

QUALITY IN ARCHITECTURE – LEARNING FORM HISTORY, PRACTICE AND COMPETITIONS

Magnus Rönn, Associate Professor
School of Architecture and the Built Environment
Royal Institute of Technology Stockholm
Sweden
magnus.ronn@arch.kth.se

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Abstract

The overall aim of this article is to clarify the concept of quality in architecture and urban design by investigating history and practice. Quality in design is connected to a set of values. The fact that the perception of quality connotes values, 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 and urban design appears to be a fundamentally arguable concept that is subject to a wide range of interpretations. The hypothesis is that

quality should be understood as an open and debatable key concept resulting in disagreement and discussion. History and professional practice in competitions support this idea. New cases of quality arise continuously in architecture and urban design. 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 type of knowledge is obtained by 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.

Keywords

Architectural quality

Architecture

Design

Judgment

Essentially contested concept

1. INTRODUCTION

‘Objective elements shouldn’t be relied on initially. Instead ‘go for quality first’ he said and meant that quality judgments were preferable’ (Hemlin et al., 1990, p 59). That statement made by an expert when appointing a professor of architecture in Sweden hits the nail on the head: what is quality in architecture and urban design? What do architects mean when they talk about quality? How do professionals understand

architectural quality?

In this paper I will discuss and clarify the concept of quality. The purpose is to demonstrate and explain how the questions of quality in architecture and urban design can be understood from a Scandinavian point of view. However, I hope the discussion is of general important for understanding quality as a key concept in design. Architecture is a field of knowledge embedded with values. Quality represents something good, a well-designed object. But what does it mean? The theory is that architectural quality as a key concept is basically disputable; this shows up in the design and appraisal of architecture and urban design projects as well as when the built environment is evaluated. Architectural competitions is a typical expempel of this understanding of quality expressed both in briefs, design proposals and jury reports.

How do you judge architectural quality? Which attributes in the build environment capture your discerning eye? Are your impressions of quality formed by practical reasons, rational considerations or emotional experiences? The Swedish National Encyclopaedia gives several different examples of this concept, which can be used as a starting point for the discussion. Quality can, firstly, be understood 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



Figure 1. Entrance to People's Park in Linköping, Sweden.
Photo by Magnus Rönn, 2013.

has a high and even quality". Quality may also have negative implications: "O is of poor quality" or "O unfortunately has many shortcomings". A comparison may reveal that object O 1 is worth more than object O 2. These examples have in common that quality is a concept related to evaluation that can be open or hidden in a message. Quality is a trait that

either is good, bad or missing. In this case we want to be able to judge the worth of products and services.

Secondly, quality can be related to personal capacities, knowledge or inner characteristics of specific individuals. A person P may be described as being quality-conscious or well informed about quality questions. Examples of such descriptions are "P is an expert", "P is an excellent artistic leader", "P is a skilled architect with exceptional feelings for using concrete material" or "P is an exciting architect who has been winning several international design competitions." 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, personal and professional knowledge.

Thirdly, quality in a project can be understood as a specific relationship to a place and a function. It is typical for architecture and urban design. In this case quality is attributed to projects that represent a whole and fit into a unique context. This perspective is found in architectural policy programs in Europe. The Danish Architecture policy, *A Nation of Architecture Denmark*, from 2007 is an illustrative example. According to the policy program, there is a "widespread agreement that architectural quality is experienced when form, function and building techniques are brought together and implemented in

a complete, artistic idea. Architecture of a high quality relates to the surroundings as a co-player or as a challenger. The architecture stresses, strengthens and interprets the cultural character and uniqueness of the surroundings.” (p 9). From this point of view, there are no general answers to architectural quality issues. Places always have unique characteristics. For this reason, quality must be design based on the understanding of the existing architectural qualities of the plot, surrounding buildings and the location.



Figure 2. Sales of homes in the People’s Park, Linköping, Sweden. Photo by Magnus Rönn, 2013.



Figure 3. Award-winning wooden-house in Stockholm, Sweden, designed by Brunberg & Forshed architect office. Photo by Magnus Rönn, 2011.

