cranston, Professor of Medicine at St Thomas's Hospital Medical School, London, a 'television discourse' from *The Scientific Basis of Medicine* series. 1971 © University of London.

Programme Summary: W. I. Cranston, Professor of Medicine at St Thomas's Hospital Medical School, London, talks about fever. A further summary accompanying the cassette reads: The programme briefly reviews early experiments on the mechanism of production of fever. Evidence is shown that bacterial pyrogens or endotoxics are not the cause of fever in disease. The distinction is made between endotoxin and leucocyte or endogenous pyrogen. Professor Cranston discusses the production of human leucocyte pyrogen, the mechanism of production, its release by cells, its sites of action in the central nervous system and the evidence for its presence in human febrile illnesses.

Typical of each production is a short opening sequence with classical music on the soundtrack before the studio-based lecture begins (Fig. B, top left, the rostrum camerawork is from a two-dimensional work followed by an image relevant to the theme of the programme which gives it a distinct identity). There are short final credits at the end (Fig. B, bottom right), a familiar feature of broadcast programming. The 'anchor', Dr Ian Gilliland (Fig. B, middle top row), introduces Professor W. I. Cranston: this sequence and others in the series were recorded separately to the lecture itself. Gilliland, plays to this media convention by turning to one side of the frame before his image fades and the lecture begins. The lecture is videoed in real-time, with two cameras and in camera vision mixing edited using a shooting script (examples are held in the production archives of the Centre held at Wellcome Collection). The lecturer is videoed presenting to camera

and interacts with a variety of visual aids (Fig. B, top row right). The camera zooms in and out on the visual aids, in a restricted studio setting. Although the tone of the lecture is relatively formal, Cranston is a confident lecturer and has a clear spoken voice (with a Scottish accent), which lends him a certain degree of charisma and contributes towards ranking him somewhat highly in terms of being 'telegenic'.

Whilst being videoed, Cranston is restless and uses the swivel and rocking mechanism of his office chair; it is not hard to imagine him delivering this lecture by pacing in front of his students, but speech and movement isn't compatible with studio production – poise in front of the cameras is something which comes with experience and both behavioural ticks and gestures are magnified on television. Also notable is that the room is very brightly lit and there is an obvious spherical reflection of the light on the visual aids as well as brightness reflected on the presenter's face and shirt (Fig. B, middle bottom row).

The content and pacing of the lecture itself are characteristic of material which was considered suitable for students engaged in pre-clinical studies; the educational load is quite intense requiring significant concentration on the part of the viewer. There are five graphs, a chart, an index and several diagrams, which illustrates cause and effect. The narrative arc of the lecture has a dramatic 'punchline' delivered at the end – that there really isn't certainty at all about how people become febrile (feverish) and that the general 'philosophical question' about why people are febrile remains unanswered. On the one hand we are being given a message about how the body functioned physiologically with the predictability of a machine, and on the other sometimes it is unpredictable. The final provocation could have led to lively discussion.

This early televisual experiment contrasts with a more varied and sophisticated lecture from 1974, 'Muscle Fatigue'.



Figure C: A lecture by Dr Richard Edwards, Wellcome Senior Research Fellow, Royal Postgraduate Medical School on 'Muscle Fatigue', a 'television discourse' from *The Scientific Basis of Medicine* series, 1974. © University of London.

Programme Summary: Dr Richard Edwards lectures on muscular fatigue in humans. This is a sustained lecture of 46 minutes duration covering the general physiology of muscle activity (in the context of neuromuscular disorders) made for the BPMF. In one scene, a human subject is used to demonstrate a small piece of technology which measures muscle force when pressing against it. This is one of a battery of tests to develop a clinical evaluation of muscle weakness. What frustrates this empirical approach (and most of the video is dedicated to this) is a lack of "voluntary effort" due to "failure of drive for psychological reasons", which contrasts with the given fact that "athletes have better endurance, perhaps because of improved motivation" – so a disjunct between what is *felt* and what is *recorded*. This leads to the body being characterised as a 'machine' with measurable inputs/outputs ("myofilament measurements") and being disembodied and physiological rather than emotional. Edwards ends his lecture to camera with "I myself have had nine biopsies", an allusion perhaps to the long-tradition of physiologists using their own bodies as an experimental canvas. (But this also speaks to the accusation that the lecturers had to 'perform' and become 'entertainers' for the camera.)



