# Grenzgang

## When Promenadology Meets Library

Tabea Lurk[1], Markus Schwander[2(✉)], Daniel Brefin[2],
and Beate Florenz[2]

[1] Media Library, Academy of Art and Design FHNW, Basel, Switzerland
`tabea.lurk@fhnw.ch`
[2] ILGK, Academy of Art and Design FHNW, Basel, Switzerland
{`markus.schwander,daniel.brefin,beate.florenz`}`@fhnw.ch`

**Abstract.** The text describes specific aspects of the documentation of the research project *Grenzgang* in the *integrated catalogue* of the media library of the Academy of Art and Design (FHNW HGK). *Grenzgang – Artistic Investigations on Perception and Communication of Space in a Trinational Border Area* – is anchored geographically in Basel and the surrounding region, while its method can be located between artistic research and promenadology. References to research results from various project phases are documented with diverse analogue and digital media in the media library's *integrated catalogue*. This catalogue attempts to display such artistic works in their heterogeneity and variety and to make them accessible for research alongside other more classic library resources. The contribution submitted here elucidates typical challenges which can occur on the threshold of the catalogue/archive in the aftermath of complex artistic research projects. Specifically, the question arises of what happens when an active investigation like "walking" encounters an apparently static collection facility like the media library.

**Keywords:** Artistic research · Promenadology · Art education
Documentation · Catalogue

## 1 Introduction

With support from the Swiss National Science Foundation (SNF),[1] the research project *Grenzgang – Artistic Investigations on Perception and Communication of Space in a Trinational Border Area* combined the method of promenadology, following Burckhardt [6], with divergent artistic methods – applied in a mode of research. Particularly worth mentioning here are performance, installation, improvisation, audio, drawing and

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[1] The project *Grenzgang – Artistic Investigations on Perception and Communication of Space in a Trinational Border Area* was conceived as a team research project between the Institut Lehrberufe für Gestaltung und Kunst (Institute for Art and Design Education) and the Hochschule für Musik (School of Music) at the University of Applied Sciences and Arts Northwestern Switzerland and was financed by the Swiss National Science Foundation (SNF) [24]. Duration: Jan. 1, 2014–Dec. 31, 2015. Research team: Daniel Brefin, Amadis Brugnoni, Corinne Hasler, Simone Etter, Beate Florenz (co-direction), Markus Schwander (co-direction).

video. In a first project phase, team members experimented with their own artistic approaches in order to develop valid research modi for their approaches respectively. Differing concepts resulted, which in turn determined and structured these approaches in space. Assuming that our perception is inalienably individual and bound to our physical experience, Burckhardt's promenadology offered a methodic approach with which to place the body in (urban) space as a starting-point.

## 1.1 Promenadology in Artistic Research and Art Education

Walking was of high relevance to the entire project. Artistically, *Grenzgang* thereby took up a tradition since the 1960's (e.g. Long [8]), while at the same time invoking contemporary positions which also apply walking as a method (Alÿs [1]; Lerjen [14]). Walking – as the common denominator of heterogenous artistic approaches – occurred both individually and in the group. In each case, walks were taken based on rules defined by the team members beforehand.

In contrast to historically motivated, documentary-photographic, architectonic or archaeological documentations, the (research) results generated by *Grenzgang* can be understood as individual, artistic protocols of space, perception and/or intervention; sketches and interpretive snapshots of the border situation. They possess a partly performative character and reflect or test both historically developed as well as innovative methods of notation and communication. These are to be conceived of not only in the context of urbanistic studies of space, but also with the professions of the participants in mind and in the context of artistic research and mediation. As the following examples showcase, the project is anchored in different fields ranging from music (notation, audio recording) to the visual arts (performance, drawing, video documentation) and from artistic research to the praxis of art education (artistic intervention, interactive/participative workshops).

In a later project phase, each team member assigned tasks to the entire team, based on his/her respective individual research modus. This yielded a correlation between individual research modi as well as a – temporarily desired – shift of perception for the team members. Walking together and the mutual completion of various praxes were the preconditions of a phenomenologically oriented, intersubjective production of knowledge. During the course of the project, this approach proved to be a crucial moment for the artistic research of the perception of space; in light of which the databank for the project *Grenzgang* can be seen as a digital extension of the intersubjective production of knowledge.

