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# QUALITY IN ARCHITECTURE AND URBAN DESIGN

## - A Disputed Concept

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Syftet med denna artikel är att förklara och illustrera begreppet kvalitet i designfältet; produktdesign, arkitektur och stadsbyggnad. Kvalitet i detta fält ses som värden hos de designobjekt som ska kvalitetsbedömas. Föreställningarna om kvalitet är emellertid inte fixerade utan tolkningsbara och utmynnar i skilda omdömen.

Det faktum att våra uppfattningar om vad som är kvalitet varierar befriar inte professionella aktörer från att ta ställning i kvalitetsfrågor. Kvalitetsbedömningen förutsätter i själva verket ett värderande synsätt.

Hypotesen är att kvalitet i produktdesign, arkitektur och stadsbyggnad bör ses som ett öppet och omstritt nyckelbegrepp som resulterar i oenighet och diskussion. Kvalitetsbegreppet är värdeladdat och designobjekten tolkas med stöd av värdeladdade kriterier. Kvalitet framträder här som något i grunden positivt. Målet för gestalt-

ningen är hög kvalitet, en god miljö för användare av designobjekt.

Kvalitetsfrågor i designfältet leder till debatt, auktoritetsdiskussioner och tvivel. Samtidigt är det nödvändigt att behandla kvalitet på ett systematiskt sätt för att bygga upp välgrundade föreställningar. Professionella aktörer behöver genomtänkta rekommendationer som beskriver hur kvalitet kan förstås på ett meningsfullt sätt i designfältet. Men det är inte en formel med tydliga regler för vad som är "rätt" eller "dålig" gestaltning som efterfrågas utan det gäller att finna lämpliga lösningar på gestaltungsproblem i projekt och användbara kriterier som grund för trovärdiga kvalitetsbedömningar. Mitt bidrag är ett försök att kasta ett förklara ljus på det professionella språkbruket.

## ABSTRACT

The aim of this article is to explain and illustrate the concept of quality in design; product design, architecture and urban design. Quality in design presupposes a set of values about the project, the building and the surroundings which are to be judged for their quality. Without a set of values it is not possible to choose a good solution among the various alternatives. The fact that the perception of quality varies with time and is different among individuals does not free professional judges from taking a stand on essential quality questions. Therefore quality in architecture appears to be a fundamentally arguable concept subject to a wide range of interpretations.

The hypothesis is that quality in product design, architecture and urban design should be understood as an open and debatable key concept resulting in disagreement and discussion. New cases of quality arise continuously. The concept itself is value-laden and quality is interpreted with support of value charged criteria. Quality is something positive which meets with public approval. This is a type of knowledge which is obtained from having good examples and interesting cases pointed out. The target is high quality. A special historical understanding is needed to reach this goal. The concept of quality even reflects the holistic approach of the architectural profession to design projects. The built environment is of public interest. Thus there are different interpretations of the meaning of the concept quality, its scope and status.

## INTRODUCTION

The Swedish National Encyclopaedia gives several different examples of this concept. Quality can, firstly, be seen as a set of good attributes. Object O can be described as attractive: "O is of good quality", "O has several good characteristics" or "O has a high and even quality". You can buy "the finest quality foods" from butchers (Figure 1) and stay at Quality Hotel (Figure 2). Quality may also have negative implications: "O is of poor quality" or "O unfortunately has many shortcomings". These examples have in common that quality is a concept related to evaluation which can be open or hidden in a message. Quality is a trait that is either good, bad or missing. In this case we want to be able to judge the worth of products and services.

Secondly, quality can refer to a certain type of material or technological production of a product. Customers and controllers can ask about the quality of products on offer. Lumber yards advertise quality wood. Perhaps as a customer I want to know how the quality was determined, what material was used or which performances the technical solutions



Figure 1. The photo is showing a butcher in a small town in Ireland promoting meat products. Quality is used in this case in the sense of "good food". Source: Magnus Rönn, Photo 2006.

should meet. The answer from the salesperson, supplier and manufacturer could very well be "product P is a quality product which has received quality award Q". That means that P has been approved after testing according to a number of quality requirements. We get a quality concept that is specified with the help of measurable parameters. Quality is linked to specific characteristics, measurements and measuring procedures (Figure 3).

