

## Aarhus School of Architecture // Design School Kolding // Royal Danish Academy

### Building perservation practice

Pilegaard, Marie Kirstine

*Publication date:*  
2010

*Document Version:*  
Publisher's PDF, also known as Version of record

[Link to publication](#)

*Citation for pulished version (APA):*  
Pilegaard, M. K. (2010). *Building perservation practice: Architect's interpretation and communication of stories in the built environment.*. Abstract from World in Denmark 2010 "As Found", København, Denmark.

#### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

## **BUILDING PRESERVATION PRACTICE, ARCHITECT'S INTERPRETATION AND COMMUNICATION OF STORIES IN THE BUILT ENVIRONMENT.**

Marie Kirstine Pilegaard, Architect MAA, PhD student  
Aarhus School of Architecture, Department of Architectural Heritage  
Nørreport 20, 8000 Aarhus C. Denmark  
Mail: mariekirstine.pilegaard@aarch.dk

**Keywords: Preservation practice, Communication models, Restoration, Transformation, Planning, Reuse of industrial buildings, Architectural practices, Museums.**

In the field of conservation practice concerned with the preservation of cultural heritage values in the built environment, there is an urgent need for a renewed discussion of how we intend to preserve the valuable environments including their historical buildings and structures for the future. Not all of the buildings and structures that we have selected as valuable cultural heritage today have the same needs in the practice of preservation and some of them will need more attention in the future debate on the possible reuse of it, both now and in the future. These environments are in the current practice, defined as everything you find on a site within a delimited selected area. Written sources and guidelines for the preservation of the environments of preservation value, written by the public authorities or professionals, describe the environments as places that *tell us a story*, and they indicate the importance of this *story* to be preserved. For the future possibility of this story or stories to be understood the questions about how we interpret and communicate the stories in the preservation work is a central issue in the strategy for this practice. In this paper I have chosen to focus on the interpretation and story communication within the architectural practice because it has a very important role in the preservation field. I will not focus on the questions of what to select and why but only on the already selected heritage of building because the following practice would be based on the same problems regardless of the nature of the selected.

Today the idea of reuse of buildings is a natural part of the architect's practice, but there is in this professional field no common discussion of how to preserve and promote the stories that have been selected as the most significant features of our society's historical development. The transformation of harbours, industrial sites and other built environments related to production are being performed all over Denmark within a short period of time and the tasks are getting still more and more numerous in the future.

It is therefore needed to examine the practice of dissemination and communication of stories in cultural heritage sites when transforming it for a new use, both when something should be removed or added to facilitate the future use of the site. The cultural heritage sites includes a range of building types that, unlike the preservation practice with the most listed buildings are including particularly buildings which places much greater efforts on the preservation work. In this paper I will divide the building into three types ranging from (1) those that can be reused without changing either the external or internal appearance significantly, and thereby the building in the principle communicate the story itself by preserving its appearance. (2) Other building types that requires more visual physical changes to be reused and therefore also the need to pay greater attention to the interpretation and communication of the building's history in the process. so it still can be understood after intervention. (3) The last building type that is not suitable for new purposes or uses, this type must be preserved as status quo, and here the communication of the story by museums will be the only

practice besides the conservation. The model below shows the building types as tree examples of this graduation of usability vs. dissemination and communication. This model (Fig.1) shows that the more usability the building has before the intervention the less active use of dissemination and story communication is needed in the transformation of the building for new purposes.

