

Section 1 - Application details

Main applicant	
NWA-Route	Please select one route in drop-down menu <i>Only one route can be selected.</i>
Title of research proposal	ACKnowledge - Artists Community Knowledge
Co-applicants	<i>Co-applicants should also be entered in ISAAC.</i>
Collaboration partners	Kunstinstituut Melly/Formerly Known as Witte de With, Het Nieuwe Instituut, Nederlands Instituut voor Beeld en Geluid, De Appel, Casa do Povo EUScreen, Re:vive, Dropstuff, AVA_net
Keywords (max. five)**	contemporary art, artistic research, community

2.1 Description of the proposed subprojects

The subprojects of ACKnowledge (Artists Community Knowledge) investigate *art as an alternative form of knowledge production*, as defined as one of the three 'game changers' within the NWA Route Kunst. They investigate three different, real-life examples of contemporary art "*practices and objects [as] embodied and situated forms of knowledge and insight*":¹

- 1.) art libraries;
- 2.) artists' self-organized communities/collectives;
- 3.) artists' material craft practices.

All three of them concern developments of new concepts and knowledge in contemporary art practices that could migrate into and innovate other societal sectors, such as:

- new, unconventional ideas on how to access libraries and archives, using digital tools;
- new, non-standard ideas on extending the concept of artistic autonomy from individualist art practices to the self-organization of communities (including activist and learning communities);
- new, non-standard ideas on how to work with analog media, such as print and film, in the digital age.

Preparatory research for the three subprojects indicates that these ideas and insights largely exist in artist's collectives and communities as shared and practical knowledge that is not yet codified or archived.²

The goal of this project is to literally ACKnowledge these new forms of knowledge,

- turning it from implicit, embodied and situated knowledge to explicit and more generally accessible knowledge,³
- research and discuss underlying concepts,
- determine, with our external partners and users as stakeholders, which knowledge is relevant for sharing
- share the explicated knowledge (a) across the diverse artists' communities, (b) with the stakeholders and (b) with a wider expert- and non-expert audience from the professional fields of the three subprojects (libraries and archives, art institutions and community organizers, cultural heritage organizations and media archeologists), (d) within the curricula of the educational institutions affiliated with this project, and beyond

The subprojects will be done as artistic research – i.e., following (Borgdorff)'s definition, as "*research in and through art practice*" which "unites the artistic and the academic in an enterprise that impacts on both domains. Art thereby transcends its former limits, aiming through the research to contribute to thinking and understanding; academia, for its part, opens up its boundaries to forms of thinking and understanding that are interwoven with artistic practices".⁴ The reason for this approach is to research artistic practices (a) in a way that does justice to their communities, (b) in forms that are accessible for both these communities and other societal actors, and (c) with art and design as the language of these three subprojects, reaching larger audiences than only academic communities.

The overarching research question for the three subprojects is:

How can we reveal knowledge that is embodied in contemporary arts practices and share it with a larger public?

All three subprojects represent a dynamics of space: bringing site- and context-specific knowledge to new sites and contexts; aiming firstly to make this knowledge more accessible and create awareness of it, and secondly to create new dialogues and crossovers of knowledge:

- Can data science and design approaches that, to date, are primarily being used for commercial purposes, also be used to make art libraries (a) publicly accessible and (b) provide them with new reading

¹NWA Route Kunst, definition of the game changer "art as an alternative form of knowledge production". <https://2.wetenschapsagenda.nl/route/kunst-onderzoek-en-innovatie-in-de-21ste-eeuw/>

² This can be seen in our list of references, which lists research literature that covers the research questions of the three subproject only on a very general level. Specialized literature on these practices is still lacking.

³ On the concept of embodied and situated knowledge, see Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies*, vol.14, no.3, 1988, pp.575–99.

⁴ Borgdorff, Henk. "The production of knowledge in artistic research." *The Routledge Companion to Research in the Arts*. Routledge, 2010, p. 45, p. 44-45.

- infrastructures that allow new forms of participation for user communities?
- Can the (hitherto) implicit new concepts of autonomy that artists practice in their self-organized communities be a model for the institutional art sector to increase its outreach, and for the self-organization of other societal groups?
- Can the individual and specific crafts knowledge of particular artists' communities be translated into more general knowledge on crafts and media for other groups of people?

All subprojects have as a goal to (a) help to strengthen the communities they are investigating and (b) make artists' new ideas on libraries, community self-organization and crafts/media accessible to the institutional project partners, parties outside their communities, and educational institutions, who then will be able to adapt them for their own needs.

