

# TECHNICAL CONSIDERATIONS AND PREPARATIONS FOR ANTHROPOLOGICAL FIELD RESEARCH DOCUMENTATION

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## Preamble

This document had its origin as the basic outline for a CIRDIS-internal field research preparation workshop organized for the members of CIRDIS' most recent research project "Trans-border Religion: Limbu Rituals in Nepal and Sikkim" (FWF P 29805)<sup>1</sup>.

After the workshop took place on May 3<sup>rd</sup> 2017 we felt that the straight-forward, checklist-style guidelines that had preceded its "practical application" part would—after some adaption and restructuring—provide a valuable supplement to the Data Management Plan<sup>2</sup> CIRDIS' core team compiled and published in 2016.

As the Data Management Plan states "...codifying strategies and concepts for the preparation, archiving and publication of original research data from the greater Himalayan area in CIRDIS' online archives." (DMP 2016:1) as its main aim this document is to provide useful guidelines and considerations concerning the time preceding the stages covered in the DMP.

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1 <http://www.univie.ac.at/cirdis/research/trans-border-religion>,  
<http://pf.fwf.ac.at/en/research-in-practice/project-finder/39821>

2 <http://www.univie.ac.at/cirdis/documentation/data-management-plan>

# 1 | Pre-departure Considerations

- What recording devices will be used?
  - available at CIRDIS
    - photo: Nikon D610 (2 SDXC memory slots) + D5100 (2 SDXC memory slot) including lenses, batteries, SB700 flash attachments and accessories; Canon IXUS 255HS (pocket camera, 1 SDXC slot)
    - audio: Olympus VN-8600PC (pocket personal recorder, 2GB internal memory only)
    - video: Canon XA10 (professional FullHD camcorder with extension handle for external XLR microphones, 64GB internal memory + 2 SDXC slots) including batteries and accessories
    - GPS: 1 Garmin Geko (further GPS trackers are available upon request through CIRDIS's cooperation partners at the Department of Geography and Regional Research)
- What accessories will be needed?
  - currently available at CIRDIS
    - device specific: batteries, lenses, chargers, USB-cables, memory cards (SDHC and SDXC; c.f. below for memory considerations and backups), ...
    - general purpose: 2 travel friendly tripods, a variety of medium to large equipment bags, flash lights, travel gear boxes, etc.
  - needed
    - additional memory cards and external HDDs for backup
- Equipment insurance
  - CIRDIS' equipment is no longer permanently insured
  - costs: e.g. ~150€ for a 3 month world wide travel insurance covering an equipment value of 4000€ with Zürich<sup>3</sup>; the insurance reimburses the acquisition value -20% (take care with older equipment, some insurances only cover the "current market value" which can quickly degrade to below 50% after only two years)
    - >> **MAKE SURE THIS HAS BEEN TAKEN CARE OF PRIOR TO YOUR DEPARTURE <<**
- Fill out CIRDIS' equipment usage form

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3 <https://www.zurich-connect.at/berechnung/kameraversicherung>

## 2 | Recording Format Suggestions and Storage Needs

- Image
  - Canon IXUS 255HS
    - photos: JPEG, 12MP (=high quality) ~= 2100 pictures/8GB
    - videos: in MOV (h.264) 1080p@24fps
    - >> THE QUALITY IS ACCEPTABLE IN GOOD LIGHT CONDITIONS BUT DO KEEP IN MIND THAT IT WILL ONLY RECORD 10MIN PER SHOT <<**
  - Nikon D610
    - photos: RAW(NEF)+JPG(basic) 24MP ~= 130 pictures/8GB
    - videos: MOV(h.264) 1080p@30fps (HQ) ~= 20min/8GB
  - Nikon D5100:
    - photos: RAW(NEF)+JPG(basic) 16MP ~= 300 pictures/8GB
    - videos: MOV(h.264) 1080p@25fps (HQ) ~= 20min/8GB
- Audio
  - Olympus VN-8600PC: mp3@192kb ~= 45h/2GB (internal memory only)
  - >> RECORDING IS MONO UNLESS ONE USES AN EXTERNAL MICROPHONE (3.5MM STEREO JACK CONNECTOR) <<**
  - ZOOM H2N: wav @16bit – 44.1kHz / 16bit - 48kHz Stereo ~= 12h/8GB
- Video
  - Canon XA10:
    - AVCHD(h.264) 1080p@25fps MPX ~= 40min/8GB
    - AVCHD(h.264) 1080p@25fps FPX ~=1h/8GB (currently suggested quality/size compromise)
  - Canon Legria HF G40:
    - >> KEEP IN MIND THAT THE G40 DOES NOT HAVE ANY INTERNAL MEMORY <<**
    - MP4(h.264/AAC) 1080p@50fps 35Mbps ~= 30min/8GB
    - MP4(h.264/AAC) 1080p@25fps 17Mbps ~=1h/8GB (currently suggested quality/size compromise)

