Historical learning processes of primary school children in museum collections: Results of an Italian-German research project

Sandra Chistolini°, Bernd Wagner*

Abstract

Dealing with multiple crises and unavoidable disasters is a current educational challenge because children are affected by environmental and climate change and economic uncertainties in the long term. Crisis-related content is usually addressed in the context of social science education in schools. In Germany, the cross-disciplinary tasks of civic education and education for sustainable development as well as multi-perspectivity in science lessons are relevant (Pech, 2009), while in Italy active citizenship is more stressed (Corradini, 2019). It remains questionable whether institutional teaching contents contribute to overcoming crises, or whether they are rather linked to social reassurance measures that conceal the fact that little is being done to change the causes. This article addresses the understanding that actively dealing with crises and unavoidable disasters requires visions for the future. These can be developed in the context of historical learning, in which historical change is made tangible. The article presents an empirically based pedagogical approach about how these visions of the future can be developed with children and their interaction with collection objects.

Key words: pedagogical anthropology; didactics of material culture; historical-political learning processes; ideas for the future; intergenerational discourse.

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1. Introduction

In Germany, Sachunterricht and its didactics as a scientific discipline deal with questions relating to the historical learning of pre-school and primary

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[°] Università degli Studi Roma Tre, Italy - ORCID 0000-0003-0462-3064.

[•] Universität Leipzig, Germany - ORCID 0009-0005-6838-7031.

school children. These are related to the historical perspective in basic social science teaching and are understood in a multi-perspective way, meaning that links are sought to other perspectives (e.g. the social science perspective) or the related disciplines. 1 Several historical didactic concepts, which have often been developed for secondary school pupils and adults and largely reflect cognitive objectives, have been taken up in the historical perspective of Sachunterricht.² For preschool and primary school children, who gain experience with the extensive topic of "time" and view it from the perspective of their living environment, these remain only partially helpful. So far, there are only a few low-threshold, anthropological-pedagogical concepts for historical learning from the didactics of Sachunterricht with reference to the related disciplines. The historical perspective in Sachunterricht has been formulated in relation to the understanding of "time", which strives for connections between past, present and future in relation to historical change.³ In addition, a future focus of the perspective framework will be on transformative education, which will also have an impact on the perspectives of Sachunterricht. Further research is needed on historical material learning processes as a conceptual understanding of time in the context of change and transformation.⁴ Research findings on learning processes with material culture⁵ can provide initial indications; studies have been carried out on this in Sachunterricht and its didactics as well as the related disciplines. Empirical studies on the stimulating character and the variety of meanings of collection objects can also be utilised.

In the following, the binational research project «Education and objects. Historical subject learning processes in school-related collections»⁶ shows that collection objects enable historical subject learning processes to be further developed across disciplines and the interdisciplinary character of subject

¹ Cfr. the perspectives in the Perspective Framework for General Studies (GDSU, 2013). In addition, "encounters with space and time" is a thematic focus in all four class levels in the Saxon curriculum.

² Hans-Jürgen Pandel's (1987) didactic model of historical consciousness, which can be adapted for primary schools, with its various forms of consciousness, e.g. reality and political consciousness, is more practicable, as it makes students aware of "things that have become" and aims to develop their own thinking.

³ Cfr. van Reeken (2018).

⁴ In this context, it makes sense to connect to the multiperspective framework of learning, which describes discursive learning processes that are framed by Sachunterricht (Pech and Rauterberg, 2013). ⁵ A conference on the pedagogy and didactics of material culture at the University of Leipzig in June 2022 focussed on the evocation of meanings and the intrinsic meaning (Hahn, 2020) of objects. The planned publication is about how research findings on material culture from the related disciplines can be taken up and further developed in terms of pedagogy and didactics of material culture.

