

Research paper

Collective memory as a design tool for sense of place in the adaptive reuse of vacant heritage.

The former department store V&D Leiden as case study.

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Abstract: A more inclusive perspective on heritage management regarding sustainable development becomes an important aspect in understanding and reflecting on heritage buildings or sites. The cultural significance they convey, such as attributes and values attached to them, are not only represented by physical assets, but are also reflected in people's meanings, experiences, and perceptions that derive from the interaction between an individual or collective and an (urban) artifact. The interest in the notion of sense of place in assessing cultural significance of heritage buildings grows, and participates in the identification of these inherited values and attributes, and gives direction to the reasons underlying heritage conservation. This paper aims to investigate the role of collective memory as a design tool for sense of place in the adaptive reuse of vacant heritage, using the vacant heritage building of the V&D Leiden as a case study. Furthermore, it introduces a method to explore a new type of repository, the social media platform Instagram, in which people's individual memories are shared and reflect similarities between them. The theory of Montgomery (1998) is used to connect these collective memories to the components of sense of place, defined by form, activity and meaning, in order to acknowledge and show that collective memory can be of great importance in sustaining and creating a sense of place.

Keywords: collective memory; sense of place; adaptive reuse, vacant heritage; cultural heritage; social sustainability; social media; Instagram

1. Introduction

In 2021, the International Council on Monuments and Sites (ICOMOS) has established a Policy Guidance for Heritage and Development Actors. It states that "*Heritage – cultural and natural, tangible and intangible—is an evolving resource that supports identity, memory and 'sense of place', and has a crucial role in achieving sustainable development*" (Labadi et al., 2021). This reinforces the importance of the links between heritage and the Sustainable Development Goals (SDGs), which were set up in 2015 by the United Nations, within Goal 11 on Sustainable Cities and Communities to "*protect the world's cultural and natural heritage*".

Cultural heritage contains "*all the tangible and intangible expressions of ways of living, developed by a community and passed on from generation to generation*" (Labadi et al., 2021). Besides this, cultural heritage is defined as the entire development of knowledge acquired so far. This knowledge is derived from the evolution and experience of human practices in relation to "spatial, social and cultural constructions" (Labadi

et al., 2021). Given the nature of heritage as 'a repository of knowledge', the role of heritage, as "essential driver en enabler" of **sustainable development**, since it contributes to improvements to the (social) well-being of society and its environment on a sustainable, long-term basis (Labadi et al., 2021).

Heritage conservation deals with the act of "*understanding and reflecting a heritage building and communicating its history and meaning in order to best sustain its heritage values for present and future generations*" (Labadi et al., 2021). According to De La Torre (2002), **cultural significance** of heritage is "*the importance of heritage places as determined by the aggregate of values attributed to it*". Values can be best described the reasons (why) underlying heritage conservation of attributes (what) (De La Torre, 2002). These values are constructed from the "*interaction between an artifact and its context; they don't emanate from the artifact itself. Value can only be understood with reference to social, historical and spatial contexts*" (De La Torre, 2002). These constructions are inherently linked to the understanding of identity and memory, which are significant in "creating, acknowledging and contesting heritage" (Pottgiesser et al., 2019).

An important and inherently linked aspect to the role of heritage is indicated by the notion of '**sense of place**'. In the practice of a (re-)design, sustaining and creating a sense of place has proven to be one of the main goals of (urban) design (Najifi et al, 2011). The term of place expresses the bond between people and spatial settings. As opposed to space, place contains a physical and psychological dimension, which are closely intertwined. Therefore, this directly gives an indication of its complexity. The concept of sense of place encompasses "*all meanings that people perceive and decode based on their roles, experiences, expectations and motivations*" (Najifi et al, 2011). These meanings and experiences of places, held by people, are constructed in a social and cultural context. Therefore, the notion of sense of place is a social phenomenon (Shamai, 2004), that, as addressed by Altman & Low (1992), "contributes to shaping personal and collective identity". Thus, sense of place is an important aspect in preserving and sustaining the quality of a place.

As pointed out by Hong & Chen (2017), heritage buildings "*contribute to people's sense of place, which needs a considerable period of time to establish*". This aspect is in line with the Recommendation on the Historic Urban Landscape (HUL), adopted by the General Conference of UNESCO in 2011. The HUL approach is grounded in the appreciation and identification of the complex layering and intertwining of "*natural and cultural, tangible and intangible, international and local values*" (UNESCO, 2011). The HUL approach "*moves beyond the preservation of the physical environment and focuses on the entire human environment with all of its tangible and intangible qualities*" (UNESCO, 2011). This inclusive management of heritage can contribute to a new understanding of recognizing and assessing values of our cultural heritage. Therefore, "**heritage management becomes the management of change, instead of the prevention of change**" (UNESCO, 2011). This shift in perspective is inherently linked to the character of 'adapting' heritage.

Adaptive reuse is part of a collection of linked activities of heritage conservation, which "*looks after a heritage place to retain its cultural significance*" (Labadi et al., 2021). It is the process of reusing an existing building and adapting it to suit its new purpose, which is different from its original use, while respecting its cultural significance. In relation to sustainable development, previous studies have shown that "*adaptation is gaining recognition as an effective strategy to improve the sustainability of existing buildings*" (Bullen, 2007).

As indicated by Love and Bullen (2011), the notion of 'sense of place' plays a part in adapting heritage buildings. According to them, adaptive re-use of heritage buildings "*has an impact on community well-being, sense of place, and therefore social sustainability because people feel a stronger sense of connection with their surroundings through heritage*". This sense of place can be linked to the heritage building' values, which "shape communities and identities as collective memory" (Ekim, 2017). Therefore, the legacy of these inherited values and attributes – our cultural heritage – form part of the collective memory.

The theory of Lynch, as addressed in *The Image of the City* (Lynch, 1960), explains the relationship between place and memory. According to Lynch (1960), "the city itself does not remember. It is about the interaction between an individual or collective and an (urban) artifact that supports the performance of memory". As

mentioned by Simmel (2015), places create stronger associations in memory than time due to the more tangible nature of places (Tang, 2020). A series of spatial images are forming part of people's memory and, simultaneously, spaces of the city form common places of memory of which people are part of it (Hussain, 2020). This spatial phenomenon of memory association develops a physical space into a place with significance and meaning. Therefore, these memory-based places perform as spatial structures for creating meaningful relationships between the city and its people (Hussain, 2020).

Supported by the advocacy of the Hangzhou declaration (UNESCO, 2013) on the role of heritage in *"transmitting the value and sense of place from generation to generation"*, cultural heritage can *"contribute to sustainable development through creative strategies of urban regeneration and adaptive reuse"* (UNESCO, 2013). Therefore, it can be observed that in order for a meaningful adaptive reuse of a heritage building, the social and cultural connection with the place is decisive.

The values embodied in cultural heritage, are firstly "are identified in order to assess significance", secondly "prioritize resources", and thirdly "inform conservation decision-making". According to De La Torre (2002), *"the articulation and understanding of values have acquired a greater importance when heritage decisions are being made about what to conserve, how to conserve it, where to set priorities, and how to handle conflicting interests"*. The significance of cultural heritage includes, on the one hand, tangible values, and on the other hand, intangible values. Therefore, the scope of heritage is not limited to the physical environment with historic monuments, but it includes the entire built environment related to social and cultural aspects.

This research focuses on the case study of the **Vroom & Dreesmann Leiden in the Netherlands**. After the bankruptcy of the department store chain on December 31 in 2015 (NOS, 2015), these large buildings with clear corporate identities became vacant. Many of them were designated as national monuments, such as the V&D buildings in Haarlem (monument number 513377) and Leiden (monument number 515119), even before they became vacant (Rijksdienst voor Cultureel Erfgoed, 2020). Located at the core of commercial activity in the inner historic cities, these heritage buildings are in urgent need of transformation to ensure sustainable development.

The official statement of the V&D Leiden as a national monument is established by the Rijksdienst van Cultureel Erfgoed (RCE) or Cultural Heritage Agency. In this case, mainly tangible attributes are designated to the object to access and justify its cultural significance. It can be observed that the emphasis is primarily on attributes, addressing the more traditional 'what'-question: "what is to be defined as heritage?" So, the statement only seems to acknowledge the tangible dimension of heritage, while the recognition of intangible attributes remains understudied. This case study demonstrates that in the significance assessment of cultural heritage, the social values attributed to a heritage building or its intangible dimensions, by the communities, are not always recognized and acknowledged. In relation to the redesign of heritage buildings, such as adaptive reuse, this phenomenon could limit opportunities for future development.

The research aims to contribute to a more inclusive heritage management regarding the sustainable development of vacant heritage, such as adaptive reuse. The main goal of this research is to investigate the important role of sense of place in assessing cultural significance of heritage buildings, using the V&D Leiden as a case study. The notions of collective memory and sense of place in relation to sustainable development of cultural heritage support the definition of the main research question:

"How can collective memory be used a design tool for sense of place in the adaptive reuse of vacant heritage?"

The research can provide further knowledge about the evolution of concepts in inclusive heritage management, which has been reflected in discussions and in application since the 1990s in many countries (Stubbs and Makas, 2011). Therefore, a more inclusive and holistic approach on heritage management can add to a new understanding of recognizing and assessing values of cultural heritage to broaden, extend and support opportunities of a redesign of a heritage building.

