A Thesis for the Degree of Ph.D. in Engineering

Advanced Assemblage Analysis of Built Environment and Persistence of the Identity of Place in Yanesen

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Abstract:

The Thesis advances methods of urban analysis based on the assemblage theory by increasing its capacity to address changes in built environment and relating them to persistences of the identity of place. In urban theory, the identity of place is defined as specific quality arising from a certain location, and highly related to its durability. The methodology proposed and tested in this thesis approaches place in its complexity and analyses the dynamics of change of a concrete place as a whole. The dynamics of change contribute to the persistence, which itself defines the identity of the place.

The Yanesen precinct of Tokyo was selected because of its peculiar urban character, which remains strongly associated with urban forms and practices of the past (Edo period), although the components of its built environment have dramatically changed, leaving almost no original buildings. The methodology applied was developed on the basis of assemblage theory and issues arising from the particularity of the Yanesen itself. The resulting assembled method brings together various tools and methods, in order to approach the totality of the place identity with due sensibility, addressing the built environment as a dynamic and complex assemblage system.

This study has shown that application of assemblage theory in place theory is possible and useful for better understanding of the identity of places and built environments in their full physical complexity and dynamics. Methodological advancements developed here contribute to the analysis in the fields of urban morphological preservation and conservation. The project refines analytical tools in urban morphology by providing a broader view of persistences in definition of the identity of place, in which the concrete elements of built environment are not necessarily conserved. That is related to an approach to built environments as dynamic systems, which can have multiple states which demand neither total conservation nor complete change. The study also provides methodological contributions to analyses in the field of place making by broadening the scope and including commonly overlooked ordinary urban places and practices. The refined method enabled observation of processes which are usually hidden behind the expressiveness of the various elements of built environment. That remains of particular interest for further developments in the analysis of places. Finally, this study has contributed to the assemblage theory itself by refining the core concepts and definitions of identity and becoming. The findings from the specific case study of Yanesen are potentially contributing to better understanding of places in architectural and urban design, thus informing future, place sensitive design practice.
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1. Introduction

The aims of this research are to explore the roles built environment plays in the processes of persistence of the identity of place, and to design and test a methodology capable to address the place as a dynamic system. The main goal of the thesis is to build a methodology for analysis of the place in its complexity through the change of its built environment. Current discourse and various analyses of the identity of the place tend to focus on the two aspects: (1) experiential processes which define the identity of the place (e.g. Lynch, 1960; Cullen, 1961; and the most recent work of Sepe, 2013) and (2) conservation and preservation of the identity of place (e.g. Conzen, 1975; Larkham, 1996; 2006). The former represents a phenomenological approach to identity of the place. From this point of view, the experiences of place embody the main ground for definition of the identity of place, characterising the identity as transcendental category which is not necessary based in the actual reality. That is, the identity of place is a phenomenon not compulsorily linked to the external reality, in which the physical settings of place can change and its identity can persist. The latter approach highlights the material aspects of place and their role in creation and maintenance of the identity. This approach emphasizes that, in order for the identity of place to persist, it is necessary to physically preserve the built environment.

Instead of defining the permanence in place, this thesis aims to create a way of analysing the dynamics of change in the place as a whole, which contributes to the persistence of the identity of the place. The objective of the thesis is to approach the identity of place from both its experiential and material sides. The identity of place is, thus, defined as an assemblage emerging from the complex interplay of the relationships of all elements of the place. The case study of Yanesen is used in order to help generate and to test the methodology. Some lateral contributions to knowledge, thus, relate to Yanesen itself. As assemblage theory has not been previously applied to urban research of Yanesen that opens new insights into this well-researched precinct of Tokyo.

1.1. Research questions, hypothesis and aims of the study

This thesis positions the identity of place between material and transcendental categories. The identity of place, although an intangible category, has to be based on human experiences and, thus, on physical, actual reality. In order to approach the relationship between the identity of place and built environment, the thesis proposes an analysis of a particular condition of place in which the identity persists within an overall transformation of its built components. This specific condition, in which the place is neither preserving
authentic buildings from the past nor simulating old architectural shapes and typologies, represents an unusual situation marked by a gap between the concrete built environment and the identity of place. That gap can be defined by distinct tension between the physical and the experienced reality. The starting assumption of this thesis is that, in such situations, the processes of persistence and change will reveal some of the usually hidden interrelationships between elements of the place. Therefore, the broad question which frames this research could be formulated to express that, seeming paradox: How can place change, but not change?

This question brings together two characteristics of place - its built environment and identity. The focus of the study is on change of build environments and persistence of the identity of place. The Thesis has two interrelated outputs: primary output - the methodology for analysis of the persistence of the identity of place within the changing build environments, and secondary output - an elaboration on contributions of built environments to the persistence of identity of concrete places within the selected case study. This larger task can be broken down to the two groups of specific questions, one related to the concrete processes of change and persistence at the case study level, and the other related to the ways of approaching the analysis. The framing question of the thesis is, consequently, divided into two sets of sub-questions:

Primary - about methodology:
- How to analyse built environments which are marked by persistent identity of place, but without preserved physical elements?
- How can the change of built environment itself contribute to the persistence of the identity of place?
- How to enhance the analysis of place in order to address its complexity?

Secondary - about the case study:
- What is the identity of place in Yanesen?
- How has the built environment of Yanesen changed while enabling the identity of place to persist?
- Which attributes of concrete elements of built environment matter in definition of the identity of place in Yanesen?

The hypothesis is that there are particular relations between elements which constitute a place, and that some of those relationships possess high degree of stability within an overall change. The physical elements can change while, at the same time, producing particular relationships which have the capacity to (re)evolve concrete identity.
On the basis of a detailed literature review, this thesis hypothesizes that assemblage theory, due to its emphasis on relationships between the elements over the physical properties of elements, can significantly contribute to the analysis and better understanding of place in its complexity, particularly in regards to the relationship between the identity of place and concrete built environments\(^1\).

The thesis hopes to shed light on the processes of maintenance of the identity of place without losing the ability of place to develop and respond to future needs, and to contribute to development of analytical tools and understanding of dynamics of change in urban morphological conservation. The focus of the thesis is on understanding of the processes of change, rather than on conservation of the elements of built environment. The thesis aims to advance application of assemblage theory in urban and architectural studies, by focusing on its core philosophical concepts and to contribute to further development of the intrinsic interrelatedness of assemblage and place theories.

An understanding of persistence of the identity of place within an overall change of built environments is significant from the aspects of urban and architectural design and planning, not only in the case of historical places, but in any location. The identity is a component of any place. Theorizing identity and an application of the new findings holds potential to contribute to concrete design and planning projects. Due to the fact that place comprises different scales (i.e. from the scale of a single room to the scale of the whole city), the results of this thesis are applicable to both urbanism and architecture. The methodological advancements presented here can directly inform decision-making in various phases of production of built environments.

### 1.2. Approach

This thesis focuses on development of a methodological approach deriving from assemblage theory, with its interest centred on physical aspects of place. The place and its identity are approached by merging two established discourses: the place theory, which is based on phenomenology, and the key postulates of new, assemblage theory\(^2\). The phenomenological approach is used as a part of the larger, assemblage approach which, in this thesis, focuses on the built environment. The phenomenological aspects of place are supplementary to the new understanding of built environment as an assemblage. The analysis is based on urban morphology discourse. Although arising from that discourse and, thus similar, the approach developed in this thesis differs from common approaches to urban morphology. The thesis

\(^1\) Furthermore, assemblage theory derives from the Gilles Deleuze's philosophy, which is characterised as new kind of materialism, positioned between the material reality and phenomenology (see Deleuze, 1994: 222).

\(^2\) For more details see section 2.3.1.
uses Conzen’s (1960) approach for analysis of townscape as a departure point for an innovative assemblage methodology. The focus of present analysis differs significantly from that of common analysis in conservation of urban landscapes. The similarity lies in an understanding of landscape as a whole in which buildings are not only elements that contain the ingredients of the identity of place. This approach broadens the demand for preservation of the identity of place, moving from conservation focused on single buildings to conservation of the relationships between elements which constitute the built landscape (eg. recent work of Whitehand et al, 2011, and Whitehand and Kai Gu, 2007 and their application of the analysis in the context of Chinese cities). The major difference which the analysis developed and conducted within this research comes from its explicit emphasis on change, which opens the possibility to address the persistence of identity rather, than the conservation as the main way to address identity. The thesis focuses on flexibility of the built environments, rather than on constraining the change.

For the purpose of this research a specific case study was selected. The case study of Yanesen represents a least likely example of conservation best practice, and exactly for this reason it was chosen for definition and testing of the new methodology. Flyvbjerg (2006: 229) explains how the single case study has a higher level of generalizability if it is an atypical case. An atypical case reveals more information, due to the fact that it involves more actors and basic mechanisms (ibid). Yanesen represents an atypical case in terms of an obvious change of built environment and an undeniable persistence of the identity of place. The typical situations situate the persistence of identity in conserved buildings from the past. The situation of Yanesen offers a possibility to conceptualize new approach to the complexity of persistence of the identity of place due to an oblique link between its built environment and the identity of a concrete place.

Another important aspect of Yanesen as an atypical case is related to an overall particularity of Tokyo and Japanese architecture and culture in general in relationship to change. Yanesen as a case is relevant to that broader cultural understanding of change, in which the change itself is a tradition (Seidensticker, 1984:91).

Tokyo is a fast changing city. The average lifespan of the single family house is only 26 years (Kitayama et al. 2010: 29). During the history of Edo (1601-1868) numerous conflagrations were causing the city rebuilding (Fig. 1.1.). Major conflagrations occurred on average every six years and many minor ones every year (Kelly, 1994:310). The fires were common and thus the city of Edo was changing fast throughout all its history. Tokyo continues that tradition. Another important aspect (and perhaps the result of the constant

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3 For more details see section 3.4.2.
changes) is that Tokyo has no iconic buildings and that the sense of history differs compared to other cities (Waley, 2012: 151). It is argued that memory and past are not physically present in Tokyo and that the past is mainly present in the commodified form (museums, products in general consumable items) (Waley, 2011a: 57-8). Edo-Tokyo continuity can be seen through topography, roads, land use, scale of the buildings and plots, the relations between the nature and the city (especially water) (Jinnai, 1995:5). Since the Edo-Tokyo boom in 1980s\(^4\) (Iwatake, 2003: 250), the reaction to this particular change of Tokyo is still manifesting through wide literature about the places that still preserve the past of the city. The tendency towards peculiarity of places and against loss of distinctiveness is present not only in architecture and urban discourse but in more broad literature. Rediscovery of *japaneseness* and places that still preserve the character of past times continues to multiply (Schultz, 2008).

![Fig. 1.1. Major destructions caused by fires in Edo-Tokyo (level of destruction is shown by number of killed)](image)
(Modified data from: Sorensen (2002) and Kelly (1994))

Furthermore, it is argued that Japanese architecture has particular relationship with the change and rebuilding, based on the Shinto and Buddhist traditions (Haldik, 2003:261;

\(^4\) The image and characterization of the Edo were changing through time. See for example Gluck, 1998; and Dale 1986.)
Smith, 1978: 48). These traditions have an implication on the architecture in which building is not a material object but the space generated inside that object (Kuma, 2010: 12). In that sense, its facade or walls become infinitesimally relevant (Ashihara, 1986: 13). Some also argue that the Japanese places are defined by activities (Shelton, 1999:10).

While in Yanesen there are no buildings preserved from the past, it belongs to a cultural milieu and to the city with that particular tradition which favours change. That is an important aspect of this case study, in which the peculiar broader relationship with tradition represents what Flyvbjerg (2006:232) calls a paradigmatic case. As such Yanesen is a good place to analyse the dynamics of change and persistence. Seeking contribution to methods in urban morphology, this thesis focuses specifically on physical environments of Yanesen and their mutual relationships.

1.3. The introduction to case study of Yanesen

Yanesen is located in central area of Tokyo, and is part of 23 wards (Fig. 1.2.). It consists of three precincts: Yanaka, Nezu and Sendagi which are usually referred to as one neighbourhood-YaNeSen (Fig. 1.3.). Yanesen belongs to two different city wards: Bunkyo and Taitō. These three areas are differentiated in geographical and architectural terms. Yanaka belongs to Yamanote area (High City) with its numerous temples and shrines. On the other hand, Nezu and Sendagi are mainly located in the valley and therefore are characterized as Shitamachi (Low City). Nevertheless, this area is conceived as a whole.

Contemporary Yanesen is predominantly low-rise, dense residential area, adorned by the network of quiet roji (lanes), modest, local commercial shotengai areas, often tiny shops and galleries, small but ubiquitous greenery, and many old temples (Waley, 1991; Radović, 2008). Character of this area is coloured with everyday life, ordinary life, and associated
with the past. Namely, Yanesen is a precinct were urban character remains deeply connected with urban forms and practices from the past- more specifically from Edo period (1600-1868) and its distinct character of Shitamachi⁵ (e.g. Seidensticker, 1984: 211; Waley, 1991: 191).

During early Edo period these areas were suburbs, located outside the boundaries of the city. Yanaka, situated at the hilly part developed as temple town, and Nezu was emerging in the valley around the Nezu shrine, with specific character of Shitamachi. The areas were largely

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⁵ For extensive explanations and definitions of Shitamachi see section 4.1.2.
urbanized during the late Edo and Meiji periods. Important aspects of everyday life in Shitamachi during that stage were pleasure quarters. In early Meiji period (1868-1912) Nezu also contained pleasure quarter. However, due to the closeness of Imperial University campus on the former estate of the Maeda, lords of Kanazawa, in 1888 the pleasure quarter was moved to Susaki in Fukagawa (Seidensticker, 1984: 178). In the same period the largest public cemetery where last shogun was buried was located in Yanaka. The most famous monument of this area, pagoda of Tennōji Temple was lost in 1957, when it was set on fire. Yanaka became significant artistic and intellectual centre in Meiji period. It was intellectual sort of place, much favored by professors, writers and artists, as Seidensticker describes Yanaka of that period: the new High City (Ibid: 211).

It is argued that spatial identity of contemporary Yanesen differs from that of other residential areas of Tokyo. That founds its bases in characteristics which reach all the way back to Edo period. Academic discourse, as well as local and international tourist guides, stresses the importance of a particular sense of an old, locally defined character. In Paul Waley’s words, this area has managed to struck a happy balance between craving for the future and basking in the past (1991: 191). At the same time, it embraces both persistence and change. It manages to maintain an identity based on the past, while responding to the contemporary appeal of modernity. Seidensticker (1984) explains how the heart of old Edo Shitamachi (area around Nihonbashi bridge) has completely changed, and does not reflect much of its past. On the other hand, Yanaka manages to preserve its character of an Edo town, in spite the fact that it wasn’t the centre of Shitamachi in Edo period. Yanaka, with its latticed fronts, its tiled roofs, and its tiny expanses of greenery, is the most extensive part of the present city in which something like the mood of the old Low City is still to be sensed (Ibid:211). That specific identity of the past in Yanesen, that mood of old city is supported by the fact that the precinct was largely spared of two massive destructions in 20th century, caused by the Great Kanto earthquake and subsequent conflagration (1923) in which almost three-quarters of the buildings were destroyed or seriously damaged, and Second World War fire-bombings (1945) with even larger span of destruction (Radović, 2008). The destructions caused by fires and earthquakes were frequent and usually these situations were used to reorganize the city. Those fires were also called ‘flowers of Edo’. The fact that Yanesen wasn’t fundamentally damaged during two largest destructions in twentieth century supports the definition of the processes of change in this area as transformative, characterized with slow change and persistence.

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6 For more details see the timeline of development of Edo-Tokyo Fig. 3.6. and appendix B: maps.
7 For more details see fig. 4.24.
Despite the recognition of Yanesen as an area that preserves the character related with Edo period, there are few reminiscences of the past. The analysis of historical maps shows that the area has significantly transformed through time\(^8\) (Fig 1.4.). The precincts in Yanesen were developing in different times and with different speed. During the late Edo period, the Sendagi area was agricultural, with the pond and river. Throughout the Meiji period, this area was largely urbanized. In the same time, Nezu and Yanaka were already urbanized and continued their densification. The plots in the whole area were showing the tendency towards subdivision. Furthermore, in the last periods the areas around major streets show tendency to create larger plots, as well as larger buildings with a significant increase in the number of floors. The river in this area was covered during the middle of the twentieth century. Today it is located under the street called *Hebi Michi* - The Snake Street where, as the name itself suggests, the morphology of the street preserves the shape of the river. The morphology of the street network in this area proves the tendency of persistence of major streets, however, at the same time redevelopment and in general terms increasing complexity of the street network, thus changing.

The analysis conducted at the scale of each building also demonstrates high levels of change. Architecture of contemporary Yanesen shows no houses reaching back to Edo period. Due to the fact that wooden architecture has a short lifespan and that it needs regular rebuilding, along with the requirements of fire protection laws, the number of the houses that have wooden facade and expressions of traditional architecture is insignificant. The fieldwork

\(^8\) For more details see appendix B-maps.
conducted in this area has shown that less than 3% of the houses have wooden facades9 (Fig. 1.5). The houses in this area have dominantly contemporary architectural expressions, using contemporary building materials. Furthermore, the houses which resemble traditional architecture are scattered, and do not create clusters which would have strong an overall traditional expression. Those houses appear as rare examples of the bygone era and, as such, evoke the sense of change over that of continuity.

Furthermore, a detailed analysis of elements at the level of facades shows that wood is the least used of building material. In this area, the materiality upon which the architectural expression of Edo period was based on (wood) is lost10. The main façade materials are contemporary (coloured facade, metal, tile, plaster, plastic, glass, and so forth). Those materials do not reflect the traditional wooden architecture of Edo.

The current state of Yanesen has shown that the elements of physical setting of place, from largest scales to those of architectural details, harbour very few reminiscences to the past. But, regardless the dramatic change of physical setting of Yanesen, its identity is still

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9 The fieldwork was conducted during the January and February 2011 and it consisted of observation and mapping of the wooden facade houses in this area. The total number of 1563 houses was observed and only 44 had wooden facade.

founded on the past. That famed ‘mood of Edo’ and Shitamachi in Yanesen is not based upon preservation of monumental buildings, nor on preservation of the houses, facades or materials. The physical structure of the place has shown great flexibility and an ability to transform and redefine itself. A sense of the bygone era, which undeniably lingers in that area, is a latent quality. The identity of Yanesen emerges from dialectical tensions between the past and the present. Without direct buildings from the past this particular situation in Yanesen is a slippery subject, falling into categories of vague, ephemeral, and elusive usually referred to through personal experiences, emotions and nostalgia and in general ‘non-measurable’. Therefore, it is highly subjective and beyond reach of analytical logic and rigour. However, those are important qualities which define the location to be a place. Those are the fields that architecture and urbanism should strive to address.

The literature review shows that previous research conducted on this area is related to: inheritance and evolution of historical townscape (Kitaoka and Miyawaki, 2008; Shiihara et al. 2000), spatial conservation and community (Shiihara, 2009), temples (Watanabe, 2011), temples and safety (Muraoka and Sugahara, 2001), renewal of wooden houses (Ishizuka, 2006; Hasegawa et al. 2005), alleys (roji) (Kim and Takahashi, 1995; Mori, 1988), private green (Manabe, 1998), land use adaptation (Tejima et al. 1988), influence of traditional built environment for experience (Nakasaki et al. 2000; Kojima et al. 1990; Mori et al. 1990; Tejima et al. 1990), influence of traditional built environment on morphology and patterns in built environment (Tachibana, et al. 1991; Mori et al. 1989; Tejima et al. 1989), compositional type of streets related with blocks in temple areas (Miyazaki and Terauchi, 2010), rebuilding (Kikkawa et al. 1985; Matsumura et al. 1985). Following the assemblage thinking from its sources in Deleuzian philosophy of space (1987; 1990; 1991; 1994) and general assemblage theory (Delanda,2000; 2005; 2006), the research conducted within this thesis focuses on the relationships of elements of built environment and, more specifically, on opportunities produced by those relationships for individual elements of the built environment to change while the identity of place persists. Application of assemblage theory to urban design analysis in Yanesen adds to an already established knowledge by adding an explicit emphasis on the importance of the lasting relationships. That opens new question about the necessity for conservation and preservation of elements of built environment at broader level.

1.4. Limitations and potentials

The identity, in general terms and thus the identity of place, is largely about the uniqueness. The uniqueness implies difference. That is a difference between some particular place in relation to all other places. In that sense, every analysis of the identity of place demands
relational aspects. Consequently, an analysis of the identity requires comparative approach. Comparative analysis generates grounds for better understanding that important difference, which is the basis for uniqueness. The limitations of this thesis are, thus, related to the fact that there was only one case study chosen for the analysis. In addition to already explained potential of paradigmatic case Flyvbjerg (2006: 229), this approach was taken due to the reasons as follows:

1) In order to understand the uniqueness of identity of any entity, the comparison should be conducted between the entities of the same kind. The comparison between entities which are not of the same kind does not reveal anything about the entity, due to the absence of similarities; it fails to define difference. In that case, all characteristics could be considered as difference. In Tokyo there is no relevant similar situation to Yanesen. There are no places with identity strongly grounded on the past Shitamachi and, at the same time, without historical buildings. In that sense Yanesen represents a unique case. Therefore, there is a minor relevance of comparative study of various places in this concrete case.

2) The aim of the thesis is to understand relationships between change in built environment and persistence of the identity of place. For that reason the focus of the analysis was on identity and place over time. The comparisons were conducted between different states of the built environment in Yanesen, at different points in time. That contributes to better understanding of the essential characteristics of identity, and their link with the built environment. That substitute the demand for defining difference (essential characteristics) based on the comparison between different places in same point in time. Thus the uniqueness of place was defined through the comparison of the same location in various points of time, rather than on the comparison between different locations. The higher relevance of such comparison comes from main focus of this thesis, which is at persistence.

Another important limitation of the study is related to its focus on only physical aspects of built environment and their change. The methodology created in the thesis aims not to simplify the understanding of the identity of place and its link with the built environment. The methodology stresses the complexity of place, while in terms of analysis it deals with one of its key components only. Activities, meanings, multiple subjectivities and emotional attachments (particularly related to temples, shrines and small enterprises in this area) are important aspects of the identity of Yanesen. The reason for choosing physical aspect of place comes from the fact that the links between identity and built environment are less

11 For more details see the definition of the synchronic identity in section 2.1.
obvious. That offers a possibility to capture the links between the built environment and the identity which tend to stay hidden and less comprehensible.

One factor which contributed to selection of the focus of this thesis comes from the author herself – who is a foreigner, with limited knowledge of Japanese language and who is an outsider to the Japanese culture and customs. Within the fields such as architecture and urbanism, which inevitably overlap with some of the most sensitive cultural issues, such situation demands a very careful definition of the project, which needs to be conducted at PhD level and be of profound relevance. Within the globalized world, that issue is not new. It has became common across the culture-related research fields and has evolved towards conscious engaging of the advantages of an external gaze, which has the potential to complement local knowledge and push towards the much-needed cross-cultural synthesis. That is not only one of the results of an increasing internationalization of universities, but also the reason for their internationalization – in Japan as in other parts of the world. Within the last several decades of the 20th century the dichotomy between local and external insights have been abolished, and evolved towards favouring the synthesis. It is common wisdom that carefully defined research topics and questions can only enrich and add depth. In the concrete case of this thesis, a significant effort of both the Supervisor and the student went towards careful definition of the topic which investigates and celebrates local quality, without the researcher being local. That resulted focus on tangible aspects of place, as close as possible to pure morphology and selection of the globally relevant methodology which is new to Japan, thus benefiting from an inevitable dis-connection from unconscious cultural associations, which native researchers naturally have. This research was conducted in good faith that it adds new point of view, and thus helps development of a richer overall knowledge.

Based on both the results and some of the above limitations a significant potential for further development of this field emerges – such as questions of limits to change and tipping points, in which places lose their identity. Future research might use multiple cases and comparative investigations, in order to develop an understanding of the links between change and different states of the identity. This can contribute to further improvements of the method and to refinement of theoretical frameworks of the identity of place. Furthermore, there is a possibility to compare various stages in development of the identity of place at various locations, in order to define the limits of change and shed light on the resilience of place. Future analyses of Yanesen itself have the potential to apply assemblage thinking on intangible aspects of place, such as meanings and multiple subjectivities.
1.5. Structure of the thesis

The thesis is divided into seven chapters which are based on the particular focus of the study and organized around the theoretical aspects and application of the theory into the practice of analysis. Chapter two presents theoretical background of the thesis. It addresses the definitions of identity and place from the aspects of place theory and assemblage theory.

Chapter three represents the link between the theory and analytical tools. The chapter develops the assemblage methodology which derives from the core concepts from assemblage theory and main characteristics of the case study of Yanesen. It explains all assembled methods and tools which were used to asses and measure different aspects of the built environment and identity of the place.

The chapters four, five and six present results from the analysis. They are divided based on the three scales: the scale of the whole Yanesen, the scale of Nezu-Sendagi and the scale of the Nezu. The aim of these chapters was to test and develop further understanding of the processes of change of the built environment in Yanesen. Chapter four sets the framework for the analysis by investigating and presenting the main characteristics of the identity of the place in Yanesen that can be linked with the built environment and defining the scales and boundaries for the study. It presents the results from the analysis of the built environment at the largest scale, the scale of the whole Yanesen. Chapter five presents results from the analysis of the built environment at the scale of Nezu-Sendagi. It is divided in two parts: first part focuses on the dynamics of the change of built environment in time and the second part presents the analysis based on the elements which are evoking that particular identity based on the past. The chapter six presents the analysis conducted on the smallest scale focusing on the aspect of the public-private interfaces in Nezu.

The chapter seven presents the conclusions and key contributions to knowledge. This chapter is divided in two parts: presenting the conclusions about the change of the built environment and persistence of the identity of place in Yanesen, and discussing the contributions in assemblage theory, morphological studies related with the conservation and place theory.
2. Conceptual framework

“There is no question in philosophy more abstruse than that concerning identity, and the nature of the uniting principle...“

(Hume, David 1739; quoted in Strawson, 2011: 33)

This chapter provides background on theoretical framework which is used in order to illuminate the main issues of thesis and to create ‘tools’ for thinking about place and identity in relation to persistence. It stresses main concepts introduced in this thesis: identity and place, as well as identity of the place. The concepts are approached from the aspects of change. The chapter is divided in three parts, following various philosophical and theoretical approaches to place and identity. The discussion opens with the summary of main issues in definition of identity in general. It introduces the concepts of durability, change and persistence in relation to identity. The second part presents the definitions of place staring with Heidegger’s philosophy based on phenomenology and existence of essences, followed by place theory and definitions of identity of the place. The third part introduces the assemblage theory, largely derived from Deleuze’s philosophy and its interpretations by Manuel Delanda. It presents the replacement of the concept of essence with multiplicity, as main element which defines identity, and explains how this influences the concept of persistence of identity itself. And, finally, the definitions of place and its identity based on the assemblage theory are clarified. The introduction of assemblage theory in this thesis is employed as additional thinking to already existing place theory, which opens new points of view and raises questions related to identity of the place and change. The thesis does not aim to build a new place theory based on the assemblage thinking, but to point at particular aspects that can benefit from assemblage thinking. That is important due to the comprehensiveness of assemblage theory which embraces all existing theories and defines links between them.

2.1. Identity

Term “identity” is widely used in sociology, anthropology, psychology, politics, place theory, everyday life and so forth. In all these fields identity is differently employed, and its meaning remains ambiguous. Gleason explains that popularization of the term identity contributes to its elusive and diffuse meaning, where it becomes increasingly a cliché, and encourages the loose and irresponsible usage (1983: 931). The term identity may mean the name by which some group of the people or person is known, or it can be used as a
reference to some distinctive characteristics which are indicating what is known by that name. It can also be used as an ensemble of cultural features that person, or a group can be identified through (Ibid: 930). Identity can simply be related to the characteristics of certain entity which are embedded in its name, but in the same time it relates to the connection of that entity with other entities and defines its uniqueness. Identity belongs to obscure, ambiguous and slippery field. Bauman (2004: 10) refers to seeking the identity as *squaring the circle* which implies the task that cannot be completed in real time, but in *fullness of time*. He uses the metaphor of collage in order to describe the construction of identity versus a puzzle. In case of the puzzle we already know how the image is looking before we start building it. Furthermore, we know that in the box we will find all the pieces of the puzzle. Identity is however, similar to the collage: we gather the elements by ourselves, create collage which is messy with missing pieces (Ibid: 48).

For that reason the first part of this thesis aims to define the identity and in consideration of the existing theories of place define the identity of the place. There are numerous definitions of the identity. This thesis firstly explains the etymological definition of identity and secondly that is followed by the philosophical concepts by Jon Locke and David Hume\(^\text{12}\) and their interpretations of identity, particularly related with change.

Term “identity” comes from Latin adverb *identidem* meaning “repeatedly”, “again and again”, and “continually” (Glare ed. 1982: 820). In the late Latin *identitas*, and Latin *idem* mean “sameness of quality, attributes” or “same” (Latham et al. 1975: 1199). It appears in English language in late 16th century in the sense of *quality of being identical* (Honorby, 2006:1715). In philosophical terms, one entity can be fully identical only with itself. The essence of “identity” is relational. It comprises all the same elements of one entity, while, at the same time, it stresses the difference which separates one from all other entities.

The definition of identity is also related to different cultures. In Japanese language identity comes as foreign word アイデンティティ *(aidentiti)* written in katakana or with indigenous meaning written in kanji in several ways. 同一*(douicu)* translated in English language as *identity, sameness, similarity, equality, and fairness*. This word comprises two kanji 同 agree, equal and same; and 一 one, number one, which emphasizes the homogeneity and

\(^{12}\) John Locke (1632-1704) and David Hume (1711-1776) belong to the empiricism, field in philosophy which approaches theory of knowledge in a way that knowledge dominantly derives from sensory experience. In that sense their work on identity is highly important from the aspects of the emphasis on the experience. This perspective is also compatible with the Deleuze’s work (e.g. Deleuze's first book was on Hume- 'Empiricism and Subjectivity-An essay on Hume’s theory of human nature’). Despite the fact that Deleuze builds a new kind of materialism (which is different from the dialectical materialism, and positioned between the phenomenology and materialism; see Deleuze, 1994: 222) some of the ideas are complementary to the work of Hume. Both John Locke and David Hume directly address the problem of identity, and their definitions of identity were found to be useful for understanding of the identity of the place.
uniqueness of certain entity. 身元 (mimoto) which is translated in English language as *person’s identity, ID, past and background*, and derives from two kanji: 身 meaning: *one’s station in life, person, somebody* and 元 meaning: *beginning, former time and origin*. In this sense, identity emerges not only as something that defines what the entity is, but also implies the dimension of time and its persistence. The principle of identity in philosophy is translated as 同一原理 and comprises four kanji meaning: 同 agree, equal and same; 一 one, number one; 原 field, meadow, original, plain, prairie, primitive, tundra, and wilderness; 理 arrangement, justice, logic, reason and truth (source: Ahlström, on-line English-Japanese dictionary www.jisho.org). The fact that there is no single word in Japanese language that explains the word identity, defines its ambiguous character and complexity. That complexity refers to its relations with different entities but also to persistence and through that the ability to linger through time.

