

DEVELOPING A RETAIL-REUSE EVALUATION TOOL

Bie Plevoets & Koenraad Van Cleempoel

Hasselt University

bie.plevoets@uhasselt.be

koenraad.vancleempoel@uhasselt.be

ABSTRACT

ABSTRACT

In many historic city centres, there is a tension between heritage preservation and retail development as historic buildings are often transformed with retail programmes. In such projects, many stakeholders are involved, all with different interests; investors are mainly interested in the revenues of the project and not in the conservation of the historic building, while conservators fear an over-use of the building without any respect for its value. But even if the owner chooses a qualitative conservation and restoration, the quality of the project is not automatically guaranteed. In many cases, the building will be rented out to a user who does not necessarily respect the specific characteristics of the building. In the case of a tenant, monument boards²⁰ have almost no control over the use of the building after its restoration. The Retail-Reuse Evaluation Tool (R-RET) has been developed for evaluating such retail-reuse projects, taking into account the different aspects of such projects: heritage conservation, architecture, retail (design), and integration into the urban fabric. The first section of this paper describes the specific tension between retail development and heritage preservation in historic centres from the point of view of different stakeholders. The second section describes the development of the R-RET. The third section illustrates the application of the tool.

1. Introduction

In different historic cities in Europe, many historic buildings are left unoccupied because they have lost their initial function. To avoid a degradation of the building itself and the cityscape to which it belongs, a new use for the building is desirable in order to economically sustain its maintenance and restoration. A sector that has shown major interest in occupying historic buildings is the retail sector. Indeed, in this sector there exists a strong demand for large, available buildings in A-locations in city centres.²¹ As the historic centre is

²⁰ ‘Monument board’ refers to the commission overseeing restoration and other works on buildings and sites that are legally protected as a monument.

²¹ The ABC-policy is based on the Dutch planning system, which defines a connection between the type of economic activity, associated zone and the accessibility of that zone.

A-location: Main retail area in the city centre with a high number of passengers. Excellent accessibility by public transport, such as in the direct surrounding of large railway stations and at the junction of public transport routes.

B-location: Area directly connected to the A-locations. Accessible by car and public transport.

often also the commercial heart of a town, the possibility for new construction is limited, and accordingly retailers often locate their stores in existing (historic) buildings such as former post offices, religious buildings or industrial buildings. As such, commercial reuse of historic buildings seems beneficial for both parties.

However tempting this immediate solution may seem, it is not always evident to introduce a retail interior in a historic building. In such projects, many stakeholders are involved, all with different interests; investors are mainly interested in the revenues of the project and not in the conservation of the historic building, while conservators fear an over-use of the building without any respect for its value. But even if the owner chooses a qualitative conservation and restoration, the quality of the project is not automatically guaranteed. In many cases, the building will be rented out to a user who does not always take the specific characteristics of the building into account. In the case of a tenant, monument boards almost have no control over the use of the building after its restoration. After all, to the public at large, the evaluation of the building does not depend on the architectural style of the monument but on the way the building is used today (Linters 1998). Therefore, reuse of buildings is not only an architectural, but also an urban and social challenge.

A specific tool for evaluation of retail-reuse projects may help in increasing the overall quality of such projects. The aim of our research is to develop such an instrument, to address the different aspects of a retail-reuse project: heritage conservation, architecture, retail (design), and integration in the urban fabric. The first part of this paper focuses on sharpening the definition of our problem statement by investigating the tension that seems to exist between retail development and heritage preservation through case study research. The second part of the paper focuses on the development of the so-called “Retail-Reuse Evaluation Tool” (R-RET), learning from existing heritage-evaluation systems. The third part of the paper presents results from testing the R-RET as a tool for evaluation realized projects, and preliminary tests for *a priori* evaluation of projects.

2. Tension between retail development and heritage preservation: identification of the involved stakeholders

2.1. Methodology

The tension between retail development on the one hand and heritage preservation on the other hand is mainly caused by the different, sometimes even opposite interests and objectives of the different stakeholders involved (English Heritage et al. 2004). Existing studies on retail-reuse tend to focus on isolated aspects of retail-reuse: retail design (Rubessi 2010), sustainable development (Hyllegard, Ogle, and Dunbar 2003; Bullen and Love 2010), marketing (Hyllegard, Ogle, and Dunbar 2006), and integration of retail development in historic towns (English Heritage, English Historic Towns Forum, and Planning Advisory Service 2005; English Historic Towns Forum 2008). As such, in order to identify the different stakeholders and their specific interests in the project, case studies were used as a primary source of data.

