

# Sample AHRC Technical Plan

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|---------|------------------------------------------------------|
| Author  | University of Bristol Research Data Service          |
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| Notes   |                                                      |
| URI     | <a href="http://data.bris.ac.uk">data.bris.ac.uk</a> |
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## Sample Technical Plan

The following is intended as an illustration of an AHRC Technical Plan. It is drawn from a real world AHRC proposal prepared by the Department of Religion and Theology and submitted to the AHRC. The plan is made public with the kind permission of the applicant, Dr. Rita Langer. This document also contains comments subsequently made by the anonymous ARHC technical reviewer, used with the permission of the AHRC.

Technical Risks, budgeting for technical items and copyright issues were covered in the wider 'Case for Support'. This document is not available. The Case for Support also contains the following statement, explaining how the planned digital outputs relate to the wider research questions:

"The audiovisual material illustrating individual cases of [ritualistic] food offerings is primarily aimed at school and university students, but the outreach potential beyond academia is great. I also envisage the dissemination of the videos in Sri Lanka and to expatriate communities in London and overseas. The presentation format of the material will be tailored to different audiences: a series of approximately 12 self-contained, short video documentaries of 2-3mins each will serve as teaching material for schools and undergraduate students and these will also be combined into a half hour documentary on Buddhist Cosmology, aimed at expatriate communities and researchers. An online photo exhibition will be aimed at all these users as well as the general public. All the media will be drawn upon to create teaching/lesson packs for secondary schools to give some context to the issues discussed."

## Kitchen Cosmology project: Technical Plan

### *Section 1: Summary of Digital Outputs and Digital Technologies*

| Output # | Digital output                            | Type                                      | Format/Duration/size                                   | Planned access                                                       |
|----------|-------------------------------------------|-------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------|
| 1        | 'Kitchen Cosmology' documentary           | Digital video                             | MPEG4, 30min, 500MB                                    | Open access via CBS website (bristol.ac.uk), Vimeo & UK Data Archive |
| 2        | 12x 'bite-sized' mini documentaries       | Digital video                             | MPEG4, 2-3min each, 40MB each                          | Open access via CBS website (bristol.ac.uk), Vimeo & UK Data Archive |
| 3        | 3x teaching packs for secondary education | Text with accompanying digital video      | PDF (text, approx. 5MB) along with videos listed above | Open access via CBS website (bristol.ac.uk) & JORUM                  |
| 4        | Online photo exhibition                   | Set of approx 80 digital images with text | JPEG, 1.5MB each                                       | Open access via CBS website (bristol.ac.uk)                          |

## 2a: Standards and Formats

In order to ensure the widest possible use I aim to disseminate the video in the widely adopted MPEG4 format. After consultation with JISC Digital Media and the BBC Archive, more ‘open’ video formats such as OGG Theora have been considered but discounted due to low uptake. The MPEG4 profile I intend to use is as follows: Progressive, 720x1080 pixels (HD), uncompressed audio. This represents an optimum balance of quality and usability. After consultation with the Web Team at Bristol, I can confirm that the target MPEG4 format is suitable for streaming and download via the bristol.ac.uk servers. MPEG4 is also a preferred deposit format for UK Data Archive and accepted by JORUM and Vimeo.

Any video footage with reuse value that we *do not include* within the named digital outputs will be retained in the native DSLR shooting format (MPEG4, 1920x1080) and will also be offered as ancillary material for download alongside the finalised documentaries on the bristol.ac.uk site and via the UK Data Archive.

Digital photographs will also be retained in their larger, .RAW format (and also made available for download) while lower resolution, JPEG surrogates will be created for the online exhibition.

## 2b: Hardware and Software

- 1x laptop computer and Final Cut Pro video editing package to allow editing in the field
- 2x external hard drives (not for long-term storage, only to allow duplicate backup in the field)
- 1x video kit: DSLR with HD video capability (Cannon 550d), video light and tripod with ‘fluid’ video head
- 1x audio recording kit: Senheiser MKE 400 Microphone with wind cover, boom pole, and headphones

*Note: Costs for each of the items listed here also appear in the ‘Justification of Resources and Project Budget’.*

## 2c: Data Acquisition, Processing, Analysis and Use

The timetable below outlines the significant technical tasks involved in the three year project:

|   | 2013 |   |   |   | 2014 |   |   |   |   |   |   |   |   |   |   |   | 2015 |   |   |   |   |   |   |   |   |   |   |   | 2016 |   |   |   |   |   |   |   |  |  |  |  |
|---|------|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|--|--|--|--|
|   | O    | N | D | J | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M | A | M | J | J | A | S | O | N | D | J | F    | M | A | M | J | J | A | S |  |  |  |  |
| 1 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 2 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 3 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 4 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 5 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 6 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 7 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |
| 8 |      |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |  |  |  |  |