2. Method

The method described in this paper was developed in two parts. The first part of the research addressed the case study of the V&D Leiden, which included a historical analysis of the building and the assessment of the heritage statement. The second part of the research addressed the notion of sense of place, which included a literature review and content analysis of social media.

Part I - Case study of V&D Leiden

Methods: historical analysis of the case study & assessment of the heritage statement

Historical analysis of the case study

The first research stage of part I contained a historical analysis of the case study. The data included archival building plans, sections, and elevations from different time periods (1936, 1968 and 2014), architectural historical documentations of the building's surroundings (Breestraat 82, 84 and Aalmarkt 22 from Meijers (2009)) and historical photographs. This data is retrieved from the archives of the V&D, the company of ASR Real Estate (former owner of the property), and the cultural-historical center of the city of Leiden *Erfgoed Leiden en Omstreken*.

The developments over time with related building elements were indicated and important (tangible and intangible) attributes were identified using the attribute framework of Veldpaus and Pereira Roders (2014). In this framework, the tangible "what" attributes of assets, areas and landscapes and the intangible "wat" attributes, that include asset-related and social aspects of a site as well as processes of management and development, were described. This analysis was divided into the related building phases of 1936, 1968 and 2014.

Assessment of the heritage statement

The second research stage of part I contained the assessment of the heritage statement. The official statement of the RCE was used as a starting point to evaluate the current definition of the cultural significance of the case study. The documents of monument numbers 515119 and 24646, used as qualitative data sources, were retrieved from the National Register of Monuments (Rijksdienst voor het Cultureel Erfgoed, 2020). This statement of the RCE was analyzed by using content-coding to identify attributes and values attributed to it, based on the attribute framework of Veldpaus and Pereira Roders (2014) and the value framework. As defined by Pereira Roders (2007) and Tarrafa & Pereira Roders (2012), the value framework applied is based on the eight categories of cultural values and includes a range of social, economic, political, historic, aesthetical, scientific, age, and ecological values.

Part II - The notion 'sense of place'

Methods: literature review on the notion & content analysis of social media

Literature review on the notion of sense of place

The first research stage of part II contained a literature review on the notion of sense of place. This research was conducted to build the theoretical framework of the research to provide an overview of current knowledge and to identify relevant theories in relation to the notion of sense of place. The data source for this stage was the theory of John Montgomery (1998) *'Making a city: urbanity, vitality and urban design'*, in which he identifies the principles of sense of place: form, activity, and meaning. In addition, the research paper of Najafi et al., 2011, *The concept of place and sense of place in architectural studies* was used.

Content analysis of social media

The second research stage of part II contained a content analysis of social media. Regarding the main research question, both notions of sense of place and collective memory in relation to the V&D were investigated.

Background of data source of social media platform 'Instagram'

As indicated by Hondelink (2016) in his tribute to the V&D, the name of Vroom & Dreesmann and the legacy of these monuments in inner cities, will live on in the collective memory of generations of Dutchmen. Past events and experiences in relation to the V&D are stored in people's memories. This is evident from the formations of different expressions, in which people want to (digitally) share their memories of the V&D. As an illustration, several social media channels about the V&D have emerged. A Facebook group 'V&D – Vroom and Dreesmann herinneringen en nostalgie' (*V&D memories and nostalgia*) was set up a few days after the bankruptcy to look back at the past of the V&D and to retrieve memories with former employees, customers, and other interested parties. Even the engagement on the social media platform Instagram by using the hashtag #vroomendreesman began long before the downfall and remained to date.

In relation to the thesis, this research had looked into the phenomenon of digitally sharing individual memories. Social media and digital technology have "hugely reshaped interactions between people and (public) space" (Tang, 2020), and have diverse the relationship between memory and place. Therefore, this phenomenon resulted in "a new type of creating collective memory, constructed by perspectives, experiences, and memories" (Lee, 2015). Nowadays, one of the leading social media platforms is Instagram. Instagram is one of the most accessed (digital) networks, in which people connect and engage with other people through the act of sharing photos through hashtags based on a common theme or interest. Therefore, analyzing shared photos could examine the collective memory based on a common theme. So, Instagram can be seen as a repository of collective memory.

Data

The data for the content analysis consisted of a large set of qualitative data, which was collected from the social media platform 'Instagram'. The inclusion criteria for the Instagram posts were: marked with the hashtag 'vroomendreesman' (#vroomendreesman). Overall, 1.297 posts were retrieved, but only 338 posts were publicly accessible and reviewed. To conduct the analysis, a total of 338 posts were analyzed through the six steps-process developed by Braun and Clarke (2008): 1- familiarization with data, 2- coding, 3- generating themes, 4- reviewing themes, 5- defining and naming themes and 6- writing up.

Analysis

The first step consisted of the **familiarization of data**. The contents of the Instagram posts were analyzed through a visual description and a textual description. The visual description contained information about the subject matter (what can be seen in the photograph). The textual description contained information about the title, subtitle, designation, hashtags, and publication date of a post. In the second step, the key contents of the posts were identified by **coding** tangible and intangible attributes from the visual and textual description. The attribute framework of Veldpauw and Pereira Roders (2014) was used to indicate tangible and intangible attributes. The identified attributes were highlighted and underscored in the written description. The third step or **generating themes** was the merging of the first and second steps, in which corresponding and common elements about the (visual and textual) content of each post were identified and grouped into several themes. In the fourth step of **reviewing themes**, the obtained themes were redistributed to give a more accurate and clear representation of the data. In consequence, a more inclusive set of themes has been developed during the fifth step of **defining and naming themes**.

After conducting these five steps, the data was linked to the concept of sense of place, which is the main notion relating to the thesis. All the themes were reviewed, in which the knowledge from the literature review (first phase of Part II), using the model from the theory of Montgomery (1998), was connected to the attributes of the content. Tangible and intangible attributes were tagged and subdivided into the components of 'sense of place': form, activity, and meaning.

In order to compare the results, the six steps of **writing up** resulted in an overview per theme by giving a graphical representation translated into a diagram. This was substantiated by means of a summary of the most important findings of the analysis per theme.

3. Results

The result section of the thesis is divided into two parts, relating to the method of Part I - Case study of V&D Leiden and the method of Part II - The notion of 'sense of place'.

Part I - Case study of V&D Leiden

Vroom & Dreesmann as a department store chain and the building in Leiden

Historical analysis of the building phases

The Vroom & Dreesmann (V&D) was a Dutch chain of department stores. The chain was founded by the brothers-in-law Willem Vroom and Anton Dreesmann in 1887, with their first store at the Weesperstraat in Amsterdam. During its prime time, the chain had more than 70 establishments spread throughout the country and was the largest department store group in the Netherlands. On 31 December 2015, the concern of the V&D department stores was declared bankrupt.

The main goal of Part I was to understand the history of the case study of the Vroom & Dreesmann Leiden. The building has evolved over time and is a merger of several buildings located at the urban Waag-block.

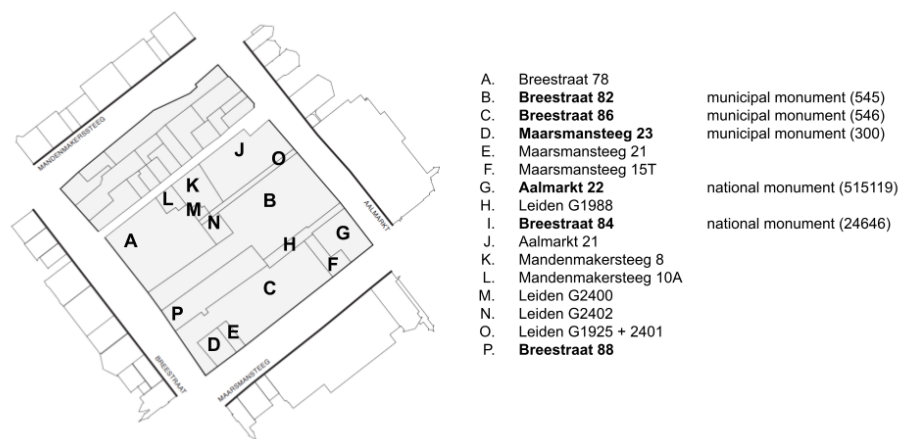


Figure 1 - An overview of the buildings and its surroundings located at the urban Waag-block. Original image retrieved from *Spatial Building Typology: Vacant Heritage: Department Stores | V&D's* (Fischer, et al, 2021).

The Vroom & Dreesmann in Leiden is located at the heart of the city center of Leiden. To be precise, the building is located at Aalmarkt 22 along the riverbank of the Rijn, in front of the Visbrug (bridge), between the two alleys of the Maarsmansteeg and the Mandenmakersteeg and the important shopping street of the Breestraat. The building, built in 1936, was designed by Leonardus (L.) van der Laan and his son Johannes Antonius (J.A.). The building is built in Traditionalism style, which is strongly inspired by the Scandinavian architecture of the time (Rijksdienst voor het Cultureel Erfgoed, 2020). The Traditionalism style is based on

traditional architecture with vernacular construction methods which were taken as a model for new builds (Architectuur.org & Van Hoek, 1998). As an illustration, the use of 'traditional' materials, like bricks and natural stone, and pitched roofs characterizes this movement. Despite new construction methods with steel and concrete, which were actually in contradiction to the ideas of the movement, these materials were obscured by other materials (Architectuur.org & Van Hoek, 1998). The facade at the Aalmarkt is a characteristic example of a facade in Traditionalism style of a relatively closed facade constructed of yellow brick with vertical openings and a sloping copper roof.