C-location: Area with less retail activities and low number of users. Accessible by roads and highways (definition based on Brussels Capital Region 2001).

Nine case studies were selected to cover (1) different scales, varying from a single shop in a historic building to a shopping centre on a historic site; (2) different retail segments, high-end and mid-level retailers²²; and (3) different heritage categories, including industrial, religious, (semi-)public, residential, and commercial buildings. [TABLE 1]

For each case study, the various stakeholders involved in the project were interviewed. General themes that were focused on during the interviews were:

- The stakeholders' individual role in the project
- The process of collaboration with other stakeholders
- The opportunities and difficulties in realising the project
- The result of the project

The number and type of stakeholders varied depending on the scale and complexity of the project. In total, 18 stakeholders were interviewed. These included 4 architects, 1 interior architect, 2 restoration architects, 3 individual store managers,²³ 2 general chain managers, 2 public servants from the heritage preservation office, and 4 project developers. Moreover, interviews with consumers for 5 case studies were conducted as well as short interviews with 17 retailers located in Shopping Stadsfeestzaal, Antwerp. All cases were located in Flanders and The Netherlands, and as such, all interviews were conducted in Dutch, recorded and transcribed.²⁴

BUILDING CATEGORY	CASE STUDY	STAKEHOLDERS						
		Architect	Interior architect	Restoration architect	Retailer/Store manager	Chain store manager	Heritage Consultant	Project Developer
Industrial buildings	1. Kanaal Vervoordt (BE)						•	
Religious buildings	2. SelexyzDominicanen (NL) 3. Donum ,Antwerpen (BE)	•	•	•	•	•	•	•
(Semi-)public buildings	4. Stadsfeestzaal, Antwerpen (BE) 5. SelexyzVerwijs (NL) 6. Donum, Hasselt (BE)	•	•	•	•	•	•	•
Residential buildings	7. Hema, Tongeren (BE) 8. Xandres, Gent (BE)	•				•		•
Commercial buildings	9. Passage, The Hague (NL)						•	•

TABLE 1. Overview of the selected case studies and the interviewed stakeholders

²² Discount retailers were not included in our case study research as they usually do not locate their store in historic buildings, or in case they do, their motivation is primarily location and surface area, and not the historic character of the building (Bovens 2011).

²³ Donum Hasselt and Donum Antwerp are run by the same retailer.

²⁴ A few interviewees did not want their interview to be recorded in which case, notes were taken during the interview and a report was compiled immediately after.

2.2. Interests of the various stakeholders

Based on the literature study and case study analysis, five major stakeholder-groups were identified:

1. *conservators*, including restoration architects and heritage consultants;
2. *municipalities of historic towns*;
3. *retailers*, including individual retailers as well as chain store retailers;
4. *designers*, including architects, interior architects, retail designers and urban planners;
5. *users*, including consumers, but also other visitors with no intent to purchase, and passersby.

The following sections describe the tension between retail development and heritage preservation as a result of the different interests of the distinct stakeholder-groups.

2.2.1. Conservators

For conservators, when a building loses its initial function, reusing it for other purposes is generally considered a positive aspect towards its conservation. Already in 1854, Eugène Emmanuel Viollet-le-Duc (1814-1879) argued that “the best of all ways of preserving a building is to find a use for it” (Viollet-le-Duc 1990 [1854], 222). His ideas were echoed by the Austrian historian Alois Riegl (1858-1905) who appointed to the importance of the “use-value” for monumental buildings (Riegl 1982 [1903]) and again in the Charter of Venice in 1964 saying that “the conservation of monuments is always facilitated by making use of them for some socially useful purpose” (ICOMOS 1964, article 5). Therefore, on the one hand, retail can be a beneficial new function for abandoned historic buildings as it is often easier to find investors for retail than for social or cultural activities. Moreover, when a building is reused for retail, the building remains accessible for a large public, which is not the case with offices or housing programmes. On the other hand, however, many sad examples are at hand where the historic building is overused to maximize commercial exploitation at the expense of its intrinsic values. Such an example is The Passage in The Hague (case 9), a 19th century shopping arcade that was bought by a project developer and completely renovated in 2000. The initial programme which included an interesting mix of functions – small shops, dwellings, a hotel, a movie theatre, and a bar– was not retained; instead, a new programme was introduced that solely focused on revenue with large shops and offices, and major architectural interventions were therefore made. Together with a weak restoration project, the limited programme caused a loss of the original atmosphere of the building, and a loss of some of its tangible and intangible heritage values (Plevoets and Van Cleempoel 2011).

