

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH



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2nd edition

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FOREWORD



Photo: Lars Grunvald

It is a pleasure to introduce the following extracts from ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH, a book published by the Network for Children and Culture in 2010. There has been some demand for this book outside of Denmark, so to meet this demand we present here some examples of the ways in which we promote and teach architecture and design to children and young people in Denmark.

Children and young people ought to be brought into regular daily contact with top-quality architecture and design. They ought also to have their eyes opened to the fact that architecture and design is all around them. That the school they go to could have been designed by an architect, the cutlery they eat with at home created by a designer.

Architecture and design have an effect on the daily lives of all children. By endowing them with a greater understanding and a keen eye we can enhance their perceptions and make them aware of the common culture and cultural heritage which surrounds us and of which we are all a part. The teaching of architecture and design to children and young people is, therefore, of great importance.

These extracts from the original Danish publication contain some excellent examples of specific projects and provide concrete tools to support the teaching of architecture and design – in kindergartens, schools and in cultural institutions. They show how we can stretch children and young people by presenting them with creative projects that will allow them to develop new sides of themselves.

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH is also a discourse, one which poses questions and provokes reflections on what works. Because there are many ways of interacting with children and young people, but what is the best way to motivate them?

I would urge you to draw inspiration from its articles and interviews with trend-setting Danes – and to draw on the many ideas, instructions and recommendations given here when working with children and young people on architecture and design.

Per Stig Møller
Danish Minister of Culture

A VISION FOR THE FUTURE

The Network for Children and Culture has asked a group of specialists from the fields of architecture, design, teaching and museums to formulate a vision for the future, a vision which will provide the basis for future generations of children to develop a creative and innovative approach to their surroundings. This approach will benefit the children themselves and the development of society as a whole and make them more aware of the architecture and design around them. This will also enable them to relate to and influence their surroundings, in keeping with the Danish democratic tradition.

There are three main points to this vision:

- ▶ It is important for children to understand, early in life, the significance of how and why architecture and design are created and the history behind these institutions. It is also extremely crucial for children to become acquainted with, and be able to appreciate the substance and qualities of these two art forms.
- ▶ Children and young people should learn to regard architecture and design as a natural part of their daily lives, and the teaching of architecture and design ought to be rated just as highly as the teaching of other independent art forms such as music and visual art.

TEACHING ARCHITECTURE TO CHILDREN AND YOUNG PEOPLE



Graphics: Architect Jes Vagnby

- ▶ Active involvement with architecture and design should give children the grounding necessary for them to work creatively with their surroundings, thereby helping to reinforce the vision of Denmark as an innovative and creative society.

Goals and relationships

In order for this vision to be achieved, the project group has formulated an overall objective one, which is intended to provide inspiration to all the institutions and individuals that are a part of the daily lives of children and young people. This overall objective is broken down into three main goals, designed to pave the way for future undertakings.

More specifically, the goals set for the work in the years ahead are:

- ▶ To give children and young people insight into and knowledge of architecture and design.
- ▶ To instil in children and young people an understanding of architecture and design.
- ▶ To test the possibilities of architecture and design in class, in play and in everyday life.
- ▶ The project group has also established a model for the presentation of architecture and design to children and young people. This makes it easier to gain a clear picture of the various aspects of the problem as a whole and the way in which these interrelate.

This model can also be seen as an illustration of the cultural food chain: from the smallest child to the teenager leaving school and choosing a career. The model endeavours to illustrate the relationship, in a complex universe, between vision, goals and action. The project group has developed its vision and its aims in such a way that they can also provide direction within the different areas of the child's and the young person's daily life and inspire action in those institutions which may have a key part to play in this:

For children in day-care centres the goal is to be introduced to architecture and design in a simple and creative form: by building houses, drawing, painting and gaining a feel for space, structure, scale and colour. Teaching plans provide a good outset for work of this nature, in which cultural idioms can be tried out in practice with reference to the many aspects of art.

For primary schools the goal is for all children

and young people to receive lessons in and gain an awareness of all the elements of architecture and design. Either as independent subjects or as an integral part of the practical/musical subjects and of the arts and sciences. The decision has just been made to conduct an experiment in which Crafts and Design will be introduced as one subject. The new series of teaching plans published by the Danish Ministry of Education in 2009 under the heading Common Goals includes many good examples of ways in which architecture and design can be integrated into the existing subjects.

For high schools and colleges the goal is for students to gain proficiency in and gain greater insight into architecture and design, so that they will be able, later, to make decisions regarding possible further education within these two areas. Design is already part of the high school curriculum and several high schools in the Copenhagen area have made a resolute effort to present themselves as being strong on the artistic and aesthetic fronts.

In the extra-curricular area the goal is to establish programmes offering activities for the whole family and stimulating a shared interest in and insight into architecture and design through exhibitions, events, talks and creative building projects. The art schools play a large role with the many courses they run, particularly for young people, and steps are currently being taken towards the setting up of more and more arts centres as relevant arenas for these activities.

For higher education courses in architecture and design the goal is for the students to learn to take account of the children and young people's aspect both in their studies and when working on projects of their own. It is important for them to become skilled in teaching architecture and design to these target groups -through work experience, for example, and participation in local projects. First-hand experience of this sort will stand the students in good stead later - also when presenting these subjects to adults.

In the following chapters the individual goals and subsidiary goals will be discussed in more detail, through descriptions of and reports from projects carried out throughout Denmark and with comments from a selection of key individuals.

The Network for Children and Culture is located in the Danish Ministry of Culture
<http://www.boernogkultur.dk/om-boerne-kulturens-netvaerk/documents-in-english/>

Professor Kirsten Drotner, University of Southern Denmark

Creativity and Aesthetic Production in the Knowledge Society

2009 was designated as the EU Year of Creativity and Innovation, a theme chosen on the grounds that creativity and innovation are fundamental resources for “personal, social and economic development” in the knowledge society – a society that is driven by the production and sharing of new knowledge and new experiences. As far back as 2002 the European Parliament decided that in future the European Union should invest in the so-called creative industries – such fields as film, television, computer games, design and fashion. The argument back then was that these branches have experienced tremendous growth over the past 10-15 years - in Europe, North America and Japan. Internationally, therefore, a lot of effort is being made to foster creativity, and particularly the sort of creativity produced by the creative industries. It should also be said that in Denmark by 2001 exports generated by these branches had already outstripped exports from agriculture.

Immaterial production is central to the knowledge society.

It is widely agreed that the ways in which our society today is ordered and develops are very different from those of only a

generation or two ago. The creation, sharing and systematisation of knowledge now play a central part in the working lives of many people, just as all sorts of products and processes are associated with particular experiences. Thus, milk is not sold merely as a basic foodstuff with a good nutritive content; it is marketed by means of stories about the origins of the milk which do their part to link its consumption with a unique experience.


Knowledge and experiences are forms of immaterial production which are to a great extent the driving force behind social development in our part of the world. Here growth and welfare are increasingly based on work which involves the forming and transforming, not of physical things and materials - like pigs and steel - but of immaterial things such as printed texts, words, pictures, sounds and figures – all of which are, of course, the building blocks of the knowledge and experience industry, not least that part of it which involves providing services to private companies and government organisations. From a global point of view one might wonder whether we are in fact all living in a knowledge society – we do still need food,

transport and clothes for our backs, after all. Perhaps it would be more true to say that material production is moving away from those western societies which have traditionally defined themselves as industrial nations. Here, nonetheless, I have opted to use the term ‘knowledge society’, this being a term commonly employed in Danish and European discussions concerning these transformations.

Focus on creative symbol production

The tools used by the knowledge society to generate knowledge and experiences and to communicate these by means of words, pictures, texts and figures are much greater in number and much more complex than anything seen in previous generations. Interactive media make it easier for ordinary people to create meaning for themselves with the aid of a multitude of digital symbols, they also facilitate speedy communication and social interaction.

The knowledge society also makes new demands on ordinary people. For instance, one must be able to handle this digital complexity, and just as importantly, if you desire to succeed in



this world you need to be able to create new knowledge and new experiences. The ability to juggle creatively with increasingly complex symbol systems has become one of today's core skills. In 2005 the OECD defined the three key competencies as being the ability to use tools interactively, to interact in heterogeneous groups and to act autonomously.

The knowledge society's visions of creating new knowledge and new experiences can only be realised if one has people capable of working creatively, alone or together, with symbols: words, numbers, text, images and sounds. Seen in this light, it is easier to understand the repeated EU initiatives to promote creativity in general and creative industries in particular. Such a development does, however, require a number of systematic changes in the ways how educational institutions and businesses are run.

More specifically, such development requires a more concrete definition of exactly what sort of creativity is involved when we create something new with the aid of symbols. This sort of creativity could be called aesthetic production.

Creativity and criticism

The word aesthetic comes from the Greek word *aisthetikos*, meaning the perceiving of things through the senses. This term has two dimensions to it. The sensory dimension pertains to the expression of inner feelings and experiences, which is to say, it relates to the subject, the individual carrying out this process. The perceptual dimension pertains to reflection on the vehicle of expression, which is to say, it

relates to the thing that is created.

This perception of things through the senses is actually effected through the physical manipulation by the individual of certain materials, whether this be through writing, drawing or playing music. In this way, as the Swiss educationalist Johann Pestalozzi so neatly put it, aesthetic production links together head, heart and hand.

It is extremely important to bear this physical link between sensory expression and rational reflection in mind if one wishes to work aesthetically and if one wishes to create surroundings that encourage such learning processes. It is, therefore, not enough for the person or persons working aesthetically to be left to their own creative devices: guidance is necessary, to encourage reflection on, for example, the choice of materials and stylistic priorities.

On the other hand, no creative aesthetic production will ever amount to anything if the practitioner is blind to the work being done by others within the same field. Criticism is vital, but one thing is criticism, another is self-criticism. Self-criticism takes its outset in one's own creative process, whether this is practised individually or as part of a team.

Aesthetics, design and innovation

Aesthetic production forms the basis of many different working processes that can be defined in terms of their tools: pictures, sounds and text, for example, in visual art, music, film, design and architecture. Aesthetic production can also be defined in terms of its purpose. If the process is an end in itself it can be described as