Fourthly, quality can refer to a certain type of material or technological production of a product. Perhaps a customer want to know how the quality was determined, what material was used or which performances the technical solutions 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” or “Service S can satisfy customer C.” That means that P and S 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. The point of departure is the idea of quality as

something which can be assured by specific procedures; quality work, quality controls and quality management. Right quality is defined as zero defects and satisfying needs in the market. But it is not enough just to deliver the ordered products to generate a positive experience of quality. More is required if you want *good quality*. The design has to be connected to positive experiences and seen as valuable in the environment. Instead of looking for defects in products the design phase becomes a strategic in the production process. This is one reason for the interest in organizing architectural competitions.

The four statements link architectural quality to values, knowledge, places and quality assurance procedures. Quality is therefore understood from different perspectives in architecture and urban design. At the same time there is a common objective saying that architecture should be both enjoyed, suit its purpose and fit on the site. Since architecture has use as its fundamental goal the subject combines artistic ambitions and intentions with requirements for functions, design methods, material, economic solutions and sustainability. 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. But they

are very hard to grasp in precise words. The transformation of quality into the text stands out as problematic. 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. Absent friends do not promote good feelings. We need a generator. There must be an enhanced value for the object, an addition to the environment that communicates a feeling of quality to the user and the professional practice. This points back to the very heart of the concept of quality in architecture and urban design.



Figure 4. Summerhouse in Skåne, Sweden, by architect Arne Jacobsen. Photo by Magnus Rönn, 2010.

2. LOOKING BACK

The discussion of relationship between objective characteristics and subjective experiences are very old. We have to return to the Greek philosophers in order to find the background to the aesthetic dimensions and understand how the quality concept has developed. Democritus (460–371 BCE) tried to define the concept of quality by considering the natural state of an object in relation to man's perception of that object. He considered the characteristics naturally inherent in an object to be its objective qualities. Such is the case with weight, size and density. Taste, smell and colour, on the other hand, were considered by Democritus to be subjective qualities, which the object is accorded as a result of the human perception process. This view of quality as a mixture of "hard" objective characteristics and "soft" subjective feelings is now a part of everyday language and be seen in jury reports from competitions.

David Hume (1611–1676) and John Locke (1632–1704) divided quality into primary and secondary qualities based on Democritus' theories. Primary qualities are inherent in the object regardless of people. Secondary qualities are perceived. Locke (1983) uses a snowball to demonstrate the two-sided nature of quality. The snowball is able to evoke the sensation of a white, cold, round object in the eyes of the beholder.

This hypothesis demonstrates the primary qualities as an objective basis for the valued experience of the snowball or its secondary qualities. The key here lies in the criticism of the idea that aesthetic qualities are subjective, created in the eye of the beholder (Fink, 2002). Thus architecture projects can produce reviews, based on its design, which has a high degree of credibility.

Understanding quality as a combination of hard objective characteristics and soft subjective sensory impressions is based on a long philosophical tradition. The discussion has focused both on the object and on what basis people can express themselves about quality issues in a reliable way. The answer to the hard qualities has been sought in measurable factors. Quality is a requirement that should be defined, specified, controlled and implemented. Soft qualities are the effects that appear via subjective sensations and the values that objects are ascribed. Such quality judgments describe the object as well or poorly made. The aim of this approach is to attain high quality. Something good and attractive should be produced. Good solutions are seen as a goal worth striving for. Hume (1962) points out that quality has an experience value which can be determined and it is our subjective ability for evaluation – sharpened through education and practice – that makes it possible for us to say what is good or bad

about various accomplishments. This is also the case when there is dissent among competent judges in architectural competitions.

Practising architects need to interpret the signs of quality in objects. Quality in architecture and urban design is inseparably linked to an evaluating relationship to the project, building, and environment which should be assessed. It is impossible to point out a winning proposal in architectural competitions without ranking their quality. The fact that judgments can change over time and differ among individuals doesn't free members of the jury from forming opinions about quality questions. High quality is the recognition of something as good or well made. Poor quality represents a degree of rejection or failure. The lack of quality in such cases is noted by judges and their assessments are lowered.

Plato (427–347 BCE) raises the conflict between celestial values and worldly desires. In the *Phaedrus* dialogue Plato tells of a team of horses drawing life's chariot through the heavens. It is a team of two horses. On the one side is a white horse, a sensible and rational horse following the laws of logic. The white horse is "straight, with a high neck and finely-arched nose...devoted to honour, self-control and modesty, a companion of true opinion not in need of the whip, guided only by command" (Plato, 2001, p 343). On the other side runs

the black horse. Crooked, poorly built, short-necked, snub-nosed with bloodshot eyes, boastful and hardly obedient to the whip. The black horse represents feeling, an incalculable horse with a soul difficult to tame. Plato portrays the black horse – symbol of suffering and fantasy – as ugly, unwieldy and false. The white horse is hindered in its course. Art is demoted.