Etymological definition of identity implies that certain invariability and duration through time is important. In that sense, Locke distinguishes two possible ways of observing the identity: *synchronic* and *diachronic*. Synchronic approach to identity defines identity in singular time based on its relationships with the Other. Diachronic approach to identity is based on the relationships between one object in different points in time (Conn, 2003: 12-3). More specifically, the identity of any entity can be defined based on the relationships that it has to other entities which are defining its difference (synchronic). Second important aspect of the identity is that it implies duration through time, and is related to persistence (diachronic). Therefore, in order for an object to persist through time means to exist continuously through successive instances of time (Ibid: 20). That is, to have the same identity. Consequently, persistence, time and identity are interdependent.

Locke proposes that persistence is naturally linked with the change. However, in persistence the kind of change is important since it requires sameness of certain elements. Therefore, there are particular limits to a change that allow for the entity to continue existing i.e. having the same identity. Those limitations are different for different entities and are defined through *essential* and *accidental* properties (Ibid: 8). Namely, not all of the elements of the entity are equally important in order for that entity to persist through time within the change. More specifically, there are elements or qualities which are more important than others in definition of identity.

However, the distinction between essential and accidental properties is relative. Locke defines the relativism of essence based on two statements. First statement relates to the impossibility to define the essence of an object without comparison of that object to the
kind that it belongs to. More specifically, in order to define the difference or which properties of an object are essential for its identity we have to compare that object to all other objects that belong to the same kind (e.g. we cannot define the distinctiveness of particular dog if we don’t compare it with other dogs). The second statement is related to the ways in which we distinguish kinds. Namely, Locke claims that kinds do not exist objectively; the division is imposed and relative. He explains that there are numerous equally legitimate ways of sorting objects into kinds and therefore the essence cannot be distinguished in objective way. That also implies that persistence is relative, depending on how the kinds are sorted (Ibid: 25).

Another important characteristic of the identity rises from the fact that identity depends on the kind of an entity that it belongs to. More specifically, that implies different kind of change that an entity can undergo. There are types of objects in which identity can persist through time within the changes. However, for some other objects the same changes can be sufficient to annihilate them. Therefore, the kind of change that one object can undergo and still continue to exist depends on the type of the object (Ibid: 76). Consequently, there are different conditions under which for example an atom at one point in time is the same as atom in another point in time and dog at one point in time is the same as dog in another point in time (Ibid: 77).

Similar to this Doepke (1996) develops an argument in which change is not necessarily observed as model of destruction of identity of certain entity. He is primarily concerned with questions of personal identity, however he offers broader view on identity in general. In spite the arguments that identity is based on persistence or permanence, Doepke (1996: 93) argues that just because there is a difference does not mean that there is a different thing; a person can be different without being a different person.

Furthermore, Doepke (1996) argues that the identity of certain thing depends on the thing itself. Namely, there are things which have essential tendency to change and the things which are determined by the tendency to remain the same. The first group of things can be defined in Aristotelian notion of cases in which "formal" cause of the thing corresponds to its "final" cause. Doepke (1996: 148-9) explains the things that are in their essence changing as the cases in which the thing is a matter of what is striving to become. Therefore, for different entities there are distinct ways of definition of persistence of the identity. In terms of places, it could be also argued that there are different kinds of places: some exhibit high tendency towards change and some are likely to strive to remain the same. Therefore the change within the place should not necessarily be observed as destruction of its identity.
Beside the importance of the kind of the entity, identity also depends on the nature and origins of the change. Furthermore, Doepke stresses that for the persistence of identity what matters is not only the nature of change that appears at the entity but where the causes of change are coming from. Namely, if the causes of change are internal to entity, then they can be observed as part of the becoming process of that entity. However, if the causes of change are external to the entity then they can be observed as potential destruction to its identity (Ibid: 151). The thing is being responsible for how it becomes (Ibid: 180). The origin of change can be explained at two examples: water and dog. Namely, by changing the temperature, which is external to its identity, water becomes different thing- ice. The structure of the same molecules is changed and therefore the identity is altered. However, when living thing changes its structure, it is part of its identity. The dog changes its structure over time through its existence and its identity is persisting. However, that change is internal change and therefore part of the identity itself (Ibid:218).

The definition of diachronic identity therefore implies persistence which largely depends on change. Persistence and change are related with essential properties of the entity. The essential properties are relative and depend on each entity individually. Therefore, the change of an entity is depending on its individual characteristics. Furthermore, the origins of change are equally important in the definition of persistence of identity. Based on the fact that essential properties are established on the imposed classification, it can be argued that identity is also relative, depending on that imposed classification. Furthermore, the persistence of the identity is also relative, and depends on the thing itself but also on the classification that is imposed to an object.

Another important characteristic of identity which contributes to its ambiguity derives from the fact that identity is highly related to individual perceptions and experiences. Those experiences are linked with certain sameness through time-persistence and durability. Therefore, the identity does not exist as a natural characteristic which belongs to an entity. Rather, identity is imposed to an entity through individual experiences and perceptions. As Bauman (2004: 15) emphasizes, the identity is something to be invented it exists as part of creation. It is not already given with the possibility to be revealed or discovered.

Similarly Hume argues for the relativism of identity in relation to its durability or in general-time. He emphasizes the impossibility to perceive any entity as invariable due to the fact that there are no constant perceptions but multiple perceptions and experiences in multiple times. Hume explains that there is no perfect identity because that implies invariable and uninterrupted perceptions of an object -which are impossible. However, in the imagination the perceptions of the same objects are reconstructed, and therefore perfect
identity becomes actualized in our mind: *we ascribe identity to an object when the successive perceptions are closely related to one another in certain ways* (Thiel, 2011: 390). For Hume imagination and feelings are important for the identity. These notions are based on the experiences through time. Although we have different experiences of outside world we believe that they are continuous and part of our own identity, however they are bound together by our believes and imagination (Strawson, 2011: 102). Therefore, it is impossible to have an empirical knowledge of real continuity. Furthermore, that continuity is identity, i.e. diachronic identity. However, we believe in real continuities which are based on imagination and patterns of perception (Ibid: 111-15). Following this memory has important function for the identity, since it produces the relations of resemblance among the perceptions (Thiel, 2011: 394). Thus, for the persistence of the identity perceptions and experiences are more important than the actual resemblance. The identity is product of human experience, a fiction which is transformed into the fact (Bauman, 2004: 20).

Another important aspect of the identity deriving from the previously stated characteristics of the identity is the change of identity in itself. Namely, identity is not naturally deriving from each individual entity, therefore it appears in the interaction between human and certain entity. In that sense the identity is always reproducing, it is forever incomplete and in order to be sustained (persistent) needs to be perpetually re-produced (Ibid: 16).

The identity is quality that is attributed to particular entity which is based upon the perception of its invariability. The union of all perceptions and therefore the definition of diachronic identity is based on the different experiences and constructed in imagination. Memory plays important function for the identity, since it generates the sense of resemblance between perceptions in different points in time. The resemblance highly depends on the type of an entity and its essence. Therefore, the identity is based on the experiences, gathered in memories which are reproducing the identity based on the duration of its essence.

### 2.2. Place

In order to define the identity of the place, firstly the place has to be clarified, due to the fact that different kinds of entities will have different essences and therefore persistence.

The place represents a complex concept which can be defined from different aspects. Similarly to identity, it appears as the result of human experience and represents ambiguous term which is used in academia but in the everyday life too. In this section place is defined from the aspects of experience, space, scale, sociality, time and identity.
2.2.1. Heidegger’s phenomenology and place

Heidegger represents philosopher who gives the most suggestive and sustained definition of the place in last century (Casey, 1997: 284). This definition of place derives from Dasein’s (human being) authentic being in the world. Furthermore, Heidegger accomplishes the definition of place although he rarely addresses place itself as a topic (Ibid). Heidegger’s temporality is essential in definition of Dasain, it is said to be the horizon of Being (Ibid: 245). Heidegger illuminates place through dwelling, nearness, and event of Appropriation (Ibid: 335).

The [place] is not already there before the bridge is. Before the bridge stands, there are of course many spots along the stream that can be occupied by something. One of them proves to be a [place], and does so because of the bridge. Thus the bridge does not come first to a [place] to stand in it; rather the [place] comes into existence only by virtue of the bridge (Heidegger, 1971: 151-2).

This definition of place is deriving from Heidegger’s phenomenology in which place as well as the world and all the entities are conceived through our experiences. As Heidegger explains the concept of phenomenology: to let that which shows itself be seen from itself in the very way in which it shows itself from itself (Heidegger, 1962: 58). This represents the basic notion of phenomenology, as Large (2008: 5) explains: there is not a subject and object separate from one another, which then, through some kind of unknowable process, have to become linked or attached. Rather, they are already intertwined in our direct experience of the world. Considering place as any other thing, Casey explains, place is not something we come across as something we are simply in (Casey, 1997: 250). Place appears in conjoint action between people and physical reality through intervention (Ibid). The place therefore, exists only in interaction between people and location. Any location has the potential to become a place as well as, any place has the potential to become mere location.

Place and time are main elements in definition of being in Heidegger’s philosophy. These two categories, time and place are observed as part of Einstein’s four-dimensional space. In Being and Time, as Mulhall (2005: 209) explains the time represents an essential element for the possibility of understanding the beings in their Being. Furthermore, the temporality as well as spatiality is represented as indivisible part of Being. As Casey explains, in Heidegger’s philosophy time becomes present to human beings in specifically placial and spatial ways. Furthermore, more crucial than the three modes of time—past, present, and future—is their “interplay” (Zuspiel), a spatially charged world that recalls “leeway” (Spielraum). Such interplay is time “true extending” (Reichen), the way it effloresces, its “fourth dimension” (Casey, 1997: 277). Being-in-the-world, is defined through existential,
lived time and place. Being, time and place are in Heidegger’s philosophy conjoint through human’s existence and represent crucial elements in definition of being in the world. That being acquires a particular complexity in which place is not only a setting for the being but part of the being itself. Thus, place represents inseparable part of human existence.

2.2.2. Place and experience

The reality, the external world, the place are conceived through people’s senses. Nevertheless, that process is never a simple perception. Emotions and thoughts are always involved in this process. The phenomenological approach used for understanding place, lies in its relation with human as a conscious being. As Casey explains there is no place without self and no self without place (2001: 684). This process of experiencing is in the same time process of knowing the space in which it becomes place. Tuan (1977) is arguing that through experience we are in the process of knowing the place in our own way. It cannot be the same experience as other people have. The processes of sensing and thinking are related processes. The given cannot be known in itself. What can be known is a reality that is a construct of experience, a creation of feeling and thought (Tuan, 1977: 9).

Movement represents an important part of the process of knowing the place. Movement enables the experience of space and place. It is also an important factor in space-place relation. Therefore, experiencing the place takes time and it is highly related to knowledge that each person has about place. As Tuan explains:

> the feel of a place is registered in one’s muscles and bones. A sailor has a recognizable style of walking because his posture is adapted to the plunging deck of a boat in high sea. Likewise, though less visibly, a peasant who lives in a mountain village may develop a different set of muscles and perhaps a slightly different manner of walking from a plainsman who has never climbed. Knowing a place, in the above senses, clearly takes time (ibid: 184).

This illustration explains the complexity of the interaction of place and people. The place and people’s experiences are dialectically related. Place comprises elements of personal experiences which derive from who the person is, but in the same time place reflects itself at that same person in its own constitution. Tuan gives the example of how place influences the human’s physical condition, but that influence is much broader. Although, the place is created through people’s experiences, their own personalities, their own identities are also defined by certain places which they encounter with.

Experiences of places are not only depending on time but also on knowledge that we already have about them. Furthermore, different people based on their knowledge about the
place could be positioned between two main categories: outsiders and insiders, defining two extreme cases. More specifically:

*From the outside you look upon the place as a traveler might look upon a town from distance; from the inside you experience a place, are surrounded by it and part of it. The inside-outside division thus presents itself as a simple but basic dualism, one that is fundamental in our experiences of lived-space and one that provides the essence of place* (Relph, 1986: 49).

The same location then can be defined as place for some people and just as location for others. Furthermore, it could be argued that each location has particular level of placeness which is based on dominant or common experiences of the place.

However, there is no single sense of place that everybody shares. Every person has a different image of place, which is based on their experiences, memories, activities, knowledge and so forth. These individual experiences are not separated from the group or community images of the place. For different groups and communities place is differently conceived. Besides individual and group images of the place, there are consensus images of the place, which can be separated in two groups: public and mass. Public images are constituted images of place created by consensus between different groups. Mass images are created by ‘opinion-makers’, as ready-made images and disseminated through the mass-media, especially in advertising (Ibid: 56-7). Mass images as part of the process of creating the identity of the place have become very important due to the development of mass-media. As such they cannot be neglected. They can be used consciously as part of ‘brand’ of certain locality, which brings economical or social prosperity. They become part of the experience of place through our initial knowledge of place, and as such play important role in process of experiencing. The different experiences of the place are generating different images. They all exist simultaneously, and the essence of place is defined in their intersections.

Different levels of involvement in certain locality imply that the same locality can be defined in different ways. Definition of place based on our experiences relays on physical setting, but in the same time strongly depends on individual characteristics as well as time spent in experiencing. This implies that for different individuals the very same locality can be conceived as place and non-place in the same time. However, there is a certain consensus related to how the locality is conceived. The level of consensus will define more or less stabilized images of place, defining its essence-what the place is.

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13 Agué introduces the term *non-place* to describe this phenomenon. Places and non-places do not exist in absolute sense of the terms. Every place contains both of them. The dualism of place and non-place is rather an instrument for measuring the degree of sociality and symbolization of space (Agué, 2008: VIII).
2.2.3. Place-space-scale

The distinction of place and space is important for the definition of place itself. Most frequently the place is defined as part of the space. However, that relationship is complex and implies different experiences. Yi-Fu Tuan (1977:3) defines place as linked with security and opposed to that-space with freedom. People need both space and place to fulfil their lives, and they are basic elements of the World (in Heidegger’s terms). Enclosed and humanized space is place. Compared to space, place is a calm center of established values (ibid: 54). Place is object in which people can dwell and space is connected to the possibility of movement (ibid: 12). In that sense the place represents a part of the space, which is adjusted to basic human needs. Therefore, the place is defined with the stability and space is linked with change and instability.

Furthermore, the distinction between place and space is based on the individual experiences. Therefore, a place and space can also change depending on people experiences. Tuan (1977:73) also emphasizes that when the space becomes familiar then it can be considered to be a place. Place can also be seen as an object, and space is composed of places and things, defining its geometry (ibid: 17). In the broadest sense, the place is part of the space. Space comprises in itself numerous places. However, it is not a stable relationship. The place and space change through time.

Similarly, Casey (2001) defines relationship between place and space through experiences. He defines space as void which comprises different things in it. Place is however, defined as immediate environment of personal experiences and has physical, historical, social and cultural dimensions (Ibid: 683). Place is based on the lived experiences. Therefore, space is related to physical structure and place has meanings, histories, based on feelings and knowledge.

Since the place is immediate environment of each person than it can contain different scales as well. Place can be the room, the house, the neighbourhood, the city, and all that in the same time. Places comprise all different scales of our existence and those scales are overlapping in our experiences. Although, place can be applied to different scales, what is common to all those scales and places is that: place is meaningful location (Cresswell, 2004: 7).

2.2.4. Place and social aspects

The fact that place appears in relation of individuals and their physical setting implies the important role of its social aspects, or practices that place embodies. Therefore, the place is not merely built landscape with particular meanings. It implies people and social
connections as well. For example, the way activities are related to certain locality defines the process of conceiving places. Doreen Massey (e.g. 2009, 2004, 1991) emphasizes the definitions of places based on the social interactions.

Place is not an object separated from the people (Massey, 1991). Furthermore, it is not homogeneous with unique and strongly built character. Rather, place is always in the process, continuously in the movement. Place is intersection of social boundaries in which physical setting becomes less relevant, and can be conceived as stage for social intersections. In that sense, the physical setting may be grounded in virtual reality, as well (Benedikt, 1992: 130). Place is not something isolated and local with the ability of lingering through time but something that will connect global and local, in progressive sense of the place (Massey, 1991:26). Therefore, the place is not only related to a particular locality and its uniqueness, but represents an intersection of generic and specific (Massey, 1995:183).

Massey defines place as interaction of social relations. The identity of the place or its specificity is that it is constructed out of a particular constellation of social relations, meeting and weaving together at a particular locus (Massey, 1991: 28). Massey defines place as extroverted, with dispersed boundaries based on social aspects rather than physical, which is always in process of change, explaining that:

Instead then, of thinking of places as areas with boundaries around, they can be imagined as articulated moments in networks of social relations and understandings, but where a larger proportion of those relations, experiences and understandings are constructed on a far larger scale than what we happen to define for that moment as the place itself, whether that be a street, or a region or even a continent (ibid: 28).

In that sense the character of certain place is never defined only through local elements, rather it comprises elements which derive from the global networks. The place is not merely the location and its physical setting. Place intersects different elements in their complexity. It is heterogeneous and multiple, rather than homogeneously defined. It comprises different social interactions as well as the built environment.

2.2.5. Place and time

Place and time are interrelated terms. Even in language there are terms which simultaneously define the time and locality (for example the term Edo defines concrete locality but in the same time it defines concrete period of time). Time and place are also related through experiences, as Lynch (1972: 241) explains they represent the framework of our experiences. There are different times that we can relate to place: our own personal time
(as the time that we spend in experiencing the place) and the time that belongs to the place itself (as its long internalized history in which it is developing). Furthermore, Tuan (1977:179) defines three different relations of time and place: (1) *time as motion or flow and place as pause* (2) time as necessity of experiencing the place and (3) *place as memorial to times past.*

The first relation represents the definition of place by time. Tuan explains that a common representation of time is arrow. In that sense arrow is representing a directional time but also a movement from one place to another, through space. In that movement goal is point in time but also point in space, or place (Ibid. 179-183). The second relation of time and place defines the meanings of the place. It was already mentioned that in order to conceive some locality as a place, we need to ‘know’ it or to experience it. Modern people are more mobile than ever in a history. Some of the people do not establish roots in one place. The visual quality or physical setting of the place is easy to grasp and do not take much time, but the ‘feel’, the sense and the meaning take long time in experiencing the particular locality. Nevertheless, the time spent in place doesn’t mean that this place will be full of meanings and that people are necessarily building the identity of the place. It can also leave us without any impressions (Ibid. 183-186). In that sense Tuan defines time as necessary for creation of identity of place but not the essential element. The third relation of place and time is based on time past or history of place which has important role in definition of place. The necessity of past in place, Tuan explains in comparison to people’s identity. Every person has the need to define personal identity through past. *I am more than what the thin present defines...To strengthen our sense of self the past needs to be rescued and made accessible* (Ibid. 186). The present of the place is always influenced by its past and future. As Lynch explains, the desirable image of place is the one that assimilates different temporalities in itself, *one that celebrates and enlarges the present while making connections with past and future* (Lynch, 1972: 1).

Another important relationship between place and time is that we perceive time or tell time through perception of environmental change which is transformed into aesthetic experience through numerous ways: (1) physical change- *temporal collage,* (2) activities change but the physical lingers, (3) direct display of change (flow of water in the river, sunset, fire and so forth), (4) motion- experience of change through different perception of landscape, (5) pattering of long range change- the one that we cannot conceive (Ibid: 168-89). Different kinds and speeds as well as ranges of change can produce different relationships with time. The change in built environment can produce the sense of multiple temporalities. Lynch (1972: 173) defines this situation as *temporal collage.* Temporal collage is a palimpsest in the place. It is complex mix between old and new. Different elements evoke different times,
their juxtaposition is amplifying each meaning, and in the same time they are conceived as a whole. On the other hand, the change in built environment can produce certain nostalgic feelings. Namely, the loss of particular building or other element of physical setting of place which is coming from the past could evoke the emotional sense of that past or even nostalgia. This particular relation to time can be described through Benjamin’s dialectical image\textsuperscript{14} or colportage phenomenon. The phenomenon is related with the tension between actual catastrophe and potential redemption (Elliott, 2011:58). It comprises the time, place and experience in their complex relationships. The loss in tangible sphere of place can produce awakening sense of historical events (Doherty, 2006: 163).

\textit{...we simultaneously perceive all the events that might conceivably have taken place here. The room winks at us: what do you think it might have happened here?} (Benjamin quoted in Doherty, 2006: 163).

This phenomenon is well illustrated at recent example of regeneration of the Gateshead and The Sage building. Zoë Thompson (2011: 55-81) is explaining how even completely new urban development of an area can evoke sense of the past. The main idea is that even if the memory of the place is erased through new design, it is in the same time evoked. In that sense, relation of the place and past times is always creative. Even preservation of the buildings represents a possibility for invention of new meanings. Lynch emphasizes the fact that preservation is not simply the saving of old things but the maintaining of a response to those things. This response can be transmitted, lost or modified. It may survive beyond the real thing itself (Lynch, 1972: 53). Furthermore, inventing traditions is part of the process of visualizing the future of certain place, as Lynch explains: \textit{The past must be chosen and changed, made in the present. Choosing a past helps us to construct a future} (Ibid: 64). In spite of all that, meanings related to any place are not entirely liberated from its physical setting; those meanings have to be based upon outside world. As Norberg-Schultz (1980:170) explains: \textit{meanings are inherent in the world, and are in each case to a high extent derived from the locality as a particular manifestation of “world”}. These different relations of tangible elements and meanings related with time illustrate the complexity of the relationships between tangible elements of place and the experience of the durability of the place. That complexity produces the complexity of persistence of the place, related with the definition of its essence which is appearing in relationship between people and tangible elements of place.

\textsuperscript{14}...what is meant by ‘dialectical image’ has two main aspects: the historical object, space or condition to which it relates; and the act of interpretation or construction that strives against the standard ideological understanding of the object (Elliott, 2011:101).
Consequently, change of physical setting is important element which shapes our experience of time, and therefore the place as well. Furthermore, there are two different types of the change: (1) evolutionary, which is slow characterized with resistance, representing adjustment of the architecture and city to the human needs and (2) revolutionary, opposed to the first (Bobić, 1990). Those types are also influencing the possibility to experience the time in place. There are two manifestations of the evolutionary change in the city: (a) through transformation of the existing form and (b) by adding to and expanding the initial structures. Bobić is arguing that viewed historically, the city is not immanent feature of revolutionary changes, rather it develops and is renovated in accordance with the rhythms of evolution and accelerated social development (Bobić, 1990: 34). And he concludes that in order to maintain the equilibrium of the city we need both evolutionary and revolutionary change. Furthermore, those types of change will have different impacts on place and its experience of past.

Therefore, time represents important element in definition of the place. In that sense, place should be illuminated as four-dimensional where time and space are equally important elements, as Lynch explains: We live in time-places (Lynch, 1972: 241).

2.2.6. Identity of the place

Identity is fundamental element in definition of the place (Norberg-Schulz, 1980:10). Identity refers to the quality and uniqueness of certain locality. It comprises the characteristics, both tangible and intangible which distinguish its authenticity as well as its relations to other places. The identity defines what the place is and is based on its essence which appears in the relationship between people and locality.

In order to describe the identity of the place, its essence Norberg-Schultz (1980) adopts the concept of genius, and develops it into the concept of genius loci. The concept of genius loci derives from Roman belief that all beings (even the gods) have their genius, their guardian spirit, which determines their character, their identity. Norberg-Schultz explains that this spirit gives life to people and places, accompanies them from birth to death, and determines their character or essence. Even the gods had their genius, a fact which illustrates the fundamental nature of the concept (Ibid: 18). This definition is based on the transcendental element of the place, its essence, which can linger despite the physical changes in the place. Therefore, the phenomenological aspect of the identity is emphasized in this definition.

In order to understand the processes of creation of identity of a particular place, it is necessary to understand its elements. Relph (1986: 47) argues how static physical setting, the activities, and the meanings-constitute three basic elements of the identity of places.
Similarly, Norberg-Schultz (1984:11) analyses place using the categories such as space and character, or tangible and intangible elements. Space is related to physical setting of the place and character illuminates atmosphere which appears in relation of people and space. Similarly, Cresswell (2004: 7) defines three basic elements of the place: location, locale and sense of place. Location represents an obvious aspect of the place. It determines its relationship with other places. Locale defines the physical setting for the social relations and the sense of place represents emotional and subjective aspects which appear in relation people-place. These categories refer to characteristics of physical setting of certain locality (space defined by Norberg-Schultz or locale defined by Cresswell), and to emotional and subjective aspect which appears in relation of place and its users (e.g. character, atmosphere, sense or meanings). Those two categories are in reality inseparable. In their dialectical relations identity of the place emerges. However, those two categories are not necessarily interdependent. Norberg-Shultz (1980:11) suggests that in spite of the complexity derived from them; those elements should be analyzed as one comprehensive concept- lived space.

Both tangible and intangible elements of the place are in dialectical relation from which identity of the place emerges. Tangible elements of the identity of place, its physical setting and activities are palpable and immanent elements which conceive ground for its creation. Intangible elements of identity of the place, are establishing themselves through people’s experiences. Those experiences, while based on tangible elements of place, do not necessary depend on it. The meanings of place may be situated and connected with its physical elements and associated activities, but they are not their property; they are, rather, the property of human intentions and experiences. Meanings can change and be transferred from one set of objects to another, and they posses their own qualities of complexity, obscurity, clarity or whatever. As such, they involve both individual and cultural variations which reflect particular interests, experiences and viewpoints (Relph, 1986: 47). However, meanings related to any place are not entirely divorced from the built environment, or human-made. Such meanings have to be based in concrete physical setting, that is, in the outside world (Norberg-Schulz, 1980: 170).

This thesis develops the definition of identity of the place based on the definitions on identity in general and the definitions of the place. The identity of the place is a quality attributed to certain location, which appears in the relationships between people and built environment. It is not entirely the property of the place itself, but is built upon it. It defines the essence of the place which appears as consensus image deriving from different users. The term also comprises durability of the place. Namely, the existence of the place depends on

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15 See section 2.1.
16 See section from 2.2.1 to 2.2.6.
its identity. The identity of the place should be distinguished from its character. Character of the place also appears in the relationship of the people and built environment. However, character refers to the state of the place in single point in time, while identity comprises multiple characters in successive points in time. Therefore, time represents an important element of the identity of the place.

2.3. Assemblage theory-place and identity

This thesis is interested in the persistence of the identity of the place. Persistence is defined as quantitative or qualitative sameness in two successive points in time within the change. Therefore, the definition of an essence is important part of the theoretical framework. Although giving valuable insight in what elements constitute and how the essence appears, the definitions of the essence presented so far offer little possibility in understanding its relationship with change. More specifically, the essence is defined as particular characteristic (e.g. genius loci) of the place, as static element which does not support any change and does not offers understanding of persistence. Therefore, application of theoretical and philosophical framework from assemblage theory is proposed. This framework does not aim to abolish the concept of essence; however, it offers possibility to define more broad view at change and identity of the place. More specifically, some places might build their identity on static concept of essence; however some places (such as Yanesen) need different approach.

This section firstly introduces the assemblage theory and its applications in different fields. Furthermore, the main concepts related with identity and change and deriving from the assemblage theory are explained. The concepts are applied in order to understand the processes which are allowing for the identity of the place to be persistent. Furthermore, those concepts are used for creation of the methodology.

2.3.1. Assemblage theory and its applications

Assemblage theory derives from Deleuze’s philosophy which is largely conceptualized by Delanda into a theory. Assemblage theory aims to be a comprehensive theory that comprises all other theories (even the reductions theories) which may be properly located in it and through their connections elucidated (DeLanda, 2006:5). It is an attempt to define inorganic, organic and social assemblages in their complexity and to avoid ontological commitment to the existence of essences (Ibid: 4). The existence of essences is replaced with, what Delanda defines as multiplicities and Deleuze as ’nomadic singularities’, ‘noematic attributes’, ‘vague essences’ and ‘becomings’(Delanda, 2002: 159-60).

17 See section 5.1.3.
Recently assemblage has become widespread in different fields. The concepts deriving from the Deleuze’s philosophy of *agencement*\(^{18}\) are applied in multiple ways in different spheres. That emerging epistemology and ontology is usually referred to as ‘assemblage theory’. The assemblage theory is largely inspired by the Deleuze’s philosophy but not entirely following all the concepts deriving from philosophy. As Brenner et al. (2011:228) explains the ambiguous field that we today refer to as ‘assemblage theory’ is far from the original philosophy of Deleuze. There are even different ways of referring to this field, such as: assemblage, assemblage theory, assemblage thinking, concepts and so forth. The whole field of different ideas deriving from Deleuze’s philosophy has not yet reached the coherence and in some cases is really far from the original ideas of Deleuze (e.g. Actor-Network Theory).

Delanda’s work on Deleuze’s philosophy represents a further contribution and creation of new philosophical concepts. Delanda is not merely explaining the Deleuze’s philosophy, but also creatively contributing to development of new ideas. Furthermore, that philosophy is applied in many different fields such as: social science research and different urban studies. Farias (2010) argues that urban thinking about the cities needs to shift from analysis of the city as *bounded unit and stable form* (ibid: 12) and proposes the assemblage theory as potentially contributing to different way of looking at city. Some of the examples of the application of assemblage theory include the global anthropology (e.g. Ong and Collier, 2004; Collier, 2006), as well as ‘actor-network theory’ (ATN) (e.g. Law and Hassard, 1999; Castree, 2002; Latour, 2005), place theory (Dovey, 2010) and very recent attempts for application to critical urban theory (e.g. McFarlane, 2011b; Brenner et al. 2011) and human geography (e.g. Anderson et al. 2012). Therefore, there are numerous applications of the concepts deriving from Deleuze’s philosophy, as well as different uses of the concepts from that philosophy. For example Anderson et al. (2012) explains how the term assemblage is generally used in two different ways: one to describe a distinct form which enables heterogeneous phenomena to be classified and second as a ongoing process, an open-ended nature of different formations (Ibid: 174-6).