Workshops with external experts (e.g. Markus Ritter, Fred Frith, Christine Heil, Elke Bippus, Francesco Careri, Bernadett Settele) accompanied the project and opened the team's internal discussion. The provisional conclusion of the project took on form with the *Research Platform Grenzgang* in the Salon Mondial on the Campus of the Arts, which presented the project *Grenzgang* for public discussion (Fig. 1).

The *Research Platform Grenzgang* in the Salon Mondial [2] brought notations and permutations from the research team together spatially, created superpositions of diverse approaches and enabled public events to take place in connection with the project. These included the *Table Conversations* as thematic forums as well as the *IRMAT Concert*, a *Walk* through the urban site Dreispitz (Basel/Münchenstein) and

**Fig. 1.** Public *Table Conversations (Tischgespräche)* with experts of praxis and theory were part of the *Research Platform Grenzgang.* Photo: Damaris Meury

work with school classes. The students undertook different walks around Dreispitz during which they completed actions according to the posts they selected. The resulting materials were played back at the *Research Platform*, thus continuing the team's notations. On this basis, the work with students was carried beyond the framework of the *Research Platform*, resulting in the conception of educational resources which can be used by teachers (Figs. 2 and 3).

With the Multitouch-Interface InfraRedMultiActionTracker *IRMAT* [19], visitors at the Research Platform could retrace selected walks from the project and, thanks to audio and visual material made available through *IRMAT*, locate it (Fig. 4).

## 1.2   Research Layout of the Project Grenzgang

*Grenzgang* pursued goals on multiple levels: questions about the specifications of the trinational border region around Basel were united with fundamental question of how we perceive space. The region is, thanks to its dense population and notably diverse utilization, particularly illuminating: "Production and traffic zones, nature sanctuaries, residential areas, and recreational, industrial and harbor facilities" intermingle with one another [12]. On an interdisciplinary level, the project was intended to demonstrate the genesis of knowledge in artistic research [5, 16] and to achieve a transfer of knowledge from artistic research to art education, as understood as an epistemic practice [11, 17]. The investigation of the trinational border region around Basel through the lenses of cultural history, sociology or urban planning imparts *Grenzgang* with a possibility for artistic access.

**Fig. 2.** Working with students was an important component of the *Research Platform*. On their own walks they were able to establish individual connections to the research questions posed in *Grenzgang.* Photo: Damaris Meury



**Fig. 3.** School classes experimented with the perception and presentation of space with artistic and participative approaches. Photo: Damaris Meury

**Fig. 4.** The Multitouch-Interface *IRMAT* as an interactive educational tool in the framework of the *Research Platform.* Photo: Damaris Meury

The question of how knowledge is generated and established as such occupies a prominent position in the discussion surrounding artistic research, which has intensified since the 1990's [4]. Bound to this question is another, regarding the power of deciding what should be declared knowledge: who determines the criteria for what should be considered knowledge? Whereby this last question was sparked against the background of scientific-theoretical thoughts on hierarchies of knowledge going back to Rheinberger [23]. However, to be able to show how knowledge is generated in a project which handles explicitly in the mode of artistic research, a detailed documentation of the procedures and resulting notations and applications was essential [25]. That applies equally for the application to art education: for an epistemic praxis of art education, the approaches used, the steps taken, the open questions and speculations emerging from notations and applications and the breaks and irritations which arise in the modus of artistic research are all relevant.

### 1.3 Artistic Approaches

Due to the heterogenous artistic approaches of the team members, the data available for the documentation of the project is decidedly divergent. Furthermore, said data can take on the status of notations as well as evaluations. The divergence of the artistic approaches – and therefore also of the resulting material – accounts for a central source of momentum for the project: it was precisely the intention to be able to correlate the individual modi of artistic work, relating as they do to the same space. Thus, the

divergence of the material is not only founded in the layout of the project. It is constitutive for the attainment of project goals, without reducing the perception of space to single sensory experiences, personal memories, culturally determined observations or the momentary states of the team members. Although, exactly such individual and momentary conditions were incorporated in notations, rather than being supressed.