The historical research on the building phases shows **three building phases** with different attributes, which were briefly explained below: the first phase of 1936, the second phase of 1968 and the third phase of 2014.

First building phase of 1936

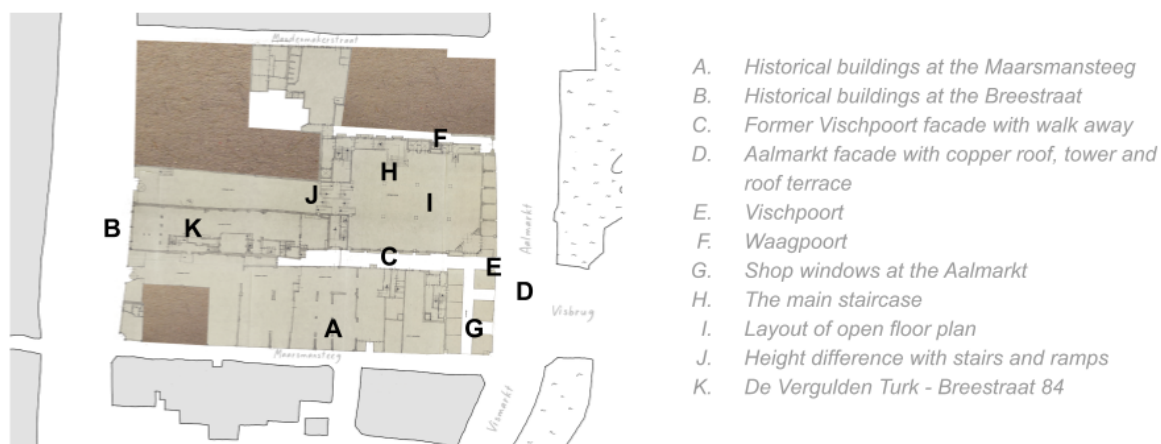


Figure 2 - Overview of the building phase of 1936. Source retrieved from author's own image in combination with archival documents from the archive of the V&D and ASR.

The first phase originated from 1936. The building elements (A to K), which were elements derived from the construction of this phase, were designated on the map. For example, the rears of the historical buildings at the *Maarsmansteeg* (A) were situated at the *Vischpoort* (E). The former *Vischpoort* and the existing *Waagpoort* (F) were important elements during the building history of the V&D Leiden. The development of the urban Waag-block and its connection to the surroundings (Aalmarkt, Maarsmansteeg, Mandenmakersteeg, and Breestraat) were based on the, still partially existing, layout of the 18th century including the historical buildings of the Breestraat, the *Vischpoort* and the *Waagpoort*. On the opposite side of the *Vischpoort* was the former *Vischpoort facade* (C) of the building which had an existing walk away on the first floor connecting the main sales area at the Aalmarkt with the different sales areas at the buildings of the *Maarsmansteeg*. This former *Vischpoort facade*, which has been absorbed into the interior over time, is an important tangible attribute, because of its influence on subsequent developments of the building.

The key elements of the architects' design were *the main staircase* (H), the *shop windows* at the Aalmarkt (G), the *Aalmarkt facade* with copper roof, tower, and roof terrace (D), the *layout* of the open floor plan with concrete columns (I), and the *height difference* with stairs and ramps (J). As well as the former *Vischpoort facade*, there were more elements absorbed into the interior over time. The shop windows at the corner of the Aalmarkt and the Maarsmansteeg, were an example of this, with the original structure of steel still present under the suspended ceiling.

Second building phase of 1968

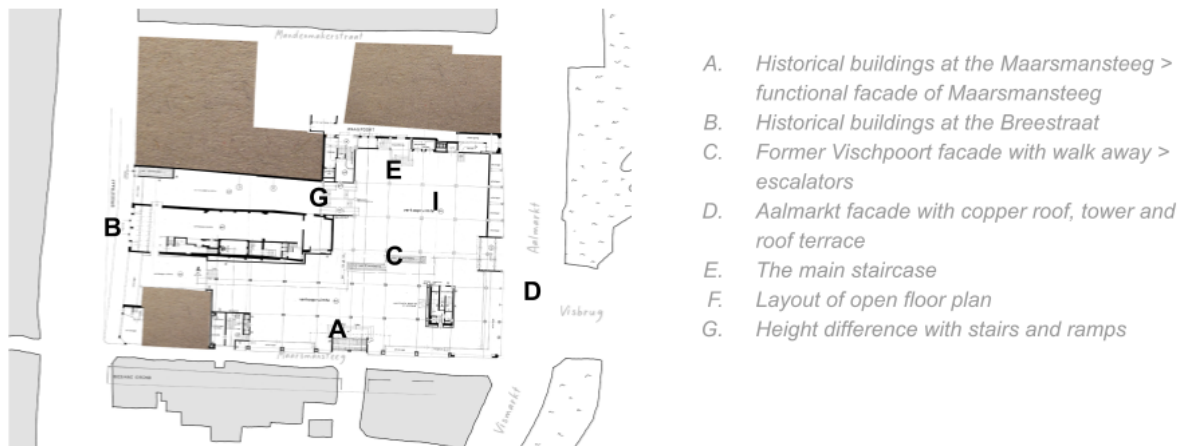
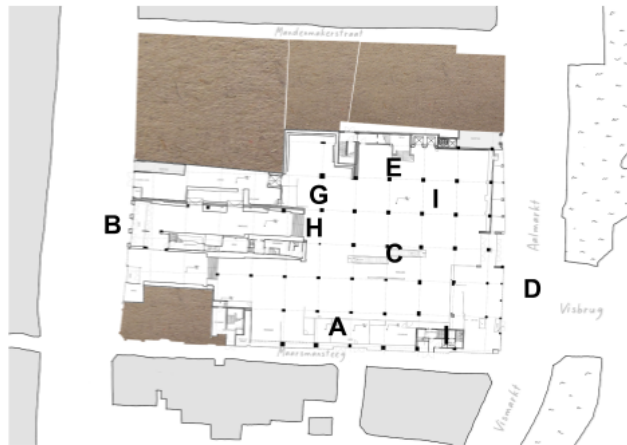


Figure 3 - Overview of the building phase of 1968. Source retrieved from author's own image in combination with archival documents from the archive of the V&D and ASR.

The second phase originated from 1968, in which the building is connected to the existing historical buildings of the Bredestraat (B), whereby the former Vischpoort is demolished and in which the facades of the Bredestraat were left intact. The escalators were placed at the former site of the Vischpoort facade (C). Also in this phase, the existing envelope of the urban Waag-block is created by the three main facades of the existing V&D building: the historical buildings at the Bredestraat (B), the functional facade of the Maarsmansteeg (A), and the Aalmarkt facade (D). For the historical buildings at the Bredestraat, a visual analysis of the building history of the Bredestraat was made to investigate the developments over time. "The Vergulden Turk", designated as a national monument (Bredestraat 84), has been more extensively researched to discover attributes and values attached to them. For example, the grid division of the parcels contains historic and age value, due to its intact existing historical setting which dates back to the 13th and 17th centuries. The origin of the building (1673) contains historic and aesthetic values, due to its reference to the Dutch Classicism Style and Jugendstil interior elements (stairs and decorated ceilings). The restoration of the historical situation with the pilastrade and block division contains historic and aesthetic values. See Appendix I for a more in-depth overview of this research. Furthermore, the historical buildings at the Maarsmansteeg were demolished in order to create more sales area. In the new structure at the Maarsmansteeg, the 'open floor plan' lay-out of the Aalmarkt with grid size of 7.2m X 7.2m is extended to overcome the connection between the old 1936- and the new 1968-structure. In this way, customers internally did not perceive the merging of the two parts. However, sections of these two structures indicate incoherent construction solutions. A new functional facade at the Maarsmansteeg is constructed in a horizontal layout with brick and narrow windows to reduce too much direct daylight. In addition, the monumental facade of the Aalmarkt is investigated during the second part of the research of assessing the heritage statement. These results (mainly historic and aesthetic values) can be found in this section.

Third building phase of 2014

The **third phase** originated from **2014**. The height difference with stairs and ramps between the Bredestraat and the Aalmarkt was demolished. The blueprint of this building element has become, together with some space at the Waagpoort, additional floor space serving as sales area. Therefore, a part of the facade on the 3th and 4th floor was enclosed in the interior of the building. Also, the partition between the Aalmarkt and Bredestraat 84 (the Vergulden Turk) was demolished and became additional floor space. At last, the emergency stairwell (I) is moved a little further to the facade line of the Maarsmansteeg in order to create a more open interior.



- A. Functional facade of Maarsmansteeg
- B. Historical buildings at the Breestraat
- C. Escalators
- D. Aalmarkt facade with copper roof, tower and roof terrace
- E. The main staircase
- F. Layout of open floor plan
- G. Height difference with stairs and ramps > additional sales area
- H. Partition between Aalmarkt and Breestraat 84
- I. Emergency stairwell

Figure 4 - Overview of the building phase of 2014. Source retrieved from author's own image in combination with archival documents from the archive of the V&D and ASR.

