

## THE HALLAND MODEL AND THE GOTHENBURG MODEL: A QUEST TOWARD INTEGRATED SUSTAINABLE CONSERVATION

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### Abstract

This paper presents new approaches to formulate the concept “*sustainable conservation*”. It is based on the theoretical framework of integrated conservation based on its physical-material and social-cultural dimensions, that has been developed in an international context.

The conservation projects discussed in this paper can be described as sustainable preservation, or conservation. The empirical platform of this paper is a major building conservation scheme carried out during the period 1993 – 2003 in the Halland region in Sweden, and its development in parallel in international context. This scheme was based on approximately one hundred building conservation projects in which almost one third of the region’s construction workers was trained in traditional building techniques, and was a close collaboration between several public sectors, and private enterprises, NGO's and researchers. The cross-sectoral and multidisciplinary networks acted with a multi-problem-oriented approach, that implied that conservation of the built heritage has the role of a catalyst for job creation, training and education in areas of concern, increasing a region’s attractiveness, strengthening democracy, regional growth and sustainable development. It is in this context that concept sustainable conservation has been promoted.

In this paper the Halland Model conservation projects, will be analysed concerning cultural built heritage values, and the characteristics of conservation. This approach is leading to a discussion of the concept *Integrated and Sustainable Conservation* and its presentation.

The paper also discusses the strategic use of investments in conservation of the cultural built heritage in an instrumental way as a catalyst for sustainable development and regional growth as well as the impact of this approach on the quality of conservation.

In this theory-based analysis methodologies developed the professional and research area in conservation and sustainable development has been used.

**Key words:** Integrated conservation, sustainable conservation, sustainable development, regional growth, management, cross-sectoral networks, and multi-problem-orientation.

### 1. Introduction

During the UN World Summit in Johannesburg in 2002, 100 best-in-practice projects were presented for bridging “*the green agenda*” to “*the brown*” (Allen and You, 2002). This was understood as projects successfully based on the combined concepts of the Rio Declaration (UNCED, 1992) and of UN Habitat (UN-Habitat, 1996). Two conservation

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projects only were presented (Allen and You, 2002, p. 120, p. 252), one of them which was the Baltic Sea project "*Balcon - Development of management skills within the cultural heritage administrations in Poland, Lithuania and Kaliningrad, Russia*" (Gustafsson, 2004), further developed from experience of an earlier project, the "*Halland Model in Olsztyn*" (Gustafsson, 2000; 2003).

The objective of *the Balcon project* was to make decision-makers aware of the importance of community impact of investments in conservation projects of built heritage, involving aspects of sustainable development – with especial attention to socio-economic growth. Further, this also implied that representatives of the cultural heritage sector themselves had to realize their role and importance for society at large, in particular considering sustainable development. The idea was that each participating region would present at least one conservation project, given priority in regional development programmes. The result was amazing. For example, one of the participating regions had allocated €300 millions for tourism, conservation and revitalization projects from a grant received from the EU Structural Funds.<sup>1</sup> Projects estimated as being of specific regional importance, were recipients of a support from EU of €1,6 billions, which means that 18.75% of the total budget was allocated to conservation projects referred to.

## 2. Objectives

Nowadays, in widely diffused political discourses, the concept *sustainable development* has been used, mostly in a rhetoric way. Sustainable development often is referred to as a desirable process - which might be sustainable in economic and social respects, as well as with attention to environmental circumstances. A holistic view is presupposed - at the same time revealing contradictions between commitments of economic growth, and protection of environment and social initiatives. Economic aspects often have got priority compared to other aspects.

Threats against tangible cultural heritage may be found - either depending on too strong financial resources in society - or the opposite - as a lack of necessary resources. Experiences related to threats of the first kind, therefore have led to a widely spread opinion to be found among several conservationists - that an objective of the cultural heritage sector has to be a slowing down of growth of economy. An opinion of this kind poses a risk that the sector accepts the role mainly as an observer. In this paper a discussion is brought up, concerning whether the concept of sustainable development may open possibilities for the cultural heritage sector to develop a more pro-active, over-viewing and leading role in general regional policy. For this purpose, the paper presents some experiences derived from case studies in Sweden and in the Baltic Sea Region, discussing how the field of conservation of built heritage, in the context of a sustainable development paradigm, has proved to be able to contribute with an assembling capacity, due to its broad interdisciplinary analyses.

