



28.01.2021 | PUNCH Lunch

NFDI4Culture

Consortium for research data on material and immaterial cultural heritage

Torsten Schrade

Akademie der Wissenschaften und der Literatur | Mainz

Franziska Boehm

FIZ Karlsruhe – Leibniz-Institut für Informationsinfrastruktur

The Consortium

Communities, Collaboration, Cooperation

COMMUNITIES of INTEREST, PARTICIPANTS and CO-APPLICANTS



COMMUNITIES

Architecture
Art History
Musicology
Theatre, Film and
Media Studies

PARTICIPANTS

Academies
Archives
Art Colleges
Cultural Heritage Institutions
Individual Researchers
Galleries
Learned Societies
Libraries
Museums
Universities

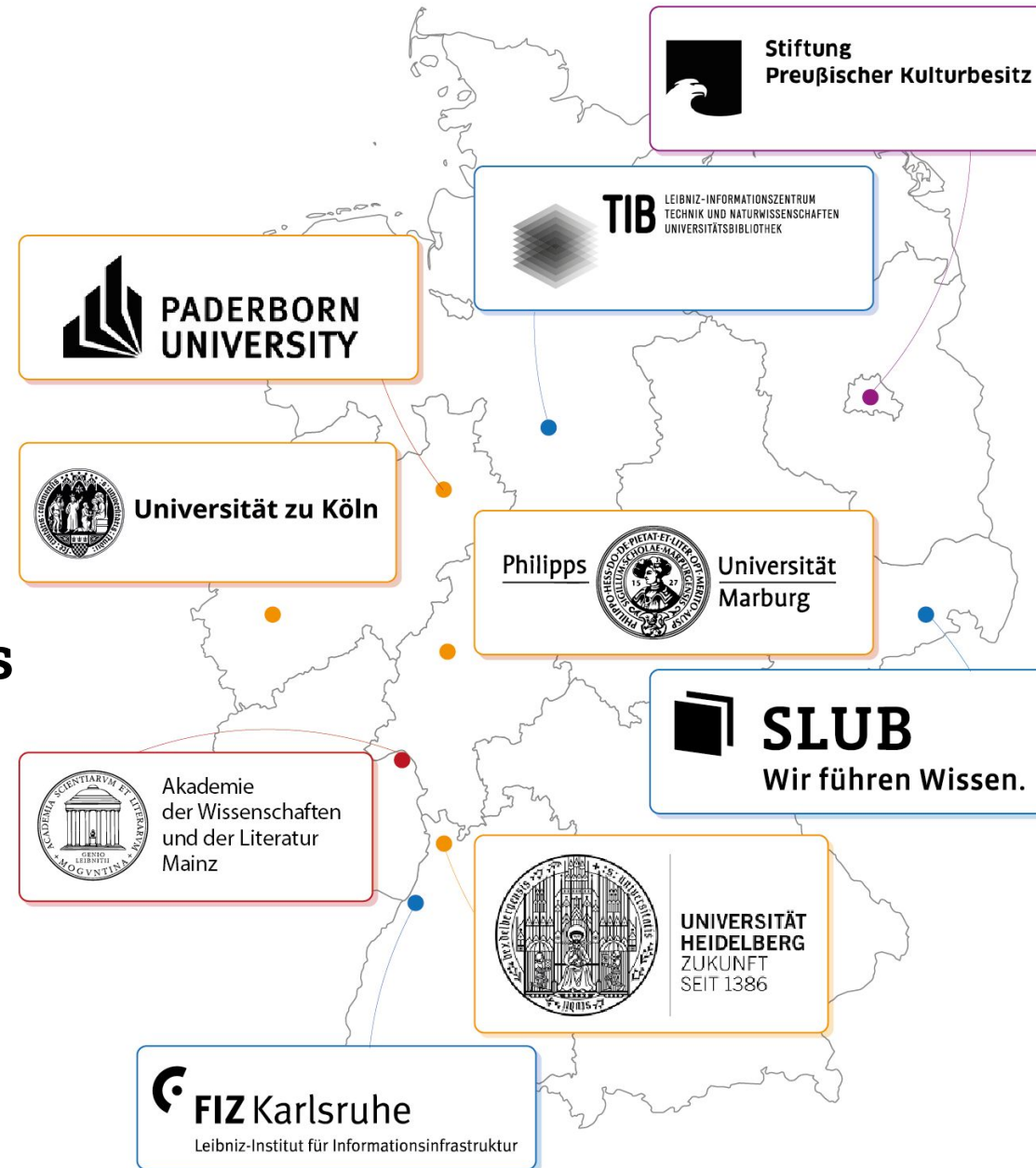


CO-APPLICANTS

Academy of Sciences Mainz
Cologne University
FIZ Karlsruhe
Heidelberg University
Marburg University
Paderborn University
SLUB Dresden
SPK Berlin
TIB Hannover