Figure D: 'The Causes of Obesity' is an example from the series *Uptodate* and is presented by Dr W. P. T. James, MRC Dunn Nutrition Unit, University of Cambridge, 1977 © University of London.

Programme Summary: Dr W. P. T. James talks about the causes of obesity. He states from the outset that he is not going to look at unusual medical abnormalities associated with obesity, but at the simple, familiar types of obesity that affect ordinary people every day. He defines how obesity should be measured using weight for height criteria. As statistics show that obesity frequently starts in childhood, James looks at social factors affecting its onset as well as demographic features and studies into metabolism.

James lectures on the discourse in the medical profession about obesity. In this video, he looks at the definition of obesity by studying height versus weight, considering weight gain from childhood to adulthood. Interestingly, this video looks at the social factors which might affect the onset of obesity using an example of a public information leaflet in the format of a printed cartoon. The com-

mentary over the cartoon strip allows James to deliver a multi-dimensional 'reading' of the text demonstrating its explicit meaning and implicit subtext. The prevailing view, as articulated in the programme, is not dissimilar to other public health information films of the time such as the film made for parents in 1968, 'Cruel Kindness', with its message that "it is a cruel kindness to feed your child too much". Reflecting the view taken by the medical profession, that it is the parents at the heart of obesity in children, James comments judgementally about people's body types and personality traits; "fatties and thinnies" and personification as "gluttony and sloth". He mentions "nutritionally inappropriate meals". These charged words create a psychological distance between the material and the viewer: James' use of idiomatic language is a shift away from the norms of medical programming when the correct medical terms are deployed, and the tone is formal. Although this clearly creates rapport between the lecturer and the viewer, it speaks to the criticism that television lacked intellectual rigour: his choice of vernacular words illustrates the shift away from medical to social reasons for behaviour which are less controllable, and perhaps less scientific. The tone of this programme is that behaviour which is unfavourable to health happens in the general population and the viewer is in a superior position of knowledge. Novel aspects of the video are that the body is healthy but flawed; belief over reality prevails (for example, people are unable to judge their frame size – choosing to believe they are large frame rather than obese) and the suggestion is that there is a breaking down of societal norms coupled with the intractability of human nature to do what is beneficial for health; "she is in fact eating at a table and that, of course, is becoming increasingly unusual". Not eating as a family is still cited as a reason for childhood obesity;

It has long been held that the traditional practice of families eating around a table together can be enormously beneficial to children. Eating together as a family can help to teach them important social skills, while those who eat with their parents are also less likely to be truant from school and are less likely to be obese.⁵³



Figure E: 'An Introduction to Forensic Psychiatry' from the *Key Topics in Modern Psychiatry* series is presented by John Gunn, Professor of Forensic Psychiatry, Institute of Psychiatry, London, with Richard Ireson. The Medical Editor was Dr Julian Bird. 1980 © University of London.

53 Smith 2017.

Programme Summary: By means of a re-enacted interview with a patient, Professor John Gunn reviews the interrelationship between the clinical and legal roles of the psychiatrist in diagnosing mental states of alleged criminals and in their trial and disposal. By means of a re-enacted interview with a patient, Professor John Gunn reviews the interrelationship between the clinical and legal roles of the psychiatrist in diagnosing mental states of alleged criminals and in their trial and disposal. He explores the differing concepts of 'responsibility', and looks at the three phases where the psychiatrist's contribution is critical: a) in the evaluation of fitness to plead, b) in the establishment of intent to commit a crime, and c) in the sentencing, choice of treatment and long-term care.

This colour video is from a sub-genre described as 'trigger' tapes in which a scenario is recreated for consideration and discussion. This scenario or 'playlet' features a case history of a patient who murdered his wife; the man (played by an actor) gradually discloses what happened and how he realised that his wife was dead. This approach was very effective; the producer, Peter Bowen, recalled an occasion when some viewers had not realised that actors had taken the parts of the patients; he received complaints about the perceived breach in patient confidentiality. The inclusion of actors in this programme is foregrounded to avoid confusion. The performance is understated with appropriate pauses and hesitation, there is considerable dramatic and artistic licence used to achieve a convincing portrayal of this man – his demeanour, general appearance and clothing all combine to contribute to this.