Considering the heterogeneity of the artistic approaches, walking, as it relates to promenadology and as a form of movement which is tied to the body and which occurs in space, provides a methodical access to space which was valid for all team members. The following references to the artistic approaches and forms carried out in the *Grenzgang* project grant a brief insight into the modus of artistic research and illustrate the rich variety of the resulting material (Fig. 5).



**Fig. 5.** The accumulated traces of a path rubbed over for multiple kilometers turn the gloves into an artistic condensation of a walk by Simone Etter. Photo: Simon Mader

The dirt- and scuff-covered white cloth gloves are the drawn notation of a walk which Simone Etter completed in the frame of her performative examination of the space in the trinational border region. The walk began at her home in Basel's (CH) inner city and ended at the Hotel Ibis in St Louis, France. Her path was guided by the cues of an audio route planner in Google Maps, which she listened to on headphones. The headphones had two functions: they were the pilot that determined the direction of her walk; and they shielded her acoustically from her environment. Her gloved hands remained in direct contact with her immediate surroundings during the entire walk: with walls, railings, stairs and thresholds, traffic signal posts, pedestrian

crosswalks, etc. The gloves become a continuous notation of walking, while the body experiences space continuously anew: from walking upright to a stooped position and vice versa. Instead of the upright hominid's eyes, the hands' sense of touch becomes central for the forward propulsion of walking.

The bag in which the gloves were stored is labeled with a tag on which the topographical coordinates of the starting and ending points of the walk are noted. The gloves, with their traces and in combination with these specifications, chronicle a completed action without needing to define it in more detail. They take on the status of a notation of a performative act, the pertinence of which for our perception of the trinational space only becomes apparent upon completion. Even if in regards to the gloves we can deduce that the urban environment on this or that side of the border leaves the same traces. The reactions of passersby are as invisible in the gloves as the experience of the body, which completes the walk (Fig. 6).
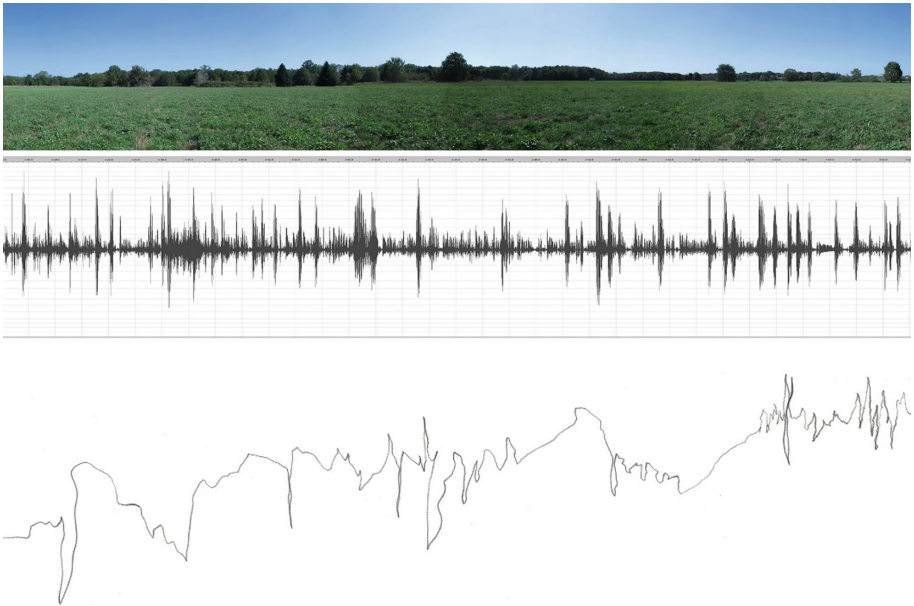


**Fig. 6.** Daniel Brefin's *rauf-runter (up-down)* is a performative translation of a real horizon (above) on the border of the media *seeing > speaking* (middle: wave-form representation of the audio data) and *hearing > drawing* (below). Photo: Daniel Brefin