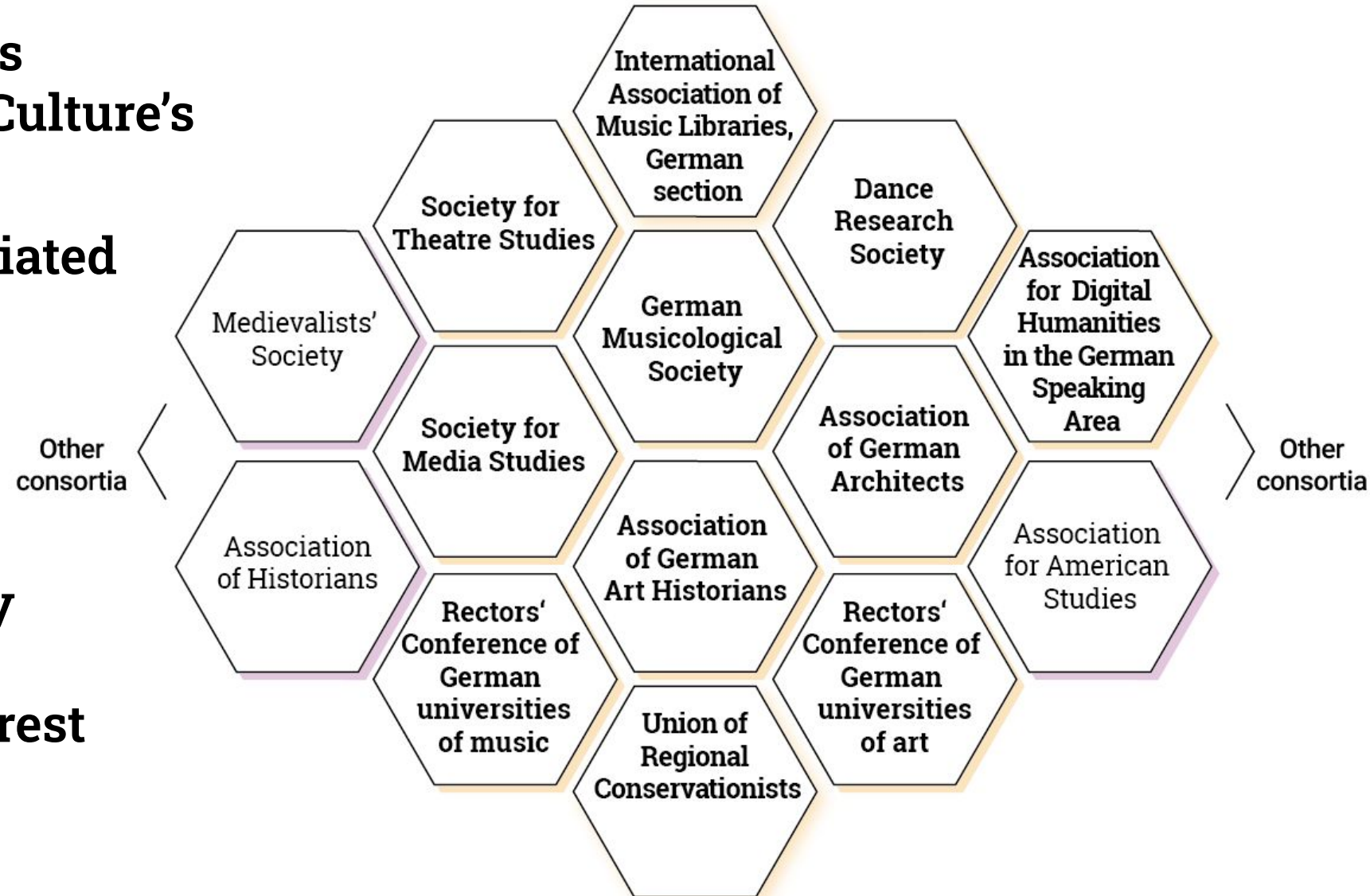
PARTNERS

- geographically, thematically and institutionally balanced network
- 4 universities
1 academy
1 GLAM institution
3 infrastructure institutions
- 51 participant institutions
11 societies
- ideally represents the broad spectrum of actors in the cultural heritage domain



PARTICIPATING ACADEMIC SOCIETIES

- 11 academic societies representing NFDI4Culture's research domains
- consortium was initiated by the societies
- societies actively participate in the governance
- consortium is highly embedded in its communities of interest



USER LEVEL

International networks of the participating academic societies

SUBJECT LEVEL

UNESCO, Getty, RISM (35 countries),
CVMA (17 countries), IAML, PHAROS,
ICOM, ALLEA, ...

INFRASTRUCTURE LEVEL

ORCID, DataCite, EOSC, Open Knowledge
Foundation, Wikimedia, ...



Research Data

Complex multimodal data types

TANGIBLE and INTANGIBLE CULTURAL ASSETS

Art History: 3D Point Cloud

Choir of the Liebfrauenkirche Oberwesel, UNESCO World Heritage Site "Upper Middle Rhine Valley"