The style of this programme is many evolutionary steps away from 'Fever' and 'Muscle Fatigue'. Gunn interacts with the actor and studies the case notes as part of this discussion – lecturing as well as acting as the clinician in a version of himself. The model of the body-mind is demonstrated as complex and unpredictable; 'responsibility' being unreliable when the mind becomes dysfunctional especially under physical stresses caused by epilepsy, for example. The video invites the audience to be participatory; Gunn asks the audience to think about 'our' friends and encourages empathy. He is also aware of the boundaries of the medium of video (the use of actors, 'jump' cuts in the narrative) and summarises the effects of watching "this tape". This speaks to a considerable shift in the expectations of the University viewing audience's media literacy.

Conflict

This section explains how the Centre's growing professional expertise and commercial activities, in the context of the internal and external pressures of the time, created a conflict of interests and, arguably, caused the Centre to over-reach its position as a University department and led to its demise. Despite the evident ambition which underpinned educational television, the acceptance of television at the University polarised views about its value. Clarke reported the following:

... cases are still known however of heads of department, in scientific subjects, forbidding their junior colleagues to use simple television techniques in practical classes.⁵⁵

This is because the perception of educational television as produced by the Centre suffered in relation to 'public' television; "the analogy with public television dies hard, where we reluctantly or avidly take what we are given".⁵⁶ Here Clarke appears to be referring to the perceived passivity of the audience and television's inherent lack of interactivity. Furthermore,

[t]his type of academic hauteur is perhaps a hangover from attitudes to public television, where a BBC Horizon programme, for instance, will properly simplify and generalise an aspect of science: many scientists and scholars in the University still seem to believe that television can only simplify and dilute; thus they ignore its real possibilities and so not read, or digest, the information circulated by the Audio-Visual Centre.⁵⁷

There was, and still is, criticism that television over simplifies and 'dumbs' down' science.58

Martin Hayden provided an insight into this disjunct between the core purpose of the department to support pedagogy and "academic hauteur" or reluctance to engage with the medium:

... the often eminent researchers and clinicians just didn't know what to make of us Scruffy Young Men, who practiced a kind of professionalism completely alien to their own. And behind it all, two particular fears. One, that we were somehow part of that PUBLIC and outside world of media business and tabloid communication. (We were not of course; we were entirely committed to their professional colleagues and closed audiences.) Two, that "televising" their "lectures" would eventually do them out of the need to give their lectures at all, and hence do them out of a job.⁵⁹

- 55 Clarke 1975, Appendix. 5, Section 3. UoL/AV/1/7 DPAV.
- 56 Clarke 1976, Appendix. Section 3, 6, Item (b) (i). UoL/AV/1/7 DPAV. 57 Clarke 1976, Appendix. Section 3, 7, Item (b) (ix). UoL/AV/1/7 DPAV.
- 58 The Pilkington Committee on Broadcasting (1960) was established to consider the future of broadcasting in the UK. Looking critically at the depth and breadth of science programming, it addressed the accusation that television 'trivialised' science. Boon 2008, 225-6; Burns 1977, 40.
- 59 Email from Martin Hayden to Angela Saward, 29 April 2019. Current university practice is that student lectures are made available in a university's virtual learning environment, per-

Noted by production staff was the pleasant, informal work culture, its "egalitarianism", which disrupted the notion of "wearing one's rank" and made the staff stand out against the default academic norms (and their mode of dress, favouring jeans and jumpers rather than suits and ties). It exposed them to the prejudices of their academic colleagues because these "scruffy young men," were perceived to hold significant creative and editorial power. 61

The professionalisation of the production process and the way it became a 'factory' standardising the way programmes were made contributed to a higher standard of production. Moreover, to avoid 'grafting on' a lecturer as an 'entertainer', new modes of programming had to be developed such as the 'trigger' series which co-opted and integrated televisual conventions into the audience viewing experience so as not to simply append a humorous or 'philosophical' coda (which had been the case in earlier examples such as 'Fever' discussed above).