At first glance, the drawn translations of Daniel Brefin's acoustic landscape portraits *rauf-runter (up-down)* appear to be abstract lines drawn on paper. In the portraits, at a particular point in the landscape Brefin's speech traces the horizon line verbally, in the medium of an audio recording. To this end he uses the verbal descriptions "rauf" (up) und "runter" (down). The alternation of the words and their articulation in the speech recording are the directions for the visitors in the *Research Platform Grenzgang* to translate the horizon onto a sheet of paper with a drawn line. Having never seen the

horizon itself, which can only be viewed from a single point, the acting person traces graphically what has been noted acoustically. The artistic notation in the medium audio overlays itself thus with the drawn gesture of the later action (drawing) of project-external individuals (Fig. 7).
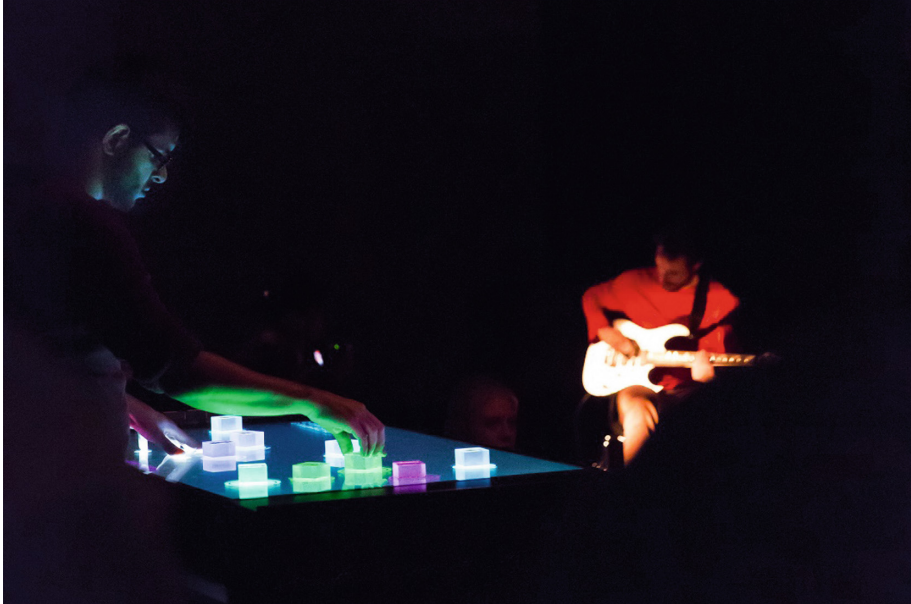


**Fig. 7.** With the Multitouch-Interface *IRMAT,* Amadis Brugnoni implements an archive of auditive notations and improvises with the guitarist and media artist José Navarro and the trumpet player Marco von Orelli in the frame of a concert. Photo: Damaris Meury

Amadis Brugnoni collected specific tones and sounds on his walks whose musical quality addresses the imagination of the listener directly. The "temporal dilation of walking, with all its acoustic inconspicuousness, as well as the convergence of the sounds and tones of the surroundings and his own steps" are thereby documented [12]. The acoustic notations reveal the auditive perception of space in that they make it available through isolation. During the course of the project, Brugnoni used the resulting archive of sound material and tone tracks both for conceptional considerations in regards to the *Research Platform Grenzgang* and for a concert during which Brugnoni improvised with the audio tracks on the Multitouch-Interface *IRMAT*. The performance, accompanied by the guitarist and media artist José Navarro and the trumpet player Marco von Orelli, could also be understood as a (sound-)spatial walk, allowing for associations with tangible space. The soundscapes that emerged during the concert included the audience in an auditive knowledge of the trinational region Basel. This is connected through hearing to a personal, acoustic, experimental knowledge. In this respect, the concert expands the auditive knowledge of space generated by Brugnoni through the presence of the concert's attendees (Fig. 8).
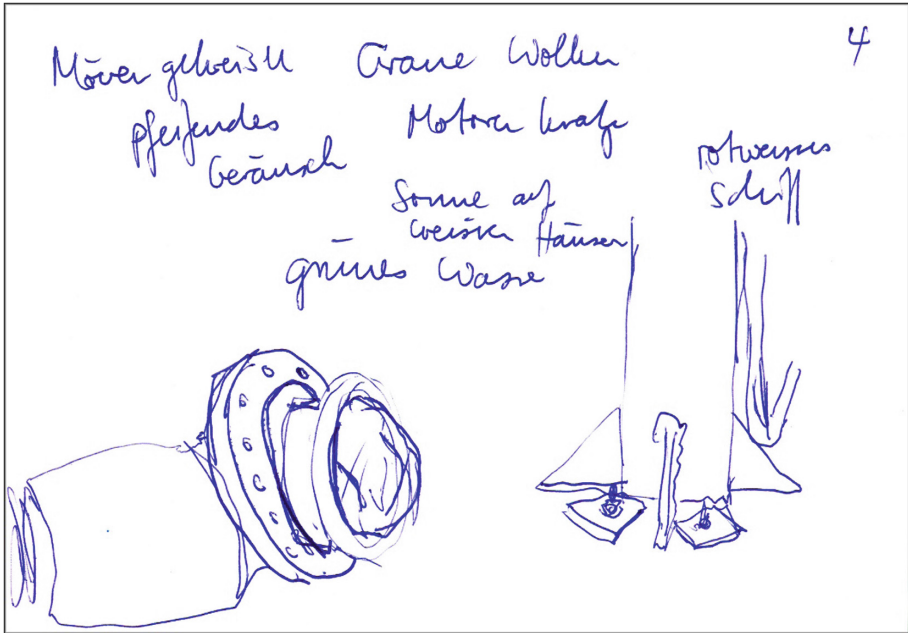
**Fig. 8.** Markus Schwander used ballpoint pen sketches and written notations like "cries of seagulls", "grey clouds" etc., to examine the imaginary border between the landscape and that which lies between the drawer and the landscape. Drawing: Markus Schwander