The horses pull in opposite directions all the time, one willing, beautiful and fast. The other riddled with faults. The image has become a myth, a poetical vision for posterity. According to Plato only in the realm of ideas do objects appear in their complete form. Here lies the foundation for architectural quality as a timeless value. It is a concept that is still valid among architects. For Plato ideas were eternal. They existed because of divine will. Plato viewed the world around us, the phenomenon world, as an unreliable mirror image of the idea world. Reality is the shadow of the idea world. Here art at best is a copy of the idea world. This suspicion of the subjective side of art returns in a pendulous motion throughout history. Feelings are set against common sense, spontaneity against rules, renewal against tradition, and functionality against aesthetic dimensions. The world is divided between classical ideals and romantic representations that are reflected in our position on basic quality questions.

Contrary to Plato, Aristotle (384–322 BCE) did not conceive of art as a deceptive phenomenon. Instead, Aristotle thought knowledge should be sought through the study of things and the human experience of them. Arts' aesthetic structure is described in *Poetics*. Aristotle's hypothesis is that poetry as an art consists in works portraying events in the real world. He takes an objective stand. Through systematic observation it is possible to arrive at specific signs of quality. The measure of poetry's quality is its capacity to set the audiences' senses in motion. For Aristotle the goal of tragedy is to arouse fear and compassion in the theatre audience: "compassion fills someone who has undeservedly experienced an accident; fear is aroused in normal people like us when they experience adversity" (Aristotle, 1994, p 41). According to Aristotle these effects are attained through the goodness of the characters, their adaptation to the role, the character's conformity with nature and consistent performance. Artistic quality is a question of a) poetry's form, b) the actors' performance and c) the audience's experience. The question is then: what is quality, how is quality *created*, and what is the *point of departure* for judging quality.

Using Aristotle as an inspiration, architectural quality may be sought in the process from the fundamental idea to the completed structure. According to Aristotle, the goal is to

identify quality that can be created, implemented, judged and experienced from different perspectives. Quality assessment in the design phase during competitions is based on representations; sketches, plans, scale models, and graphic illustrations. The jury is searching for the overall best solution to design problems in the brief.

Testing of the structure "in situ" takes place after the design has been transformed into a built environment. Then quality is a question of the experiences evoked by the architectural project and how the building – after completion – affects our senses and needs. When judging the quality a decisive element is the extent to which the environment fulfils the anticipated positive experiences for the users, visitors, proprietors and administrators. This assumes that the form of expression results in the intended impression, a foreseeable whole general impression. "In situ" quality judgments are part of the changing process of society. We continually get new viewpoints about what are good, desirable and suitable quality goals for our undertakings. The market makes us especially aware of the profitable trends in architecture and town building.

Professional quality assurance is attained in three phases; one defining quality, one attaining quality and one supervising quality work. The quality experience is left to the market. 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 William Edwards Deming (1900–1993), both of whom emphasized the important role management plays in successful quality work. Another important researcher is Philip Crosby (1926–2001) who introduced the concept of zero defects. Zero defects is defined as the *right quality*. But zero defects is not enough to generate a positive experience of quality in architecture. More is required if you want a product with *good quality*. 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. There must be an enhanced value for the object, an addition to the environment that communicates a feeling of quality to the user. Quality in architecture and urban design needs a primary generator (Drake, 1979).

At the end of the 1970s Crosby was instrumental in extending the quality concept to the entire production chain. Stressing management's role in securing/assuring successful quality work in industry is generally referred to as TQM, or total quality management. Emphasis is on the early stages of models *before* manufacturing. Instead of looking for defects in products the design phase is seen as a strategic phase in the

production process (Moss, 1996). The transition from minimizing defects to maximizing quality is a way of identifying good characteristics and stresses design as the foundation for future quality experiences.

Satisfying a customer's requirements and meeting their expectations is an ever-growing goal for quality work in industry and trade. Quality has become a means of competing on the market. Quality is linked to communication; traits, values and experiences acquired through policies and markets. These require suppliers who can make quality visible and relate quality in an understandable way to customers and the general public; this again brings up the importance of design and aesthetics as key aspects of quality work.