Assessment on heritage statement

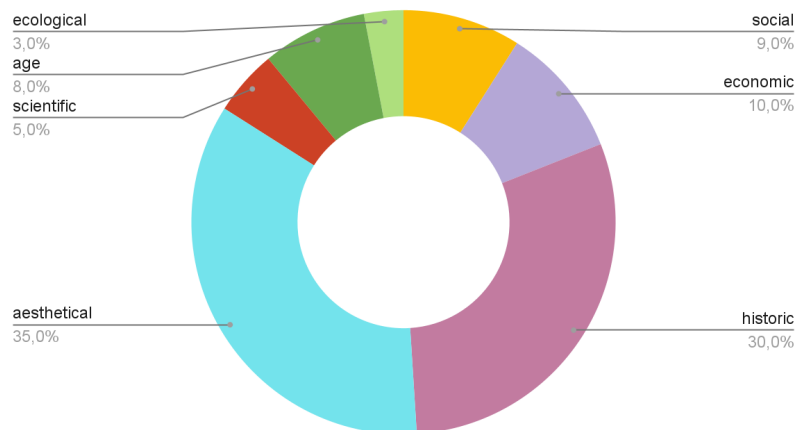
Vroom & Dreesmann Leiden as national heritage

In April 29, 1975, the building "In den Vergulden Turk" was designated and listed as a national monument, registered under number 24646. The location of monument 24646 is defined by the address of Breestraat 84. This address also forms part of the Vroom & Dreesmann building in Leiden of 1936. The building type is originally categorized as a residential housing complex with a work-living function.

In October 9, 2000, the V&D Leiden was designated and listed as a national monument by the Cultural Heritage Agency (RCE), registered under number 515119. The location of monument 515119 is defined by multiple addresses of Aalmarkt 22 (as main address) and Breestraat 82 through 88. The building type is originally categorized as a commercial building, storage, and transportation building.

Analysis of RCE statement

Figure 5 - Results from value assessment of RCE statement of V&D Leiden



After analyzing the RCE statement of 515119, a total number of 72 attributes were identified, including 60 tangible ones and 11 intangible ones, 1 both. The values attributed to it were established from the context of the statement. This resulted in a total of 113 identified cultural values, which were based on the eight categories of the value framework of Pereira Roders (2007) and Tarrafa & Pereira Roders (2012), which were represented in Figure 5.

In general and in conclusion, the RCE statement of the cultural significance of 515119, and designation of the (former) department store as a national monument, was supported by the description of physical, mainly tangible, architectural(-historical) attributes of the object. The values attributed to it were primarily aesthetic,

historic and age values. The intact original (age value) facade of the Aalmarkt contains aesthetic values, such as the style of building (Traditionalism style) with characteristic building elements: the 'risalerende' tower and materials (sandstone framing of windows with concave lisen, sandstone bands, and yellow brick). The 'Empire'-windows (scientific value) are of historical value, because of its nature of a 19th-century six-row rod distribution. The original wooden frames of the shop windows are of historical value. The economic values, embedded in the former program of the building (shop windows, display islands, offices, service areas and -entrances), can be explained by the former function of a department store.



Figure 6 - Result of Part I Case study of V&D Leiden. A visual overview of the indicated tangible and intangible attributes reflected on the facade of the Aalmarkt. These numbers and letters referred to Tables 1 and 2.

Furthermore, the intact monumental stairwell is defined by the white-black marble paneling, tiled column, linoleum on floor and steps, wooden railings on bronze supports, and stained glass (figurative and abstract, rectangular and round stained glass windows). These building elements of the stairwell contain both aesthetic and historical values. As a final point, the assessment on the more community-related values, such as social and political, showed that these were a minority.

An overview of tangible and intangible attributes of the case study

The results of the first part of the research, including the historical analysis and the assessment on the heritage statement, provided a general overview of the case study of the V&D building Leiden including the identified tangible and intangible attributes attached to it. These findings were represented in two tables (Tables 1 & 2) based on the attribute framework of Veldpaus and Pereira Roders (2014). The majority of the attributes identified were tangible ones, mainly components of *assets* such as building, building and urban elements. A few were also components of *area*, such as ensemble and context. The section of the intangible attributes was outnumbered. Here too, the asset-related ones were the majority, which were often "related to, or represented by, a tangible heritage asset" (Veldpaus and Pereira Roders, 2014).

Asset	Building element	
		1-copper pitched roof, 2-facade of Aalmarkt, 3.facade of Vischpoort, 4-yellow brick, 5-natural stone, 6-sandstone bands, 7-parcels*, 8-main staircase with white-black marble paneling, 9-tiled column, 10-linoleum on floor steps, 11-wooden railings on bronze supports, 12-stained glass, 13-(wooden frames) of shop windows of Aalmarkt with 14-existing steel structure, 15-tower, 16-roof terrace, 17-lay-out of open floor plan with concrete columns, 18-height difference with stairs and ramps, 19-escalators, 20-facade of Maarsmansteeg (horizontal layout with brick and narrow windows), 21-entrance portals with round arches of

		Vergulden Turk, 22-pilastrade and block division of Vergulden Turk facade, 23-Jugendstil stairs and decorated ceilings at Vergulden Turk, 24-facades of Breestraat, 25-Empire-windows, 26-former display islands, 27-five building layers
	Building	28-V&D building, 29-buildings at Breestraat 82 to 88 with Vergulden Turk at Breestraat 84, 30-former buildings at Maarsmansteeg
	Urban element	31-alleys of Maarsmansteeg and 32-Mandenmakersteeg, 33-Visbrug (bridge), 34-Vischpoort (gate), 35-Waagpoort (gate), 36-walk away on first floor
	Natural element	37-riverbank of the Rijn
Area	Ensemble	38-Waag-block
	Context or setting	streets of 31-Maarsmansteeg, 32-Mandemakersteeg, 39-Breestraat, Aalmarkt, Visbrug
	Area	heart of Leiden' city center
Landscape	Layers	40-18th-century layout of urban block
	Everything	n/a
*) parcels of 2393, 1987, 1928 2392 1988, 1926, 1559, 1986 and 1925		

Table 1 - Result of Part I Case study of V&D Leiden. Matrix describing the **tangible** "what" attributes of assets, areas, and landscapes (Veldpaus and Pereira Roders, 2014).

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Asset related	Concept or artistic trend	a-Traditionalism Style of V&D building, Scandinavian Style of V&D building, b-Dutch Classicism Style of Vergulden Turk, c-Jugendstil interior elements of Vergulden Turk, d-origin of Vergulden Turk (1673), e-Empire-windows
	Relation context-location	f-grid division of parcels at Breestraat
	Character	g-open floor lay-out
Societal	Use, function	department store, h-sales area, i-former cafe-restaurant of Vergulden Turk, j-residential housing complex of Vergulden Turk with work-living function, k-commercial, l-storage, m-transportation, offices, n-service areas and -entrances, retail
	Knowledge, traditions, customs	n/a
	Relation context-association	public interest, iconic urban location in city center
	Community / people	0-spells about community in relation to department store (V&D as a place for the entire family)
Process	Management processes	n/a
	Development or evolution	p-building phases/evolution of 1936, 1968, 2014, development Waag-block, blueprint of building

Table 2 - Result of Part I Case study of V&D Leiden. Matrix describing the *intangible* “what” attributes that include asset-related and societal aspects of the site as well as processes of management and development. (Veldpaus and Pereira Roders)

In relation to the thesis, the V&D building in Leiden is used as a case study to investigate the notion of collective memory as a design tool for sense of place in the adaptive reuse of vacant heritage. For the purpose of this design aspect, these metrics with identified attributes and values attached (Tables 1 & 2) were translated into a visual overview to actually indicate them using the architectural language of floor plans and elevations drawings (Figures 6 & 7).



Figure 7 - Result of Part I Case study of V&D Leiden. A visual overview of the indicated tangible and intangible attributes reflected on the ground floor of the building. These numbers and letters referred to Tables 1 & 2.