### 3 | Storage and Backup Strategies

- general considerations
  - backup the recorded material on a daily basis
  - estimate your storage needs (generously)
- variant a: SD-cards + backup on internal/external drive
  - take enough SDXC cards (64 or 128GB) and leave all recordings on the cards
  - backup your new recordings on an external (or your laptop's internal) drive daily
- variant b: limited number of SD-cards (enough for 4-7 days of recording) + backup on two internal/external drives
  - run a daily backup of your new recordings to at least two internal and/or external drives
  - overwrite the SD-card content once they are full

**>> SD-CARD STORAGE IS ABOUT A FACTOR TEN MORE EXPENSIVE PER GIGABYTE COMPARED TO EXTERNAL HDDS => VARIANT A IS CONVENIENT BUT QUICKLY BECOMES VERY PRICEY <<**

### 4 | Power in the Field

**>> MANY OF THE RESEARCH AREAS COMMON TO THE MEMBERS OF CIRDIS ARE REMOTE AND NOTORIOUS FOR HAVING LIMITS IN THE AVAILABILITY OF ELECTRICITY AND/OR FOR FREQUENT POWER OUTAGES<<**

- golden rule: charge EVERYTHING whenever you have the chance (even if the batteries are only marginally emptied)
- take enough sets of rechargeable batteries to cover at least one full day of recording (ideally two)
- non rechargeable batteries are usually readily available in most places<sup>4</sup>
- consider taking a power bank to recharge mobile phones in the field, particularly if you plan on using them as GPS trackers

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4 for the limited number of devices that still use AA or AAA batteries



## 5 | Metadata: Guidelines and Best Practises

>> THE METADATA LISTED BELOW CAN BE APPLICABLE TO AN ENTIRE RECORDING SESSION (=SINGLE RECORDED EVENT/ENTITY) – E.G. MANY PHOTOS/VIDEOS/AUDIO RECORDINGS DOCUMENTING THE SAME EVENT/ENTITY, TAKEN AT THE SAME PLACE AND TIME – OR TO INDIVIDUAL RECORDS (SINGLE IMAGE/VIDEO/AUDIO RECORDING) <<

### a) minimum metadata needed for archiving in the HAV

- title (what has been recorded in two to eight words)
- description (what has been recorded in a few sentences)
- author (who produced the recording)
- place (where did the recording take place)
  - modern place name, current geographical and political hierarchies (country, state, district, ...)
    - provide Getty Thesaurus of Place Names<sup>5</sup> and/or Geotree<sup>6</sup> IDs at least down to the level they do exist (which is usually not far beyond state in our research areas)
  - GPS coordinates
    - GPS tracker
    - GPS tracker apps
      - Android (e.g. Geotracker<sup>7</sup>)
      - iPhone (e.g. Map3D<sup>8</sup>)
    - after the fact via QGIS<sup>9</sup>, Google Earth<sup>10</sup>, ...
- time (when did the recording take place)
  - use local time and do note the time-zone
    - e.g. India: UTC+5:30h, Nepal: UTC+5:45h
  - can be handled automatically through the time-stamp from the recording devices (c.f. considerations and best practices)

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5 <https://www.getty.edu/research/tools/vocabularies/tgn/>

6 <http://geotree.geonames.org/>

7 <https://play.google.com/store/apps/details?id=com.ilyabogdanovich.geotracker>

8 <https://itunes.apple.com/at/app/maps-3d-gps-für-fahrrad-wandern-outdoor/id426034047?mt=8>