The overarching research question will be differentiated, in each subproject, into two aspects and subquestions:

- 1) ACKnowledge innovation:
Which embodied and situated knowledge [in contemporary arts practices] is *new, unconventional, non-standard* when measured against canonical knowledge?
 - In the subproject on libraries, this concerns the use of existing social network technologies to involve the community in labelling data, the ways and the extent to which the body of knowledge in libraries can be turned into machine readable data;
 - In the subproject on artist's self-organized community spaces, this concerns the extent to which artists' working concepts of autonomy break with existing art theory definitions of autonomous art,⁵ and contribute to new societal practices of autonomy and self-organization.
 - In the subproject on audiovisual craft practices, this concerns the extent to which these practices can help us rethink ways in which craft heritage may be recorded and accessed.
- 2) ACKnowledge impact:
How can the (investigated, explicated) knowledge be shared across and beyond their communities of origin?
 - In the subproject on libraries, this concerns the collection as data and the visualization of the knowledge contained in the library, through different forms of library publishing. The collection as data reflects the memory and history of the institution i.e. the museum or cultural institution, enabling the production of new knowledge.
 - In the subproject on artist's self-organized community spaces, this concerns the extent to which diverse societal groups - but also academic humanities - can learn from new concepts of autonomy that are being developed and practiced by contemporary artists;
 - In the subproject on audiovisual craft practices, this concerns the extent to which these practices can be learned, adopted, and adapted by new communities.

To sum up the overarching agenda of the three subprojects:

- focus on concrete artistic practices in contemporary (experimental) arts and technology.
- unlocking, explicating, preserving, disseminating and recontextualizing implicit knowledge of artistic practices.
- building and strengthening communities and networks, across and beyond these practices.

2.2 Relevance for NWA route and societal and/or scientific impact

The primary relevance of these subprojects for the NWA Route Kunst lies in their direct uptake, investigation and elaboration of its subcategory/'game changer' *art as an alternative form of knowledge production*. Furthermore, with their aspects/sub questions "ACKnowledge Impact" and "ACKnowledge Innovation" (see section above), the subprojects follow the definitions in the NWA Route Kunst according to which innovation is not limited to "problem-solving" and impact is not limited to "entrepreneurship, professionalization and concrete 'deliverables'", but where "art practice [...] introduces an entanglement of theory and practice, of doing and thinking" that constitutes "an 'innovation' of a different nature".⁶ As described in 2.1, it is exactly these new forms of thinking-through-practice and the new knowledge they create that the three subprojects investigate and want to translate into tangible research outcomes. All three subprojects respond to the two forms of impact and innovation defined in the NWA Route Kunst:

⁵ As summarized and discussed, among others, in Lütticken, Sven. "Neither Autocracy nor Automatism: Notes on Autonomy and the Aesthetic." *Cultural Revolution*, Sternberg Press, 2017, pp. 59–86.

⁶ All quotes from NWA Route Kunst, *Over impact en innovatie in de kunsten*, <http://routekunstnwa.nl/informatie> (accessed Oct. 12th, 2020)

- 1) impact and innovation *within* the arts (in the words of NWA Route Kunst: "the question is [...]equally: what does an art project or a research project mean for the arts? What is its artistic urgency?"), in the areas of art libraries (subproject 1), artists' community organization (subproject 2) and artists' material practices (subproject 3), with all investigated practices exploring and stretching "the boundaries of existing notions of what art is, of art itself" (NWA Route Kunst), and thus also updating humanities theories and concepts of the arts.
- 2) impact and innovation *outside the arts*, when new concepts of libraries, autonomy and crafts/media can provide inspiration and discussion material for other disciplines and societal groups (as detailed in section 2.1).

The three subprojects are collaborations between HBO (polytechnics) and WO (research universities), directly in the libraries and crafts subprojects, indirectly in the autonomy lab subproject (since the two partner Hogeschool Rotterdam and Codarts collaborate with Erasmus University Rotterdam in the Rotterdam Arts & Science Lab). The concrete impact on these partners is: (a) use of research outcomes on libraries/artists' publishing, autonomy/community organization and craft/media in updated art school curricula, (b) use of insights into new developments and concepts in contemporary art practice in university art theory and the humanities.

The external partners in the arts and culture field (De Appel, Kunstinstituut Melly/Formerly Known as Witte de With, Het Nieuwe Instituut, Nederlands Instituut voor Beeld en Geluid, EUScreen, Re:vive, Dropstuff, Casa do Povo, São Paulo, Brazil) will use the research project (a) directly, in publishing and exhibiting its research products, (b) in a long-term perspective for obtaining impulses for rethinking their ways of working, in the need to not only curate and preserve artefacts in their cultural heritage and exhibition spaces, but to also foster arts practices that are focused on work processes rather than objects. Conversely, their institutes, and their audience, will provide public platforms for the research done in the subprojects.

2.3 Support and involvement of network

Description:

The ACKnowledge project is supported by the stuurgroep NWA Route Kunst, headed by Prof. Dr. Janneke Wesseling. The stuurgroep represents the field of the arts and artistic research in its broadest sense, in WO and HBO (represented by university professors and lecturers), covering a wide network of different artistic disciplines. The stuurgroep has been involved in the selection of the three subprojects and has offered and will continue to offer support and critical feedback.