But even if the owner chooses a qualitative conservation and restoration, the quality of the project is not guaranteed. In many cases, the building will be rented out to a user who does not always respect the specific characteristics of the monument. In the case of a tenant, monument boards have almost no control over the use of the building after its restoration. Interesting interiors are sometimes completely covered and concealed to create a bland furnished space, looking like any other building of the same brand. This was the case for one case study: the rehabilitation of the Dommershausen in Tongeren (case 7), a 16th century late-gothic half-timbered house and its adjacent premises (Plevoets 2009). Once the project was

finished, the chemist chain Hema selected the building because of its A-location and its size. They were not interested in the historic character of the building (Bovens 2011). As such, the building was furnished as any other Hema store without taking into account the building's interior: shelves were even placed onto historic interior elements.

2.2.2. Municipalities of historic towns

On an urban level, reusing historic buildings for retail may advance the viability of historic centres, and as such, may stimulate urban regeneration (English Heritage et al. 2004). Additionally, Kirby and Kent (2010) state that reuse of the city's architectural heritage can act as part of the city's image and its city branding. They explain that the purpose of city branding is to promote a city for certain activities and in some cases, sell parts of the city for living, consuming and productive activities. An often applied strategy is to orientate the city branding towards reworking, repackaging and re-presenting historical and existing cultural qualities of the city. Maastricht, for example, promotes itself through its built heritage, and more specifically, through remarkable reuse projects for its religious buildings (Frijters and Grootswagers 2011). One of these projects is Selexyz Dominicanen (case 2), a bookstore located in a 13th century gothic church which was originally part of the Dominican convent. In the 1960s, a shopping centre was constructed adjacent to the church on the site of the previous convent. When in 2000 this shopping centre was replaced by a new one, the rehabilitation of the church was made part of this large retail development. Its interior, designed by Merckx+Girod Architecten received major attention by national and international press (among others: Dodson 2008; Overbeek 2007; anon 2008).

2.2.3. Retailers

Usually, the retailer chooses a specific building because of its location; the fact that a building is historically or architecturally significant is thus not always recognized as an added value from a commercial point of view. When the building is listed as a monument there are limitations to retail design, and therefore, restoration and maintenance of the building may bring about additional costs. For some retailers however, being located in a historic building may become a tool for differentiation towards competitors, i.e. when they 'use' their location to offer their customers an "authentic experience" (Plevoets, Petermans, and Van Cleempoel 2012; Plevoets and Van Cleempoel 2012). The owner of Donum, a lifestyle and furniture store, explains that for their store in Hasselt (case 6), they did not intentionally look for a historically or architecturally significant building. However, the reactions of the customers were very positive and he felt that the unique historic setting of the store created a kind of curiosity that triggered people to enter. Moreover, it created exposure by national and international press. Later, when they wanted to start a store in Antwerp (case 3), they specifically looked for a building with monumental qualities because they felt that this suited them.²⁵

Our case study, however, showed that some retailers find that locating one's store in a historic building is not commercially viable because the design of the store is too expensive, the typology of the historic buildings causes limitations to the store's layout and design, and in some cases 'tourists' without any intention to buy, may in fact disturb the regular shopping

²⁵ Interview with Jos Peeters, owner of Donum Hasselt and Antwerp, 17 February 2010.

activity. An example is Xandres (case 8), a women's fashion brand that opened its first concept store in Ghent in 2006 – before then, they only sold their clothes through independent retailers. At that time, they needed a beautiful store that reflected the brand's value 'classical and timeless beauty'. As this coincided with a period of economic recession, commercialisation of the retail environment became more important. Xandres therefore changed the concept of its stores from being timeless and exclusive towards more fashionable, more easily accessible and more transparent in an attempt to reach a larger – and especially younger – group of customers.²⁶