Despite the requisite investment in time, Peter Bowen,⁶² who was hired in 1970 and worked at the Centre until 1974, recounts that most lecturers-cum-presenters were reluctant to commit to spending too long in preparing the lectures: lecturers would meet prior to recording and share their teaching materials, this could be prepared for recording in advance (using the services of the inhouse designers). The next meeting was likely to be at the recording itself. The 'heavy lifting' in the production process was all borne by the production team at the Centre. Peter Bowen clarified this process,

I suppose you could say that we at the Centre were a bit like a factory, responding to a commission from the sponsor and working within those limits. We weren't the originators of what we produced, and we didn't have much contact with the consumers of the product.⁶³

The 'factory' approach also led to a degree of specialisation; Peter Bowen worked primarily on the medical roster of programmes having been recruited to head up the BPMF's video programme (39 titles credited to Bowen are held at Wellcome). He recalled a phrase which Clarke used in defence of the criticism that the department was not using the televisual medium to its fullest extent: "Who writes a sonnet to the milkman?".⁶⁴ By this he means that the production aesthetic they had developed was entirely appropriate for their defined audience.

haps in response to the increase in student fees and the need to demonstrate value for money. 60 This phrase was mentioned by Pat Gulliford (former Administrative Assistant to Clarke);

⁶⁰ This phrase was mentioned by Pat Gulliford (former Administrative Assistant to Clarke): telephone interview with Angela Saward, 25 January 2019.

⁶¹ Burns 1977, 286. Burns interviewed production staff in 1963 and 1973 in an analysis of the BBC as a working community and an occupational milieu.

⁶² Email conversation Peter Bowen to Angela Saward, 06–14 May 2019.

⁶³ Ibid.

⁶⁴ Ibid.

Successes

Looking back at the financial year 1974–5, The Committee of Management reported that there were 1435 known uses of the ULAVC's material in the London area, 541 uses in higher education elsewhere and 108 miscellaneous uses abroad or by commercial firms. Notably, Clarke mentions that not only the rate of original production was as high as in postgraduate education elsewhere in the UK, but that distribution was higher than any other university.⁶⁵

Sales figures rose too in the mid-1970s; in 1974–75, sales forecasts were £3000 versus actual sales of £4000, although there is not enough granularity to discern the most popular titles over time.⁶⁶ The Centre rapidly realised that it could increase its reach and augment its federal grant with a new revenue stream comprising of the commercial distribution of videos at cost (the mark-up of which in time increased with pressures on funding).

Overall sales figures (either loans, sales or copying) were provided in the annual reports as a key indicator of the Centre's success.⁶⁷ There is only a broad indication of what titles were the most successful such as titles which had a clear educational brief. The *Uptodate* series on cancer research and immunology were considered good examples of the Centre's work as they dealt in depth with a topic.⁶⁸ When the GPO withdrew the cable service which hosted Channel 7 on 31st March 1977, the impact of losing the television service was mitigated by the emergence of an alternative distribution 'network'; the postal service itself due to the commercial sales operation which had developed for domestic sales. (There was also great potential for overseas sales to develop in the English-speaking World, although audio-visual material was routinely held up at Customs and the administration proved too burdensome).⁶⁹

During the financial year 1979–80, the department needed additional revenue to upgrade equipment (due to the shift from black and white to colour picture production) and entered into a programme distribution agreement with The Open University via its commercial arm, Open University Educational Enterprises, which became the Centre's exclusive overseas distribu-

⁶⁵ Clarke 1976, 3, Section 2. C. UoL/AV/1/7 DPAV.

⁶⁶ Clarke 1975. Appendix, 2. UoL/AV/1/7 DPAV.

⁶⁷ Commercialisation is a key feature of university marketing: many MOOCs (Massive Open Online Courses) free at the outset are promotional tools to engage potential students, earn fees and/or improve international student recruitment.

⁶⁸ Clarke 1975, 2, Section 2. UoL/AV/1/7 DPAV.