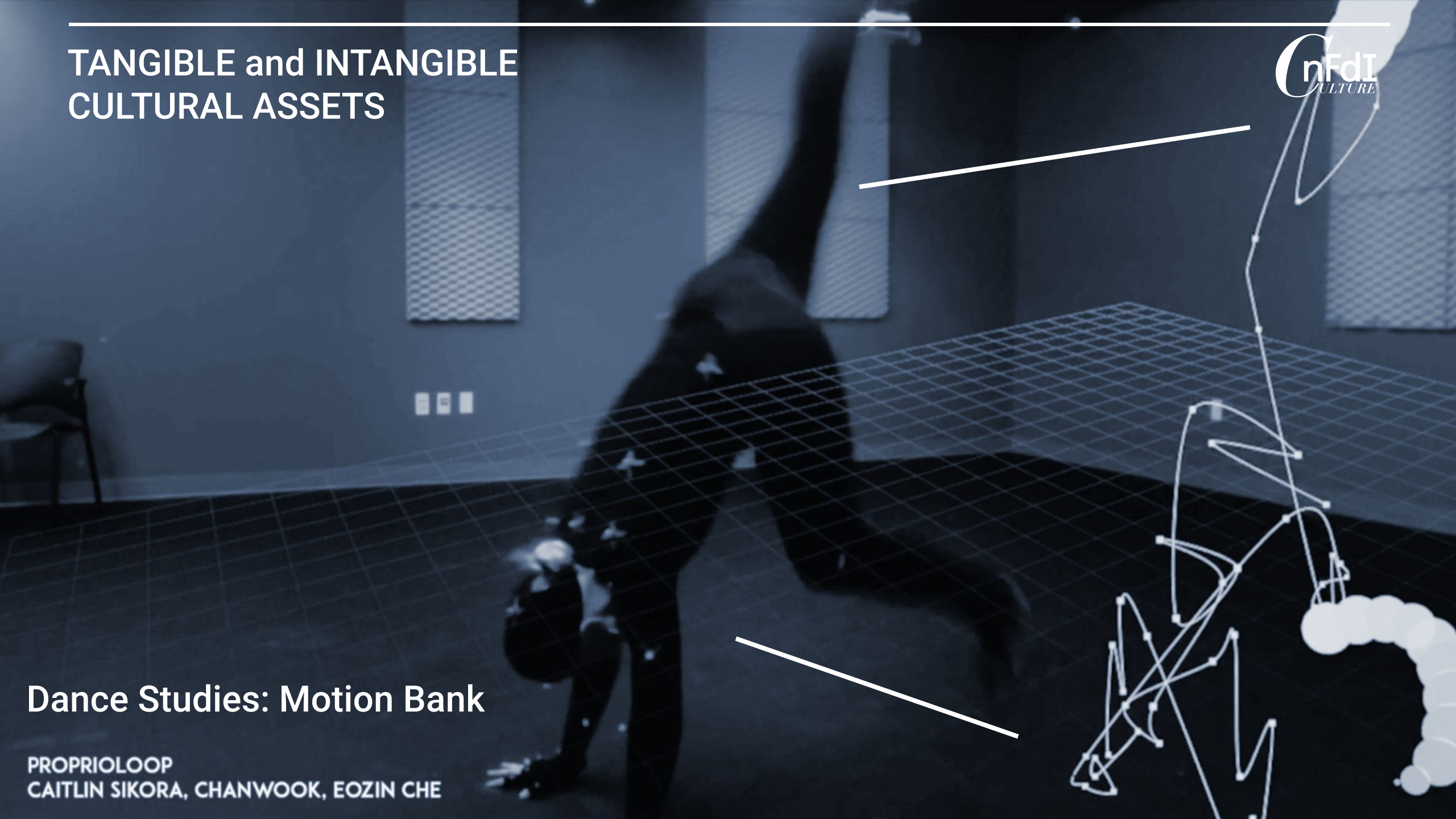


TANGIBLE and INTANGIBLE CULTURAL ASSETS

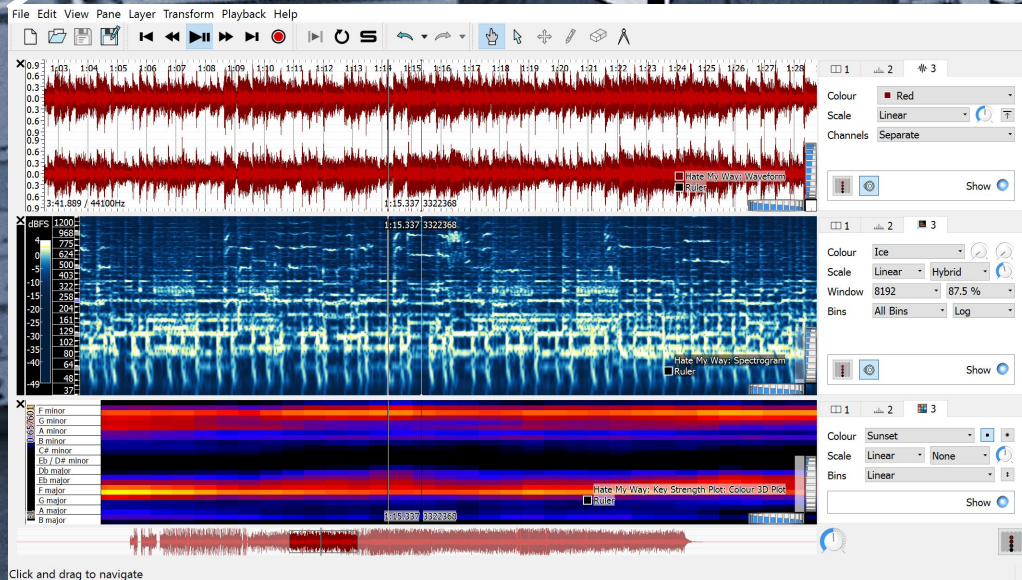


Dance Studies: Motion Bank

PROPRIOLOOP
CAITLIN SIKORA, CHANWOOK, EOZIN CHE



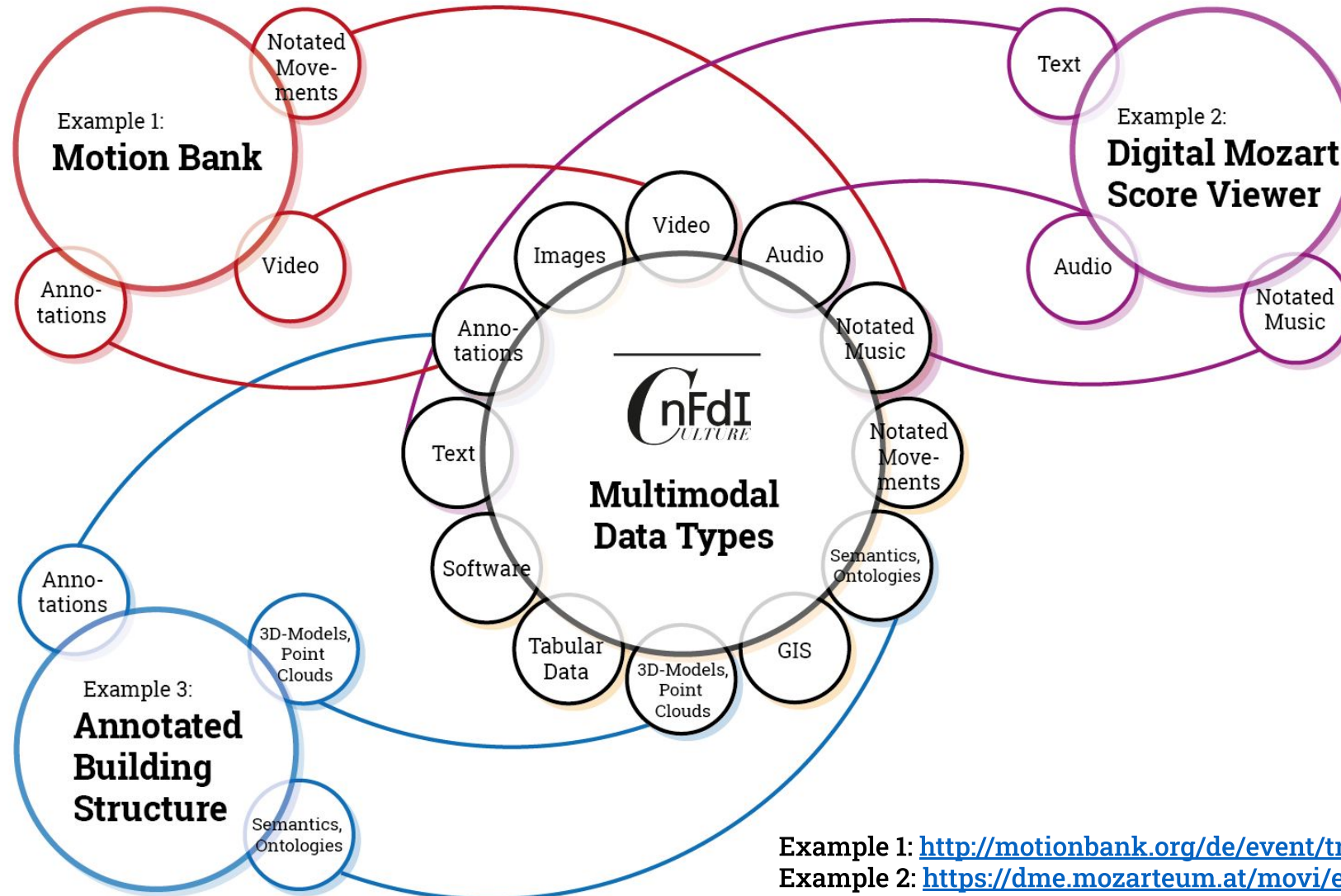
TANGIBLE and INTANGIBLE CULTURAL ASSETS



Musicology: Bernd Alois Zimmermann "Requiem"

Studio für Elektronische Musik des WDR, Köln 1969, Bernd Alois Zimmermann und Mesías Maiguashca (r). Foto: Werner Scholz.