Thus, as a starting point of this paper, the objective is to present an approach to formulate the concept "*sustainable conservation*", referring to the concept sustainable development as it was initially defined in the Brundtland report. At the international inter-disciplinary, problem-driven and application-oriented research meeting in Rome in 1985, on "*Air Pollution and Conservation – Safeguarding our Architectural heritage*" (Rosvall et al., 1988), it was possible to launch a valid set of then not any more contradictory conclusions, concerning long-term conditions for preservation of material structures (e.g.,

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<sup>1</sup> The Regional Development Programme for Dolnaslaskie (Wroclaw)

cultural heritage of any kind), and how principally to act in order to minimize their deterioration mechanisms, under various kinds of conditions. This means, that the very idea of “*sustainable conservation*” was launched, as a result of this pro-active research initiative, from the side of Institute of Conservation at Göteborg University in collaboration with Swedish Institute in Rome, in a joint venture with Volvo Car corporation, and a set of responsible organisations in the conservation sector, in Italy, Sweden and at international level, like ICCROM, ICOMOS and Italia Nostra. Further, this perspective, for its practical implications, needs to be related with PSL methods (Prediction of Service Life) and LCA perspectives (Life Cycle Analysis), concerning the longevity of material structures, in this case including tangible cultural heritage. This is to be understood, as preparatory studies, paving the way for *sustainable conservation* (Rosvall et al., 1988; 1995).

Further, the outlook of this paper is based on the theoretical framework of the concept of “*integrated conservation*”, referring to a comprehensive understanding, description and explanation of physical-material and socio-cultural dimensions of cultural heritage. Examples from the “*Göteborg Model*”, and in its related international context, are given to illustrate an approach of this kind (Rosvall et al., 2006).

The scope of this paper is limited to analyze *the Halland Model* conservation projects concerning built cultural heritage values and conservation characteristics. This approach is leading to a discussion and a presentation of applied methodology based on the concept of *Integrated and Sustainable Conservation*.

### **3. Problems**

The purpose of this paper also is to discuss a possible contribution to sustainable development related to the field of conservation of built environment. Further, to examine the strategic use of investments in conservation of built cultural heritage in an instrumental way, as a catalyst factor for sustainable development and regional growth. The paper also is considering the impact of this approach related to the quality of the conservation results. In this theory-based analysis, methods will be used, developed by professionals and researchers in conservation and sustainable development.

### **4. Sustainable development**

Global Society of today is facing three major challenges; *climate change; global economic competition; social exclusion*. The political response to these challenges in various organisations, has been synthesized with the term *sustainable development*, and important milestones such as *the Brundtland Report* (WCED, 1987), *the Rio Declaration* (UNCED, 1992), *the Habitat Agenda* (UN-Habitat, 1996), *UN World Summit 2002* (UN-Habitat, 2002), and *World Urban Forum* (UN-Habitat, 2006).

In March 2000, the EU meeting in Lisbon of Heads of States and Governments agreed to have made EU by 2010 the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth - implying more and better jobs and greater social cohesion (European Commission, 2004). *The Lisbon Strategy* so far has concerned numerous activities of the European Union in economic, social and environmental areas, not the least at regional level.

### **5. Culture in a globalizing world**

Nowadays all regions in Europe are operating regional development programmes, aiming at sustainable development, with new solutions for innovative strategies

strengthening regional competitiveness. It has often been mentioned that culture and creativity are important drivers for individual development, social cohesion and economic growth. In May 2007 the European Commission adopted an important strategy document on culture in the form of a “Communication”, proposing a European agenda for culture in a globalizing world (Commission of the European Communities, 2007).