All those different applications of the concepts are resulting in an incoherent state of assemblage theory. Furthermore, the very meaning of the concepts is also differing depending on the perspectives from which they are applied. As McFarlane (2011b: 207) emphasizes: there is no singular history of assemblage especially when all those applications are contextualized in their own different fields. Although, the Deleuze’s philosophy aims to be dynamic, incoherent and open-ended in itself, there are attempts to define and structuralize what we today call ‘assemblage theory’ (e.g. Anderson et al. 2012).

\(^{18}\)For further details of problematic translation of Deleuze’s concept of *agencement* from French to English language as *assemblage* see Phillips (2006).
Notwithstanding different uses of the concepts of assemblage the base ground for most of the researchers is that applications are offering a new ideas and contributions. Namely, Brenner et al. (2011: 230) argues that assemblage theory becomes very useful when it is mobilized with other existing theories or concepts. More specifically, the assemblage theory is bringing new ideas as supplementary to exiting theories not by replacing them but adding new concepts. For example, McFarlane (2011b) emphasizes three main possible contributions that assemblage theory can offer to critical urbanism. One is related to a descriptive orientation to the city, what Brenner et al. (2011: 228) defines as thick description of urban inequalities, which are produced through relationships of history (McFarlane, 2011b: 208). Second is that assemblage thinking can help focusing on different problematic of materiality in broadest sense, with the emphasis on both social and material as inseparable elements of the cities (Ibid: 215). And finally, assemblage thinking can help to create more general critical imaginary (Ibid: 208). Therefore, McFarlane is explaining the ways in which assemblage theory can be added to already existing theory and contributing rather than replacing and building a new theory. Brenner et al. (2011) takes even further step and explains how exactly assemblage theory can be applied in political economy. He emphasizes three main domains in which assemblage theory can be used: firstly as empirical (by focusing on and explaining the actual assemblages existing in the field of political economy), secondly as methodological, and finally in ontological spheres (Ibid: 230-1).

Similarly, this thesis uses the assemblage theory as additional concepts to already existing place theory. The application of assemblage theory into the place theory does not abolish already existing ontology on place but contributes to the broader understanding of the place. Particularly, it focuses on the aspects of change and persistence of place and its identity. The assemblage theory comprises already existing ontologies and connects them into a comprehensive ontology, where for example the Heidegger’s definition of place represents one possible state or definition of the place, but not necessarily the only single truth. Therefore, the assemblage theory does not construct a new ontology on the place, abolishing the already existing theories. It is based upon them and built upon them.

The concepts that this thesis uses are deriving from the Deleuze’s and Delanda’s philosophy as well as the applications in the place theory by Dovey (2010). The assemblage theory is applied in order to understand the identity of the place and its relationships with built environment in dynamic processes of change. Main concepts used in this thesis are: assemblage, multiplicity, relationships, and becoming. In this thesis the assemblage theory is applied as empirical (in which concrete place is observed and analysed as assemblage), ontological (in order to define how place and identity are persisting), and as concept for creation of methodology.
Following Dovey’s (2010) development of place theory the concept of assemblage is used in this thesis for understanding of place. Namely, the case study of Yanesen is defined and analysed as assemblage. The concept of relationships is also applied for understanding the structure of the place. This represents an empirical application of assemblage theory.

In terms of application of concepts of assemblage in place theory the main contributions are deriving from multiplicity, becoming and relationships. The concept of multiplicity is applied in understanding of dynamics of identity of the place. Difference and intensity are related to the physical aspects of the place and are applied in order to understand the process of persistence of identity through change in its built environment. Already exiting definitions of identity of the place are supplemented with the concepts from assemblage theory.

The assemblage theory is also used in order to generate the methodology. More specifically, methodology is built upon the idea of thick descriptions based on the scales and relationships between elements. The methodology aims to allow analysis from different aspects having multiple and non-coherent conclusions which are partially overlapping and creating the thick description of the place. The methodology deriving from assemblage theory aims to emphasize the open-ended nature of the place.

2.3.2. Assemblage

In assemblage theory, all the entities, no matter how complex they are, are defined as assemblages of different elements. Namely, assemblages are wholes whose properties emerge from the interaction between parts (DeLanda, 2006:5). Societies are assemblages of people; neighbourhoods are assemblages of certain groups of people, houses, streets and so forth.

One of the characteristic of the assemblage is that, even it emerges out of the interaction between smaller elements; it cannot be reduced to them. That is due to the relations between elements. Nevertheless, those relations are not only defined inside but also outside the assemblage, what Delanda (2006: 11) calls relations of exteriority. The relationships between elements imply that component parts of an assemblage cannot explain the whole. Therefore, the assemblage is not a simple sum of elements. The characteristics of elements as well as their relationships are equally important in definition of an assemblage. For example, observing the building as assemblage offers different possibilities based on the relationships. Namely, building can be defined as assemblage of different rooms. Those rooms could have different connections and they will define different character of the building, therefore different assemblages. If rooms are connected by horizontal spaces such
as corridors that will highly differ from the situation in which connections become vertical: staircases or elevators. Different connections will define different buildings, conceived as different assemblages. Therefore, the building itself cannot be reduced to its elements—the rooms. Furthermore, in this concrete example, two different assemblages will have different relations to the exteriority as well. One building which has horizontal connections will connect to street differently in comparison with the building consisting of vertical connections. Relations inside the assemblage also define relations of exteriority, with other assemblages.

Another important characteristic of the assemblage is that relations between elements of an assemblage may be logically necessarily, but also contingently obligatory. Those relations are never defined hieratically; rather they are conceived in rhizomatic manner. These relations Delanda defines as non-linear causality as complex relations of micro-macro scales (DeLanda, 2006:28) (Delanda, 2002: 119). One assemblage can be defined through micro and macro causalities in the same time. For example, position of the house at plot. This position may be determined by general planning regulations of the city, or just as part of the context of street, as higher level of causality or macro level. On the other hand, that same position is highly determined by the demands of the owner of the house or architect’s decisions, which are in this particular case-micro levels. These demands, both from higher and lower level are inseparable, and they are overlapping through this concrete manifestation of the position of house at plot. In this concrete example the position of the house on the plot will be result of both regulations and demands of the user.

Assemblages are also made out the elements that are self-subsistent and can be detached and transferred to another assemblage (Delanda, 2006: 18). In this sense, elements of an assemblage are conceived as material, inbuilt entities, which can become part of another assemblage. Those elements are seen as mere materiality, as elements that posses volume. Therefore, although, assemblage is constructed out of different elements, it can still exist without one of them, due to different roles that components may have based on their interactions.

This characteristic of an assemblage is highly important for methodology created in this thesis. The relationships of interiority and exteriority in terms of micro and micro levels are defining the multiplicity and thus identity. The existence of the relationships between elements defines the possibility for elements to change and allow the persistence. The

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19 For more details see section 5.1.3. and 7.1.
analysis of entities in terms of relationships between elements contributes to understanding of multiplicity, identity and becoming.

2.3.3. Multiplicities

The view of the entities as assemblages allows for their analysis as complex systems of different relationships. Due to this fact, the essence is replaced with the concept of multiplicity. That concept aims to understand the identity of an entity through processes of change. Therefore, in this thesis this concept is considered as important and useful aspect, which illuminated the processes that enable persistence.

Delanda (2002, 2006) explains the role of the concept of multiplicity as concept which in assemblage theory replaces the essence. Essence comprises particular characteristics of an entity which are eternal and define its identity. Essences are necessary elements of an entity, existing from its birth to its death. If entity loses its essence it becomes something else. On the other hand, in Deleuze’s ontology identity is not defined through static concept of characteristics but through morphogenetic process which creates entities (Delanda, 2002: 9-10). Static concept of essence defines archetypes as timeless and constant without possibility of change. On the other hand, Deleuzian philosophy implies that multiplicities are dynamic concepts which define individual rather than type, what Delanda calls flat ontology. Another important difference between essence and multiplicity is therefore defined through time. Essences are eternal and multiplicities are defined as becomings, progressively changing. Third difference appears as the fact that essences are given and multiplicities represent possibilities for becomings.

There are two types of multiplicities: quantitative and qualitative (Deleuze, 1991: 40-2). First is defined as spatial, discontinuous and actual (Ibid: 117). It is related to numerical multiplicity and extensive characteristics of entity. The latter is defined as continuous, temporal and virtual (Ibid).

Delanda (2002) explains the difference between essences and multiplicities using the example of evolution of species. In essentialist point of view species are static, however in morphogenetic account they are dynamic (Ibid: 10). Species are illuminated, opposed to essentialism, as groups of individuals, whose similarities derive from similar processes that determined their genesis, rather than eternal characteristics. In that sense, Delanda defines this Deleuzian ontology as flat ontology. In flat ontology there are no general typologies, there are no archetypes defined by essences, all entities are defined as individuals, no matter

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20 For more details see section 3.2, 7.1. and 2.3.5. which summarises all concepts of assemblage related with identity.
how complex they are, and they emerge from concrete historical processes and causal interactions among smaller scale individuals (Ibid: 117).

Delanda distinguishes essences and multiplicities in relation of their definition of the identity, former creating strong and clear boundaries between identities as archetypes and latter (defined as concrete universals), as zones that create continuum and boundaries that are dissolved rather than sharply defined. In Delanda’s words:

*unlike essences, which as abstract general entities coexist side by side sharply distinguished from one another, concrete universals must be thought as meshed together into a continuum. This further blurs the identity of multiplicities, creating zones of indiscernibility where they blend into each other, forming a continuous immanent space very different from a reservoir of eternal archetypes* (Delanda, 2002: 22-3).

Consequently, multiplicities are defined in relation to time and change. More specifically, multiplicities are defining the *structure of spaces of possibilities* as part of morphogenetic processes (Ibid: 10). In that sense, multiplicities are not given all at once; rather they are possibilities, in which every entity is product of its own history. They reveal themselves through time and through concrete historical development of entity. In that sense, multiplicities in their nature imply certain change and are important for definition of persistence of identity.

Furthermore, a multiplicity can be described as a *nested set of vector fields*, which are non-symmetrical and defined through *attractors* (Ibid: 32). While essences are clear and distinctive multiplicities are defined through *singularities* (attractors). Singularities are determining *long-term tendencies, structure the possibilities which make up state space* (Ibid: 16). Those singularities *come in sets, and these sets are not given all at once but are structured in such a way that they progressively specify the nature of a multiplicity as they unfold following recurrent sequences* (Ibid: 16). In that sense, singularities represent the fields of attractions, which determine the development of multiplicities. Singularities are in a way infinities and cannot be completely achieved. They are not *fully actual*, they represent *guides* of real processes (Delanda 2005: 83). Therefore, multiplicities should be imagined as spaces of possibilities, rather than concrete and defined characteristics. This space of possibilities is not real, and Deleuze and Delanda define it as *virtual* (Ibid). Those spaces of possibilities are emerging through time, revealing themselves in relation to concrete historical situations. Therefore, although not part of the actual state of an entity, singularities are present in the sense of something yet to be achieved. Deleuze explains *that which transpires into an already-there that is at the same time not-yet there* (Deleuze and
This definition of multiplicity also implies particular perspective on the way existence of entities in which \textit{being} is replaced with \textit{becoming} (Deleuze, 1990: 164).

\textbf{2.3.4. Becoming}

The replacement of being in assemblage theory with becoming represents an important element which can contribute to understanding of persistence of identity\textsuperscript{21}. Becoming represents a particular point of view in which identity is defined through processes in particular relationships between past, present and future. Furthermore, the existence is not defined as static but dynamic state related with change.

Becoming is defined as stretched succession of moments in which entity is forming. That formation is constant and represents natural state of any entity (Delanda, 2002: 84). That process can be more or less intensified, and changes its intensity through time. Delanda (2002: 107) uses example of water at 0\textdegree C to explain the \textit{pure becoming}. At that particular moment water is not liquid, nor solid; it is both and neither in the same time.

This state of becoming, Deleuze (1987) explains through two different concepts or readings of time: Chronos and Aion. Chronos represents a traditional concept of time which is limited and infinite, inseparable from circularity and its accident. Opposed to that Aion is unlimited, like a line which infinitely stretches in both directions (Deleuze, 1990: 165). Becoming is linked with Aion concept of time. It represents a paradox, affirmation of both senses or directions of past and future in the present, in which present is eluded. In Deleuze’s words:

\begin{quote}
\textit{Becoming unlimited comes to be the ideational and incorporeal event, with all of its characteristics reversals between future and past, active and passive, cause and effect, more and less, too much and not enough, already and not yet. The infinitely divisible event is always both at once. It is eternally that which just happened and that which is about to happen, but never that which is happening (to cut too deeply and not enough)} (Ibid: 8).
\end{quote}

Furthermore, the concept of becoming in which entities exist has implications in definitions of past and present and their interactions. In that sense present is active (becoming) and past is not active, nevertheless it \textit{is}, rather than \textit{was}. The past has \textit{not ceased to be} (Deleuze, 1991: 51). Furthermore, past does not represent the state of thing in one moment in time, but succession of moments that coexist with the present (Ibid: 59). The time here is represented as a cone, and each section of the cone represents a certain moment in the past.

\footnote{\textsuperscript{21} Explained in the section 2.3.5.}
and the present is the point at the top (the smallest one, however in the same the most condense one since it comprises all the pasts) (ibid).

The interactions between past and present are important from the aspects of persistence. The persistence implies certain sameness of an entity in different points in time. Becoming implies that element is changing through time and its past and present are part of that process. In that sense the persistence of the identity implies that entity is always in the process of formation, therefore not static. Where, becoming is intensified and identity is not lost.

2.3.5. Identity

It was already mentioned that instead of defining identity of certain entity through essence in assemblage theory the essences are replaced with multiplicities. This section explains the main processes and illuminates the ways in which the assemblage theory can be useful in understanding the persistence of the identity within the change.

In assemblage theory it is emphasised that identity is not given all at once, but it is defined progressively. Furthermore, identity should be conceived as mere product of historical processes, and not as base category upon which ontology is build (Delanda, 2002: 42). Multiplicities define processes which determine each entity’s unique individualization. Thus, any entity and its identity are in the process of becoming rather than being. Therefore, the identity is always unachieved and in the process of individualization. The process of individualization is determined through intensive factors or differences in intensities. Furthermore, those intensities remain hidden underneath the extensive and qualitative properties of the final product (Ibid: 59). Consequently, Deleuzian approach to definition of identity emphasizes the necessity to involve not only the characteristics of entity itself, but the constructive processes which guide its morphogenesis (Delanda, 2005: 82). Moreover, the identity of an entity lies in its extensive characteristics, however its description demands the historical processes that constitute that identity which lie in the virtual sphere and are defined as intensities.

In order to explain the approach to identity and the processes behind it, the definition of the extensive-intensive division needs to be clarified. In assemblage theory all entities can be defined in terms of extensive and intensive magnitudes. The difference between intensive and extensive quantities is based on their divisibility (Ibid: 81). Intensive quantities are indivisible and extensive opposed to that, divisible (Ibid). Furthermore, intensive quantities are objective averages, meaning that they tend to preserve the same average value upon division which determines them as indivisible. For example, if we divide the room into two
rooms, those two rooms will have half of the volume of the room that was divided. In this specific example, the volume is the extensive quantity that describes room as an entity. However, the temperature of air in the example of divided room will not change after the division. Therefore, in this example the temperature of the air of room will represent the intensive quantity.\textsuperscript{22}

The morphogenetic processes which characterize any entity (and therefore place) are defined as product of differences in intensities. Two intensive quantities can produce change if there is a difference in the degree of their intensity. The change which is produced in this process is not a simple addition, but the emergence of spontaneous flow or movement which will tend to cancel the difference in intensity and restore the equilibrium and average values (Ibid). Thus, intensive differences are productive (Ibid).

Since every entity can be defined through intensive and extensive properties, then every entity can be analysed from the aspects of actual and intensive space. Furthermore, the concept of multiplicities can be defined as the possible and belong to the third dimension. Thus, there are three main aspects of spaces which define the reality: (1) virtual-

\textsuperscript{22} Some of the examples of intensive quantities are related with emotions, such as: joy, love, hate, grief, beliefs, desires and so forth, therefore highly important for the identity.
characterized through number of possibilities, which are not actual (but are real), and exist through singularities, (2) actual- characterized with extensive divisible characteristics of an entity and (3) intensive-defined through number of processes which are producing entity. Any entity and its identity should be observed from those three aspects. Furthermore, this division illuminates that in order to understand the processes (rather than singular state) of the individualization it is necessary to observe the intensive aspects of spaces. Moreover, the focus should be on zones of higher and lower intensity, where difference in intensities has not cancelled-created equilibrium (Delanda, 2005: 82; Deleuze, 1991: 43, 96-8).

The definition of identity in the assemblage theory does not imply that it is in the constant processes of formation and change. Furthermore those processes are not linear due to the fact that multiplicity can have number of possible states of becoming. Those states can be defined through two different dimensions (Fig. 2.1.). One dimension comprises the different roles that components of assemblage may play, creating variable different mixtures of material role at the one extreme and expressive role on the other. Material role of elements of assemblage is the way those elements occupy space; it defines only their physical characteristic. Expressive role defines their qualitative characteristics, their role in the assemblage as agents. All assemblages are mixture of different levels of material and expressive roles. The second dimension defines processes in which these components become involved: on the one side stabilized, or increasingly homogenized (territorialization) and on the other increasing heterogenization called deterritorialization. Different assemblages can have different levels of material expressive dimension or stabilized and change-territorialized and deterritorialized characteristics (DeLanda, 2006:12). As Delanda explains, the identity of any assemblage at any level of scale is always the product of a process (territorialization, and in some cases coding) and it is always precarious, since other processes (deterritorialization and decoding) can destabilize it (DeLanda, 2006:28). Furthermore, different levels of territorialization and expressiveness may appear in different points in time through individualization.

The stability of identity therefore is related to level of homogeneity or its uniformity. Furthermore, clear and stabilized identity of assemblage is conceivable when the territories are clearly defined. Those aspects of assemblage should be observed as singularities, as

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23 Delanda adds third dimension of intensity to original two dimensions (actual and virtual) proposed by Deleuze (1991;1987:88)
24 Fig. 2.1. illustrates one possible development of an entity, staring from dominantly expressive role of its extensive qualities and in the same time having blurred boundaries and heterogeneity. Further in time the entity is showing more territorialized state with dominantly material role. That can be explained at the example of place as identity being highly linked with particular buildings and having very clear boundaries. In the same time, processes of demolishing the buildings might start and identity will shift into more expressive state with less clear boundaries. This follows the idea of cycles explained by Delanda at the example of organisms (for more details see Delanda, 2002: 86). However, not all entities will have cyclical individualization.
extremes and identity always emerges from mixture of those, which create discrete states through time. This does not imply that it is impossible to maintain identity through time, just it should not be observed as static category. Among those extreme singularities there is also a process of reterritorialization which is significant for understanding of persistence. This process can appear after deterritorialization. It is re-establishing the identity without going back to the previous state of entity, the state before process of deterritorialization. As Deleuze and Guattari (1987) explain:

Reterritorialisation must not be confused with a return to a primitive or older territoriality: it necessarily implies a set of artifices by which one element, itself deterritorialised, serves as new territoriality for another, which has lost its territoriality as well (Ibid:174).

This is an important capacity that of an entity that has persistent identity. Namely, it allows entity to change, reorganize itself through reterritorialization. The ‘new’ entity which appears after the process of reterritorialization is made to, as Buhanan (2005) explains, stand for the lost territory. The possibility to have compensation and substitute for previous value that has been lost, Buhanan calls home value and emphasizes that this is when memorialisation steps in-it positions relics of the past as tokens that ‘stand for’ the lost territory (Ibid:31). This process is important for the change and persistence of assemblage. Namely, reterritorialization does not represent the returning to the previous state of an entity. It represents its persistence within particular change. This process can be linked with Deleuze’s concepts of repetition and difference.

Repetition emerges between the things that are distinct but share the same concept. Repetition implies difference in itself. Therefore, repetition appears as a difference, but a difference absolutely without concept; in this sense, an indifferent difference (Deleuze, 1994: 15). Thus, it could be argued that continuity of identity implies particular sameness through time (persistence), which is given through repetition in time which in itself implies difference. Repetition cannot be return to the original state. Repetition always includes difference, it is never the Same but includes the Other (Ibid: 22). The identity in becoming is defined through repetition, it is multiple and revolving around the difference (ibid: 40). Furthermore, Deleuze links the difference and the repetition in the identity:

Returning is being, but only the being of becoming. The eternal return does not bring back ‘the same’, but returning constitutes the only Same of that which becomes. Returning is the becoming-identical of becoming itself. Returning is thus the only identity, but identity as secondary power; the identity of difference, the identical

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25 That is an entity in one point in time and in different point in time
which belongs to the different, or turns around the different. Such an identity, produced by difference, is determined as ‘repetition’ (ibid: 41).

Therefore, repetition represents the becoming instead of being, in which the difference represents an inseparable element. For Deleuze only the extreme forms return without the difference. Returning to the previous state is rarely possible.

Fig. 2.2. The snapshots of the essence and multiplicity in time

Persistence of identity through time implies certain sameness. In assemblage theory it is linked with the multiplicity rather than particular characteristics of an entity. The sameness is therefore invoked to account for repetition through time. In order to understand these processes the entity needs to be analysed as assemblage, through relationships between elements. In addition, the identity represents an emergent property which depends on causal relationships between entity’s parts (Delanda, 2002: 155). Furthermore, it appears only when the assemblage is observed as a whole. That difference allows the explanation of process of persistence. Namely, persistence defined with an essence implies particular characteristics of an entity. As long as those characteristics are present the entity exists. When entity looses those characteristics it consequently ceases to exist. However, in assemblage theory, those characteristics are defined as extensive properties of an entity. Therefore, they are only products of the processes. Opposed to essence multiplicity is defined through interaction between elements, therefore through processes rather than characteristics. Therefore, analysis of an identity based on the multiplicity should reveal the
processes in which the extensive characteristics are produced. That implies that different elements of an assemblage can produce the same relationships and therefore the same emergent extensive properties (Fig. 2.2.). Therefore, the change of elements in assemblage is more flexible in terms of the persistence compared with the analysis based on the essence.

2.3.6. Place as assemblage

In assemblage theory all entities are defined as assemblages. Therefore the place can be defined as assemblage. Furthermore, recent developments of place theory are related with Kim Dovey’s applications of assemblage theory in definition of place. Dovey introduces the replacement of Heideggerian ontology of being-in-the-world with a Deleuzian notion of becoming-in-the-world (2010: 6). Dovey (2010) depicts the place as territorialized assemblage, as dynamic rhizomatic structure of people and environment, which is both material and experiential. Moreover, the assemblage theory is used as a toolbox to explain place. Thus place is defined as state of affairs rather than a thing or collection of parts. It is constructed from different elements but still can exist without one of them (Ibid: 16). Dovey uses the example of street to explain the concept of place as assemblage: a street is not a thing nor it is just a collection of discrete things. The buildings, trees, cars, sidewalks, goods, people, signs, etc. all come together to become the street, but it is the connections between them that makes it an assemblage or a place (Ibid).

Furthermore, Dovey (2010) introduces the Deleuze’s concept of tree and rhizomatic systems in order to explain the relationships between elements which constitute the place. In Deleuze and Guattari’s A Thousand Plateaus rhizomatic systems are explained in contrast to tree-like systems. Tree systems are organized hierarchically vis-à-vis rhizomatic systems characterized with horizontal lines of movement, networks and connectivity (Ibid: 20). Main characteristics of rhizome systems are: (1) connection and heterogeneity—any point of a rhizome can be connected to anything other, and must be, (2) multiplicity—there is no unit which will serve as a pivot, and (3) rupture—explode, which define the connections to the other systems (Deleuze and Guattari, 1987: 7-20). Rhizome is composed not of units but of dimensions, or rather directions in motion (Ibid: 21). The conceptual contrast between rhizome and tree finds a parallel in striated and smooth space (Dovey, 2010: 21). Striated space is where identities and spatial have become stabilized in strictly bounded territories. In opposition, smooth spaces are described with movement and instability, through which identities and spatial practices become possible. Smooth space is linked to rhizomatic modes of practice. Dovey concludes that spatial structures are always a mix of tree-like and rhizomatic systems (Ibid: 21). These two extreme states of the systems illuminate different structures which are based on the relationships between elements of an assemblage.
Therefore, the place as assemblage should be observed through different relationships between its constitutive elements.

Another important aspect of defining the place as assemblage is related with its interactions with other systems, what Delanda calls relationships of exteriority (2002, 2006). Those relationships have important influence in understanding the places, not as isolated phenomena but in connections between different scales (both macro and micro). On the one hand, the place is influenced through bottom-up processes as well as top-down coming from larger scales. Those relationships are not linear and only contingently obligatory. However, the important aspect is that place should be analysed as intersection of different scales26.

Definition of places as assemblages has direct implication for understanding the place reduced to mere subjective experience. Namely, in assemblage theory emphasis is on the material world, which is between phenomena and noumena 27(Delanda, 2000: 36). Thus, the place and its identity appear in interaction of experience and material setting of the place. As Dovey (2010: 17) explains, the senses or meanings of the place are neither found within the material urban form nor are they simply added to it, rather they are integral to the assemblage. Meanings of the place are not simply attached to the places; they are already part of it. They are always in interaction with elements that compose that place. The quest for the sense of place is a paradox, as Dovey explains it language can name this sense but is powerless to define it (Ibid: 25). Sensation operates before the cognition and meaning. The encounter with a song, painting, poem or place is experienced before analysis can turn it into a proposition (Ibid: 25).

In spite of commonly recognized idea that genius loci, spirit or identity of the place are static phenomena which define the essence of the place, Dovey argues that identity is integral element of place assemblage and as such is always in the process of becoming, change. This is an attempt to define place in less essentialist and ontological way. His approach to definition of space represents a shift towards the place, in both terms of spatiality and sociality. The definition of genius loci as stabilitas loci is reduction and it ignores social constructions of place identity (Ibid: 5). In terms of Manuel Delanda, the identity of place as any other assemblage should be conceived through multiplicities. In that sense the identity of place does not represent number of characteristics which define its uniqueness, rather the processes which determine its individualization. That implies

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26 For more details see the section 7.1.-how relationships between different scales are affecting the persistence of the identity of place in Yanesen.

27 In his book Difference and Repetition Deleuze explains the difference not as phenomenon but as noumenon (existing by itself without human perception) closest to the phenomenon (see Deleuze, 1994: 222). Therefore his approach is between the phenomenology (the world exist only the way it is experienced in human mind) and the existence of the world independently from the people’s perception-the world in itself.
possibility for different structures of the built environment to form the same identity (defined through multiplicity). Furthermore, it has direct implication in persistence of the identity of place within the change of its built environment. It implies that identity of the place is the product of the processes based on differences in intensities in which the built environment is product rather than a basis for identity. Therefore, different material expressions can be related with the same processes and therefore will represent the continuity of the identity.

Moreover, this view offers the possibility to define identity in becoming, through processes which are never completely accomplished, which stream to singularities. This of course does not imply that identity in all of the places is in constant change. That identity can be stabilized through the processes of territorialization and homogenization as described earlier. Identity characterized through multiplicities implies that it is defined through processes of becoming rather than number of characteristics of uniqueness. Those characteristics are deriving from relations of exteriority and interiority in assemblage.

Following the definition of identity of the place, the elements which constitute place as assemblage can be distinguished as physical setting, activities and meanings. However, the important difference is that meanings in the assemblage theory are represented to be part of the assemblage. Therefore, the experiential sphere of the place is not separated and only based upon the built environment. In the assemblage the meanings play equal role as any other element.

For Dovey identification of space with “freedom” and “movement” in contrast with place with “stability” and “rootedness” is a serious mistake. Place should be conceived as assembled mix (Ibid: 23). For him distinction of place and space lies in intensity which is in relation of people and physical setting, which are conceived as assemblages. The relations between elements of an assemblage are what defines place. As he explains: what distinguishes place from space is that place has an intensity that connects sociality to spatiality in everyday life (Dovey, 2010: 3).

The definition of place as an assemblage allows us to illuminate place through the relations between elements rather than only through elements themselves. Furthermore, the definition of place as assemblage emphasizes the characteristics of heterogeneity. Thus, the single global equilibrium of assemblage is replaced with multiple equilibriums meaning that

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28 See the Fig. 2.2. and explanations of identity in assemblage theory in previous section 2.3.5. and concrete example of change of the structure which produces the same identity based on the sizes of elements through time in Nezu and Sendagi in section 5.1.3.

29 See for example the conclusions especially the role of narratives which are based upon the consensus meanings in the persistence of the identity of place in Yanesen (section 7.1.).
history matters (Delanda, 2005: 83). Therefore, the place should be analysed in its totality, comprising all the elements of the place. Namely, the identity of the place is defined not only through its essential characteristics but through the relationships between all the characteristics of the place (and across the scales). Furthermore, the persistence of the identity of place is benefiting from the definition of the assemblage as dynamic system.

The assemblage theory aims to be comprehensive theory which can comprise all other theories. In that sense all the previously explained definitions of place and identity find their own position within the assemblage theory. For example, the definitions of place based on the Heidegger’s phenomenology finds its own place in this theory. However, it represents only one part of the definition of place as assemblage. Therefore, the images of the place which are formed through people’s experiences of certain locality are only one part of identity of the assemblage. They are in interactions with all other aspects of place.

Assemblage theory offers a possibility to assess the place in its complexity and dynamics. Therefore, based on this theory there is a need for complex approach to analysis of the place. This thesis represents a step in that direction.
3. Methodology, methods and data collections

This chapter presents an epistemological approach which aims to link philosophical concepts and theory with the concrete tools. It discusses the links between assemblage theory and methodology, introduces different methods and data collections and defines the ways in which they are linked. The thesis uses assemblage methodology at the broadest level in order to gather and organize different descriptions of Yanesen. The main concepts deriving from the assemblage theory are explained. Furthermore, the general characteristics of concrete assemblages are defined, and five relevant concepts are contextualised from the assemblage theory. The methods are gathered around two steps: (1) definition of the identity of Yanesen and (2) the analysis of its built environment. The general structure of analysis is explained. All methods used in the thesis are described with the emphasis of their overlaps and creation of thick descriptions30.