2.2.4. Designers

For designers today, working with historic buildings is considered an interesting challenge and an important aspect of their work (Schittich 2003). This has not always been the case; during the post-war era, architects primarily aspired to create new buildings, but as a reaction against the increasing rate of demolitions and new construction, a growing interest has developed for conserving old buildings of every kind from the second half of the 20th century onwards (Cantacuzino 1975). Currently, adaptive reuse is distinguishing itself as a specific discipline within the broader field of architectural conservation (Plevoets and Van Cleempoel 2013). Historic buildings of every kind are being transformed for a variety of programs, among which retail. Several of the interviewed architects and interior architects explicitly expressed their pleasure in working on an historic building. Bart Lens, architect of Donum Hasselt (case 6) explains:

If you have the opportunity to work with historic buildings in an urban context ... for an architect, this is as a gift. Therefore, the architect should show some respect for the building. If you don't force yourself on the building, if you let the architecture speak for itself and you try to approach the building in a modest way ... than it will work.²⁷

Also Evelien Merkx, interior architect of Selexyz Dominicanen (case 2) states:

... If you receive a church [to work with], that is a real gift!²⁸

2.2.5. Users

Depending on the type and the scale of the project, different (groups of) users may be identified such as customers, visitors, employees, residents, and passersby. On the one hand, working, shopping or living in a historic building may be a unique experience. On the other hand, the specific typology of the building and the strict regulations in the case of protected buildings may cause practical implications and limitations to the use of the building. Customers of Shopping Stadsfeestzaal (case 4) explained that they came to the shopping centre mainly because of its unique atmosphere and not so much for shopping. Visitors of Selexyz Dominicanen (case 2) who were interviewed after visiting the store did not talk about the building as a store, but as a monument.

²⁶ Interview Pieter Claesen, retail manager Xandres, 20 October 2010.

²⁷ Interview Bart Lens, architect Donum Hasselt, 3 March 2010.

²⁸ EvelienMerkx, architect SelexyzDominicanen, 5 February 2010.

3. Retail-Reuse Evaluation Tool (R-RET)

In order to improve the quality of retail-reuse projects that will be realised in the future, a tool for evaluating such projects was developed. As a first step, existing heritage evaluation systems were reviewed (de la Torre and Avrami 2000; Mason 1999; English Heritage, English Historic Towns Forum, and Planning Advisory Service 2005; English Heritage et al. 2004; Lemmens, Nocera, and Van Balen 2006; Van Balen 2008) as well as evaluation systems for sustainable building adaptation (USGBC 2010; BREEAM 2013), and their applicability to retail-reuse was checked. The instrument that was found most suitable is the Nara grid, developed at the Raymond Lemaire International Centre for Conservation (KU Leuven). [TABLE 2] Five reasons supported the preference for the Nara grid:

- Instead of offering a set of prescriptive guidelines (such as e.g. English Heritage, English Historic Towns Forum, and Planning Advisory Service 2005; English Heritage et al. 2004), the Nara grid is an open discussion tool;
- The tool allows an interdisciplinary analysis of the project;
- Instead of a quantitative analysis with a numerical ‘score’ as an outcome (BREEAM 2013; USGBC 2010), the grid allows a qualitative analysis of the project and presents a more nuanced and substantive outcome.
- It is easy to use and convenient for communication (in contrast with: de la Torre and Avrami 2000; Mason 1999);
- The grid enables evaluation of both tangible and intangible aspects.

The Nara grid is based on the Nara Document on Authenticity and initially developed in relation to restoration of masonry as a framework to analyse the relationship between the material-technical aspects and the impact of craftsmanship. Later, it was applied in relation to other themes in conservation such as 3D documentation techniques, evaluation of eclectic architecture, restoration of historic interiors and for designing a master plan for the conservation of specific heritage sites (Lemmens, Nocera, and Van Balen 2006; Van Balen 2008; Jaenen 2008). This methodology has been found very effective for the evaluation of complex problems. In practice, the Nara grid presents the ‘aspects’ and ‘dimensions’ of authenticity as formulated in article 13 of the Nara Document on Authenticity, on the axes of the grid. The relationship between these aspects and dimensions is visualised which may help to make value judgements about specific proposals or case studies (Van Balen 2008). As stated by Van Balen, “the straightforward and simple representation [of the Nara grid] promotes communication and exchange of ideas on the topic” (2008, 45).