2.4 Connections

New connections are created on the levels of institutions, disciplines, media and knowledge dissemination:

- (1) On an institutional level, by creating new connections between art/design schools, universities, cultural heritage institutions, exhibition spaces, festivals, community spaces and creative enterprises (see section 3). This entails exploration of new work forms between organisations that normally do have radically different modes of operation (such as artists' self-organizations versus art and cultural heritage institutes).
- (2) On a disciplinary level, by connecting separate knowledge domains and breaking existing knowledge paradigms, as described in 2.1. These connections are transdisciplinary: between contemporary art and library science, craft practice and media preservation, contemporary art and societal activism.
- (3) On the level of media, through experimenting with and reflecting on media technology, data science/data design and new forms of publication and publishing as part of subprojects' artistic research approach (as described in 2.1 1)
- (4) On the level of knowledge dissemination, by sharing knowledge between scientific and non-scientific communities, and by experimenting with new forms of archiving and reusing knowledge.

New connections will also be created between the three subprojects, by

- using data analysis tools and design/knowledge mapping methods developed in *How to Read a Library* in the other two subprojects;
- using the community of *Autonomy Lab for Crafted* to include artist-run initiatives with specific craft knowledge, such as KNUST Nijmegen (in printmaking) and Filmwerkplaats Rotterdam (in analog film processing).

Next to their individual research outcomes, in the form of archive prototype, knowledge network visualizations, and small publications, the three subproject will produce a common 'multimedia longread',⁷ i.e. using a digital

⁷ More information on that media format by Stimuleringsfonds voor de Journalistiek: <https://www.svdj.nl/longread/>

publication format developed by the New York Times in 2012 where text, images, video and sound are interwoven in one long, scrolling web page. This format is particularly suitable for including the data visualizations and database publishing from the three subprojects and communicating across communities and disciplines. It is an experimental format for research publications in other disciplines and projects. The longread can both be presented at partner institutions and be electronically shared with the communities the project wants to reach.

New connections, and impact, will also be created in education. The research methods and research knowledge will be used in (and for the redevelopment of) the curricula of our partner schools:

- *How to Read a Library* will directly feed into the curriculum of Graphic Design Arnhem, ArtEZ University of the Arts. This will focus on research related to data visualisation, screen-based typography and database publishing.
- *Autonomy Lab* will involve teachers and students of - and serve as the foundation for renewing – the interfaculty 'Autonomous Practices' curriculum of Willem de Kooning Academy and the Composition study program of Codarts
- *Crafted* will feed into the MA Comparative Arts and Media Studies curriculum of Vrije Universiteit Amsterdam, for instance as part of the regular "Reading Concepts: Intermediality" course.

The research outcomes will be presented at national and international symposia (such as ELIA artistic research conferences) for wider dissemination.

Section 3 – Subprojects

3.1 Subproject 1

Subproject leader 1	Archival Consciousness (Mariana Lanari, Remco van Bladel)
Title of subproject 1	How to Read a Library
Type of subproject 1	knowledge utilization
Co-applicants involved in subproject 1	
Collaboration partners involved in subproject 1	

3.1.1 Description of the proposed subproject

This sub-project is concerned with the collections of libraries in cultural institutions and museum libraries, which we will refer to as cultural libraries.

It departs from the questions: Can we use the physical library and its collection to imagine access to knowledge in the digital library? Can we use digital tools to allow readers to link data, share knowledge and collaborate within and across libraries? Can machine learning, AI and algorithms be used in a library to enhance reading and promote access instead of being used for targeting advertisement, surveillance or predictive forecasting? Is it possible to make the library a safe digital space?

It builds up on our previous project at the Stedelijk Museum Library *Moving Thinking: the origin of one's thought is the thought of another* [2015/2016] and the exhibition *Social Library: Active Voice* [2019] at Casa do Povo, São Paulo. For this current project our library partners are the library of De Appel in Amsterdam and the library of Casa do Povo in São Paulo.

As gateways to knowledge and culture, libraries play a fundamental role in society. The resources and services they offer create opportunities for learning and help shape new ideas that are central to a creative and innovative society. They also help ensure an authentic record of knowledge accumulated by past generations. In a world without libraries, it would be difficult to advance research and human knowledge or preserve the world's cumulative knowledge and heritage for future generations.⁸

Each library has a story to tell. In cultural institutions, books are acquired by librarians, directors, curators, during the preparation of exhibitions and events through relationships with other institutions or donations. As a result, the making of the collection reflects the history and memory of the institution. If the memory of the institution is reflected in the library, can the collection of books in the library also reflect its memory? And if so, can this memory become visible for the public?

In this sub-project we will create a 'Reading Machine' for experimentation and to perform the methodologies of our ongoing artistic research involving data in cultural libraries. And at the same time investigate how to multiply it to other library collections and situated knowledge environments.