In his book ‘After Method: mess in social science research’ Law (2004) emphasizes that methods do not solely discover or depict, but also produce realities. The results deriving from the analyses are depending on both the reality itself and on the type of method applied. Consequently, the conclusions obtained from certain analysis highly depend on the ways of approaching the reality. Furthermore, Law (2004) argues that if method is conceived based on the assumption that reality is singular and static the research results will be singular as well. Following that, it could be argued that different entities (realities) demand different methods and those methods are describing, creating realities and amplifying some of their characteristics.

This thesis aims to approach identity of place as complex system, as assemblage. Therefore, it seeks to develop process for analysis of identity of place as open-ended, dynamic and complex reality. It focuses on describing a concrete reality: Yanesen, and does that by assembling various methods for structuring a heterogeneous but compatible methodology as assemblage. The thesis uses case study of Yanesen in order to design and test assemblage methodology. More specifically, the case study is used to examine and inspire the creation of new ideas for the concrete assembled methods versus the singular view at the place. Therefore, the methodology emerges from the interaction between the theory and empirical study.

30 For detail explanation of thick and thin descriptions and their role in assemblage theory see p. 53 and Fig. 7.1.
For the purpose of describing the identity of Yanesen as the first part of assemblage methodology, various data collections and analysis are applied. Furthermore, those descriptions of elements of identity of place are gathered in order to define the relationships between them. More specifically, this method constitutes of various data collections and analyses in order to create platform for the conclusions. Those conclusions are deriving from diverse points of view at the identity of the place as assemblage, however the intention is to analyze the way they overlap and interact between themselves. The methods of data collection include archival research, electronic data collection, site fieldwork and photograph, while the methods of data analysis include: mapping, photograph survey, urban morphology analysis, observation, and statistical analysis.

For the purpose of this analysis the data are organized according to the research question. However, this methodology offers multiple ways of structuring the analysis. Consequently, the analysis could be defined within diverse structural organizations with the emphasis on various methods and therefore creating multiple descriptions of the place. Furthermore, this analysis could be re-assembled in a different ways. This thesis represents just one of the multiple viewpoints at the identity of the place and its built environment. The importance of this particular perspective comes from the place itself and the research question of this thesis related with the change of built environment and persistence of identity.

3.1. Assemblage methodology

This thesis develops assemblage methodology which is based on the definition of identity of place in assemblage theory. Assemblage methodology represents an attempt to analyze identity of place in its complexity, dynamics and infinity. The methodology is assembling various analysis and methods in order to create comprehensive but open-ended rhizomatic structure of descriptions in diverse media. These descriptions are linked and overlapped creating an assemblage approach to identity.
Following the main ideas deriving from the philosophical opus of Deleuze the “nomadic though” the assemblage refuses the boundaries between the concept, object and subject (1987). There are no strict boundaries between them. Concept is not imposed on the description of object. They are in interrelationships and they change in their interactions. Consequently, the assemblage methodology developed in this thesis is based on the relationships between the concepts of analysis and the place and its identity as well as the concrete case study of Yanesen. The assemblage methodology is part of the place, of its identity and Yanesen. It is all that and none of them separately. Therefore, the methodology is deriving from the concepts of assemblage theory and in the same time from the concrete case study as well.

Assembled Methods:

- **Assemblage Theory**
  - 1. non-coherence
  - 2. becoming
  - 3. multiplicity
  - 4. ambiguity
  - 5. relationships

- **Assemblage Methodology**
  - thick description
  - analysis over time
  - comparison of the states of built environment over time
  - pivotal points
  - relationships

- **Assemblage Diagram** (relationships between all individual results- qualitative analysis of quantitative results)

- town-plan analysis (streets, blocks, plots and building footprint)
- degree of change
- standard deviation
- principal component analysis

- discourse analysis of narratives

- streetscape analysis:
  - visual permeability
  - type of public-private interface
  - photographic survey

- urban morphological analysis (streets, blocks, building footprint)
- cluster analysis
- Getis and Ord G analysis

Fig. 3.1. Diagram of approach to design assemblage methodology in Yanesen

The question of this thesis is approached through application of assemblage theory in creation of assemblage methodology, which by being concretized defines the framework for

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31 For more details on separate methods see the section 3.4.
the assembled methods (Fig. 3.1.). The assembled methods are produced in interaction between already existing discourse on identity of the place and concrete case study within the assemblage methodology. Assembled methods are concrete tools for the analysis of the particular place, in which interaction between them defines the assembled descriptions of the place. The methods and thus descriptions are heterogeneous but compatible (Fig. 3.1.). This method defines identity as emerging from interactions between built environment, activities and meanings. Assemblage theory defines entities as wholes whose properties emerge from the interaction of their parts (DeLanda, 2006:5). From this point of view identity emerges as part of assemblage of its tangible and intangible elements.

It could be argued that physical appearance of Yanesen is not significantly different from any other precinct (low rise high density residential areas) in Tokyo; however the stories and narratives produced from and around this precinct show Yanesen as different and special place among all other places in Tokyo. The identity of Yanesen is related to supposed strong connections with the past and those influence its meanings. That is why Yanesen represents a good place to analyze identity as assemblage. The gap between physical characteristics of the place and narratives represents a basis to depict their relationships. This thesis is therefore, focusing on the relations between various elements of physical structure of the place and their links with the meanings and identity. It aims to understand those aspects of identity of place and define the relations between them.

In order to analyze identity of place of Yanesen as an assemblage, with emphasis on relations between elements and multiplicities, this thesis aims to develop an assemblage methodology. It argues that identity of place represents a complex system and therefore demands a method which will produce multiple and relational results and conclusions. In this thesis the method largely derives from the characteristics of identity of place defined as assemblage and is inspired by the Law’s (2004) definition of assemblage method in social science. For design of this method the relevant characteristics of identity of place as complex system are:

1. Identity of the place is not coherent. The identity is defined as part of place as assemblage in which relationships between different elements play an important role (Fig. 3.1.). That means that identity of place can have local non-coherences which can produce their own form of coherence as part of the place as assemblage. In similar

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32 The division deriving from Relph’s definition of the identity of place (1986: 47).
33 In his book ‘After Method: mess in social science’ Law discusses the problem of approaching complex realities in social science. Law criticizes current methods which assume that all realities are constant, passive and universal and opens the discussion on the necessity for development of assemblage method which can deal with allegorical, ambiguous, indefinite, unclear and tacit realities.
34 The term non-coherence here follows the same idea introduced by Law (2004: 100) in which non-coherence does not imply the opposite and therefore negative of coherence; and should be distinguished from incoherence.
manner, it could be argued that singular description of identity of place will not illuminate the reality in its totality. It will show only partial description, leaving out all the non-coherences of the system. That assumes that there are no general and invariant laws which could be used to describe identity of place. The identity defined as assemblage does not imply constancy.

2. The identity of the place is not static. One of the characteristics of the identity defined as part of an assemblage is that it is in constant process of becoming (Fig. 3.1.). That characteristic does not only imply that identity is in constant process of change but also that it represents a paradox of time comprising both past and future in the same point. The description of identity therefore becomes important in relation to time. The time is then not observed as an external element of identity, but rather it is inseparable part of the becoming, therefore-identity. In the same time, the change measured in time is also defined in non-linear or non-constant way, where different temporalities merge and interact. Therefore, in order to analyse identity the irreversible processes of individualization have to be taken into account. The identity of the place is thus indefinite process rather than a static product. The concept of passivity and predictability cannot be applied in description of identity of place as assemblage.

3. Identity of place is multiple. The essence as singular characteristic of identity is in assemblage theory replaced with the multiplicity (Fig. 3.1.). Multiplicity represents possible state of identity rather than its singularity. That means that identity acquires number of different states in the same time and cannot be described through singularity. The analysis therefore demands gathering various descriptions of multiple states rather than description of singular condition. Thus description of the identity of the place has to focus on all the elements of the place (e.g. if the identity of the place is based on particular monument, all ordinary buildings have to be considered in the analysis as well). This multiplicity implies both multiple states in time as well as in one single point in time. This characteristic also implies that there is no universality that can be applied to the description of identity.

4. Identity of place is ambiguous (Fig. 3.1.). The characteristic of multiplicity creates a state of identity where its definition becomes number of overlaps of different multiple states. That characteristic produces certain ambiguity related to the characteristic of impossibility to derive at singular statement which depicts identity of the place. The ambiguity of identity of place can also be described through metaphor of allegory. That metaphor is useful because it depicts art of meaning deriving from more than what is being said. Furthermore, clarity and precision are also characteristics that cannot be committed to description of identity of place. Therefore, based on this concept the analysis of the identity of the place consists of numerous descriptions which interact and
overlap among themselves. The descriptions are compatible and revealing similar (but not the same) characteristics from various points of view.

5. Identity of place is characterized through gathering. The characteristic of identity of place as assemblage is that it consists of number of elements which are gathered through their overlaps and relationships (Fig. 3.1.). The identity of place appears when we observe the assemblage as a whole, comprising both interior and exterior relationships between elements. In the case of urban assemblages the interior relationships can be defined as the relationships between elements at one scale. Consequently the exterior relationships are defined as relationships between elements across scales. Therefore, in the analysis of identity of place relationships between elements become equally important as elements themselves. The analysis which would focus only on the elements is not capturing the complexity of assemblage, because it does not represent a simple sum of its elements.

All these characteristics do not imply that identity of place cannot become static, coherent, singular, precise, clear and isolated. Within the process of individualization there are points of Heidegger’s being which are part of that overall becoming. The state of being is possible to appear during the development of the place; however the importance is on the fact that it will represent only one point in the irreversible process of individualization. The emphasis is rather on observing the identity of place as dynamic concept which can acquire various stability states through its individual history.

The assemblage method designed for the purpose of this thesis is based on these main five characteristics of identity of place deriving from assemblage theory. It comprises various methods which illuminate various aspects of identity of place. Those methods (assembled methods) become part of assemblage of methods for analysis of the identity of place. In that sense, the results allow to show non-coherences of identity of place as complex system. The assemblage method also depicts dynamic processes of change of place and its identity. The multiple views on identity gathered together comprise different temporalities and stability states. Assembling the different descriptions of the identity of place and their overlapping creates comprehensive image of place that does not exclude dynamics, temporalities and localities. It is defined as plural, relational and open-ended.

Following these five characteristics which are deriving from the assemblage theory and the characteristics of the case study the methodology is defined as assemblage of different methods that will illuminate different aspects of identity of Yanesen and create non-
coherent, dynamic, multiple, ambiguous, gathered descriptions. This assembling of the methods can find its parallel in ‘thick description’.

In anthropological research concept of ‘thick description’ is used to illuminate the meanings which are hidden behind the appearance of realities. This metaphor can be used to describe the motivation of introduction of method assemblage for the purpose of this research. Geertz borrows the concept of ‘thick description’ from Gilbert Ryle and describes it at the example of winking and twitching as two identical movements with different meanings. The elaboration on those two different situations is defined as thick description (Geertz, 1973: 6-7). Namely, the physical appearance of both movements is the same. However, meanings behind those movements are different and their interpretation depends on the specific culture from which they are observed. In order to fully understand those actions there is a demand for interpretation, derived from thick descriptions.

![Fig. 3.2. A diagram of elements of built environment and their complex relationships which are analyzed in this study (illustration only)](image-url)

35 For more details about the possible parallels between application of assemblage theory in description of cities and ‘thick descriptions’ see Brenner et al. (2011) pp. 228. For more details of application of the concept of thick description see the definitions of scales at next section.
In the similar manner assemblage theory offers comparable way of thinking. By analysing the same phenomenon from different points of view and reassembling them together in single and open-ended description we arrive at certain kind of thick description. However, the difference is that it is not necessarily related to the meanings and it is inexhaustible. Furthermore, the analysis is conducted from the multiple aspects and the conclusions are deriving from their relationships. The additions of new analysis will represent more accurate definition of the identity. Different aspects of the place can vary in their size, details and can change through time. In this study only elements of built environment and their characteristics which are directly related with identity are analysed (Fig. 3.2.).

This method represents an attempt to create open-ended description of identity of place. The indefinite description of identity of place challenges the constant process of becoming and non-coherence. It does not aim to produce comprehensive description of identity as finished product; rather it seeks for illumination of its complexity and comprehensiveness of the method itself as a process. Consequently, for the method assemblage the process of change represents crucial element. This indefinite description of the identity of place versus the static and singular definitions is significant for the urban planners and architects. The understanding of the identity as the process offers a possibility for the planners and designers to design the possible scenarios as a tool for future development of any place, where identity can persist without conservation of the built environment and is not necessarily linked with the places that represent.

The identity of the place is defined by the interactions between three spheres: physical setting of the place, activities and meanings (Relph, 1986: 47). The assembled methods in this thesis focus only on one aspect from those elements: built environment. Furthermore, the analysis is focused on physical setting of the place, which is defined by the relevant scale (zooming in and out and elements which are appropriated to the scale) and the essential qualities of the identity of the place in Yanesen. Therefore other aspects of the place are not included in the analysis. The analysis conducted in this thesis is incomplete from the aspects of describing the identity of Yanesen as a whole, however considering the framework of this analysis it represents the comprehensive procedure which is relevant from the aspects of the research question of this thesis. The same concept from the assemblage theory can be used in order to build an analysis of other two spheres of the identity of the place.

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36 For more details see section 4.1.3.
37 For details about the reasons for selecting this particular part of the place see section 1.4.
3.2. Approach to identity of place of Yanesen

The assemblage methodology designed in this thesis is defined with both theory and the concrete place-Yanesen. The boundaries between the concept of the analysis and the object of the analysis are blurred. For the purpose of this study, the five main characteristics of the assemblage (listed in earlier text) are redefined by the characteristics of the case study deriving from the particularity of its identity.

Yanesen represents a good site to analyze the identity of place because of its paradoxical relationship with the past times. Due to the fact that buildings as physical elements, as extensive characteristics of place, are not preserved from the times upon which the contemporary identity of Yanesen is built, the processes following the extensive become more palpable. More specifically, the fact that there are few buildings preserved in Yanesen and identity of the place being persistent represents rare case and it can be assumed that analysis will reveal the new characteristics of the role of built environment in the identity of the place. Furthermore, the dialog between extensive and intensive spaces reveals complexity and description of place as assemblage. The absence of the equilibrium between actual and virtual in Delanda’s (2005) terms is the key for understanding the dynamics of identity of place. Those dynamics are usually hidden behind the preserved buildings.

In order to approach the analysis of Yanesen’s built environment and to examine its role in the identity of the place specific elements and their characteristics have to be defined. Namely, the analysis starts with the assumption that not all characteristics of built environment equally contribute to the identity of the place. Therefore, the objects of analysis in built environment are framed with the descriptions of what the identity of Yanesen is. Following the definitions of the identity\(^{38}\), place has essential and accidental properties. Consequently, the first step in analysis is to define the essential properties of the identity of Yanesen in order to analyse only specific characteristics of the built environment (Fig. 3.3.). Only those which contribute to the identity of Yanesen are selected for the analysis.

The definition of essential properties can be asserted in two ways. One represents the analysis of the entity in relation to its own kind. For example the essential properties of the specific animal will be defined in the relationships with the animals of the same kind which can show the difference of the animal that we are examining, and therefore its identity. In terms of places, that becomes almost impossible, since there are multiple ways of distinguishing different kinds of places. The classification is highly relative and can be conducted from different aspects. The second possibility is to observe the entity in time and

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\(^{38}\) Especially the definitions deriving from Locke’s philosophy described in the previous chapter.
map the characteristics which are creating persistent pivotal points as attractors similar (but not completely same) characteristics. The latter approach is selected for the purpose of this thesis because it offers more objective possibility to define the essential properties at the example of places.

In order to define the characteristics of identity of Yanesen which are essential for its built environment the analysis of the identity in time was conducted (Fig.3.3 (1) and (2)). The analysis is based on different narratives and descriptions of the Yanesen. However, there is a relative lack of the descriptions of the place from the earlier periods which contribute to specific view of this analysis. In order to overcome that lack of the data the analysis of the narratives on Shitamachi was conducted. Namely, the analysis of contemporary Yanesen has shown that there is a relevant link with the Shitamachi (an area of the city that appears in Edo period). Furthermore, the Shitamachi represents a state of identity in history and the contemporary condition of identity of Yanesen represents its state in different point in time. Observing the identity of Shitamachi and contemporary identity of Yanesen can provide the information of which pivotal points of that identity show temporal invariability and therefore are essential for Yanesen’s identity.

By comparing two descriptions of identity (Fig. 3.3. (2)), the thesis arrives at the similarities gathered around particular pivotal points. The second part of the analysis represents a definition of the characteristics of built environment that can be linked with those essential elements. Based on those results the specific elements as well as specific characteristics of the elements of built environment are chosen for the analysis (Fig.3.3. size and public-private interface).
The second part of the analysis is focused on the elements of the built environment and their relationships (Fig. 3.3. (3)-(9)). For the purpose of this analysis the relationships are dividend in two categories: relationships of exteriority and interiority (Fig. 3.3. (10)). The specificity of the objective of this study the distinction between interior and exterior is defined based on the scales. The relationships between elements of an assemblage are defined in rhizomatic manner and have non-linear causality. This characteristic is extensively explained in previous chapter and introduced as part of the methodology under the fifth characteristics of gathering. Namely, the importance of the relationships between the elements of the assemblage as interior relationships is equally defining the assemblage as the relationships of the exteriority. Consequently, it is important that analysis focus on both aspects of the assemblage.

39 For more details see section 3.4.  
40 For more details see the section 2.3.2.  
41 For the purpose of this thesis the term scale is used following the Delanda’s (2006) definition of the relationships of exteriority-micro and macro. Furthermore, this distinction was also considered compatible with the analysis of the cities in terms of various scales which have particular level of details of information (see for example the multi-scale approach in the analysis in Sepe (2013: 82-4).
There are different ways of defining the scales in built environment. In assemblage theory they are distinguished depending on the assemblage and its successive micro and macro scales (Delanda, 2006:17). The scales can be defined from global (comprising all the states) to the very micro scale (of each person) (Dovey, et al. 2013). Analysis of the built environment through relationships of the exteriority can be conducted analysing all different scales (globe, state, city, neighbourhood, street, house, person) in which there will be rhizomatic and not hierarchical relationships between the scales (Fig. 3.4.). However, the relationships between successive scales are more influential and numerous than within the other scales. Consequently, for the purpose of this analysis three different scales were...
selected: the scale of the whole Yanesen, the scale of the Nezu -Sendagi and the scale of the Nezu. Those three scales are successive and the relationships between elements of the different scales were examined. The scales are defining the relationships of exteriority, where element at one scale is interacting with the element observed at different scale. The relationships of exteriority are divided in two groups: macro (causality from bigger to smaller scales) and micro (causality from smaller to bigger scales).

The second part of this analysis is the analysis of the relationships of interiority. Those relationships were defined as relationships between elements within each scale. Relationships of interiority and exteriority are defining the thick descriptions of this method. They are assembled in order to create the stage for the conclusions.

The third part of the analysis is related with the characteristics of durability of the identity of the place and multiplicity as well as dynamics in the place. All analysis of the built environment can be divided in two kinds, depending on their descriptions of the place: analysis in time and space. First is related with the diachronic and the latter with the synchronic character of the identity of the place. The diachronic characteristics of the identity of the place are interconnected with the change and persistence of the identity over time. Similarly, in terms of built environment the analysis of different changes, their dynamics and the persistence was conducted. For this purpose different points in time were selected and the change of the elements of built environment was measured. In the same time the synchronic character of the identity of the place was described throughout the analysis of contemporary conditions of built environment. Analysis of built environment in time and contemporary situations are observed in their relationships.

In order to achieve all these analysis and arrive at the conclusions various methods are applied. Those methods vary, based on their scales and objectives of the analysis. Each of the analysis has its own results and based on those, diverse conclusions. The assemblage methodology is applied as the framework which gathers various conclusions. Consequently the conclusions are re-assembled based on the objective of this research. It is important to emphasize that this ensemble can be re-assembled in a various ways which would contribute to the ‘thickness’ of the description of the Yanesen’s identity. That is important from the aspects of the complexity of the identity. There is no single definition of the identity. There are multiple descriptions, which combined together contribute to comprehensiveness of the identity of the place-its thickness. The dynamics of the methodology applied in this thesis lies in the characteristics that the conclusions and different methods can be reassembled in order to create different image. The analysis conducted in this thesis represents only a state of the identity and its built environment at one point in time, therefore offers the possibility
for future research in order to analyse different aspects of change and contribute to the thickness of the description of Yanesen’s identity of the place.

The assemblage theory is applied as framework which gathers various methodologies and methods in order to give a comprehensive description of Yanesen’s identity from the perspective of the built environment. Different points of view at identity of place are gathered in one description that represents assemblage itself. Those multiple descriptions are overlapping and integrating in rhizomatic image(s) of identity of place. In some cases they show oppositional statement and in some are complementary. In that sense, the relationships between those conclusions become more important than each particular conclusion. The description of identity of place becomes an assemblage itself, and is grasped only by observing it as a whole.

The methods for the analysis of built environment are deriving from different fields and are selected based on the characteristics defined with the analysis of the identity of Yanesen. The methods are: mapping, photograph survey, evolutionary analysis of urban morphology, observation, and statistical analysis. Their role and the way they are conducted are described in detail in further text of this chapter.

The next section explains the approach for data collection and analysis. The design of methods and various types of data collection were defined based on the place itself, on the specificity of Yanesen. In that sense Yanesen becomes mediator between the theory and methodology. Case study is not only an object of analysis, a reality that needs to be described. The character of this particular place supports the design of methodology itself. The first part of the section explains the data collection and the second different methods used for the analysis.

3.3. Data collection

3.3.1. Promotion, branding, commercial material

The main sources for analysing the identity of the place are based on the questionnaires and/or cultural or popular indicators such as: paintings, advertisements, television and other media (Hague and Jenkins, 2005: 9). The popular publication promoting Yanesen or areas of Nezu, Yanaka and Sendagi were successively collected during the fieldwork and research (from 2011 to 2013). The data include printed and digital media. Printed data comprise: 1.material distributed in Yanesen as maps and brochures advertising diverse shops, galleries or cultural activities, 2.various touristic guides about Tokyo, 3. data from Yanesen Magazine. Digital data comprise: 1.online official touristic guides, 2. blogs and other non-organizational web sites. These data were mainly used to form the narrative part of identity.
of Yanesen and to define the physical boundary of Yanesen for the analysis of built environment.

Various maps on Yanesen were collected by the author during the period of research (from 2010 to 2013). The maps are deriving from two sources: internet (digital maps that show Yanesen) and printed maps (mostly distributed in Yanesen). The maps have diverse themes: from those advertising certain shops in the area to those showing the main tourist routes around Yanesen. The main purpose of collecting these maps was to define the boundaries of the Yanesen’s identity perceived by the people who are in various ways involved with the place.

The total number of 31 maps was selected for the purpose of this analysis. The maps were selected based on the fact that they are presenting Yanesen as a whole, and not only part of the neighbourhood. Printed maps were scanned in the greyscale mode and adjusted to the precise map of the area (since some of the maps were not showing the real sizes). The Adobe Photoshop CS2 was used for that purpose. The digital maps were also adjusted in the same program to the greyscale mode.

In order to assess the identity of Yanesen and to define the essential properties of that identity the data deriving from different narratives about the place were gathered. Since the identity of the place is emerging from the public images, created in the consensus of different users of the place, it is important to define both narratives of the insiders and outsiders. Insiders are people who have lived experience of the place (have spent long time experiencing and knowing the place). Outsiders are people who have very limited knowledge about the place (they only have visited the place and do not have a lived experience). Between those two extreme cases there are numerous shades of “outside-ness” and “inside-ness” related to the place. For the identity of the place both extremes are equally important\(^2\).

The collection of different touristic guides was used in order to extract the texts about Yanesen. Those data were further analysed using the discourse analysis methods. The collection was conducted on online touristic guides as well as printed. The total number of 26 texts was gathered (Appendix A). Due to constrain of the author the texts collected were limited to the texts only in English language. The wide variety of the texts present in Japanese language is not included in this analysis. This constrains also represents the amplification of one of the aspects of the identity of the place, external gaze. The fact that the texts were written in English (foreign) language does not mean that the texts were written by the outsiders. They are created for the outsiders, and therefore focus on most

\(^2\) For more details see sections 2.2.2. and 2.2.6.
distinguishing characteristics of the place. Furthermore, the particular discourse was selected. The one related with branding and tourism. That was because this discourse focuses on the most particular characteristics of the place, which define its identity (those texts are focused on answering the question: why is this place different from any other places in Tokyo?). Moreover, most of the touristic guides are representing the official or unofficial Japanese representations of the place for the tourists. The data collected consist of: 10 touristic guides, 13 internet blogs and 3 magazines, which is total number of 26 sources collected for the analysis. From that number 14 sources were Japanese (mainly the touristic guides) and were written or published by the Japanese. The two sources were written in collaboration with Japanese and foreigners. The 10 of total number of 26 sources are written by the foreigners (mainly blogs). This distribution of the sources is important due to the fact that identity of the place is defined both with the outsiders (in this concrete case the foreigners as visitors or tourists at the Yanesen) and on the other hand certain kind of insiders (in this case Japanese, mainly touristic guides). That means that the sample selected for this analysis is representing both points of view at the identity of the place (outside and inside), and therefore is a valid sample related to the condition of the creation of the identity in reality.

The data collected from the Yanesen Magazine are providing the information about the place from genuine insiders, since the stories are based on the experiences of people living in this area for a long time. This data were used in early stages of the analysis in order to guide the methods and data collection. Those data were not used for the analysis of narratives since they give much focused descriptions of Yanesen. Those narratives are focusing on particular issues and not in general about the Yanesen.

3.3.2. Archival research

The data collected through archival research can be divided into two groups: 1. the data which are related to general characteristics of Shitamachi and 2. the data related to historical characteristics of the Yanesen area.

In order to define the characteristics of Shitamachi and compare them with the contemporary definitions of Yanesen the archival research was conducted. For this inquiry the research was focusing on data that describe the characteristics of Shitamachi area in Edo period. The type of data which was gathered includes: academic literature (focusing both on the architecture, built landscape as well as the everyday life and social practices of this area), old maps, and museum’s promotional material. The data about the Shitamachi were extensively collected and organized during the consultations and focused discussions with an expert -Professor of Human Geography at University of Leeds, Paul Waley. From the
The academic literature the data of main characteristics of way of life as well as type of architecture, materials, dimensions of the houses, typology of the open spaces and streets, as well as the data considering the density of build landscape and people are gathered. The maps are used in order to understand the structure of the city, streets and plots, as well as sizes. The working visits to the museums: Edo-Tokyo Museum, Taito-ku Shitamachi Museum and Edo-Tokyo Architectural Museum were also conducted and their promotional material was gathered as well. These visits and gathered material were also used to collect the main visualized characteristics of Shitamachi area.

In order to understand general characteristics of Shitamachi the research focused on the definitions of what Shitamachi is as well as on typological characteristics, planning rules, old photos and prints as physical elements of Shitamachi area. In parallel the data about population, culture, life and so forth were collected. It based on its change through time and is defined from three aspects: historical, socio-economic and nostalgic. The systematized data gathered through this method were used for research design of contemporary Yanesen.

The main focus of this research is based on the elements which contribute to the characteristics of Shitamachi mood. Therefore, the research focuses on specific domains of the physical setting in Yanesen, the areas in which public and private come together and contribute to specific sense of domestic, neighbourhood feelings. The data were used in order to create the main typologies of public-private interfaces in Shitamachi area. Those typologies were created based on the observation and definition of main typologies of contemporary situation in Yanesen. This research derived the understanding of main characteristics of Shitamachi area and enabled their further usage in the analysis of identity of Yanesen as an assemblage, as well as comparison with intangible characteristics of contemporary Yanesen and comparison in order to understand which elements of the typologies are showing high level of persistence. Furthermore, the comparison of identity characteristics of Yanesen and actual characteristics of Shitamachi shows the difference between actual and virtual characteristics as part of re-memory. That difference also shows the ways in which identity is changing, becoming, and as such is interacting with other elements of the place as an assemblage. This comparison also provides an understanding on essential elements of Yanesen.

The second group of information is based on the concrete historical characteristics of Yanesen area. For this purpose the data gathered were: old historical maps of this area from different periods. These maps belong to the period from 1888 until today. The 1888 map of Tokyo represents the oldest precise map of this area and can be linked with late Edo period (which ended in 1868). For the purpose of analysis five maps of different periods were selected: 1888, 1919, 1923, 1956, and 2003. The reasons for selection of these years are
explained in the section that describes in detail the methods. The maps were in 1: 5000 scale. Maps are deriving from: cadastral maps (Uchiyama, 2011) maps of Edo to Tokyo periods (Takahashi, 1988) as well as Edit Committee documentation compilation maps. The 2003 map is based on the data from Center for Spatial Information Science (cSIS) The University of Tokyo. Collected maps (1888-1956) were scanned and redrawn as vector data. Moreover, in order to achieve higher level of precision all maps were geo-referenced to the contemporary map of the same area using the ArcGIS 10 program and the data from Center for Spatial Information Science, The University of Tokyo.

All the data gathered through the archival research are related with the particular topic of this study and the questions that it puts forward.\textsuperscript{43} The data aim to illuminate the physical aspects of the place, the way they were changing through history and the ways in which they are expressed in the built environment.

3.3.3. Site fieldwork

The multiple visits to the site were conducted during the period from 2010 to 2013. Photographs taking, measurements and observation were used to gather the data about contemporary conditions in Yanesen. The data collected through this method were dominantly used for mapping and creation of typologies which analyze the physical setting of the identity of Yanesen. The main focus was on the relationships between the elements of the physical setting which contribute to the characteristics of closeness, neighbourhood and domestic feelings which are related with the identity of Yanesen. The measurements were conducted on positions of openings on the facades and their sizes. The data about the quality of openings was also gathered. The mapping of these data allowed analysis of public and private characteristics in Yanesen. This data gathering also represents the basis for comparison of contemporary characteristics of Yanesen and the historical data as well as the characteristics of Shitamachi.

Along with the focused fieldwork conducted by the author, the thesis has benefited through the data collection from the vertical projects conducted in the laboratory. Those include:

\textsuperscript{43} See the pp. 55-6 and the research questions in section 1.2.
undergraduate and master thesis\textsuperscript{44} and workshops conducted in collaboration with other Universities\textsuperscript{45}.