RESEARCH DATA on MATERIAL and IMMATERIAL CULTURAL ASSETS



Example 1: <http://motionbank.org/de/event/trailer-motion-bank.html>

Example 2: <https://dme.mozarteum.at/movi/en>

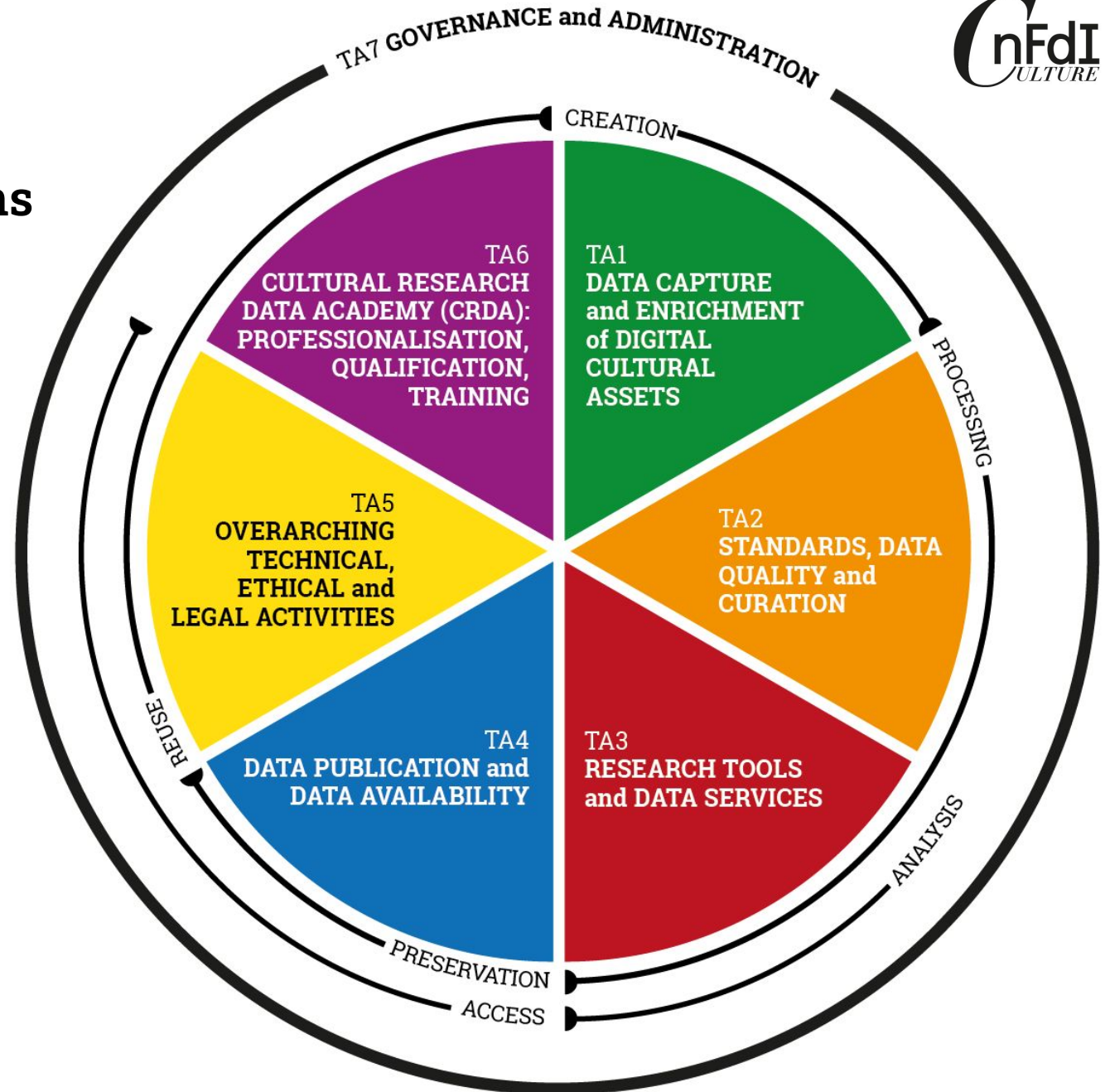
Example 3: <http://oberwesel.spatialhumanities.de/viewer>

Task Areas, Aims & Services

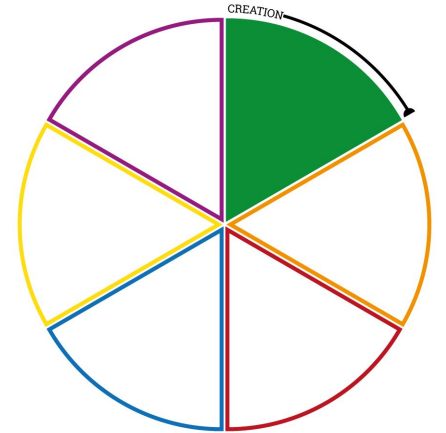
Be FAIR and CARE

TASK AREAS aligned to the RESEARCH DATA LIFE-CYCLE

- existing cultural data collections with millions of records
- long-term archives for storing 2D/3D representations
- research software tools
- subject-specific information infrastructures
- multitude of training offers
- dedicated professorships teaching RDM in cultural heritage
- Digital Humanities study programmes



TA1 – DATA CAPTURE and ENRICHMENT of Digital Cultural Assets



Prof. Dr. Ina Blümel
Architecture, Information
Infrastructure
TIB | Hannover



Reinhard Altenhöner
GLAM, Information
Infrastructure
SPK | Berlin

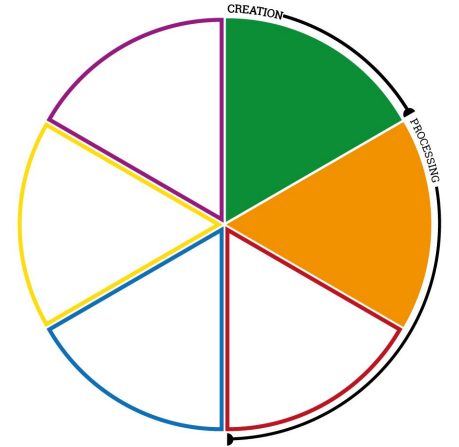
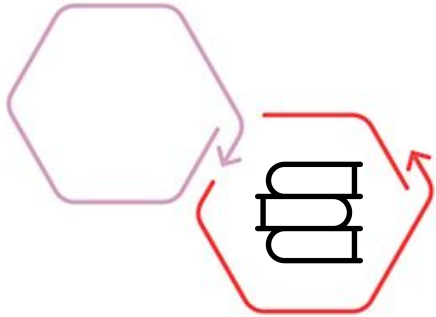
Aims