During his walks, small-format DIN-A6 cards enabled Markus Schwander to contend, through drawings and descriptions, with Lucius Burckhardt's *Nullmeter*; with the question, by extension, of where landscape begins. In *Grenzgang*, Schwander meets the question of the perception of space with an artistic reflection on that western tradition which perceives/conceives of an expansive exterior space as landscape. Schwander sketched objects from his immediate surroundings on his small-format cards and supplemented the sketches with spatial terms which either applied to the (abstract) distance, as in, for example, "white sky", "knolls", "forest edges", or named distant acoustic impressions and tones which characterized both the actual environment for the drawer and the imaginable landscape. Thus landscape became a space which could not be packed into a picture, the human in the midst of its surroundings is being evoked as a central theme instead. In the final abundance of cards, words and sketches create a sort of conglomerate occurs which explores our perception of space through the interplay of seeing and designating.

The different artistic notations and realizations developed by participating researchers in *Grenzgang* can become incitements to further action in a continuing epistemic praxis. If different perspectives are accessible and connections are drawn, for example, between texts from the project and images and sounds, the projects knowledge can further evolve. Same with performances or drawings which are combined with literary texts on spatial experience while walking (e.g. [18, 22, 29]). All that can

become applicable in multiple ways. In this sense, we are searching for the ways in which the individual components of *Grenzgang* can be combined to new units of meaning.

## 2   From the Project to the Catalogue/Archive

Upon completion of the project, a selection of approximately 120 filed documents were digitally consigned to the media library to be stored and mediated for the long-term.

As a filter for later publications and for the creation of a structured research (and project) archive, a balance had to be found in the moment of technical assimilation. Specific contexts should be capture/documented/fixed without destroying the flexibility desired by the research team. Whereas Claude Lévi-Strauss' concept of "bricolage" (improvising) [15] was seminal for the project members about content, for the media library it was important to combine technical solutions with archival (file-based) approaches and library (object-centered) conventions. Considerations had to be made regarding the unavoidable loss of knowledge, which occurs when knowledge is transferred as information or (rather) data to third parties such as the media library. Athanasios Velios' recent thoughts on "creative archiving" were helpful here: "Creative Archiving", writes the author, "was introduced recently to describe the process by which the archivist openly contributes to the interrelation of an archive. The result of creative archiving is an additional layer of interpretation, typically through an online interface, which illustrates the archivist's ideas about the core concepts kept within the archive material. This delivers a result which is unique to the specific archive rather than a standardized view of the collection as presented by popular library or archiving software. The proposal of creative archiving comes as a result of recent discussions in the archiving profession" [27]. This additional layer described can, in technical regards, be compared to the Curation-Layer from Choudhury, Palmer et al., which distinguishes itself by "adding value throughout life-cycle" [7].