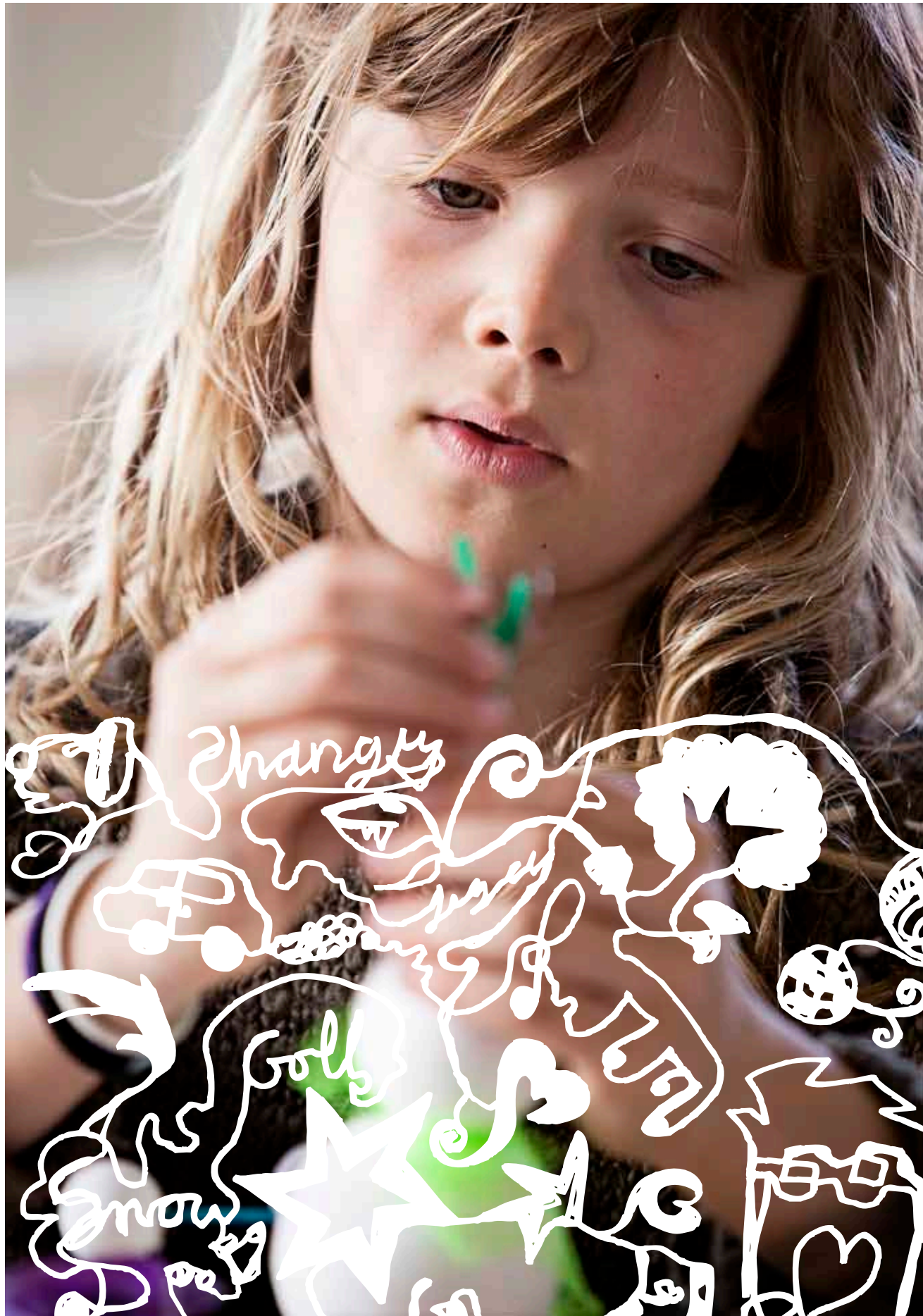
art or a hobby. Few people take evening classes in ceramics in order to become artists able to make a living from selling their work; but, as with the artist, the focus is on the process of working with the material.


If aesthetic production is defined in terms of its end result, then we are talking about design. Here the focus is on the product, whether it is a matter of creating a physical object such as a lamp or a door-handle or things produced by means of symbols, as is the case with graphic design and multimedia design.

If aesthetic production is defined in direct terms of its financial application, then we are talking about innovation. In this case, creative use of symbols is a prerequisite for the real objective, which is to give a service or product a face-lift in order to increase its sales; either that or the innovation is geared towards an organisation or a working process in which the financial result is less direct.

Innovation is often a key issue in the countless discussions concerning the development of the knowledge society. Politicians and people involved in organisational development are often more interested in the work-related and economic aspects, products and results. There is a booming market in handbooks dispensing good advice on how to plan and organise innovation.

But innovation is the last link in a food chain in which the content and results can be hard to plan. If the result could be planned then clearly there would be no talk of renewal. This renewal is fed by the systematic, creative process-





ing of materials; and these materials are, to an ever-increasing extent, symbols propagated by the interactive media. In order to foster the innovation sought by the knowledge society a far more resolute educational endeavour is required, to boost aesthetic production. This also requires changes in this form of education.

Aesthetics is also education

For almost a hundred years there has been an interest within the educational system in aesthetic production and related subjects such as woodwork and handwork. Ideas on what aesthetic production should actually involve has changed over the years, though with drawing and singing as more or less permanent ingredients.

Ideas on what purpose it should serve have also changed during the twentieth century, and has been closely related to the school systems in different countries. Between the two World Wars, reforming educationalists spearheaded the introduction into Danish primary schools of so-called creative work, to offset the regimentation of industrialisation. In the 1960s the focus was on the playing child, with a corresponding increased priority on personal experiments with colour and form.

The situation today is full of inconsistencies. In many educational systems in the western world higher priority is given to the teaching of the native language, foreign languages and the sciences, and forms of testing are standardised and integrated into the syllabus. In other parts of the world the trend is going the other way. So, for example, in Singapore the educational and didactic

focus has shifted towards project work and independent reflection on the part of the pupils. Here in Denmark the latest revision of the teacher training programme entailed the downgrading of the so-called 'practical-musical' subjects (music, drama, handwork, woodwork and PE) in favour of Danish and maths. This, even while calls are being made for innovation and enterprise to be taught, for example, as part of many business management courses.

The whole concept of knowledge needs to be expanded

For aesthetic production to be accorded higher priority in the Danish education system requires, first and foremost, general political acknowledgement that the cultural production of meaning is the driving force behind the knowledge society. The prevailing view of what knowledge is needs to be expanded to include processes which do not have predictable results and which are created in practice and as practice. This needs to be followed by a coordinated effort at different levels of education, to ensure that educational initiatives supplement one another, and that different initiatives do not simply come to a dead end.

This does also require, however, a rethinking of the very concept of the 'practical-musical' subjects. These subjects are also cited as those which enhance the pupils' creative work; work which is supported by a much wider range of tools than available in the industrial society in which the term was coined. When today's children and teenagers draw, it is often with the aid of a pressure sensitive tablet or directly on to a screen; they make and sample

music digitally; they send texts and are assiduous contributors to Facebook; and they mix images from the media. In the digital culture there are no clear lines between receiving and creating: elements from films already produced and posted on YouTube can be spliced together to create new stories, thus generating new meaning.

Researchers talk of a new creative 'participatory culture' among older children and young people, fed by digital media which revolve around content production – one's own, that of others, and combinations of these. Such trends highlight the untenability of defining the creative subjects as the necessary antithesis to the passive entertainment offered by the media culture or the repetitiveness of the production line. In short, ingrained educational definitions of aesthetics and creativity need to be redefined.

Aesthetic production needs to be taught

If one takes a broader view of what aesthetic production involves, as here in this article, then it seems quite clear that today's children and young people participate in more aesthetic production processes in their free time than in school. But not all of these are equally active and the users vary greatly in their creativity. Middle-class children are more inclined to use the digital possibilities in new ways, so the participatory culture outside of school does contain obvious digital divides.

If one also accepts the argument that proficiency in creative symbol production is essential in the knowledge society then educational establishments in

Denmark and in many other countries are faced with a crucial challenge. If they do not teach aesthetic production, the digital divides seen outside of school will continue, and there is the risk that digital divides will turn into social divides, since there are groups of children and young people who may not acquire the skills necessary for them to cope well as adults with the demands made by the knowledge society.

If the teaching of aesthetic production is to become more systematic, changes will have to be made in the conventional teaching schedules. Because aesthetic production does not lend itself readily to the standard timetable and curriculum format. Some, though not all, aesthetic processes are best performed in groups, possibly with some delegation of tasks. But teamwork is often necessary in order to achieve a viable result.

Whatever solutions are chosen, it is essential to start by acknowledging that the areas of aesthetic production and digital participation are far too important for us to leave it up to children and young people themselves to choose whether to pursue it in their free time or not.

Kirsten Drotner (MA in English and Danish, Ph.D.) has been professor in media science and media culture at the Institute for Literature, Culture and Media at the University of Southern Denmark since 2000. Since 2004 she has been director of the national research centre DREAM: Danish Research Centre on Education and Advanced Media Materials at University of Southern Denmark. She is the author of numerous academic papers and an active public speaker.



Photo: The Children's Arts Centre, Aarhus

Kerstin Bergendal, artist

House History Hypotheses

A model for the integration of the child's perspective into architecture.

In connection with the planning of the new Children's Arts Centre of the Future I carried out a survey which took the form of eleven consultative workshops, for the purpose of defining a basic architectural design which would provide children and young people with the best possible introduction to different forms of artistic expression.

Right from the start the aim was to integrate lessons learned from this process into the actual planning of the new children's art centre in the Copenhagen suburb of Amager. For this reason, we arranged for both children and adults to work closely with the architects, thus ensuring a wider ownership of the children's quality criterias, so that the children leave an actual imprint on the new building. I wished to ensure that the adults' viewpoint did not, in the end, prevail. The children and adult strands of the process were kept quite separate.

Most of those taking part had a concrete link with the Ama'r Children's Arts Centre: the 15 children were all users or future users of the centre. Among the other participants were artists, committee members, staff and employees from day-care centres, other arts centres or the local authority – and, last but not least, a number of experts from the worlds of the theatre, art, libraries and research.

Picturing dreams

A model is, of course, in itself a picture. It can be used to show to other people what we consider important, and to give an object to relate to. All of the participants, regardless of age, were therefore asked to produce models and drawings. They were not to think in terms of any specific organisation, building site, economic or technical considerations. They were simply to give me a purely hypothetical suggestion for the sort of building which they believed would produce dynamic activity in children's arts centre.

So all the contributions were suggestions for dream buildings, or pure principles for the things to be considered when building an arts centre for children. All contributions – whether from children or from adults – were therefore considered to be equally valid.

Qualified listening

This process is founded on quiet, attentive listening, and quiet, attentive listening takes time. So the children had seven meetings, each one lasting five hours. Usually, each adult had just one meeting, also lasting five hours. Besides drawing up models, I videotaped an interview with each participant, sitting in front of the models and drawings they made. These interviews revolved around the questions of what it is that generates a productive en-

counter between children and art, and how to define about arts for children.

Extracts from these interviews, featuring statements from both children and adults, were later made into the film HusHuske-Hypoteser (HouseHistoryHypotheses – ed.). This film is vital to the end result of the process. The interviews were regarded – by the children especially – as a parallel of sorts to television interviews. Over all, everyone took the whole thing very seriously and considered their words most carefully, which makes these filmed interviews a rich and relevant source of input for planners and decision makers.

Finally, all of the priorities and recommendations from the interviews and models were boiled down to a number of main principles, presented in a little box in the size of a deck of cards. Each main principle has been given its own little leaflet, illustrated with examples from the dialogues. The boxes and the film are published as a set. The information gathered from those taking part has to a great extent formed the basis for the building programme for the Children's Art Centre of the Future.

Double Entry System

By continually involving both children and adults in a visualisation process such as this, one creates an incentive for the adults

to actually accept the children's suggested models and quality parameters as an asset.

At the same time, the children's input on the spatial organisation is also formulated in an ongoing 'double entry system'. On the one side one has their models and words. On the other one has skilled adults who study the children's models and are able to verify their viewpoints and translate their structures into practical educational and economic terms.

By getting adults with a lot of experience to work with children, we not only ensure a sympathetic response to the children's input. We also ensure that the process has the wider authority and the collective sense of ownership necessary for a higher general level of ambition. The children remind the adults of what they themselves found exciting and challenging when they were children. This recreated memory has a motivating effect. During a process such as this, one can also spot, quite early on, where and how the traditional financial, operational and organisation concerns actually run counter to the whole purpose of the centre – to be a centre on the children's own terms.

Being taken seriously

It is a vital part of the process that the participants feel they are being taken seriously. This is particularly important as far as holding the children's attention is concerned: the children must be introduced to actively listening adults who help them make models. They are interviewed about their thoughts and ideas for a film. And they see themselves in this film before being shown the architects' first designs for the building.

When one is taken seriously, one also takes one's own work seriously. During their meeting with the architects the children paid close attention. They showed quite clearly that they were capable of assessing whether architectural design was suitable for children or not. They listened carefully to the presentation and afterwards they asked a string of critical questions: "How do you actually get up there?", "Do you really have the money for all this?" and "What do you do if there's a fire?"