ASPECTS of the sources:	DIMENSIONS OF THE HERITAGE			
	ARTISTIC	HISTORIC	SOCIAL	SCIENTIFIC
FORM AND DESIGN				
MATERIALS AND SUBSTANCE				
USE AND FUNCTIONS				

TRADITION AND TECNIQUES (intangibles)				
LOCATION AND SETTINGS				
SPIRIT AND FEELING				

TABLE 2. The Nara grid as developed at the Raymond Lemaire International Centre for Conservation

The Nara grid was applied in the assessment of the selected case studies (for examples see Plevoets 2009; Plevoets and Van Cleempoel 2009). Although interesting conclusions on the case studies could be drawn, there were also some limitations and shortcomings. Firstly, the Nara grid does not include economic aspects, which are relevant for retail projects as economic considerations are the primary concern for several of the involved stakeholders. Secondly, although the Nara grid is recognized as an interdisciplinary discussion framework, it has mainly been applied by interdisciplinary teams involved in conservation and restoration of heritage sites. Since the interests of the different stakeholders involved in retail-reuse projects are very diverse, and sometimes even contradictory, the stakeholders' positions need to be made more explicit.

The grid was therefore adapted based on these considerations: on the vertical axis, which presents the various aspects, 'return & investment' were included in order to allow an economic assessment of a project; on the horizontal axis, which in the Nara grid represented the different dimensions of the heritage, the different stakeholders involved in retail-reuse projects as identified above were presented. Depending on the specific circumstances of the project, the five main stakeholder groups were sometimes subdivided. For example: 'designers' may be subdivided into architect, interior designer and retail designer; 'users' may be subdivided into customers and employees. This adapted version of the Nara grid was renamed 'Retail-Reuse Evaluation Tool' (R-RET).

To use the tool not only as a 'container' holding all sorts of information on the case study, each issue stated in the grid was colour-coded according to whether it was a positive (blue) or a negative (red) element regarding the realisation of the project; the grid thus became an evaluation-instrument. [TABLE 3]

STAKEHOLDERS → ASPECTS ↓	Conservator	Municipality	Retailer	Designer	User
Form & Design					
Materials & Substance					
Use & Function					
Tradition & Techniques (Intangibles)					
Location & Setting					

Return & Investment					
Spirit & Feeling					

TABLE 3: The adaptation of the Nara grid into the Retail-Reuse Evaluation Tool

4. Application of the R-RET

4.1 R-RET for evaluation of realized projects

The applicability of the R-RET was tested by using it to evaluate the case studies analysed in the context of this research. The application of the R-RET on the case study of Selexyz Dominicanen (case 2) has been chosen to illustrate the outcome of the test. [TABLE 4] Selexyz is a bookstore chain in the Netherlands that intentionally looks for unique buildings to locate their stores. Their store in Maastricht, which is called ‘Selexyz Dominicanen’, is located in a 13th century Gothic church that lost its religious function during the French Revolution. The church is located next to a newly developed shopping centre ‘Entre Deux’. [FIGURES 1 and 2]



FIGURE 1 (left): Selexyz Dominicanen opening night, January 2007 (picture by Roos Aldershof ©)

FIGURE 2 (right): Selexyz Dominicanen in use, August 2008 (picture by the author)

	Conservator	Municipality	Retailer	Designer	User
--	--------------------	---------------------	-----------------	-----------------	-------------

Form & Design	<ul style="list-style-type: none"> - Reversible - Interventions are respectful of the historic building - Interventions done by the retailer later on in the process did not fully respect all historical features of the church - Architectural intervention provides an 'unique heritage experience' for the visitors 	<ul style="list-style-type: none"> - Publicity by national and international press - contributes to city branding - Visitors come especially to see the rehabilitated church - Reversible (easily adaptable for other tenant) 	<ul style="list-style-type: none"> - Publicity by national and international press - Gondola's did not provide enough space for horizontal presentation of the books - Architecture provides an 'unique customer experience' - No store windows - Retail design not very flexible (eg. Limited storage space, no possibility for expansion) - Limited (arranged) possibilities for applying Selexyz' branding 	<ul style="list-style-type: none"> - Interesting typology to work with - Innovative reuse of a church building (functionally & architecturally) to be used as example for other projects of reuse of churches 	<ul style="list-style-type: none"> - Architecture provides an 'unique heritage & customer experience' - Visitors come especially to see the rehabilitated church
Materials & Substance	<ul style="list-style-type: none"> - opportunity to restore the church + paintings on walls and ceilings 			<ul style="list-style-type: none"> - 'book case' contrasts with typology of the church 	
Use & Function	<ul style="list-style-type: none"> - new function is not conflicting with the previous religious function - Public function: monument becomes accessible for larger public 	<ul style="list-style-type: none"> - Public function - 'Coffeelovers' is originally a retailer from Maastricht - Retail as new function provides income (from rent) 	<ul style="list-style-type: none"> - Combination Coffeelovers & Selexyz is an added value 		<ul style="list-style-type: none"> - Combination Coffeelovers & Selexyz is attractive for visitors
Tradition & Techniques (intangibles)	<ul style="list-style-type: none"> - wall painting discovered by Victor the Steurs. His drawing was used for restoration of this painting 				