- Regular exchange between producers and users of digital representations
- Ensure uniform quality levels of 2D/3D data capturing
- Environments for automatic / collaborative enrichment of digital representations

Services

- Digitisation – Enrichment – Reuse
- Source analysis & monitoring infrastructure

TA2 – DATA STANDARDS, DATA QUALITY and CURATION



Prof. Dr. Barbara Wiermann
Musicology, Library and
Information Science
SLUB | Dresden



Dr. Christian Bracht
Art History, Information
Infrastructure
UMR | Marburg

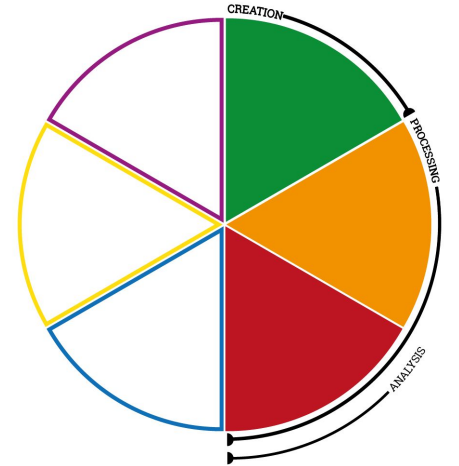
Aims

- Definition, development and application of data standards & criteria for quality assurance
- Authority data & vocabulary development
- Guidelines for research data management in the field of tangible & intangible cultural assets

Services

- FAIR Clearing Agency
- Data rescue, quality assurance and certification

TA3 – RESEARCH TOOLS and DATA SERVICES



Dr. Lisa Dieckmann
Art History,
Computer Science
UZK | Cologne



Dipl. Wirt.-Inf.
Daniel Röwenstrunk
Business Computer Science,
Musicology
UPB | Paderborn

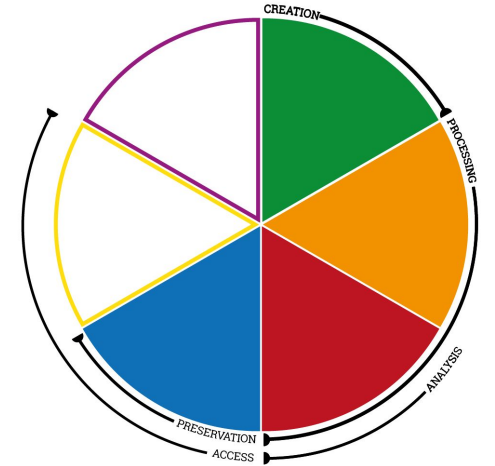
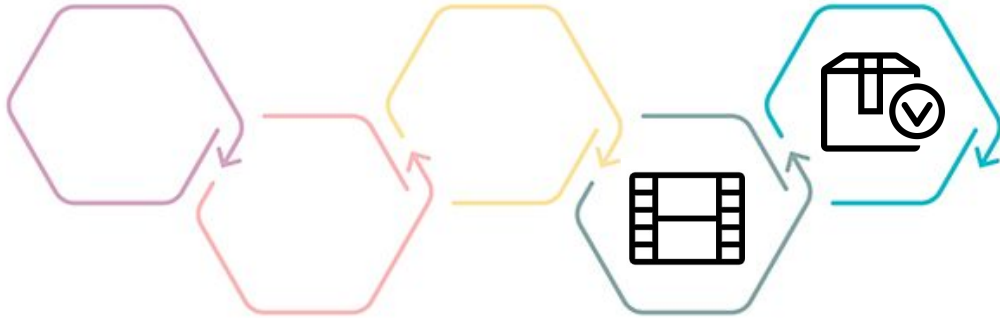
Aims

- Evaluate & integrate relevant tools and data services
- Develop, certify & curate research software and APIs
- Convenience & low-threshold provision of research tools

Services

- Agency for cultural heritage software sustainability
- Domain-specific registry of tools & data services
- Needs-oriented guidelines for collaborative development

TA4 – DATA PUBLICATION and DATA AVAILABILITY



Aims

- Repository & publishing solutions for multimodal data types / enhanced publications
- Reference implementations for long-term preservation of research data on tangible and intangible cultural assets

Services

- Agency for cultural heritage data publications
- Long-term preservation services
- Development of sustainable operating models

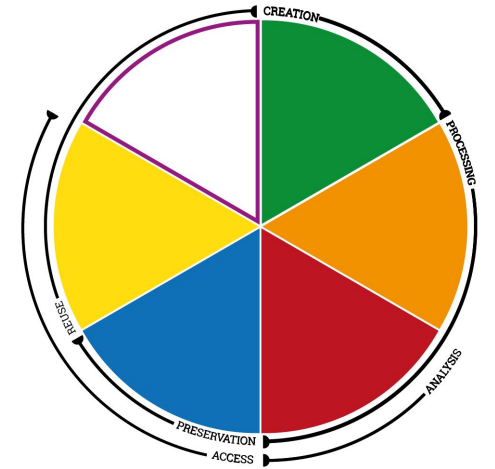


Dr. Maria Effinger
Art History, Open Access,
Information Infrastructure
UHD | Heidelberg



Dr. Jens Bove
Art History, Information
Infrastructure
SLUB | Dresden

TA5 – OVERARCHING TECHNICAL, LEGAL and ETHICAL ACTIVITIES



Prof. Dr. Franziska Boehm
Jurisprudence
FIZ | Karlsruhe

Aims

- Comprehensive, overarching technical infrastructure
- Ensuring FAIR on all levels through Linked Data
- Legally and ethically trustworthy framework of action

Services

- Culture Knowledge Graph & Terminology Service
- Culture Information Portal
- Legal Helpdesk & Ethical Advisory Board



Prof. Dr. Harald Sack
Information Service Engineering
FIZ | Karlsruhe

TA5 – Legal Help Desk

Focus:

- Contact point for researchers and institutions on questions concerning copyright, property and personal rights in the context of culture (FAIR Principles)

Tasks:

- Coordinating and partly advisory function
- Identification of relevant rules
- Collection and categorization of questions, legal classification and prioritization
- Compilation of existing legal information
- Forwarding to appropriate contacts (e.g. rights holders, other organizations)