3.4. Methods

The methodology applied in this thesis uses number of different tools in the analysis. The general characteristics of these tools are explained in this section and their specificities are given in detail at each analysis.

This section explains main methods used for the analysis. The methods are organized by the topics of the analysis. Firstly the analysis of the definition of Yanesen’s contemporary identity is explained. Secondly the methods for the analysis of the built environment are clarified. Following that, the methods used to generate typology of public-private interface are clarified\textsuperscript{46}. Furthermore, the methods for the analysis of visual permeability are clarified. And finally the methods based on the phenomenological analysis are described.

3.4.1. Discourse analysis

Discourse analysis represents the analysis of text in context. The main idea behind this analysis is that \textit{all features of talk or texts perform some kind of action (for example exercising power and control over others) and it is possible to analyse how language is used to achieve that action} (Bloor et al., 2006: 53). This analysis therefore is focusing on how different types of discourse influence general social practices, people’s believes and even their identity. For the purpose of this thesis this analysis is used in order to understand the ways in which different types of discourse are influencing general people’s believes and meanings as part of identity of Yanesen. The branding and marketing discourse as well as multiple ‘subjectivities’-through different blogs and magazines have been chosen for this analysis. That discourse is predominantly based in different touristic promotions of Yanesen. Furthermore, in this study maps are also used as one kind of the text. Their reading is important part of the identity of the place since it links the spatial aspects to the meanings.


\textsuperscript{45} ‘The Tokyo Creative Urbanism revisited’ Workshop-Daikanyama, Harajuku, Kichijoji, Shimokitazawa, Nezu, Nakameguro (2010) with the National University of Singapore and Architecture and Urban Design Workshop with Leeds University (2012) ‘nezu+yanaka/ public+private/density +intensity’ (mentioned are only the workshops which had direct impact on the collection of the data).

\textsuperscript{46} The analysis on public-private interface is analysed as part of the physical setting of the built environment which was found to be linked with the narratives (for more details see the section 4.1.3.). Furthermore, the analysis of the public-private interface was conducted on the smaller scales which demanded suitable level of details.
Branding and marketing places

This section illuminates main reasons for selecting this discourse for the analysis of the identity of Yanesen. It could be argued that branding and marketing places (mainly through touristic guides at the example of Yanesen) plays important part in not only describing but also creating its identity.

Places are increasingly conceived as commodities. The ‘selling’ of places has become important part of economy and sustainability of cities and their places. Furthermore, city marketing is today considered to be element of urban planning, especially in the cases of regeneration and governance (Deffiner and Metaxas, 2010: 50). Places are not presented as foci of attachment of people but as commodities in competition with one another in open and unregulated market. Furthermore, places are conceived as commodities that can be consumed, fond attractive, advertised and marketed (Philo et al., 1993: 18). Since places are conceived as commodities the processes of branding, marketing and selling are applicable in the explanation of place and the identity of place.

The places in cities become increasingly branded and marketed. This process is strongly influencing and creating their meanings and identities. As Kotler et al. (1993) argues Places are, indeed, products, whose identities and values must be designed and marketed. Places that fail to market themselves successfully face the risk of economic stagnation and decline (Kotler et al., 1993: 10). The necessity for promoting and marketing places can be seen as part of their identity building as crucial element of their, dominantly economical, sustainability. However, the identity of place emerging from marketing and branding is influenced by the characteristics of the place itself. Therefore, through the processes of marketing the identity is not only constructed but in the same time it is amplified as part of already existing identity of place.

The characteristics of the place to be emphasized are chosen from the place itself and based on the public images\(^47\) of the place. Therefore, place branding is influencing the identity of certain locality, it tends to build or reinforce certain characteristics of a place and not the other. That fact comes from the definition of the brand itself, in which distinctiveness and relation to the Other as well as uniqueness and values have crucial role (Kavaratzis and Ashworth, 2010: 4). For that reason this discourse is useful for the analysis of the identity of the place.

For the purpose of this analysis the selected discourse belongs to the marketing and branding of Yanesen. The reason for connecting the public meanings of the place and brands lies in the characteristics of brands to show and create values of commodities

\(^{47}\) For more details see section 2.2.2.
branded to their users. As Morgan et al. (2004) explains: successful brands have social, emotional and identity value to users: they have personalities and enhance the perceived utility, desirability and quality of a product (Morgan and Pritchard, 2004: 60). That ‘identity value’ can be linked with the meanings which are produced in the interaction of users, marketing and the place. Brands comprise emotional and uniqueness (celebrity) values (Ibid.) and could be argued that they present an important factor in creation of identity of place. In the same time brands amplify the main characteristics of the commodities and therefore produce them as more clear and visible.

An additional link between identity of place and the process of branding is related to creation of clear images of places which comprise its identity. As Hankinson (2010) explains from a marketing point of view, the induced brand image is the central device whereby a set of functional, experiential and symbolic associations are communicated to target audiences in order to create a holistic image which encapsulates a unique and desirable identity (Hankinson, 2010: 29). Marketing and branding of places therefore relay on strong and clear images. Those images are based upon experiential associations, emerging from interaction of consumer and commodity-in this case place- creating emotional experiences linked with phenomenological familiarities with place. Relationship between identity and image of place is that identity of place implies certain continuity of its characteristics and that can be strong or weak. Main role of place marketing is to create that strong image as well as to maintain it (Deffiner and Metaxas, 2010: 52). Identity therefore becomes reduced to clear images of place which then become enriched through different encounters with the place itself.

Most common usage of marketing, branding and selling of places are the images of places which are related to their pasts (Kotler et al., 1993, Philo et al., 1993). History of certain locality is important element in process of selling places. That history is usually manipulated as part of culture of certain locality and part of promotion and selling of that locality. The history of certain place becomes important as physical heritage of the place as well as through stories and myths generated in that particular locality. Philo et al. (1993) explains that process of selling places is about manipulation of culture, history and memory of certain locality and it is competitive and tends to sell places both to the outsiders and insiders. More specifically, he emphasizes:

...any manipulation of culture involved in the selling of places will tend also to be manipulation of history: an attempt to tap historical resources, whether these be ‘relief’ features in a landscape such as a castle or associations with an ‘historic’ event such as the
beheading of a queen, in the course of marketing the image of a place both externally and internally (Philo et al., 1993:5).

The branding and marketing discourse therefore represents important part of identity of place. Through this discourse the identity is explained but in the same time it is created. Analysing the branding and marketing discourse in order to define the identity of Yanesen is aimed to provide more structuralized images of that identity. Due to fact that these images are in the case of Yanesen defined as produced by the insiders for the outsiders illuminates the important part of the definition of that identity. Furthermore, those definitions are combined with the narratives from subjective impressions of the outsiders. In that sense they are providing the valuable discourse on the definition of the identity of Yanesen.

This study focuses on the physical aspects of the identity of the place. However, in order to understand which characteristics of built environment are important for the identity there is a necessity for understanding of externally projected identity. Thus for the purpose of the analysis in this thesis the branding discourse was found to be useful for explanation of the identity of the place in Yanesen, and was selected as source which gives insight to the understanding of the perceived identity. This analysis has contributed to framing of the analysis of the built environment, due to the fact that not all elements or characteristics of the built environment are equally important for the identity of the place 48.

**Discourse analysis-the method**

For the purpose of this thesis branding and marketing discourse about Yanesen is conceived in broad sense. Namely, branding and marketing is commonly defined as process related to specialized institutions and companies that deal professionally with these issues. However, this thesis is not interested in marketing itself; it is interested in different narratives around the place. For that reason all promotion discourse is considered, coming from community organizations, individuals or specialized touristic organizations. Therefore branding in this thesis is understood in its broadest sense.

Since Yanesen’s place identity is strongly influenced by branding, this analysis is used in order to define the intangible part of its assemblage, dominantly the meanings which are predetermined and are influencing the perception of Yanesen’s physical structure of place and as such are involved in the process of its identity creation and maintenance. It aims to arrive at the definition (explanation) of what that identity is. Those definitions are strongly influenced by the discourse and are deriving from the ‘branding’ of Yanesen. Since Yanesen area is strongly ‘branded’ in its own peculiar way by touristic guides and other publications,

48 For more details see the section 4.1. and 4.1.3.
the influence of language and visual images (maps) on its identity cannot be neglected as equal part of assemblage and its creation and maintenance through re-memory processes. Furthermore, this analysis of how Yanesen is characterized in contemporary discourse is compared to the data of the actual characteristics of Shitamachi gathered through archival research. This comparison is conducted in order to show which elements of that identity are essential for its persistence. It also shows how meanings and the ways Shitamachi character is conceived is changing, is in process of *becoming* and as such part of assemblage - in which other elements are changing as well - becomes resilient.

In order to understand the image of place, branding is analyzed as part of promotion of places. The data is gathered from:

1. on-line sources (such as tourist guides, blogs and so forth)
2. printed media (magazines, tourist guides, maps and so forth)
3. google maps and images
4. youtube

For the purpose of this analysis only writings were selected.

<table>
<thead>
<tr>
<th>Meaning unit</th>
<th>Condensed meaning unit</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visiting the more famous and historical of places around the nation is interesting but so is seeing the usual, more common side of Japanese life</td>
<td>Usual, common life in Japan</td>
<td>Japanese everyday life</td>
</tr>
<tr>
<td>no better place to see this than in the shitamachi areas of Yanaka, Nezu and Sendagi in eastern Tokyo</td>
<td>Yanesen represents most preserved shitamachi character in Tokyo</td>
<td>Shitamachi character</td>
</tr>
</tbody>
</table>

Table 3.1. Example of the qualitative content analysis

In order to define the main elements of identity of place which are promoted the qualitative content analysis is applied. Content analysis is defined as qualitative analysis of the text. This analysis is used in order to derive at two contents from analyzed text: the manifest content and latent content. The manifest content is visible and obvious component of the text; it explains what the text says. The latent content, on the other hand allows interpretation of meaning of the text (Graneheim et al. 2004: 106). In this study the unit of analysis is text which describes Yanesen and derives from different sources of branding. Furthermore these units of analysis are divided into meaning units, based on phrases,
keywords or specific themes introduced in the text. The second step in this process is condensation. Condensation represents the process of shortening, but in the same time preserving the core of the meaning unit (Ibid). Furthermore, the next process is aggregation in which codes are formed. According to Coffey and Atkinson codes are tools to think with (1996:32) they allow the grouping into categories and are showing the direct meaning of the text-manifest content (Table 3.1.).

In order to define the latent meaning of the text categories are translated into the themes which are defining the ‘hidden’ meaning of the text.

These themes are used in order to understand how Yanesen is branded, more broadly, how different discourses are influencing perception of the place, and furthermore what elements of the place are emphasized in that process. Besides creating the clusters of characteristics which are emphasized the content analysis shows also the quantification of the characteristics, in other words, which of the characteristics of Yanesen are most promoted in the process of branding. For that purpose the appearing codes in all texts were quantified and represented in terms of the percentage of their appearance.

This analysis also shows the difference of what is promoted and what is actual state in reality of Yanesen. Furthermore, these characteristics of promoted Yanesen are compared with the characteristics of the Shitamachi, which derives from the archival research of literature and other sources. The comparison allows defining the similarities between these two discourses and defining the main characteristics of built environment for the identity of Yanesen which are influencing its persistence. It also shows how the image of Shitamachi is transforming through time, creating an assemblage of its definitions.

**3.4.2. Urban morphology–elements of built environment**

The methods from urban morphology are applied in order to define the elements of built environment and to measure their change and persistence as well as to define the structure of built environment as assemblage. Urban morphology is a field that involves research from wide diversity of disciplines focusing on the study of city forms. The contribution of urban morphology is focused on development of different methods and methodologies to understand how built environment changes as system of relations submitted to rules of transformations (Gauthier et.al, 2006).

In order to observe the dynamics of change of physical setting in built landscape the method follows Conzen’s (1960) approach in which streets and street system, plots and plot system, building footprint are essential elements where the morphogenesis of urban landscape is observed (Ibid: 5). Based on the Conzen’s method for analysis of Alnwick (1960) a method
for analysis of Yanesen was developed. However, the method applied in analysis of Yanesen uses only starting points of the Conzens’s method of structuring the built environment and develops different tools for measuring the change, using statistical analysis and concepts from assemblage theory.

Following Conzen’s approach and available data about Yanesen the elements of built environment are divided in three groups: streets, blocks and plots or building footprint and their systems. Elements of built environment were analysed in time (with the focus of their change) and across scales. All the elements were named, quantified and defined with their area or length using the ArcGIS 10 software.

Those data were further used for the analysis of degree of change, creating the clusters and classes of sizes for the purpose of understanding the structure of the assemblage as well as the function and characteristic of each element within the assemblage. For this analysis methods deriving from statistics were used.

### 3.4.3. Statistical methods

The statistical methods used in this thesis are: standard deviation, clustering, and principal component analysis. The application of these tools in this thesis allows dealing with large number of data.

The statistical methods applied in this thesis are explained as follows:

Standard deviation shows how much variation there is among the data from the average (mean) of all those data. If the standard deviation is low then the data are close to their mean- meaning that the difference between the data is very low. On the other hand if the standard deviation is high then the data are more dispersed, or creating more heterogeneous structure of the assemblage.

In this thesis standard deviation is applied as classification model and calculated in ArcGIS 10 program. The standard deviation classification method was applied for defining the classes of sizes and classes of degree of change of elements of built environment (streets, blocks and plots or building footprint). ArcMap calculates both the mean and standard deviation of data. The brakes between the classes are created with equal value ranges that are proportion of standard deviation (intervals of ½ standard deviations and using mean values and standard deviation from the mean). The classes are showing the proportional distance of standard deviation from the mean (n Std.Dev.). The classes calculated by this method are showing the structure of assemblage based on the relationships of interiority. For that reason the analysis of the classes is always relative (for example the analysis of the
classes in time was conducted separately for each period defining the relative classes). The reason for choosing this way of defining the classes is due to the fact that they represent the role of each element in the concrete assemblage and not in general terms-they define the expressive role\(^{49}\) of the elements of built environment. More specifically, the class defines function that each element of the assemblage has based on the relationships within other elements at the same scale. For example, if the element belongs to the class of small sizes then its function as an ‘agent’ in the assemblage is to generate the character of small in the space. Therefore, the classes determine the relationships of an element to all elements defining the whole assemblage, and are generated as the difference from the average state of assemblage.

In order to analyse the structure of assemblage the clustering method was used. Clusters are defined as aggregations of elements of similar characteristics and consequently can be used to describe the complexity and the structure of assemblage. For the purpose of defining the order of aggregations and discontinuities the data mining analysis was conducted. For that purpose Weka software was used. The clusters were defined in two steps. First step was analysis in Weka software which produced initial clusters. The clusters were defined as grouping of two or more elements of similar sizes and two end-point elements that defined either upper or lower extremes of the cluster. Furthermore, the obtained clusters were refined in relation of their size to the maximum size of the cluster at each level. Using this method, only significantly large discontinuities were considered for further analysis. Discontinuities were defined as gaps between aggregations of elements that clustered around similar size range. Therefore, each cluster is defined with the relationships of interiority, within the similar elements (which is different from the standard deviation that determines the relationships based on the average values of the whole assemblage).

For the purpose of defining the clusters in space the Getis and Ord G statistical analysis was used. This analysis was performed in Arc Map 10 program and calculated as “hot-spot” analysis. This analysis defines the degree to which high or low values cluster together. Unlike the cluster analysis performed in Weka software here the clusters are based on only extreme values and depend on their distance. The distance was calculated as Euclidean distance. This analysis shows the aggregations of the similar elements in the space. Aggregations are defined with minimum two neighbouring elements that have similar characteristics.

In order to define the patterns in data and analyse the way they change in time the principal component analysis was applied. Principal component analysis (PCA) is mathematical

\(^{49}\) For explanation of the expressive role see section 2.3.5.
method which defines new variables based on the large amount of variables (Kim and Muller, 1976:14). Those new variables are called ‘principal components’ (PCs) and account for the majority of the variability in the data. This allows for the description of the information with considerably fewer variables than was originally present. The PCA method is usually used in order to reduce the dimensionality of large data set of interrelated variables while retaining most of the variation present in the data. This is achieved by creating a new set of variables defined as principal components (Jolliffe, 2002:1). Therefore, PCA is reducing the number of data but in the same time preserving the basic structure of the data, because it accounts the variance in the data. PCA can also be used in order to define which of variables have the strongest impact on the cases described (Owen et al. 2006). The eigenvectors correspond to principal components and the eigenvalues to the variance explained by the principal components. The largest eigenvalues correspond to the principal-components that are associated with most of the covariability among a number of observed data.

PCA is in this thesis used in order to compare the PCA values calculated on the elements of built environment in time. Namely, PCA is applied in order to define different tendencies/patterns through time. For that purpose data of sizes of different elements are used (length of the streets, area of blocks 50). These two elements describe the urban landscape from the aspects of scales due to fact that each variable has different speed of change. Years are entered as variables and sizes of different elements of built environment are defined as cases. The PCA value was calculated for each year in order to illuminate the way in which this place was changing through time. The calculations were conducted using the Multi Variate Statistical Package (MVSP) software. The results were shown at two axis of PCA and third axis represents time.

3.4.4. Mapping the change and persistence of elements of built environment 51

The method consists of measuring the change and persistence of elements in urban landscape. The measurements are based on size, position and their shape. The comparison through time was conducted. For that purpose five periods in development of Yanesen were selected. The maps were analysed using the ArcGIS 10 software. Each element is named and measured and its change was calculated in successive periods. The change is measured in percentage and based on the size.

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50 Plots and building footprint were not considered in this analysis due to the fact that data are not correlated (since there are no data about the plots in two last periods: 1956 and 2003).

51 This method was developed in collaboration with Emilio Garcia-PhD candidate from Faculty of Architecture, Victoria University of Wellington, New Zealand.
The selected maps are dated in five periods: 1888, 1919, 1932, 1956, and 2003. Those periods are chosen in order to show a continuous development of this area and connection to Edo period. Following the Conzen’s (1960) arguments that maps observed need to follow the cultural periods that affect them (which he calls morphological periods), the selected maps of Yanesen are following the major historical periods related to Japan and Tokyo (Fig. 3.5). First important period for development of Edo-Tokyo is Edo period. That period lasted from 1601 until 1868. The 1868 represents an important transitional period when Edo changed its name into Tokyo. Tokyo became capital of Japan and the emperor established his rule in the new capital. From that point Meiji period begins. It is characterized with high urbanization and development of Japan, and opening to the West. Sorensen (2002) argues that in this period the modern city planning in Japan begins. In 1888 the first planning law was established through ‘Tokyo City improvement ordinance’. Meiji era was period of modernization and industrialization of the economy, which had large impact at cities, particularly Tokyo and its urban development. The period lasted until the death of Meiji emperor in 1912. The third period is Taisho (1912-1926) which was turning point in Japanese urban planning. In Taisho period rapid urban and industrial growth caused pressure for development of more activist approaches for shaping that urban growth. This resulted in the first Japanese comprehensive City Planning and Urban Buildings Laws in 1919, applied to whole Tokyo. The period was also characterized as ‘Taishō Democracy’. This period was marked with Great Kanto earthquake in 1923 which destroyed much of the city. Seidensticker (1991) argues that 1923 earthquake represents an important transitional point in Tokyo history. The destructions of that earthquake and subsequent conflagrations were located mostly at Shitamachi area. It could be argued that the change of these areas were important for transformation of Edo into Tokyo. The fourth period is Showa (1926-1989). The major characteristic of Showa period is the Second World War and the destructions of Tokyo caused by the fire bombings and conflagrations in 1945 and the post-war economic growth. In 1968 the new planning system was established. This planning system was largely orientated towards the control of transformation of agricultural into urban land. Another important date for development of Tokyo was summer Olympic Games in 1964, which were the trigger for great changes in the city. The final period is Heisei era (1989) which still lasts. This period is characterized with 1990s bubble economic crash, and following recovery period. During 1980s Tokyo suffered from high migration and was transformed into a global city (Sassen, 1991; Sorensen, 2002).

The maps chosen for the analysis of morphological evolution of Yanesen are following the rhythm of major periods that had importance for the development of the Edo-Tokyo. The
years are following the major events and not overlapping with them, due to the fact that change in urban landscape appears with certain delay after the major changes in economy, politics or cultural spheres.

The selected maps were in the scale 1:5000 which shows the important information necessary for this analysis: streets, blocks, plots, and building footprint in acceptable detail levels. Due to the lack of information about building footprint from 1888-1932 those data were not considered in the analysis. However, the maps from 1956 and 2003 lack the information about the plots and have the information about the building footprint. In these two cases the analysis of the plots was dismissed and instead of that the analysis was conducted based on building footprint.

In order to analyze the dynamics of change in selected areas measurements were conducted for these five periods. The measurements consist of: structure of assemblage based on the classes of size and degree of change of elements of built environment. The blocks and plots were measured in terms of area and streets in terms of length. For that purpose the lines

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**Fig 3.5. Timeline of major events in Tokyo and Japan**
that follow the centre of the street were selected for quantification. Blocks and streets were named and numbered to track their transformations, appearances and disappearances (appendix B). Due to the lack of information about the plots in two maps 1956 and 2003 the classifications of plots was done in relationship to their respective blocks as a density of plots per block. The results are shown on the maps and using different diagrams for the purpose of showing not only the degree of changes and persistence but their position and the ways of interactions between different scales.

The characterization of structure of the assemblage was conducted in relation to different classes of sizes of each element: street, block, plot or building footprint. The classes of streets, blocks and plots were calculated based on standard deviation using the ArcGIS 10 software.

The degree of change was measured as the difference of size of each individual element of built environment between two successive periods. Those morphological changes were quantified as percentage of the difference of the same element in two successive periods. The largest block or plot area or the street length always represents 100%, so that degree of change is obtaining the output of 1 to 100 in both cases of shrinking or growing (appendix B, tables). The analysis has shown that different complexity of data requires different approach in calculations of change.

The level of change for the blocks was calculated based on their areas. Since the maps from different periods were slightly different in areas the block’s change was calculated based on the ratio of area of one block to the whole area. More specifically, the percentage of change was based on the ratio that one block has to the whole area of the same period (appendix B). In that way the achieved precision of change of the block is higher than in the case of basing the calculation simply on the area of block. In the case of subdivision of block change was calculated for each subdivided block based on the whole size of the previous period block. Therefore, the area of first period was calculated number of times which match the number of subdivided blocks. In the case of merging the blocks of previous period into bigger blocks, the names of blocks were assigned based on the similarity of size and position with the new block. The level of change was measured based on the ratio between the block that has more similar characteristics of size to the new block. In the cases of similar sizes the block located at the centre of new formed block was chosen as reference for change. Since the aim of this analysis is to show the degree of change and not the qualitative characteristics of that change, the analysis does not show if blocks are merging or subdividing. Therefore, there is not distinction between those two processes. The degree of change is calculated as same process, focusing only on the fact of changing the size.
The degree of change of the streets was calculated based on their length. In this case the data about the width of the streets were not considered. The measurements of the width of streets were not conducted since the historical maps used for this analysis are not accurate. The degree of change of length is calculated based on the middle line of the streets. Streets were named and traced in all maps (appendix B). The change of the street is calculated based on the longer length without distinction of nature of change: growing or shrinking. In the case of appearance of new street, the change was calculated as 100%. In the case of disappearance of street, the street change is also calculated as 100% and shown on the map with dashed line.

The calculation of level of change of the plots demanded different approach. Due to the number and fact that plots are changing in higher rate than blocks and streets the plots did not follow the same method of calculation of change of the area. Degree of change at the level of plots and building footprint was calculated based on the division of the blocks and presented on the map on the level of blocks. The degree of the change was not calculated separately for each plot (based on the change of the area of plot) due to the precision of the maps available for this analysis. First two periods were analyzed based on the data of the plots and second two periods based on the analysis of building footprint. First two periods define the change of the plots based on the size of all preserved plots in one block and represented at the level of block. Namely, if the geometry of block division to plots is the same, than it is considered that plots are completely preserved (despite the slight change in their area). Degree of change is defined as relationship between sum of area of plots preserved in the block and the whole area of that block and shown in percentage. Blocks which are differently divided in plots are considered to have degree of change of 100%. In the second two periods the degree of change was calculated based on the building footprint due to the lack of information about the plots. Degree of change is calculated and presented at the level of blocks. For each block the change of sum of the area of building footprint was determined as indicator of degree of change. Degree of change is defined as sum of all areas of building footprint divided by the area of whole block in two successive periods. The degree of change of building footprint is calculated in percentage. In the period of 1932 to 1956 degree of change was calculated using the existing information about the plots (map from 1932) and building footprint (map from 1956). In order to define degree of change of each plot those two maps were overlapped and building footprint in 1956 was used to identify the plots that haven’t changed from 1932 by detection of boundaries of plots and buildings. Namely, if the buildings from 1956 were located inside the plot from 1932 that plot was considered to be preserved. Furthermore, in order to be able to compare the data with other periods the degree of change was shown at the level of blocks. The
degree of change was calculated as relationship between the sum of area of preserved plots within one block and the area of block. Degree of change was calculated in percentage. Standard deviation is used in all periods in order to define the groups of different degree and diversity of change.

3.4.5. The relationships of public and private

Methods assembled around the analysis of relationships between public and private spheres of the city aim to analyse the place at more detailed scale and focus on the interaction between elements. The relationship between public and private is manifested at public-private interface. The interface contains both characteristics of private and public spheres.

The terms public and private are widely used and their meaning tends to show an ambiguity. Furthermore, those terms are highly cultural; their meaning depends on the specific location, culture and history. Therefore, there is a need to explain how public and private are employed in this thesis.

**Japanese concept of public and private**

The public and private in Japanese context represent a complex concept. Namely, the cultural difference in understanding of this concept can be seen in the fact that in Japanese language there is no direct equivalent to the twofold of public and private. The English word ‘privacy’ became common in Japanese world as *putaibashî*. This clearly shows that there is a distinction in what we mean by public and private in Japanese context. Makino (2002) argues that *uchi* and *soto* could be addressed as possible equivalent of private and public in Japanese language. These terms have metaphorical extensions in Japanese language and can be explained from different aspects. Here we will examine only the ones that are related to their spatial implications.

*Uchi* is the closest Japanese word which describes English ‘privacy’. Literary meaning of the word *uchi* is inside, and the opposite word is *soto*-outside. Inside (*uchi*) is associated with purity, cleanliness, safety and intimacy, and is related to the group or space. Furthermore, *uchi* is space for interacting freely with others in an informal, friendly or intimate relationship [...] it can even mean one’s house or home (Ibid: 29). *Uchi* is the space of involvement, within which the contact with family members (people that are close to us) is highlighted. Outside (*soto*) is associated with impurity, dirt, danger and strangeness (Hendry: 1992: 55-71).

Another possible interpretation of public and private dichotomy is offered by the Nakajima (1996). Nakajima explains that in Japanese culture, dichotomy public/private in city can be
understood as *omote/ura*. In an urban space, the *ura/omote* dichotomy defines, on the one hand, the world of escape or transgression and, on the other, that of the everyday; it is roughly equivalent to the distinction between private and public (Ibid: 69). The meaning of *omote* is front, surface or appearance, and *ura* is in back, what is kept hidden from the others (Bachnik, 1992: 7). These meanings offer the possibility to address the fluidity of the distinction between public and private. Namely, the interface between public and private depends on the scale that we are referring to. One street can be considered as public space at a smaller scale but it can be considered as private in a larger scale (Shelton, 1999:168; Sorensen, 2002: 25-30). It could be argued that at the larger scales some streets can be considered as *omote* (more public) and some *ura* (more private-especially *roji*). At detailed scale the interface between the public and private can be located at the house. In that sense *roji* becomes public space and the interior of the house private. That distinction can be furthermore examined in the house itself (Daniels, 2008; Nakajima, 1996; Ozaki, 2002; Ozaki et al. 2006).

Despite the complexity of public and private in Japanese cities it is argued that the way public and private are assembled represents important element in definition of character of the place. The public-private interfaces played important role in distinctiveness of the character of both Shitamachi and Yamanote areas. Shelton (1999:66-87) explains that the size and structure of the spaces between the private realm of the house and public realm of the street in Shitamachi creates as soft boundaries that are vibrant spaces. The connections and structures of public and private were highlighted as characteristics that contribute to the creation of identity of Tokyo (Kitayama et al. 2010). Furthermore, Jinnai (1995: 44-48) emphasizes the importance of the structure and size of public-private interface for the preservation of character of some neighbourhoods in Tokyo. Public-private interfaces in Japanese urban landscapes where defined as soft boundaries that have contributed to the consolidation of the identity of old towns (Nakagawa, 2006:54). This discourse represents an additional argument for the usage of the public-private interface for the analysis.

Furthermore, it could be argued that in general public-private interface contributes to the character of any place. Norberg-Schulz emphasized that boundary between outside and inside in architecture is strongly defining the character of the place (1980: 14-5). Habraken (1998) emphasizes that the essence of the urban lies in the way the margin between private and public is negotiated (ibid: 168). Boundaries between public and private realms of the city are representing materialization of society and its culture as well as intrinsic element in process of creating the character of the city (Madanipour, 2003: 59-60).
Another important aspect of public-private interface is that it represents the relationships between different elements of built environment. Therefore it is important part of the assemblage analysis. For all those reasons the thesis proposes the analysis of the public-private interface as vital element of built environment for understanding of identity of place in Yanesen.52

The definition of public and private

In this thesis public-private interface is related to one scale, and comprises the relationships between the private sphere of the house and public sphere of the streets. Public-private interfaces on other scales were not considered in this thesis.

The relationship between public and private in this thesis is in the broadest sense grasped as the relationship between city and the house. The realm of private is manifesting itself as a house, while public realm in the city plays important role in connecting private spaces and is used for variety activities, fulfilling social needs. The home is private, intimate space that protects its members from public. It is the contextualization of private space. The interface between house and the city is fluid, dissolved and ambivalent space, rather than a clear-cut boundary. Public-private interface is defined as the space between private sphere of the house and public sphere of the street and posses qualitative characteristics of both public and private.

Furthermore, in this thesis three different, but overlapping spaces of public-private interface were analyzed: 1. zone of interaction between interface and private space, 2. the space of interface and 3. zone between the interface and public space (Fig. 3.6.). First space is analysed within the visual permeability of the facade from public space to the private space.

Fig. 3.6. The public-private interface diagram

52 The link with the identity of Yanesen is explained in the next chapter 4.1.
The second space is analysed through typologies of public-private interfaces based on the position of the house and its entrance. The third space is analysed with presence of different ephemeral elements (plants, bicycles, shoes, toys and other personal belongings).