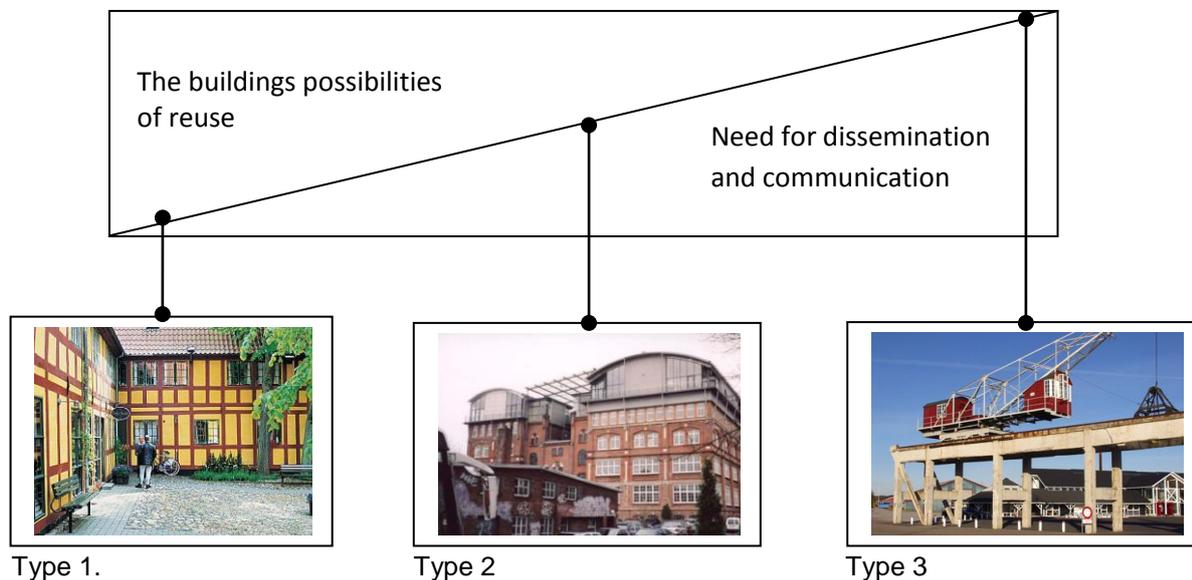


Fig. 1.

In the following I will focus on the Type 2, the middle building type, because this is the most used in transformation projects and also the most vulnerable because of the necessity for larger interventions. The buildings of this type are industrial sites with buildings recently emptied of the original functions and are today often categorized as cultural heritage. They represent a large number of sites spread all over the country as a memory of the industrial period in Denmark. The current need for strategies in order to qualify the preservation and the reuse of the sites, is a central issues discussed over and over again in the field of professionals dealing with the cultural heritage. The challenge is to find the balance between use and protection but the expectations to the role of the cultural heritage and its potentials within the local areas, has been elevated in the recent years. This fact is caused by the current focus on the cultural heritage as a resource in a perspective of experience economy, the storytelling of the local area as a practice can, from this perspective be used as a strategy to generate economic activity. (Heritage Agency of Denmark 2010)<sup>1</sup>

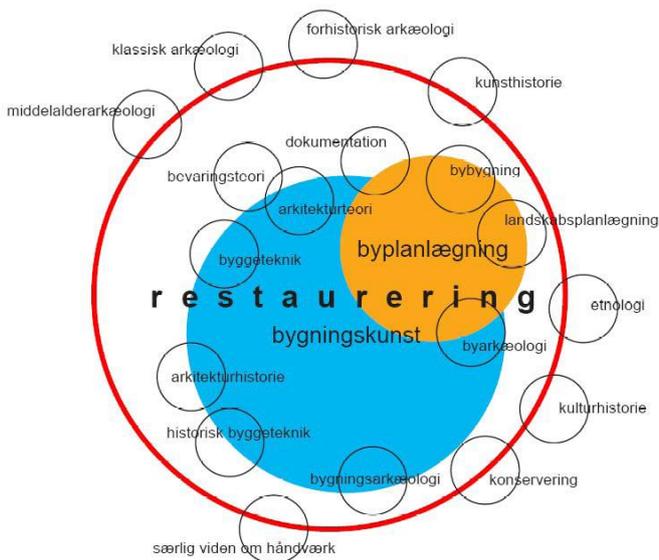
One of the terms to preserve the cultural heritage sites and buildings, is the collaboration between the planners, architects and the local museums, an interdisciplinary collaboration that during more than a century has been difficult of more reasons. The relationship between the professionals and the distribution of competences and roles within the field of preservation has been unclear, which has caused conflicts that are still influencing on the collaboration in today's practice (Ottosen 1984). The practice of the museums and the architects are basically different, but in this field the purpose of preservation and communication of stories is the very same task, although they have different ways of practicing this.

<sup>1</sup> "Both urban and rural Denmark holds a rich cultural heritage which may be incorporated as a strategic element in local planning. Cultural heritage is a resource that can be used proactively to promote settlement, commercial development and tourism." [www.kulturarv.dk](http://www.kulturarv.dk)

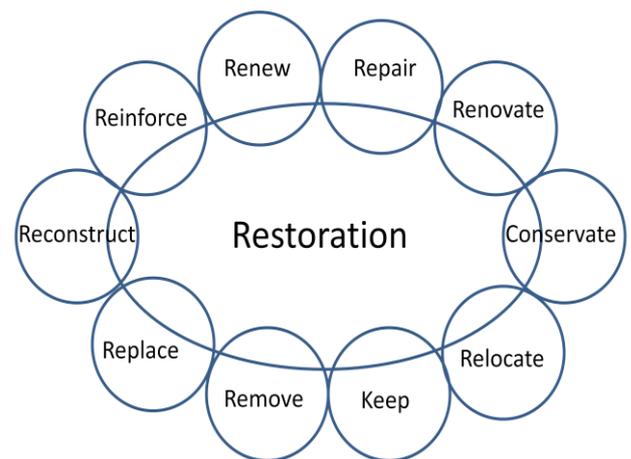
## The communication practice of the architects in the preservation of buildings