⁶⁹ Clarke 1976, 8. UoL/AV/1/8 DPAV.

tor.⁷⁰ The Open University typically had very small production teams and limited expertise in science programme-making (only one producer specialising in science) so this was expedient for both parties and an endorsement of excellence for the Centre's programmes and could have led to further commissions. However, fulfilling the demands of the University of London's departments was already very challenging and without more investment, this opportunity was wasted. Within the restrictive financial climate, the core production activity of the Centre just about survived. Scott, now the longest-serving and most senior producer continued his high output of productions and staff at the Centre engaged in important advocacy in the sector by representing their work at conferences.⁷¹ The expertise of the Centre was critical in providing support for the University's diverse extra-mural, part-time and continuing education portfolio of courses (unique in the sector at the time) and this shift in strategy they defined as "collaboration".⁷² This was to emphasise that production alone was no longer core to the department, instead being superseded by another and increasingly important strand of activity, "communication and instruction" or training.

Practical media training was necessary alongside the ability to deconstruct the ingredients of a successful media production. In 1985, Scott ran an introduction to educational technology as part of the department's emerging role of being a training department. In addition, reflecting the growth of interest in Television Studies as a discipline and an acceptance of television as a credible medium of study, Scott developed a Master's module on Television Drama available via the University at Royal Holloway, part of the Federation of London Universities. As part of his own research for a MPhil/PhD at the Institute of Education's Department of English and Media Studies, Scott began an investigation into the influence of production values, method and the style and effectiveness of educational TV, video and media using the work he had created for ULAVC. (Unfortunately, this research was never completed due to the pressures of work).

Michael Clarke as director of the Centre over a period of successive technological change commented in his final report (there was no annual report produced for 1983-84) that "it became unfashionable not to be a technological optimist".73 His comment about technological "optimism" is charged

⁷⁰ The Open University was established in 1969. http://www.open.ac.uk/about/main/ (accessed 21 June 2019). It is the "leading university for flexible, innovative teaching and world-leading research in the United Kingdom" and is best known for supporting part-time adult distance learners by delivering teaching remotely, partly via TV programmes.
71 Clarke 1982, Document A, Agenda Item 4, p.3 Section 2. UoL/AV/1/9 DPAV.

⁷² Clarke 1982, 2–3 para. 23. UoL/AV/1/9 DPAV.

⁷³ Clarke 1982, 1, Section 2. UoL/AV/1/10 DPAV.

with irony; his tenure had been characterised from the beginning by surmounting every technological shift regardless of the funding headache it presented – his investment was both professional and personal.

Upon his retirement, colleagues and industry peers collaborated on a slim publication dedicated to Clarke entitled *Continual Change* in celebration of his career. Hayden reflected on the ethos of the department and the passion behind their endeavour:⁷⁴

... we were engaged in something rather radical and challenging compared to broadcasting. We were accessible to media amateurs because we didn't have to make popular products. Productions for specialised audiences of learners did not have to contain the lowest-common-denominator features supposedly required to make subjects digestible for mass-audiences. It was not that popular invariably implied bad; more that specialised implied freedom from constraints of consensus. So we had a chance to work on selected, detailed erudite topics: to make no apology for them since audiences would be motivated (no matter whether by intellectual thirst, professional ambition or fear of examination). At the same time, we wanted to be professional – to offer the advantages of a craftsman-like approach but without the concurrent tendency to trivialise and condescend too often associated with that word 'professional'.75

Although initially the televisual lecture format appeared limited in scope, one of the Centre's great successes was the wide appeal and distribution of these programmes in the sector – largely out of commercial necessity but providing evidence of the transferability of the subject matter and content. Martin Hayden, who produced many programmes for the ULAVC and continued his career in media production at Brighton Polytechnic as Head of Media Services (developing the 'trigger tape' videos for different professional audiences)⁷⁶ observed that regardless of the seeming out-datedness of the programmes, the organisation captured medical history in the making: how cholesterol became implicated in health and the role obesity and diabetes play in morbidity, for instance.⁷⁷

In the 1980s, several innovative productions threw a spotlight on the Centre; notable examples are an interactive videodisc and a computer-generated three-dimensional analyph film, 'The Structure and Function of Haemoglobin', described as "a major piece of applied research into the possibility of computer production of stereoscopic motion-pictures". Upon Michael Clarke's retirement in 1984, his deputy, David R. Clark, was appointed Director of the Centre. He repositioned the department at the cutting edge of

⁷⁴ Bagshaw 1984.