Location & Setting	<ul style="list-style-type: none"> - Church located next to fortification wall of Maastricht: Archaeological excavations preceded the works - Maastricht: part of a group of rehabilitated religious buildings in historic centre 	<ul style="list-style-type: none"> - Maastricht has become an international example for adaptive reuse of (religious) historic buildings 	<ul style="list-style-type: none"> - Rehabilitated church becomes part of the branding of Selexyz Dominicanen - A-location inside the city centre - Part of the shopping centre Entre-Deux 		<ul style="list-style-type: none"> - Inside the historic and commercial centre (easily accessible)
Return & Investment		<ul style="list-style-type: none"> - Restoration and maintenance is financed by the city of Maastricht (owner of the building) - Building is owned by the city of Maastricht and receives income from rent 	<ul style="list-style-type: none"> - Lower rent than average - Protected as a monument: no restrictions for opening hours - Customers have more attention for the architecture than for the products at sale - Larger maintenance costs 	<ul style="list-style-type: none"> - Attention by national and international press: publicity for the designers 	<ul style="list-style-type: none"> - Low pressure to consume - Book bought at 'Selexyz Dominicanen' is considered by customers of higher value, than the same book bought elsewhere (added value from experience)
Spirit & Feeling	<ul style="list-style-type: none"> - Sacred atmosphere of the church is 'restored' due to sensitive restoration and retail design 	<ul style="list-style-type: none"> - Space serves as an easily accessible, but nevertheless tranquil 'public space' in the centre of Maastricht 	<ul style="list-style-type: none"> - Unique location: 'luxurious' appearance & differentiation strategy among competitors 	<ul style="list-style-type: none"> - Applied materials, colours and lighting 'restores' the sacral atmosphere 	<ul style="list-style-type: none"> - Church serves as an easily accessible, but nevertheless tranquil 'public space' in the centre of Maastricht

TABLE 4: R-RET for Selexyz Dominicanen

Table 4 illustrates that although the project is a significant example of adaptive reuse of a former religious building, some problems can be found, mainly at the expense of the retailer. Some limitations to the retail design became clear, such as the limited storage area and the limited possibility for visual merchandising in the store. Moreover, customers seem primarily interested in the 'architectural experience' of the building, and less in the books on sale.

The R-RET allows a cross-case comparison between the different case studies that have been analyzed in the context of this research. On the one hand, the tool visualizes a cross-case comparison for one specific stakeholder group, but on the other hand also allows a comparison for one specific aspect of retail-reuse, e.g. use & function, or return & investment.

4.2. R-RET as a tool for *a priori* evaluation of projects: preliminary test results

In order to test the R-RET as a tool for *a priori* evaluation of retail-reuse projects, master students in interior architecture were asked to use the tool during the design process. In this phase of the research, the tool was only tested with four students: two students who

followed a master seminar on adaptive reuse and two students who followed a master seminar on retail design. All four students designed a retail function in a specific historic building for their master project.

The R-RET was presented to the students in a very early stage in their design process and they were asked to fill in the tool at least two times during their design process. After finishing the whole project, each student was individually interviewed. The interview focused on the following questions:

- How many times have you used the R-RET during the design process? At what stage in the process?
- Did you find the tool easy to use?
- Was the R-RET useful as a design tool, i.e. to guide design decisions? Was the R-RET useful as a communication tool, i.e. to prepare for a jury, to motivate design decisions?
- Was the output of the tool proportional to the input?
- Would you change something to the R-RET? Was something missing or unnecessary?
- Would you spontaneously decide to use the R-RET again? In what circumstances?
- Would you recommend using the R-RET to other students?