In the theoretical background for architects educated within the field of building preservation, the intervention of the architect with the purpose of restoration or transformation is indicated is described in different models as the one below (Fig 2) which shows the skills of the architects needed for this practice. The skills near the central blue circle is the most important and the others are professions as archaeology, art history, ethnology etc. are peripheral areas that the architect must have some knowledge about. (Bock, 2007).

(Fig 3). This model shows the actions and decisions made by the architect, depending on the individual building and its technical condition before the intervention and the character of the project. (Ottosen 1984) These models are used to inform the architect of the various different actions that can be used simultaneously in the same building, based on the decisions made by the architect. It is important that the architect is conscious about the character of his actions and what the consequences are for the future of the building.



**Fig. 2** The professional skills of the architect



**Fig 3.** Model of the actions in the preservation work

The selection, interpretation and communication of stories are not described in these models as either a skill or an action that is made by the architect. To interpret and communicate stories is considered as skills in the architectural practice that are as natural as the skill for the artistic and creative work. It is therefore not a skill that is questioned, neither in the education within building preservation or in the practice of the other architect. This seems remarkable, because the interventions made by the architect, especially in the buildings of the 2. type, are so significant for the future understanding of the buildings. The decisions made in the transformation projects of cultural heritage sites are therefore very important and should be made with more consciousness.

In connection with the work of restoration and transformation, architects use the communication of messages in different ways. Primarily with the communication through documentation of the building and this will take place before any action is performed. It describes the building as found and is a recording of the building's current state and of the visible layers of history it may have. The listed buildings will often require an

archaeological building investigation, which goes even further and investigate every sign that can illustrate the past conditions of the building and its historical development. This communication can be used by the architect as a catalogue of possible narratives he can choose from, based on what he/she believes are the qualities and important stories to preserve in a building transformation. However it is far from all buildings and sites that are undergoing investigation and documentation of this scale, it is practiced only on the listed buildings and rarely in many of the empty industrial sites and other production buildings.

A second level of the architect's communication is inspired by The Venice Charter from 1964, who says that new additions should visually distinguish from the original, so that restoration does not falsify the artistic or historic evidence. This means, that the architect through his work also must communicate his own actions through a conscious use of materials and shapes in a contrasting design. The architect must communicate the interventions in a manner that this may appear clearly in the building. The architects own contribution in the historical building is added as a "contemporary" layer or as a "present-day-marker"<sup>2</sup>.

Communication of the buildings history is a third level communication. To select, interpret and communicate the story or stories, that the architect decides to highlight in his project, as the message to be understood in building for the future. This communication is a part of the designing process and must be adjusted to the demands for new functions. The story or stories relates to the building's historical process, and is primarily showing selected parts of the original building, but it can also be the reinterpretation of the building through addition of new elements. The Danish restoration architect Bue Bech writes in an article on the restoration profession: "Restoration is a deliberate way of working which involves staging. It should always be kept in mind, that a restoration by the architect is a storytelling based on the existing. Even the most humble buildings have many layers and many stories to tell. But as an architect you are privileged, but also forced to choose the angle. It is the architect alone who is staging and thereby telling future generations the story of the house."<sup>3</sup>

The story communication by architects is therefore, in not listed buildings, based on individual choices and following only the architects own selections; the architects educated within the field of building restoration might be more conscious about the historical values and the possibilities to promote them, but still the result is based on personal taste and preferences.

### The communication of architects in the planning for the cultural heritage

In today's planning practice the SAVE system is used as a tool by the Municipality to communicate the content of valuable buildings and structures in the local area. In the Publication "Byens træk -om by og bygningsbevaringssystemet SAVE" written in 1992 by three architects Gregers Algreen-Ussing, Grethe Silding and Allan De Waal, some of the ideas that originally was behind the practical use of this system are explained. Here one of the most important ideas is, the cognition of that values selected within in a certain period must be seen as temporary and not of eternal value, the perspective of what is of aesthetic and historical value will often change over time. This fact, that both evaluation of the architecture and the cultural history changes in time means that the valuable buildings and structures of more buildings, must be open for new interpretations and renegotiation before decisions are made