Since the thesis is interested in the identity of Yanesen generated as public image in interaction of different users (within different levels of outsideness and insideness) only interface related with the public was examined. More specifically, the private space of the house was not included in this analysis. The thesis was interested in spaces that can be experienced from the public sphere, therefore the spaces that are visually accessible from the public space.

3.4.6. Visual permeability

For the purpose of analysis of the zone 1 the visual permeability was introduced. The method applied in the analysis of visual permeability is used to describe the interaction between public and private spaces with the focus on how private spaces affect the sense of privateness in the streets. Furthermore, this openness of the facade contributes to the level of publicness of the street. This method is complementary to other two zones and gives quantitative as well as qualitative characteristics of the structure of the public-private interface.

The visual permeability in this research is defined as level of visual connectedness between public space of the street and private space of the house, observed from the public. The level of permeability describes the way public and private space are visually separated or connected and are contributing to the nature of ambiguous zones of semi public or semi private spaces.

The method consists of: 1) mapping the physical characteristics of street facades, 2) calculating the visual permeability per each house and 3) analysing the relationships between the houses in terms of their different levels of visual permeability.

The physical characteristics of the facade were mapped in order to define their permeability and possibilities which they create for interaction between the public and private. The data were collected during the fieldwork and consists of: size, type, position of the opening as well as the type of the barrier for the protection of the privacy (appendix C). The data were collected by actual measurements and from photographs taken during the fieldwork. The

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53 The fieldwork was conducted during the May and June 2012 in collaboration with at that time master student Charles Lemonier. His master thesis on visual permeability represents much detailed analysis of the structure of the openings in this area.
data were corrected and entered at the existing GIS data from cSIS, The University of Tokyo. The detailed explanation of the collected data is given at the table (Table 3.2.).

<table>
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<th>window</th>
<th>gate</th>
<th>balcony</th>
<th>garage door</th>
</tr>
</thead>
<tbody>
<tr>
<td>position</td>
<td>floor (1,2, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>height</td>
<td>distance from the ground (m)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>size</td>
<td>width</td>
<td>height</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>transparency</td>
<td>transparent</td>
<td>translucent</td>
<td>opaque</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>barrier</th>
<th>at opening</th>
<th>curtain</th>
<th>shutter</th>
<th>bars</th>
<th>plants</th>
<th>etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>in space</td>
<td>fence</td>
<td>fence height (m)</td>
<td>materiality of pavement</td>
<td>difference in height</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.2. Type of data collected for analysis of visual permeability

The collected data are grouped in three categories: 1. characteristics of the building, 2. characteristics of the openings and 3. characteristics of the space between public sphere of the street and the opening. The first group of the data gives important information about the building itself. The relevance of these data is based on the function of the opening. Those data comprise the information of the usage of the building (residential, commercial or other) and the position of the building in relation to the street measured in meters. The data about the openings consist of their type (door, window, gate, balcony, and garage entrance), position on the facade (obtaining different floor and specifically for the first floor
the precise distance from the ground\textsuperscript{54}, size of the opening (height and width measured in meters) and transparency (classified in three groups: transparent-it is possible to see through; translucent-only light comes through and is possible to see shadows; and opaque-it is not possible to see through). The third group of data is related to barriers located in the space between the opening and the street. The data were gathered separately for the barriers which are part of the opening (curtain, shutter, bars, plants and so forth) and those present at the space between the street and opening (fence, fence height, change in pavement and height of the space between). Total number of 215 facades was observed and 899 number of openings were mapped and presented at 156 houses.

The data were mapped in AutoCad based on the existing map of the area. The drawn data were then together with the attribute tables that contain information about the characteristics of each opening entered in ArcGIS 10 in order to be further analysed and visualized.

The visual permeability was calculated at the level of the facade. It was mapped and presented at the level of the house. Visual permeability of the houses which have more than one street facade was calculated as the average of visual permeability of all facades.

The results are shown as actual visual permeability ($V_{ap}$) that aimed to quantify the level of openness of the facade close to the actual experience taking into account the geometrical characteristics of the opening (size and position) on the facade and its qualitative characteristics (material: opaque, translucent and transparent). For that purpose correction indexes were defined. Based on the position of the opening on the facade three different indexes were defined: if the opening is on the first floor the correction index ($i_p$) was 1, for the second floor 0.5 and for the third floor 0.3 and four and higher floors was 0.2, due to the fact that openings located at the first floor have greater impact on the level of perceived openness of the facade. The correction index based on the type of the material ($i_m$) was: opaque-0.5, translucent-0.7 and transparent 1.

$$V_{ap} = \sum_{k=m}^{n} P_{ok} i_p k \cdot i_m k \cdot P_f$$

$V_{ap}$ – visual permeability
$P_o$ – area of opening
$P_f$ – area of façade
$i_p$ – position index
$i_m$ – material index
$k$ - number of openings at the facade

\textsuperscript{54} Due to the fact that position on the first floor varies because of direct contact between street and house the distinction becomes important. Most of the openings on the second and higher floors are following typical pattern of the windows with variations only in their sizes.
Actual visual permeability (Vap) is defined as the sum of corrected areas of openings divided with the whole area of the facade for each building. The values of Vap are therefore between 0 and 1. Values close to the 0 define less visually permeable facade and values close to 1 are related to higher level of visual openness of the facade. The data are shown on the level of the house and classified based on natural brakes using the ArcGIS classification.

3.4.7. Typology of the public-private interface

For the purpose of analysis of the second zone of public-public private interface the typology was created. The houses taken into relevance for creation of this typology are the houses located in this area. The data about the houses were collected during the fieldwork (2010-2012). Typologies are defined based on the morphological characteristics of public-private interface (shape and sizes of the public-private interface) as well as the main characteristics of usage of houses. Morphological characteristics which appear repeatedly in similar public-private interfaces define the type. These characteristics are diagnostic elements defining the criteria for the typology.

The data are gathered by the observation of the houses in Yanesen which are product of past and present spontaneous consciousness (Caniggia and Maffei, 2001:53). Based on the commonalities between different buildings the typologies were created and mapped for the whole case study of Yanesen and with more specific analysis on the three streets. The typology was mapped in ArcGIS program and the distribution of clusters as well as statistical analysis of different quantities of typology was created. For statistical analysis standard deviation was used as well as cluster analysis.

The first criterion for creation of typology is division on collective and single family houses. This division is important for the structure of the public-private interface because it implies different connection between each private space of the house or apartment to the public sphere of the street. Namely, the apartments have indirect connection between their entrance and the public sphere conceived through semi-public space (corridors, common spaces inside the building and so forth). Single family houses usually do not contain the semi-public space between their entrance and public realm.

The second criterion for the creation of typology is related to the shape and the size of the public-private space. The shape of the public-private interface is related to the position of the house on the plot and the position of the entrance to the private space of the house or the apartment, more specifically the way in which public and private are connected. At the single family houses the connection can appear at one level or at the two levels. First represents interface that connects the living space of the house and the street at the ground
level. The latter represents the case in which living space of the house is located at the first floor and interface comprises the ground level. The collective family houses have also two different shapes of public-private interface. First is defined with the interface located outside the building (and usually visible from the street) and the latter is located inside the building.

Furthermore, the direct connection between public and private at the ground level is distinguished in three types based on the size of the interface. Based on these morphological characteristics division of collective family houses have developed two different types and singe family houses have four types (Fig. 3.7).

<table>
<thead>
<tr>
<th>Type</th>
<th>Section</th>
<th>Plan</th>
<th>3D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I</td>
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<td><img src="image2.png" alt="Diagram" /></td>
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<tr>
<td>Type II</td>
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<tr>
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<tr>
<td>Type IV</td>
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<td><img src="image12.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Type V</td>
<td><img src="image13.png" alt="Diagram" /></td>
<td><img src="image14.png" alt="Diagram" /></td>
<td><img src="image15.png" alt="Diagram" /></td>
</tr>
<tr>
<td>Type VI</td>
<td><img src="image16.png" alt="Diagram" /></td>
<td><img src="image17.png" alt="Diagram" /></td>
<td><img src="image18.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Fig. 3.7. Typology of houses in Yanesen
Type I is single family house. The main facade of the house is facing the street directly, and the boundary of the street corresponds with the position of the facade. The entrance to the house is directly from the street. The interface is reduced from the space to the plane and is located at the area of the facade.

Type II is single family house. The boundary space between public and private is less than 1m in width. The house can have boundary marked with the difference in the height, difference of the material of the pavement or fence. The entrance to the house is facing the street. However, the space between the house and the street is limited in its size and therefore is limited in function. This type has characteristics between the type I and type III.

Fig. 3.8. The typology of street sections based on the public-private interface type of the house
Type III is single family house with set back from the street more than 1m. In this case the boundary acquires different functions (garden, parking lot etc.). The boundary is defined with the fence. The entrance to the house is separated from the street; however it is orientated towards the street and therefore visible from the public space.

Type IV is single family house. In this type the ground level is not used for the living. It is usually used for parking and has entrance to the house. The boundary can be marked with the fence or change in the material of the pavement. This type is separating the private space of the house and public space of the street with the characteristic that private space is located at the second floor.

Type V is apartment building. The boundary between public and private space of each apartment is stretched through semi-public space. However, this space is located outside of the building and there is still a visual contact between each door and the street.

Type VI is apartment building. The semi-public space is located inside the building, acquiring the characteristic of private sphere and disconnecting each entrance to the apartment from the public space of the street. These buildings tend to be high rise buildings with commercial usage on the ground level.

Types of the public-private interface were mapped and represented at the level of the house.

In order to analyse the ways in which different types of the public-private interfaces are related to each other and are generating different spaces along the streets the typology of the street section was developed. The typology of the street section is based on the connections of different types of public-private interface. The purpose is to show how different types come together to create clusters in space and the ways these clusters respond to the same space characteristics on other zones: zone of the facade and zone of the objects in the streets.

The typology of the streets sections is defined with the clustering of the similar types of public-private interface. Namely, types I and II, III and IV and V and VI were grouped together based on their similarities. Furthermore all possible connections between these groupings defined six different street section types. The types are representing different values of the publicness and privatness of the street based on the interface typology. The values are shown on the right side of the image (Fig. 3.8.) in different shades of the gray. The type I and II form the darkest colour and the type V and VI the lightest (Fig. 3.8.). The darkest colour represents the space of the street which has the highest level of privatness created with the closeness of the private space of the house. On the other hand the lightest colour represents the highest level of publicness of the street created with the largest public-private interface which separates the private sphere from the public sphere. Between those
two extremes there are different shades of the relationships between privateness and publicness of the street.

3.4.8. Photographic survey and streetscape analysis

For the analysis of the third zone of public-private interface a photographic survey was conducted. The analysis uses the tool of phenomenological de-layering and aims to quantify and describe the zone of the public-private interface related with the street. The objective of this analysis was to map and examine the visual experience of the streets. Namely, presence of particular elements in the space can provide the sense of different levels of publicness and privatness of the street. The objects usually present in streets of Yanesen are ephemeral in their character and private belongings of the inhabitants (e.g. potted plants, toys, shoes, bicycles and so forth). The number, position and the size of those objects can affect the sense of publicness or privatness of the street due to the extended meaning that those objects may possess (e.g. that they are private, personal belongings). In that sense those objects are enclosing the space, widening the zone of private into the street.

Habreken (1998) defines enclosure as space which is controlled by certain agents and territorialized through different elements. Those elements could be walls, gates or even isolated elements which dominate the space around them. In that sense the enclosure is not only the forms that claim space. The isolated dolmen erected in Neolithic times still dominates the space around it (Habreken, 1998: 56-7). Those isolated elements which can enclosure space with their presence are observed as crucial elements which create sense of private, domestic and closeness in Yanesen. Those are the elements present on the streets as ephemeral things which by claiming the spaces of the street are creating the sense of semi-private spaces (Fig. 3.9.). These elements are in a way widening the private sphere of the house and therefore dissolving the boundary between public and private spaces of the city. The streets then become ‘privately enclosed’ by these elements at different levels. For all those reasons the ephemeral objects present at the public-private interface were selected for the analysis.

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55 Habreken (1998) defines all actors which are transforming any kind of space as agents. Agents can be people or organizations.
The analytical tool used in this analysis is based on the phenomenological de-layering of the photographs. The phenomenological de-layering is based on the selection of particular phenomenon which is then mapped and extracted from the image that contains numerous phenomena. For the purpose of this analysis the phenomena extracted were different personal belongings present at the street (Fig. 3.9.).

The data were gathered by taking photographs along the streets in sequence of approximately 7.5 m (Fig. 3.10. and Fig. 3.11.). The distance is chosen based on the experiential trial in which the scenery of the street changes enough between two successive photographs. The photographs were taken at the eye-level, from the middle of the street, centring the photograph along the middle line of the street. The photographs taken along the street simulate the real experience that visitor has by walking along the street.

The reason for choosing this method for taking the photographs can be explained from two different aspects. One aspect is technical in its nature. The streets in Yanesen tend to be very narrow (from 1 to 4 m wide). Consequently, taking photographs of the facade frontage becomes almost impossible. The second reason lies in the fact that this analysis aims to show how the streets are experienced rather than their actual state. The analysis is not aiming to quantify the objects, but to show how they are experienced. Therefore, it is important to note the position of the objects along the street, where distant elements equally
affect the perception of quantity. In that sense, the analysis focuses on visual quantity of the elements (all the elements that can be seen from certain point). That means that elements will be repeatedly quantified along the street. The method is based on the quantification which is virtual (perceived or experienced) and not actual. The limitations of this method are related to the framing of the photos, which are not close to the human perception of the space. Human perception of the space is usually freer and less predictable. Nevertheless, this method describes the perception in a manner close to reality and therefore allows the measurement of the density of selected elements, and as such is chosen for this purpose.

Each photograph was de-layered using the Adobe Photoshop software. Ephemeral elements were traced and extracted from the photographs. Furthermore, their areas were quantified and expressed as the ratio of sum of pixels for the ephemeral objects to the number of pixels of whole photograph and presented in percentage (appendix D).

Furthermore, based on the results of the quantity of the ephemeral objects the data were categorized into five classes. Those classes were further used in order to reassemble the data based on the analysis of two other zones of public-private interface and create comprehensive description of public-private interface.
3.5. Discussion

The methodology proposed in this thesis represents a framework that is based on the assemblage theory and the concrete place-Yanesen. It comprises different tools and aims to produce multiple descriptions of the place and its identity. It should be also emphasized that it could be re-assembled in a different way and can produce different conclusions which are based on the structure of the assemblage of tools and results. This particular way of
assembling the methods corresponds with the questions raised in this study. Furthermore, the methodology also offers the possibilities for the further analysis and new results.

The aim of creating tick descriptions of the identity of the place that can grasp the complexity of the place is achieved with multiplying the aspects from which the place is analysed. However, this method also produces the possibility that in some point the analysis can become too complex and produce the impossibility to arrive at the conclusions. Therefore, the number of aspects from which the place is analysed should be well balanced between too ‘thin’ and too ‘thick’.

This analysis focuses only on the elements of built environment that contribute to the persistence of the identity of place. However, other elements of place might be also affecting the built environment. That is supported with the definition of the place as assemblage that comprises different elements (physical setting, activities and meanings) which are interrelated and therefore inseparable. However, in this thesis the aspects of meanings and activities are not examined. The main focus is only on the built environment.

Furthermore, the analysis of the definition of public-private interface has also shown that in the context of Japanese cities those boundaries are fluid and change depending on the scale. The analysis conducted in this thesis is focusing only on one scale—between the house and the street. That analysis shows only partial state of the interface and opens questions for further and more comprehensive research.

The assemblage theory is an incoherent theory, still in development. This thesis uses only some of the concepts from the wide range of concepts which were found to be useful for this study. In that sense it aims to contribute to the discourse by creating a methodology for analysis of the identity of place. The methodology defined in this thesis should be used as the ‘tool’ for thinking, and not as completed recipe. The assemblage methodology should be observed as a concept rather than an instrument to be directly applied. That distinction is common for assemblage theory and is asserted by number of authors. In his foreword to the Deleuze and Guattari’s *A Thousand Plateus* Brian Massumi (1987: xii) explains the concept as a brick. Although used to explain the relationships between concept, subject and object, he also asserts that *it can be used to build the courthouse of reason. Or it can be thrown through the window*. The methodology in this thesis aims to create a way of thinking rather than “breaking the window”.


4. Analysis and results: the scale of Yanesen

This chapter aims to introduce the main features of the identity of Yanesen and set the framework for the analysis of built environment. The chapter outlines the results from the analysis conducted on the scale of whole Yanesen. Firstly the analysis and results of the identity of Yanesen are presented in order to define essential properties of the identity. Following that the main focus of the analysis of built environment is defined. Secondly the analysis on boundaries of Yanesen summarized and finally the analysis of elements of built environment are explained.

4.1. Yanesen’s identity

The definition of the identity of the place is based on three different elements of the place: physical setting, activities and meanings. This thesis focuses on the analysis of the built environment. As it was shown in the second chapter not all of the elements that constitute the identity of the place play equally important role. Some elements are essential and some of the elements are accidental. Consequently, in order to understand the role of built environment for the persistence of the identity of the place firstly the analysis of the identity has to be conducted. That analysis should give an insight in characteristics of the identity which are essential and therefore enable the persistence of the identity.

In order to arrive at the definition of essential characteristics of Yanesen’s identity the analysis based on the different temporalities is conducted. More specifically, the identity of Yanesen persists through time, which implies certain changes. However, persistence also implies invariability of particular elements of the identity which are defined as essential properties. By loosing those properties the place will change its identity. This does not imply a static definition of identity, in which elements that constitute that identity are constant. Namely, those elements can be defined as essential and accidental and they constitute the multiplicity of the identity. Furthermore, during the time those elements can change their roles (essential or accidental) which define the multiple states that identity can have.

Furthermore, as explained in detail in the third chapter, the analysis is based on the comparison of the identity in two different times. The similarities between those two stages of the identity are defined as essential properties. First analysis represents the analysis of the contemporary identity of Yanesen and the second represents the state of that identity in the past. The first analysis is deriving from different narratives gathered around Yanesen.
(touristic guides, promotion literature, personal blogs and so forth) and the later represents historical definitions of Shitamachi deriving from academic discourse.

4.1.1. Narratives and contemporary identity of Yanesen

Gathering the data and discourse analysis are explained in the previous chapter. This chapter outlines the main results based on the analysis. Based on the discourse analysis of selected texts (appendix A) the total number of 38 different key words and concepts that depict identity of Yanesen were found. Those keywords are repeating in different texts and the number of their repetition is defined as signifier of their importance.

The total number of keywords is further divided in four different themes in order to better understand the structure of the Yanesen’s contemporary identity. The themes are showing the differences in the number of keywords as well as level of their importance. The themes are also overlapping and creating ambiguous boundaries between themselves. However, the division between them is imposed for the purpose of structuring. Themes are not listed by their importance but alphabetically.

The first theme comprises different concepts gathered around the community, sense of closeness and neighbourhood (Fig. 4.1). This theme has twelve different but significantly overlapping key words and concepts: community, commoner's houses, home feeling, Japanese everyday life, lively, local, neighbourhood and closeness, ordinary, peaceful, real Japanese life, slow and strolling (listed alphabetically). In some of the cases the non-coherences were found in terms of different descriptions of the same phenomenon (e.g. lively and slow, peaceful). That contributes and illustrates the complexity in which identity of the place appears. It also supports the hypothesis that identity should be analysed as a whole and complex system. The highest number of repetitions in different texts is shown at the concept of peaceful (46% of all texts). This concept is followed by strolling (35%), Japanese everyday life (30%), local (23%) and neighbourhood and closeness (19%). Concepts of real Japanese life, home feeling and slow are present in 7.7 percent and least present are: community, lively, commoner’s houses, and ordinary with each of them present in 4 percent of all texts.

The second theme comprises the historic descriptions of Yanesen (Fig. 4.1.). This theme has ten different but also extensively overlapping concepts: continuity, Edo residential atmosphere, heritage, old, preserving past, Shitamachi character, temples and shrines, traditional activities and atmosphere, traditional buildings and streets, and traditional crafts and products (listed alphabetically). All of the concepts are emphasizing different links with

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56 The concepts or the keywords are presented in the analysis as ‘codes’.
the past; some are located in the nature of change, and the others in concrete physical reminiscences from the Edo and Shitamachi. The highest number of repetitions is shown at the concepts of temples and shrines (65.4%), traditional buildings and streets (65%) and traditional crafts and products (61.5%). Those are followed with the concepts of continuity (46%), Edo residential atmosphere (35%) and traditional activities and atmosphere (31%). The percentages of the historical concepts are much higher than the concepts gathered around the community and neighbourhood theme. Least present, but in significant numbers are: heritage (15.4%), old (11.5%) and Shitamachi character (11%).

The third theme is related with smallness and modest (Fig. 4.1.). The theme has only three keywords which are closely related to each other. Those are: alleys, modest and smallness (listed alphabetically). All of the concepts are actually related with small in terms of the sizes. The most present keyword is smallness which appears in 50 percent of all texts. Second is the keyword of modest (31%) and the third is alleys only 4%. Although not so large in terms of number of keyword these theme is very compact in terms of the meanings. In the same time it is closely related with the community and neighbourhood and with historical theme, more specifically Shitamachi character.

The fourth theme is most different from the other three and it is entitled as uniqueness (Fig. 4.1.). This theme has the largest number of keywords from other three themes. It comprises
thirteen concepts. Those are: accessible, art and creative, charming, cherry-blossom, famous people, hidden and discover, landscape, legend, maze, museums, name, re-use and unique and different (listed alphabetically). The keywords show high level of variation between them; however they all emphasize the difference between Yanesen and all other places in Tokyo. That difference stretches from the specificity of the name of the place (comprising three different names-three different neighbourhoods) to the museums and legends as well as the famous people who lived in this area. The highest numbers of repetitions of concepts are: unique and different (57.7%) followed with the famous people and name (each having 34.6%). Furthermore, the concept of hidden and discover is present in 27 percent of all texts. Those are followed with accessible and legend each of them present in 19.2 percentage. And finally, cherry-blossom (15.4%), landscape (15.4%), museums (11.5%), art and creative (11.5%), re-use (11.5%), charming (7.7%) and maze (4%) are present in lower numbers.

The themes are significantly overlapping and some of the concepts could belong to multiple themes. The analysis has shown that in highest number of cases the historic character of Yanesen is emphasized. Interestingly, the traditional buildings and streets are present in very high number of texts despite the fact that there are almost no buildings or streets preserved from the past. This shows the flexibility and proves that for the identity imagination is very important aspect.

The second important aspect of this discourse is that the identity of Yanesen is linked with the characteristics of traditional landscapes in Tokyo. The terms such as Edo or Shitamachi are relating this place with the concrete past of the Tokyo. It also proves that the analysis of the character of Shitamachi and its definition are valid for the comparison with the contemporary Yanesen. Furthermore, it supports the hypothesis that this comparison allows for the definition of the essential properties of the identity of Yanesen.
The third important aspect is that the identity of Yanesen is presented as the assemblage of different concepts that have different meanings. The analysis has shown the complexity of the identity. It has shown the ways in which different keywords are overlapping and interacting and creating that identity. The identity of Yanesen cannot be reduced to any single concept; it comprises all the concepts and emerges through their interactions as a whole. However, this whole, or this assemblage is also open-ended and this analysis represents its frozen state, in one single point in time. If conducted for different period it could be differently assembled with different relationships between the concepts. We can imagine the identity of Yanesen in time, with bobbles moving and changing size, some of them appearing and some them disappearing (Fig. 4.2.).

Another important finding of this analysis has shown how different phenomena are described from different points of view. For example, the topic of the community-sense of closeness-neighbourhood uses all these keywords in its description. The whole theme cannot be reduced to any single concept due to the fact that it will give only partial description. All three keywords are equally important and cannot be separated. They all reveal some parts

57 The complexity of the identity of Yanesen could be the important characteristic which allows the identity to persist through change. That is not the topic of this thesis and was not further developed. However, it raises interesting questions of the structure of the identity of place and its relations to the persistence.
of the meaning but are significantly overlapping-generating the assemblage. Similar processes are noticeable in each of the themes.

4.1.2. Shitamachi

*The definition*

The Shitamachi represents a complex and floating concept that is changing through time in terms of its meanings and geographical boundaries. The meaning of Shitamachi is not a homogeneous and the notions are related to different spheres of the city. The definitions of Shitamachi vary depending on the perspective that might be taken. It marks a part of the city of Tokyo and is highly connected with its origins in Edo period. However, it is not necessarily bounded to one location. It defines way living, particular patterns of participation in urban life (Smith, 1960: 249) as well as a certain social structure of its inhabitants. It could be also argued that the term is not only related to Edo-Tokyo. Today the term could be found in other Japanese cities (e.g. Osaka) (Cybriwsky, 1997: 130-1). In the broadest sense it defines a low-lying urban area, a downtown inhabited with merchants and artisans (chōnin), related with shopping and small family business. In Tokyo it appears from the early beginning of the city.

The shogun’s city, called Edo (contemporary Tokyo) has from its founding been divided in two regions: Yamanote or the high city-山手, and Shitamachi or the low city-下町. The boundaries between these two regions are hard to determine, nevertheless hilly Yamanote was generally consisting of areas west of the shogun’s castle (now emperor’s palace) and the Shitamachi consisted of low lands east of the castle. The yamanote area was a diluvial terrace packed with warrior residences; the shitamachi was an alluvial area with a concentration of chōnin dwellings (Matsunosuke, 1997: 43). High city was the place of aristocratic dwellings, shrines and temples and the low city was home of merchants and artisans. Nevertheless, plebeian enclaves could be found among the Yamanote as well as aristocratic dwellings in Shitamachi (Fig. 4.3.). As Seidensticker explains, the precise boundaries are difficult to define, the low city was always vaguely defined region, it sometimes seems as much an idea as a geographic entity (1984:8). The flat lands of Shitamachi were created by filling out marshy mouths of Sumida and Tone rivers. During the Meiji period, Tokyo had fifteen wards, from which Nihombashi and Kyōbashi as well as flatlands of Kanda and Shiba belonged to low city. The centre of pleasure in Meiji, Asakusa and Yoshiwara quarter were during the Edo period outside of the city itself. Asakusa and its Kannon temple were built initially to serve the pilgrims and lay beyond the

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58 Smith (1960: 248) also mentions chōnin in both Tokyo and Osaka living in the wards called Shitamachi.
points of guarding approaches to the city of Edo. Nevertheless, during the Meiji period these areas become part of the low city. Today everything east of the Sumida could also be considered as Shitamachi (Ibid).

The differences between Yamanote and Shitamachi could be also defined in terms of the population. Namely, Dore (1958) explains that Shitamachi districts originally were inhabited by the non-samurai merchant and artisans. Therefore the typical Shitamachi person was (and is still considered as) merchant or independent craftsman, or tailor or carpenter, owner of a small workshop and so forth. Yamanote person, on the other hand gets the living from modern tertiary industries, he is professional person, salesman in a department store, official, business executive, and so forth. Also there are differences in the language, Yamanote’s language has become an official Japanese language and Shitamachi dialect still contains some of the old Edo elements. There are differences in the character of the people as well. Shitamachi person is *hot-tempered* but *warm-hearted*, and Yamanote

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**Fig. 4.3. The areas of Shitamachi in Edo**
person is more rational and bourgeois. The communal life of Shitamachi is wide open without secrets while Yamanote’s families had greater individualism and privacy (Ibid: 11-13). Similarly Smith (1960) argues that the difference between Yamanote and Shitamachi is defined with two different lifestyles and their relationships to the urban life.

Another important concept that is linked with Shitamachi is the concept of ‘Edokko’ (child of Edo). Edokko is name which appears in the second half of 18th century, and describes chōnin who were born in Edo. Matsunosuke (1997: 42) defines edokko as merely a low-class, poor, uncultured chōnin with neither strength nor guts, however this term was used with particular amount of pride. The concept of Edokko is characteristic only for the city of Edo; it does not appear in Kyoto, nor in Osaka, or any other city in Japan. One of the possible explanation is that this term, which describes native citizen of Edo, appears due to the number of ‘outsiders’ who lived and worked in Edo (Ibid: 43). The Edokko culture was based on: language, concept of iki and tsū, ukiyo-e, and literature, such as kibyōshi, sharebon, and yomihon (Ibid: 44). The concept of iki is highly related to particular qualities of refinement, tension and specific sensibility which were developed in Shitamachi (Smith, 1960: 244).

The Shitamachi was characterized with Shitamachi jōchō, the “mood of the Low City” with its rows of wooden buildings and sense of neighbourhood as community (Seidensticker, 1984: 86). Pleasure quarters were important areas for development of low city’s culture in Edo period. One of the most famous was Yoshiwara, which emerged in seventeenth century as something more than provincial outpost (Ibid: 18). Another important part of everyday life in Shitamachi were public baths. Public baths were indigenous part of social life in Shitamachi. They were sort of community centre, a relief from crowding and noise (Ibid: 92).

The distinction between Yamanote and Shitamachi is the old one, deriving from the beginning of the city. However, that distinction was changing through time. Smith (1986) explains that it was varying as the city itself was changing. In late Tokugawa Shitamachi was the ‘downtown’ area located around Nihonbashi and considered as urban area. In the same time Yamanote suggested rusticity in opposition to the urbanity of the centre, of the downtown. The Shitamachi area was in that period considered to be the centre of the city (Waley, 2002). It was populated by merchants, artisans, contained pleasure quarters and was regarded as the centre of the art of those days. During the 1880s Shitamachi was redefined from urban centre to poor periphery (Smith, 1986: 373). Nonetheless, the

59 And for some authors authentically and indigenously Japanese (e.g. Matsunosuke, 1997).
distinction between Yamanote and Shitamachi remains an important social, geographic and subcultural division in contemporary Tokyo (Bestor, 1989: 31).

In his book chapter ‘Metaphors of the Metropolis- Architectural and Artistic Representations of the Identity of Edo’ Coaldrake (2003) examines how during the time artistic representations of Edo city have changed. He links the artistic representations of the city with the notions of the identity of Edo-Tokyo. The images of Edo started with the representations of the high culture of daimyo (Yamanote areas) with the gradual shift during the time towards common people of Shitamachi. Coaldrake (2003) explains how in the 18th century focus of artists and in that sense the identity of the city changes from high culture to popular culture related to Shitamachi. The image of strong wealthy ruling shogunate slowly disappears from the eyes of artisans and people. In 18th century there is a tendency for showing the wealth and power of earlier periods. The art was used to revive the memory of opulence of early Edo, but architecture created more muted forms by ‘keeping up appearances’ (Ibid: 139). In that sense different artistic representations of the city show how the identity of its parts, Yamanote and Shitamachi, was changing: from importance of the Yamanote to the superiority of Shitamachi in 18th century.