Key ideas

This paper is about how we can understand quality as a key-concept in architecture and urban design in a fruitful way. The methods are close reading of documents, conceptual analysis and re-use of interviews carried out 2005–2007 in a study on architectural competitions in the Nordic countries. 18 experienced jury members, architects and urban planners, from Finland, Norway, Denmark and Sweden were interviewed



Figure 5 Restored houses for the dean at the Bauhaus school in Dessau, originally built in 1933 and damaged by the Second World War. Photo: Magnus Rönn, 2010.

in a Nordic study (Rönn, 2011). The theoretical framework for the investigation consists of Gallie's idea of "essentially contested concepts", which he published in 1956 in *The Proceedings of the Aristotelian Society* and in 1964 in the book *Philosophy and the Historical Understanding*. Gallie provides a tool for the analyses of quality and how this concept is used in the building sector.

My reason for re-using interviews and documents in the investigation is the belief that praxis reveals how professional practitioners speak, think and act in quality issues. I think the interviews reflect a stable and deep understanding of excellence among practicing architects. In architectural and urban design quality concepts are communicated through drawings, sketches, illustrations, photomontages, plans, and descriptive

texts. Quality is a dynamic concept, changing as new models are introduced, established and scrutinized. There are also many answers to the question of quality in architecture and urban design. But even if quality is difficult to grasp, there are a number of fundamental criteria from which to start. These criteria are about how design ideas are expressed and how they influence the public, users, clients or citizens. Architects and urban planners use criteria to identify, interpret experience, understand and judge signs of quality in the design field. Prize-winning architecture and urban design are all based on this fundamental assumption. 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.

Throughout Western history, starting with philosophers in ancient Greece, quality is perceived as a conflict between an objective and a subjective position; as a relationship between objects and how we perceive them through our senses. The objective position can be seen as speaking of qualities and means an impartial judgment devoid of 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 good reasons 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 quality 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 is the more credibility is given to the subjective quality experiences. Stuart and

Hubert Dreyfus Hubert (1986) have proposed a influential model for learning showing the development of skills starting with beginner and ending as expertise knowledge. We trust the assessments of well-educated and experienced persons 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 related to their cultural backgrounds and professional practice.

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 in order to understand quality as a key-concept. Then the answer is no longer so obvious. To identify quality in product design, architecture and urban design in a meaningful way we need to choose a point of departure for the questions, a theoretical framework for the investigation. However, we can start in practice and study how designers, architects and urban planners express quality. Which qualities can be demonstrated in artistic undertakings, architectural works and built environments? How are qualities transformed to credible assessments? To

what extent may we trust evaluations and quality judgments? These crucial questions force us back to the starting point: how can quality be understood in architecture and urban design in a meaningful way?



Figure 6. Classrooms and labs at the Bauhaus school in Dessau, built in 1933. Photo by Magnus Rönn, 2010.

3. AN ESSENTIALLY 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 Walter Bryce Gallie (1956) and later by Alan Janik (1991). Gallie was a British social theorist, political theorist and philosopher. He was a professor at three different universities. More important, he offers a starting point for the discussion, a theoretical framework that gives meaning to quality conflicts in the building sector. 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 to be something 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 that 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. Architectural quality in society is seen as an overall intention, which the profession guards by means of general language. The defenders try to coordinate the different interested parties with a common ambition. High quality is the requirement. The rhetoric is also used to disarm potential opponents. This is the third type. Few would like to deny the need for a good built environment. 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 as an essentially contested concept eight rhetorical functions appear. These signs are evident in linguistic usage, both in the interpretation of design projects, in a firm's internal policy document and in the European architectural policy programme, which can be found on the homepage of the *European Forum for Architectural Policies* (www.efap-fepa.eu/indexb.php?lg=en). A close study of policy programs – especially from Denmark, Norway, Finland and Sweden – shows how quality is understood in this context. Here I would like to point out eight specific functions connected to quality as a key concept with support

of Gallie. From this perspective quality in architecture and urban design can be understood as an open concept promoting debates on values and identified by design criteria. The concept represents a whole, a special kind of learning and use of history, which express power in both the practice and the build environment.

An open concept

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 urban design. 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.

Architectural quality as an open concept creates

uncertainty. In architectural competitions for example the jury must be able to read and interpret drawings, drafts, illustrations and scale models. The challenge lies in understanding the competition's task and the design problems. Qualities in the design solutions become wicked problems (Churchman, 1967, Rittel & Webber, 1973). Wicked problems cannot be solved by traditional analyses. It is impossible to objectively evaluate the solution as being right or wrong. Churchman (1967) describes wicked problems in a social planning context as ill-defined problems that have unique causes, nature and solutions.