⁷⁵ Hayden 1984, 24.

^{76 &#}x27;Awkward Readers', 'Awkward Libraries' and 'Awkward Colleagues', are examples of productions made for Brighton Polytechnic. Email from Martin Hayden to Angela Saward 19 May 2019.

⁷⁷ A series of seven videos on atherosclerosis (a fatty build up in the arteries) was made for the *Uptodate* series, in 1975.

applied information technology (interactive laser disk technology, for instance) so the focus of activity shifted again. This was the point at which the department, arguably, achieved its greatest success but also faced the conflict of needing to create a commercial offer to support its activities, well beyond the well-established network within the University of London and its colleges, which required scaled up marketing and distribution systems to be successful. Exposure to these market forces led directly to its demise.

Challenges

Audience numbers were never collated or analysed as the Centre's clients were the departments and lecturers, so there was no formal communication with actual students. Although, in 1976, the Committee of Management reported on the findings of a newly appointed departmental Liaison Officer whose role it had been to gather feedback forms from the colleges in the federation regarding the take-up of the closed-circuit television service. There were lots of non-respondents to the questionnaire and, when followed up, a lack of enthusiasm for the cetv model emerged. Respondents indicated that the television service had been set up in the wrong places, in busy lecture theatres, for instance. The upside to a centralised procurement process (how the service was rolled out to the federation) was that there was strength in numbers; the downside was individual needs of the Schools and Colleges were not addressed.

Colour television was a reality for public broadcast television from the late 1960s (BBC2 started broadcasting in colour in 1967), but in the university sector, colour video only became feasible from the mid-1970s. Shooting and broadcasting on colour video tape required all the equipment from camera to television sets to be replaced, which was a considerable expense, so there was a delay between its availability and adoption. By 1976 some post-graduate medical centres that had been using the department's production tape library refused to borrow monochrome videos (those in black and white) and so much of the earlier video material became redundant. Also colour television production proved technically challenging as the Centre used 1" IVC recording to 1" B tape, a system which was not adopted by UK broadcasters and therefore did not have industry support:

Techniques which are commonplace in monochrome production, such as videotape editing, do not always work as satisfactorily in colour, despite the claims of manufacturers; while the

78 Clarke 1975, Document C., 3, Section 4. UoL/AV/1/7 DPAV.

drop in resolution when a one-inch master recording is transferred to video-cassettes has proved more perceptible in colour programmes than in monochrome.⁷⁹

The BBC also experienced difficulties with colour television production as it required more complex equipment and more staff to operate it.80 The Centre had been propelled into more commercial activity due to the adverse political climate under the Conservative Government led by Margaret Thatcher causing financial pressures. As a result, it became more involved in producing 'corporate' videos to promote the institution externally such as 'Not Just Another University' which broadcast on Channel 4 in 1987 to 1.8 million viewers.81 In 1976, the University of London sought to reduce the Centre's grant by 4%, representing a cut of £4800. Also, inflation and other costs which amounted to "incremental creep" were £3500 and together with a predicted deficit and a cut in the BPMF grant (due to colour production being available in an external audio-visual centre which was running under capacity),82 this meant that there was a large hole in the budget which was not readily resolved by cost savings, such as leaving producer posts vacant. Addressing the impact of reduced funding, the institutional consequences of this on what activities the Centre could continue to do, J. E. Webb, Chairman of the Committee of Management for the Centre argued that some of these costs were counter-productive in fulfilling the University's aim of providing a "Spielraum" of inter-disciplinary scholarship:83

Two tendencies can be discerned in many students today: a preference for inter-disciplinary studies, which is met by the course-unit system: and a preference for applied studies, [...] but in many cases the single-subject departmental structure raises difficulties in providing some of the subject combinations for which there would be student demand.

The work of the Audio-Visual Centre, for reasons inherent in the techniques with which it deals, may well be able to help with these problems. Television, film and sound recordings can assist with the problems of numbers, distance and timing and can often be used again and again.

Later, even bigger cuts were sought. Significant technological change, problems with personnel retention and then tackling the workload were all factors in this growing tide of problems. When the Centre sought some control over its destiny by offering solutions, the University sought the advice of a city-based management consultancy who decided to dismantle the operation. The consultancy listed a catalogue of criticism; lack of clear management and direction; the absence of team approach to business development; lack of business

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79 Clarke 1976, 10, Section 5. UoL/AV/1/8 DPAV.
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⁸⁰ Burns 1977, 267.