4.2.1. Usefulness as a communication and design tool

The experience by the students for using the R-RET was rather diverse. All students considered the tool a useful instrument in the design process, but for various reasons.

Two students found it useful in the very early design phase in order to define a concept for reuse for the building they were working on. They did not see any benefit from the tool later in the process.

One student considered the tool useful as a checklist throughout the design process, but not helpful in taking important design decisions. She found the tool very valuable as a communication tool, not in the sense that she would show the tool to third parties, but to prepare herself for presentations and juries. By completing the R-RET she became very much aware of the strengths and weaknesses of her project and she felt therefore better prepared for questions.

One student was very positive about using the tool and explained that she used it several times during her design process. It helped her very early in the process to further elaborate her concept for the building. Later in the process, she applied the R-RET when taking conceptual design decisions; for example, making all interventions reversible was guided by the outcome of the tool. In the last phase of the process, she used the tool as a communication tool to prepare for a jury. Besides using it during the design process, she also used the R-RET in her preliminary research to analyse case studies. It was therefore very easy to compare specific problems in her own project with the way these were approached in the different case studies, which helped her solving design problems.

4.2.2. Usability

The students agreed that the R-RET seemed rather complex in use, but once they started filling in the grid they found it easy to use. The students were all familiar with the

Nara-grid as they had used this tool during their studies for value assessment of historic buildings, which may have helped in understanding the concept of the R-RET. Three completed examples of R-RET for case studies were given to the students and discussed during earlier courses. One student emphasized that these examples were very helpful when she started using the R-RET.

5. Discussion

While the R-RET was found to be useful in analyzing and comparing completed retail-reuse projects, it also seemed helpful in the design process, specifically in the early design phase in order to define a concept for the building to be reused, as well as in the later phase as a communication tool. One student found the R-RET beneficial in taking design decisions. However, in order to generalize these findings, the tool should be further tested with conservators, municipalities confronted with finding new functions for abandoned buildings, retailers looking for a suitable (historic) building to house their store, and local communities. The methodology of systematically identifying the different stakeholders seems to be a valuable stage, particularly when informing the early design phase.

So far the R-RET has been specifically and solely developed for evaluation of projects with retail as new use; broadening the application field of such a tool to other reuse functions may be considered

Acknowledgements

The authors thank the students who were willing to use the R-RET in their master project for their valuable comments. We also thank the Agency for Innovation by Science and Technology Flanders (IWT) who financed this research.

References

- (USGBC) U.S. Green Building Council. 2010. Practical Strategies. USGB.
- Anon. 2008. Leben Intrinsic Values *Architecture Interior Technical solutions* January/February.
- Bovens, Marijke. 2011. Herbestemming in de toekomst/Interviews, trends en ontwikkelingen. In *H-team Notitie*. Amersfoort: H-team en Nationaal Programma Herbestemming.
- BREEAM. 2013. *BREEAM In-Use 2013* [cited March 8, 2013 2013]. Available from <http://www.breeam.org/page.jsp?id=360>.
- Brussels Capital Region. 2001. Regional development plan of the Brussels Capital Region, Glossarium.
- Bullen, Peter, and Peter Love. 2010. The rhetoric of adaptive reuse or reality of demolition: Views from the field. *Cities* 27: 215-224.
- Cantacuzino, S. 1975. *New uses for old buildings*. London: Architectural press.
- De la Torre, Marta and Erica Avrami. 2000. Values and Heritage Conservation. Los Angeles: The Getty Conservation Institute.
- Dodson, S. 2008. In the beginning was the bestseller. *The Guardian*.
- English Heritage, English Historic Towns Forum, and Planning Advisory Service. 2005. Retail Development in Historic Areas. Edited by E. Heritage. London: English Heritage.