⁶ The German Research Foundation, Deutschen Forschungsgemeinschaft (DFG), is founding the 2022-2026 Project "Bildung und Objekte: Historische Sachlernprozesse in schulbezogenen Sammlungen".

teaching to be maintained. In the first two years of the research project, the national approaches to historical learning have become clear and the Italian research team in particular has emphasised contemporary relevance as an important component of historical thinking. As part of the joint data interpretation, these were expanded to include references to the future thematised by children in their engagement with objects. The Italian university collection *Fondo Pizzigoni*, which was opened to groups of children as part of the research project, also contains hints to this. In the collection on the teacher educator Giuseppina Pizzigoni⁷, the pedagogical reform focal points have been worked out, for example the pedagogical and didactic claim to thematise current topics with children as much as possible.⁸

A model was then built for the educational programme of the collection in Rome, which exemplifies Pizzigoni's experimental method in its topical contemporary references. In the concrete environment of the school, for example inspired by a flock of sheep visible through the classroom window on a meadow opposite, a teaching unit, the "cycle of wool", was developed that takes place in numerous locations. This has also been taken up as a contact zone in the research project in the form of an interactive model (see Fig. 1 and Fig. 2: the sheep figures are pupils' works from the collection). The images shown in this article are authorised and blurred where necessary.

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⁷ See: Chistolini, S. (2015). Kindererziehung nach Giuseppina Pizzigoni. Gegenspielerin Maria Montessoris und Begründerin einer femininen Pädagogik. Paderborn: Ferdinand Schöningh.

⁸ Sandra Chistolini writes: By "learning from historical material" we mean the development of intellectual processes triggered by the observation of and interaction with historical material, as in the case of the calendar drawn and narrated by the children of the old Pizzigoni school. During the interaction with the objects, the child does not describe the object itself but establishes the link between the object it sees and its own lived experience, which it remembers well.

⁹ Marie Louise Pratt (1999) used the concept of the contact zone in a decolonial context in 1991. James Clifford (1997) developed it further in the museum context. It is about tensions that arise in the context of object worlds and that highlight inequalities, differences and disparities. In such negotiation processes, new relationships and perspectives can emerge that promote historical learning (Wagner, 2010).



Fig.1 - Interior view of the interactive model of a school building with teacher (Photo: Keidel, 2022)



Fig. 2 - Exterior view of the interactive model of a school building with sheep (Photo: Keidel, 2022)

This article is composed of four sections. In section 1, the study "Education and Objects" is categorised in the research context of historical learning with collection objects. Section 2 presents the binational design of the study. Section 3 then presents selected axial codes of the data material from the perspective of the binational research group and outlines perspectives for historical learning in primary schools with reference to current challenges. The research findings point to the potential discursive significance of collection objects for dealing with crises and future concepts, which is explained in section four.

2. "Education and objects" – a video ethnographic study in Italy and Germany

The binational work on setting up the contact zones in both school-related

collections, on data collection and the extensive multi-stage analysis according to Grounded Theory (Strauss and Corbin, 1996), has largely been completed. The bi-national co-operation between Sandra Chistolini and her colleages at the Università degli Study Roma Tre and the Sachunterricht-Sozialwissenschaften Department at the University of Leipzig involves the school history collections Schulmuseum — Werkstatt für Schulgeschichte Leipzig and the Fondo Pizzigoni at the Universitá degli Studi Roma Tre as well as selected primary schools in Italy and Germany. The extensive school-related collections focus on the topic of *schools 100 years ago*, which can be found in both countries, albeit in different forms:

- A) School outdoors. Numerous stagings of the school situation, often with the entire inventory in the open air, e.g. in the playground or in the forest (Germany) as well as in the garden or a neighbouring cornfield (Italy).
- B) Gymnastics throughout school. It is noticeable that in Germany the gymnastics tradition, in which certain exercises are performed by many participants in different teaching situations, is important (Schede and Dietze, 1926). In Italy, it is often gymnastic exercises that create an aesthetic image; objects in the collections provide hints to this.
- C) Appreciation and didactic inclusion of children's work. Children's work is also used as teaching material in both countries. This is particularly pronounced in the Italian collection, which includes a puzzle picture designed by children and in which children's work has been collected on calendar pages.

With one test group each, collection objects were selected for the thematic focal points that inspired 9- to 11-year-old primary school children to engage with them. These were made tangible in contact zones in the context of an object environment and as originals or replicas with direct reference to the objects in the display cases in both school-related collections. The contact zones have been designed to suit the spatial conditions¹¹ and the selected objects. This was based on previous work in which objects that are not completely unfamiliar, but also not used daily, were identified as particularly activating for this age group.¹² Unfamiliar objects come into focus when they encourage children to try them out or when they can be linked to real-life confrontations. In addition, previous developments in the didactics of

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¹⁰ The first binational publications have also been submitted to and published in the Italian journal *IL NODO. Per una pedagogia della persona*, also in the thematic issue 54 (2024) on *Cultura materiale e processi di apprendimento nelle collezioni pedagogiche*, which is currently in print.
¹¹ In the School Museum in Leipzig, several rooms have been utilised and a room has been designed that will also be retained as a longer-term offer. At the Fondo Pizzigoni in Rome, the movable objects are also displayed in the collection and set up when children visit.

