



Ethical and Responsible Research at CSMC

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'Treat others as you would like others to treat you. Treat others' objects as you would like others to treat yours.'

Preamble¹

The *Centre for the Study of Manuscript Cultures* (CSMC) and its Cluster of Excellence *Understanding Written Artefacts* (UWA) are a large international community of scholars from the humanities and natural and computer sciences who collaborate closely in studying written artefacts from the beginning of writing to the present day. Throughout their work, researchers interact with people (citizens, colleagues, and officials) as well as institutions. Such large-scale, global, and cross-disciplinary collaborations should be carried out in accordance with ethical and responsible research practices. The purpose of this document is to offer advice to researchers working on written artefacts and to provide a brief overview of common issues concerning the ethical treatment of researchers, artefacts, and data.

In all our disciplines, senior researchers are strongly encouraged to train students and early career researchers in the best practices and make sure that ethics is part of their education. Good scientific practice should be seen as a part of ethical behaviour.

1. Researchers

As a researcher, you act ethically when you

comply with the laws, regulations, and customs of the states, institutions, and societies you work in/with.

According to the <u>Bonn Declaration</u>, 'Freedom of scientific research is inseparable from a plurality of voices', research must be carried out with due respect to local practices and traditions, as well as the laws of the respective countries. If necessary, we must apply for research permits from government and academic authorities. With the application we often must agree to sending a report of the work performed, including all photographs taken and publications that concern the studied objects. This can apply to any data or material generated during the research. In teams, all members are responsible to keep such agreements.

¹ DFG document on good practices in research: <u>https://zenodo.org/records/6472827</u>

The European Charter for researchers: https://euraxess.ec.europa.eu/jobs/charter/european-charter





When working abroad, we may experience extraordinary situations. In some countries, freedom of research is limited and some topics are forbidden for ideological, religious, or political reasons, or because they might interfere with the official credo. In such countries, we may have limited access to the research objects and cooperation with local colleagues may be limited or even impossible; sometimes research topics can also be imposed by local authorities. Consent on research topics and objects should always be sought with the relevant institutions or, where applicable, communities of origin, especially when working with culturally sensitive objects such as sacred material.

No matter whether research topics are imposed or forbidden for ideological, religious or political reasons, researchers must act according to their own conscience in order to carry out the research. At the same time, they must be careful not to put themselves or others in a dangerous situation.

> avoid cooperation with institutions and individuals who are in conflict with the UN Declaration of Human Rights

When working with persons employed by institutions whose research policy is under the control of national politics, it has to be considered that these persons may act individually without necessarily being involved in the politics of their institutions. Some of them might even fight for the freedom of research in opposition to their government and thus risk imprisonment. In such instances, every precaution should be taken not to endanger these persons.

On the other hand, any cooperation with persons who are in conflict with the <u>UN Declaration of Human</u> <u>Rights</u> or whose political and/or religious standpoint is dubious – for example, by rewriting history in order to please their governments – must be avoided.

> are aware of 'double discourses' and of impediments to the freedom of research

This applies especially to the cooperation with persons who side with a regime with which diplomatic relations have been cut off because of war, violence, or oppression. In this context it is important to pay attention to possible 'double discourses', that is, to scholars expressing views in a local language that they would not express in other languages and vice versa.

Particularly difficult are situations in which governments rewrite their history or use cultural heritage for political, religious, or economic agendas. In such cases the researcher should, as far as possible, analyse and, eventually, make known any constraints imposed on him or her which may affect his or her research work.

> safeguard and help colleagues in financially or politically precarious circumstances

In some countries, scholars and the general population endure permanent violence through war, terror imposed by armed groups, government violations of human rights, dictatorship, and censorship. In such regions, it can be difficult or even impossible to conduct research and to cooperate freely with local colleagues without putting them in danger. Researchers may have to deal with multifaceted political and diplomatic relationships and situations.





It is important to respect local knowledge. When working with local colleagues, it is also necessary to consider carefully whether they are in precarious situations. Some of them may have fixed-term positions or no real academic background. They may also be deprived of access to scientific documentation (because it does not exist, because they have no access to libraries, to the internet, or even electricity, or because of a lack of language skills). Such cooperations must be based, as far as possible, on real joint work to which everyone contributes equally with his or her own expertise. This can be done by stating the possible contributions of each project participant from the outset.