In the late Tokugawa period the decline of the population started to emerge in the Shitamachi areas (Rozman, 1986: 344). However, Meiji restoration marked a new period for Shitamachi and Yamanote areas. During the transition from Edo to Tokyo the major changes in the city were at the samurai areas-Yamanote. With the abolishment of the previous Tokugawa class system and disappearance of the whole class of warriors, who mainly inhabited the Yamanote areas, those areas were ground for the change, a modernization of the city. As Rozman explains, Yamanote were in that period the areas of decline. Most of the samurai resettled, often outside the castle towns and land values were much lower than in the more stable machi areas (Ibid). Therefore, they become a ground for the change of the city. Since most of the innovation and modernization was located in Yamanote areas, Shitamachi started gaining a new image: as a representative of old order and traditional cultural forms (Waley, 2002: 1536). Following that Smith (1986: 373) argues that the distinction of Shitamachi/Yamanote gained a historical dimension, by which one was equated with Edo and the other with Tokyo. Shitamachi was therefore defined as old, traditional, unchanging, indigenous, plebeian and Yamanote as new, modern, changing, imperial, elite and intellectual. One of the illustrations is that the house typology which was associated with Yamanote areas (house with its own garden, set-back from the street) became an ideal house of middle-class and Shitamachi areas gained the notions of periphery and slums (Ibid: 372). During the industrialization period the meaning of Shitamachi was changing into image of poverty, crowded and uncomfortable places (Waley, 2002: 1543).
However, in recent periods that image has changed into a distinct nostalgia for traditional qualities of social spaces, neighbourhood and community feelings (Ibid: 1544-5). In general, Shitamachi has become associated with certain indigenous qualities of living. Overall, the image of the Shitamachi changed from the centre of the city to the backward periphery and finally to the nostalgic images of the Edo. In popular culture and in some academic circles Edo is equated with Shitamachi.

Not only that the meaning and general attributes of Shitamachi and Yamanote were changing through time, but the location and geographical boundaries of the spaces were also changing. In Tokugawa period the heart of the low city was Nihonbashi, which was first claimed land by shogun. Nihonbashi got its name by the bridge Nihonbashi, the “Japan Bridge” and was the site from which all the measurement of the distances between Edo and other cities begun (Seidensticker, 1984:9). The major transformations of Edo were in period from Genroku to Kyōhō (1688-1736) when number of new wards were constructed, or old wards were relocated, daimyo estates reorganized (Matsunosuke, 1997: 27). At the end of 19th and the beginning of 20th century the boundaries of Shitamachi have expanded
northwards and were including the Asakusa and nearby areas (Waley, 2002: 1536). In that period Shitamachi was consisting of Kyobashi, Nichonbashi, Kanda, Shitaya and Asakusa (Ibid). During the Great Kanto earthquake (in 1923) and subsequent fires the most of the Shitamachi was destroyed. Siedensticker (1991) argues that this was the critical point for the Shitamachi since most of its built environment was destroyed and never rebuilt in the same manner. The destruction of the heart of the Shitamachi contributed to the change of the boundaries as well. Therefore, today most of the old Shitamachi central areas are not considered to have the traditional character. Most of the areas that still retain the flavour of old Shitamachi are located at its previous borders. During the second half of the 20th century the Shitamachi areas have spread along the Sumida and Edo river banks (Fig. 4.4.).

The floating concept of Shitamachi can therefore be defined in many different ways. It can gain a historical, socio-economic and psychological/nostalgic definition. The historical definition of Shitamachi is related to its inhabitants (chōnin) and locations around Nichonbashi and Asakusa to the north. However, it must be emphasized that there is no clear definition of what ‘past’, most of the interpretations of historic kind are based on the indeterminate past. In some cases that past is related to Edo period (which actually comprises a long period from 1601 to 1868 and is not homogeneous in its character) while in others it could be even related to the period after the Second World War. Socio-economic definition of Shitamachi is based on the small scale enterprises and close-net communities. It is not necessarily linked with Edo period. It is mainly focused on the period after the Great Kanto earthquake (1923) until 1960s. It comprises the areas at east bank of Sumida River. Nostalgic definition of Shitamachi is the broadest one. It comprises strong neighbourhood and community connections as well as traditional shopping streets. In terms of locations this definition can be related to almost any neighbourhood in Tokyo. That is well described at the example of Miyamoto-chō in Bestor’s book called Neighborhood Tokyo. Bestor (1989:7) explains that this neighbourhood is not part of the ‘true shitamachi'; however it dates before Second World War and has gained some of the ‘customs and cultural values that characterize shitamachi’. He further argues that for many Japanese that is what characterizes Shitamachi- the way of life and not the place. Although separated for the purpose of better understanding, the definitions are usually mixed or overlapped in different interpretations and create ambiguity around the term of Shitamachi. The nostalgic definitions of Shitamachi were also appearing and disappearing through history. The nostalgic reminiscences based on the sentimental spirit appear after the Meiji restoration in 1890s, in order disappear after the Great Kanto earthquake (1923) (Smith, 1978: 56-69) and strongly appear during the late 1980s and beginning of 1990s (Sand, 2001). In this period the everyday history and therefore Shitamachi were ‘monumentalized’ (ibid).
Shitamachi is today (and perhaps always was) an elusive term that comprises multiple meanings and locations. It is associated with the Edo and memory, past and tradition of Tokyo’s urban areas (Fig. 4.5). The fact that Shitamachi defines traditional everyday life contributed to its ambiguous definitions and boundaries. Waley (2012) argues that this meaning related to tradition is mainly based on the memory, stories and activities of the place. Therefore the character of Shitamachi is today located at the intangible spheres of the place (Ibid: 163). However, the fact that Shitamachi was changing its locations and boundaries through time suggest that there is something about the built environment that enables that specific memory or identity based on Shitamachi to be evoked. More specifically, although the heart of the Shitamachi was around the Nihonbashi, today other areas are considered to have Shitamachi character. That is due to the fact that this area has changed its built environment significantly, and that areas located at the border of the Shitamachi were less affected and are considered today to have partly preserved the character of Shitamachi. Consequently, this indicates that not only intangible but also tangible elements of the place are important for persistence of the Shitamachi character. Despite the fact that in general Japanese architecture is considered to have short lifespan and that places are basing their continuities at intangible elements, it can be argued that both tangible and intangible elements of the place must come together to create a persistence of identity of the place. Therefore, it could be argued that there are certain spatial characteristics that can produce associations and evoke the sense of Shitamachi. In broadest sense those are: temples and shrines, matsuri (festivals), small family enterprises,
dagashi-ya (particular shop selling sweets), intimate spaces, roji (alleyways) and old buildings.

Further text examines the main characteristics of typologies and structure of the built environment in Shitamachi areas in the way they appeared in Edo period.

The built environment

The grid of the low city was rigid, right angled, and high city’s streets were following the terrain, with two main types of the roads: one that follow the slope and other which cut through (Seidensticker, 1984: 237). The samurai areas in Edo occupied two-thirds of its territory with population of quarter of that in commoner area (Sorensen, 2002: 33). As Seidensticker explains: The Low City was small, tight, and cozy (Ibid: 9). The living conditions in the low city were defined with overcrowdings, with density much higher than 673 people per hectare (Kobayashi, 2013: 70). Standard dwelling for the artisan and poorer tradesman were in the back alleys called “nine-by-twelve”, consisted of two rooms, one of them earth-floored, with nine feet of frontage on the alley, and extended twelve feet back from it. The houses were dominantly wooden and one storey high. As Seidensticker describes, they lived with mud, dust, darkness, foul odors, insects, and epidemics (Ibid: 14). Nevertheless, some of the wealthier merchants lived almost expensively and extravagantly as aristocrats in the high city (Ibid: 5). The commoner areas in Edo were characterized with very high population densities. In late 18th century the area of commoners in Edo was 13 square kilometres and was divided into 1 700 neighbourhoods with total population of approximately 500 000 with the most dense areas up to 58 000 per square kilometre. Most of the houses were only one storey high, and only those facing the main streets could be two storeys high (Sorensen, 2002: 27). Due to that overcrowdings, the city was proud of its fires, which were called Edo no hana (or “flowers of Edo”), and were bringing chances, creating spaces for rebuilding and for better living conditions (Seidensticker, 1984:14). Following that, the backstreets of Edo, called uradana were widened anytime it became possible.

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60 Seidensticker gives information that still in 1915 more than nine-tenth of the city architecture was still wooden (1984: 85).
Main typological characteristics of Yamanote and Shitamachi built landscapes

The characteristics of different typologies of built environment in Edo were based on the configuration of terrain and class division. The main division in Edo was on the areas of commoners (machi-chi), the area of samurai (buke-chi) and the areas of temples (jisha-chi). Due to the fact that separations of these areas were guided by the characteristics of the topography they were therefore intermixed (Sorensen, 2002: 25).

Fig. 4.6. The structure of the commoners’ areas (Shitamachi areas)
Each district was defended by its own walls, and therefore was contributing to general defence of the city. In Edo, temples and shrines had their own gates and walls as well as higher class warriors (hatamoto) districts and daimyo estates had their own walls and gates. Within the commoners’ areas each neighbourhood had its own gated and guardhouses which were closed at night and guarded by the residents (Ibid: 23).

The Yamanote areas were defined as warrior class buke-chi. The land use was exclusively residential with some administrational function, but never commerce or other activities (Sorensen, 2002: 33). These areas were characterised by specific topography, road network and large daimyo estates (Ibid: 34). During the Meiji period former samurai areas changed their character. Since the samurai lost their superior class status, many grand samurai residences imported small shops along the street-front, or were subdivided into smaller plots or simply sold. As Sorensen explains the former samurai areas thus became progressively more diverse in their land use and occupancy (Ibid: 81). After the Meiji Restoration the decline of population was mostly located in the samurai areas, whereas during the late Tokugawa period the decline of urban population was in the machi areas (Rozman, 1986: 344). In the same time the samurai areas were not densely built; therefore most of the new public buildings were erected in these areas (Ibid).

Commoners’ areas were usually laid out in the grid pattern following Chinese model adopted in Kyoto and were planned by city elders (Fig. 4.6.). The main pattern was based on the block (chô), each measuring 60 ken by 60 ken (1ken was approximately 1.8 m, so the block was 109/109 meters). There are three uses of the word chô. One describes the block with the length of each side of 60 ken= 1 chô, the second describes measurement unit; however in the same time it describes the residential neighbourhood which formed the basic unit of urban administration. That block has developed through various stages into the latter pattern of the neighbourhood that was composed of two sides of block long-street with gates on the both sides of that street. The chô usually had approximately 300 people which were of diverse classes of commoners: from wealthy merchants, landlords, and shopkeepers with the houses fronting the main streets (omote-chi) to the tenants of nagaya in the back alleys (ura-chi) who were usually employees or servants of the merchants. Land use was also mixed, with shops facing the main streets and small-scale handcraft industry in both front-street houses and back street tenements and residences. Traditionally these blocks were subdivided in 12 plots each measuring 10 ken by 20 ken (measurement called tan). In commoner areas in Edo these plots were slightly smaller leaving the central space of the block open (kaishôchi) which was used for well, garbage collection area and neighbourhood shrine. With continuing the pressure on the land and overcrowding these spaces were during the 18th century built up (Sorensen, 2002: 25-30).
In Edo period urban scene was dominated by three main types of the buildings: (1) *buke-yashiki* (2) *machiya* and (3) *nagaya*. *Buke-yashiki* was a type of warrior class residence, with one or more buildings standing in the garden surrounded by high walls and big gates and located at the Yamanote areas. *Machiya* was a townhouse which functioned as residence and shop, office, warehouse or workshop. *Nagaya* was the row house of commoners, and perhaps the most numerous of all types (Shelton, 1999: 66-86). Nagaya and Machiya were types of the houses located at the Shitamachi. Those three main types defined the urban sense of Edo, mainly based on the social hierarchy.

*Buke-yashiki* type of warrior’s house had three main subtypes classified by rank: *damyo yashiki*, *tamatomo yashiki* and *kumi yashiki*. All these types had clearly defined boundary space between public space of the street and private space, through high fences and gates. The streets were conceived as circulation spaces (Fig. 4.7.).

*Machiya* type was defined as residence on the second floor and semi-public space (shop, office, warehouse or workshop) on the ground level (Fig. 4.8.). The boundary between house and the city is dissolved through introduction of public service.
activities. Streets become more ‘lively’ places, where many activities are conducted. Nagaya or the row houses were mostly aligned next to small alleys (roji) only 1m or 2m wide, behind and between machiya. The entrance to the house was directly from the alley, which was perceived as semi private space, shared among the tenants (Fig. 4.9.). Usually, the alley was gated as well, and served as space for cooking and other domestic activities (Shelton, 1999: 66-86). Waley (1992) explains that appearance of nagaya was not strictly planned during the Edo period and that they were appearing due to the lack of housing. The most common nagaya was the smallest one having the front width of nine shaku (or 2.7m) and only two ken deep (3.6m). The 70% of Edo’s townspeople lived in this type of the house. During the Meiji period the similar typology was appearing in northern and eastern parts of the city (where the factories were located along the Sumida river). During that period many of those settlements were insanitary slums. One of the famous one was Shitaya Mannenchō (Ibid: 108-9).

Change of the nagaya type of the house

The Shitamachi areas were dominated with the typology of the machiya and nagaya. The nagaya typology of the houses was most numerous in the landscape of Shitamachi, and therefore is important for its descriptions. However, this type was largely changing through time and contemporary discourse of nagaya vey often does not consider the stage of its development. More specifically, the references to nagaya should be clearly linked with the time.

A one possible description of the way this type of the house was changing through periods is shown at the figure based on the material gathered from Taito Ward Shitamachi Museum (with specific focus at the nagaya types in the areas around Yanesen) (Fig. 4.10). During the Edo period nagaya was one storey high, consisting of earthen floor entrance and single room. During the Meiji period it was still dominantly one storey high, consisting of one room, however gaining the toilet and kitchen. During the Taisho and Showa periods the size of each apartment in nagaya is gradually becoming bigger. Most of the houses of this type in those periods are having two floors, and gaining the complexity in the plan. The similarities in all periods are related with the organization of the apartments. In all periods apartments are next to each other in long rows. Even the name ‘nagaya’ of the type suggest that characteristics. It consists of two kanji (長屋) with the meaning long and roof.
Fig. 4.10. Development of nagaya typology

Publication material by Taito Ward Shitamachi Museum
Therefore, the main characteristic of this type: apartments gathered under the one long roof, remains throughout all periods.

4.1.3. What matters?

The definitions of Shitamachi and contemporary identity of Yanesen are ambiguous and complex. The conducted analysis shows their structure and allows the comparison of different concepts which constitute those identities. The similarities between the structures of the identity of Yanesen in two different times are emerging at the levels of keywords. Those similarities are used in order to define the important elements of built environment for the essential properties of identity of the place in Yanesen. The question what elements and which characteristics of built environment are essential elements that contribute to identity in Yanesen is assessed in the combination of the narratives about the Yanesen and history and definitions of Shitamachi.

Narratives are defining the identity of Yanesen as traditional, unique, continuous and so forth. In some of the texts the direct link with the Edo and Shitamachi are mentioned. On the other hand, the thesis examined the main characteristics of that Shitamachi character which was proven to stand for the tradition and the whole Edo period and city (indeterminate past). These two aspects show that identity of Yanesen is defined as Shitamachi in its broadest meaning and modified meaning (deriving from historical, socio-economic and nostalgic definitions). The analysis of identity of contemporary Yanesen therefore supports its connections with Shitamachi.

The comparison shows that there is no direct similarity in identity of contemporary Yanesen and Shitamachi. Namely, Shitamachi is representing a broad concept that comprises historical Edo and different areas in the city. It is linked with the class system and particular style of living which do not exist anymore. However, by examining the concepts that constitute that identity (small, intimate spaces, crowded, neighbourhood, downtown, merchants, artisans, community, temples, shrines, and so forth) we can define similarities between the Shitamachi and contemporary Yanesen identity. Therefore, Shitamachi and Yanesen are not the identical concepts. However, the elements that constitute them are found to be the same to a certain degree, which explains their persistence and not preservation.
Comparison of the keywords that appear in Shitamachi definitions with Yanesen’s descriptions shows that some of the keywords are the same, some are lost and some are slightly changed but still carry the similar meaning (Fig. 4.11.). The concept of downtown, and low-land areas as well as the notions of particular kind of urbanity which appear in definitions of Shitamachi are not appearing in contemporary descriptions of Yanesen. Therefore the importance which Shitamachi areas had in Edo period as areas located in alluvial parts of the city is lost in contemporary Yanesen. That also explains the fact that Yanesen has both hilly and alluvial parts which are considered as part of that same identity - linked with the past. Namely, Yanesen belongs to both Yamanote and Shitamachi areas in terms of the topography, use and building typology. Yanaka is located at hilly part and Nezu manly in the low parts of the area. Originally, it could be said that only Nezu can acquire the image of Shitamachi. However, from the examination of the narratives it is

Fig. 4.11. The keywords of Shitamachi definition (on the left) and keywords of contemporary Yanesen’s descriptions (on the right)
clearly shown that those meanings are overlapped and merged into one general Shitamachi feeling. Therefore, the Shitamachi in Yanesen is far from its original definition, perhaps most closely related to its psychological definition. However, it stands for all three areas: Yanaka, Nezu and Sendagi. That is possible because the position of the Shitamachi has become its accidental property, therefore not crucially important for its identity. Another important concept in Shitamachi definition that is lost in contemporary descriptions of Yanesen is wood. It also appears that material became accidental property of the identity of Shitamachi. One of the reasons could be that all buildings in Edo period were built in wood, and therefore it was not considered to be important property of the identity since it did not define any difference.

Other concepts of the definition of Shitamachi can still be found in Yanesen’s descriptions (community, crowded, intimate spaces, merchants and artisans, neighbourhood, old buildings, small, small enterprises and temples and shrines). The analysis has also shown how in contemporary identity of Yanesen new concepts are emerging. Those are the concepts that do not have clear link with the Shitamachi (such as accessible, maze, hidden, artistic and creative, local and so forth). This shows the way in which the identity is evolving. The identity of the place is in process of change. It is becoming and not being. It is dynamic and not static. The identity of Yanesen represent an example of how identity of the place is changing through time and how it is not based on the essences but multiplicities which are appearing progressively through morphogenetic processes in the place.

In order to create a hierarchy of the importance of the concepts and their links further analysis is conducted based on the results of the importance of concepts in contemporary narratives about Yanesen. Following this the similarities can be found at the concepts of: 1. neighbourhood, community, intimate spaces, 2. small, modest, crowded, 3. temples and shrines, 4. small enterprises, crafts and products. From those four concepts two were selected for the analysis due to the fact that they have their expressions in built environment.

For the purpose of analysis of built environment the concepts of small size and neighbourhood and community were selected (Fig. 4.12.). The concepts of temples and shrines as well as the concept of small enterprises crafts and products were not considered for the further analysis. That is due to the fact that although those concepts have their implications in built environment, they have more important role for the activities in the place. Temples and shrines with the different celebrations (matsuri) and very strong symbolic meanings were excluded from the analysis. In the same time the crafts and products as well as the small enterprises are more important from the aspects of their activities and the very commodities rather than their physical characteristics.
The concept of smallness and modest has direct implications on built environment in terms of the sizes of its elements. Concept of spatial intimacy and neighbourhood has also influences in built environment from the aspects of connections and creations of structure of built environment.

![Image](76x477 to 544x701)

It is also important to stress that definitions of Shitamachi show certain emphasis in terms of the built environment. In all descriptions of Shitamachi as well as in the narratives of Yanesen the sizes of different elements in built environment are considered to be important. Shitamachi was defined as area which was densely populated and therefore related with the lack of space. The sizes of houses, rooms, streets (especially roji) were important in all descriptions. In the narratives about the Yanesen the keywords of ‘smallness’ and ‘modest’ were appearing very frequently. Therefore, the size of the elements of built environment can be considered as essential characteristic of the physical structure of both identity of Shitamachi and Yanesen. Consequently, the certain size of elements of built environment can be considered as important characteristic for the persistence of Shitamachi identity in Yanesen as its tangible element of the place.

The second characteristic that appears in both narratives about Yanesen and the definitions of Shitamachi is related to a certain spatial intimacy that creates neighbourhood and community feelings, certain sense of closeness. In terms of built environment, what actually enables or produces the possibility for that closeness to emerge are specific relationships between the buildings and the public sphere. The liveliness of the streets and especially the private sense of the back streets (roji) should be defined not only by the sizes of those streets but also by the specific relationships between each private sphere of the house and the public sphere of the streets. Following that, characteristics of very high and low densities,
public-private interfaces played important role in distinctiveness of the character of both Shitamachi and Yamanote areas.

The fact that relationships between public and private were examine by many scholars in the definitions of Shitamachi supports the reasons for choosing this space of built environment for further analysis. The important distinction between Shitamachi and Yamanote were highlighted at the existence of different relationships of house and the street (e.g. Daniels, 2008; Nakajima, 1996; Nakagawa, 2006; Ozaki, 2002; Shelton, 1999; Sorensen, 2002). Those specific relationships are also highlighted as important elements of the identity of Tokyo (Kitayama, et al. 2010). Public-private interface is also considered in broad terms to have very important role in definition of the character of the place (Madanipour, 2003; Norberg-Schulz, 1980) and character of the urban (Habraken, 1998).

Therefore, public-private interface is defined as important element of both Shitamachi and Yanesen identity. Furthermore, it is an element that in general is defined as important for the character of the place. And finally, public-private interface is an element that describes the relationships between the buildings and is therefore important from the aspects of main concepts of assemblage theory.

The sizes of elements of built environment and public-private interface were selected as essential properties for the persistence of the identity related with the built environment in Yanesen. Those elements will be further examined in the analysis of built environment in Yanesen.

4.2. Definition of boundaries of Yanesen

In order to analyse the elements of built environment in Yanesen the boundaries of identity of Yanesen have to be defined. Since the aim of the thesis is to analyse the role of built environment for the identity of the place in Yanesen the boundaries of identity of the place define the boundaries for analysis of the built environment. Those boundaries do not necessarily correspond with the actual administrational boundaries. For that reason the analysis which is conducted aims to define the spatial boundaries of the identity of Yanesen. More specifically, what do people usually mean when they are referring to Yanesen.
In order to define the boundaries of Yanesen and therefore the first scale for the analysis of built environment, firstly the administrative boundaries are explained and secondly the analysis of different maps was conducted.

Yanesen represents an area which consists of three different neighbourhoods: Yanaka, Nezu and Sendagi. Administrative boundaries of these three areas are shown in the map (Fig. 4.13.). Nezu is located at the southern part of the neighbourhoods in the valley. It comprises the smallest area compared with other two neighbourhoods. The major street in this area, Shinobazu Dori is located at the central part of the Nezu, cutting it from the southeast to the northwest. This street is connecting Nezu with Shinobazu pond and Ueno in the south. On the north-western part of Nezu neighbourhood the Nezu shrine is located. This shrine represents an important cultural centre of the neighbourhood. Nezu station on the Tokyo metro line is located at the Shinobazu Street at the southern part of the neighbourhood. The neighbourhood is dominated with the small shops and restaurants as well as residential buildings. Sendagi is located north from the Nezu and comprises much larger area. Both Nezu and Sendagi belong to the same city ward, Bunkyo. The neighbourhoods are connected through the Shinobazu Street which cuts eastern part of the
Sendagi. This area is dominated with the small residences, galleries, shops and restaurants as well as temples. The main station is Sendagi station and also located at the Tokyo metro line, connected with the Nezu and on the central part of neighbourhood along the Shinobazu Street. Sendagi comprises both hilly parts of the areas as well as valleys. The third neighbourhood, Yanaka is located east from both Nezu and Sendagi. The area dominantly comprises hilly parts of the neighbourhood. It also belongs to a different city ward, Taito. The area is dominated with the temples (currently 64 temples). Some of the temples date from early Edo period, when the area was outside the city boundaries and temples were serving for the protection of the city (in both spiritual and actual meanings). Another important part of Yanaka is its cemetery with famous cherry-blossoms. There are numerous small galleries, museums and shops. The area is also distinct by the traditional shopping street called Yanaka Ginza. The area is marked with the Yamanote train line on its northeast and Nippori station. Yanaka is most different area from all neighbourhoods.

These neighbourhoods belong to different city wards; they are different in their character and function, building typology. However, all three neighbourhoods are conceived as one-Yanesen. That is highly supported by the organization deriving from the community itself, which started by three local woman organizing the neighbourhood newsletter in 1984 to be developed into a magazine called “YaNeSen”. This magazine is dedicated to celebrating and promoting local history, as Sorensen explains: 

*magazine has been extremely influential as a project of story-telling as place-making, and celebrates families that have been in the neighborhood many generations, local shops, craftspeople, popular history and historians, current events, festivals, and local buildings and places.* (Sorensen, 2009: 219). The magazine is published both in English and Japanese and present at the internet as well.

The fact that there is a difference between administrative boundaries of these three neighbourhoods and that they are conceived as the part of the one neighbourhood rises the questions of necessity to define those boundaries in terms of the identity. Furthermore, since the thesis is interested in the links between the identity of the place and built environment it is important to emphasize the difference between actual and perceived (experiential) boundaries.
In order to define the research area different maps that represent and promote Yanesen were gathered\textsuperscript{61} (both as printed material and as digital material from internet). The diversity and the quality of the maps varies (examples are shown at the Fig. 4.14.). All the maps were adjusted in order to fit the precise map of Yanesen, presented in greyscale and overlapped with transparency of 30\% in order to show areas which are most frequently represented on the maps (Fig. 4.15.). The darkest colours of gray represent the areas most frequently shown on the maps. Therefore, the most frequent areas presented in different maps of Yanesen are chosen as indicator of the consensus images of the areas that compose the identity of Yanesen. Consequently the area chosen for this research is the area most frequently shown on the maps (Fig. 4.16).

\textsuperscript{61} Total number of 31 maps was gathered by the author from 2010 until 2012, which is explained in the chapter 3.
The result of this research shows different levels of clarity of the boundaries. Namely, very clear boundary is shown on the east of the area defined by the Yamanote train line and the stations Nippori and Nishi-Nippori. In the same time northern boundary is also very clearly defined with the street leading to Nishi-Nippori station. There are almost no maps which show any of the areas outside these boundaries. The Yamanote train line represents very clear boundary in the space. It interrupts the built environment with strong spatial division. However, western and southern boundaries are not so clear. Although, it could be argued that on the west area Shinobazu Street represents very strong boundary because of its size and the intensity of the traffic, in reality it is not conceived as such. The reason for that might be the location of the Nezu shrine, west of the Shinobazu Street. Most of the maps
include Nezu shrine in their presentation of Yanesen, however due to the lack of the clear separation element west of the Nezu shrine there is no clear boundary as well. The boundary is gradually dissolving to the west. The southern boundary is also very ambiguous. In some cases it stretches all the way to Ueno pond. That is particularly noticeable at the maps which are titled as Yanesen and *Shitamachi*. Since Ueno area is well promoted in touristic guides and also part of Shitamachi Museum is located in this area it represents a logical connection. There is a notable tendency to present Yanesen as part of already well developed image of Ueno area.

Fig. 4.16. Selected research area

However, this research also showed that there is a core area, the one dominantly represented in all the maps. This area is located between Yamanote line on the east and Shinobazu Street on the west, street to the Nishi-Nippori station on the north and street...
connecting Nezu station and the Yamanote line on the south (Fig. 4.16.). Since this area was present in all the maps it was chosen for the research of this thesis.

The boundaries are always complex and their definition requires extended research. There are always difficulties to present a boundary with a single line in the space. Yanesen and its boundaries are no exception. However, the aim of this research is to define the boundaries of Yanesen’s identity for the analysis of the built environment, and not to define the actual boundaries of Yanesen. For that reason the core area was selected which excludes the fuzzy borders of that identity. For the purpose of defining the actual borders of the Yanesen more precise, extensive and detailed analysis is required.

The area defined in this analysis will represent the first and the largest scale of the analysis of the elements of built environment. That is presented in the next section of this chapter.

4.3. The structure of built environment based on sizes in Yanesen

This analysis is conducted based on the results from the previous two sections. The analysis conducted on the importance of the elements and their characteristics has shown two important aspects of the built environment for the identity of place. In this section the analysis is based on the sizes of elements of built environment. The boundaries for the analysis of the elements were defined in the previous section. Following the definition of the identity of place in Yanesen the smallest elements of the built environment have significant contribution for its persistence. However, the question of the thesis is related with the ways in which the built environment contributes to the identity of Yanesen and the smallness represents only one part of that explanation. This section aims to explain the structure of the built environment in Yanesen from the aspects of the sizes of its elements.

First part of the section represents the analysis of classes of sizes at the level of each system of elements of built environment. Secondly their distribution in space is explained. Thirdly the clusters of the elements of similar sizes are analysed, with the emphasis on their interactions.

The analysis is conducted on the three different systems of elements of built environment (streets, blocks and buildings). The selection of elements of built environment is explained in detail in the section 3.4.2. In this analysis the plots were not included due to the fact that these data were not available. However, instead of that the analysis at the level of buildings was conducted. The analysis of the system of streets was focused on the area of the streets (in square meters). The area shows both the information of length and width and was chosen for that reason. The blocks were also analysed in terms of their area (in square meters). The buildings were analysed separately at two different characteristics: building
footprint (the area covered with the ground level of the building in square meters) and building height (number of floors, where ground level was calculated as the first floor). All elements in the area defined with the Yanesen identity were analysed.

For each system the classes of sizes were calculated using the method of standard deviation classification in ArcGIS 10 software (explained in detail in section 3.4.3). This classification method was selected due to the fact that shows the classes based on their difference from the average size. That is linked with the experience of the space. The most distant classes (extremely small or large in this case) will present the largest difference and therefore are important for the perception of built environment. Furthermore, the number of classes also defines the diversity of different sizes of element. The higher number of classes will appear if the elements are more differentiated from the average. The classes were named based on the number of classes for each system of elements ranging from extra small (xs) to extra large (xl).