¹² However, it is not about idealising objects (Hahn, 2016). Even inconspicuous, unused or discarded objects can be appealing to children. It is particularly clear in the collections that adults see objects differently and find other objects appealing than children.

material culture emphasise that the performative exchange around object meanings and active design with objects promotes material learning processes (Krösche, 2020; Wagner, 2024). In the following, examples are given from Italy and Germany of the contact zones designed in the collections, which can be experienced on the primary school excursions in 2-3 hours.

Inspired by the ideas and practices of gymnastics and gymnastics exercises as well as the forms of outdoor school lessons in the 1920s, movable gymnastic figures were created for a contact zone in the Leipzig School Museum (see also Fig. 3). During the Weimar period, school lessons were often held outdoors in Germany, for example in the school garden. School desks and blackboards as well as other classroom furniture were often taken outside, i.e. the entire classrooms were moved outside. These endeavours also took place in other European countries, for example the classrooms in the dunes by the sea in the Netherlands or the lessons in the garden at Giuseppina Pizzigoni's Rinnovata reform school in Milan.

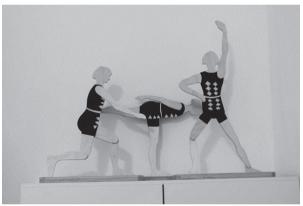


Fig. 3 - Gymnastics figures by Mady Piesold for the contact zone in the Leipzig School Museum - Workshop for School History (Photo: Keidel and Zehbe, 2023)

The wooden gymnastics figures are part of a contact zone in a museum room that refers to gymnastics and gymnastics illustrations from the 1920s and a school bench from this period. According to historical documents, school benches were also used for gymnastics exercises. There is also a larger room with a video of movement sequences of gymnastics exercises and the movable wooden gymnastics figures that activate children to move. From the video data of the research project, it can be reconstructed that the participating children, without being asked, try to imitate the positions that they can perform with the wooden figures. For example, individual children are encouraged to place a leg on the shoulder of a classmate, do the splits and try out other movements, including the most extreme ones possible (see also Fig. 4: Video sequence from 16 June 2023, minute 6:30-7:50).



Fig. 4 - Children and gymnastic figures in the School Museum - Workshop for School History Leipzig (video still: Keidel, 2023)

The historical photos provided also encourage children to make contrasting connections with their everyday lives. Spontaneous discussions also took place: one group of children, for example, philosophised for a long time about "school outside" in relation to their school using the historical photos, without adult guidance. The children made references to their current everyday school life, asking themselves what would happen if they moved their classroom to the playground today and what school outside looks like today. The insights into the data material of the ongoing research project show that objects such as a bread bag or pinhole camera in the Leipzig School Museum whose form of use are known but whose exact functions are unknown lead to test situations. In addition, objects that stimulate forms of movement that can be mimicked in the children's group arouse interest. The objects, which are related to the children's own living environment, i.e. "school", also lead to interactions.

Eight contact zones were created in different rooms at the Fondo Pizzigoni in Rome. The university collection is located near the library of the "Dipartimento di Scienze della Formazione", where a corridor, the campus courtyard and the main archive room were used for contact zones. For example, there was a contact zone for original hand puppets from the collection; one for apparatus and devices for imitating bird calls; one for puzzles relating to original student work and didactic material designed by Pizzigoni; as well as a contact zone for hula hoops, which were used to create flower shapes in the campus courtyard using gymnastic exercises. The video sequences for the contact zone with the bird calls are particularly interesting because they require the participants to produce these calls themselves. The aim is also to find out which bird species the voice belongs to.



Fig. 5 - Video still of bird calls (Video still: Pallotta, 2023)

The activities at the round table are easy to follow. The video sequence (Keidel, Wagner and Zehbe, 2023a, 00:15:08 - 00:16:59) shows the challenge of trying something out, i.e. the objects are tried out and numerous, also group-related performative discussions take place. The dialogue is more casual, but the cognitive designations are subordinate – possible meanings of the objects are exchanged, and functionalities are tested. Contact zones with collection of objects offer the opportunity for the children to get acquainted with the anthropological approaches available to them to make objects comprehensible. Further coding of the video material and the question of the anthropological starting points of primary school children with regard to material culture point to this.