- English Heritage, RICS, British Property Federation, and Drivers Jonas. 2004. Heritage Works. The use of historic buildings in regeneration. A toolkit of good practice. edited by English Heritage: English Heritage, RICS, British Property Federation, Drivers Jonas.
- English Historic Towns Forum. 2008. Focus on Retail. In *Focus*, edited by English Historic Towns Forum. Bristol: English Historic Towns Forum.
- Frijters, Joyz, and Lilian Grootswagers. 2013. *NL Reset: Religieuserfgoed*, November 2011 [cited March 8, 2013]. Available from http://www.academia.edu/2005021/NL_Reset_Kerk_zonder_geloof.
- Hyllegard, Karen H., Jennifer Paff Ogle, and Brian Dunbar. 2003. Sustainability and historic preservation in retail design: Integrating design into a model of the REI decision-making process. *Journal of Interior Design* 29 (1): 32-49.
- Hyllegard, Karen H., Jennifer Paff Ogle, and Brian Dunbar. 2006. The influence of Consumer Identity on Perceptions of Store Atmospherics and Store Patronage at a Spectacular and Sustainable Retail Site. *Clothing and Textiles Research Journal* 24: 316-334.
- ICOMOS. 1964. The Venice Charter. International charter for the conservation and restoration of monuments and sites. edited by ICOMOS. Venice.
- Jaenen, Marieke. 2008. Safeguarding the spirit of an historic interior on the basis of the 'Nara-grid'. In *16th ICOMOS General Assembly and International Symposium: 'Finding the spirit of the place - between the tangible and the intangible'*. Quebec, Canada: ICOMOS.
- Kirby, Audrey, and Tony Kent. 2010. The local icon: re-use of buildings in place marketing. *Journal of Town and City Management* 1 (1): 80-91.
- Lemmens, Bert, Nicandra Nocera, and Koenraad Van Balen. 2006. Understanding and Evaluating Authenticity using the Nara Document. In *Conservation in changing societies. Heritage and development*. Leuven: Raymond Lemaire International Centre for Conservation.
- Linters, Adriaan. 1998. Gebruiken of verbruiken. *Hergebruik van gebouwen. Kunsttijdschrift Vlaanderen* mei 1998 (3).
- Mason, Randy, ed. 1999. *Economics and Heritage Conservation*. Los Angeles: The Getty Conservation Institute.
- Overbeek, Marit. 2007. Boeken tot aan de Hemel. *de Architect* (November 2007).
- Plevoets, Bie. 2009. Retail-Reuse of Historic Buildings. Which type of buildings can be suitable for retail-reuse? And how can retail design respect the historic value of the monument?, ARSO, Katholieke Universiteit Leuven, Leuven.
- Plevoets, Bie, and K. Van Cleempoel. 2009. Retail-reuse of historic buildings: developing guidelines for designer and conservators. *WTA Schriftenreeks. Building Materials and Building Technology to Preserve the Built Heritage* 33 (1): 61-80.
- Plevoets, Bie, Ann Petermans, and Koenraad Van Cleempoel. 2012. (Re)using historic buildings as a retail differentiation strategy. Paper read at Heritage 2012, at Porto.
- Plevoets, Bie, and Koenraad Van Cleempoel. 2011. Assessing authenticity of 19th century shopping passages. *Journal of Cultural Heritage Management and Sustainable Development* 1 (2): 135-156.
- Plevoets, Bie, and Koenraad Van Cleempoel. 2012. Creating sustainable retail interiors through reuse of historic buildings. *Interiors: design, architecture, culture* 3 (3): 271-293.
- Plevoets, Bie, and Koenraad Van Cleempoel. 2013. Adaptive reuse as an emerging discipline: an historic survey. In *Reinventing architecture and interiors: a socio-political view on building adaptation*, edited by G. Cairns. London: Libri Publishers.
- Riegl, Alois. 1982 [1903]. The Modern Cult of Monuments: Its Character and Its Origin. *Oppositions* 25 (Fall 1982): 21-51.
- Rubessi, Chiara. 2010. Sustainable practice in retail design: new functions between matter and space. *IDEA Journal* 2010 Interior Ecologies: 78-79.

- Schittich, Christian. 2003. *Building in Existing Fabric - Refurbishment, Extensions, New Design, Edition Detail*. Basel Birkhäuser.
- Van Balen, Koenraad. 2008. The Nara Grid: An Evaluation Scheme Based on the Nara Document on Authenticity. *Association for Preservation Technology International (APT Bulletin) Special Issue* 39 (2/3): 39-45.
- Viollet-le-Duc, Eugène Emanuel. 1990 [1854]. *The Foundations of Architecture. Selections from the Dictionnaire raisonné*. Translated by K. Whitehead. Edited by B. Bergdoll. New York: George Braziller. Original edition, *Dictionnaire raisonné de l'architecture française du XIe au XVIe siècle*, vol. 8 (Paris: B. Bance, 1884), 14-34.