We believe that there are two essential elements for providing better access and discovery in libraries and digital collections. One is visualization of how an object taps into the network of a collection and how it relates to the history of the institution. The other is the possibility to have an overview of the collection, to look at a map that

⁸ White, Ben. "Guaranteeing Access to Knowledge: The Role of Libraries" in WIPO Magazine. August 2012, https://www.wipo.int/wipo_magazine/en/2012/04/article_0004.html

shows where that object is located. Assuming that the position of an object is never fixed, but volatile and always changing depending on the use of the collection. The map of reading in a library is constantly, and collectively, in the making.

The installation will serve to share knowledge zooming into the whole data life cycle, from its extraction to their visualization and data analyses. It is composed of two interdependent objects. A smart bookshelf and a carpet that will serve as a grid for mapping. Together, they compose what we will call a micro reading environment. This mobile unit can be temporarily plugged into library collections to perform our work-in-progress experiment of reading libraries.

The aim is to:

- Make cultural libraries better accessible and discoverable
- Extend the database of the library into a knowledge base
- Include linked data in library collections
- Involve the reader in mapping the library, thus including different world views in the mapping
- Public participation as a method and not an end result

Data environment for a data practice

“Big data is not simply ‘a lot of data’; it also means new data combinations and continuous flows of data.”⁹

The *Reading Machine* and the *Mapping Carpet* together form a mini data school and a mini data factory. The miniature aspect is emphasized to clarify that we are not dealing with big data yet, but stepping back to where we lost track of what exactly data is, how it is fabricated, how it becomes useful, when it becomes powerful, and when it starts to become dangerous, violating privacy and profiling users. In this project we are practicing and experimenting with data considering its entire life cycle starting at the smallest unit, a state in which it is not even information yet, all the way to the point in which it can be used to produce new knowledge.

The user wants to know the library, the library does not need to know its user.

We do not gather user data, we ask readers to label parts of the content of publications that will draw connections within the publication and link to other publications within the collection, enriching the dataset of the library slowly and through its users. “The revolutionary power of big data lies in combining many different units of data. That only becomes possible when databases are open and accessible.”¹⁰

In technical terms; in the field of linked data each connection is called a triple. Triples are the building blocks of a knowledge graph which is in the background of many applications that we use on a daily basis. For example, when we like or tag a picture on social media, we are making triples, the platform is collecting data and many companies behind these platforms are profiting from our data.

While using a similar approach of social network technologies on a library collection, but not collecting user data, we are creating a powerful knowledge network, linking data with the genuine purpose of discovering, sharing, visualizing and knowing more about that collection. While at the same time generating awareness of the process of collecting data, and tapping into the important topic of data literacy, making the process of data mining transparent, including the users, and making sure to include the voice of underrepresented groups in the datasets.

How you plan to execute this idea:

In the first phase we will focus on the research, describing and sketching the methodology in a way that it can be translated into these two interdependent objects that constitute our micro reading environment.

In the second phase we will build the *Reading Machine* that will be composed of overhead scanner, rfid (radio frequency identification technology), image recognition for book spines, microphone and speakers. The visualization of the data made through the *Reading Machine* will be shown on the websites of the partner institutions, as well as our own in realtime.

The Mapping Carpet with 3 x 4 m carpet is composed as a framework for data visualization. While data and objects in a collection are in constant movement, the carpet provides a framework that adds meaning to the map. Like in a chess board in which the pieces are moving, but the board is always the same.

3.1.2 Budget clarification

Personnel Costs

The research hours will go in planning the information architecture based on the collection of our two library partners De Appel and Casa do Povo, and in their existing databases. Scanning objects, creating a protocol for

⁹ “Creating value through responsible access to and use of big data” in *Portfolio for Research and Innovation*. Page 103. Dutch National Research Agenda, 2016.

¹⁰ *Idem*

image aggregation, organizing image files, ocrs, and text files. Integrating data aggregation to the existing data base of the partner libraries through an API. Cleaning data, prototyping RFID, testing RFID and image recognition. Integrating RFID database with institution database. Making a knowledge graph for data aggregation. Designing user interface. Experimenting with tools for public participation. Testing and adjusting interface for public participation. Making script for tutorials. Making visuals and video tutorials.

Material Costs

The Reading Machine: an installation including:

A mobile bookshelf unit with RFID reader and antenna

Scan / work surface with RFID reader and Czur overhead scanner with OCR text recognition.

Audio input/output and camera for image recognition (book spines).

The Mapping Carpet: Production costs of weaving a carpet(s) for the installation and public events. Created in collaboration with TextielLab / Textielmuseum, Tilburg. 3 x 4 meter carpet(s) with a schema of the library data.