This agenda has formulated three sets of objectives:

- *To promote cultural diversity and intercultural dialogue in Europe,*
- *To promote culture as a catalyst for creativity and innovation in the context of the Lisbon Strategy for jobs and growth,*
- *To ensure that culture becomes a key component in the EU's external relations to build bridges with other parts of the world.*

One year earlier, in 2006, KEA European Affairs carried out a major survey where the economy of culture in Europe was assessed (KEA European Affairs, 2006).<sup>2</sup> The quantifiable socio-economic impact of the cultural and creative sector is of great interest:<sup>3</sup> its annual turnover was more than €654 billion in 2003, which can be compared to €271 billions in 2001 of the car manufacturing industry, or €541 billions in 2003 of the ICT manufacturers. In total, the culture and creative sector contributed with 2.6% to the EU GDP in 2003. The same year, the industry of chemical, rubber and plastic products accounted for 2.3% of contribution to the EU GDP, real estate activities for 2.1%, and the food, beverage and tobacco manufacturing sector for 1.9%.

In Europe 5.8 million people in 2004 were occupied in culture and creative sector, equivalent to 3.1% of total employed population in EU. At a general level, the overall growth of the sector's value added, during the period 1999–2003 was 19.7%, which was 12.3% higher than the growth of the general economy (KEA European Affairs, 2006, p. 6).

In the Swedish Government Official Report *Sustainable Organization of Society with Power for Development* (Ansvarskommittén, 2007, pp. 211–214), a proposal was presented how to organize the regional level of the public sector in Sweden. Of interest here is the discussion about the Governmental subsidy to conservation of cultural resources, which was proposed to be integrated in the overall regional sustainable development function, and moreover accompanying the EU regional cohesion policy and the Structural Funds. A specific Regional Development Act was proposed, to which the Building and Planning Act is anticipated to be linked.

## 6. Methodology

The empirical platform of this paper is a major building conservation scheme carried out during the period 1993–2003 in the Halland region in Sweden (Gustafsson, 2003), *the Halland Model*, and its development in parallel in international context in the Baltic Sea Region (Gustafsson, 2000; 2004). This scheme was based on approximately ninety building conservation projects, in which almost one-third of the construction workers in the region were trained in traditional building techniques. This meant a close

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<sup>2</sup> KEA European Affairs, with support from Turku School of Economics and MKW Wirtschaftsforschung Saarbrücken, Innsbruck and München, for the European Commission (Directorate-General for Education and Culture)

<sup>3</sup> The study's scope of investigation was both the culture and creative sector. The first included non-industrial sectors producing non-reproducible goods and services (e. g. museums, heritage sites, archaeological sites) and industrial sectors producing cultural products aimed at mass reproduction, mass-dissemination and exports. In the second culture becomes a creative input in the production of non-cultural goods and thereby a source of innovation.

collaboration between several public sectors, private enterprises, NGO's and researchers. The cross-sectoral and trans-disciplinary network acted with a multi-problem-oriented approach, which implied that conservation of the built heritage played the role of a catalyst for job creation, training and education in areas of concern, increasing a region's attractiveness, strengthening democracy, regional growth and sustainable development. In this context the concept *conservation* was promoted for probably the first time in Sweden in connection with *strategic development*.

Observing *the Halland Model* in a paradigmatic long-term development perspective, it is evident that this panoramic and challenging conceptual framework, and its manifold applications at a set of different systemic levels, may be understood as a logic outcome of *the Göteborg Model*, combining a theoretical conservation concept with inter- and trans-disciplinary programs of application-oriented nature. For a background to this far-reaching set of objectives, a general presentation is provided in a set of position-papers (Rosvall et al., 2006).

### **7. "The Halland Model": Cross-sector co-operation and multi problem-oriented approach**

The integrated conservation processes applied in *the Halland Model* implies that groups of professionals and citizens have been affected in various ways, having resulted in a flexible and transparent attitude among the participants, as well as in choice of methods of operations, that were used. Of decisive importance was the involvement of participants in finding common objectives for collaboration, and how to communicate together, but also with politicians and other kinds of decision makers. In *the Halland Model*, each of the various cooperating public sectors had their own planning instruments with differing political perspectives and priorities. The planning instruments of these various sectors were joined together in a "trading zone", or "feasibility studies" as it was called, in a process where it was of great importance that the conservationists were able to make themselves understood. The importance of communication in the conservation processes has been emphasized, and like semiologists, the conservators have to describe messages conveyed by conservation objects (Muñoz Viñas, 2005). This requires a well developed theoretical framework, addressing the specific conditions of tangible cultural heritage, and its related in-tangible dimensions, connected to its various phases of authenticity, changes, degradation, and deterioration, before ultimate destruction. Heritage experts have not very much based their research hitherto, on semiotic modelling, enabling reliable de-coding of complex message systems in actual heritage structures (Nordbladh and Rosvall, 1978).