Part II - The notion of sense of place

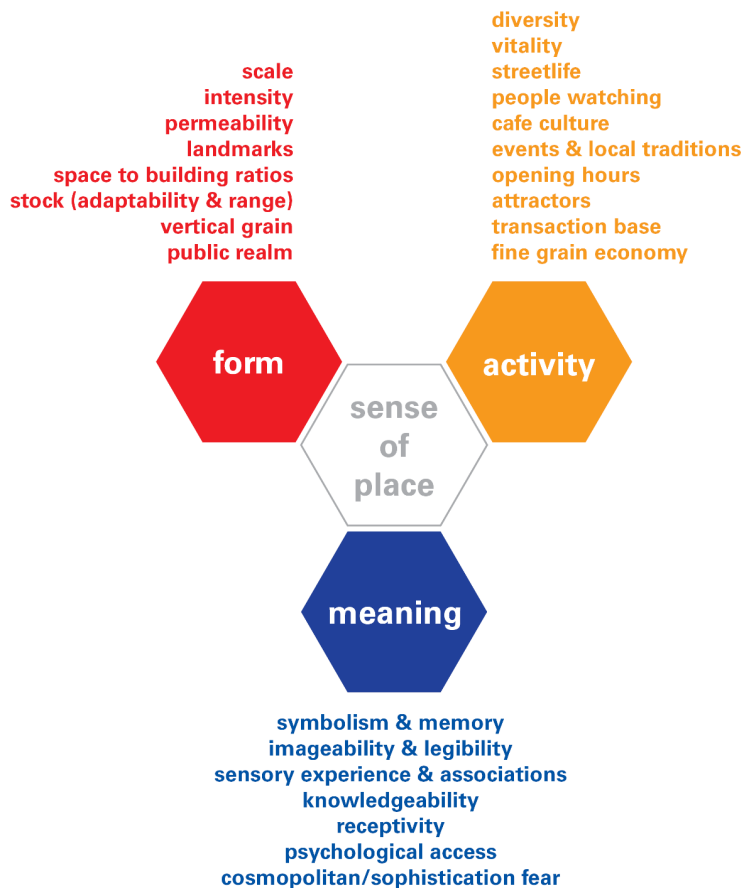
Vroom & Dreesmann for the community

Literature review of sense of place

In relation to the thesis, it is important to investigate the notion of sense of place, because in the practice of a (re-)design, creating a sense of place has proven to be “one of the main goals of urban design”, because a sense of place establishes a stronger relationship between people and place (Najafi et al., 2011). As she pointed out, people “hold certain beliefs or memories about a place, and act certain ways in places, besides the feelings that people have about a place. [...] People’s past experiences, backgrounds, memories, personality, knowledge, culture, attitude, motivations, beliefs, age, and gender influence the perceived sense of place’.

A relevant academic model on the notion was presented by John Montgomery (1998) in the Journal of Urban Design, in which he wrote the article named ‘Making a city: Urbanity, Vitality and Urban Design’. He

described the entry of the notion in the field of urban design, in which the importance of “generating and protecting” the sense of place is relevant in a “holistic approach to urban planning, development and management”. He introduced a “composite derived model” of the principles of sense of place: **form**, **activity**, **meaning**.



The first principle of **form** is about the emphasis on physicality, in which physical components of the building and urban form are important.

The second component of **activity** is about the related concepts of vitality and diversity. Vitality “refers to the numbers of people in and around the street (pedestrian flows) across different times of the day and night, the uptake of facilities, the number of cultural events and celebrations over the year, the presence of an active street life, and generally the extent to which a place feels alive or lively” (Montgomery, 1998). The vitality of a place can only be obtained by a “complex diversity of land uses and activity”.


The third component of **meaning** is about “the combination of the identity of a place with how a place is perceived”. People’s feelings “come from a filtering of information received and collected about a place, which is partly based on individual and cultural values, beliefs and ideas”. It is important to understand the relationship between the three components, where “image and meaning derive, in no small part, the activity one finds there, and the built form.

Figure 8 - Three components of sense of place (retrieved from Montgomery, 1998)

Content analysis of social media

The results of the content analysis were structured in the six steps-process developed by Braun and Clarke (2008): 1- familiarization with data, 2- coding, 3- generating themes, 4- reviewing themes, 5- defining and naming themes and 6- writing up.

The **first step of the familiarization of data** began with a general perspective through the collected data of 338 Instagram posts with the hashtag #vroomendreesman. As a result of this step, a visual and textual description of the content of every post was written to get familiar with the collected data. These written descriptions were given answers to questions such as: *What can be seen on this post?*, *What does the creator tell you about this post?*, *What kind of interaction or engagement does this post provoke to other people?*



Post 91_T7_EMP_22

visual description:

- Empty open floor plan with escalators of V&D

textual description:

- V&D Alkmaar
- once it was the cozy/gezellige workspace of my mother
- This is what's left of it
- V&D buildings
- department stores
- Are you being served?
- came by, visiting (memory)

Figure 9 - Example of one of the results of the first step of the familiarization of data - a visual and textual description of the content of the post. And the results of the second step of the coding - an overview of the attributes attached to the (visual and textual) content of the post.

The **second step of coding** resulted in the identification of tangible and intangible attributes within the written description. The attribute framework of Veldpaus and Pereira Roders (2014) was used to indicate tangible and intangible attributes. The first and second step was applied to the collected data of 388 posts, and a total of 999 attributes were identified. In Figure 9, an example of one of the results of the first and second step is illustrated. The combination of the two steps has led to the third step of *generating themes*, in which common elements about the (visual and textual) content of each post were identified. The result of this third step was an overview of fifty themes, which was shown in Table 3.

1 LA PLACE - FOOD & DRINKS	11 LASTEST PURCHASES AT V&D	21 COLLECTORS ITEMS VINTAGE	31 STREETScape	41 EINDHOVEN V&D
2 STAFF MEMBERS / COLLEAGUES	12 SHOPPING BAGS OF V&D	22 TAGS	32 ROTTERDAM V&D	42 AMSTERDAM NOORD V&D
3 ACT OF SHOPPING	13 ERASER OF V&D	23 BIMBO BOX	33 HAARLEM V&D	43 ARNHEM V&D
4 BARGAINS AT V&D	14 STAPLES OF V&D	24 ADVERTISEMENT	34 ALKMAAR V&D	44 MAASTRICHT V&D
5 STATEMENT ON SHOP WINDOW	15 THUMB TACKS OF V&D	25 SUGAR SACHET	35 DEN BOSCH V&D	45 HISTORICAL PHOTOGRAPHS
6 FINAL SALE	16 HABERDASHERY OF V&D	26 V&D LOGO	36 LEIDEN V&D	46 BUILDING ELEMENTS
7 EMPTY STORE	17 UTENSILS OF V&D	27 VIEW	37 DORDRECHT V&D	47 STAINED GLASS
8 QUOTES IN STORE	18 DISCOFOON	28 NIGHT	38 DEN HELDER V&D	48 STAIRCASE
9 MEMOIRS	19 DISCOBAR	29 INTERIORS OF THE PAST	39 DEN HAAG V&D	49 ESCALATORS
10 MANNEQUINS	20 VINYL AT V&D	30 PEOPLE IN FRONT OF STORE	40 DEVENTER V&D	50 CARDS OF V&D

Table 3 - Result of the third step of generating themes. An overview of the fifty themes.

The fourth step of *reviewing themes* encompassed the redistribution of the fifty themes to give a more accurate and clear representation of the data. In consequence, an overview of five themes has been set, which was the result of step five *defining and naming themes*.

THEME 1	THEME 2	THEME 3	THEME 4	THEME 5
V&D BUILDINGS IN DUTCH CITIES	BUILDING CONTEXT	URBAN CONTEXT	DEPARTMENT STORE OF V&D	MEMENTO OF V&D
67 POSTS 230 attributes	30 POSTS 106 attributes	33 POSTS 54 attributes	156 POSTS 363 attributes	120 POSTS 246 attributes
23%	11%	5%	36%	25%

Table 4 - Result of the fourth step of reviewing themes. An overview of the five themes.

In relation to the thesis, the fifty themes were reviewed using the knowledge from the literature review on the notion of sense of place using the model from the theory of Montgomery (1998). Therefore, the retrieved attributes of the second step *coding* were subdivided into the components of sense of place: form, activity, and meaning. In Figure 10, an example of one of the results of this step is illustrated.

FORM - Tangible attributes were categorized in this component, such as: *city center, stained glass, building, surroundings (like street names), facade, shop window, rooftop, open floor plan, urban, ground floor, and more*. Intangible attributes, which were listed in the same category, were for example *relaxed setting (atmosphere /association), heart of the city, Art Deco Style, Art Nouveau Style, traditional streetscape, progressive building, citylife, etc.*

ACTIVITY - Tangible attributes were identified, such as: *La Place, long line of people or shopping area*. However, the majority consisted of intangible attributes, such as: *department store (use/function), shopping, reading, gathering, enjoying, streetlife, restaurant, cafe, Prijzencircus, Schoolcampus, working at V&D, shop-in-shop, empty, Sinterklaas, etc.*

MEANING - Tangible attributes in this component were: *collector's item, cultural heritage, monument, historical buildings, archive or typography (graphic design)*. Also in this component, the intangible ones were leading. For example, *glory days, memory (lane), time periods (like 70s, 1930), nostalgia, Dutch commercial spirit, childhood sentiment, end of an era, V&D empire, etc.*

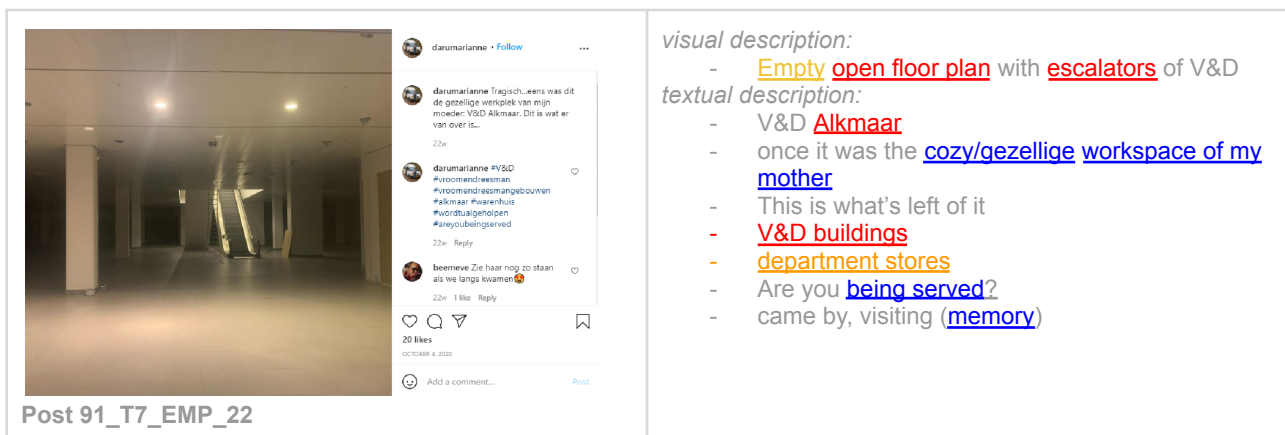


Figure 10 - Example of one of the results in relation to the theory of Montgomery (1998).