3.2 Subproject 2

Subproject leader 2	Florian Cramer (Willem de Kooning Academy Hogeschool Rotterdam)
Title of subproject 2	Autonomy Lab
Type of subproject 2	<i>Innovative</i>
Co-applicants involved in subproject 2	Simon Kentgens (Willem de Kooning Academy Hogeschool Rotterdam), Josué Amador (Codarts Rotterdam)
Collaboration partners involved in subproject 2	<i>Kunstinstituut Melly / formerly known as Witte de With, Het Nieuwe Instituut</i>

3.2.1 Description of the proposed subproject

Description:

This subproject departs from our observation (substantiated in the prior project *Autonomous Fabric of Rotterdam*, autonomousfabric.org) that the practice of many contemporary artists is shifting from individual studio work towards running experimental self-organized collectives that operate in informal settings. These collectives often work without institutional support and rarely produce for art markets. Examples include experimental schools, restaurants, radio stations, libraries and even ferry boats run as art projects. As opposed to social design projects, these projects are self-initiated,¹¹ self-organized and use contemporary art, with its notion of aesthetic autonomy, as a point of reference and departure even where they deviate from the fine art paradigm. They also are autonomous in the literal sense of seeking to maximize independence from external institutions and curatorship.

This leads to the research question:

Which concepts of autonomy do these collective, self-organized art practices embody and represent, how do they differ from established concepts of artistic autonomy, and what can other societal actors learn from them?

This also yields the practice-oriented research question of how these new concepts conversely change art practice and, consequently, art education.

Our preliminary observations point towards a changed notion of autonomy in the arts that is no longer tied to individual artists and artworks, and by extension not only to individuals - as opposed to how autonomy has been traditionally understood in Western thinking since the enlightenment period. This occurs in a social and historical context where on the one hand the terms individual "autonomy" and "freedom" have become contested,¹² and where on the other hand the term autonomy has acquired new, extended, post-enlightenment meanings among others in systems theory (von Foerster, Prigogine/Stengers) and political philosophy (Berardi, Lazzarato).

These observations and working hypotheses need to be verified in this subproject.

¹¹ Thus matching Bourdieu's definition of autonomous art versus heteronomous art; Bourdieu, Pierre. *The Field of Cultural Production*. Columbia University Press, 1993, 319-322.

¹² See Lütticken, Sven. "Neither Autocracy nor Automatism: Notes on Autonomy and the Aesthetic." *Cultural Revolution: Aesthetic Practice after Autonomy*, Sternberg Press, 2017, pp. 59-86.

Autonomy Lab will be an artistic research project (i.e. as a project whose research is done with artistic methodologies and in an arts context) in the forms a series of workshops, conversations and small publications (podcasts and zines), engaging artists from self-organized collectives as researchers and contributors, with the goal of making their *implicit* and *tacit* knowledge of new forms and concepts of autonomy explicit, subject to a critical debate among peers, and accessible to larger scientific communities and larger publics.

The sessions will be public, taking place on location at artist-run spaces in Rotterdam and simultaneously online, and based on concrete questions to the practitioners such as:

- Why and how is your artist-run cooking practice/ferry boat/school/library etc. an autonomous practice? How does it create autonomy? How and where is this autonomy situated? These questions may also be answered and investigated in practical, experimental and performative ways.
- How can we more generally characterize the underlying concept of autonomy of your practice? What do other artists' collectives think about it? Where are agreements and disagreements between different collectives and practitioners?

Under the supervision of the core researchers of this subproject, students of the Autonomous Practices curriculum of Willem de Kooning Academy and the composition class of Codarts will be involved to produce small, experimental publications (zines, podcasts, sonifications) that will document these sessions and their findings throughout the project, shortly after each session. These small publications will also be disseminated via the artists collectives to their non-traditional audiences in their self-organized libraries, ferry boats etc. Eventually, the small publications will be synthesized and reworked into one final publication on new concepts and practices of autonomy for a larger audience, in collaboration with our external project partners:

- As a cultural heritage organization and a platform for contemporary exhibitions and debates in architecture, design and e-culture, Het Nieuwe Instituut will contribute this expertise and its extensive archive on urban development in Rotterdam. In 2020, its research program has taken a turn from supporting individual fellows to a focus on interdisciplinary collectives, in line with the observed paradigm shift in this project.
- The shift of autonomous arts projects towards collective participation has also been observed by our partner Kunstinstituut Melly (Formerly Known as Witte de With Center for Contemporary Art). The institute has restructured to include the open platform MELLY for collective practices and community participation, oriented towards young people from Rotterdam with multicultural backgrounds. The institute sees this as an ongoing process of change that includes its renaming and for which it wants to study and learn from community practices in the city.

This project therefore contributes to the 'game changer' *Art as an alternative form of knowledge production* within the NWA Route Kunst, the NWA question no. 67 "Wat betekent kunst voor mensen?" and its focus on art as a means for people to "shape their relationship with the world".