Thirdly, quality can be related to personal capacities, knowledge or inner characteristics of specific individuals. A person may be described as being quality-conscious or well informed about quality questions. Examples of such descriptions are "P is an excellent artistic leader" or "P is an exciting architect with exceptional feelings for using concrete material". Quality in this sense has an evaluation aspect. It is a sign of competence based on an ability to judge aesthetic dimensions. Good judgment in quality questions results in confidence.

Fourthly, quality can be a certain type management in the production of services and things. Quality is in this case assured by quality work, quality controls and quality management of processes. This is a production technology



Figure 2. The entrance to the Quality Hotel in Vänersborg. The sign promises quality. The concept of quality seen here reflects the hotel providing "good service" to the guests. Source: Magnus Rönn, Photo 2006.

perspective. Giving a product certain characteristics can ensure future quality. But that is not enough to fulfil technical specifications. Customers' requirements and expectations must also be met. This is another example of subjectivity and the return of emotions in decision-making. Quality work should lead to products that win customers' approval in a competitive market. Products may be ascribed a reputation for quality through advertising campaigns and alluring photos. Two researchers who have greatly influenced the development of the quality technique in trade and industry are the Americans Joseph M. Juran (1904-2008) and W. Edwards Deming (1900-1993). Another important person is Philip Crosby (1926-2001) who introduced the concept of zero defects as right quality.

#### QUALITY IN PRODUCT DESIGN, ARCHITECTURE AND URBAN DESIGN

The aim for this paper is to clarify the concept of quality in

design. My purpose is to explain how quality in the field of product design, architecture and urban design can be understood. The underlying assumption is that there are eight characteristics, which denote the understanding quality in this specific area of professional practice. The point of departure is that praxis reveals how professional practitioners speak, think and act in quality issues.

In product design, architectural and urban design projects quality concepts are communicated through sketches, illustrations, photomontages, plans, and descriptive texts. In practice, architectural quality is a dynamic concept changing as new models are established and scrutinized. There are also many answers to the question of architectural quality. But in the long run the discussion is about how to judge the accomplishments or works and which criteria should form the basis of our judgments. Even if quality is a concept which is difficult to grasp there are a number of fundamental criteria from which to start. These criteria are about how fundamental ideas are expressed in design and how they influence the public, users, customers/clients or citizens. We use criteria to identify, interpret, experience, understand and judge signs of quality in products, architecture and urban environments. Prize awarded products (Figure 4), architecture (Figure 5) and urban design (Figure 6) is all based on this assumption. Quality in all scales. The premises is that quality is a concept which can be judged in society; there are undertakings, structures and environments created to be attractive, arouse interest and be of value in some way.

Architecture should be both enjoyed and used. Since architecture is used as a goal it combines artistic ambitions

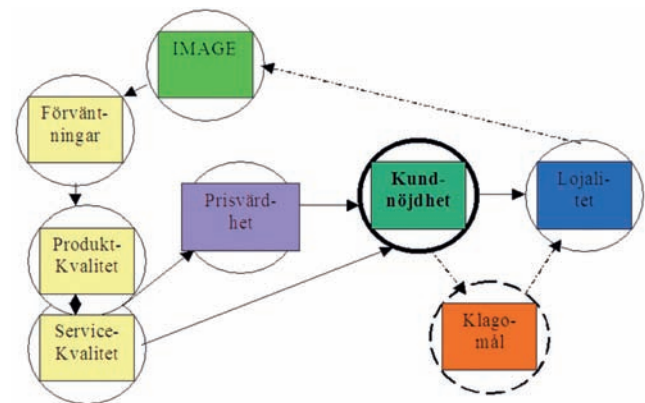


Figure 3. Examples of Quality of measurable characteristics and values. The picture shows the principle behind how quality is measured in the motor trade. The idea is quality is expressed as satisfied customers. Source: Homepage for Swedish quality index.