The method of the evaluation of buildings, uses as a principle evaluations on different scales, going from the mapping of architectural values on the whole city and down to the evaluation of smaller areas. As a tool for the future planning, the use of the valuable structures and the single buildings are meant as the primary communication of values in the planning process. The structures and the single buildings evaluations must be considered as guidelines, but both are meant to have the same importance in the political decision made for a site. In the elaboration of local district plans the values must be consulted and reviewed from a contemporary perspective. (Ussing, Silding, De Waal. 1982) The presented district plan should always be involving the local museum before the final decisions are made. In this way both the architectural and the

---

<sup>2</sup> Present- day- marker is a term used by Inge Mette Kirkeby, to describe the new elements added by the restoration architect to distinguish his work from the original building.

<sup>3</sup> My translation of the article: Bue Bech. Arkitektur og Tid. Arkitekten 08.2007.

historical interests can be protected in the planning of the site<sup>4</sup>. The original intentions in the SAVE system is very rarely used in practice by the municipalities and the revision of the evaluations are not performed.

The method of SAVE is focused on the architectural values and other elements related to the visual environment, it as to be seen as a communication of preservation interests made by architects to inform other architects. This means that this method is unfit for the communication of the historical values. For this purpose another method is used today CHIP<sup>5</sup> but this method is not easily combined with the SAVE system. The two methods are based on different perspectives on preservation, the SAVE is mainly used on evaluations of cities and the CHIP in the rural landscape. Another difference is the concept of openness in the SAVE method (not used in practice today) while the CHIP method is not.

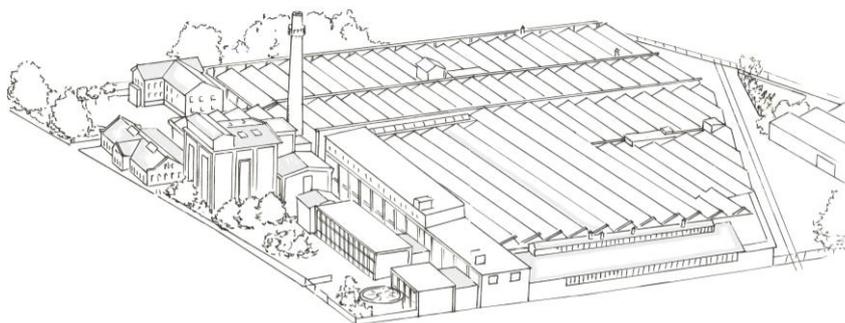
### The transformation of the Cultural Heritage site Grenaa Textile factory

The current focus on the Cultural Heritage as a resource for economic growth, the empty industrial buildings and sites, who were originally build to contain an industrial production are currently subject to a alternative kind of use. By categorizing the industrial buildings and sites as valuable cultural heritage in the same moment they close down the production and at the same time as potential of possible economic growth, only a short period of time is given to consider the possibilities of future use and the content of preservation interest. The values are therefore defined in the process of the transformation projects, which has the purpose of transforming a structure from being a place with low aesthetical value and public interest to a place that at the same time can attract crowds of people and give them aesthetical experiences and entertain through the designed storytelling. The preservation of an industrial site with the only purpose of communicating the history would without doubt result in less usability, which cannot be considered a desirable consequence of the preservation works; on the contrary the usability must be given high priority. But the question is, if you can combine buildings of this character with such an intensive use without erasing important, and maybe not yet identified preservation interests.

Currently we have a large number of function emptied buildings and sites that are expected to accommodate functions as residents and commercial activity but with the risk of that not all the industrial sites can bear this within such a short time perspective. In some areas, like near larger cities, this strategy can be useful but in other areas this could do more harm than good because the real possibilities of attracting new users can be very limited and uncertain. As an example of this expectation of an intensive use of industrial sites the Grenaa Textile factory situated in the city of Grenaa in Jutland, a smaller city with 16.000 inhabitants. The textile factory is situated near the center of the city in an area that is now used for commercial and residential purpose. The textile factory closed its production in 2001 and the 33.000 m<sup>2</sup> of industrial buildings were emptied at once. The industrial site is described on the homepage of The Cultural Heritage Agency as one of the most important regional industrial heritage with the following evaluation.