⁸¹ It was made for a budget of £28,000.

⁸² Clarke 1976. UoL/AV/1/8 DPAV.

⁸³ Webb 1976, 1. UoL/AV/1/8.

ness skills and consequent failure to capitalise on opportunities for developing profitable areas of work; lack of focus in relation to market opportunities; a scattered approach to business development and underutilisation of space and facilities. This was an incredibly harsh indictment of the work carried out by the Centre of the prior decades and unfortunately mirrors the fate of similar media production units in the United Kingdom.

Legacy

'Continual change' was indeed a constant: together with the educational, financial and technological turmoil already outlined, the need to maintain and relocate premises on numerous occasions loomed large in the official record. The designated premises were also not always fit for purpose which impacted on the Centre's videos: many of the tapes (One Inch IVC) became affected by mould which meant the tapes were no longer playable. Their original use had been ephemeral and the storage of the tapes in suitable environmental conditions was a luxury considering the premium placed on office and storage space in Central London. This was when the collection was at its most vulnerable and its retention was only due to the doggedness of the staff and their conviction regarding its historical value.

By the early 1990s, many of the departments who had been the Centre's clients had obtained media production equipment to create their own video programming as technology became smaller, cheaper and easier to operate, leading to centralised video production facilities going out of favour – a phenomenon which quickly spread across the educational sector. However, with the benefit of hindsight, it can be argued that the Centre had a role in transforming educational programme production in several significant ways; by training presenters (especially scientists and medical clinicians) and by providing experience to production staff thereby distributing or 'democratising' expertise in front of and behind the camera across the sector. Moreover, the Centre succeeded in creating a distinct aesthetic via the televisual lecture and new sub-genres within postgraduate education.

Conclusion

A practical concern for the archivist of audio-visual material is to preserve material for what might be unknown or unforeseen audiences in the future. This challenge is becoming urgent when considering the near obsolescence of analogue video formats: the prospects for analogue video material was summarised in 2013 as "So that's it: going, going, gone for analogue by 2023 unless something changes. Digitise now!!"84 Michael Clarke wrote to Wellcome in retirement with these final words:

The atmosphere during the last days of ULAVC, I gather, was not very happy, and it was fortunate that we had our meeting in May and drawn up outline plans for 'rescuing' the material. I suspect that if I had not written to the Principal of the University to report our discussions, the tapes and films really might have gone into a skip. As it was, preservation and continued access suddenly became the received piety, as it should have been all along [...].⁸⁵

From Clarke's perspective, the legacy of the Centre was embodied by the video material itself. Were these videos really "not very inspiring"? Both obsolescence in terms of the video formats and the shift from monochrome images to colour made many programmes redundant because no colleges wanted to show them to their students anymore. There was no great impetus to remake any videos although at least one series was re-made when the tapes became worn out. (All 20 videos produced for The London Fortran Course, made with UCL and the London University Press, were so successful that the master tapes wore out by being repeatedly played back and they had to be reshot).86 There is also an inherent redundancy in much medical educational content as current practice shifts and evolves over time. The videos reflect the discourse on obesity, exercise and the dichotomy of mind-behaviour of the time and this is what makes the archive so fascinating for the scholar of medical humanities and the history of medicine because the material can speak to new audiences of researchers rather than the original intended audience. The challenge for the Collections Specialist is to take the long-term view and anticipate these future audiences and uses.

The immediate legacy of the Centre was the continuation in the educational sector of many of the producers: this meant that the educational sector was seeded by like-minded media professionals who had started at the University of London and been mentored by Michael Clarke, which by osmosis connected them to the British Documentary Movement.⁸⁷ Behind the camera, this led to the professionalisation of the craft of audio-visual media production. In front of the camera, clinicians and medical practitioners appeared in many of the Centre's videos and, unlike today when researchers are encouraged to seek media exposure and participate in public engagement as

⁸⁴ https://www.prestocentre.org/blog/going-going-gone-prospects-analogue-audiovisual-content (accessed 21 June 2019).