Figure 4: Prize awarded cameras. 2009 Big Design prize was given to Axis Communications AB and Zenit Design group for their camera collection. According to the jury has cameras has a good design that include whole process from design solution to installation and use.  
Source: The home page of SVID.

and intentions with requirements for functions, method, material and economic solutions. The concept has both aesthetic and technical dimensions. The quality concept may be compared with soap in the bath water. When we try to establish what architectural quality is, clarity slips between our fingers. Good solutions to design problems are visible, can be experienced and can be pointed out. At the same time they are very hard to grasp. There is something that escapes, is ambiguous, in the phenomenon and usage of the concept. Fault free and correctly dimensioned plans do not guarantee that a structure results in a positive quality experience. A well proofread manuscript free of typographical errors does not necessarily communicate an interesting message to the reader. Quality has to be more than zero defects. There must be an enhanced value for the object, an addition to the environment that communicates a feeling of quality to the user.

One difficulty lies in the meaning of quality, objectivity and subjectivity. Usage of the terminology should not be a problem. Quality can be judged from objective and subjective positions. Quality assessment is a job for professional practitioners who discern, compare and evaluate.

It is not odd that when speaking of the objective qualities of an object everyone means an impartial judgment without self-interest. But that is not the same as saying that quality is found in the objects and their designs. The demand for objectivity only means that the quality assessment shall be based on facts and without bias. Objectivity in this case is an expression of honesty and the pursuit of truth on behalf of the judge. It should also be possible to control objective qua-

lity assessment in an acceptable way. But objectivity is not something that is either present or missing in an assessment; it is a scientific standard. It is a norm met to varying degrees when discussing quality in artistic undertakings, architectural works and designed environments.

A subjective position need not be problematic as long as the departure point is a personal meeting. Credibility in such quality assessments can be sought with the person who passes judgment and how it is justified. The subjective position is an aesthetic choice and is justified through learning and knowledge. The more educated the assessor the more credibility given to the subjective quality experiences. We trust the assessments of well-educated and experienced persons



Figure 5: Housing In Malmö. 2009 Kasper Sahlin prize went to a housing project in called "urban villas". The prize is established by the Swedish Association of Architects and has high status. According to the jury the project is characterized by the architects engagement approach to sustainability and community and will contribute to a good life for its inhabitants.  
Source: The home page of the Swedish Association of Architects.



Figure 6. Awarded urban design. The illustration shows the development plan of Lomma harbour, located at Öresund. The urban design was 2005 awarded the planning prize by the Swedish Association of Architects. According to the jury the urban design of plan could be characterized as high architectural quality, a clear vision and a well-executed cooperation with age existing buildings in the area.

Source: The home page of the Swedish Association of Architects.

with good judgment. Quality as an experience requires an individual encounter with the undertakings and works; that a relationship is established which influences people. There are even some collective traits in people's quality experience which are related to their cultural backgrounds and professional cultures.

Thus far linguistic usage doesn't present any great difficulties. Architectural quality is about distinguishing, describing, interpreting, understanding and explaining to the people around you what is good, better or poor in undertakings and structures. It sounds like a reasonable programme. The problem arises when we want to deepen the discussion. Then the answer is no longer so obvious. To discuss quality in product design, architecture, urban design in a meaningful way we need to choose a point of departure for the ques-

tions. There is no objective position. Instead the basic issue is how the concept can be understood for designers, architects and urban planners. This is a fruitful starting point. What does quality mean in this design field of knowledge? Which qualities can be demonstrated in artistic undertakings, architectural works and urban environments? How can the qualities in the environment be made accessible for credible assessments? To what extent may we trust quality evaluations?

#### A FUNDAMENTALLY CONTESTED KEY CONCEPT

Architectural quality appears to be a basically contestable key concept with a wide range of interpretations in architecture and urban design. These thoughts were launched by Gallie (1956) and Janek (1991). It was Gallie who first coined the expression "essentially contested concepts". This is a concept that leads to endless disputes about the correct meaning of the notion. Linguistic usage has both aggressive and defensive traits. Such is the case with debates about art, democracy and championship. Gallie uses championship as an enlightening example. In the world of sports, championship is considered something which is appreciated and valuable, a winning concept. The concept changes meaning according to the circumstances. Championship is not only about being best on the field. A champion should also fight well and win the public's heart.