**Fig. 4** Grenaa Textile factory the inside of the factory.



**Fig. 5** The textile factory in 2003 before its transformation

<sup>4</sup> "Under the Danish Museum Act, the local authorities must consult the local cultural heritage museum when they draft plans for new housing, infrastructure, etc. In this way, the museums apply their expertise to secure significant urban and rural cultural heritage". [www.kulturarv.dk](http://www.kulturarv.dk)

<sup>5</sup> CHIP - Cultural Heritage in Planning - Identifying valuable cultural environments through planning. The method was elaborated by historians, as a tool to select historical values with the purpose of communication with the planning authorities.

"Grenaa Textile factory was for a period the largest textile factory in the country, the largest workplace in the city and until the 1960's the only large industry in Djursland. The industrial site is well preserved and of high architectural value. It stands as a representative of the textile industry and as a memory of a business with a huge importance to Grenaa, both economically and socially."<sup>6</sup> Grenaa Textile factory was evaluated with the use of the SAVE system and on the site only one small building was evaluated as having high preservation value and one of middle value. (Fig.6) This evaluation was made from a contemporary perspective of architectural value and in a time where the industry was still in activity and the destiny still unknown. At the same time the whole structure was evaluated as valuable and of high preservation interest. (Fig.7) This evaluation should have the same importance as the one building of high value. A local district plan was elaborated in 2006 on the request of the new owner, who presented his visions of a transformation of the textile factory site into a new district with shoppingcenters and large residential areas to the Municipality. In the district plan the following intentions for the protection of the site is written:

"In connection with the transformation of the buildings in Grenaa textile factory it will be sought that the existing buildings should be mixed with new buildings, so there can be a " tension between the buildings with contemporary look and modern materials and the old buildings, so the differences between new and old is highlighted and the history of Grenaa Textile factory becomes clear and easy to understand. ... .. There are according to the SAVE evaluation two valuable landmark buildings on the textile factory site". One of medium and one of high value. (Grenaa Kommune 2006)



Fig. 6 The evaluation of the buildings 1995

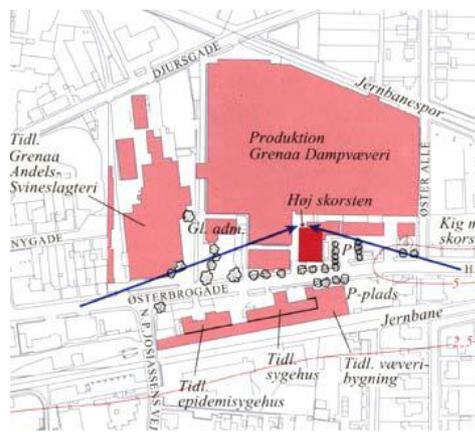


Fig. 7 The evaluation of the build structure of the industrial site 1995

When the local district plan is under elaboration, the evaluation of the building made 12 years before is used directly as the only objects of preservation interest and guidelines for the future planning of the site. The evaluation of the whole structure as an important and valuable structure did not influence at all on this decision. The local museum, who has a large amount of knowledge about this specific industrial site, was not consulted in the process and after the presentation of the district plan the critical objections from the museum was completely ignored (Interview with Britta Mosdal 2010). In the decision of the future for the site, the local authorities have not re-evaluated the preservation interests from a current perspective of what historical values to preserve and communicate in the future. With this district plan the Municipality of Grenaa wanted a complete project for the whole site, with the intensions and expectations of a rapidly economical gain. The year after, in 2007, the architects CEBRA and the engineers Tækker proposed the final project made on the request of the developer. The project consists in a large quantity of new buildings with the total area of almost 30,000 m<sup>2</sup>, the building are mixed housing and commercial areas, primarily as a huge shoppingcenter. The project sought to create a brand new attractive town district and initially the project involves some of the distinctive factory buildings and the boiler house, with facades facing the main road. A large sign on the roof with the name of the textile factory, tells the story of the textile factory as a brand for the new district. The visions have primarily been to build new instead of finding new uses that could fit into the existing. The project was made by the architects without any contact to the local historical museum, thus

<sup>6</sup> Cultural Heritage Agency of Denmark, the 161 most important regional industrial heritage sites in Denmark.

they hold the knowledge of the historical background of the site. The first stage of the project was to demolish all the buildings except for a few buildings along the main road, an area of approx. 20,000 m<sup>2</sup> of factory buildings. A new supermarket was built and shortly after the demolition, the financial crises begun and the project never was completed.



**Fig. 8 and 9.** Prospects of the transformation project made by CEBRA architects and Jørn Tækker in 2007

Today only the first stage, the supermarket which is a completely new building with the gables of the old building attached. The few buildings that were left on the site are today in a very bad condition and are not accessible for the public. The project will not proceed and the owner and developer have pronounced that he consider the demolition of the rest of the buildings because of the dangerous condition<sup>7</sup>. The future of the site is uncertain but the planned visions will not be realized. The re-evaluation of the possibilities for the cultural heritage site is no longer possible, and it poses the question of the intensions to protect the site in the district plan has been rather pointless when the site and its history as the most important industry in the history of Grenaa, no longer can be understood.