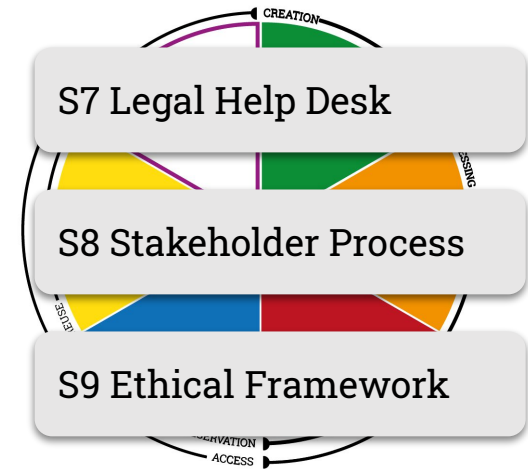
Aims:

- Contribution to the development of decision-making aids and good practices on legal and, where appropriate, ethical issues relating to research data on tangible and intangible cultural assets
- Framework for researchers and FD managers



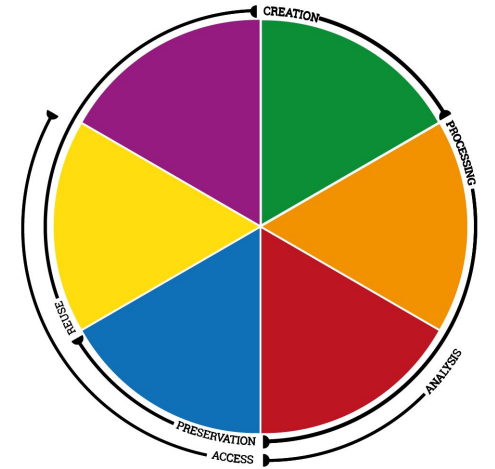
Publications:

- **Stellungnahme, NFDI4Culture zum zweiten Diskussionsentwurf zur Umsetzung der DSM-RL, Fabian Rack/Franziska Boehm**
https://www.bmjv.de/SharedDocs/Gesetzgebungsverfahren/Stellungnahmen/2020/Downloads/073120_Stellungnahme_NFDI4Culture_RefE_Urheberrecht-II.pdf?__blob=publicationFile&v=2
- **Rack/Boehm/Pasdzierny/Schmidt, NFDI4culture: Forschungsdaten in den Kulturwissenschaften, in Schör/Fischer/Beaucamp/Hondors, Tipping Points – Interdisziplinäre Zugänge zu neuen Fragen des Urheberrechts, Weizenbaum Institut, Nomos 2020 (im Erscheinen)**



TA6 – CULTURAL RESEARCH DATA ACADEMY

Professionalisation, Qualification and Training



Aims

- **Subject-specific Data & Code Literacy according to the FAIR4S framework of EOSC**
- **Provide researchers, lecturers & GLAM employees with easy access to certified training**

Services

- **Definition of FAIR4S compatible quality criteria**
- **Build a portfolio of certified training offers**
- **Qualification & training helpdesk**

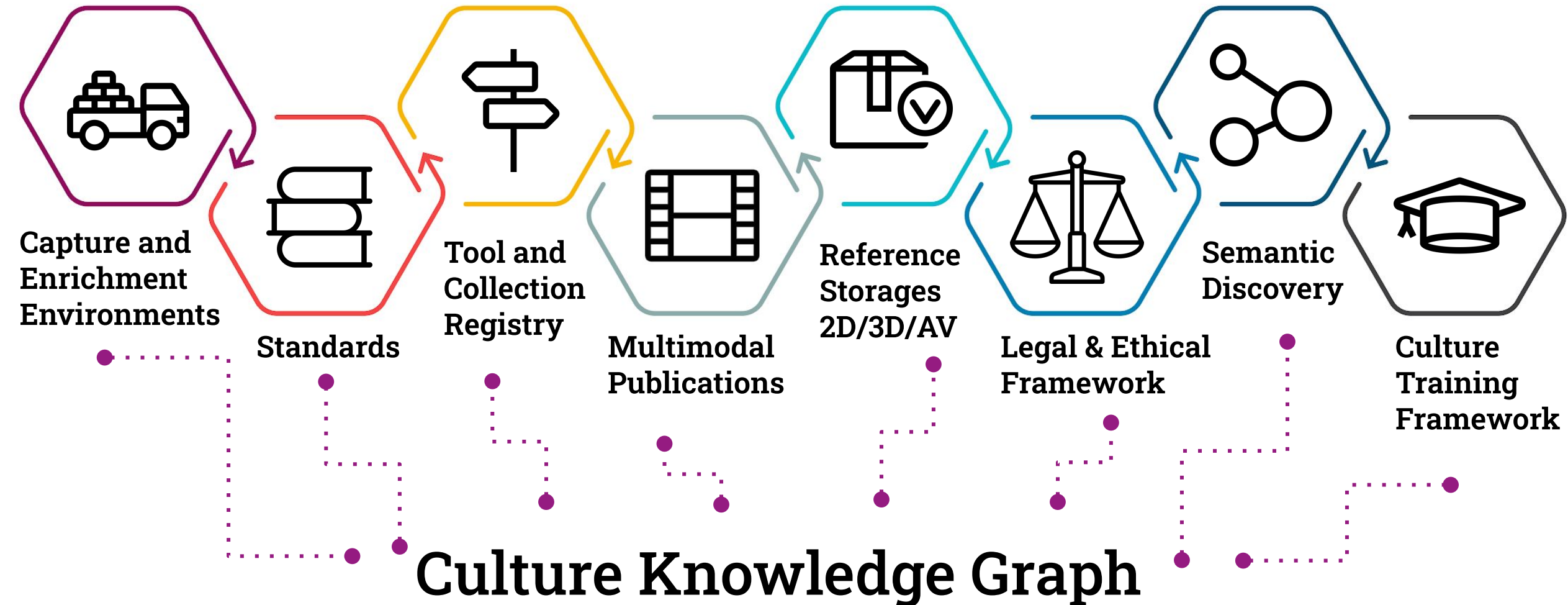


Prof. Dr. Malte Hagener
Media Studies
UMR | Marburg



Prof. Dr. Andreas Münzmay
Musicology
UPB | Paderborn

Culture Information Portal



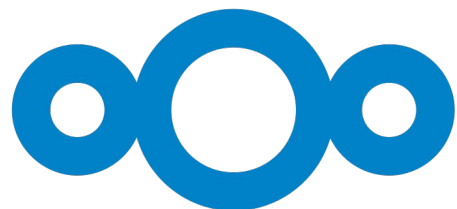
COLLABORATION

Approaches and Experiences

- Single Sign On / DFN-AAI ready
- Usability / Ease of Use / Mobile
- DSGVO conformance, data sovereignty, data security
- Federation : Sharing services between consortia and the directorate
- Open Formats
- Open Source / Integrations / Extensions
- Active Development Community
- Sustainability

With regard to our communities in NFDI4Culture, we need a way to include users without institutional affiliation. Therefore it is necessary to provide a "Homeless IdP" in addition to eduGAIN.