Gallie's description of an essentially contested concept fits quality well. In architecture and urban design, quality appears as a contested concept. The building sector is composed of professionals with different opinions about what quality is and how the concept should be understood. Architects use three types of rhetoric when describing quality: an offensive (aggressive) usage which attempts to create interpretation advantages. Architects usually claim they are best at designing and judging quality in architecture and the built environment. There is a defensive rhetoric which defends architectural qualities in society and the role of the profession as well as a mediating language which tries to coordinate the different interested parties with a common ambition. High quality is the requirement. It is the positive value implications in the concept that give quality its unifying function. Thus for example architectural quality has been used as a common goal for the Danish architectural policy programme (Nygaard, 2006).

When architectural quality is considered an essentially contested concept eight rhetorical functions appear. These are signs which appear in linguistic usage, both in the interpretation of design projects, in a firm's internal policy docu-

ment and in the European architectural policy programme developed during the 1990s in Europe starting in Netherlands (1991), Norway (1992) and Denmark (1994). These eight specific functions are described as follows:

1. Architectural quality is an open concept built on knowledge. To know what architectural quality is means that one can recognize, explain and account for illustrative examples. Knowledge about quality is obtained through education, professional practice and research. New examples of quality arise continuously in architecture and urban design. Changes create the need for revising, reinterpreting and specifying the contents of the quality concept. There is no final definition of what characterizes good solutions for design problems in architecture and town building. The concept becomes meaningful through continuous dialogue. Communication is a prerequisite for architectural quality to continue to be a knowledge-based key concept, both for the profession and societal debate.

2. Architectural quality is an open concept that promotes debate. There are basic discrepancies in different views of quality. The concept is controversial. Disagreement is a driving force. The breadth of the linguistic usage reflects the different attitudes toward what quality is, how quality work should be carried out and how quality goals should be expressed in the design of architectural and town building projects. At the bottom of the disagreement lies the desire to steer the agenda in order to acquire interpretation seniority, status in society and assignments. Architects maintain that they are best ones qualified to judge architectural quality thanks to their education and professional experience. Since there is no single way to solve conceptual differences the debate can continue forever. At the same time there is a need for common understanding within the professional building sector. Building is a collective process accomplished by many professional groups. Shortcomings in quality must be avoided during all phases. With this in mind a debate about quality is used to clarify the concept and help define appropriate quality criteria for the design and assessment of projects.

Werner (2005) notes that literature is often portray architects as a profession having to defend its competence, sometimes for not very understanding surroundings. The procurer of architectural services often sees the emphasis on aesthetic goals as a risk factor (Blau, 1987). For architects, praise from colleagues and coverage of projects by the media is often more important for quality development than administrative routines for quality assurance and technical specifications.

The aesthetic dimension dominated the debate in Denmark during the 1990s. The architectural community launched architectural quality as an offensive and future-oriented solution to the problem of quality shortcomings in building (Nygaard, 2006; Christofersen, 2007). Architectural quality was a goal that had a significant impact thanks to its positive force and ability to define a common direction for architectural policy. The aesthetic dimension in the concept received status and was included in the policy programmes of both the government (1994 in Danish Architecture, in Architecture 1996 and 2007 in Nation of Architecture Denmark) and the Architects' Association of Denmark (DAL, 1996). In Swedish discourse shortcomings in building were seen primarily as technical problems. It was expected that promoters and building firms provide the solutions. In 1994, requirements for quality responsibility were incorporated into the planning and building laws. Shortcomings in quality were redressed through measurable requirements, internal controls, and certificates. The reforms stemmed from a technically-oriented concept. The aesthetic aspects of the quality concept were highlighted later on in the Swedish debate. That was in 1997 when the government proposed a national policy for architecture and design. The debate during the 1990s vacillated between technical and aesthetic oriented quality concepts.

3. Architectural quality is a concept charged with values. "This is quality" is a judgment expressed in a complimentary way. The concept infers valuation. Quality is seen as something basically positive, even if often expressed in terms of good/bad and beautiful/unattractive. Such values express either approval or dislike. Quality is then bound to values, which in a decisive way stray from the normalized quality concept incorporated into the ISO 9000 (standard). In the latter case quality is an operative concept used for controlling, defining and measuring qualities in terms of right and wrong. The difference in the viewpoint is described as the right quality and good quality, which represent two diametrically opposed ways of relating to the quality concept in the building sector. The right quality means zero defects. Requirements have been implemented. The delivery corresponds to the quality specifications. A product of good quality is accredited positive worth and has a certain number of desirable characteristics for someone or something which are identified. Good quality assumes that the delivered product is experienced as good or attractive.