Children's architecture as a funnel

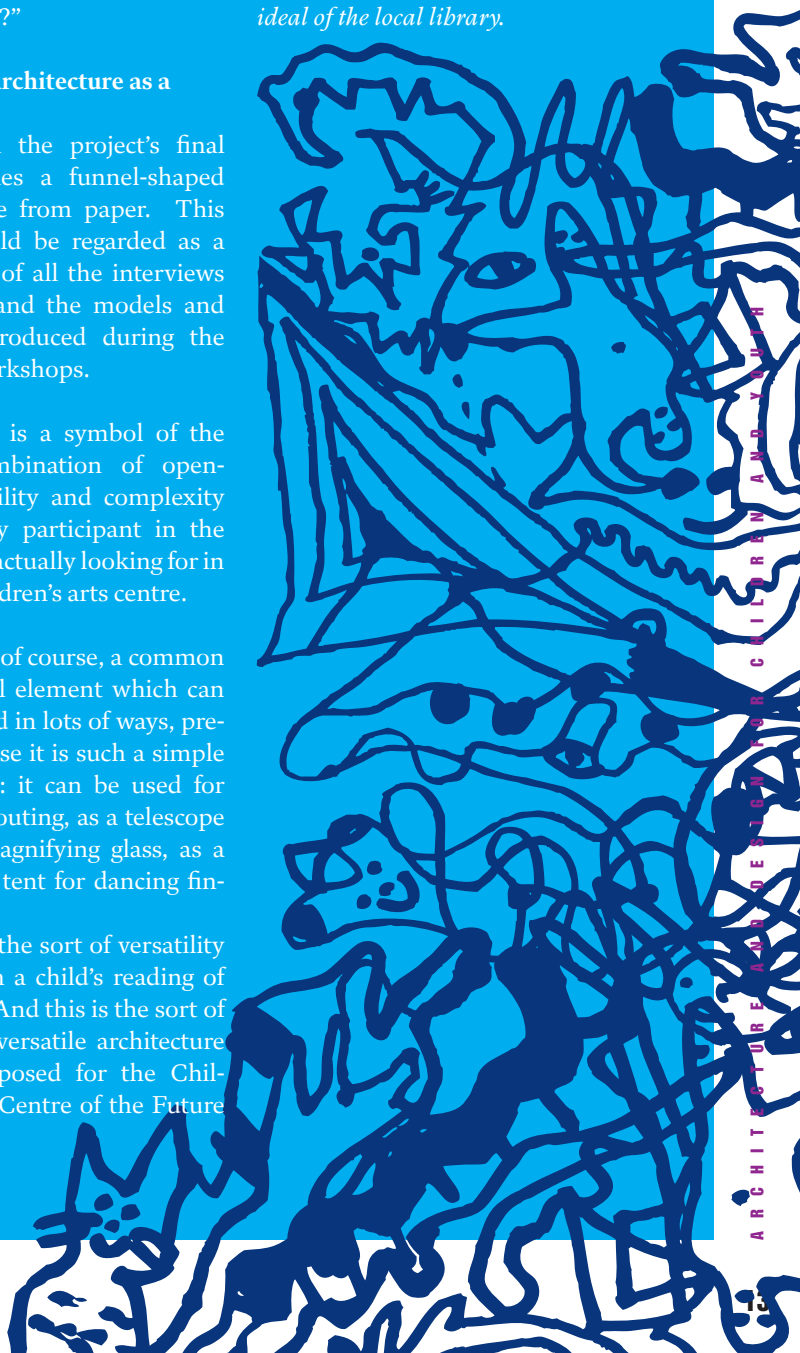
Along with the project's final report comes a funnel-shaped object made from paper. This object should be regarded as a condensate of all the interviews conducted and the models and drawings produced during the series of workshops.

The funnel is a symbol of the unique combination of openness, flexibility and complexity which every participant in the survey was actually looking for in a future children's arts centre.

A funnel is, of course, a common architectural element which can be employed in lots of ways, precisely because it is such a simple basic shape: it can be used for pouring, shouting, as a telescope and as a magnifying glass, as a lamp - or a tent for dancing fingers.

This is just the sort of versatility one finds in a child's reading of the world. And this is the sort of simple yet versatile architecture that is proposed for the Children's Arts Centre of the Future in Amager.

Kerstin Bergendal is a visual artist and independent curator, performing large-scale and often long term interventions into public space. Her recent works are a reorganisation of a public library, an alternative playground for a public school, and a proposal for an altered public museum. She records places, forms places, interacts with places, evokes the history of places. Most recently she completed a reorganisation of Brønshøj Library in Copenhagen, and in so doing also revived the old ideal of the local library.



Boost children's sense of responsibility for the world around them.

As a child was there any experience of architecture or design that made a particular impression on you?

My father was a designer, he created logos for the Bella Center, Billund Airport, the SDS Savings Bank, the Danish Bankers' Association as well as all sorts of other things. He could spend a whole Sunday afternoon hanging shelves in such a way as to get just the right interplay of shadows, form and colour – back then I found it really irritating, but that aesthetic stringency has stayed with me ever since. Be it in my business suits, my dress style generally, the colour schemes in my own homes around the world or whatever.

How, in your opinion, can children and young people benefit from being involved with architecture and design in their daily lives?

It's important that they are introduced to this aspect in kindergarten – rather than having to pick it up later in life, and it is important that they are conscious of the space around them, in close interaction with it, that it touches them in some way. Children do love to touch, to feel, to taste and so on, and this is a way of taking art a step further, to where it also has to do with the way we create jars or rooms, and design houses.

Take the older kids and teenagers out, too - to different offices and workplaces, and allow them

to experience different aspects of the public space. So much has happened, for example, around the harbour in Copenhagen, at the airport and in the Metro, where there are things going on at several levels. Or at the Zoo, which has undergone tremendous development. Design and architecture exude a certain sensuality that really speaks to children, I think – they respond to it.

For one thing, it can endow them with a sense of curiosity which may in the end also give them the feeling of having a fuller life. To enjoy shapes and colours, to appreciate the countryside and the open air, and to be alive to all the genuine natural and environmental assets we have in Denmark which you won't find anywhere else. Concern for the environment is such a central value in Denmark while in other parts of the world it's something that has had to be acquired.

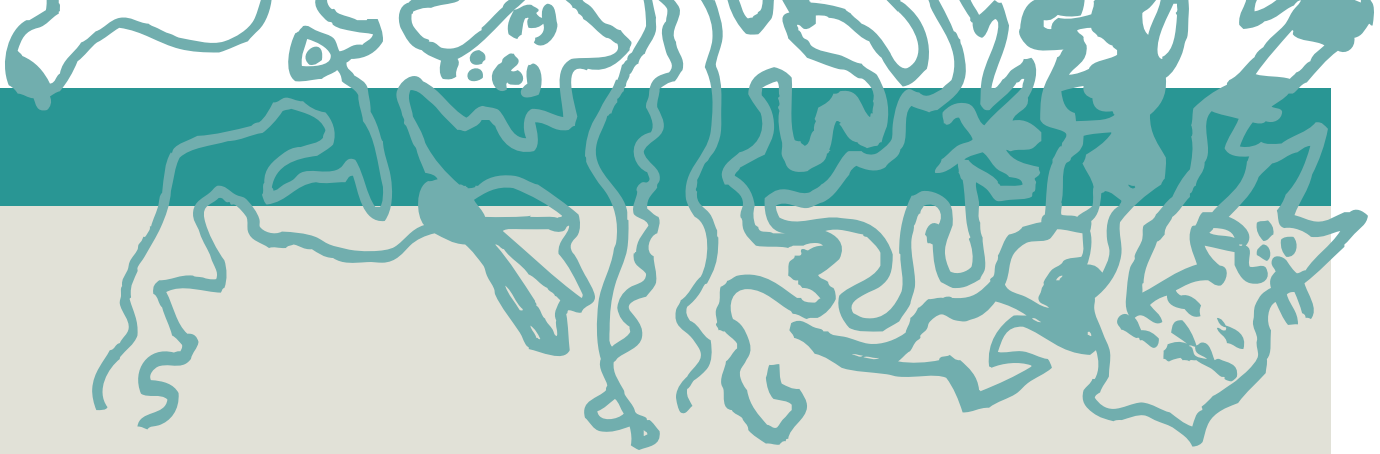
I also believe that the experiences we have as children of how towns and cities are laid out and how people live – these we carry with us and they eventually evolve into a kind of responsibility. Supposing, for example, that one day you became a member of your local town council – those experiences can affect how you act in that capacity. Whether you are an architect, a designer, a town-planner, company director, politician or president, it matters that you have absorbed such experiences.



Because at the end of the day it is our personal experience of art, settings, milieux and aesthetics which colours the choices we make. And that experience starts back in the art class and in kindergarten – which is why it matters whether a wall is red or yellow. There is a creative dimension which goes beyond two plus two and which can stand you in good stead no matter what you end up doing, because you learn to think outside of the box. Whether you wind up with Grundfos, designing an industrial pump, or devising new insulin pumps for Novo Nordisk, or maybe working for Lego - whether you are the designer or the decision-maker, it is incredibly important to include this dimension.

If you were to present a child with a piece of architecture or design, is there any particular work that springs to mind?

I think children should be presented with a whole host of buildings and objects. From an architectonic point of view Copenhagen is, for example, turning into a gem of a city – so much has been built in the past ten years, alongside all the buildings from the seventeenth-century, which we mustn't forget. The combination of Eigtved's eighteenth-century mansions, the French architect Jean Nouvel's



new Concert Hall for Danmarks Radio and the steel-and-glass buildings from the Sixties and Seventies – children should be presented with the whole spectrum. And perhaps they will go on to create something else on the back of these.

Is it an advantage for the business world that more emphasis is being placed on the teaching of architecture and design to children?

It will result in a whole lot of citizens with an aesthetic sense and a sense of civic responsibility. Many modern buildings today are much more energy conscious in their design – employing low-energy solutions, recycled materials etc. I was just in Tokyo, for example, where an amazing number of buildings in the city have grass roofs. The creative thought process starts at the drawing-board and may eventually result, at the other end, in our having a hand in the drawing of our environment. There is also an element of competition in the way in which we design our pumps, our Lego bricks and packaging and so on – these are the things which will help us to survive in the world of today, in which everything can be produced anywhere. And it must surely be high time we came up with a replacement for Arne Jacobsen's chairs, which we've milked for all they're worth – we need to stimulate creative thought at pre-school level if we

want to be a knowledge society which dares to think creatively, differently, off-the-wall and against the stream. It's possible to instil these dimensions in children through play, on their terms, in their world.

Do you have any suggestions for how to tackle the task of teaching architecture and design to children and young people and getting them interested in it?

We have to take the children out to look at different things, let them spend time in rooms and spaces and gain a feel for these themselves. And companies should open their doors, show off what they have, discuss their products: schools and day-care centres should be welcomed in, taken behind the scenes, to see how things are produced. Whether it be a Novo Nordisk factory, the Nykredit offices, the airport, the Metro or the National Gallery of Denmark - which is, on the one hand, very old, and on the other, brand-new.

We can also do things with the children in these spaces, but that's not what really matters. The main thing is for them to be there and absorb things through play – to have the chance to draw them or build them with Legos. Or to be given an assignment: "We have to build a new building. Can you draw what you think it should look like"?

When it comes to high-school students who are faced with hav-

ing to choose a course of study, this can also affect their decision. It's here that the real significance of architecture and design begins to dawn on them, because this is the point at which they start to concern themselves with Denmark as part of a globalised world and with a future in which we're going to be overtaken by the Chinese, and so on. And it begins to make sense for them to discuss these things. This is an arena in which we could do with stepping up the pace – for example by having a business sector that is open to collaboration; companies that will invite students to visit, support them, open their doors to them, tell them what they stand for, maybe even supply them with teaching materials.

For a company there are also benefits to be gained from visits by students – these days it's essential to think in very broad terms when it comes to possible outside interests, and children and young people often feel a life-long connection with those companies which welcome them in and show them around. I remember from my own time at high school and business school just how fascinating it was to listen to talks by people from the real world outside. Such things make a huge impression.