**Fig 10.** The site today, most of the building has been removed.



**Fig 11.** The new supermarket with the gables of the former building attached

<sup>7</sup> Interviews with CEBRA architects and with the owner and developer Trautmann.

## The communications models of Eilean Hooper-Greenhill

The role of the museums in the field of preservation use principles for dissemination and communication that follows the current practices within the used museological methods. In museums the communication is one of the central tasks that the museums must perform.<sup>8</sup>

The museums can through their policy of collection interpret and communicate stories as messages to the audience, by the use of the collected objects in exhibitions. But as practice they can use the objects several times to communicate other stories in a new context when needed. In the exhibitions the use of a communication strategy is often used to communicate a selected story to the audience with the purpose of education and information. In the communication theory by Eilean Hooper-Greenhill is used a series of models for the communications between the communicator and the receiver; it is concerned by the negotiated production, rather than the imposition of meaning. From this view it is proposed that “reality” has no finite identity, but it is brought into existence by storytelling, and that the stories are produced through communication between communicator and receiver. (Hooper-Greenhill 1994)



Fig. 12. Simple communications model

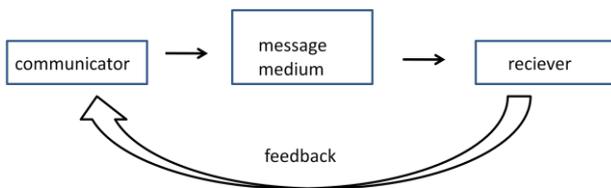


Fig. 13 Simple communications model and model with feedback

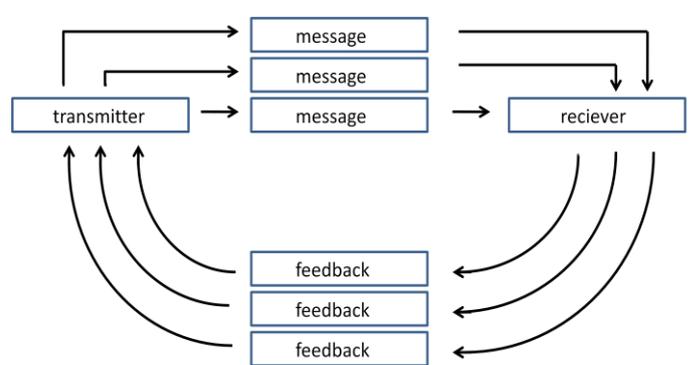


Fig. 14 Successive feedback loops progressively alter the original message

The first model (Fig. 12) shows a simple communications process, it proposes a linear view of communication, and the first source is the one that also defines the meaning of the communication act. The receiver of the message is passive, and his role in this process is only to receive a message. If the receiver then does not understand the message, then the whole process has been failed and a possibility for a different and more qualified communication of the message will not take place. (Hooper-Greenhill 1999)

The second model (Fig.13) for communications with the audience by Hooper Greenhill argues that the concept of feedback can qualify communications between communicator and the receiver, if the message is not understood the message must be modified in order to obtain a better understanding.

The third model (Fig. 14) is a communications model based on successive feedback loops; the receiver is brought into the communication process and is now playing an active role. The meaning of the message is

<sup>8</sup> Under the Danish Museum Act, all state-owned and state-subsidised museums must help to secure Denmark's cultural and natural heritage in five ways: Collection: The museums must add relevant new objects and documentation material to their collections. Registration: The museums must register the objects and material collected. Knowledge of exhibits, etc. must be accessible. Preservation: The museums must ensure that their collections are preserved for posterity. Objects and archives must be stored in suitable conditions, and objects must be conserved as required. Research: The museums are research institutions and must seek to gain new insights into their respective areas. Dissemination: The museums must disseminate their knowledge and collections. The Cultural Heritage Agency, 2010. www.kulturarv.dk