Culture Collaboration Tools



nextcloud

SHARING

WRITING

CALCULATING

PRESENTING

CALENDAR

CONTACTS

GROUPWARE

DIAGRAMS



PROJECT MANAGEMENT

DOCUMENTATION

METRICS

TICKETS



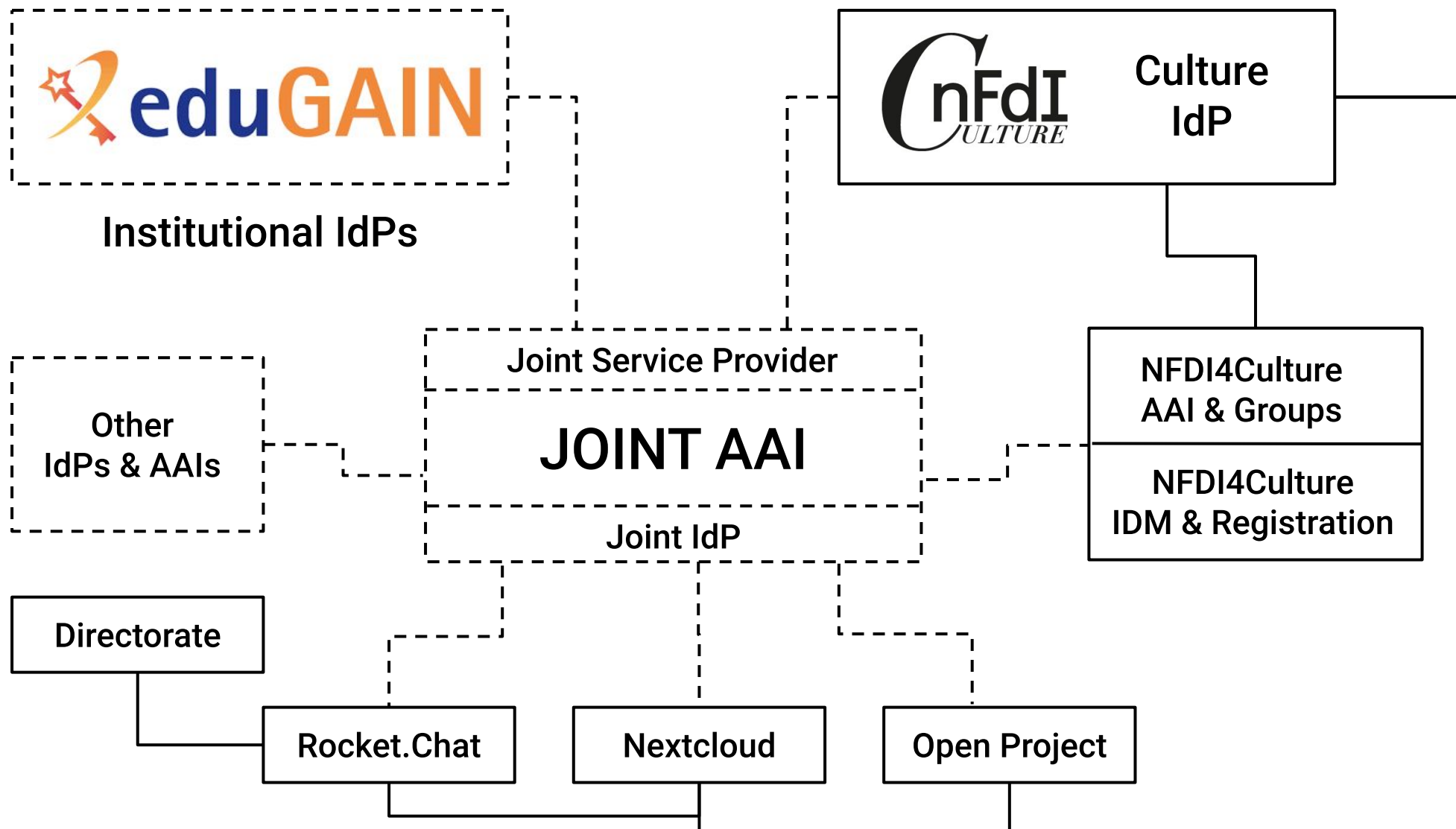
OpenProject

COMMUNICATE



ROCKET.CHAT

Basic Vision for SSO/AAI



Culture Identity Provider

DFN

LINK: [Empfohlene Attribute zum IdP Betrieb](#)

Nr.	Attribut	LDAP-Name	Objektklasse
01	Name	cn (commonName)	person
02	Angezeigter Name	displayName	inetOrgPerson
03	Nachname	sn (surname)	person
04	Vorname	givenName	inetOrgPerson
05	E-Mail-Adresse (Dienst)	mail	inetOrgPerson
06	Name der Heimateinrichtung	o (organizationName)	organizationalPerson
07	Netz-ID	eduPersonPrincipalName	eduPerson
08	Art der Zugehörigkeit zur Heimateinrichtung	eduPersonAffiliation	eduPerson
09	Art der Zugehörigkeit plus Domain Name	eduPersonScopedAffiliation	eduPerson
10	Berechtigungen	eduPersonEntitlement	eduPerson
11	Pseudonymer, Anbieter-spezifischer Identifier	eduPersonTargetedID	eduPerson
12	Eindeutiger, global gültiger Identifier	eduPersonUniqueId	eduPerson
13	ORCID ID(s)	eduPersonOrcid	eduPerson
14	Level of Assurance / Verlässlichkeitsklasse	eduPersonAssurance	eduPerson
15	User Status	schacUserStatus	SCHAC

- Culture IdP implements all recommended SAML attributes
- DFN class basic conformance



nationale
Forschungsdaten
Infrastruktur
for CULTURE

NFDI4Culture Account Service

Register new account

Firstname *

Lastname *

Username *

Email *

Institution or Org



nationale
Forschungsdaten
Infrastruktur
for CULTURE

NFDI4Culture Single Sign On

Bitte geben Sie Ihren Nutzernamen und Ihr Passwort ein

Um diesen Dienst zu nutzen, müssen Sie sich authentifizieren. Bitte geben sie daher unten Nutzernamen und Passwort ein.