Interview by Monica C. Madsen

Claus Buhl, branding and creativity consultant, Buhl Global

Creativity

– Denmark's most important raw material

If I say 2070, what do you think of? The amount of money you gained from the new tax reform, maybe? But 2070 is also the time when this year's batch of Primary 1 pupils will reach retirement age. They can look forward to a world and a life full of change. We have already been hit by it ourselves. Ten years ago, if anyone had said that everybody – everybody – in the whole world would be able to look up information on one very subject imaginable: from Le Corbusier's views on human nature to the current regulations covering the concrete foundations of nuclear reactors, in under five minutes and all at the same time, we wouldn't have believed it. And we certainly wouldn't have believed that people would actually complain of it taking as long as five minutes, because of a slow internet connection.

Nowadays it's not just the various technologies that are rapidly evolving and changing our living conditions. So too is the volume of knowledge. Every five years the amount of knowledge in the world doubles. And this is happening not just in our part of the world – all over the globe investment is being made in education and in producing clever minds. According to UNESCO, by 2020 there will be more people graduating through education than have done so since the beginning of history. Knowledge will be something to which

everyone will have access. That too engenders change in the world. Did you know that a way has been invented of making payments by SMS – so the window-cleaner can now be paid simply by sending a text message? Well it has – but not in Denmark, nor anywhere else in the West, but in Zimbabwe, one of the poorest countries in the world. A developing country. But thanks to technology, the Internet and the increased accessibility of knowledge, Zimbabwe is not merely a developing country, it is also a country which is actively developing. And developing solutions within fields which many in the West probably assumed to be exclusive to them.

Technology, the growth of knowledge and globalisation are three of the major forces of change in the world at the moment. And the biggest increase in the number of smart, skilled individuals is not taking place in the West, but in those regions where the population growth is greatest: in Asia, in Africa and in South America. Today an Indian engineer can do the same job as his Danish counterpart. But for a quarter of the price. Which means, of course, that it won't be long before we'll be having the calculations for the foundations of our new conservatory done in India. The new century will be nothing like the old. Consequently, the demands placed

on our children, in terms of their knowledge and capabilities, are also changing. Just look at this introduction to a job advertisement placed by my own local authority, which is looking for a new member of staff:

“You have the relevant academic qualifications. You have vision, initiative and an eye for the big picture. You are pro-active, self-motivated and responsible. You are inquisitive, creative and reflective. You can convey your message clearly, simply and enthusiastically. You can work with people at all levels.”

There are several things which stand out in regard to the competence requirements listed in this advertisement. Obviously one has to have qualifications, the notion of the unskilled labourer will soon be completely unknown. But academic qualifications as we know them today are not enough. The local authority worker also has to be inquisitive and creative, generate enthusiasm, be able to communicate etc..

There is not a single company in Denmark that is not looking for people like this. But they are hard to come by. Because our educational system is not designed to develop our performative and creative abilities.

Our educational system is based on factual knowledge and logical thinking. And we are currently in the process of defining very precisely what our children ought to know, at what age and in which subjects. We test them to check whether they achieve the set goals. We mark them according to their mistakes. We standardise as much as we can.

Alongside this standardisation we are constructing distinct subject hierarchies: the top subjects – those which are accorded the highest status and the most teaching hours – are maths, languages and the sciences. The less highly rated subjects are the creative subjects, those for which marks are not necessarily given, which will not necessarily be part of the curriculum all the way through school, and which do not necessarily have any other purpose than to show the children that in their free time they might be able to do something with music or art -which just happen to be the two creative subjects with the highest status. Below them come the more peripheral subjects such as design, architecture, drama and the like.

What we're doing in our educational system today is to go for more of what we know. We improve the children's academic skills, the knowledge and the abilities we cultivated in the past century. More Danish classes, more maths classes. The price we pay for this is a lower priority on the development of the children's creative potential. The children must be able to choose German, but not drama. They must read Holberg, but not perform Holberg (ed: Danish playwright 1684-1754). They have to be trained in logical thinking, but not in creative thinking. They must learn to know lots of things, but not also learn to conceive of lots of things. The ideology of the old century is ingrained in us: we take it for granted, everybody has to know something. We also take it for granted that not everybody needs to be creative.

The challenge, however, is that already the demand from the business sector and the world for creative and performative skills is at least as great, if not greater, than for a good memory and factual knowledge.

Our children's progress towards the year 2070 will be a journey into a time when new knowledge, technology and globalisation will continue to change the conditions of life, which is why we need to ensure that all of our children's talents and creative gifts are developed in exactly the same way as their academic skills. Change calls for new ideas and new solutions. Obviously we have to become more competent and more knowledgeable, because the rest of the world is doing just that. We have to be innovative. So we improve upon our education system, to ensure that knowledge and ability, academic skills and performative skills, logical thinking and creative thinking can go hand in hand, as equal strengths, not as overdog and underdog.

This requires us to take a new, fresh attitude to our education system, to the subjects taught, to assessment methods, teaching methods and learning processes. But when faced with change the most important skill one can have is that of innovative thinking. Because then you can do something to create your own life conditions and not simply be subject to change.

Claus Buhl has an MA in art from the University of Copenhagen and a Ph.D. from Copenhagen Business School. He is a creativity consultant with Buhl Global and chairman of the Danish Parliament's expert committee on the establishment of experience zones in Denmark. He is also a writer and public speaker.

He is inspired by the thoughts on education and creativity by Sir Ken Robinson. http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html



FOCUS ON THE VERY YOUNGEST SPACE AND FORM IN KINDERGARTEN

The Design Kindergarten in Vonsild:

Aims:

- Set up a day-care centre consisting of a crèche for 24 infants and a kindergarten for 88 pre-school children.
- Create a 'theme kindergarten' with design as its theme.
- Raise the standard of teaching, in a large number of day-care institutions, of design and design processes.
- Establish and develop collaboration between the local authority childcare options and appropriate cultural institutions.
- Show what the cultural institutions have to offer children/parents who have not yet become a part of this community. The project should, therefore, facilitate both the social and the ethnic integration of marginal groups.
- To build an institution which will encourage and provide inspiration for work with design and design processes for, with and by children.

Target group:

The project involves the building of a day-care centre consisting of a crèche for 24 children aged 0-3 and a kindergarten accommodating 68 children plus a daily intake of 20 pre-school children from affiliated day-care institutions from the Kolding District.

Success criteria:

- A greater number of children to develop their skills in the area of design and design processes.
- A greater number of children who do not normally use Kolding District Council's cultural institutions to be introduced to these and make use of them.
- The development of teaching practice regarding the observing of children's strategies for the pursuing of their own ideas.
- The creation of a mutually beneficial collaboration between the day-care institutions and the various cultural institutions in Kolding.
- The creation of a collaboration between the childcare department and the schools department on the development of design processes by, with and for children.

Content

- The initiation of activities which take their outset in play.
- Work with design will take its outset in the child's abilities, knowledge, imagination and social skills.
- An exploration of the relationship between idea, execution and result.
- Particular focus on the fact that children work with design processes in different ways.

- Enhancement of the children's concentration skills through absorption in the processes.
- Focus on the child's development relative to the nearest zone of development
- Ensure that the children are introduced to good quality materials.

Organisation:

The kindergarten and the crèche are subject to the following conditions:

The Design Kindergarten is a day-care institution like all of the other day-care institutions in Kolding District. But it is also a theme kindergarten, with design as its theme.

Collaborative partners:

- Cultural institutions: e.g. the Children's Art Centre, Nikolaj for Children, Trapholt Museum of Modern Art, Kolding School of Design, Koldinghus Museum, Kolding Library.
- Collaboration with appropriate educational institutions on further education/in-house training of the Design Kindergarten staff and other employees involved in working with the Design Kindergarten.

Read more at
www.designkolding.dk

Anne Line Svelle, children's cultural coordinator, Aarhus District Council
(Author providing her own translation)

Experiencing architecture



Three dimensions are of particular importance for our experience of architecture. Firstly, it establishes the preconditions for our purely phenomenological experience of the space and the forms that surround us. Secondly, it bears witness to our cultural heritage, thus reminding us about who we are and giving us a sense of identity. Thirdly, it shows us that the space in which we live is, to a certain extent, produced by ourselves and thus malleable and changeable.

Choosing architecture as an area of interest at the Children's Cultural Centre (CCC) in the municipality of Aarhus (and taking our cue from the Norwegian project "Urban detectives"), we wanted to create a model for projects that would cover all three dimensions. The result was a sensory-creative model for teaching architecture to children and adolescents that consists of five stages.

The sensory-creative model for teaching architecture

In the first step the focus is primarily on the immediate experience of space and form. The credo in this stage is "Open your senses to



the surroundings!" The participants start on a walking tour in a predetermined area. The chosen area has to be well known to the participants, partly because they should concentrate on experiencing the space, and partly because the area should carry a dimension of self-evident, yet hidden meaning. Furthermore, the walk should be supervised by an expert of architecture - preferably a skilled mediator with an interest in storytelling. The expert answers questions about architectural details and engages in a dialogue about the observations the participants make.

Having walked the neighbourhood for a while, the participants are asked, in stage two, to collect traces. These may be obtained with the help of a digital camera or a note book produced for the occasion which among other things contains questions to help the investigation. The participants may also collect various pieces of ma-

terial which they find particularly interesting - like a brick which has fallen out of a particular wall or a leaf from the most beautiful tree in the playground - or prints of specific exemplary forms made by rubbing coal on a thin sheet of paper, also to be found in the notebook, placed on top of the form to be remembered. If time pressure is high, stage two may be performed simultaneously with stage one.

Stage three consists of a workshop in which the various traces and pieces of material are investigated and discussed. The findings are displayed and the expert continues the dialogue by urging the children to reflect upon their reasons for choosing these exact traces as a documentation of the architectural experience. On the one hand the material is investigated phenomenologically: Which sensations do they refer to? How does the material help produce a particular atmosphere

Photos: City Detectives Photography Project, the Children's Arts Centre, Aarhus

in the environment? And on the other hand questions about meaning inherent in the architectural experience are raised: Why was a particular building created and how is the purpose detected from the building itself? How is history engraved in our buildings? How, for instance, does signs of decay affect us? When everything is investigated thoroughly, the participants are asked to decide which of the findings are the most important to them and which part of the area or which building(s) they would like to investigate in depth. When a choice has been made, the group is ready for a major change of focus.



In stage four the perspective is changed from a sensory-perceptive attitude to a creative-transformative approach. Now, the children are turned into agents of change. They are asked to consider how the building(s) or the area that they have chosen may be improved. When a number of potential improvements have emerged, they are asked to make prototypes of the changes they would like to make. Prototyping is chosen as a means of negotiating which changes should be made for three reasons. Firstly, the concreteness of prototyping makes it possible to maintain the sensory approach which is so important during the walk. Very often it is only when actually touching the various pieces of material that the ideas for changes take form. Secondly, it helps keeping the discussion about the mean-



ing of the suggested changes concrete. And thirdly, it secures that a product needed for stage five is produced.

Stage five is a presentation of the changes. The aim is to present the prototypes as well as the reflections that led to the production of them. Preferably, the presentation should take the form of a public exhibition. The public dimension forces seriousness onto the work with the prototypes and, by the same token, it gives the participants a feeling of being taken seriously. Furthermore, it heightens the level of reflection when you know that many people will consider your suggestions.

A general model with a potential for several age groups

At CCC we have tried out the model in several projects on participants ranging from 4 to 20 years of age. Luckily, the model seemed to be equally successful in all projects. Of course, it takes some calibration to make the model work for different age groups. This calibration may be helped by certain parameters like topics of interest and various surprises.