3. Data collection and analysis in the binational research team

The video data analysis focussed on the question of children's performative forms of engagement with the collection of objects in the contact zones.¹³ A further research focus is the question of learned forms of engagement with collecting objects, or forms of engagement that have been over-formed by national school systems versus anthropologically determined forms of

extensively in national and binational research teams. This led to the initial theoretical approaches.

¹³ The interpretation of the video data in the binational research team of eight people took place in several face-to-face and online sessions and as part of a conference on the research topic at the Università degli Studi Roma Tre. For this purpose, comparable video sequences were tabulated, and open and axial coding was created for video sequences, which were then discussed extensively in national and binational research teams. This led to the formation of categories and

engagement by children. 300 primary school children in Italy and Germany took part in the video ethnographic research project. The research questions were pursued with reference to this sample. The binational research team has made the educational focus in Germany and Italy visible. While in Italy, on the one hand, emphasis was placed on reform pedagogical and psychological interpretation schemes, in Germany, on the other hand, educational childhood research was an important frame of reference. The collaboration clarified the different disciplinary perspectives and at the same time triggered interpretation processes, e.g. regarding Giuseppina Pizzigoni's experimental method, in which learning is understood less as a constructivist connection process and more as a reorientation triggered by current challenges (see contact zone, which consists of a school model and a sheep meadow with moving figures). ¹⁴ In the following, the main points of the analysis of the main research question and then the anthropological prerequisites are presented.

2.1. Data evaluation using the example of two axial codes

The extensive video data material has been sequenced and coded. Coding, in turn, has been discussed extensively in the national teams and the binational research group. The binational research group has so far identified six axial codes, two of which are presented here as examples and related to historical learning.

2.1.1 Forming shared meanings

The variety of meanings of objects is explored by the children involved in relation to their lifeworld and their own activities. The following transcription sequence from the Italian material shows this using the activity *collecting*¹⁵ and can serve as evidence.

Transcription (2023b, 00:02:22 - 00:03:50):

Researcher: "The Pizzigoni Fund contains collections of calendars and newspapers that were made by children many years ago. What do you collect?" Interjections: "I collect old things."

Interjections: "I collect my photos."

Child 1: "I collect iron figures."

Child 2: "I don't collect anything, but I hope that I will collect something."

Child 3: "I'm not collecting anything, but I'm going to start collecting something."

¹⁵ Cfr. the fundamental work by Ludwig Duncker et al. (Duncker and Kremling, 2010).

¹⁴ Pizzigoni's method is based on the idea of "Attualità" and follows the neorealist trend.

Interjections: "I collect toys."

Interjections: "I collect my grandmother's things: there is a toy from my grandmother, first it belonged to my grandmother and then to my mother." Interjections: "I collect Barbies, all the Barbies you can imagine."

Based on a real collection and the familiar activity of *collecting*, numerous meanings and collecting possibilities are evoked. In the contact zones that encourage creation, for example with construction kits in Leipzig or with puzzles in Rome, building agreements must be made and own productions named. For example, meanings are exchanged during the construction and destruction of a wooden tower (2023c, 00:16:30-00:19:00). A search for lavender plants, in which children explore a poster with magnifying glasses, is reinterpreted as a search for gold in a flower container, with the magnifying glasses provided being converted into digging utensils (2023d, 00:05:45-00:13:27). A gymnastic task in which children place flowers with hula hoops is also solved by them finding their own names for the gymnastic exercises. Obviously, children are able to actively engage with objects in a way that considers the variety of meanings of these objects and makes them tangible and communicable.