- **Task #1 video preproduction/production phase:** research, hiring freelancers, meetings, location hunting, etc. and 2x field trips to Sri Lanka
  - first trip is dedicated to recording testimonies and private offerings (Nov 2013)
  - second trip to coincide with Vesakh festival (May 2014) is dedicated to recording public food offerings, festivals and feasts

- **Task #2 video post-production phase:** capturing video content, creation of first edits
- **Task #3 initial screening of edited videos:** at 20th Postgraduate Conference of Religion and Theology in Bristol (March 2014) and to a Bristol schools audience (October 2014)
- **Task #4 creation of second (refined) edit:** based on any changes required after first screening, addition of final voiceover and captions
- **Task #5 presentation of videos:** at one-day international workshop on “Food and Cosmology” in Bristol (March 2015), and present videos to the Sri Lankan expat community in London (Vesakh, May 2015)
- **Task #6 finalisation of media.** selection of photographs, authoring corresponding contextual descriptions, edit of mini-documentary, creation of written secondary school teaching materials. Authoring of written translations as Closed Captions (May/June/July 2014)
- **Task #7 academic dissemination phase:** preparation of digital outputs via the web, uploading videos to launch of bristol.ac.uk website. Deposit of videos and photographs with UKDA, videos with Vimeo and teaching material with JORUM (June-July 2015)
- **Task #8 wider dissemination phase:** documentary to be submitted to the 23<sup>rd</sup> Sheffield International Documentary Festival (June 2016); 14th RAI International Festival of Ethnographic Film (June 2017) and International Buddhist Film Festival (date to be confirmed). The project will participate in further 3<sup>rd</sup> party, public events throughout the third year of the project, including exhibition and film screening for wider audiences as opportunities are announced

#### **AHRC assessment: Project management**

The technical components of the project are very clearly managed. The capture, editing and management of the digital components of the project are suitably structured and divided between core research team members and additional experts. The PI has appropriate broad level experience to co-ordinate these activities. The timetable is clear and has appropriate milestones. The team have the required expertise both to assess the workload required and to complete it as planned. The resources are appropriate. There is no specific pilot phase for digital production but the timetable allows for development of outputs over time, and the potential for feedback and enhancement. I have no doubt that the research and dissemination outcomes could be completed given the management processes described here.

#### *Data storage:*

Bristol’s Research Data Storage Facility (RDSF) will be used to store the data during the project. The facility represents 2 million pounds of digital resilient storage, with ongoing capital investment. The RDSF is overseen by a steering group of senior research and support staff, which includes the PVC Research. Backup procedures are robust (overnight backup, copies held remotely on tape) and secured access is in place.

Recordings made in the field will be copied to the RDSF via a secure web connection, by the PI, as soon as possible, but some delays are expected due to Sri Lankan facilities. Therefore an external, portable hard drive (and an identical copy, for redundancy purpose) will be used for backup in the field. These will remain the responsibility of the PI and filmmaker (each will be carried separately). Checking the quality of recordings made and photographs taken each day will be the responsibility of the PI.

#### *Metadata:*

No exceptional metadata/cataloguing difficulty is expected during the project. The Final Cut editing package will be used to automatically log each video clip as it is added. During the project, simple

file/folder naming will be used to locate each piece of media as it is needed. A spreadsheet will be used to log participants' (interviewees') details and to ensure a release form has been signed by them. Extra documentation will be created for dissemination purposes (see below).

**AHRC assessment: Data development methods**

Digital video and photographic content will be captured during fieldwork and then edited together into a series of digital outputs, including documentaries, a website and learning resources. These will be delivered on-line, on DVDs, and during public and more intimate face to face dissemination activities. The digital formats proposed are appropriate and the choices made have been informed by expert advice. The use of standards is well articulated. There is limited discussion of metadata but I would agree with the applicant that the project poses no specific metadata requirements and given the expert consultation and output frameworks I feel happy that appropriate metadata will be generated and published. The proposed data development methods clearly fit with the research questions of the project. They are straightforward and present no specific risks. I am also convinced of the value of the proposed digital outputs both for future scholarship.

*Section 3: Technical Support and Relevant Experience*

I have completed the course 'Documentary filmmaking for Fieldwork' at Manchester University (2011) and have essential filmmaking skills such as video composition, lighting and sound recording. I have created two teaching videos on similar themes in Laos and Thailand. To cover more elaborate events, such as festivals and feasts, I shall employ a filmmaker with skills in advanced editing, post production and video delivery. I shall begin working with the filmmaker in the UK and we shall then undertake the field trips together.

Bristol is the host institution of JISC Digital Media, a national media advisory service. JISC Digital Media offers course within the University. A course on video production and editing will be attended by the project student. JISC Digital Media are also able to offer, wider ongoing support throughout the project.