In our experience it is helpful to narrow down the vast subject of architecture by focusing on a particular topic of interest and to engage all senses in the walk. You may, for instance, introduce distinctions like inside/outside or hard/soft or you may ask the participants to focus on, say, facades. Such topics are particularly helpful for young children but

they also trigger the adolescents. In order to evoke all senses you may also tell the participants to focus on smells or sounds and prepare small surprises that will help make the point that sound, smells and light differ in various types of space and buildings. In our experiences, surprises like these will also stimulate the urge to pose interesting, philosophical questions.

You may, for instance, consider making the local baker present a sample of cookies to be tasted on a certain spot on the tour. This will definitely work for the young children - and probably for the older groups as well. For the latter group you may, however, consider giving the participants an experience of entering a building blindfolded in order to make them experience how their other senses become enhanced, when they are deprived of sight. Or you may position a saxophonist or a singer in a tunnel or a backyard as an effect of estrangement which raises the level of curiosity, no matter which age group. The important point of introducing parameters like these is that they make it possible to change the experience without changing the model.





Giving children a focus within the creative process

What, as you see it, can children and young people gain from being in close everyday contact with architecture and design?

Well, we all live in works of architecture, of course. So from that point of view children do always have a sense of the rooms they inhabit, and for the whole business of making little replica houses – playhouses and so on. I think it's something that's deeply rooted in us, from when we're very young, the sense of having space around us and the need to build structures around ourselves that will give us some feeling of home.

That's also why kids go off into the woods and build dens – it makes them feel secure and at home in the woods – it's very instinctive, I think. That primal instinct that prompts us to build nests, or places that are somehow ours, it makes itself felt very early on in children.

Do you have any suggestions for ways in which kindergartens, schools and cultural institutions might go about teaching architecture and design?

My children went to the best kindergarten in the world, Ålsgårde Kindergarten, which is full of all sorts of different rooms that the children helped to design. That's the best example I can give of how to go about it.

For instance, they have a luminous room, a fairy-tale room, caves, castles and so on – nooks and corners designed in collaboration with the children in a way that really expands their imagination and their sense that here you can do one thing, here you can do something different; this place can be spooky, this place can be fabulous and magical and so on.

These rooms are designed to suit the children themselves, because they design everything in them. But for this you need adults imaginative enough to give the children the right base to work from. For example: "Now we're going to make an ocean room – a room down under the water!" Or a night room. The adults need to provide a focus – on a particular setting and specific materials. And that can be all that's needed to keep kids busy for days.

You could create universes in school in much the same way – when working, for example on a topic such as global warming you could ask the class to design rooms containing nothing but plants or things from nature – or other rooms containing only those industrially produced goods that are proof of the state the world is in and of the fact that we can't let it go on like this.

If you create this sort of clearly defined focus, by presenting the children with a limited selection of materials for use in the project or the task in hand, the children

will find the work extremely interesting. Whereas, if you simply say: "Make whatever you like" it's too vague.

If you were to introduce a child to a piece of architecture or design, what would it be?

Oh, dear – there are so many ... Kronborg Castle, the Sydney Opera House, the Taj Mahal – these are all fairy-tale buildings full of history. And fairytales speak to what lies deepest in children and adults.

At Kronborg Castle I would tell them about its location just there. And about its towers and roofs and walls and ramparts and what the castle was used for and why it's laid out the way it is – and how it was a mini-society in itself, with the casemates, the courtyard, the banqueting hall, the church. I would tell them it had a function, and that this determined that it should look as it does.

In the Opera House I would explain that it took the form it did because it has to be seen from so many different angles – from in front, from behind, from below, from above. This lends an extra dimension to it, which is why my father chose to make it a sculptural building.

The Taj Mahal is quite magical – here they built something that is not the norm, but the absolute best that man is capable of. Both architectonically and in the

◀ decoration of it. The way it's laid out. The sense of harmony you feel, as a person, walking around inside it – the same applies to the Opera House and Kronborg, you step inside and just being in these places makes you relax. You feel whole. That's the magic of them.

Can you remember any experiences with works of architecture or design that made a particularly big impression on you?

Well, I did live in a house that my father had built in a forest. To begin with I lived on a building site, with mattresses on the floor and

sawdust all over the place, and I watched this building come into being in the middle of the forest, by the lake. That was magical.

And the whole sense that this was a very modern house with huge windows, and I had a sandbox inside the house. To sit in that house and see the light shining through the trees and the insects dancing in it – it was like I was living under a glass umbrella – that was a very powerful experience.

That feeling has never left me. I love architecture and it has a great

influence on me – space matters to me, and how a house is situated, the materials it's built from and so on, are very important to me. Not because I want to have a big, fancy house, but certain rooms speak very strongly and forcefully to my feeling for space and being. While there are other places I just can't stand to be at all.

I also have a feel for decorating buildings – not all artists choose to do it, but I really like that sort of work.

Interview by Monica C. Madsen.



Architecture as a school subject on a level with social studies

Is it important that children are given the chance to engage with architecture and design in their everyday lives?

Yes! Architecture ought to be a school subject on a level with social studies: how and why we live as we do is absolutely basic knowledge.

It's something of a paradox that you're taught all the other arts, which are, if you like, the sprinkles on top of the cake: you read loads of literature in your years at school, you have art and music classes and so on. But nothing on architecture, even though it represents the physical side of the basic things you learn in social studies.

It's also important to make children see that they themselves have the power to influence the look of their surroundings: I mean, our towns and cities weren't handed down to us by a bunch of gods or little green men – we built them ourselves. A city is not a constant, but a process dictated by human beings themselves. If something in the city no longer suits the way we live, we have to change it. It's all part of growing up in a democratic society - the fact that you can have a hand in colouring and shaping your physical surroundings. In my opinion, schools of architecture ought to come under the Ministry of Education, not the Ministry of Culture. It's also interesting to note that architecture is invariably discussed in the arts section of a newspaper, not in the main section alongside the political and financial news.

What dimensions can architecture and design add to a child's experience of the world?

It can help them to understand that works of architecture and design are conceived by men and women and that they affect all our lives: you go to school in a building, you play sports in a building, you live in a building, you take the train from one building to another – all the spaces you inhabit are works of architecture; these present possibilities as well as setting certain limits. That's why it's important to know why our houses look the way they do – why old houses look one way, newer ones look another way and brand-new ones are quite different again. It would be great if we could reinforce children's – and adults' – general awareness of buildings and architecture in this fashion, so that they wouldn't merely think of something as being nice or not nice to look at, or as bad style or good. Architecture is about so much more than that – not least about a far more intuitive approach to creating the settings for the life we want to live: we're not forced simply to put up with the settings we've inherited from past generations! We actually do have the ability and the possibility to alter things to fit the way we want to live today. That's why the most important thing we can teach our children is not to take anything for granted, but to question why we actually do things the way we do.



What would you place most emphasis on if you were teaching architecture to children and young people?

There is a tendency to regard as banal anything that's clear and comprehensible – when some architects use the word 'comprehensible' they mean it as an insult: "If everybody can understand it it's not interesting," is how they see it. A friend of mine calls this crypto-Fascism, i.e. suppression through incomprehensibility, a means of retaining power by making a big secret out of what you do. Maybe some architects feel that it's hard to explain their work in a way that can be understood if they can't give people all the answers – as Nietzsche says, many people prefer a known lie to an unknown truth. But there's nothing wrong with having a few loose ends: you can say what there is to say and leave it at that!

I would also focus on the story of how buildings have come into being through interaction with events in the world around them. In BIG's book *Yes is More* we set out to tell the stories behind a number of our projects: but not by explaining them in the traditional way, with plans and detailed descriptions of the aesthetic and stylistic departures from tradition. Instead, we look at the

◀ sociological reasons for why different things have different appearances. We've put together a whole lot of photographs and diagrams to make a sort of comic book about architecture, one in which we tell the story of the creation of each building in comic-strip form, with a beginning, in which we set the scene; a middle, in which we wrestle with the problems involved, and an ending with a point.

One could also use Darwin's step-by-step model to explain how buildings have evolved – in the same way that he shows us, step by step, how we have evolved from single-celled organisms into human beings. It would be absolutely fascinating to look at the creation of the modern city in the same way and examine why things have ended up looking as they do today.

And one shouldn't be afraid to give architecture more popular appeal and spice up the teaching of it a bit. A lot of architects

are critical of the new fashion for turning world-famous architects into media darlings, as fêted as film stars. But just as having a crush on an actress like Scarlett Johanson can lead you to start seeing quality films, so an architect with a fascinating background can arouse your interest in a subject such as architecture, in which you would otherwise have had no interest. The fact that Zaha Hadid is an Iranian princess and wears designer clothes might well prompt you, for example, to suddenly find her extension to Ordrupgård Museum interesting. Just as Jørn Utzon's incredibly brilliant presentation skills combined with his film-star looks might spark your interest and lead you to take up architecture.

Is there any particular experience of architecture or design that you remember from your childhood?

As a child you don't really care whether something is nice to look at or not – the great thing is for it to be able to do some-

thing special, something you've never seen before, that provides fresh scope. As a six-year-old I was, for example, much more impressed by the big and much-maligned Sixties-style balconies and all-glass façades of the modern blocks of flats back home in Skodsborg than by the much-admired Modernist houses from the Fifties across the road. What mattered to me when I was young was what things could do, not how they looked.

But my interest in architecture stemmed, first and foremost, from my enormous fascination, when I was about nine or ten, with the mansions in the James Bond films – not social housing. And even though so far I've only built some financially affordable private housing in Amager on the south side of Copenhagen, and that's a far cry from the James Bond-style mansions, nonetheless we have tried to endow them with an element of novelty and adventure. Take, for instance, The Mountain, our building in



the new Ørestad district, where you can be living on the tenth floor and still have a huge garden, and where you can drive your car up into this really colourful basement, then take the sloping lift up to your flat.

In the James Bond films it's the villains who have the most fabulous homes – a very particular style of architecture prevails here, with secret doors, bookcases that can be pushed back to reveal secret rooms, or swimming pools under floors. And then there's the entrance to the Bat Cave, camouflaged by bushes which seem to be just part of the landscape, but which slide back to allow the Batmobile to drive down into the caves under Batman's mansion... I was absolutely fascinated by the extreme and surprising inventiveness of the luxury mansions in those films: every kid wanted to have a sloping lift they could take down to the beach, or a submarine in the basement that could sail out through a secret channel.

What I really wanted to be was a comic-book artist, but I also used to build lots and lots of Lego models full of hidden rooms, and when I was around ten or twelve I drew my own James Bond mansions, packed with all sorts of surprises. That more extravagant way of realising dreams or a fantasy, rather than trying to capture some image of what's nice or not nice, is something that's carried over into my work today.

If you were to introduce children to a work of architecture - which one would you choose?

The Round Tower is fun – the story of how the king couldn't be bothered walking up to his telescope, and so they built a spiral ramp to allow him to drive all the way up in his carriage.

We're actually building a complex out at Ørestad right now; it's called Figure Eight and it's constructed on several levels: at the bottom are offices and small terraced houses with front gardens and cycle paths running past

them, and right at the very top there are penthouse apartments with front gardens and roof gardens – and you can ride your bike all the way up to the tenth floor. It's a sort of residential version of the Round Tower.

The Bjarke Ingels Group's photographic comic strip 'Yes is More – an Archicomic on Architectural Evolution' is the catalogue for the BIG exhibition 'Yes is More', which was staged at the Danish Architecture Centre in Copenhagen in the spring of 2009. By means of photographs, drawings and speech bubbles this photo comic presents a picture of the ideas and the circumstances which determine the ultimate appearance of BIG's various projects and buildings.

The 'Yes is More' catalogue is available from the Danish Architecture Centre bookshop and other bookselling outlets. Price: €20.

www.english.dac.dk



FOCUS ON THE CULTURAL INSTITUTIONS

TEACHING PROGRAMMES GAINING GROUND. MORE EXPERIENCES, MORE TEACHING

We need more and better ways of introducing children and young people to architecture and design at its best. Whether this is achieved locally or elsewhere children and young people need to experience and understand their cultural heritage in all its forms: through buildings, urban spaces, objects and symbols and through the things, new and old, all around them.