Thus, in the conception phase, the core areas of the *Grenzgang* project were modelled in a Wiki, in which CiDOC-CRM [13] is stored as a structural schema [9]. The units "Walk" and "Testwalk" emerge as logical core elements, specified through the orientation in space (path), time (when) and the constellation of participants. A distinction was made between "Authors" und "Participants", since the walks were realized either alone or collectively in the group: generating the collected material in terms of artistic research, as previously mentioned. Then, the data was clustered according to the "Walks" and ingested into the *integrated catalogue*.

### 2.1   From File to Display

Because of the project's self-containedness, the collection was sorted by search terms, following the (archival) principle of provenance. Selecting, sorting out and parts of the classification were adduced by the research team. The fragmentary inventory was developed with the goal, "to identify its parts, bring them into an adequate arrangement and register them" [30]. Beyond the specific core attributes, like people involved (artists/authors), main genre (work, notation, event, documentation, GPS raw data, etc.)

title, media type, material type and extent (number of respective documents, access rights), each object could be seen as a constituent part of a temporal, spatial and local continuum. The multi-dimensional approach was in part reminiscent of archaeological documentations. To obtain the most precise survey possible, such documentations combine photographic methods of documentation (which document e.g. the excavation progress and findings) with drawn views (incl. technical, e.g. schematic measurements) and sedimentological descriptions (including geological and anthropological material descriptions), in order to identify the connections between the documents and their possible meanings during the course of the archaeological description.

- Space (and spatial reference) means here aspects of the perception of surroundings. In addition to actual environmental occurrences, the (phenomenological) description of the (internal) state of the acting/recording person can play an important role.
- The location (of the actual scene) is usually localized in the form of GPS coordinates.
- In regards to time, a distinction is made between the temporality (date, time) and the duration (period of time/start-end) of the event.

The category of the "Walk" served as a further harmonizing trait. As a base method, it either aided the collection of data (Brefin, Brugnoni, Florenz) or appeared as a performative event with *in situ* character (Etter, Schwander). Thus the category of the work was devised as an abstract entity (compare FRBR: work or CIDOC: E70 Thing) and could, by means of an entity of itemization, contain a multi-part object (file/Dossier). Local (GPS coordinates) and temporal (date/time) coordinates "located" the work's formation history and ca now be supplemented through semantic description(s).

## 2.2   Ingest Process

The *integrated catalogue* makes it possible to integrate these types of research data into the regular catalogue of the media library. Research data becomes thereby equally accessible as the rest of the library's media [10]. The *integrated catalogue* consists of a data warehouse with SOLR-Index, data server, web server with different web front ends and a transcoding system, in which entire collections as well as somewhat weakly structured material bundles can be registered.

Within the ingest process, completely new integrated material is analyzed, structurally filtered and enriched with semantic information through a half-automated analyzing cascade. The following tools, among others, are used to this end:

- **Apache Tika** for extracting the MIME type and encodings, as well as full texts in the case of texts
- **ffmpeg** for transcoding and extracting technical metadata from data which is identified (from Tika) as time-based media (MIME type "video/*" or "audio/*")
- **GPSBabel** for transcoding GPX-data
- **gvfs-info** for identifying the MIME type. This has similar capabilities as Libmagic but can deliver different results

- **imageMagick** for analyzing image- & PDF-data. imageMagick creates furthermore thumbnails and preview images
- **Libmagic** for creating the initial list of files. It tries to identify also the MIME type and encoding
- **OpenLayers** is a JavaScript library which detects/transcodes well-known waypoint formats (GPX data)
- **(OpenOffice Server)** for transcoding for office documents [not jet implemented]
- **SAC** (Spatial Audio Coding) for transcoding audio
- **Sonogram**(s) are generated by a C++ software which was developed by Jürgen Enge
- **External services**: Bing Maps (for GPX-display), info-age GmbH (design/ 3D-modelling/data management), Zencoder (for large stocks of video data or specific formats).

Since the search operation is technically based on the SOLR-(full text-)Index, content and metadata do not have to be harmonized to according to a standardized metadata scheme. Data is rather mapped implicitly according to the common displaying principles, which are embedded within the template. A unified appearance of heterogeneous search results makes them readable/comparable with other catalogue content, despite formal differences. Nevertheless, the original data set is stored unchanged in the index and used for the display. Keeping the original data set is not only helpful regarding complex metadata set such as MARC21 for library media, but it is especially interesting for other data, since these resources often come from historically evolved sources (Filemaker, SQL, etc. or even from simple Excel tables, directory structures and others), where the design contains non-factual knowledge.