4. Architectural quality is a concept that is interpreted with the help of value-charged criteria. Architecture is judged



from criteria which include opinions, values, ideals and impressions of desirable characteristics. Thus a building project may be evaluated externally using quality criteria based on requirements for suitability to the surroundings, natural materials and a design that spreads joy to the users and visitors. According to Birgit Cold (1989) quality is usually ascribed to beautiful buildings with well thought through functions. That is an example of value-charged criteria describing an architectural attitude that includes values such as wholeness, durability, accommodation to the surroundings, genuineness, aesthetic honesty, beauty, readability, usefulness and professionalism. News-worthiness and originality are criteria that encourage renewal of traditions and overstepping conventions and experience-based professional guidelines.

5. Architectural quality is part of a learning form leading to evaluations which cannot be deemed true or false. Architectural values cannot be controlled from the standpoint of being right or wrong. There is simply no empirical support for such conclusions. On the other hand, it is possible to formulate well-founded and plausible judgments about what is good for some in a specific context. Competent assessors, with a broad experience from similar cases, may examine quality in terms of goal fulfilment, efficiency, usefulness, technology, artistry and economy. The purpose is not to portray reality but to develop models, concepts and criteria to facilitate the two main aspects of quality work: design and assessment. Quality is visualized and identified by seeing, comparison and interpretation. It is learning based on designated good examples, instructive cases, architectural reviews, critique and reflections about ideal solutions to design problems. Juries for architectural competitions use scale models in their final assessments when choosing a contest winner. Scale models are made of the best entries. These enable the jury to see with their own eyes how the solutions will suit the site. Such models also enable the jury to pose clear quality questions to the participants.

6. Architectural quality is a concept, which reflects a combination of element to a whole. Quality in architecture and urban design is seen as a holistic idea among professionals. Here quality is viewed upon as an overlapping summary and composite entity of aesthetic dimensions and technical aspects along with requirements for economy, environmental friendliness and social conditions. According to this view it is a combination of aesthetics, technology, economy and environment as a working entity that characterizes the quality concept in the field of design. It is typical for architectural

practitioners in the Nordic countries. They understand the concept as a contradiction to the idea of quality as one of several limited aspects of design in architecture, urban design and town planning projects.

The idea of quality as an overlapping and composite entity is a consistent theme in the statement of the 1997 investigation Architectural Quality (Arkitektonisk kvalitet) from The National Board of Housing Building and Planning (Boverket). The association for architect and engineering firms (arkitekt- och ingenjörsföretagen) states that architectural quality should include aesthetic, functional, technical and social qualities as well as environmental and economical considerations. The Swedish Local Council Organization (Svenska Kommunförbundet) maintains that good architecture can be recognized by the successful blending of aesthetic, functional, economic and technical requirements. The County Government Board (Länsstyrelsen) in Kalmar states that architectural quality is a concept that has a wider scope than just aesthetic design. According to The County Government Board architectural quality includes the building's design with regard to function, material, building technology and adaptation to the surroundings.

7. Architectural quality is a concept which is part of a specialized way of understanding and using of history in practice. Architectural history is a basis for models. Time does not move in only one direction. Architects are free to refer to ageless values in new assignments. There is a practical usefulness built into architectural history. Impressions of ageless values are characteristic of their times and solutions. Vitruvius, who was a Roman architect and builder, formulated a quality idea which is everlasting for the architectural profession. Vitruvius describes architecture as an indivisible combination of form (*venustas*), function (*utilitas*) and construction (*firmitas*). It is a 2000 year-old tradition that is still flourishing, a canon to posterity that architects continuously refer to in their profession. The quality of architecture lies in the special way the unit is composed as aesthetic form, function and construction. This is a professional, cultural and historically defined way of understanding quality in architecture and urban design (Rönn, 2009).