It is also important that children, young people and their families have better opportunities for coming into contact with such things in their free time, and not only on school outings and the like. So far the options available to them tend to be scattered all over the country, but more new options are cropping up all the time – programmes and events that are open to all.

Many cultural institutions make an active effort to teach children and young people about architecture and design. In this chapter we provide an introduction to a number of these institutions, and to programmes already offered in different parts of Denmark. We also present a brief guide to exciting initiatives and particular institutions in other countries which can provide inspiration for further work here at home.

Here in Denmark, the teaching of architecture and design to children and young people is mainly carried out by art and specialist museums, as well as by arts centres and art schools in the larger towns and cities. In many cases these activities are occasional events rather than a permanent feature.

A number of electronic portals have made it easier to find out what is on offer and to do some preparation at home.

ARKEN – museum of modern art:
www.arken.dk/content/us/education

DAC – the Danish Architecture Center:
www.english.dac.dk
www.dac.dk/guide

Designmuseum Danmark:
<http://designmuseum.dk/en/skoletjeneste>

Trapholt – Museum of modern art – and Designmuseum Danmark
www.designprocessen.dk

“Lessons in architecture give children new opportunities, methods and tools for influencing the way in which building environments of the future will be shaped. They open new windows and doors onto a world of possibilities, onto the prospect of an as yet unknown future.”

*Pihla Meskanen, director of ARKKI,
School of Architecture for Children and
Youth, Helsinki
www.arkki.nu*





What is needed:

- ▶ State-run cultural institutions could improve upon their teaching programmes for children and young people, for example through their performance contracts with the Ministry of Culture and the local authorities, and by the development of competence within these programmes.
- ▶ The cultural institutions could benefit from developing ways of presenting architecture and design digitally and via mobile phones, so that children and young people all over the country can have access to top-quality teaching programmes. Such programmes are to be developed in collaboration with appropriate organisations and institutions within these fields.
- ▶ An Internet forum which can provide all interested parties with access to information on architectural and design events and attractions around the country.
- ▶ Art schools and arts centres could develop their teaching of architecture and design, and local authorities could consider initiating experiments with schools of architecture and design for children and young people.
- ▶ New specialist arenas for network-building and interaction which would allow all the relevant institutions and other interested parties to become involved in national and international exchanges designed to promote dialogue and global vision.

At **national** level the Danish Arts Council/Danish Arts Agency should accord high priority to the promotion of architecture and design and should rate the teaching of these subjects to children and young people just as highly. For example, by expanding upon the existing Artist-in-Residence programme and promotion funding schemes open to museums.

At **district** level, local authorities should do their part, with their arts and leisure policies, to ensure that cultural and day-care institutions run and funded by the local authority give priority to architecture and design wherever possible.

At **institution** level, efforts should be made to ensure that activities related to architecture and design for children and young people are integrated into action plans etc., for the benefit and pleasure of all children and young people.

Architecture and design in pride of place

The three most notable cultural institutions for the promotion of architecture and design are all located in Copenhagen. These are: The Danish Architecture Centre, Designmuseum Denmark and the Danish Design Centre. The first two run special programmes for children and young people.



Photo: Danish Architecture Centre

The Danish Architecture Centre: Learn About Architecture

The Danish Architecture Centre (DAC) is an information and exhibition centre for adults and children which generates and imparts knowledge on architecture, building and town planning, with the focus on the future.

Among other things the DAC offers teaching activities and teaching materials for children, young people and adults, the focus here being on the way architecture shapes and structures spaces. Its teaching programme is based on dialogue and is conducted through the DAC's various exhi-

bitions at the Gammel Dok Warehouse overlooking Copenhagen Harbour and through walks and sightseeing tours around the city.

The DAC also runs seminars for teachers and other educators, providing them with aids to teaching architecture in schools – among them the educational game Playspace.

Children and young people are keen to learn about architecture.

In the DAC's experience many children and young people are

interested in learning about architecture and space, because architecture forms the framework of our lives and is the key to many experiences: we grow up inside works of architecture, we pass between works of architecture on our way to school and to work; and the rooms in which we spend our time every day and relate to in one way or another – all of this is architecture.

DAC wishes – through its teaching programme – to give children and young people the means with which to put their own in-



Photos: Danish Architecture Centre

dividual experiences of architecture into words, and to arouse their interest in and understanding of the architecture around us. In a democratic society such as ours it is vital that children and young people are equipped to actively form opinions about and discuss the buildings that are going up all the time in their local neighbourhood. We want to provide all children and young people with the tools which will enable them to have a qualified influence on the shaping of their surroundings.

Architecture is also an obvious topic for inter-disciplinary projects. Architecture has to do with stories as well as numbers, and when we learn about architecture we are also learning about social conditions, identity and culture. Architecture can, for example, be included in any project - in art, Danish or history - in which the children can work with the topic on many levels. And as part of the new high school reform, the teaching of architecture could be integrated into high school classes in general preparation for study, Danish, sociology, geography, history and art.

The DAC teaching programme

The DAC website at www.dac.dk/undervisning gives access to free digital teaching materials:

- Arksite, Arksite Plus and Arksite Kanon contain background articles, exercises and teaching instructions.
- *Playspace* is an educational game in which pupils can work creatively with urban spaces.

All teaching materials have been developed by DAC | Education in collaboration with various bodies and individuals, and financed by the Realdania Foundation and the Danish Ministry of Education's Pools and Lottery funds.

DAC | Education is also involved in developing various teaching materials on architecture. These include books, newspapers, anthologies, exhibitions and television programmes for use in primary schools and high schools. Up-to-date information on these projects can be found at www.dac.dk/undervisning along with suggestions for teachers on how to use DAC materials in class.

The idea is for teachers to be able to construct a teaching module on architecture and cities out of both digital and actual encounters with architecture: in the class the teacher can start by introducing the children to the subject with the aid of *Arksite and Playspace*. The natural next stage would be to go out and look at, examine and experience architecture live in the pupils' own neighbourhood or on a class outing to Copenhagen, for example. The whole of Denmark is a potential learning space.

Several times a year the DAC also holds workshops and seminars in different parts of Denmark on the teaching of architecture. Here teachers are, for example, given an introduction to the DAC's teaching materials, presented with concrete teaching cases and taken out to visit and explore the local architecture.

Seminars are advertised on our website at www.dac.dk/undervisning.

Designmuseum Denmark

Classes in design for primary schools and high schools

Designmuseum Denmark presents an excellent picture of Danish and international design – be it industrial design, applied arts or crafts. The museum also houses large historical collections from Europe, China and Japan.

The aim of the Educational Service classes run by Designmuseum Denmark is to enable children and young people to appreciate, understand and evaluate works of design and crafts. This is achieved by honing their awareness of form, function, construction, technique, texture, colour and material.

The museum also runs courses for teachers.

The Educational Service offers various dialogue-based teaching sessions which can be combined with a workshop session. These sessions take their outset in the museum collections, special exhibitions and the Design Studio, a storeroom open to the public in which everything can be touched and handled.

The Educational Service places a lot of weight on the promotion of learning processes that reinforce the individual pupil's analytical sense and cultural identity – by developing their ability to look at and consider design, to shift perspective, to describe what they see and to analyse a piece of design and put it into perspective. And by giving pupils the chance to express their opinions, ideas and observations in visual and material form.

The teaching sessions for high-school students are designed to tie in with the requirements for academic courses in design as specified in the Danish Ministry of Education high-school reform bill: A number of these sessions provide the students with insight into the designer's working methods and working partnerships and thereby into the design process and the many factors involved in this.

<http://designmuseum.dk/en>

Designprocessen.dk

Designmuseum Denmark and Trapholt Museum of Modern Art have produced a new digital teaching programme on design, www.designprocessen.dk. Here one finds descriptions of the design processes behind classic pieces and totally new designs – Ten concrete examples in which one can follow each stage of the process, from idea and inspiration to production and use.

The target group is high-school students, but the website can be used by anyone interested in design.

The website has been developed in collaboration with the Danish Ministry of Education's design consultant and others.

REMIX AND SAMPLING – a service offered to high schools by the Educational Service

Under the new high-school reform bill the aesthetic subjects have a new role to fulfil:

These subjects must now constitute a meaningful part of the students' other subjects and projects – they should act as a catalyst, to give students a better chance of gaining insight into and knowledge of all subjects, be it the classic artistic disciplines or other areas of study, in which students can sample and remix form and meaning from different fields of knowledge and epochs in our common culture and history.

The Educational Service has therefore launched a campaign entitled REMIX AND SAMPLING which allows high-school teachers and museum staff to enter into a close dialogue on how high schools can draw on the knowledge and resources of the art museums in their work with the aesthetic subjects.

Through the campaign's seminars, focus groups and publications, museums and high-school teachers can exchange the knowledge and experience which will turn the museum into a full-fledged knowledge centre and alternative learning environment for high-school students.

This campaign has been organised by ARKEN Museum of Modern Art, the National Gallery of Denmark, Film-X, the Educational Service Music Department. Louisiana Museum of Modern Art, Thorvaldsens Museum, KØS Museum of Art in Public Places, Designmuseum Denmark and Nikolaj Copenhagen Contemporary Art Center.



Architecture and design in the art museums

Three art museums have made architecture and design an integral part of their activities, both in their permanent exhibitions, special exhibitions and through their information and teaching programmes:

Louisiana – Museum of Modern Art

At Louisiana, primary school pupils and high school students are given a unique insight into the interplay between the architecture of a museum, the works on display and the surrounding landscape. They can also visit the regular architecture exhibitions, which offer an excellent opportunity to discuss, debate and consider the architecture in which we live now and that of the future.

Louisiana's education department offers teaching sessions on the architecture of the museum, on the permanent exhibition and on its special exhibitions. These sessions take their outset in dialogue and practical exercises such as process writing and sketching. There is a choice of a one-hour session in which pupils are introduced to the central themes and elements of the

exhibition and a two-hour session in which pupils also have the chance to work in the workshop.

Louisiana's architecture and collection

Ever since its first buildings saw the light of day in 1958 Louisiana has been acclaimed by architects worldwide. The museum was designed by architects Jørgen Bo and Vilhelm Wohlert and later extended several times by them. Their respect for the museum's unique location in a green, wooded spot overlooking the Sound between Denmark and Sweden allows pupils to experience the interplay between art, architecture and nature that gives this place its distinctive atmosphere: the French architect Jean Nouvel, designer of the new Danmarks Radio concert hall, has for instance written a whole mani-

festo in which he hails Louisiana as being an ideal example of the location-specific architecture of the future.

Architecture exhibitions

Until 2011 school classes also have plenty of opportunity to visit the museum's annual architecture exhibitions. Louisiana has long been known for its architecture exhibitions and over the years 2008-2011 a series of exhibitions entitled the Frontiers of Architecture I-IV has been an annual event which spotlights new and alternative trends in architecture today. For example, new collaborations between architects and engineers, endeavours to design green architecture and the development of new forms of housing.

www.louisiana.dk/uk/Menu/Children

ARKEN – Museum of Modern Art

Experiencing and learning about architecture

Lots of primary school and high school classes visit ARKEN Museum of Modern Art every year to experience the museum's distinctive architecture and its collection of modern art. ARKEN, one of the few Danish examples of deconstructivist architecture, was designed by Søren Robert Lund in 1988.

The ARKEN building is an excellent starting point from which to give schoolchildren and young people an insight into the conceiving of spaces, and to introduce them to the architecture of the twentieth century – from constructivism and modernism to the latest trends in twenty-first century architecture.

Teaching programmes

ARKEN offers various teaching programmes on the architecture of the museum, tailored to suit different age groups, addressing different aspects of architecture. These programmes are designed both as interesting experiences for the children and to equip them to take part in discussions about

architecture, culture and society.