The Public Relations Office (PRO) team are available to advise on building the project website which will be used for delivery of the streaming videos and as a digital photo exhibition platform. Both JORUM and the UK Data Archive have provided clear depositing guidance and will be available to answer queries during the project.

**AHRC assessment: Technical infrastructural support**

The digital infrastructure requirements of the project are clearly addressed. There is a local repository and also a range of external dissemination methods, and an external repository. The host institution will provide appropriate levels of support in terms of advice and facilities. There is no indication of a formal agreement in this respect but this seems implicit in the technical plan and other application documents. The recruitment of the web developer is not described in depth (although I have assumed that this will be an internal appointment from the Bristol webteam) and the application could make reference

to requirements for appropriate standards to be maintained on the project website (both in terms of language and technical details).

The experts consulted and the participants in the project have an excellent technical preparedness for involvement in this project. The backup provision is appropriate.

#### *4a: Preserving the Data*

In addition to serving as a data storage facility for the duration of the project, ACRC will undertake to preserve each of the digital outputs mentioned above, for three years beyond the end of the project on the Research Data Storage Facility, undertaking refreshment of storage media as required. These materials will be available on request. Sustainability and open access are discussed below.

##### **AHRC assessment: Data Preservation and sustainability**

The preservation strategies for the original and derived data are excellent, and fit with the research and dissemination proposals. Following funding the resources will remain accessible for at least the three years required. They will be disseminated through a range of channels, supported by social media and other mechanisms for promoting their existence and continued use. Embedding the content in learning resources will also encourage continued use. Maintenance of the resources described should require minimum intervention (despite the technical plan proposing a likely need for technical migration during the three years), and certainly none specifically from the funded project team. There is no stated plan to update the intellectual content of the resource after the funded period ends.

#### *4b: Ensuring Continued Access and Use of Your Digital Outputs*

The access arrangements and sustainability plans for each digital output are address below:

##### 'Kitchen Cosmology' documentary and 12x 'bite-sized' mini documentaries

The videos will be made available via the bristol.ac.uk website (both as streaming media and downloads) HD and SD versions will be provided to accommodate those with lower bandwidth. Closed Caption translations into Sri Lankan will be created by the CI and presented as an online option.

Videos will also be made available via Vimeo, a platform that is already well used by research students at Bristol. Appropriate metadata will also be provided to the existing Vimeo standard.

All video will also be available for download and re-editing by third parties. To facilitate this Creative Commons licenses will be assigned to each item. In order to ensure this usage is possible, the required permissions will be gathered from participants (using a suitable release form) before recording commences.

Once completed, no further amendments are required in terms of the intellectual content of these videos though (given the fast pace of media technology) new formats are likely to be required within three year of the project ending. It will be the responsibility of Bristol's Public Relations Office (Web Team) to generate these, inline with other video already present on the bristol.ac.uk domain. The domain is indexed regularly by Google and appropriate keywords will be used to improve visibility. Responsibilities for updating videos deposited with the UKDA and JORUM belong to those respective archives.

##### Online photo exhibition

Images will be presented online as simple JPEGs with textual descriptions. No format migration is expected to be required in the foreseeable future. Downloading of these and original .RAW format images will be permitted via Creative Commons licences. Responsibilities for photographs deposited with the UKDA and JORUM belong to those respective archives.

### 3x teaching packs for secondary education

The teaching packs will consist of text and a selection of the media listed above. Each will be a Reusable Learning Object (RLO) and deposited with JORUM for wider dissemination. Each teaching pack will also be made available via the bristol.ac.uk website. Keywords and other metadata, describing the resource will be provided to the existing JORUM standard.

#### **AHRC assessment: Access**

The website, repositories, DVDs and other mechanisms proposed are excellent. These will be supported by submission of content to festivals and exhibitions, and an array of public-facing (academic and non-academic) activities to mediate and promote these resources.

Each of these activities has been appropriately resourced given the research plan, and the existing expertise and facilities at Bristol. The technologies are all fit for purpose and have been carefully evaluated. Access will be open to all resources.

#### **AHRC overall assessment**

The technical components of this proposal are clearly and succinctly defined. The project team have sought appropriate advice, gained the necessary support to ensure a high quality, accessible set of resources. They have also identified a series of ways both to ensure the quality and diversity of the original material, and to disseminate this information widely.

My only clarifications related to the need for participants to be clear about the re-use of material under creative commons licenses (although I accept that this should be implicit in the statements regarding gaining permission, signed release forms etc. from interviewees), to the longer term access to the raw footage (although I again accept that the funding requires only three years), and for a specific articulation of the standards to which the project website will adhere e.g. in terms of language employed and technical accessibility rating (particularly given the audio-visual focus). Overall a very clear description of what sounds like an interesting and broadly accessible project.

**AHRC overall mark 6 (out of a possible 6).**