To conclude, the findings of the five themes were summarized in five tables (Table 5 to 10), in which each theme is briefly explained by the components of sense of place in relation to the theory of Montgomery (1998).

The notion of sense of place in relation to the theme *V&D Buildings in Dutch Cities*

	FORM	ACTIVITY	MEANING
<p>THEME 1 V&D BUILDINGS IN DUTCH CITIES</p> <p>form - 49.1% activity - 13% meaning - 37.6%</p> <p>32 ROTTERDAM V&D - 9 POSTS</p> <p>33 HAARLEM V&D - 15 POSTS</p> <p>34 ALKMAAR V&D - 14 POSTS</p> <p>35 DEN BOSCH V&D - 8 POSTS</p> <p>36 LEIDEN V&D - 6 POSTS</p> <p>37 DORDRECHT V&D - 3 POSTS</p> <p>38 DEN HELDER V&D - 1 POST</p> <p>39 DEN HAAG V&D - 3 POSTS</p> <p>40 DEVENTER V&D - 3 POST</p> <p>41 EINDHOVEN V&D - 2 POST</p> <p>42 A'DAM NOORD V&D - 1 POST</p> <p>43 ARNHEM V&D - 1 POST</p> <p>44 MAASTRICHT V&D - 1 POST</p> <p>67 POSTS - 230 attributes</p>	<p>scale - 6 Netherlands - 6</p> <p>intensity - 5 urban - 1 city life - 3 heart of center - 1</p> <p>permeability - 0</p> <p>landmarks - 77 surroundings - 33 architecture - 21 building - 12 <i>eclectic (1), classic (1), most stately (2), big (1), historical (1)</i> building elements - 7 <i>stained glass (2), facade(1), escalators (1), brick (1), glass (1), copper roof (1), terrace (1)</i> V&D buildings - 4</p> <p>space to building ratios - 2 streets - 1 streetscape - 1</p> <p>stock (adaptability&range) - 2 adaptation - 2 <i>extensions (1), renovation (1)</i></p> <p>vertical grain - 2 beautiful view - 1 skyscraper - 1</p> <p>public realm - 19 city center - 19</p>	<p>diversity - 1 reuse 1</p> <p>vitality - 4 empty - 4 <i>streets (1)</i></p> <p>streetlife - 2 shopping- 2</p> <p>people watching - 0</p> <p>cafe culture - 2 restaurant - 2</p> <p>events & local traditions - 1 Christmas - 1</p> <p>opening hours - 0</p> <p>attractors - 16 department store / warehouse / shop - 14 shopping center/street - 2</p> <p>transaction base (flow) - 4 traffic - 3 <i>metro (2), tram (1)</i> walking laps - 1</p> <p>fine grain economy - 0</p>	<p>symbolism& memory - 7 memory/-ies - 3 glory days - 1 (good) old times - 2 collectors item - 1</p> <p>imageability - 50 bankruptcy - 6 <i>demise (1)</i> building style - 10 Art Deco (5), N. Zakelijkheid (1), A'dam School (2), Expressionism, interwar modernism (1), Art Nouveau (1) (corporate) architect - 11x <i>Jan Kuijt (6), G.W.J. Caron (3), Van der Laan (2)</i> time periods - 13 <i>1900 (1), 20s (2), 30s (1), 60s (3), 70s(2), 80s (1), 90s (1), 2015 (2)</i> monument(al) - 7 <i>national (2), building (2), heritage (1)</i> a concept for many people - 2 V&d empire - 1</p> <p>legibility - 5 icon(ic) - 5 <i>warehouse (1), building (1), of shopping city (1)</i></p> <p>sensory experience & associations - 19 nostalgia - 6 sad - 4 atmosphere - 1 missing - 2 good-bye - 2 history 2 most striking building - 2</p> <p>knowledgeability - 0</p> <p>receptivity - 3 Dutch - 3x <i>department store (2), design (1)</i></p> <p>psychological access - 3 next generation - 1 job - 2 <i>first (1), staff (2)</i></p> <p>cosmopolitan/sophistication fear - 0</p>
	113	30	87

Table 5 - Results of Theme 1 - V&D buildings in Dutch Cities reflecting the components of sense of place.

An overview of the results of Theme 1 were provided in Table 5, in which the components of sense of place were linked to the content of the posts. In short, the majority of attributes were represented by the component of form, in which the aspects of **landmarks** and the **public realm** have contributed the largest share. People appeared to link the place, the different stores of the V&D in Dutch cities, to its surroundings. For example, people named specific street names, squares or urban elements. This can be explained by the

theory of Lynch (1960) in which “nothing is experienced by itself, but it is always in relation to its surroundings and sequence of events leading up to it, the memory of past experiences” (Montgomery, 1998). This phenomenon is strongly connected to the other component of meaning. People’s knowledge of a city is, according to Lynch (1960, 1981), “a function of the **imageability** of the urban environment. In turn, **imageability** is influenced by a city’s **legibility**: the degree to which the different elements of the city (defined as paths, edges, districts, nodes, and landmarks) are organized into a coherent and recognizable pattern.” (Montgomery, 1998). This research has shown that these paths proved to be indeed of great significance to foster and sustain a sense of place. Furthermore, the aspects of **imageability** (such as architectural styles, architects and time periods) were primarily represented. These findings regarding architectural styles have been underpinned by Montgomery’s (1998) last physical condition for making a city, in which he explained that architectural styles “convey meaning, shape identity and create image”. According to him (Montgomery, 1998), “good cities have always been places which personify or at least display strong elements of culture, technology, engineering, innovation, civilization and cosmopolitanism.” These images of styles and time periods are too associated with people’ memories, experiences and perceptions.

The notion of sense of place in relation to theme **Building context**

	FORM	ACTIVITY	MEANING
<p>THEME 2 BUILDING CONTEXT</p> <p>form - 52.8% activity - 17% meaning - 30.2%</p> <p>46 BUILDING ELEMENTS - 6 POSTS</p> <p>47 STAINED GLASS - 15 POSTS</p> <p>48 STAIRCASE - 4 POSTS</p> <p>49 ESCALATORS - 5 POSTS</p> <p>30 POSTS - 106 attributes</p>	<p>scale - 9 Netherlands - 8 city - 1</p> <p>intensity - 5 urban - 4 urban exploration (1) city life - 1</p> <p>permeability - 0</p> <p>landmarks - 35 surroundings - 4 architecture - 4 building - 2 historical (1) building elements - 22 stone (1), statue (1), glass (1), skylight/lightdome(2), escalator (2), geometry, colors (2), stained glass (7), window (1), light (1), interior (1), stairs (2), marble (1) V&D buildings - 3</p> <p>space to building ratios - 2 streets - 2</p> <p>stock (adaptability&range) - 0</p> <p>vertical grain - 0</p> <p>public realm - 5 city center - 5</p>	<p>diversity - 1 gathering - 1</p> <p>vitality - 1 busy - 1</p> <p>streetlife - 2 shopping - 2</p> <p>people watching - 0</p> <p>cafe culture - 1 restaurant - 1 La Place (1)</p> <p>events & local traditions - 0</p> <p>opening hours - 0</p> <p>attractors - 13 department store / warehouse / shop - 12 market - 1</p> <p>transaction base (flow) - 0</p> <p>fine grain economy - 0</p>	<p>symbolism& memory - 1 memory/-ies - 1 childhood (1)</p> <p>imageability- 16 bankruptcy - 2 the end (1) V&D era - 1 end of era (1) building style - 5 Art Deco (3), A'dam School (2) (corporate) architect - 5 Jan Kuijt (4), G.W.J. Caron (1) time periods - 1 20s (1) monument(al) - 2 heritage (2)</p> <p>legibility - 4 icon(ic) - 4</p> <p>sensory experience & associations - 8 nostalgia - 3 beautiful - 4 stained glass (1) art - 1</p> <p>knowledgeability - 1</p> <p>receptivity - 1 Dutch - 1x department store (1)</p> <p>psychological access - 1 reimagination of stores - 1</p> <p>cosmopolitan/sophistication fear - 0</p>
	56	18	32

Table 6 - Results of Theme 2 - Building Context reflecting the components of sense of place.