All team members of the comprehensive consortium of *the Halland Model* team had to understand and agree, that historic buildings at risk are potential conservation objects, and as such are conveyors of intended and desirable meanings. These kinds of meanings might be described as desirable social, private or scientific meanings.

In *the Halland Model* a large number of actors entered the conservation arena, representing various types of power structures (e.g., County Administrative Board, County Labour Market Board, various local authorities, etc.), commerce and trades (e.g., Constructors' Federation, and the Building Workers' Union), and knowledge-oriented mechanisms (museums and universities), as well as citizens and their NGO organisations (e. g. historical associations). According to e.g. Muñoz Viñas, the meaning of conservation is a totally subjective phenomenon - but at the same time - mainly an inter-subjective phenomenon (Muñoz Viñas, 2005, pp. 158-160).

The stakeholders are derived from their contribution to the overall significance of the object - or their being affected by alteration of the meaning of the object. Conservation projects often are experts-only zones, but *the Halland Model*, with its broad approach, implied that it was possible to invite representatives from other public sectors to joint co-operation, resulting in what Muñoz Viñas calls conservation “affected-people zones” (Muñoz Viñas, 2005).

## 8. Trading Zone

The decisions made within *the Halland Model* can be compared to what Sverker Sörlin regards as a trading zone, where different actors present their values and goods to achieve the goal (Sörlin, 2001, pp. 47-60). Sörlin develops a line of arguments where conservation is understood as a process of articulation - whereby certain phenomena are given their specific meaning. Sometimes they are given new meaning, and thereby becoming re-articulated and re-introduced into a kind of accelerated circulation meanings. However, preservation can not be seen as a process where something has been taken out from the material or economic circulation. The decision to preserve or conserve a historic building is a complex process based on cultural, historical and political aspects. It may be described as a successfully concluded articulation of meanings and values. According to Sörlin, the trading zone is a lively commercial, scientific and political marketplace where various traditions, methods and languages, related to the actual stakeholders involved, have to be understood and combined. In the trading zone an exchange occurs, and a common language of communication across the borders is developed between different disciplines and practices.

## 9. Selection of objects

The selection of conservation objects of *the Halland Model* was based on the planning documents of cultural heritage sector - together with wishes and needs of the co-operating bodies (Gustafsson, 2003). The selection was based on where and when in the region the greatest demands for labour market policy initiatives were identified, what kinds of skills amongst the construction workers on the building market that were available, and what kind of buildings and functions that were required for regional needs (e. g. ventures in tourism, culture or arts).

These functional views opened up the interpretation from the side of the conservationists, not limiting themselves only to artistic or historic dimensions of historic buildings. According to Vestheim et al., preservation is connected to three kinds of interrelated interests: *political*, *economic* and *cultural*. The economic interests include the private market as well as public budgets, while the cultural interests may be defined as the sector dealing with cultural activities. In value-driven conservation, decision-making should be based on analysis of the values possessed by an object, related to different groups of sectors. Within *the Halland Model* this implied that consensus was to be reached within the conservation team (Muñoz Viñas, 2005, pp. 178-179).

*The Halland Model* was organised so that specific meanings and needs were prioritized - of cultural and local identity, cultural history, employment, training needs and the overall importance of sustainable development. These meanings were discussed and negotiated during the feasibility studies, where key words for the success of conservation projects, as well as cross-sector and multi-problem oriented approaches were formulated as “flexibility among stake holders, trust for the partners, and transparent methods”.

## 10. Catalyst for sustainable development

In 2001 *the Balcon project* was established as a network in Northern Europe, aiming at promoting investments in cultural heritage as a catalyst for regional sustainable development. The purpose of Balcon was to develop management skills within cultural heritage administration at local and regional levels. This has been carried out by means of an exchange of knowledge and experience. In the project, leading regional politicians and professionals participated. The impact of the conservation projects involved at the regional level are described in following dimensions:

- regional sustainable development,
- strengthening of democracy,
- cultural identity,
- development of the concept *Integrated and Sustainable Conservation*.