Next to this general research question, this project also addresses a domain-specific and practice-oriented research question: how does the existing creative sector - including art schools - need to change in order to reflect and institutionally support these new art practices and concepts of autonomy? While this question cannot be answered within the scope, time and budget limitations of this subproject, the research outcomes will serve as practical inspiration and conceptual groundwork.

Research findings will directly feed into the Autonomous Practices of Willem de Kooning Academy, an interdisciplinary curriculum for students of all art and design programs of the school, and the composition study program of Codarts which investigates new ways of self-organized, local community-oriented performance practices for music composers and musicians outside concert halls. They will help the curatorial work of the two partner institutions which are confronted with the challenge of meaningfully supporting self-organized and institution-skeptical contemporary arts practitioners in their programs. They will also inform program makers, educators and policymakers in the Netherlands on the paradigm shifts occurring in artists' practice.¹³

Keywords: collective arts practices, artistic autonomy, self-organization

3.2.2 Budget clarification

¹³ Nuchelmans, André. "The Autonomous Fabric: Autonome praktijken in Rotterdam in kaart gebracht." *Boekman*, 118, Apr. 2019, pp. 46-47. (Article on our previous research.)

Since the subproject is based on a series of collaborative workshops and work sessions with artist collectives, most of the work will be done by the two main researchers who will organize and structure these workshops, supervise teams of students and the teacher-researchers guiding them, and turn workshop documentation into research findings. The focus on workshops (where the participating artist collectives will be paid for the work time and spaces they provide) and small collaborative publications done in the process of this subproject also means that we need to allocate 30% of our budget to material costs.

3.3 Subproject 3

Subproject leader 3	Prof. Dr. Alec Badenoch, VU University Amsterdam, Faculty of Humanities, Art and Culture.
Title of subproject 3	CRAFTED: Passing on crafts and artistic expression to future generations of artists
Type of subproject 3	Innovative
Co-applicants involved in subproject 3	Johan Oomen MA, VU University Amsterdam, Faculty of Computer Science, Business Web and Media
Collaboration partners involved in subproject 3	Netherlands Institute for Sound and Vision, DROPSTUFF.nl, Visual artists through RE:VIVE, EUscreen Fondation, AVA_net.

3.3.1 Description of the proposed subproject

This subproject uses artistic research to capture and regenerate the intangible craft knowledge of analogue audiovisual production for new generations of visual artists.

Crafts are an invisible thread that connects groups of people into communities who share the same knowledge, skills and traditions. Historically passed down through oral tradition, crafts have the potential to change and rejuvenate with each new generation and branch out to new forms of artistic expression. While often applied to such handwork as weaving, carpentry or pottery, craftsmanship can also be seen in the use of analogue media technologies to produce sound and video recordings. In the 20th Century, people operating analogue recording devices and cameras in professional, artistic and everyday settings developed new knowledge and skills about lighting, sound engineering, manipulation of technical settings and editing techniques that allowed them to achieve desired effects for their media productions. These crafts are mostly collected as 'objects': either finished products (on magnetic tape or film) or in the production equipment itself. In the digital age, their very materiality has proven a promising source of inspiration for visual artists.

However, tangible craft objects do not grant us access to the intangible knowledge, skills, techniques and traditions that are essential for the continuation and renewal of craftsmanship in contemporary practices. Documenting and re-appropriating these skills and knowledge enable us to better understand the possibilities and limitations of analogue media technologies and the works that were created with them. Due to the rapid shift to digital technologies, analogue practices and tools have not been well documented in heritage collections or require additional expert knowledge to be fully accessible. Providing high-quality, easily accessible and reusable crafts content can also support the livelihood of contemporary artisans and artists who seek inspiration in traditional methods and techniques and would benefit from the renewed public interest in crafts.

CRAFTED poses the central research question: **how can the embodied tacit knowledge of analogue audiovisual production be captured and archived for new generations of artists?**

To address this question, we will collaborate with artists to develop a model to capture, store, enrich and provide access to intangible heritage. We curate content around various analogue media technologies and their practices, showcasing how they were used to make professional and amateur productions. Sound and Vision and the EUscreen Foundation will contribute to this thematic domain of crafts heritage with photographs, 3D scans and 360-degree images of analogue technologies from their collections and video and sound recordings that document how analogue technologies were used in professional settings (e.g. television studios) and by amateurs.

Building on related work outside the Netherlands, notably the Technes (<http://technes.org/en/home/>) and DEMA (<https://www.c2dh.uni.lu/projects/doing-experimental-media-archaeology-dema-practice-theory>) projects, and research in the arts disciplines we study how contemporary artistic practices can co-design new ways of engaging future generations of visual artists. We expand on the emerging research paradigm of *experimental media archaeology*, which emphasizes hands-on, embodied experiment with old media technologies to explore their

modes of perception and physical affordances (van der Oever and Fickers 2019). Whereas such practices typically shift the historical researcher into the creative, experimental role of an artist, we reverse these roles *to make the artist a researcher* in exploring their own embodied acts of (re)creation. Specifically, we engage with visual artists to reimagine new ways of sharing intangible heritage, and also studying and appropriating emerging technologies using augmented reality technology that explores how crafts heritage can be enjoyed through means of artistic expression. The aim is to stimulate future generations to get inspired by visual art production of the past.