Theme 2 has shown a large percentage reflecting both the form- component (52.8%) and the meaning-component (30.2%). Since physicality is the foundation of the form-component, these tangible attributes of, for example, **building elements** are predicted indicators that create a sense of place. People

seemed to connect physical attributes of the appearance of a place, which defines the identity of a place, to their perceptions and associations of that place, which define the image of the place. The **sensory associations** with the place seemed to be heightened and activated the aesthetic stimulus to perceive the space as beautiful. In some cases, these intangible attributes were related to, or represented by, a tangible heritage asset, such as 'stained glass'.

The notion of sense of place in relation to theme *Urban context*

	FORM	ACTIVITY	MEANING
<p>THEME 3 URBAN CONTEXT</p> <p>form - 56.1% activity - 14% meaning - 29.8%</p> <p>27 VIEW - 19 POSTS</p> <p>28 NIGHT - 4 POSTS</p> <p>31 STREETSCAPE - 10 POSTS</p> <p>33 POSTS - 54 attributes</p>	<p><u>Scale - 2</u> Netherlands - 1 city - 1</p> <p><u>intensity - 1</u> heart of center - 1</p> <p><u>permeability - 1</u> entrance at square - 1</p> <p><u>landmarks - 16</u> surroundings - 10 building - 2 building elements - 2 <i>stained glass (1), windows (1),</i> new built - 1 street view - 1</p> <p><u>space to building ratios - 0</u></p> <p><u>stock (adaptability&range) - 0</u></p> <p><u>vertical grain - 5</u> view - 2 <i>panoremic (2)</i> rooftop - 3</p> <p><u>public realm - 7</u> city center - 7</p>	<p><u>diversity - 0</u></p> <p><u>vitality - 1</u> vacancy - 1</p> <p><u>streetlife - 2</u> shopping - 2</p> <p><u>people watching - 0</u></p> <p><u>cafe culture - 2</u> restaurant - 2 <i>La Place (2)</i></p> <p><u>events & local traditions - 1</u> Saturday market - 1</p> <p><u>opening hours - 0</u></p> <p><u>attractors - 2</u> department store / warehouse / shop - 2</p> <p><u>transaction base (flow) - 0</u></p> <p><u>fine grain economy - 0</u></p>	<p><u>symbolism& memory - 3</u> memory/-ies - 1 glory days - 1 archive - 1</p> <p><u>imageability - 9</u> bankruptcy - 1 building style - 3 <i>Art Deco (1), A'dam School (2)</i> time periods - 4 <i>30s (1), 50s (1), 80s (1), 90s(1)</i> monument(al) - 1</p> <p><u>legibility - 0</u></p> <p><u>sensory experience & associations - 5</u> beautiful - 3 <i>building (1), city (1), people (1)</i> history - 2</p> <p><u>knowledgeability - 0</u></p> <p><u>receptivity - 0</u></p> <p><u>psychological access - 0</u></p> <p><u>cosmopolitan/sophistication fear - 0</u></p>
	32	8	17

Table 7 - Results of Theme 3 - Urban context reflecting the components of sense of place.

The urban context of places suggested a description of the “*general situation of built and natural features, as well as social, economic and environmental factors, that are related to a place, and which helps to be understood.*” (HarperCollins Publishers, 2021). People seemed to appoint these features, such as the surroundings of a place, like street names and squares. According to Montgomery (1998), streets “*are undoubtedly the most important elements in a city’s public realm, the network of spaces and corners where the public are free to go, to meet and gather, and simply to watch one another.*” Besides, activities such as a weekly Saturday market (an attribute identified) provided the “dynamic quality of urban places”, and generated a more active public realm. Despite the fact that the notion of the public realm is deeply connected to these public activities, the result of a low rate (14%) of activity-related aspects stood out.

The notion of sense of place in relation to theme *Department store of V&D*

	FORM	ACTIVITY	MEANING
<p>THEME 4 DEPARTMENT STORE OF V&D</p> <p>form - 22.3% activity - 28.1% meaning - 49.6%</p> <p>1 LA PLACE - FOOD & DRINKS -15 POSTS</p> <p>2 STAFF MEMBERS / COLLEAGUES - 13 POSTS</p> <p>3 ACT OF SHOPPING - 3 POSTS</p> <p>5 STATEMENT ON SHOP WINDOW -15 POSTS</p> <p>6 FINAL SALE - 19 POSTS</p> <p>7 EMPTY STORE - 22 POSTS</p> <p>8 QUOTES IN STORE - 5 POSTS</p> <p>10 MANNEQUINS - 46 POSTS</p> <p>29 INTERIORS OF THE PAST - 10 POSTS</p> <p>30 PEOPLE IN FRONT OF STORE - 8 POSTS</p>	<p>scale -27 surroundings - 23 Netherlands - 4</p> <p>intensity - 2 urban - 1 relaxed setting - 1</p> <p>permeability - 1 open floor plan - 1</p> <p>landmarks - 38 architecture - 1 building - 2 <i>progressive (1), big (1)</i> building elements - 32 <i>outdoor terrace (1), shop window (17), interior (4), dressing room (1), kassa (1), escalator (5), ground floor (1), display (1), electric lighting (1)</i> V&D buildings - 1 traditional streetscape - 1</p> <p>space to building ratios - 0</p> <p>stock (adaptability&range) - 0</p> <p>vertical grain - 2 view - 1 rooftop - 1</p> <p>public realm - 11 city center - 11</p>	<p>diversity - 6 gathering (meeting up) - 2 enjoying with friends - 1 reading - 1 celebrating - 1 fitting - 1</p> <p>vitality - 17 empty - 15 abandoned - 1 crowd in front of store - 1</p> <p>streetlife - 13 shopping- 12 streetlife - 1</p> <p>people watching - 1 street photography - 1</p> <p>cafe culture - 15 restaurant - 10 <i>La Place (6), cafe (2)</i> lunch - 1 eating - 2 having drinks after shopping - 2</p> <p>events & local traditions - 8 Prijzencircus - 3 Schoolcampus - 1 Sinterklaas - 2 Saturdays - 1 holidays - 1</p> <p>opening hours - 0</p> <p>attractors - 28 department store / ware house / shop - 24 shopping area - 1 retail - 2 looking at shop windows - 1</p> <p>transaction base (flow) - 5 walking around - 1 customers - 2 long line of people - 2</p> <p>fine grain economy - 9 shop-in-shop - 9</p>	<p>symbolism memory - 24 memory/-ies - 5 <i>old (1), good (1), sweet (1)</i> glory days - 1 (good) old times - 5 <i>back in the days (1)</i> last time - 7 archive - 4 vintage - 1 ritual - 1 <i>of purchasing (1)</i></p> <p>imageability - 59 bankruptcy - 31 <i>crisis (2), vacancy (1), suffering and death story (1), RIP (3), decay (1)</i> time periods - 7 <i>30s (1), 40s (1), 50s (1), 60s (2), 90s (1), zeitgeits 70s (1)</i> V&d era - 9 <i>end of era (9)</i> a service minded mentality - 1 service - 2 lively - 1 messy - 6 inspire and surprise you - 1 culture - 1</p> <p>legibility - 0</p> <p>sensory experience & associations- 78 nostalgia - 11 sad - 16 sentiment - 1 missing - 8 <i>toilets, sausage roll, make-up, woman, escalator</i> good-bye - 8 history - 14 <i>the past (5)</i> relaxed setting - 1 yummy, fresh, 100% natural, home-made, healthy food - 1 a shame - 2 fun - 3 free - 2 gezellig - 2 busy - 3 sign of times - 1 misery - 1 beloved department store - 3 beautiful - 1</p> <p>knowledgeability - 1 supporting V&D - 1</p> <p>receptivity - 4 Dutch - 4 <i>glory (1), department store (2), people (1)</i></p> <p>psychological access - 10 (next) generation - 1 job - 6 <i>staff member (2), unemployment (1), colleagues (1), of mother (1), for 10.000 people (1) working at V&D (1)</i> personal and career growth - 1 friends&family - 1</p> <p>cosmopolitan/soph. fear - 0</p>
156 POSTS - 363 attributes	81	102	180

Table 8 - Results of Theme 4 - Departement store of V&D reflecting the components of sense of place.

Theme 4 represented the societal aspect of the former use of these places (department stores of the V&D), in which past experiences or events took place. The acts of shopping, fitting, gathering, enjoying and eating were intangible attributes that indicated the **vitality** and **diversity** of these places. These were often related to tangible attributes, including shop windows, dressing rooms or the interior, in which these acts took place. For example, Montgomery (1998) mentioned that the “*public realm and associated semi-public spaces provide the terrain for social interaction and a significant part of a city’s transaction base*”, in which shop windows (or shop frontages), and the act of strolling around and looking at, have been a great example of this activity-related aspects.

Following the event of the bankruptcy of the department store chain, the **imageability** of the places of course changed and was associated with common images of a crisis, a suffering and death story, vacancy and decay. The sensory experiences and associations with these images were mainly negative, like the sense of loss, sadness, misery and saying good-bye. As explained by Lucy (1994), “*when attachments to people and places are broken, people experience deep feelings of loss and grief, which reflects the relation between sense of place and well-being*” (Hussein, 2020). The break with the imageability of places ensured a different type of sense of place as defined by Hussein (2020) as the ‘nostalgic sense of place’. According to Hussein (2020), people “*tried to restore their lost sense of place by restoring their past experiences, relations and stories related to the place*”. It can be seen that the data source of the social media channel Instagram, used in this research, could be seen as a virtual space in which people tried indeed to restore this sense of place. And despite the fact that the use of these places is lost, a strong sense of place was reflected in these (digital) collective memories. Therefore, these findings substantiated an important statement of Farrar (2011): “*Nostalgia results in the impulse to preserve, maintain, or create a sense of place in one’s surroundings*”.