A link between the architecture of ARKEN, town planning and urban life is established by means of net-based film footage and teaching resources dealing with the growth of the south-western suburbs of Copenhagen – known collectively as 'Vestegnen' - from the grand Utopias of the Sixties to life in urban centres today. As an international art museum ARKEN is a product of the great dreams for Vestegnen. Films and website are geared towards high schools and colleges and are part of ARKEN's three-year exhibition project 'Utopia'.

Teaching materials

Before a teaching session, printed material is sent out to teachers and pupils. This printed material is tailored to suit the age of the pupils and is supplemented by a wealth of material on the ARKEN website, where teachers will find exercises, assignments, literature and links to further work on architecture in school or high school.

Courses for teachers

ARKEN Education runs courses for teachers in its online architecture workshops. These help to prepare teachers for the teaching session and familiarise them with the technology involved before visiting the museum with the class.

Utopia – a film about Vestegnen

ARKEN has produced a film on urban life in Vestegnen aimed at high school and college students. This film can be viewed on the ARKEN website along with interviews with young people from the town of Ishøj who talk about the way they see and use the town's public spaces. Their comments are interwoven with statements made by the politicians and town planners who built Ishøj and other new towns in Vestegnen in the Sixties. The aim of the film is to teach young people about planning and building processes and thus enable them to take part in debates regarding future building projects and how we can preserve our cultural heritage.

Trapholt – Museum of Modern Art

Design events for schoolchildren

Together with eight Danish teachers and their classes, Trapholt Museum of Modern Art has devised two teaching programmes on design for use in Danish lessons in primary schools: a Design and Inspiration session for Reception/Infant and Junior Primary classes and a Design and Life-

style session for Senior Primary/Lower Secondary classes, both of which were regularly assessed by the schoolchildren themselves during the development process.

Design and Inspiration

The Design and Inspiration programme includes a textbook – De-

sign Adventures – which combines the two subjects of Danish and art.

The book begins with an easy-reading story in which all the characters are different chairs designed by furniture designer Nanna Ditzel – chairs which the children are already familiar with



from visits to libraries, the doctor, airports and so on.

The last section of the book contains lots of creative and investigative exercises which can be used in the teaching sessions.

This book can also be used back in the classroom to follow up on the Design and Inspiration tour of Trapholt, by encouraging the pupils to find inspiration in everyday objects and in ingenious crossover design pieces.

But classes don't need to visit the museum in order to work with the book: In 2006 three of Nanna Ditzel's armchairs went on a tour of Danish libraries, thus enabling children to read about design

while sitting on an actual piece of design. In 2009 the three chairs were off on their travels again, this time visiting kindergartens throughout the Kolding district.

Design and Lifestyle

The Design and Lifestyle programme takes the form of a guided tour on which the pupils are split up into small teams, each of which makes its own study of chair design.

The chairs involved are classic pieces by Hans Wegner, Børge Mogensen, Arne Jacobsen, Verner Panton etc. To begin with the chairs are covered by cloth bags, and the children have to examine them by touch alone: this way their perception of them is not

coloured by any previous knowledge of the chairs and their appearance. The pupils put their impressions of the chairs into words and at the end their perceptions are compared to the designer's own thinking behind each piece.

Other events

Autumn of 2009 saw the launch in Denmark of a new touring exhibition 'Bottom and the Seven Designers – the art of finding a chair to fart in'. The exhibition consists of seven chairs and is aimed at classes from Primary 3 to Primary 6. To book the exhibition contact Trapholt Museum of Modern Art.

Architecture and design in the art schools.

Several art schools around Denmark have adopted architecture and design as themes in their classes:

The Copenhagen Children's School of Art Architecture – the School of Art's theme of the year

At the Copenhagen Children's School of Art, architecture was the theme of the year in 2009-10.

Copenhagen Children's School of Art has conducted many design and architecture projects in the past and during 2009-10 students at the school examined different ways in which architecture is experienced and perceived – also with regard to the way in which architecture is carried over into the world of art.

Spring Exhibition 2010

For the 2010 Spring Exhibition in the main hall of Copenhagen Town Hall every class at the school worked with a concept inspired by Italo Calvino's cult book *Invisible Cities*. Each class constructed their own architectonic universe or city on and around a platform; all of these cities or ideas for cities were then placed on exhibit for visitors to wander around and view.

As a prelude to the project, teachers at the School of Art took part in an inspiration teach-in – a three-stage rocket process the first stage of which involved a study trip to Ørestad, complete with lectures, a walk around the new district of Copenhagen which is taking shape there and a visit to the new Danmarks Radio Con-

cert Hall. This was followed by a teaching seminar consisting of presentations, lectures and workshops, and finally the teachers attended a performance of *City Puzzle*, a stage show which is also inspired by Calvino's novel.

Inspiration day for art teachers

To ensure that art teachers in primary schools are also well-equipped to prepare and present lessons on architecture, the Copenhagen Children's School of Art took the initiative to arrange an inspiration day for art teachers in the Copenhagen district. On the very day, the School of Art presented different ways of working with architecture, methods which the teachers could take back with them to their art rooms.

Other architecture projects

During 2009-10 a number of other School of Art projects also revolved around the year's architectural theme: some classes built a massive cardboard town which was exhibited in the School of Art gallery in the spring of 2010. Other classes worked with film animation in a project entitled *The Animated House*. Here, students have to imagine that they are building a house in which the focus has to be on sustainability, town-planning and storytelling.

Architecture was also the theme at the School of Art on Copenhagen's annual Culture Night in October. During this event, entitled *The Hanging Gardens*, three classes built sets especially for the Culture Night, when everyone who was interested could come to the Art School and take part in an architecture workshop.

Architecture Summer Camp

The School of Art is also an active member of a Nordic collaboration with other art schools for children and young people – ARKKI School of Architecture for Children and Youth in Helsinki and Myndlistaskolin – the Reykjavik School of Visual Art. In 2009, eight of the Copenhagen Children's School of Art's students took part in an exchange trip to Helsinki, where they visited ARKKI. Afterwards they joined the architecture summer camp for 13- to 18-year-olds which the three schools take it in turns to arrange – a week-long workshop on sustainable architecture entitled *Nature Form – Ecological Architecture*. In 2010 it was the Copenhagen Children's School of Art's turn to host the summer camp, which was held in Copenhagen.

Read more at
www.billedskolen.kk.dk



Anders Byriel, managing director, Kvadrat, and chairman of the Danish Design Council



From your perspective, would you say that a greater focus on the teaching of architecture and design to children would be of benefit to the business sector?

It's an investment in our future and the place our part of the world will occupy in that future. It may be only one little building brick, but it can help to safeguard Denmark's future position.

Design and architecture are also in many ways a unique part of

Give children cultural readiness

our cultural heritage. Within the visual arts Denmark has not produced all that many major international successes. But on the architecture and design fronts there's no doubt that we've made our mark on the international scene. These are fields in which we have a tradition for distinguishing ourselves and in which we have something special to contribute.

I think we have to use architecture and design as ways of reinforcing our identity – as part of a cultural readiness. Your ability to decode things and to make your way in the global world is vital.

We're being bombarded with more and more information; more and more we are working virtually – we're operating in a world full of so much information noise.

That's why it's very important to know where you're coming from. Architecture and design can tell us a lot about the course of history and the view of people and of the world that our buildings and objects have reflected down through the ages: it's a way of interpreting your world that can make you better equipped to cope out there in the global noise, where things are going full blast.



How can teachers, educators, cultural exponents and the like tackle this task?

They can work with 3D and 4D in school and kindergarten. 3D involves model building and so on, while 4D involves visualisation and the whole of that visual universe, which is really taking off at the moment – and demanding more and more of us when it comes to dealing with and creating things that can function in virtual space.

This is also one of the key points in the new design policy which we at the Design Council, together with the Danish Enterprise and Construction Authority, are attempting to draw up – the concept of venturing into the immaterial. Things are happening in that field and it's one of the areas in which we could well make our mark: we are arguably among the best in the world when it comes to adapting to the virtual world and IT development. So schoolchildren shouldn't build models so that they can all become architects, but in order to view the world more in three-dimensional terms, also in practice. Because that is the world we're going to be living in – the context in which they will have to function and in which they'll have to be able to create situations, products and experiences. They are going to have to relate to a great many immaterial processes.

What part did architecture and design play in your childhood?

A very big part – I suppose I'm a bit of a nerd! My father was creative director of Kvadrat (the Danish textile design company – ed.) from 1968 until I took over in 1999. So as a child I was used to looking at design, and I was

dragged through all the art museums. And in my teens – before I started to study law – I was fascinated by architecture. I've seen some statistics which say that approximately every fourth Dane is interested in architecture – that's a lot more than in any other country. And I'm one of them.

Do you recall any particular encounter with architecture that made a big impression on you?

When I was about five or six my grandfather would often take me to museums in Copenhagen. They made a big impression on me. Especially the National Gallery and the Ny Carlsberg Glyptotek.

And then, of course, I had a father who was a great fan of the COBRA group and Danish modernism, so I was used to being in houses designed by Friis and Moltke – both exponents of Danish functionalism. And in Aarhus, when I was studying there, every day I could enjoy the sight of Arne Jacobsen's Town Hall and C.F. Møller's university campus - another architectural gem.

Generally, I think our physical surroundings – in terms of both architecture and design - have a great bearing on the quality of our lives. The interaction between the physical elements around us can produce better people and better lives. And that is particularly true where children are concerned.

Which is why I think the Danish state should set up a massive fund for the revitalisation and rebuilding of all those schools that are badly in need of it.

Interview by Monica C. Madsen

Elisabeth Momme, head of the Children's Art Centre in Helsingør

Architecture and design outside of school

In 2004 I attended a meeting in Helsinki along with some of my Nordic colleagues. The theme of this meeting was 'Children and architecture'. One of the visits we made in Helsinki was to Phila Meskanen at ARKKI, a school of architecture for children and young people of which she is the director. I was very impressed by her way of working with children and architecture and to see how children can have an influence on the rooms they are forced to spend time in every day, and how their intuitive thoughts and ideas can enhance the development of a whole neighbourhood.

Phila, who – in her own architecture firm – is involved in the building of schools and institutions, had the best possible sparing partners in the students at ARKKI.

At ARKKI I also found the key to those young builders in Helsingør who have a designer/constructor/craftsman gene: children whose interest we have not

been able to satisfy in the classic art classes at our art school. At that time the Art School in Helsingør concentrated mainly on painting and drawing.

Craftsmanship is an essential tool when it comes to encouraging an interest in and a curiosity about architecture and design.

As a qualified textile designer I know that the aesthetics of the hand and the material are equal and important partners when we are experimenting with form and surface. By doing something practical we achieve results that we cannot achieve only by thinking about them.

In 2007 the late Jørn Utzon turned 90. In honour of the occasion the Danish TV channel DR2, presented a whole evening of wonderful programmes about his work and, not least, about Jørn Utzon the man.

One of the things that struck me that evening was his description

of what it had meant to him as a child to visit the shipyard with his father, who was a shipbuilder. Here he learned about the properties of the different materials and how to work with massive structures.

Without this knowledge he wouldn't have been able to work out how to devise the self-supporting structure for the vaulted 'shells' on the roof of the Sydney Opera House.

Where do children today have the chance to learn things like that? How often do you hear of guided tours of building sites? Shipyards? Carpenters' workshops?

Those young people today who take architecture classes at the Art School in Helsingør are mainly interested in design: design processes, design techniques and tools.

Working with these encourages the students to think in abstract terms and to relate to unknown



Photos: Children's Art Centre in Helsingør



and undiscovered spaces - large urban spaces, for example, or flat district plans. Spaces they can step out into or absorb themselves in and experience physically.

In the long term our vision is to make it possible for children to give full rein to their nest-building instinct, to bring their fantasy worlds to life in 1:10 scale, move into them, discover what it's like in there and, of course, play games of 'what-if'.