Researchers should take into account that funding brought into cooperations with researchers in countries with authoritarian regimes may rise suspicion about the funded research activities; there can be severe consequences for the reputation or the physical well-being of the researcher on site and of those he or she works with. In turn, the potential impact of accepting funding or invitations from foreign institutions should be carefully assessed. Events organised by institutions that are based on funding from authoritarian regimes are likely to be intellectually controlled by such regimes; invitations from such institutions should be declined.

Researchers should also be aware of how funding from European or American governments or organisations might be perceived in the countries where they work. What is admissible (and even desirable) from one's point of view might be perceived as corruption by others.

> accept that conventions concerning authorship are different across disciplines, institutions, countries, cultures, and other value systems, and acknowledge all contributions to your research including those by 'hidden workers'

Practices differ across various scientific domains, such as the humanities, natural sciences, and computer sciences, with respect to, for example, the number of authors of papers, the order of the authors, etc. The same can hold true for different institutions, countries, cultures and value systems that are involved in your research. When cooperating in a specific project, each contribution has to be acknowledged and, where possible, provision should be made for joint publications. All contributions by 'hidden workers', i.e. people helping to find and to access research materials etc., should be explicitly acknowledged. When employing local workers for specific tasks, it is important to provide an adequate remuneration.

There is a certain danger of inventing interviews in participatory sciences such as ethnology, anthropology, and sociology. The interpretation of such material, especially if it is not public, calls for a highly critical assessment of the sources and the material itself.

share all results of your research by making them accessible not only to the international scientific community but also to local and regional stakeholders and to the general public

Scholarship does not know boundaries. All sources, methods, and results of our research should be openly accessible and widely distributed in an appropriate way. In an interdisciplinary project, it is always fundamental to share knowledge and methods to progress together towards the best results possible, which will then be collectively signed.





In the countries concerned by our research, our work can only benefit if we share the fruits of our investigations. This is possible by signing agreements on the reciprocity of intellectual research with local scholars and also by contributing to the training of future generations through, for example, intensive internships.

It is important to share our knowledge, to educate people, to make them aware of the importance of cultural heritage and to teach them how to protect it, and to pass on their expert knowledge to others. Researchers should respect the communities they work with in all aspects of their projects in order to ensure that their research activities improve local knowledge production.

> act according to your own conscience.

It is important to always act according to your own conscience and refrain from any behaviour or speech that could endanger yourself and other persons. It is important to remain sensitive to events in the countries in which you work, particularly where basic human rights are not respected.

> use generative AI technology according to the DFG guidelines.

When making their results publicly available, researchers should disclose whether or not they have used generative models and if so, which ones, for what purpose and to what extent. The use of such models does not relieve researchers of their own content-related and formal responsibility to adhere to the basic principles of research integrity. Authors must ensure that the use of generative models does not infringe anyone else's intellectual property and does not result in scientific misconduct, for example in the form of plagiarism. Generative AI technology must not be used for reviewing processes. If there are further questions concerning the use of generative AI technology, please contact the head of the CHAI institute at the Philosophy department of the University of Hamburg.

2. Artefacts

Members of CSMC are engaged in numerous fields of study with very different traditions of thinking about and dealing with ethics and artefacts. The CSMC recognises the importance of synergic approaches to the protection of written artefacts and the importance of researchers' contribution in this regard. On account of the position of CSMC and its researchers in the international academic community, it is mandatory to provide clear recommendations on this issue. This is especially true as we observe an increasing awareness of artefacts and ethics, in particular with regard to the social and historical contexts in which artefacts were produced and in which they were circulated.

As a researcher, you act ethically when you

treat artefacts in a culturally appropriate manner

Written artefacts are produced within a specific historical and social context. The significance and meaning of an artefact include several components, such as the role of originators, materiality, techniques, and context of origin; additionally, the life of the artefact in social contexts that can be different from those of its origin is indissolubly linked to its original authenticity. The traces that such socio-





historical path can leave on the artefact can be stratified and may have modified the artefact itself in a more or less substantial way. However, they are a component of the diachronic integrity of the work.

As scholars and researchers, we have to respect both the integrity of the artefact and its contextual complexity: treating artefacts in a culturally appropriate way means respecting the object in its multiple elements of authenticity, integrity, history, social context of origin, provenance, and use. The religious meaning and use of certain artefacts must be taken into consideration as well, and scholars must avoid any use of artefacts which might be offensive or inappropriate for the religious community to which the artefacts belong or belonged.

Research on an artefact must not modify its structure; any intervention, be it virtual (e.g. digital processing) or physical, must always be recognisable and clearly explained during the research in order to not interfere with the above-mentioned values. The CSMC encourages research on written artefacts that allows for an accurate and scientifically solid reconstruction of the artefacts' origin and life. This includes contextualising the research and to treating the artefacts according to their historical, artistic, and, if applicable, religious character. As products of human activity, written artefacts are linked with the individual and collective dignity, which must not be jeopardised in the course of research and study.