CRAFTED mobilizes the NWA route's gamechanger "art as alternative form of knowledge production" in several innovative ways:

- its dialogue and co-creation between former practitioners and current audiovisual artists *revalidates and revitalizes audiovisual production practices as creative practice*
- It expands methods of experimental media archaeology by *making artistic practice and knowledge, the main driver of research*, rather than historical understanding,
- It adds a new dimension to cultural heritage institutions usual concerns of making archival material available and stimulating re-use by *involving artists in designing the archive itself*
- It *shifts the focus of archival re-use* from finished audiovisual artefacts or collected objects *to the intangible skills, modes of perception and embodied knowledge of the original creators*

To achieve these goals we will hire a postdoctoral researcher who will be embedded in the Arts faculty of the VU University and will work part time at the Netherlands Institute for Sound and Vision. We will generate:

1. Two co-design workshops with visual artists, design agencies and (retired) media professionals.
2. A conceptual design of an archive for intangible heritage, based on the co-design workshops, interviews and desk research. With collections from Sound and Vision and EUscreen we will create a pilot version of the archive and evaluate it with participants of the co-design workshop.
3. A journal article (aim: <https://www.spt.org/techne/>) documenting the outcomes of the work.
4. Bi-monthly blogs posts and at least two press releases targeted at a general audience. The Sound and Vision communications department will assist in the dissemination and amplification of these.
5. Contributions to the ACKnowledge long-read featuring video and other media from the workshops

By engaging with artist-communities, we will develop inspiring and intuitive ways of conveying this knowledge to contemporary artists. By using these analogue techniques, or reverse-engineering them within their digital workstations, their artistic vocabulary is expanded. For a general audience, the educational materials developed in the project will lead to a greater understanding and appreciation of the skill involved in twentieth century analogue film making. Though the focus of this work will be visual arts, the insights can also be used to document other craft domains, such as fashion, clothing and jewellery, toys, costumes, decorative arts and ritual objects, musical instruments etc.. Not only within other projects directly linked to the "Kunst" route of the NWA, but also with other routes, notably Levend Verleden, Naar een veerkrachtige en zinvolle samenleving and the Big Data Route.

Partners and their roles

- VU University - will supervise the postdoctoral researcher hired to execute the research
- The Netherlands Institute for Sound and Vision will provide the use case and acts as part-time host organisation for the researcher;
- Design agency DROPSTUFF.nl will share insights into Augmented Reality as part of the design workshops;
- RE:VIVE (www.revivethis.org) works together with producers of electronic music and visual artists to work with archive material. They will be invited to participate in the co-design workshops;
- The EUscreen Foundation (www.euscreen.eu) brings together broadcasters and audiovisual archives from across the EU) will provide collections to be used as contextual information;
- AVA_net is the umbrella organisation of audiovisual archives. EYE Film institute, LiMA, Sound and Vision are amongst its members.

3.3.2 Budget clarification

A postdoc with expertise outlines above will be recruited for 10 months in accordance with NWO salary tables (€47.273)

The two co-creation workshops have been costed at 2,700 in total, with €800,00 to cover hosting the workshops (total €1600), along with costs of video recording and support (in total €650) and travel costs for workshop participants (€450).

3.4 Coherence between subprojects

The three subprojects amount to a common research project ACKnowledge. Their coherence has been described in section 2. To summarize:

- They investigate *art as an alternative form of knowledge production*, as defined in the NWA Route Kunst
- They investigate three different, real-life examples of contemporary art "*practices and objects [as] embodied and situated forms of knowledge and insight*"
- They have the common research question: *How can we reveal and share knowledge that is embodied in contemporary arts practices?*
- They research and explicate shared, practical, and in most cases neither codified nor archived knowledge that exists in artist's collectives and communities. Involving and strengthening these communities is a common goal.
- They will share research tools and methods, such as data visualization and publishing forms.
- They will summarize their outcomes in a joint *longread* publication.

Section 4 – Data management

Responsible data management is part of good research. For the collection/generation of data and the analysis of this data, timely measures need to be taken to ensure the storage and later reuse of the data. This means that prior to the start of the research project researchers must ascertain a) which data could be relevant and b) how these data could be stored so that they are accessible for reuse. After a proposal has been awarded funding, the researcher will draw up a detailed data management plan in which the researcher explains how all relevant research data will be made findable, accessible, interoperable and reusable (FAIR). For more information about the data management, see www.nwo.nl/datamanagement

Please answer the following questions:

4.1 Will data be collected or generated that are suitable for reuse?

Please select one of the boxes. If no, please briefly explain why; if yes, state any constraints on reuse of existing data if there are any.