9 <https://www.qgis.org/en/site/>

10 <https://www.google.com/intl/en/earth/>

- content language(s) (what languages are being used in the recorded event/entity)
  - ISO 639-1 = standardized two letter macrolanguage codes<sup>11</sup>
  - ISO 639-3 = standardized three letter codes featuring language variants<sup>12</sup>
  - name of dialect if not classified in the ISO standard (do provide the ISO code for the language family)

## b) useful (but optional) metadata

- local, historical place name or variant(s)
- persons involved (who was taking part) + role of persons involved (performer, narrator, interviewer, interviewee,...)
- your field specific categories (e.g. cultural/religious affiliation, ethnic group, tribe, object type and or classification)
- additional notes (free text)
- references to other media/recordings/websites
- bibliographical references

>> **GENERALLY SPEAKING: MORE IS BETTER (IF CONSISTENT!)** <<

## c) considerations and best practices

- sync the time of all your recording devices
    - ALWAYS USE LOCAL TIME and set up the time-zone correctly
      - don't forget to change, if you cross time-zones
      - some devices only offer full-hour time-zone divisions: if this is the case consistently use either the closest full-hour time-zone or UTC
- >> **MAKE SURE TO TAKE NOTE OF HOW YOU HANDLE THIS IN YOUR DOCUMENTATION** <<
- check the synchronisation every day, settings might get lost during battery change (they shouldn't but it does happen if the battery is out for too long)
- maintain the daily recordings in a structure way
    - depending on backup strategy
      - one folder per day + one subfolders per recording session (if necessary)
      - one folder per SD card

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11 [https://en.wikipedia.org/wiki/List\\_of\\_ISO\\_639-1\\_codes](https://en.wikipedia.org/wiki/List_of_ISO_639-1_codes)

12 [https://en.wikipedia.org/wiki/List\\_of\\_ISO\\_639-3\\_codes](https://en.wikipedia.org/wiki/List_of_ISO_639-3_codes)

- record all relevant information about your recorded sessions in a text-file EVERY DAY (we forget details quickly)
  - do not forget to include this file(s) in the daily backups
- be consistent
  - use ISO codes (languages, timestamps, ...), online thesauri etc. where they exist
  - maintain your own consistent, controlled vocabulary for everything else
- turn your field notes into structured metadata

**>> DEPENDING ON AVAILABLE TIME AND PERSONAL PREFERENCE CONSIDER DOING THIS ALREADY DURING YOUR FIELD RESEARCH TRIP <<**

- spreadsheet documents offer a simple way to maintain your metadata in a structured way and provide a good basis for a later (semi-)automated ingestion into the HAV
  - per recording session
    - folder: “20170501”
    - subfolder: “session 1”
    - videofiles: “xxxx.mp4 – zzzz.mp4, xxxx.mts – zzzz.mts”
    - audiofiles: “xxxx.mp3”
    - imagefiles: “xxxx.jpg – zzzz.jpg, xxxx.nef – zzzz.nef, ...”
    - title: “some event”
    - description: “stuff happening”
    - place: “somewhere”
    - time: “2017-05-15T19:20:00+05:45” (this is also saved in each file's timestamp if you set up your recording devices properly → c.f. below)
    - ...
  - per record
    - folder: “20170501”
    - filename: “XYZ.mp4”
    - title: “something specific”
    - ...

## 6 | HAV Copyright Agreement

- the HAV **strongly promotes** Open Research Data and thus open, non-restrictive license models (CC BY, CC BY-SA)
- the HAV supports more restrictive licenses (CC BY-NC-ND down to “all rights reserved”)
- keep in mind
  - ethical and moral concerns have to be taken into considerations (e.g. some materials might have to be closed to the public or released under a restrictive licensing)
  - embargo periods can be set

>> TODAY MANY FUNDING INSTITUTIONS (LIKE THE FWF) ENFORCE OPEN LICENCES FOR RESEARCH DATA GENERATED BY THE PROJECTS THEY FUND <<

## 7 | Informed Consent

- your local informants must be aware about your use of the data you obtain with or through them and particularly about the general implications of open research data
  - written consent is often impossible to obtain but documented consent can be obtained e.g. in the course of an interview
  - a witness (translator, local research partner) might also provide a way of ensuring consent

## 8 | Imprint

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