Design as a professional practice is embedded with wicked problems. You cannot define and understand design problems out of their specific context. The solution and the problem are connected to each other in architecture and urban design. This point is demonstrated by Cross (1992) when he is quoting an architect who says: "I don't think you can design anything just by absorbing information and then hoping to synthesise it into a solution. What you need to know about the problem only becomes apparent as you're trying to solve it" (p 20). Typical for architecture and urban design is also that there are always many good solutions to the same design problem in briefs. One solution is, generally, never overwhelmingly better than another in architectural competitions. This is a wicked problem from

the jury's perspective. Since there are several good solutions to choose from, the jury's quality judgment will be marked by *insecurity*, a fundamental doubt that normally remains up until the final assessment. This uncertainty is typical among the jury members in architectural competitions where you have to find a winner and it is a consequence of quality as an open concept.



Figure 7 Glass facade for building including classrooms and labs at the Bauhaus school in Dessau, built in 1933. Photo by Magnus Rönn, 2010.

Promoting debates

2) Architectural quality is a concept that *promotes debate*. There are basic discrepancies in the different views of quality. The concept is controversial. Disagreement is a driving force. New design ideas can constantly be seen in the architecture, not only in international competitions. The breadth of the linguistic usage reflects the different attitudes toward what quality is in contemporary design, how quality work should be carried out and how quality goals should be expressed in architectural and urban design. 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 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. Contradictions has to be bridged. 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 criteria for the design and assessment of projects.

In the building sector the discussion on quality has an *aesthetic dimension* and a *technical dimension*. This is a typical foundation for disagreements between architects and engineers at construction companies, at least in Nordic countries. The aesthetic dimension of quality in architecture and urban design is a question of experience and evaluation. The technical dimension of quality concerns traits in products that can be controlled during the production process. These two aspects are very difficult to unite in a quality concept. There is disagreement as to what architectural quality *is*, how appealing environments can be *created*, and how they should be *assessed*. I think we have to accept the fact that there are different ways to understand the concept of quality. They represent different kinds of knowledge. Both the aesthetic dimension and a technical dimension are therefore legitimate in architectural design and construction. Based on this insight we should build “conceptual bridges” to ensure better understanding between the key players in the building sector.

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



Figure 8. Classrooms and labs at the Bauhaus school in Dessau, built in 1933. Photo by Magnus Rönn, 2010.



Figure 9. Wall mounted radiator 1933 at Bauhaus school in Dessau. Photo by Magnus Rönn,

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 in Denmark (1994 in *Danish Architecture*, in *Architecture 1996* and 2007 in *Nation of Architecture Denmark*). 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 called *Forms for the future* (Framtidsformer).

Charged with values

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). Quality in this technical perspective is seen as general characteristics, function and performance. They are characteristics that can be measured, guaranteed and controlled (Nashed, 2005; Nelson, 2006). The record is the proof of quality. This is regarded as evidence for how a proposal meets the specifications. The strategy is fault minimization. In this perspective quality is an operative concept used for controlling, defining and measuring qualities in terms of right and wrong. The difference in viewpoint may be described as the *right quality* and *good quality*. They 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 with positive worth and has

a certain number of desirable characteristics for someone or something. Good quality assumes that the delivered product is experienced as attractive or appealing.

Value-charged design criteria

4) Architectural quality is a concept that is interpreted with the help of *value-charged design criteria*. Architecture is judged from criteria. They include opinions, values, ideals and impressions of desirable characteristics. Thus a architectural project may be evaluated externally using quality design 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), former professor at the Department of Architecture at the Norwegian University of Science and Technology, 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, adjustment 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.