> establish the provenance of written artefacts

Written artefacts come from archaeological excavations or are kept in collections, and their origin is in many cases not known. Political instability and economic disparity in conflict zones exacerbate the looting of sites or museums and illicit trafficking, feeding the antiquities market with unprovenanced written artefacts. Such unprovenanced objects are found on the antiquities market, in private collections, or they are bought by some museums that do not comply with international legislation.

As researchers, we are committed to reflecting on how to deal with such unprovenanced written artefacts, with private collectors and antique dealers eager to authenticate these artefacts, with other colleagues who authenticate them, with publications that include unprovenanced artefacts, etc. How to deal with ethical and responsible practices in such situations? How to distinguish a written artefact resulting from the looting of antiquities from another legally acquired object years ago?

The CSMC and its members condemn the illicit acquisition of cultural objects, their removal from contexts and their illicit trade, and they support legal authorities to effect the return of such objects to their country of origin. In principle, research on such objects should be regarded as problematic. This implies that all persons conducting research under these auspices maintain the highest standards of ethical conduct and research integrity. Before starting any study, it is highly recommended to find out the provenance of the artefact and to be sure that the object has not been acquired and exported illegally.

Members of CSMC should uphold the principles of national and international legal instruments that protect cultural heritage and are guided by codes of ethics and practice produced by academic and heritage organisations. It acknowledges the German government's ratification of the 1954 UNESCO Convention for the Protection of Cultural Property in the Event of Armed Conflict, commonly known as the Hague Convention (<u>Convention of The Hague first protocol, 1954</u>, and <u>second protocol, 1999</u>); and the <u>1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transport of Ownership of Cultural Property</u>. It urges the German government to ratify the <u>1995 UNI-DROIT Convention on Stolen or Illegally Exported Cultural Property</u>.





After the 1970 Convention, every unprovenanced object is illegal. However, this does not mean that before this date everything was acquired legally. The provenance of an object is not licit if that object was illicitly acquired and exported from its country of origin (or any intermediary where it was held legally and ethically) in violation of the country's laws at the time of its export or imported into its current country in violation of national laws at the time of its importation. Scholars must be aware and respectful of the laws regarding cultural heritage in the countries in which they work. Scholars are encouraged to engage in discussions on objects that might not have been illegally moved, but where the move took place in ethically problematic contexts.

encourage the owner of unprovenanced or otherwise illicit artefacts to return them to their country of origin or source community

In many cases, artefacts are purchased in good faith but without awareness of the legal and/or ethical problems associated with their provenance. In crisis areas, whether there are wars or natural disasters, the commercialisation of cultural heritage, including written artefacts, is a very severe problem that further depletes the heritage at risk. Researchers and scholars have the opportunity to give their contribution in promoting a more responsible approach to cultural heritage.

If the legal status of the artefact is unknown or doubtful, it is the duty of the scholar to approach its owner, whether a collector, an antiquarian, or a museum/archive/library, and to suggest returning it to its country of origin if possible. Scholars who discover that the material on which they are already working was illegally acquired should inform the appropriate authorities and support its repatriation to its country of origin.

The arguments in favour of the repatriation of objects must focus on the concept of community of origin or provenance of the artefact, even more so if the items come from crisis situations such as wars or natural disasters, where ethical and legal obligations towards local cultural heritage have an additional meaning. The actual security situation for artefacts returning to crisis areas must not discourage the attempts of researchers in facilitating the process. Return procedures must be initiated with the competent authorities in the respective countries.

As researchers, we can also have a proactive role in preventing trafficking by providing data and information helpful for national inventories of protected property in the countries where they have been established.

educate the public about cultural heritage

The general public, and sometimes the academic community itself, is often not aware of the problems associated with the authenticity, integrity, and the provenance of artefacts; while promoting access to written artefacts as part of democratic participation in cultural heritage, researchers must also commit to an ethically responsible approach to heritage which involves civil society at multiple levels. In consequence, CSMC expects its members to communicate not only their scientific work on cultural heritage to a wider audience, but also its ethical implications. The CSMC promotes the <u>people-centered</u> approach to cultural heritage, and the engagement of researchers in the collective responsibility towards cultural heritage stated in the <u>Faro Convention on the Value of Cultural Heritage for Society</u>, <u>2005</u>.