Next to the indicated present feeling of belonging, as defined by Montgomery (1998) as **psychological access**, people were also addressing a feeling of belonging reflecting the past and the future. For example, people referred to former jobs of themselves or relatives in the past, in which they mentioned personal and career growth as an important meaning of it. This also applied to the more societal-attributes that were reflected in the social-economical impact on generating employment for more than 10.000 people, and, at the same time, creating unemployment due to the bankruptcy of the chain. Therefore, these places and attributes attached to them seemed to represent **memory**, **meaning** and **association** for individuals, groups (such as colleagues, friends and families) or societies (Dutch people).

The notion of sense of place in relation to theme *Memento of V&D*

	FORM	ACTIVITY	MEANING
<p>THEME 5 MEMENTO OF V&D</p>  <p>form - 7.3% activity - 21.5% meaning - 71.1%</p> <p>4 BARGAINS AT V&D -15 POSTS</p>	<p>Scale - 12 surroundings - 5 Netherlands - 6 city - 1</p> <p>intensity - 0</p> <p>permeability - 0</p> <p>landmarks - 4 building - 2 interior (1), shop window (1), (lack in) streetscape - 2</p> <p>space to building ratios - 0</p> <p>stock (adaptability&range) - 0</p> <p>vertical grain - 0</p> <p>public realm - 2 city center - 2</p>	<p>diversity - 1 purchasing - 1</p> <p>vitality - 2 abandoned - 1 vacancy - 1</p> <p>streetlife - 8 shopping - 8</p> <p>people watching - 0</p> <p>cafe culture - 7 restaurant - 5 La Place (4), Lunchroom (1) lunch - 1 having drinks - 1</p> <p>events & local traditions - 18 Prijzencircus - 3 Schoolcampus - 1 Christmas - 3 Discofoon (records) - 7 Discobar - 3 Fathersday - 1</p>	<p>symbolism memory - 67 memory/-ies - 9 stopping escalators (1), childhood (2), sweet (1), going to the toilet (1) going up and down the escalator (1), historical event (1) (good) old times - 7 early days (1) turn back time - 1 teenage years - 1 collectors item - 9 vintage - 18 retro - 1 old - 2 oldschool - 3 secondhand - 7 plastic shopping bag - 1 guilder - 4 remembering - 1 archive - 1</p> <p>imageability - 31 bankruptcy - 8 RIP (2) time periods - 15</p>

<p>9 MEMOIRS - 11 POSTS</p> <p>11 LASTEST PURCHASES AT V&D - 6 POSTS</p> <p>12 SHOPPING BAGS OF V&D - 8 POSTS</p> <p>13 ERASER OF V&D - 4 POSTS</p> <p>14 STAPLES OF V&D - 3 POSTS</p> <p>15 THUMBSTACKS OF V&D - 2 POSTS</p> <p>16 HABERDASHERY OF V&D - 4 POSTS</p> <p>17 UTENSILS OF V&D - 5 POSTS</p> <p>18 DISCOFOON - 7 POSTS</p> <p>19 DISCOBAR - 2 POSTS</p> <p>20 VINYL AT V&D - 6 POSTS</p> <p>21 COLLECTORS ITEMS VINTAGE - 9 POSTS</p> <p>22 TAGS - 10 POSTS</p> <p>23 BIMBO BOX - 6 POSTS</p> <p>24 ADVERTISEMENT - 10 POSTS</p> <p>25 SUGAR SACHET - 2 POSTS</p> <p>26 V&D LOGO - 4 POSTS</p> <p>45 HISTORICAL PHOTOGRAPHS - 3 POSTS</p> <p>50 CARDS OF V&D - 3 POSTS</p>	<p>opening hours - 0</p> <p>attractors - 14 department store / ware house / shop - 13 retail - 1</p> <p>transaction base (flow) - 2 strolling through shopping street - 1 weekly coming by - 1</p> <p>fine grain economy - 1 shop-in-shop - 1</p>	<p>20s (1), 30s (3), 60s (1), 70s (2), 80s (6), 90s(1), 2000 (1) a household name - 1 bargains - 2 a shopping day - 1 birthday present - 1 renowned gramophone division of the V&D - 1 analog store - 1</p> <p>legibility - 12 V&D design - 12 packaging (1), own brand (4), signature logo (1), typography (1), graphic (2)</p> <p>sensory experience & associations - 37 nostalgia - 16 sad - 4 sentiment - 1 childhood (1) missing - 2 good-bye - 2 history - 6 the past (2) every day fresh and homemade food - 1 100% natural food - 1 gezellig - 2 shopping (1), seat at city (1) less fun to shop - 1 melancholic moment - 1</p> <p>knowledgeability - 12 bought at the V&D / from the V&D - 5 new collection - 2 museum - 4 always nr. 1 - 1</p> <p>receptivity - 8 Dutch - 7 warehouse (2), all layers of ... population (1), heritage (1), made in the Netherlands (1), commercial spirit (1) hometown - 1</p> <p>psychological access - 8 (next) generation - 1 job - 4 staff member (1) friends&family - 3</p> <p>cosmopolitan/sophistication fear - 0</p>	
120 POSTS - 246 attributes	18	53	175

Table 9 - Results of Theme 5 - Memento of V&D reflecting the components of sense of place.

The title of Theme 5 is called Memento of V&D which refers to “objects kept as a reminder of a person, place or event” (Cambridge University Press, 2021). The results have shown that people posted a variety of tangible objects that recalled individual memories about the V&D chain, its places, and its events. However, it appeared that these individual memories were commonly remembered and shared by people. This act “pushed it to go beyond an individual's perspective to enter the collective one.” (Hussein, 2020). These objects (such as utensils and purchases) were associated with places, which recall past memories, experiences and meanings attached to it. As Hussein (2020) pointed out, there are three types of place relationships when talking about places: biographical, ideological and narrative bonds. This threesome was featured in the results of this research. First, people feel bonded to the place because they have spent (much) time there as a child or during their teenage years. Also, these biographical bonds are reflecting different time periods associated with people's lives. Second, ideological bonds were represented in a common sense of (home) ownership (receptivity) as it was a Dutch warehouse, which was part of the Dutch

heritage, which conveyed a Dutch commercial spirit with items made in the Netherlands, which were available for all layers of the Dutch population. Third, narrative bonds were represented by people's mentions about their attachment to several events and (local) traditions that used to take place, such as Prijzencircus, Schoolcampus, Christmas, Fathersday and Discofoon/-bar.



The results of all five themes were represented in an overview (Figure 11) to indicate the percentages of the components **form** (29.9%), **activity** (21,1%) and **meaning** (49%). Almost half of the attributes found can be linked to the component of 'meaning', which derives also from activities happening at these places, and from the built and urban form of these places, as described in the results per theme.

Figure 11 - Results of the five themes reflecting the components of sense of place.

Discussion

Collective memory as a design tool for sense of place

This research aimed to investigate the important role of sense of place in assessing the cultural significance of heritage buildings. Additionally, it explored how collective memory plays an important role in creating a sense of place, and to explore the use of collective memory as a design tool in the adaptive reuse of vacant heritage, using the V&D Leiden as a case study. First, the research of the case study indicated that the findings did only acknowledge the tangible dimension of heritage, in which mainly the component of 'form' is represented by mainly tangible attributes and a handful of intangible attributes, which were often related to tangible heritage assets, which is aligned with the statement of Veldpaus and Pereira Roders (2014). Knowledge about the notion of sense of place of the case study is not informed by the findings of the first part of the research.

The results of the data source Instagram show that events and experiences in relation to the case study are stored in people's memories which they share in this new type of repository. The overview of the themes, in which common grounds of perceptions, meanings and experiences are founded, proves a shift from an individual memory to a collective one, in which people comment similarities about a collective 'sense of place'. For the purpose of designing, it can be of great importance to gain knowledge about this collective memory of a place. Therefore, this knowledge can help to sustain these meaningful bonds attached to a place in order to create new ones, without creating odds with the existing ones.

So, the findings of this thesis indicate how collective memory contributes to a sense of place. Heritage places, such as the case study of the V&D Leiden, "symbolize shared memories, customs and traditions, which leads us to consider the role of meaning or image in place making" (Montgomery, 1998). In his theory, he already explained the connections between the components of 'sense of place'. The results show that these links are even more important in creating a sense of place.

In this context, urban planners, (urban) designers, and administrative authorities (such as the Rijksdienst voor het Cultureel Erfgoed) should acknowledge the importance of collective memory and its role in creating a sense of place, and even implement these notions in their approach to heritage management regarding sustainable development. With a view to the activities of heritage conservation, such as adaptive reuse, planner and designers should take advantage of this existing sense of place in order to create meaningful places by sustaining these individual and cultural associations attached to these places.

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