Nutzername

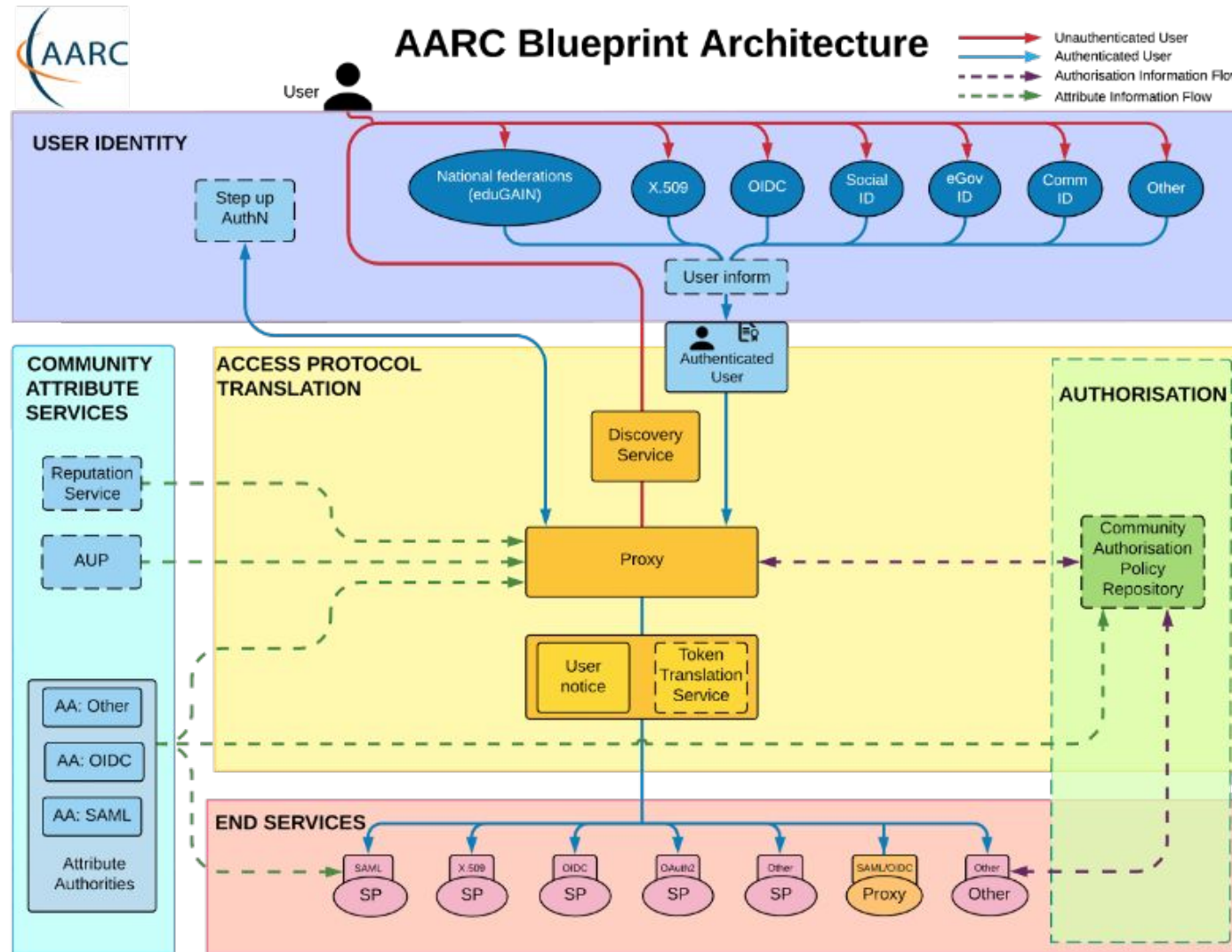
Passwort

Anmelden

Help

- [Forgot your password?](#)
- [Edit your account](#)

SSO/AAI – European Open Science Cloud



Quelle EOSC AAI Architecture:

https://docs.google.com/document/d/12l0xVU9oiXqtVqkwrJiji16L-i_YcM_K6SHkNMf4IWE/edit#heading=h.pntg2zivnt8i



1913
"Suspense", dir. Lois Weber

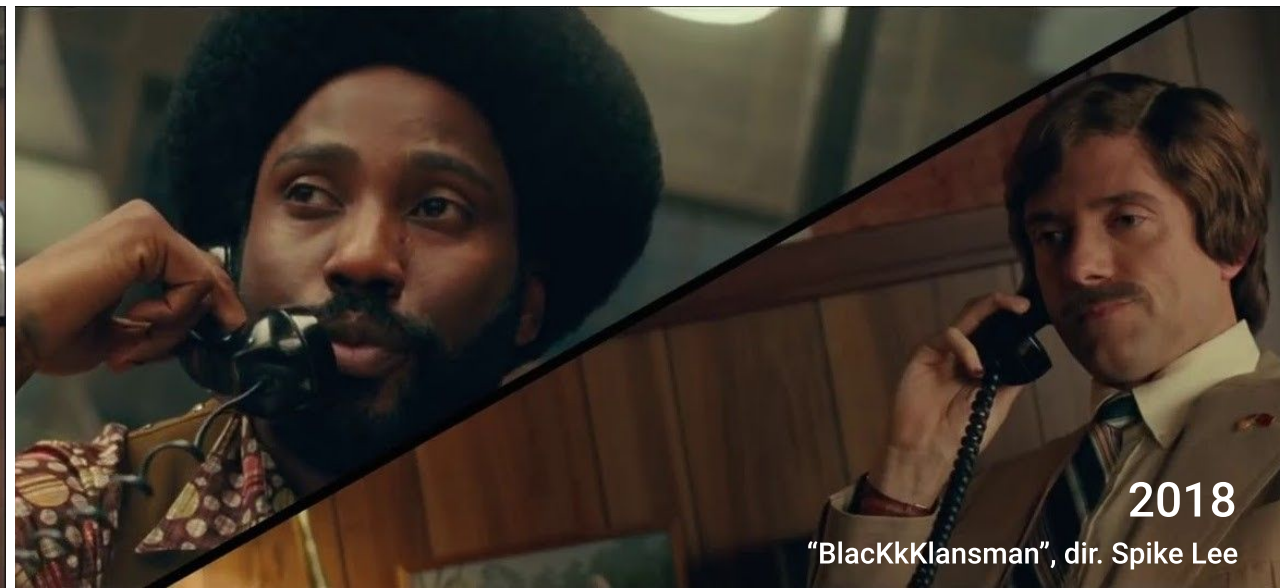


1959
„Pillow Talk“, dir. Michael Gordon

<https://nfdi4culture.de> – contact@nfdi4culture.de



2009
"OSS 117: Lost in Rio", dir. Michael Hazanavicius



2018
"BlacKkKlansman", dir. Spike Lee