Researchers and scholars must engage in communicating to the wider public, be it colleagues in the academic milieu or the general public, the concepts of authenticity and respect for the artefact, which sometimes set a limit to the manipulation, physical or virtual, of the artefacts. Similarly, scholars have the responsibility to educate the general public as well as dealers in cultural heritage about the dangers of trafficking unprovenanced objects. Those who authenticate a dealer's inventory must know that they may be supporting the market for illegal antiquities.

The decision whether or not to publish the unprovenanced artefact is the responsibility of the scholar.

3. Research Data, Digital Data, Data Management and Ethics

Research data are all data that are generated or used in a scientific project. Research data include images, videos, audio recordings, interviews, 2- and 3-dimensional scans, human studies (psychology), measurement data, laboratory values, audio-visual information, texts, survey data, objects from collections, or samples that are created, developed, or evaluated in the scientific workflow. Methodolog-ical test procedures, such as questionnaires, software, and simulations, can also represent central results of scientific research and should therefore also be included under the term research data.

As a researcher, you act ethically when you

follow the CARE and FAIR principles on research data

The misuse of research data can cause significant harm to people and to your research. Therefore, data management in research should respect fundamental ethical principles. Members of CSMC should follow the principles outlined by the Deutsche Forschungsgemeinschaft in their 'Basic Rules of Scientific Practice' (Grundregeln wissenschaftlicher Praxis, GWP)²,³ under the acronym **FAIR**:

- **Findable** Research data can be found on the internet and are citable.
- Accessible Research data are accessible open or on request.
- Interoperable Research data can be technically reused through software.
- **Re-usable** Research data are well documented and can be used for new research.

In the context of CSMC, the FAIR Principles should be complemented by the **CARE** Principles for Indigenous Data Governance, developed by the Global Indigenous Data Alliance (GIDA⁴). The usage of research data should be guided by⁵:

² Handout: <u>https://www.dfg.de/formulare/80_10/80_10_de.pdf</u> (in German)

³ Code of Conduct "Guidelines for Safeguarding Good Research Practice": <u>https://wissenschaftliche-integritaet.de/en/</u>

⁴<u>https://www.gida-global.org/</u>

⁵ https://mackenziedatastream.ca/en/article/fair-and-care-data-principles





Collective benefit

Data ecosystems should be designed and function in ways that enable indigenous peoples to derive benefit from the data.

• Authority to control

Indigenous Peoples' rights and interests in Indigenous data must be recognised and their authority to control such data be empowered.

Responsibility

Those working with Indigenous data have a responsibility to share how data is used to support Indigenous Peoples' self-determination and collective benefit.

• Ethics

Indigenous Peoples' rights and well-being should be the primary concern at all stages of the data life cycle and across the data ecosystem.

At CSMC, the key questions in the context of research data and ethics are:

- How to receive consent⁶ (to collect data, to take images and other research data)?
- How to collect data?
- How to use and cite data generated through social media and the internet?
- How to handle data?
- How to publish data (access rights, 'as open as possible, as closed as necessary')?
- How to protect personal data (to ensure that no personal or organisational rights are violated)?

Whenever research is performed in countries with restrictions by the government and/or cultural or religious institutions, it is necessary to apply the same regulations to digital research data as to the physical objects of interest as outlined above.

> plan, collect, document and evaluate data in accordance with CSMC's expectations

Legal, cultural, political and ethical problems arising in Research Data Management (RDM)⁷ can be largely avoided by observing the following recommendations, and acting responsibly and transparently:

• Planning

Plan the collection process: what is necessary? Do you need consent forms (obtained with tools such as, e.g., CFW⁸), specific contracts, or elaborate permissions? What kind of equipment and what kind of data management (in the field) is required?

⁶ Consent is 'any freely given, specific (cf. below), informed and unambiguous indication of the data subject's wishes by which he or she (...) signifies agreement to the processing'. Consent can be **express** (i.e. by a written or oral statement, including by electronic means, where it is often signified by ticking a box) or **implied** (by an affirmative action). Silence or inaction (e.g. a pre-ticked box) cannot be interpreted as consent. Consent **can be withdrawn at any moment**, but this withdrawal is not retroactive (i.e. it does not affect the lawfulness of the processing prior to the withdrawal).

⁷ The term Research Data Management (RDM) is used for all processes around research data.





Collection

When taking photos, measurements or scans, it may be necessary to move the objects of interest. Be very careful and refrain if necessary, if there is any risk of damage.