2.1.2 Space and time links

The creative approach to the objects accessible in the contact zones is also visible in the video data in relation to temporal dimensions. Children categorise unfamiliar objects based on their current experiences. They create references to the past and future from the present, sometimes in leaps and bounds. One child, for example, who is confronted with an original, historical object of a model kit of Göttingen with a city wall, points out that a wall divided Germany into West and East (2023e 00:01:30-00:02:30). The historical photos, especially the unusual fashion recognisable on them, e.g. on a poster depicting Pizzigoni, also encourage historical comparisons. One child addresses this directly by asking: "How is this woman dressed?" (2023f, 00:03:30-00:05:10). This statement makes it clear that the initial assumption is the present, in which such clothing is not worn. Based on a concrete image with unusual fashion, the past is interpreted from the present, which is an essential requirement of historical didactics. 16 In addition, historical change is thematised, which points to one of the aims of the perspective framework for teaching history. The question of the anthropological prerequisites has been dealt with in the extensive video data corpus based on the concept of the stimulating character of collection objects

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¹⁶ Fashion as an important point of reference for historical change has been analysed in detail in cultural studies (Barthes, 1985).

for children. In particular, impulses that were triggered in object interactions were emphasised. In addition, interactions with reference to the group of children and the rooms were further coded. Before this question is pursued further in the next section, the learned behaviours visible in the video material, the institutionally practised approaches, are shown.

2.2 School approaches to the class excursions

Two selected open coding are first presented, which show the contrasting approaches to collection objects learnt and shaped by national school systems on excursions by Italian and German primary school classes.

2.2.1 Excursion groups occupy rooms in an unknown institution

The Italian research group noticed that the larger space in Germany is only used to a limited extent and that the children often form themselves into working groups without being asked to do so and then act in small groups.



Fig. 6 - Children form a working group in the Leipzig School Museum (Photo: Keidel 2023)

The groups of children take up space in different ways and according to requests. These are behaviours learned at school that often only allow activities after being asked to do so. It can be reconstructed from the video material that these activities are carried out in different ways by the groups of children. In Italy, children have an open work assignment with animal hand puppets, which results in confusing experimental situations. In Germany, there are numerous forms of group work that are reminiscent of discussion groups. At the same time, most Italian children are focussed on the gymnastics exercise, for which a picture of a flower can be created, and only during the break do they show off their additional artistic skills with the hula hoops.

2.2.2 Excursion groups resolve emerging conflicts

The conflicts that arise, which are expressed through differences of opinion or arguments, are mediated in different ways in the video material. In Germany, several conflicts escalate, especially between boys, so that adults have to intervene. In Italy, after a brief escalation phase, there is often mediation by an involved or uninvolved child that calms the situation. These are obviously learnt ways of dealing with situations that are perceived as institutional. In this context, the Italian researchers have pointed out that in Italy, training for cooperative collaboration is already offered in kindergarten, which also includes strategies for independent conflict resolution without adults.

In addition, the groups form themselves differently in the room; in Italy and Germany this often takes place sitting or standing, but only in the German video material can groups be seen lying on the floor. This is linked to how familiar school excursions are, and to the different experiences between them and everyday school life. In Italy, the different experience in an out-of-school place is also made more difficult by school uniforms, which continue to mark a school situation even outside the institution. It also seems to be even more difficult than in Germany to organise school excursions administratively.¹⁷



Fig. 7 - Children with collection objects in the contact zone in the corridor of the Fondo Pizzigoni (Photo: Pallotta 2023)

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¹⁷ This becomes clear, for example, with the ministerial authorisations required long in advance and the requirement to have the transfer provided by a bus company. According to Italian teachers, local public transport cannot be used with groups of pupils for insurance reasons.

3. Research results on historical learning – interpretations of the binational research team

The video material reconstructs basic anthropological activities that are available to children when dealing with objects. The participating Italian and German children first try out the object, then the experiences are contrasted with their own lifeworld and linked to familiar collections. In the Italian material, there are numerous situations in which the children talk about collecting in their family, also mediated by their own activities with the animal hand puppets or accompanied by the monkey hand puppet Spirimpolo¹⁸. In Germany, the movable gymnastics figures, a video animation of night gymnastics and old photos form a contact zone that encourages children to talk about whether school outside would still be possible today, even with the consistent and elaborate material moves depicted in the photos. This leads to conversations about how children would like school to be. The extensive construction and design possibilities with the pedagogical material for the city construction kit as well as the puzzle and Pizzigoni elements also show that material is used as a means of expression without instructions, whereby moods, activities and spatial conditions are included (2023g, 00:16:30 - 00:21:00; 2023h, 00:06:00 - 00:12:00).