## 11. Socio-cultural dimensions

*Integrated conservation* as a well developed theoretical scholarly-professional discourse and multi-disciplinary-oriented platform, has gradually become a well accepted general approach to conservation applications in planning at various levels of society, but notably in direct interface with citizens and respecting historic dimensions, local identity and a profoundly humanistic attitude to heritage, especially intangible multi-factor quality dimensions. Even if there are several independent background roots for this academic discipline, this movement was not very well accepted originally by various stakeholders within conservation as well as in other sectors of society and the academic world. One of the original theoretical roots of this concept, obviously can be found in the formation of *conservazione integrata*, introduced in Italy by Piero Gazzola, and promoted by Council of Europe as an important component of its launching of the Amsterdam documents, and accompanying policy in 1975. In parallel, the American townplanner Donald Appleyard prepared his overview of this European phenomenon, published in the same period (Appleyard, 1979).

Already in the mid 1960's similar observations and knowledge formation took place in Sweden, partly by Göran Lindahl at the School of Architecture, Royal Academy of Fine Arts in Stockholm leading to his model for generative conservation planning, especially of mid-sized Swedish towns (Engelbrektsson & Rosvall, 2003). Simultaneously, Nanne Engelbrektsson at Göteborg University and Chalmers University of Technology, was introducing a comprehensive model for humanities-oriented analysis and historic planning,<sup>4</sup> based on urban and local identity-oriented research (Engelbrektsson, 1982; Engelbrektsson & Rosvall, 2003). This early initiative in much was related to the destructive urban effects of the specific Swedish welfare planning, aiming at excluding historic dimensions and directed to demolish authentic evidence of earlier phases of society. The outcome of this research and initiated university education in the later part of 1960's, was the strongly focused establishment and further development of *integrated conservation*, initially as part of existing programs, later of conceptualisation of new and special courses in this field, and ultimately leading to the formation already in 1978 (Engelbrektsson, 1987; Engelbrektsson & Rosvall, 2003; Engelbrektsson et al., 2003). This was one of the very first at international level, of a comprehensive graduating university program *in this new profession and discipline*,<sup>5</sup> finally organised as one of the still

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<sup>4</sup> Swedish: "kulturvårdande samhällsplanering"

<sup>5</sup> Swedish: "Bebyggelseantikvarisk utbildning" and "Kulturvård"

relatively few existing complete university institutions with a complex and comprehensive course system in the various branches of conservation, and on all levels including since 1991 a full Ph.D. program (in *Conservation*) - i.e. a complete structure in *Integrated Conservation*, according to the *Bologna Process*. This complex structure is forming the gradually established "*Göteborg Model*", together with other cooperating academic departments of conservation as well as other relevant disciplines worldwide, and in joint clusters together with external cooperation partners in the public sector as well as with private enterprising of relevance (Rosvall et al., 1995; Rosvall et al., 2004). In this perspective, the *Halland Model* - even if established in full independence - owes its core value from this branch of *integrated conservation of built environment*, forming the "*Göteborg Model*".

Selection of conservation objects within the Halland Model was based on local cultural heritage protection programmes and plans. These programmes were prepared with broad co-operation between politicians, officials from various public sectors, representatives from NGO's and conservationists, as well as supported by the public opinion.

In Poland the Presidents of regional boards invited representatives from all municipalities and villages in their regions, to participate in the selection procedure. For most representatives this was the very first time that they were collaborating with other public sectors, becoming responsible for their own decisions made within a project. That implied that the participants had to clarify their individual roles as politicians, civil servants or entrepreneurs (Larsson, 1999; Boston Consultant Group, 2004). The Cultural attaché at the Swedish Embassy in Warsaw described the most important contribution of *the Halland Model* as represented by the "case" of Olsztyn, had been to strengthen the democratic development in Poland (Larsson, 1999).