- Yes: From my own or a collaborator's prior research.
 Yes: Publicly available data.
 No: Have you considered reusing existing data but discarded the possibility? Why?
Description, if you have answered no:

4.2 Will data be collected or generated that are suitable for reuse?

- Yes *Please answer questions 4.3 and 4.4.*
 No *Please explain why the research will not result in reusable data or in data that cannot be stored or data that for other reasons are not relevant for reuse.*
Description:

4.3 After the project has been completed, how will the data be stored for the long term and made available for the use by third parties? Are there possible restrictions to data sharing or embargo reasons? Please state these here.

Description:

All the data generated in the three sub projects will be open and public, shared long-term of the research institutions and also be available for reuse by any third party under Open Science policies. The servers of Instituut voor Beeld & Geluid will be used as the main archive for the ACKnowledge. The project will make use of Beeld & Geluid's expertise and long experience in archiving audiovisual data. -We will also encourage smaller artist-run public repositories (such as *Monoskop* and *aaaargh*) to reuse our data and research outcomes.

4.4 Will any costs (financial and time) related to data management and sharing/preservation be incurred?

- Yes: Then please be sure to specify the associated expenses in the budget table of this proposal.
- No: All the necessary resources (financial and time) to store and prepare data for sharing/preservation are or will be available at no extra cost.

Section 5 - Public summary

Please write a public summary in both English and Dutch (max. 50 words each). Briefly describe your research in terms that are understandable for readers who are not experts on this topic. Please note that this texts will be used for communication purposes if the proposal is granted.

English public summary

Description:

ACKnowledge (Artists Community Knowledge) investigates alternative forms of knowledge produced in the arts: art libraries, audiovisual collections, artist collectives. How can we reveal and share knowledge that is embodied in these contemporary arts practices? The focus is on shared, practical, and non-codified knowledge that exists in the arts.

Word count: 48

Dutch public summary

Description:

ACKnowledge (Artists Community Knowledge) onderzoekt alternatieve vormen van kennis die in de kunsten wordt geproduceerd: in kunstbibliotheken, audiovisuele collecties, kunstenaarscollectieven. Hoe kunnen we kennis die in deze hedendaagse kunstpraktijken wordt belichaamd, ontsluiten en delen? De focus ligt op collectieve, praktische en niet-gecodeerde kennis die in de kunsten bestaat.

Word count: 48

Section 6 – Literature references

For ACKnowledge in general:

Borgdorff, Henk. "The production of knowledge in artistic research." *The Routledge Companion to Research in the Arts*. Routledge, 2010, p. 45.

"Kunst: Onderzoek en innovatie in de 21e eeuw." *Nationale Wetenschapsagenda*, 2019, <https://2.wetenschapsagenda.nl/route/kunst-onderzoek-en-innovatie-in-de-21ste-eeuw/>.

Maharaj, Sarat. "Know-how and No-How: stopgap notes on 'method' in visual art as knowledge production." *Art and Research. A Journal of Ideas, Contexts and Methods* 2.2 (2009).

NWA Route Kunst. "Impact en innovatie in de kunsten." *NWA Route Kunst*, 2020, <http://routekunstnwa.nl/informatie>.

Subproject *How to read a library*:

Adam, Alison. *Artificial Knowing Gender and the Thinking Machine*. Routledge, 1998.

Dockray, Sean Patrick. *Performing Algorithms: Automation and Accident*. Diss. 2019, https://monoskop.org/images/2/29/Dockray_Sean_Performing_Algorithms_Automation_and_Accident_2019.pdf

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Subproject *Autonomy Lab*:

Dockx, Nico, and Pascal Gielen. *Mobile Autonomy. Exercises in Artists' Self-Organization*. Valiz, 2015.

Lütticken, Sven. "Neither Autocracy nor Automatism: Notes on Autonomy and the Aesthetic." *Cultural Revolution: Aesthetic Practice after Autonomy*, Sternberg Press, 2017, pp. 59–86.

Subproject *Crafted*:

van den Oever, Annie and Fickers, Andreas. "Doing Experimental Media Archaeology: Epistemological and Methodological Reflections on Experiments with Historical Objects of Media Technologies". In B. Roberts , & M. Goodall (Eds.), *New Media Archaeologies*. Amsterdam University Press, 2019, pp. 45-68

Section 7 - Signature

Please make sure you check the box below, declaring that you satisfy the accepted standards for scientific conduct.

- By submitting this form, I declare that I satisfy the nationally and internationally accepted standards for scientific conduct as stated in the Netherlands Code of Conduct for Scientific Practice 2014 (Association of Universities in the Netherlands).

Main applicant	
Place	
Date	