It is planned to embed the *integrated catalogue* in further university infrastructures such as for example the recently developed website (search routine), which makes the system an active element of the creative data cycle. The creative data cycle is a model, which describes how results, generated at the HGK, are made accessible as resources and how they can be recurrently (re-)used. This is important for multiple reasons: data remains relevant in regards to the active accumulation of knowledge and, especially at art academies, data generally gains in value as it ages. In addition, interfaces for the active reuse of the data can be created which keep track of the (re-)use. This form of updating and reuse is especially exciting regarding the *Grenzgang* project, because it was from the very beginning about the perception and communication/transfer of space experiences. These experiences can only be shared/anticipated/incorporated by actively using (and realizing) the existing resources or their concepts: when e.g. a particular practice, which led to a specific resource within a walk, is imitated/imagined/updated. Thus later users can make their own personal space experience and (intangible) knowledge is passed as.

## 2.3 Data Curation and Communication

The web interface of the *integrated catalogue* provides access to data on three levels: list view, list preview, detail page. These views process the search results as situated in particular contexts. Thus different ways of browsing or searching are enabled, which

we all know: from the non-targeted search, which leads us in the real spaces of a library through different shelves according to thematic topics, to specific search via author, subject, date etc. These routines are transposed into a virtual environment which contextualizes the data on the catalogue level. While the list preview offers a first impression of the found results/objects (Fig. 9), the detail pages contextualize the resources. In that, for example, the background of their creation or semantic framing are displayed (Fig. 10).



**Fig. 9.** List view (screenshot) of the web interface of the *integrated databank*. Screenshot: Tabea Lurk
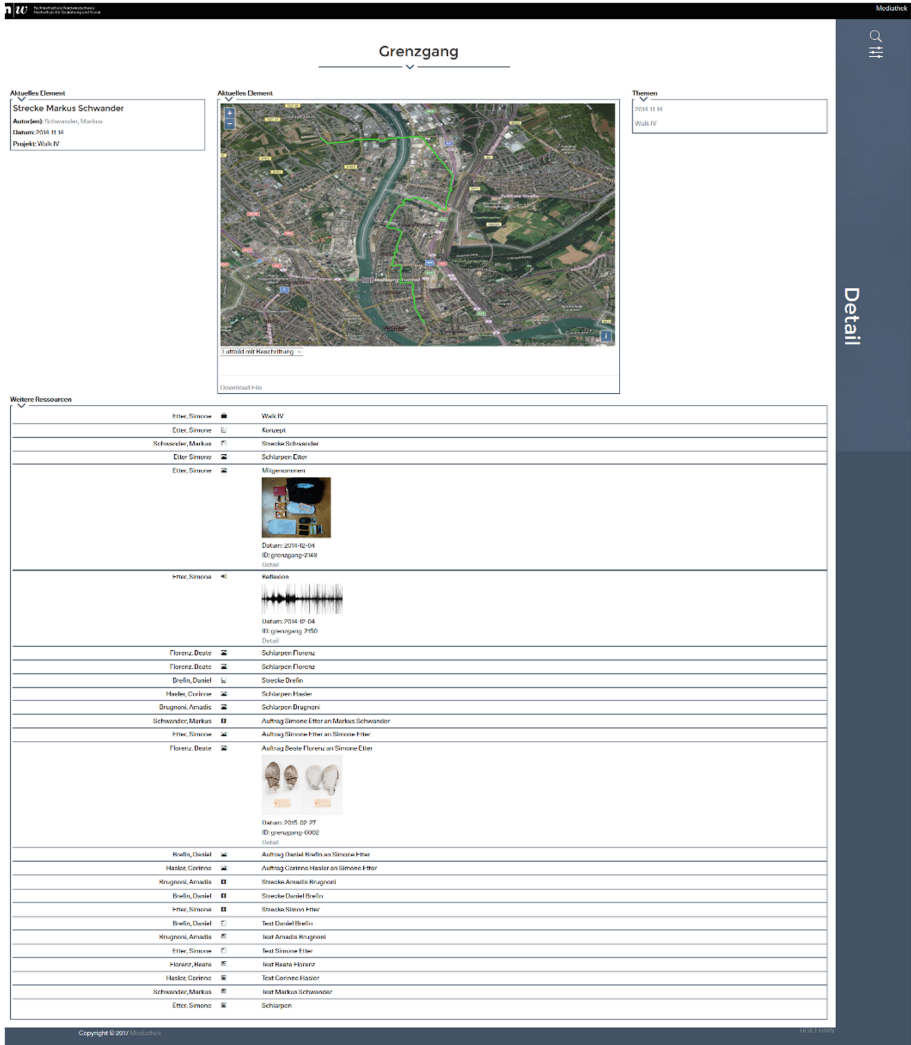
**Fig. 10.** Detail Page (screenshot) of Walk IV with selected resources open. Screenshot: Tabea Lurk