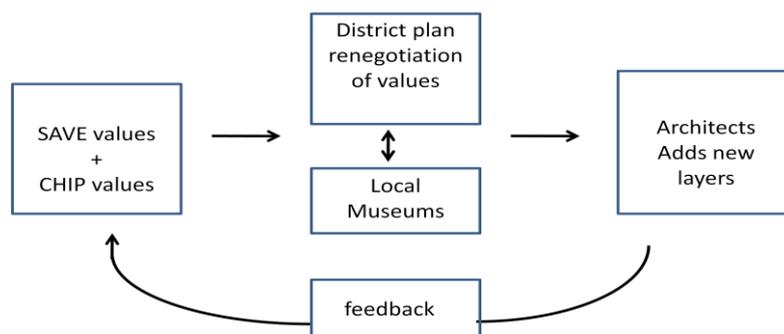
now not only defined by one part of the process, the sender of the message, but also by the receiver that have an influence in the message. “When a match can be made between the audience (the receiver) and both the content of the message and the nature of the medium, then the communication process may have begun” (Greenhill 1994) The more feedback she argues, the more effective the communication will be and the outcome of the process is that the receiver will consult the receiver before the message is sent.

I will try to compare the first model with simple communications to the actual practice of architects in transforming an industrial plant like the Grenaa Textile factory. (Fig. 15) The content of the message is defined by the evaluation of buildings that has taken place often many years before the new decisions are made. The decision makers do not renegotiate the buildings values in the message, in this case the district plan. The architects elaborate the project based on the first evaluation and the message will now be a result of their own interpretation of the message from the communicator. The message, in this case the chosen stories by the architect, may not be understood or not a qualified message and the process can never be reversed.



**Fig. 15** The communication process in the case of Grenaa Textile factory

The model below (Fig.16) is inspired by Hooper-Greenhill’s communications model with the use of the feedback loop. The model describes the process from the evaluation to the project made by the architect and takes place in time. The transmitter is the SAVE evaluation and the CHIP values, as two independent evaluations made even many years before the planning process begins. In the case of Grenaa Textile factory they were not yet made, but they should be placed in the communications model beside the SAVE values. The evaluations will then be renegotiated in a current planning situation in collaboration with the local museum for an updated view and qualified communication of the cultural heritage values. The district plan would now be based on an updated evaluation the receiver, the architect, can design his project. In the project he can add new layers to the historic building in order to make reuse of it. The feedback loop indicates, that the possibility to restart the communication process, it is now open and the SAVE and CHIP values will be updated in a future evaluation. When a new for transformation is needed, new renegotiations, interpretations and decisions could be made again and again in the future planning for the site.



**Fig. 16** Model of a more qualified communication in the planning process.

Using this approach in the preservation practice, the room for reuse of the site without the architect defining only one “reality” in his design by highlighting one story, this way the original message can be altered and new stories added. Using the possibility of plural communicators and plural “realities”, it could create a wider range of future possibilities within the preservation practice for the cultural heritage sites in the future.

## Conclusion

As a conclusion I would stress the importance of not to see the buildings and sites emptied of the original industrial functions with the intention of only a an intense and active reuse within a short time perspective, but instead look at it as a resource that can be used and reused again in the future. In that way, the site will be open for the adaption of shifting future uses and able to accumulate new histories and identities. In this perspective it is important that the communication practice of the architects will leave room for future interpretations and dissemination of the site, rather than communicating the history as *one final reality* in the design of the transformation project. In the work with buildings of cultural heritage value, the time perspective for a site should be longer than one single transformation and the contribution of the architect in the buildings history should be performed with the conscience of the often short perspectives in the specific uses. By this I mean that the contribution of the architect must be seen as a new layer in the history and a not as a final decision. The fact that the developers and the architects have a supreme role in the story interpretation and communication is a problem that should be solved by a stronger cooperation with the local museums and a qualified use of the evaluation tools by the authorities and this approach can prevent the short time perspectives in the preservation work. The competences in the museums as independent institutions must be included in this work and the solutions and decisions made from a constantly updated professional point of view. In the perspective of a long term preservation strategy, the ideal way to preserve would primarily be to obtain a high general usability of the building, rather than transformations for a specific use. This perspective could be a more qualified strategy both in terms of the material and cultural sustainability and avoid the loss of the embedded narratives in the authentic buildings appearance, as a source for future generation's ability of understanding the buildings.

Temporary use, as a strategy for this type of buildings, could be a far more sustainable approach to a long term strategy for the preservation work. The recognition of the impossible challenge of preserving so many sites of historical and architectural interest within a short time perspective is important, and we don't have to make intense use of the cultural heritage sites at once, but to make qualified decisions and to be able to renegotiate the preservation values in the future. The following project is an example of the concept of preserving the buildings as they were as found and make low cost transformations to new purposes of less intensive character. The location of both project in a large city like Paris, of course opens up a wider range of possibilities for the use, but the use could also, in less populated areas, be other kinds of use and not alone for the public use but even for the use of storage or production by smaller industries.