In Sweden the building conservation scheme of *the Halland Model* developed to a project aiming at sustainable development, given priority by the regional decision-makers (Gustafsson, 2000; 2003). Between 1993 and 2003 almost one third - 1,100 of a total of 3,700 construction workers in the region - participated in *the Halland Model*. In the mid 1990's, approximately 300 individuals were involved on a daily base in the scheme. Over 100 men hereby became skilled workers, found access to the regular labour market, and were fully paid.<sup>6</sup> After concluded conservation process, 235 persons were employed in the activities that immediately took place in the improved premises. For example, the conserved industrial site at Rydöbruk, was considered an exciting and creative environment, and certainly not only by artists. An interior decoration company also moved into the area and became the greatest employer in the village, with more than 50 new job positions, which is a considerable number of employees in this region, especially in this village.

## 12. Environmental dimension

Observing the rapidly growing field of environmental concern, it is directly recognizable that the traditional humanities-oriented apprehension of "*environment*", or "*milieu*", which until not very long ago was the adequate concept for architectural and other kinds of human settings - be that in interiors, urban circumstances like townscapes, parks etc., but as well generally in "*plain air*", i.e. in "*nature*". "*Ambience*", however also

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<sup>6</sup> In Sweden, apprentices are not fully paid, and only earns a specified percentage of a skilled worker's salary

has been a relevant concept for characteristics of human surroundings, and their linked values.

In many respects, these concepts and terms have been captured by the “green movement”, natural scientists of various disciplines as well as a growing number of market-based mechanisms, and consequently by related public bodies and NGO’s.

Therefore, it is prime-time to launch strong efforts from the side of representatives of *cultural conservation*, to re-activate an anthropogenic perspective to the environmental sustainability progressive movement. Simultaneously, this perspective consequently also has to be widened, and to incorporate from its side natural phenomena of relevance – either just to involve “*nature*” as an evident component of cultural settings, but further to integrate – among other dimensions, components and processes, e.g. deterioration mechanisms, and pro-active preventive measures for a long-term sustainable future of our material cultural settings, ambiances, milieus and their environments – including their heritage components, strongly linked to their intangible cultural dimensions.

In practice, the perspective presented, implies a full-scale implementation of *integrated sustainable conservation*, at all levels, in any way possible, to promote a vivid and healthy society – composed of settings, landscapes, buildings, implements and so on from all periods and social backgrounds, together with adequate evolving contemporary additions.

This field of inquiry and policy concern, still has not more than just started its coming movement, and anticipated growth. Examples of strong indications from this field have been referred to in other parts of this paper, but in this context two references may provide sufficient openings to a coming development of this inter-, intra- and trans-disciplinary field of knowledge and applications (Fusco Girard et al., 2003; Fusco Girard, 2006; Engelbrektsson & Rosvall, 2003; Engelbrektsson et al., 2003). According to e. g. David Throsby, and Engelbrektsson & Rosvall there are parallels observed between natural and cultural capital, which implies that the concept sustainable development can be applied to culture (Throsby, 2006; Engelbrektsson & Rosvall, 1999; Rosvall et al. 2003).

The environmental approach early was given priority in *the Halland Model*. This implied that environmental friendly materials were used in the conservation projects (Svensson, 2000). Another aspect was the choice of sources of energy in the buildings to be conserved. In the Tyreshill dwelling house at Rydöbruk, a heating system using renewable sources of energy therefore was installed (Gustafsson, 2003). At Olsztynek in Poland, the earlier coal-based heating system in the medieval castle was replaced by a district heating system during the conservation project (Gustafsson, 2000). In the Scandinavian countries there have been major problems for historic buildings with additional thermal insulation as a solution to energy-saving. In the conservation of Kuggavik childrens’ holiday camp, experimental work was carried out to solve these problems (Gustafsson, 2003). Another important contribution to sustainable development was the conservation of the small jugend-style villa, Metalowa Street at Olsztyn, Poland. Within the broad joint venture team, the function of the conserved building and improved premises were discussed. It was decided to invite a museum of nature focussed on school-oriented education in ecology, but addressing also adult people for the courses.

### **13. Economic dimension**

During the 20th century, the built cultural heritage to a great extent unfortunately was regarded as an obstacle to economic growth, and therefore conceived of as a cost for progress of society. Today, built cultural heritage instead successively has become

regarded as an enormous treasure, which is elucidated in the tourism industry. Increased interest has been directed to the economic values of cultural heritage. As mentioned above, many researchers, as well as political organisations, and NGO's are convinced that investments in built heritage will have a major impact on economic development and regional growth.