If applicable, supplemental information on further resources is provided.

In *Grenzgang's* case, the detail pages display the "Walks": each folder outlines information respective to one "Walk" and contextualizes the actual data (texts, images, audio and video files, GPX-data) by referencing information about author/participants, space, time, type of resource and additional information regarding meaning and semantics.

One part of curating the *Grenzgang* project consisted, therefore, in contextualizing the resources, which meant to visualize the aforementioned heterogeneity of research

modi and forms of experience in all their plurality. The benefit in regards to the catalogue occur most evidently in inter-collection connections. If one searches finds additional resources, texts or objects etc. from the same person, from the same time/time-frame, from the same place etc. but e.g. from other research projects, etc. by research all collections. In the data set itself, the source of the information is recognizable. Furthermore, the media library can instigate their own indexing or mapping based on standardized classification systems, thesauri or ontology-based models, without disturbing the original language of the project. Thus, not only the various sources of the indexing become visible (accountability), but also shifts in meaning (semantic drift) which occur over the course of time. Regarding *Grenzgang*, the sensory data of space could later be loaded on mobile phones or navigation devices for users who might observe transformations in an urban context. Since not only pure GPX-data is entailed but also the descriptions/instructions of the "Walks", the method becomes applicable to different contexts. Also the notation forms, developed by the artists, contribute to the sensory experience of the trinational border region for later users, and serve to keep the principles of promenadology present.

## 3   Conclusion and Outlook

The availability of digital cartographies may seem to provide some relief from (supposedly) objective documentary and classical constraints on representation. Yet subjectively accumulated perceptual, artistic and/or communicative forms of experiencing space can add specific knowledge and dedicated value to the current state of research. *Grenzgang* offers a plausible example for this development. Simultaneously, parallels to the (new) discourse on materiality [20, 21, 28] can be identified. In this context the focus shifts from "things in and of themselves" in a direction, which take society and the (broader cultural) scene into consideration: "what psychoanalytic theory calls 'object relations' in the explanation of identity formation, what sociology invokes as the physical manifestation of culture, and anthropology refers to as the objectification of social relations" [3].

From the perspective of *Grenzgang*, the digital processing of the project data induces a sort of a flexible correlation of the present material [26]. Within the scope of the databank, relationships, consequences and continuing routines, which were not visible during the course of the project, can be newly constituted; thus revealing the process of artistic research can be continued. The data gathered should therefore be understood as discursive material, which generates knowledge continuously anew, rather than established knowledge, which functions statically in accumulation.

In regards to the documentational and communicative (/educational) situation, which includes the formats and raster of the description, the systematics of metadata and their forms of usage need to become more and more flexible. Alternative forms of description and organization are required, just as there are different views of reality. Alternative search filters, which take the needs of the searcher into account, will allow for a plurality of descriptive forms. Project-internal/artistic/creative terminologies can then be offered in parallel to formalized descriptive forms. This coexistence will, in return, facilitate accidental (browsing) encounters with the unknown or the unexpected.

Renewed creativity can be yielded and the scientific reuse of data can be supported. It becomes evident that automatic recommending systems, which make large amounts of data available based on algorithmic patterns, have their justifications in this regard. That doesn't relativize the assessment abilities of users (regarding information competence), but on the contrary, it promotes diversity.

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