### **Palais de Tokyo Paris. Architects: Lacaton and Jean-Philippe Vassal**

Palais De Tokyo was built in 1937 and was up till 2001 used for other purposes. The building was from its beginnings and until 1974, the Museum National d'Art Moderne. The Ministry of Culture decided in 1999 to make new use of the building as a "setting up of a site devoted to contemporary creation. The project was performed by Lacaton and Vassal with a much reduced budget. The intensions of the project were "To utilize what exists, not to transform it, to make the most of the building's physical and aesthetic qualities."(Lacaton and Vassal)



Fig. 17 - 18. Palais de Tokyo.

### References:

- Algreen- Ussing, Gregers, Grethe Silding and Allan De Waal. Byens træk om by og bygningsbevaringssystemet SAVE. Miljøministeriet Planstyrelsen 1992. 6-7, 78-79.
- Bech, Bue. Arkitektur og tid. Arkitekten. vol. 08. Arkitektens Forlag, København. 2007. 34-37.
- Bock, Lars Nikolai. Restaurering og bygningskunst. Arkitekten. vol. 08. Arkitektens Forlag, København. 2007. 29-33.
- Grenaa Kommune. Lokalplan 171 med kommuneplantillæg nr. 18. For et område til centerformål ved det tidligere Grenaa Dampværeri Østerbrogade 45. Teknisk afdeling. April 2006.
- Hooper-Greenhill, Eilean. The Educational Role of the Museum. Routledge. London and New York. Second edition 1999. 28-35
- Kirkeby, Inge Mette. Mødet mellem nyt og gammelt – Bygningsbevaring i vor tid. Christian Ejlers Forlag. København. 1998. 202-207.
- Lacaton and Vassale: [www.lacatonvassal.com/index.php?idp=20#](http://www.lacatonvassal.com/index.php?idp=20#)
- Miljø- og Energiministeriet, Skov- og Naturstyrelsen 1995, Kommuneatlas Grenaa – bevaringsværdier i byer og bygninger. 1995. 20, 44.
- Ottosen, Michael. Dansk bygningsrestaurerings historie - en indføring. Skriftserie 1984 nr.1. Arkitektskolens Skriftserie. Århus. 1984. 3-4, 19-21.
- The Cultural Heritage Agency. [www.kulturarv.dk](http://www.kulturarv.dk).
- The Venice Charter 1964. international charter for the conservation and restoration of monuments and sites. [www.icomos.org](http://www.icomos.org)

### Interviews:

- Britta Mosdal, Museum director, Djurslands Museum, Grenaa. 2010.
- CEBRA architects Aarhus. 2010.
- Trautmann, by Søren Krarup Hansen. Ebeltoft. 2010.

### List of Illustrations:

- Fig. 1. Model of the building types : Marie Kirstine Pilegaard
- Fig. 2. The professional skills of the architect: Lars Nikolai Bock .Arkitekten 08/07. Arkitektens Forlag 2007. 29.
- Fig. 3. Model of the actions in the preservation work: originally in Swedish. Michael Ottosen, Dansk bygningsrestaurerings historie- en indføring. Arkitektskolen i Arhus, 1984. 4.
- Fig. 4. Foto of the textile factory, Marie Kirstine Pilegaard 2003.
- Fig. 5. Drawing of the textile factory, Marie Kirstine Pilegaard 2003.
- Fig. 6. Kommuneatlas Grenaa- bevaringsværdier i byer og bygninger, Miljø- og Energiministeriet Skov- og Naturstyrelsen 1995. 20.
- Fig. 7. ibid . 44.
- Fig. 8-9. Prospects of the transformation project made by CEBRA architects and Jørn Tækker in 2007. [www.taekker.dk](http://www.taekker.dk)
- Fig. 10-11. Photos of the site Grenaa Textile factory. Marie Kirstine Pilegaard. 2010.
- Fig. 12. Simple communications model. Hooper- Greenhill, Eilean. The Educational Role of the Museums. Second edition 1999. Routledge. 1999.
- Fig. 13. Simple communications model with feedback loop. Ibid. 34.
- Fig. 14. Communications model with successive feedback loops. Ibid. 35.
- Fig. 15. The communication process in the case of Grenaa Textile factory. Marie Kirstine Pilegaard
16. Model of a more qualified communication in the planning process. Marie Kirstine Pilegaard
- 17 -18. Palais de Tokyo. <http://www.lacatonvassal.com/index.php?idp=20>