Our vision is also to give the children involved tools they can use and the chance to present concrete proposals for changes in the spatial world into which they were born. The tools and the words with which to communicate with the adult planner, architect and designer, and with the decision-makers, and perhaps one day have some influence over the spaces that are normally defined for them by adults.

A common professional language is the key to a good professional dialogue.

Have the architecture classes bored a hole through to the surrounding world?

When the recently adopted district plan for Helsingør was being drawn up, local people were invited to submit their suggestions and comments. And the children were also invited to contribute to the dialogue.

In the Art School's workshop the children had their opportunity to come up with ideas and suggestions for the lay-out of the town. They studied large plans and photographs of the area and discussed and built their proposals for new areas and new housing developments in Helsingør. These suggestions were taken into account by the local authority planners and considered with curiosity and interest.

The workshop project was later repeated within the Children's Art Centre itself. Again, considerable interest was shown, also by children who weren't attending architecture classes at the Art School. In our experience, archi-

ture is the ultimate Dad and kids activity.

We can therefore conclude that both the subject and the topic are extremely popular. But why is this?

The examples from Finland are convincing, and in recent years the Danish Association for Children, Art and Pictures, well supported by professionals in the field, schools of architecture and the Network for Children and Culture, has launched a massive campaign to show what architecture has to offer children and young people. Art schools, model experiments by local authorities and artist-in-residence schemes have taken up the baton and architecture has very quickly proved to be a language and a subject which really captures children's interest. So it's no surprise that the idea has rapidly taken root in many parts of Denmark.

Read more at www.toldkammeret.dk



Photos: Children's Art Centre in Helsingør



Show children how rich the world is

over it and it gave warmth, but a house fire, for example, is bad.

And then I show them how each element interacts with the buildings people live in around the world. Arabian roofs are flat because very little rain falls in the Arab countries, while the very steep roof of a Norwegian stave church causes the rain to run off the wooden shingles, thus saving them from rotting. In Rome they boast that they can control water by building beautiful fountains. And water can also create an atmosphere of stillness and quiet: beneath the murmur of a fountain you can whisper secrets to one another that no one else can hear. The Arabs knew this, and the same property has been exploited in many small public parks – in New York among other places.

are connected. Understanding the connections – that's why it's so important that children are taught about architecture. Because architecture is the unifying factor: there is a function, there are some materials, there can be a financial aspect, an ecological aspect, a psychological aspect, a poetic or cultural aspect – they all come together in architecture. Because architecture is all about the circumstances of our lives, our living conditions – the house is a direct result of the living conditions in a given place, whether it be an igloo in Greenland or a woven reed hut in Afghanistan it always reflects the climatic conditions, the economic conditions, the cultural conditions, the technical conditions etc.

I'm one of those people who believes that architecture should be taught in primary school. Traditionally there has been a tendency to think that architecture was a very narrow field. But actually it's far more fundamental than most other subjects.

In your view, how can children and young people benefit from working with architecture?

It is, I think, of absolutely crucial importance. Because architecture is almost like life that has been fast-frozen at a particular point in time. Things look the way they do for reasons that have to do with the life we lead. So they are rather like a manifestation of our lives and our dreams and of all sorts of other things. Which is why I believe it's really important that children have the chance to be involved with architecture in their everyday lives.

Why have you written books about architecture for children?

I wanted to encourage children to think about why buildings look the way they do. More specifically, I show them how the four elements – fire, water, air and earth – are an utterly fundamental part of our lives and how each of them has an influence on the way people construct their buildings.

Every element has a good side and a bad side. We can drink water, for example, and it helps plants to grow – but we can also drown in it, and it can flood vast tracts of land. In the same way, fire is something that people have always gathered around: in the old days food was cooked

I use pictures from all over the world: photographs, etchings, plans and models, to teach children to think abstractly about different ways of depicting buildings.

Why do you want to teach children about architecture?

I want to tell children how rich and wonderful and full of fun the world is! That in Copenhagen, for instance, people can take pride in a manhole cover and decorate it in time-honoured fashion with the city coat-of-arms and so on. And there are lots of other similar examples in architecture and town-planning that show how things in the world

Have you any suggestions for how teachers, educators, art exponents etc. can strengthen children's and young people's interest in architecture and design at school, in day-care centres and after-school clubs, in their spare time and so on?

Say to the children: Draw a house for your favourite animal! What does it need? Water, air, food...? Draw a house that will be right for it.



◀ This is a good exercise because it's all about being aware of the world around you – why does it look the way it does, what does this tell us? Architecture has so many stories to tell: there's always a certain approach to life behind the way in which buildings are designed. And they transmit some very strong non-verbal signals that do their part to affect and alter our lives.

You could also go for a walk, look at the façades of buildings: find a particular animal on a house front, or on a manhole cover – go hunting for something. Because what you'll find is that when you go looking for one particular thing you're liable to spot all sorts of other things and end up in places where you've never been before.

In my book I also give some questions which the children can answer by identifying particular houses in the book – which can then prompt further discussion:

Which house do you think will stand the longest? Which house do you think was there a hundred years ago? Which house do you think will still be there a hundred years from now? Where do you think your grandfather would most liked to have lived? Where would you most like to have your birthday party? Which house do you think cost most to build? And so on...

I call my books 'eye-openers'. Because the children already have eyes. It's just a matter of getting them to open them.

How were your own eyes opened to architecture and design?

I went to a really lovely local school which was brand-new back then – Vangebo School. It was designed by Jørgen Selchau, Mac Brüel, Henning Larsen and Gert Bornebusch. It's so incredibly well-thought-out, that school – it was designed according to humanistic principles, so each class had its own little garden. And it was constructed in such a way that you felt you could really breathe when you entered its gates. It had a very simple, clear design, with one long pathway linking the playground and a string of small passages and gardens: for us, as children, it was straightforward and accessible and just walking into it had a soothing effect on us.

It means so much for a child's development, I think, to grow up in such surroundings. It's like being welcomed in and led by the hand: good architecture is a form of love – just as bad architecture is a form of violence. It's almost as if it's saying: "Don't bloody think you're anything special. You can damn well sit here in this poor light at these rotten desks, they're bloody well good enough for you!" Instead of saying: "You're a wonderful child, you ought to be given the best possible setting in which to grow!"

If you were to introduce children to one specific piece of architecture, what would you choose as an eye-opener?

The Round Tower in Copenhagen is so brilliant in its simplicity. It's a fantastic building, with huge cartoons on its façade and a rebus in Latin. And the long, spiralling ramp that horses can be ridden up or a child can run up. And the view from the toilet at the very top, which is quite fabulous. And Marienlyst Palace in Helsingør – visiting it is like being inside a lovely, elegant little casket. In the old days you could stand on the roof and watch the ships sailing into the Sound. Bagsværd Church is also very atmospheric – with what look like great white clouds rolling across the ceiling, making it seem brighter inside the building than outside. It's very odd.

Bente Lange is the author of four illustrated books: Houses and Air, Houses and Water, Houses and Earth and Houses and Fire. These books provide both children and adults with the opportunity to discuss why houses look the way they do. The 'Water' book is published by Klematis, the other three titles by Lange Publishing.

Interview by Monica C. Madsen.

Jes Vagnby, architect firm, Jes Vagnby Architecture and Identity

Local Architecture and Design Centres for all children and adults

Creativity and a sense that the world can be shaped – two qualities that are indispensable if people are to take an active part in democracy and respond constructively to a changing world.

To ensure that future generations will contain competent individuals who are aesthetically aware and used to perceiving the world innovatively – that would, therefore, be my idea of a political vision which would ensure every child a creative, personal education. Our job is not only to develop a child's academic, functional and economic competence. We also have to give them a form of ballast in which beauty, quality, aesthetics and cultural identity all play an important part.

Local centres for architecture and design could help to give children all over Denmark this vital ballast

An Architecture and Design Centre in every local district

In different parts of Denmark the first step has been taken in this respect. It's up to us to support these ventures and build a decentralised organisation to foster both existing and future initiatives.

My dream is for each local authority to set up an Architecture and Design Centre. A centre which would, by its example, blaze new trails and act as a meeting place,



source of inspiration and power centre for local institutions and schools. A centre where schools, kindergartens and others can requisition the services of architects and designers to help with projects and teaching sessions. A centre where children can take part in workshops. A centre where whole families can take part in activities together, under expert guidance.

And a knowledge centre to which the local authority will automatically turn for help and advice on new undertakings, thus making it possible for children, young people and their parents to play an active part in the shaping of their own local environment. For example, when residential areas are to be extended, recreational areas given a face-lift or institutions fitted out, the Architecture and Design Centre can work together with local people to formulate concrete suggestions for the development process – for example by coming up with interim architectonic solutions. The use of temporary architecture allows various ideas to be tried out for a length of time before the area or space is permanently developed.

One can, for instance, create temporary public areas with common gardens and green areas, spots where people of all generations can meet, space for sub-cultures, playgrounds and so on in areas that are due to be built-up later.

In this way, children, young people and adults would have direct influence on the shaping of their own physical surroundings, since some of the lessons learned from the temporary schemes could be absorbed into the plans for the permanent development.

A miserable experience

Some years ago I went to collect my sister-in-law's children from their kindergarten.

In physical terms this kindergarten was, in every way, a miserable place. The proportions of the rooms were all wrong for children. The light, the materials, the colour, the furniture, even the toys and utensils were of the worst possible quality, both in form and concept.

This experience prompted me to start writing and publishing a series of educational books on architecture for children and young people and confirmed for me that the buildings I design must evolve out of a process which involves the user, and must be flexible enough to allow for any future wish to add to it or alter it.

Give children a real chance to influence things.

We live in a country with a long history of democracy, one which is founded on our personal commitment and participation.

Which is why, if we as citizens genuinely want to have any real chance of having a say in the future development of our physical surroundings, we need to teach our children - from an early age – to appreciate architecture and design.

Learning processes in architecture and design also train children to think creatively and innovatively – two absolutely vital skills in a country like Denmark, where the most important raw material is the knowledge and creativity of its people.

An important political task

We ought to integrate architectonic and design-based thinking

into the upbringing of our children and young people – into their schooling and into the shaping of their physical surroundings.

From the highest political body to the lowliest council office one of the most important political tasks is to ensure the sort of thinking that will produce future generations capable of taking an informed part in the debate on how, in the years ahead, we will run our roads through the countryside, construct our bridges, extend our harbours, lay out our urban areas, develop our urban spaces, improve our housing styles, our house furnishings and our household utensils. In tune with availability and with a mind to the resources at our disposal.

Architecture and design should figure in every part of children's and young people's lives – both physically and in their learning processes, right from nursery schools and kindergartens for the very young to primary schools and after-school clubs, and all the way up to high schools and colleges.

We can if we want to. I don't think we can afford not to want to!

Jes Vagnby is an architect and has his own architect firm, Jes Vagnby Architecture & Identity. To date he has published three educational books on architecture for children and young people: Haroun and the Arabian House, Yuka and the Japanese House and Malik and the Greenlandic House (published by forlaget Guldmai). Each book deals with the type of housing found in a different country in the world.

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH

focuses on the question of how an interest in architecture and design can best be stimulated in children and young people, and how the teaching of these two subjects can become a natural part of their daily lives.

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH

contains articles by professionals within the two fields as well as interviews with trend-setting architects, designers and top business people in which they give their views on how to render architecture and design relevant to children and young people. Best practice examples from experiments and projects in local districts and institutions illustrate the sort of work already being done around Denmark to present architecture and design to children.

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH

is the result of two years' work by a professional project group consisting of representatives from various professional bodies and institutions. It is aimed at promoters of architecture and design, schoolteachers, child-care professionals, architects and designers, and at parents with an interest in the teaching of architecture and design to children and young people.

ARCHITECTURE AND DESIGN FOR CHILDREN AND YOUTH

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Read more about the Network for Children and Culture on the Children and Culture Portal at www.boernogkultur.dk