The historically influenced idea of quality has a practical point of departure. History is a useful subject. The history of architecture is a heritage of many instructive examples. They may be used as reference points for new assignments and inspiration for solutions to design problems. Even quality concepts typical for certain times such as classicism, national romanticism, functionalism, modernism, brutalism,

postmodernism, deconstructionism, and new functionalism contain timeless elements in new settings. The everlasting in design is the result of proportions, volume, scale, sight-line, balance, harmony, rhythm and movement. The notion reflects architecture's Vitruvian relationship to fundamental quality questions. The relationships between forms, function, material and construction must be continuously worked on and critically examined.

8. Architectural quality is an idea linked to interests in society. Power is portrayed through architecture. Quality is produced by actors with different ideas about the notion's content, scope and status. A balance between private and public interests in planning and building laws is part of the balance of power in society which influences the reach and direction of quality work. Official statements about proposed changes in legislation are enlightening. Viewpoints concerning the 1997 investigation of architectural quality from The National Board of Housing, Building and Planning are informative. Several authorities, including Gothenburg Town Planning Office (Byggnadsnämnden i Göteborg), wanted to see the law changed so that roads, streets, bridges, town squares and public areas would be subject to architectural quality requirements. Those who oppose this viewpoint consider quality to be a private issue and would rather see the power of public authorities limited. This controversial question also touches upon the extent to which the concept of quality should include aesthetic, cultural-historical, technical, social, environmental and economical aspects.

In its statement Jönköping's County Administration argues it needs competence in architectural quality when granting building permissions and physical planning. The county administration means they need a city architect at the county level to coordinate the different interest groups in the planning process to reach comprehensive architectural solutions. The Swedish building owner's association (Sveriges Fastighetsägare) on the other hand doesn't wish to see any changes in the law that would interfere with their right of disposition over their buildings. The crucial point is who should decide what architectural quality is. On this matter the building owners association and the home owners (Villaägarnas Riksförbund) association are very clear. The decision should lie with the private owner not the architectural organization, county town planning office or politically appointed persons. According to the National Homeowners' Association building permission for the detail plan may never be undermined due to unpredictable, vague and poorly defined aesthetic requirements. The county should not be able to impose its

aesthetic values on a home owner. Criticism of unpredictable requirements would be troublesome if architectural quality should include aesthetic and technical aspects as well as economical, social and environmental features in the design of the surroundings.

## DISCUSSION

From the descriptions it can be seen that quality has a concept structure which leads to debate, authority and doubt. To discuss this in the most systematic way possible it is necessary to build up serious conceptions of what should or should not be considered quality in architecture and urban design. The life span and stationary situation of a building makes it available as a public text-book on quality. The notion is also developed through discussion. Through historical retrospect you can learn about the quality ideas that were the focal point of debate during various periods and how architects used these models. Equally interesting is the study of quality questions which recur in the choice of solutions to design problems in architecture and town planning projects which enables an analysis of vital ideas.

Professionals need well-founded recommendations which describe how quality ideas should be understood and carried out in projects. But not a formula with clear-cut criteria for what is "right" or "poor" design, but to find an appropriate solution to a design problem. The connection is very important because it gives meaning to the concept of quality. Architecture is an applied art. A building need should be met. The goal is use. The assignment should result in surroundings utilized by people. Clarity and coherency in the design of architectural and town planning projects are aesthetic preconditions for the future utilization of environs. Therefore good solutions rely upon knowledge of the cultural setting where the project belongs.

The architect's task during the planning process is to give the project the characteristics which upon completion – with application – generate well thought out values and experiences of architectural quality. The underlying idea is that already in the design stage, before production, the drawings and models enable you to predict future impressions. The ability to design and assess architectural qualities that can be realized in projects and are evident when the consumer uses the building should be the core of professional competence. That is the fundamental challenge for education, professional practice and research in architecture and urban design. The concept has to communicate quality in architecture and urban design in a meaningful way in order to be useful in practice.



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## ELECTRONIC SOURCES

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**Nationalencyklopedin**

[[http://www.ne.se/jsp/notice\\_board.jsp?i\\_type=1](http://www.ne.se/jsp/notice_board.jsp?i_type=1)]

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