• Documentation

In the field a good and clear documentation is necessary. This includes information on location, date and time, people involved, equipment used, consent forms, contracts, technical details etc. Use common digital file formats and a scheme for the names of digital files and directories. Data should be stored twice on different storage facilities. At the end of the research project all collected data should be selected and well documented for archiving and publication into the <u>Research Data Repository (RDR)</u>. Make the data as open as possible in line with the consent forms, the legal options, and contracts.

• Evaluation and processing

After collecting and evaluating data, is it actually possible to exploit the data? What kind of processing is actually covered by applicable consent?

> **are aware** of potential data misuse, data ownership, and data forgery

Geo localisation

Modern smartphones and some digital cameras add geographical coordinates to images in the EXIF (Exchangeable Image File) data. This can cause problems with images from endangered objects. The publication of such images on the internet is an opportunity for robbery of cultural objects. Delicate information in research data should therefore be deleted before publication.

• Images with buildings, signs, persons

Images showing buildings, signs, or persons may be misused for the identification of persons, causing problems for those persons in some regions of the world. Sensitive information in research data should therefore be deleted before publication or such images should not be published at all.

• Research with digital data of illegally traded objects and objects with unclear provenance Research on illegally traded objects and objects with unclear provenance is not an option. Research with digital data taken from these objects is no option either. This includes images and 2- or 3-dimensional scans of these objects.

Research data from other sources

Re-using data is no problem if the source is clearly defined and the usage conditions are maintained. Research data with unclear provenance should not be used.

⁸ Consent Form Wizard (CFW): https://consent.dariah.eu/. 'The aim of the CFW is to support humanities researchers within the European Union in obtaining valid consent for data processing in the context of their specific professional activity.'





• Forgery

Digital images, databases, and methods are perfect for manipulation. Digital images and data could, e.g., be used to fake 'real' manuscript leaves. 3-dimensional data could be used to print objects and material analysis allows 'deep fakes' when someone uses this information. How can we ensure that received or used images are not manipulated? Can we trust the images (colours, sizes, and other parameters)? How can we ensure that images and data from CSMC in general are not subject to forgery?

High resolution images or 3-dimensional scans can be used for high quality reproductions, and with results from material science it might be possible to produce a replica with slight changes compared to the original. A common problem with digital images is colours. They change with the camera model, the lenses, the light, and the white balance, and in the end your computer screen will interpret the colours. Colours should be measured on the original object and a full calibration of all used technical equipment as well as the use of a colour control patch is recommended. With colours wrongly replicated certain aspects of an artefact can indeed be manipulated in images.

- > accept that ethical data management is central to all stages of your project
- If I ask someone to sign and present a consent form, I will never get the permission for a photo.

But if you have not asked and have no consent it is not ethical or even illegal to take photos and use them for research. Respect the rights of people and organisations.

 My research is on minorities or religious groups and I have to avoid arousing problems for them. All data and images are only for my personal private use.
This type of research is highly problematical. In a publication, it will not be possible to substantiate your findings with tangible data.

• My research – my data!

Of course, you have the right to use your data first. But your research is financed by public money and the collected data are not your personal property. At the end of your project, you need to share your research data as widely as possible because this is (or will be) part of the contract between the research institution and the funding agency.

• I protect everything with passwords and/or encryption.

This is acceptable. However, be careful to keep the password and/or the key for encryption. Otherwise, data will be useless. When you leave CSMC, please give the password and/or key to the CSMC data management.

• I only store my data on local hard drives.

This is only a good idea if you always have a second copy, preferably stored at another place. For long term storage this is not a solution. Please store everything in the RDR or, if this is not possible because of legal restrictions, ask in the CSMC for a saving data on specific storage devices.





> store all digital data in the <u>university's secure long-term repository</u>

The Research Data Repository has the following features:

- Security
 - $\circ\quad$ Write access only with UHH user identification
 - o Users are not allowed to delete published data
 - Descriptive data are public
 - Storage in the UHH computer centre with three copies on different sites
- Integrity of data
 - o Every data record is secured by a MD5 checksum
 - o No modification, compression or file format change, Bitstream conservation
- Findability
 - o Permanent link
 - Digital Object Identifier (DOI)
- Licensing
 - Research data can be open, embargoed, restricted (accessible on request), or closed
 - Creative Commons (CC)⁹ and other licenses
- Storage time
 - o At least 10 years
 - approach CSMC's Ethics Committee in case of extremely confidential or problematic data

In such cases data management should be organised in cooperation with the <u>CSMC Ethics Committee</u>, which will attempt a dedicated case analysis.

⁹ <u>https://creativecommons.org/</u>