Fig. 8 - Children with city building blocks in the Leipzig School Museum

The binational research project benefited from the productive, sometimes differently accentuated activities of the national children's groups in the collection rooms that were visible in the data material. This made it possible to scrutinise not only the different premises of the national teams with regard to

¹⁸ During the excursions, the children could be accompanied by selected original objects, such as the puppet of a monkey that a student teacher at Pizzigoni designed for an Italian children's group based on a story from a newspaper article.

data analysis, but also their own interpretations.¹⁹ The anthropological focal points, i.e. basic skills that are available to children as cultural techniques when *opening up* objects and dealing with possible meanings, can also be reconstructed in the data material. This supports the endeavours of cultural education in both countries, which enable children to access cultural heritage and to take learning on the dimension of time. This is summarised in the following section.



Fig. 9 - Designed figure made of reconstructed material from the Fondo Pizzigoni collection

4. Historical learning about collection objects and future challenges

Not all objects and object environments in the contact zones appeal equally to 9- to 11-year-old children. Through unfamiliar collection objects that can be contextualised and tested in the real world, the discursive diversity of meaning can be opened up and the "intrinsic meaning of these objects" (Hahn, 2020) can be made recognisable. Collection objects that evoke meanings can encourage children to initiate discourses and use them as *boundary objects* in the sense outlined by Susan Star and James Griesemer (1989). Boundary objects tie in with the discursive nature of object learning and enable intergenerational discourse by allowing children to present the possible meanings they have found to adults and relate them to intergenerational issues. In state institutions, museums, collections and schools, this can stimulate the necessary transgenerational dialogue on how to deal with crisis-ridden developments and

¹⁹ The developmental and psychological limits of what children can achieve were repeatedly emphasised to the German team by Italian researchers. The Italian team took up aspects of educational childhood research and thought about children as actors in the video sequences.

²⁰ Star and Griesemer (1989) developed their discursive concept of *boundary objects* with adults. In the context of the proposed intergenerational dialogue, the aim is to use the discursive character of collection objects to give primary school children the opportunity to contribute ideas and communicate them to adults.

unavoidable disasters. The initial research results of the binational study *Education and Objects* can be summarised on the basis of two points:

A) Gaining meaning - learning to interpret history from the present for the future

Historical learning processes are not just about reconstructing the past and simply looking back into a closed history. Rather, they involve reinterpreting historical contexts from the present for possible future perspectives. This approach to time supports children as actors in their learning processes, creates a capacity for imagination about the past and leads to historical thought processes that provide indications of possible open futures that are not obscured by past or present constraints and that can be dealt with. The processes are not just about reconstructing the past and simply looking back into a closed history. Rather, they involve reinterpreting historical contexts from the present for possible future perspectives.

B) Confrontations with boundary objects that stimulate discourse in intergenerational groups

The discursive debates about time are stimulated by collection objects that have a stimulating character for children. The different ways in which children and adults can experience the meaning of *boundary objects* offer the opportunity to enter dialogue with institutions about the future that can be shaped. In school situations, which are in themselves characterised by the mediation of generations, these confrontations with material cultural heritage are of educational and didactic importance.

More research is needed to be able to further describe the *boundary objects* that particularly appeal to certain age groups and thus strengthen the didactics of material culture. In both countries, the aim is to make the cultural heritage of collections, which is preserved at considerable expense, accessible to future heirs.

Children have access to present-related approaches, as the following diagram visualises once again.

²¹ The possibilities for the future that were not pursued in the past can be integrated into these thought experiments. In Walter Benjamin's figure of thought on "suspended history" can also be connected here.

²² Being able to imagine different ways in which societies develop is a fundamental prerequisite of historical awareness that is linked to aesthetic learning processes.

²³ This ties in with the social science understanding of history didactics as developed by Annette Kuhn, with a focus on emancipation (Götz, 2018).

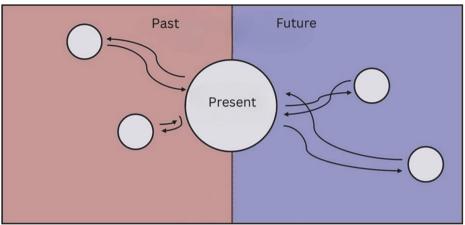


Fig. 10 - Material culture enables leaps from the present to the past and future

The Italian research team states: "Archives, museums and collections arise from the desire to bring sedimented culture to life, from the awareness that what we collect teaches us to understand who we are, where we come from and where we are going." From an educational perspective, the binational research team would like to contribute to stimulating more possible responses to crisis-ridden developments and intergenerational visions for the future in both countries.

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