Another type of value-charged design criteria was found in a Nordic study of architectural competitions at the School of Architecture and the Built Environment in Stockholm 2005–2008. The evaluation criteria in briefs were examined during 1999–2000 (Rönn, 2010). These criteria vary from competition to competition. But there was also a stable pattern, a number of fundamental design criteria, which appeared time and again in competitions and influenced the jury's quality judgment on a deeper level. All competition entries, in principle, were judged by these design criteria even if they were not specifically outlined in the competition programme and combined with demands or objectives depending on the specific task in the competition brief. The following eight fundamental design criteria were found in almost every brief and jury statement: (a) *Wholeness and fundamental idea*; is there a powerful design idea in the project? (b) *Coherence and surroundings*; how do the proposals fit the site? (c) *Entrance position*; how has the competitor solved the entry into the area, site and buildings? (d) *Suitability and functional set up*; how has the competitor solved the spatial organization in relation to the planned activities? (e) *Economical and technical solutions*; How is the proposal technically produced? (f) *Development possibilities*. To what extent can the proposal be

further developed? These design criteria are part of an assessment based on dialogue and have two principal functions. They tell the jury members *what* is important to judge and *how* to proceed. The first step is to direct the juror's attention. This is the "what". The second step is a question and represents the "how". The jury acquires knowledge by posing questions about the proposal. Quality in architecture and urban design is revealed by these design criteria, representing professional ideas about good design.

Learning form

5) Architectural quality is part of a *learning form* related to design and critical review. Knowledge is developed and expressed by design and the assessment of solutions. This evaluation of architecture and urban design is not true or false. Architectural values cannot be controlled as being scientifically right or wrong. There is simply no empirical support for such conclusions. On the other hand, it is of course possible to formulate well-founded and plausible judgments about what is good for some (designers, clients, end-users) in a specific context. This is what the jury members do in architectural competitions when they select a single winner after examining

the best design solutions. Competent assessors, with 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 by architectural criticism. Quality is visualized and identified by seeing, comparing and interpreting. 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 design solutions will suit the site. Such models also enable the jury to pose clear quality questions to the participants. It's learning by seeing quality rather than by looking at drawings and illustrations. The qualified eye becomes crucial for judging design proposals.

The whole

6) Architectural quality is the combination of elements that form *a whole*. This is fundamental for the assessment of

projects, especially in early stages, such as in architectural competitions. Quality in architecture and urban design is seen as a *holistic idea* among professionals. Here quality is viewed upon as an overlapping summary: a 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 in 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* from The National Board of Housing, Building and Planning. The Swedish association for architect and engineering firms states that architectural quality should include aesthetic, functional, technical and social qualities as well as environmental and economical considerations. The Swedish Local Council Organization maintains that good architecture can be recognized by the successful blending of aesthetic, functional, economic and technical requirements. The County Government Board 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 also includes the building's design with regard to function, material, building technology and adaptation to the surroundings. The same understanding of architectural quality as a combined weighting of aspects into a whole, can be found in the European architectural policy programme, as well as in Canada.

A specialized way of using history

7) Architectural quality is part of a *specialized way of using history*. Architectural history produces models for both for understanding design problems and judging quality in architectural projects. Time does not move in only one direction. Architects are free to refer to timeless 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 beauty (*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 with regard to 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.

Interests and design power

8) Architectural quality is an idea linked to *interests* in society and *design power* in the building sector. 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 design power in society. This balance influences the reach and direction of quality work in architecture and urban design projects. 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 Swedish authorities, including the Gothenburg Town Planning Office, 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



Figure 10. Residential buildings from the exhibition 1936 in Ystad, Sweden, on leisure. Architect, Erik Friberger. Photo by Magnus Rönn, 2010.

argues that 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 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 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.

4. DISCUSSION

From the descriptions it can be argued that the structure of the notion of quality is an “essentially contested concept”. Quality has a structure that leads to debate, differences and doubt. But to discuss the concept in a professional context as systematically as possible it is necessary to construct 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 among stakeholders. 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 in relation of solutions to design problems in architecture and urban design. This enables an analysis of vital ideas connected to the concept.

Architectural competitions produce knowledge about the future by design in a very early stage of the planning and building process. Professionals need well-founded recommendations describing how quality ideas should be understood and carried out in projects. However, not a formula with clear-cut criteria for what is “right” or “poor” design, but to find an *appropriate solution* to a design problem that fits on the site. The connection is very important because it gives meaning to the concept of quality. Architecture is an applied art. Architects and clients should both meet the end-users' needs for a well-designed space. The global goal is use *and* a future-oriented professional responsibility for quality in architecture and urban design. The assignment should result in surroundings utilized by people. Clarity and coherency in the design of architectural projects are aesthetic preconditions

for the future utilization of built environments. Therefore, I believe 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. Scientific evidence can be found in the architectural competition by comparison winning design proposals and implemented projects as a built environment. 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. I hope that my investigation, demonstration and discussion of architectural quality as a key concept can contribute to this challenge. 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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