For instance, European Commission for a long time has regarded cultural tourism as the most obvious way to seek economic benefits from culture, therefore recognised as such in European regional development policies and programmes (Kildy, 1998, p. 8). Recently another issue has been emphasized in this context by decision-makers, namely how to entice new inhabitants into the region, to be attracted by its cultural assets, notably its cultural heritage and foremost its built environment, cared for by processes of integrated conservation.

"The creative class" has been demonstrated as a focus area of interest, characteristic for the regional and urban growth, and relating to an extremely movable group of people, according to recent studies, i.e. by the American geographer Richard Florida (Florida, 2005a). Referring to a newly presented survey of Sweden in the "Creative Age", these groups of citizens tend to reside in historic centres, characterized by old buildings (Tinagli et al., 2007, p. 15).

An illustrative example of this relatively recent movement, is presented in "*Stiftelsen Göteborgs Stenstad*" (Wirsin & Rosvall, 2004, "*Historic Göteborg Foundation*"), established by market-based entities in the early 1990's by companies operating in the busy town Göteborg, in areas of construction, estate management, and consulting enterprises. The core idea of this voluntary policy-organisation is to promote the urban qualities in order to attract citizens locally as well as from abroad, to live in and visit the historic districts, and thereby to enhance the architectural ambience and the built environment, by their direct contacts and paying their tributes to keep this urban setting by means of a spontaneously supported movement related with *integrated and sustainable development of built environment* (Rosvall et al., 2004).

An obvious trend today amongst regional decision-makers is to prioritise competition on a global market, where the creative class, composed of highly skilled and entrepreneurial people, rich in resources of various kinds, is considered to be the group that will strengthen their region to be successful in the global economy. The creative class also is the target group for competition between cities and regions. Local building traditions and well-preserved urban environments have been given a new role: as a crucial part of a city brand, and at the same time an illustrator of the city qualities and what differs it from competitors. These ambiances, characterized by integrated conservation of their built environments, are of conclusive importance for attracting the creative class in their choice to move to a new city (Florida, 2005b; Tanigli et al., 2007; Andersson and Andersson, 2007, p. 113). In this global competition the awareness is slowly increasing among decision-makers and investors, that the values of well-preserved historic centres have a strategic meaning for sustainable development, not at least for regional or urban growth. Remember Jane Jacobs' words: "*New ideas have to use old buildings*" (Jacobs, 2005, p. 216).

#### **14. Sustainable conservation**

In order to be successful, sustainable development has to proceed from the existing resources of the region, and in this context the cultural heritage is of crucial importance. The concept sustainable conservation has been increasingly recognized and frequently used during the last period. The sustainable conservation approach implies the firm

involvement of citizens. Decision-making in favour of a process of preserving - or not - implies that a great variety of factors has to be taken into account, long before concluding *what* should be preserved and *how* (Zancheti, 1999; Nanda et al., 2005, pp. 61-62; Engelbrektsson, 1987; Engelbrektsson & Rosvall, 2003).

Referring to the well established conceptual framework within conservation as a profession, and its supporting academic discipline, it has been an axiomatic condition, to respect the principle of *minimum intervention* (Rosvall et al., 1995). Since long, this theoretical approach as well as the formula of *reversibility*, to be applied in normal conservation interventions, has begun to be increasingly questioned. This has been discussed, i.e. by Barbara Applebaum, who started a big professional debate about the relevance of reversibility, and introduced the concept of *re-treatability* based on a sound discourse (Applebaum, 1991; Rosvall et al., 1995). Later, this scholarly-scientific-professional discussion has been continued, i.e. by Muñoz Viñas. The latter noticed, that it is not possible to achieve full reversibility in conservation, and that it is impossible according to the scientific laws of physics for an object to be brought to its preceding state of preservation (Muñoz Viñas, 2005, pp. 186-189). The conceptual framework however still is in use, which implies that an object is recommended to be preserved, more or less in its actual state.