⁸⁵ GC/170 acc. 401, Wellcome Collection.

⁸⁶ Email from Martyn Hayden to Angela Saward 29 April 2019.

⁸⁷ Boon 2008, 224.

part of their research impact statements, these videos are the only time their research can be heard in their own words. One example is, 'The EMI Scanner', 1975, from The Scientific Basis of Medicine featuring James E. Ambrose who co-developed the first Computed Tomography (CT) scanner. At the beginning of this research, the selection of lecturers appeared amorphous: the choice of lecture participants was probably highly curated (unfortunately some of the detail behind the selection is still obscure pending further archival research). The documentary evidence bears out Clarke's claim that the Centre was "the first large-scale, systematic use of videotape in British postgraduate medical education" and "the largest and most varied body of medical film and video". However, it is also likely due to the vicissitudes of time and the problems of preserving analogue video, that there may be little opportunity to compare similar bodies of audio-visual work as they either no longer exist or are on the brink of being lost. The "received piety" when it comes to the preservation of analogue video materials is now digitisation: alongside efforts to retain the medical-related videos at Wellcome Collection, the BFI is now playing a part in the preservation of this vulnerable video material with its major digitisation project, BFI2022.88

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- 'Muscle Fatigue', University of London Audio-Visual Centre on behalf of the British Postgraduate Medical Federation. Produced by Martin Hayden, 1974, B/W, https://wellcomelibrary.org/item/b17306048#?c=0&m=0&s=0&cv=0
- 'The Causes of Obesity', University of London Audio-Visual Centre. Produced by Trevor A. Scott, 1977, B/W,
 - https://wellcomelibrary.org/item/b17259204#?c=0&m=0&s=0&cv=0
- 'An Introduction to Forensic Psychiatry', University of London Audio-Visual Centre on behalf of the British Postgraduate Medical Federation. Produced by Martin Hayden, 1980, Colour https://wellcomecollection.org/works/tnta2bvv
- 'I Want You To Take These Tablets', University of London Audio-Visual Centre. 1974, B/W, http://catalogue.wellcomelibrary.org/record=b1678689
- 'The Microbioassay of Hormones', University of London Audio-Visual Centre on behalf of the British Postgraduate Medical Federation. Produced by David R. Clark. 1974, B/W, https://wellcomelibrary.org/item/b1680353x#?c=0&m=0&s=0&cv=0
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 - https://wellcomelibrary.org/item/b17443544#?c=0&m=0&s=0&cv=0

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- 'Atherosclerosis: atherosclerosis and diabetes mellitus', https://wellcomelibrary.org/item/b16799185#?c=0&m=0&s=0&cv=0
- 'Atherosclerosis: epidemiology', https://wellcomelibrary.org/item/b17271745#?c=0&m=0&s=0&cv=0
- 'Atherosclerosis: treatment of hyperlipidaemia', https://wellcomelibrary.org/item/b16769120#?c=0&m=0&s=0&cv=0
- 'Atherosclerosis: hypolipoproteinaemia', https://wellcomelibrary.org/item/b16769132#?c=0&m=0&s=0&cv=0
- 'The EMI Scanner', University of London Audio-Visual Centre on behalf of the British Postgraduate Medical Federation. Produced by David R. Clark. 1975, B/W, https://wellcomelibrary.org/item/b16802238#?c=0&m=0&s=0&cv=0

Full list of ULAVC titles held at Wellcome Collection:

https://search.wellcomelibrary.org/iii/encore/search/C__S%22university%20of%20london%20audiovisual%20centre%22__Ff %3Afacetmediatype%3Ag%3Ag%3AVideorecordings%3A%3A__Orightresult__U__X0?lang=eng&suite=cobalt

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- 'Cruel Kindness', British Life Assurance Trust for Health Education with the British Medical Association. Written and directed by Winifred Holmes, 1968, Colour, https://wellcomelibrary.org/item/b16676166#?c=0&m=0&s=0&cv=0
- 'Not Just Another University', University of London Audio-Visual Centre for Channel 4. Directed by Michael Orrom and produced by Trevor A. Scott, 1987, Colour, https://www.youtube.com/watch?v=JTcnd4o4rC8

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