Considering the use of cost-benefit analysis, conservation generates costs that are tangible as well as intangible. The conservator's reality - viewing conservation of objects as finite resources - can be seen as similar to analogous considerations taken by ecologists and economists. The conclusion of Muñoz Viñas in this respect, is that best conservation practice provides most satisfaction for most people, while at the same time not depriving ability for future users to function in a symbolic and meaningful way. Contemporary theory of conservation calls for common sense for understanding why, and for whom, things are conserved, according to Engelbrektsson and Rosvall (Muñoz Viñas, 2005, pp. 212-214; Engelbrektsson & Rosvall, 2003; Engelbrektsson et al., 2003 ) *The Halland Model* resulted in decisions not only made from a conservationist's opinion, but in a comprehensive and transparent way.

In this context it is appropriate to indicate another initiative, enhancing *integrated sustainable conservation*, with a new research organisation addressing exactly the kind of problems and issues, presented in this paper.

As a further development within the "*Göteborg Model*", a research compound has recently been organised to solve needs and problems in the market segments, where the conservation theoretical framework is relevant. This initiative is named "NMK", which means "*Postgraduate Enterprising Research School - Natural Materials in Environmental Sciences and Cultural Conservation*". This mechanism, attracting highly competent researchers for earning a doctorate in this field, with substantial resources for mentoring, salaries, laboratories, travels and other kinds of expenditures, is financed partly by a Swedish research endowment, and partly by private companies in need of relevant, top class research. Some twenty doctoral candidates will have been promoted for a doctoral degree, and likewise their financing enterprises, when the present project phase is concluded by 2008, in total financed by c. 45 millions SEK (€5 millions, or US \$6.5 millions). This is understood to be an attractive future model for the field of *integrated sustainable conservation*, combining research needs, financial resources and adequately equipped doctoral candidates and competent academic and company-based mentors in various venues of relevance. This paper actually is the outcome of one such NMK project, with Gustafsson preparing his doctoral dissertation based on adequate experiences in the field and Rosvall being his mentor and supervisor, at the same time initiator and co-director of NMK.

## 15. Conclusions

The prerequisite of prosecuting successful policies for regional culture and cultural heritage nowadays are very propitious. UN and EU - as well as national, regional and local decision-makers - are increasingly regarding culture and cultural heritage as important resources for sustainable development, and as proper objects for investments.

If conservation operations are intended to be sustainable, e.g. meaning that a building will be preserved for a long time, it is important within conservation projects that conservation officers participate also in searching for activities and new functions that can take place in a conserved building. Then of course, a priority is that those activities do not threaten heritage values, but at the same time it is most important that they are bringing some income to the property that contributes to guarantee future maintenance in a sustainable way.

Conservation projects discussed in this paper can be described as examples of sustainable preservation, or conservation. These projects may be considered to be economic since they have provided obvious return on investments, and they have already guaranteed future income to cover costs for maintenance, and moreover they have contributed to regional growth. Concerning social aspects, the conservation process involved regional cohesion, and developed cross-sector networks, as well as a multi-problem-oriented approach. Further, they have increased the level of knowledge, strengthened local identity and democracy, as well as created new jobs in the region. Finally, this process was sustainable from an environmental perspective, since conservation is about to care for existing resources instead of demolishing. Environmental-friendly construction materials were also used together with renewable sources of energy in conserved buildings.

Legal systems and regulations have been developed for the protection of built heritage. Now it is time to develop strategies for elucidating the central importance of culture and cultural heritage for regional growth. Accordingly, it is of importance to illustrate the economic impact of investments in culture and cultural heritage. This also implies needs of new strategies and methods for the cultural heritage sector, and especially how to handle larger budgets. To manifest impact of conservation for sustainable development it is required to initiate a deeper discussion, leading to more capacity of interdisciplinary research and cross-sector cooperation based on multi-problem oriented approaches.

Those kinds of initiatives indicated above require a partly new role for policies of culture, as well as for preservation of cultural heritage. To develop and establish adjusted methods and strategies must be seen as a responsibility of the heritage sector itself, where investments in building conservation at the same time can serve as a catalysing factor for sustainable development and regional growth. Without any doubt, it is of great importance that regions identify their significant and unique qualities, as a platform from where decisions can be made, and objectives for the future can be defined. It is obvious, that during the last decades the importance and value of cultural heritage and well preserved urban environment, successively have increased - playing a central role in building city brand. Thus, there is a general need for distinct and elaborated concepts and methods in the field of *integrated and sustainable conservation of built environment*, corresponding to contemporary demands of a long-term future.

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