The results represent statistical data on the structure of each level of built landscape. They show the diversity in quantity of sizes and number of classes for each level of the built landscape: street, block and building and the way they interact in the assemblage. They also show the quantities and importance of smallness in the built environment.

**Streets**

All streets in Yanesen (total number of 189 streets) were considered for this study. The standard deviation has shown four classes of area (Fig. 4.17): the smallest size (less than 1219.1 m\(^2\)), medium size (from 1219.1 to 2473.2 m\(^2\)), large size (from 2473.2 to 3727.3 m\(^2\)) and extra large size (from 3727.3 to 9368.9 m\(^2\)). The numbers of streets in each class show large difference between smallest class and all the other classes. The smallest class contains 169 streets (89.42% of all streets in area), medium class has 10 streets (5.29% of all streets), large class has 3 streets (1.59% of all streets) and extra large class has 7 streets (3.7% of all streets).

The number of classes shows that sizes of elements are not homogeneous. The number of streets in each class shows heterogeneity of the system. The most numerous class is the class which contains the smallest elements. The general coherence of the system is created with the smallest streets which contribute to the creation of identity. However, the classes containing larger streets contribute to creation of local non-coherences of the system.
Blocks

All blocks in Yanesen (total number of 212 blocks) were considered for this analysis. The standard deviation has shown only three classes of sizes of blocks (Fig. 4.17.). The smallest size class (area ranged from 20 to 8491 m$^2$), medium size class (area from 8491 to 17046 m$^2$) and large size class (area from 17046 to 62275 m$^2$). The numbers of blocks in each group show significant difference between small class and medium and large classes. The smallest class of block sizes defines the majority of the blocks. It comprises 192 blocks (90.6% of all blocks). The medium class comprises only 7 blocks (3.3% of all number of blocks) and large class has 13 blocks (6.1% of all blocks).

The number of classes shows that blocks tend to be less heterogeneous in their sizes than streets (they are close to the average value). The distribution of blocks in each class shows that homogeneity at the level of blocks is created by smallest blocks.

![Fig. 4.17. The structure of the elements of built environment based on the classes of sizes and the numbers of elements present at each class in Yanesen](image)

Building footprint

The number of houses selected for this analysis comprises all the houses (4811 houses) in chosen area in Yanesen. The standard deviation has shown five classes of sizes (Fig.4.17.). The extra small size (area ranged from 5 to 17.3 m$^2$), small size (area range from 17.3 to 126.4 m$^2$), medium size (area range from 126.4 to 235.6 m$^2$), large size (area range from 235.6 to 344.7 m$^2$) and extra large (area range from 344.7 to 2930.6 m$^2$). The number of houses in each class shows large difference between the small class and all other classes. The extra small class comprises 263 houses (5.47% of all houses), small class has 4095 houses (85.12% of all houses), medium class has 289 classes (6% of all houses), large class has 62
houses (1.29% of all houses) and extra large class contains 102 houses (2.12% of all houses).

The number of classes shows that the sizes of building footprint are dispersed from the average value and therefore more heterogeneous. The distribution of the houses at each class shows that small class is dominant in terms of the number of buildings that belong to this class.

**Height of the buildings**

Height of the buildings represents important element of the size of house. For the purpose of this analysis all buildings (total number of 4811 houses) in chosen area of study were considered. The standard deviation has shown four classes (Fig. 4.17.). The classes are: class of small height (height from ground level to 2 floors), class of medium height (houses of three floors), class of large height (houses of four and five floors) and class of extra large height (houses of six to fourteen floors). The number of houses in each class shows heterogeneity as well. Most numerous buildings are located in the class of smallest height (containing 3883 houses or 80.71% of all examined houses). Medium class has 719 houses (or 14.95% of all houses), large class has 155 houses (or 3.22% of all houses) and extra large class contains only 54 buildings (1.12% of all houses).

The number of classes shows less diversity compared with the building footprint. Distribution of the number of houses in each class shows that small height buildings are most dominant. This corresponds with the building footprint distribution of houses. However, the medium size class has significant number of houses.

**The structure**

The analysis has shown that each system of elements has its own distinctiveness in terms of number of classes (and therefore heterogeneity of the elements) and the distribution of elements at each class. The most diverse elements are present at the level of building footprint having five classes. On the other hand blocks are showing the lowest levels of diversity. In all elements of built environment the most dominant class is the class that contains small elements. That shows that built environment is dominated with the small size elements. However, the presence of large classes is also important.

The analysis has shown that the built environment in Yanesen is heterogeneous (having number of classes of sizes). The extreme classes are least numerous and they are creating non-coherences. The extreme sizes of elements are relative because they represent a possibility for built environment to achieve its expressiveness and therefore contribute to
identity. Local non-coherences are created across the elements at the plane of extremes. However, it is important to note that at each level the most numerous class is small class and not medium or large. The relationship between coherent values and extreme values of the space are important for creation of processes and identity and will be further examined in the next sections.

Due to the fact that not only the quantity of elements contributes to the identity of the place the analysis on the spatial distribution of those elements was conducted.

4.4. Spatial distribution of classes of sizes in Yanesen

The second part of results of the sizes elements of built environment in Yanesen represents spatial distribution of classes of sizes. This analysis shows the ways in which those elements are interacting in the actual space and therefore contributing to the experience of the Yanesen. The analysis is based on already calculated classes of sizes and shows all elements that belong to the class separately. Furthermore, the coverage of all elements in each class and for each element of built environment was measured. That was conducted in Adobe Photoshop software by calculating the number of pixels that each map contains.

**Streets**

Four different classes of sizes show not only the difference in number of the elements present in each class but also different spatial distribution as well (Fig. 4.18.). That distribution influences the character of different areas in Yanesen. The streets which belong to the smallest class are mostly grouped in area of Nezu and Sendagi. They are less present in area of Yanaka. The fact that those streets are dominantly aggregated in area of Nezu and Sendagi affects the general perception of the character of small, and therefore the identity of the place. The three classes of medium, large and extra large are dispersed in whole Yanesen. Those streets are not forming the aggregations in space. Another important aspect of the analysis is the coverage of each class. Although smallest streets are most numerous in their quantity, the area that they occupy is smaller compared to the extra large class of the streets. The streets which belong to the extra large class have the highest coverage area.

**Blocks**

Blocks have only three classes of sizes. Smallest blocks are dominantly aggregated in Nezu and Sendagi and have smaller aggregations in Yanaka (Fig. 4.18.). Medium and large blocks are all present only in Yanaka. Medium size blocks occupy least of the area of Yanesen (they have the smallest coverage compared with other two classes). Both large and small size
blocks occupy almost the same amount of area. Those are two dominant classes that create majority of Yanesen area and are important for the identity. Although the class of smallest blocks is most numerous it also occupies almost the same area as the large class blocks. Therefore, the importance of built environment for the identity of Yanesen is related to both extreme classes (of large and small elements).

**Building footprint**

Sizes of area of the building footprint show highest level of diversity. All classes of sizes show that they are homogeneously scattered throughout Yanesen area. There are no distinctive aggregations at each class (Fig. 4.18.). The most numerous class of small elements shows the highest coverage from all other classes. The extra large class is showing the next high coverage compared with other classes. The analysis of spatial distribution of building footprint shows that space is dominated with the small class elements and that next important class is extra large.

**Building height**

Building height has four classes of sizes based on the number of flours. The classes of small, medium and large height show homogeneity in their spatial distribution (they are almost equally located in Nezu, Sendagi and Yanaka areas)(Fig. 4.18). The buildings that have height less than three floors are most numerous and therefore important for the expressive characteristics of Yanesen’s built environment. This class also shows the highest level of coverage compared with other classes. The class of extra large height shows tendency of aggregation. High buildings are creating two aggregations at Shinobazu Street. This class has very low coverage compared with other classes.
Fig. 4.18: Spatial distribution of classes of sizes.
**Spatial distribution**

This analysis has shown that each system of elements has its distinctive way of distribution. The analysis of the classes showed that small elements of built environment are most dominant (most numerous) and therefore contribute to the identity of Yanesen. However, the spatial distribution has shown that extremely large classes have important role in the assemblage as well. Namely, at the system of streets and blocks the extra large classes cover significantly larger area. At the systems of buildings that distinction is smaller; however the quantity of coverage cannot be dismissed. For perception of the built environment and therefore process of creation of the identity of place in Yanesen the actual area that elements comprise plays very important role. Therefore, based on this analysis we can conclude that not only the small elements but also extra large elements play important roles for identity of Yanesen. For that reason the next section analyses the ways in which the extreme classes are creating clusters in space and iterating between themselves.

**4.5. Clusters and relationships within the scale (relationships of interiority)**

Previous two analyses have shown that both extremely small and large elements have importance in structure of the built environment in Yanesen. This section aims to explain the ways in which those two classes are interacting between themselves and therefore contributing to the identity of Yanesen. More specifically, the analysis shows the ways in which elements of built environment are acting in the place as assemblage. For that purpose the analysis on only low and high values at the level of each elements of built environment was conducted. The analysis comprises two steps: (1) the analysis at each level shows the clustering of the elements and (2) the analysis on the interactions between those clusters was mapped.

The first part of analysis represents mapping and defining the clusters in space. The analysis is conducted separately for each element of built environment (streets, blocks, building footprint and height of the building). The aggregations of the largest and smallest elements of built environment shows discontinuities and heterogeneities of the place. If the elements with similar characteristics are aggregated in certain area then that area will have stronger character based on the multiple similar elements. More specifically, the higher number of similar elements in smaller area will create the stronger character of that area which will be based on those similarities. In that sense, the smallest elements aggregated in certain space will create a distinctive level of intensity of small. The clusters of elements of similar characteristics (in this analysis the extreme levels of sizes-small and large) will create higher
and lower intensities of that characteristics in space. The clusters are based on the number of elements and their proximity in space\textsuperscript{62}.

The clusters are defined with two criteria: similarities of characteristics and closeness in space. The calculation was conducted based on the sizes of elements at each level. One cluster contains elements similar in their sizes and close in the space. Therefore, the cluster does not represent the elements of same size, but similar sizes, which are given by the degrees of small and large. Those degrees are defined within the extreme values of small and large. For the purpose of this analysis all elements of built environment in Yanesen were considered.

Results show (Fig. 4.19.) that at the level of streets there are three clusters of smallest elements located in the Nezu and Sendagi and one cluster of largest elements located in the Yanaka. At the level of blocks there are two clusters of the smallest blocks both located in the Nezu. The cluster of largest blocks comprises very large area located in Yanaka. At the level of building the number of clusters is higher than at the previous two systems of elements of built environment. Building footprint shows eight clusters of smallest elements dominantly located in Nezu and Sendagi and twelve clusters of the largest elements dominantly located in Yanaka. The analysis of the height of the building shows fifteen clusters of lowest buildings scattered around all Yanesen and thirteen clusters of highest buildings located dominantly at the edges of Yanesen.

\textsuperscript{62} The method is explained in detail at the section 3.4.3. as Getis and Ord G statistical analysis
In order to show how each of the clusters in all elements are interacting between themselves.
the clusters were analysed separately for the large and small elements. Their connections in the space were mapped (Fig. 4.20.). Namely, this analysis examines meaningful connections between elements of assemblage, the ones that are contributing to the identity of Yanesen. Those relationships are defined based on the location of their appearance (if two clusters of the smallest or biggest elements are located at the same area this is considered to contribute to the character of that location-to the intensity of smallness or bigness).

The analysis shows that significant relationships for both clusters of big and small are appearing in Yanesen. Relationships between clusters of big elements of built environment are scattered throughout all Yanesen area. The higher numbers of relationships appear between the elements of streets, blocks and building footprint.

The relationships between clusters of small elements are gathering in the area of Nezu and Sendagi. The relationships are appearing between all elements of built environment (streets, blocks, building footprint and height of the buildings).

The relationships which appear between all elements of built environment produce higher levels of intensity of the character of small or large. In this sense the analysis shows that built environment is heterogeneous in terms of the sizes and that those discontinuities are producing different characters in the place. The relationships between the clusters of smallest elements are dominantly appearing at the Nezu and Sendagi. Those relationships are also comprising all elements of built environment and therefore producing the character of high intensity of small.

In terms of concrete contribution to the expressiveness of smallness we can see that there are few spaces which exhibit their spatial connections across all elements of built environment. The one space which shows this characteristic is located in Nezu and represented with clusters of small classes. The connections between clusters of large classes do not show the connectivity across all elements of built environment. However they show connections between two or three different elements.

In order to show the complexity of connections across levels of assemblage and to show all the degrees of complete or partial connections all the maps were re-layered. For this purpose the maps that show all the classes of sizes of each level were shown in the greyscale where smallest elements were presented in darkest colours. The levels were re-layered with 50% of transparency in order to show all patterns of different degrees of smallness defined with connections between the scales (Fig. 4.21.). The darkest parts of the map show overlaps of smallest elements at each level. The brightest parts of the map show the overlaps of largest elements at each level. The number of shades between those two extreme shows
Fig. 4.21. Patterns of sizes in assemblage
different connections and different number of connections between levels. The map shows

Fig. 4.22. Zones of intensity of smallness
great diversity and number of different degrees of smallness and the interactions between small and large elements. All those patterns create different characteristics in space.

Based on that analysis the zones of different intensities of smallness were mapped (Fig. 4.22.). The map shows three zones of different intensity of smallness in space. Zones were formed in Adobe Photoshop using the selection based on the colours. They clearly show the heterogeneity of assemblage which is important for creation of identity. Namely, the difference in intensities of smallness represents basis for narratives of Yanesen to be grounded in physical setting of the place.

4.6. Discussion

The analysis of the identity of Shitamachi and Yanesen has shown high degree of the complexity of both identities. That complexity is described with the number of concepts that are gathered, overlapping and interacting. The concepts, their overlaps and interactions are changing through time. They are dynamic.

The analysis on the identity of Yanesen has shown important links with the Shitamachi. Those links represent the essential aspects which are further analysed at the built environment. The identity of Shitamachi in the past and present at the contemporary Yanesen has shown high levels of change through time as well as the persistence of particular elements. Those elements are related to ordinary and everyday rather than to monumental history. That also opens a question of the role of ordinary and everyday in persistence. Those concepts could be influencing the possibility for the identity to develop, evolve and adapt to new ways of everyday, due to the fact that ‘everyday’ is always present and always different (opposed to monument which does not change in its essence).

The persistence of the identity of Shitamachi in Yanesen has also shown that essential properties are present at the level of elements that comprise those identities. The size and public-private interface are selected from the built environment as corresponding to the concepts of identity: small, neighbourhood, spatial intimacy and so forth.
The analysis of the sizes of elements of built environment at the whole Yanesen (which was determined with the boundaries of the identity) has shown that not only the elements related with small are important for the definition of assemblage. Namely, the analysis has shown different levels of intensity of smallness in the built environment. That intensity is created by clustering different elements of built environment and by their interrelationships. Based on that analysis the areas that have different intensities of smallness were mapped and set the ground for the selection of the boundaries for the second scale.

![Fig. 4.23. The areas destroyed during the Second World War](image)

(Modified data from: Nippon map Inc. & committee to record Tokyo air raid (1985))
The second scale for the analysis comprises the areas that contain both high and low intensities of smallness. It is located in part of the Nezu and Sendagi (Fig. 4.23.). This area has also exhibited high number of overlaps of clusters of smallest elements (Fig. 4.20). Furthermore, this area can be divided in two different regions: one dominantly located in Nezu and the other in Sendagi. The one located in Nezu has longer history of urban development, while Sendagi area was developed during the Meiji period (see appendix B). The area of Nezu was the area that in late Edo period contained machiyashiki typology, with machiya (shop) at the front of Shinobazu-dori and nagaya typologies in the back streets. The area shows characteristics of planned shitamachi typologies, and was developed
around the Nezu shrine. In the same period Sendagi’s area was still agricultural land, with two rivers and a pond in the middle of selected research area. During the next period it was urbanized. Another important aspect is the fact that during the Second World War the part of the Sendagi was destroyed (Fig. 4.24.). This fact allows analysing two different spaces, the ways that they were changing and how the built environment contributes to the identity of Yanesen.
5. Analysis and results: the scale of Nezu and Sendagi

This chapter presents the analysis and results conducted on the second scale-more detailed scale. It comprises the areas defined in the previous chapter (Fig. 4.23).

The chapter is divided in two parts. First part represents the analysis of the change of the built environment through time. That corresponds with the definitions of the diachronic identity. It describes the change of the structure of the built environment based on the sizes of its elements, their distribution in space, degree of change of each element and dynamics of change. The second part represents the analysis of the built environment related to the public-private interface and is focused on the contemporary state of that interface. Therefore it represents the link with the synchronic definitions of identity.

5.1. Analysis of the built environment over time

5.1.1. The structure of built environment based on sizes over time

This analysis aims to show the ways in which the change of size of different elements of built environment contributes to the change of the structure of the assemblage. The analysis is based on the sizes of elements of built environment (streets, blocks and plots or building footprint). The analysis uses standard deviation classification method in order to define different classes of sizes, which were named from extra small to extra large (xs, s, m, l, xl) depending on the size of the elements that they contain. The size measured in terms of quantity (meters or square meters) is defined as the material role of each element of the built environment. On the other hand, the division of all elements into the classes of sizes (from xs to xl) defines the expressive role of the elements (the function which they have in the assemblage). The analysis was conducted for five main periods (1888, 1919, 1932, 1956, and 2003). First part of results shows the different classes of elements based on their size, as well as the numbers of elements present in each class. The data are shown separately for each element of built environment through time. The second group of data shows in detail the way in which the classes of smallest elements were changing through time. It aims to

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63 Explained in detail in the section 3.4.2.
64 Gathered maps showed differences in the quality of information for the level of plot and building footprint. The maps from 1888, 1919 and 1932 had only information of the plots and no information of the building footprint and the maps from 1956 and 2003 show only data of building footprint and not their plots. In order to define sizes of that smallest level of assemblage those data had to be combined following the logic that different sizes of the buildings in average correspond with different sizes of their plots.
65 Explained in detail in the sections 3.4.3. and 4.3.
66 Explained in detail in the section 3.4.4.
show possible permanence of the elements which are essentially important for the identity of Yanesen, the smallest elements.

**Streets**

For the purpose of this analysis all streets in selected areas were considered in all chosen periods. The length of the streets was measured from their middle axis. All streets were named corresponding to all periods (appendix B). The total number of streets varies in time. In 1888 the area had only 24 streets; in 1919 the number of streets was more than doubled (51 streets). In the 1932 number of streets has dropped to 30 streets. Both 1956 and 2003 show increase in the number of streets. In 1956 total number of streets was 47 and in 2003 it was 51. The diversity of change and non-liner change of the number of streets exhibits the dynamics and complex changes of this area through time.

The number of classes in each period shows variation. In 1888 the system had only four classes of sizes of streets: xs, s, m, xl (Fig. 5.1.). The extra small class comprises the streets in length less than 80m, small class has streets between 80m to 258m, medium class has streets from 258m to 436m and extra large class has streets from 436m to 776m. The number of streets in extra small class is 37.5% (or 9 streets) in small class is 41.67% (or 10 streets) in medium class is 8.33% (or 2 streets) and in extra large class is 12.5% (or 3 streets).

In 1919 the diversity of the system has increased and it has five classes: xs, s, m, l, xl (Fig. 5.1.). The extra small class comprises streets in length less than 61m, small class has streets length from 61m to 233m, medium class: from 233 to 404m, large class: from 404m to 576m and extra large class: from 576 to 885m. The numbers of streets in each class differ: extra small class 37.26% (total number of 19 streets), small class: 45.1% (or 23 streets), medium class: 9.8% (or 5 streets), large class: 3.92% (or 2 streets) and the extra large class: 3.92% (or 2 streets).

In 1932 the number of classes is reduced to four classes and the class that has disappeared was class of large sizes of streets. The classes are xs, s, m, xl (Fig. 5.1.). The extra small class has streets in length smaller than 91.87m, small class: from 91.87m to 294.53m, medium class: from 294.53m to 497.19, and extra large class: from 700m to 871.5m. The distribution of streets in their classes is: extra small class: 30% (or 9 streets), small class: 50% (or 15 streets), medium class: 13.33% (or 4 streets) and extra large class: 6.67% (or 2 streets).

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67 The size of the streets was calculated as their length. Width of the streets was not considered due to the fact that different maps show different precision of the width of the streets.
In 1956 the number of classes is continuing the division from 1932, having only four classes: xs, s, m, and xl (Fig. 5.1.). The extra small class comprises the streets smaller than 54m in their length, small class: from 54m to 234m, medium class: from 234m to 414m and extra large class; from 414m to 880m. The number of streets in each group shows that extra small class has 42.55% of streets (or 20 streets), small class has also 42.55% (or 20 streets), medium class: 6.38% (or 3 streets) and extra large class: 8.52% (or 4 streets).

In 2003 we can observe that diversity and number of streets have increased. There are five classes of sizes (Fig. 5.1.). The extra small class comprises the streets smaller than 55m in their length, small class: from 55m to 201m, medium class: from 201m to 347m, large class: from 347m to 493m and extra large class: from 493m to 873m. The distribution of number of streets in each class is: extra small class 41.18% (or 21 streets), small class 43.14% (or 22 streets), medium class 7.84% (or 4 streets), large class 5.88% (or 3 streets) and extra large class 1.96% (or 1 street).

In all periods the highest numbers of streets are located at the extra small and small classes. The changes of the structure of classes are located at the levels of large and extra large classes. The biggest change in the distribution of number of streets in small and extra small class appear in 1932, while in other periods they show continuity in terms of the distribution of streets per classes.

![Fig. 5.1 The structure of classes based on the length of streets and number of streets present in each class through time](image)

**Blocks**

All block in selected areas and periods were considered for this analysis. The sizes of blocks were calculated based on their areas. Classes in each year were created with standard deviation method in Arc GIS 10. The average value of each class shows great diversity between the years. That fact produced inability to create coherent classes of sizes through
all periods based on their average values (xs, s, m, l, and xl) like in the case of streets. That characteristic shows the change at the block level was more intense compared to the streets. On the other hand, for the purpose of this analysis it is important to show the relative classes of sizes (which are formed based on the relationships between the elements of the assemblage). Therefore the classes were calculated per each year separately.

Blocks in 1888 show the biggest difference in the average size of classes compared to all other years. Namely the average size of smallest class in 1888 corresponds with small and medium classes of all other periods. That shows that blocks were sub-divided through time. The greatest subdivision appeared in transition from 1888 to 1919 and in subsequent years the sizes of classes became relatively stable. The period from 1888 to 1919 represents the period of transition from dominantly rural to urban area. The diversity and its dynamics through time are shown at the number of classes. The lowest diversity is shown at the 1956 map with only four classes. The total number of all blocks in area varies from 24 in 1888 and in 1919 that number increased to 68, in 1932 it was changed to 35 blocks, and again in 1956 and 2003 shows the tendency of growth from 51 to 70 in 2003.

![Fig. 5.2. The structure of classes based on the area of blocks and number of blocks present in each class through time](image)

In 1888 there are five classes of block sizes (Fig. 5.2.). The extra small class contains blocks with area smaller than 2350 m², small class: from 2350 to 7700 m², medium class: from 7700 to 13000 m², large class: from 13000 to 18000 m², and the extra large class: from 18000 to 23000 m². The distribution of blocks per class also differs: smallest class contains 38% of all blocks (or 9 blocks), small class 46% (or 11 blocks), medium class 8% (or 2 blocks) and large and extra large have 4% of all blocks (or 1 block per class).

In 1919 there are also five classes of sizes, however with large difference of their average sizes compared to 1888 map (Fig. 5.2.). The extra small class contains blocks smaller than
800 m², small class: from 800 to 2500 m², medium class: from 2500 to 4000 m², large class: from 4000 to 5700 m² and extra large class: from 5700 to 9400 m². The extra small class contains highest number of blocks 45% of all blocks (or 31 blocks). Small class has 34% of all blocks (or 23 blocks), medium class has 12% (or 8 blocks), large class has 6% (or 4 blocks) and extra large class has 3% (or 2 blocks).

In 1932 there are five classes of sizes. The extra small class contains the highest number of blocks (Fig. 5.2.), which are smaller than 1800 m². Small class has blocks from 1800 to 4500 m², medium class: from 4500 to 7000 m², large class: from 7000 to 10000 m² and extra large class: from 10000 to 10200 m². The distribution of blocks in each class show that extra small class contains 45% (or 16 blocks), small class has 29% (or 10 blocks), medium size has 14% (or 5 blocks) and large and extra large class have 6% (or 2 blocks per each class).

In 1956 there are only four classes (Fig. 5.2.). The extra large class disappeared in this period. The extra small class contains highest number of blocks which are in area less than 1300 m², small class: from 1300 to 3000 m², medium class: from 3000 to 4700 m², large class: from 4700 to 7700 m². The distribution of blocks in each class shows that extra small class has 47% of all blocks (or 24 blocks), small class: 23% (or 12 blocks), medium class: 22% (or 11 blocks) and large class: 8% (or 4 blocks).

In 2003 the number of classes has increased compared to 1956 to five classes, showing that diversity of the sizes as well as the number of blocks has increased (Fig. 5.2.). The extra small class contains blocks in size less than 800 m², small class: from 800 to 2300 m², medium class: from 2300 to 3700 m², large class: from 3700 to 5200 m², and extra large class: from 5200 to 7500m². The distributions of blocks in each class are: extra small class has 34% (or 24 blocks), small class has 43% (or 30 blocks), medium class has 13% (or 9 blocks), large class has 7% (or 5 blocks) and extra large class has 3% (or 2 blocks).

In all years most numerous classes are small and extra small, similar to the structure of the streets. However, at the levels of blocks the distribution of elements does not show the same coherence as at the level of streets. The number of extra small blocks was increasing from 1919 to 1956, but in 2003 decreased. The small class was decreasing from 1888 to 1956 in order to increase again in 2003. In general, distribution of blocks in different size classes show greater change through time compared with the streets.

**Plots and building footprint**

The analysis of sizes of smallest elements in built landscape comprised plots for the maps from 1888, 1919 and 1932 and building footprint for the maps from 1956 and 2003. The
variables of sizes were calculated as their areas. Due to the fact that classes (xs, s, m, l, xl) cannot be compared across the years they are based on local distinction for each year separately. The total number of plots varies through three observed periods: 1888, 1919 and 1932 and shows constant tendency of growing. In 1888 there are 174 plots, in 1919-194 and in 1932 there are 228 plots. The number of buildings also tends to grow in time, showing in 1956 total number of 946 buildings and in 2003 total number of 1273 buildings. The diversity of the levels is also shown with the change of the number of classes in each year. The number of classes of sizes does not show linear changes, rather they are discontinuous. In 1888, 1932 and 2003 there are five classes and 1919 and 1956 maps show only four classes. That shows that dynamics of change of the area are complex and not linear through time.

In 1888 there are five size classes of plots (Fig. 5.3.). The extra small class contains plots with area less than 190 m$^2$, small class: from 190 to 1200 m$^2$, medium class: from 1200 to 2200 m$^2$, large class: from 2200 to 3200 m$^2$, and extra large class from 3200 to 7900 m$^2$. Extra large class comprises elements of much wider variety of sizes compared to extra small, small, medium and large class. The distribution of plots per class also varies: extra small class contains 10% of all plots (or 18 plots), small class has 81% of all plots (or 141 plot), medium class has 5% of all plots (or 8 plots), large class has only 1% of all plots (or 1 plot) and extra large class has 3% of all plots (or 6 plots). This shows that the small class is most numerous and in the same time does not cover great variety of sizes.

In 1919 there are only four classes of sizes (Fig. 5.3.). The extra small class contains plots of area less than 250 m$^2$, small class: from 250 to 870 m$^2$, medium class: from 870 to 1500 m$^2$, extra large class: from 1500 to 5000 m$^2$. Those classes are largely different from the sizes of classes defined in 1888. The results show that maximum value of extra large class is much smaller than maximum value of the extra large class in 1888. Number of elements in the system has grown but that is not necessarily producing diversity of the sizes in the system. The distribution of plots per each class is also varying. The extra small class contains 27% of all plots (or 52 plots), small class has 59% of all plots (or 115 plots), medium class has 9% of all plots (or 17 plots) and extra large class has 5% of all plots (or 10 plots). The number of elements belonging to small class is reduced compared to 1888.

In 1932 there are five classes of sizes of plots (Fig. 5.3.). The extra small class contains plots of area less than 130 m$^2$, small class: from 130 to 830 m$^2$, medium class: from 830 to 1500, large class: from 1500 to 2250 m$^2$ and extra large class: from 2250 to 6900 m$^2$. The distribution of plots per class is also varying. The extra small class contains 13% of all plots (or 31 plots), small class has 75% of all plots (or 171 plots), medium class has 8% of all
plots (or 18 plots), large and extra large class have 2% of all plots per class (or 4 plots per class). The size of plots has increased in extra large class and in the same time the number of plots in whole area has increased compared to previous period. That means that not only simple processes of subdivisions of plots are happening. Reorganization and process of merging different plots are also notable.

In 1956 there are four classes of sizes of building footprint (Fig. 5.3.). The extra small class contains buildings with area less than 50 m$^2$, small class: from 50 to 90 m$^2$, medium class: from 90 to 140 m$^2$ and extra large class: from 140 to 390 m$^2$. The distribution of buildings per each class also varies. Most number of buildings is distributed in extra small and small class. The extra small class contains 35% of all buildings (or total number of 334 buildings), small class has 44% of all buildings (or 413 buildings), medium class has 14% of all buildings (or 133 buildings) and extra large class has the smallest number of buildings only 7% (or 66 buildings).

In 2003 there are five classes of sizes of building footprint (Fig. 5.3.) creating more diverse system compared to the previous period. The extra small class comprises buildings with area smaller than 27 m$^2$, small class: from 27 to 90 m$^2$, medium class: from 90 to 150 m$^2$, large class: from 150 to 220 m$^2$, and extra large class: from 220 to 1210 m$^2$. In terms of sizes there is a very distinctive difference in extra large class compared with the 1956, showing the appearance of four times larger building footprints. The distribution of buildings per each class also varies compared to 1956, where there is a growth of number of buildings that belong to small class. The extra small class has 20% of all buildings (or total number of 257 buildings), small class has 65% of all buildings (or 833 buildings), medium
class has 10% of all buildings (or 125 buildings), large class has 3% of all buildings (or 35 buildings) and extra large class has 2% of all buildings (or 23 buildings).

In all periods the small class contains most of the elements of an assemblage. There is a growth of number of elements in all years but the diversity and number of classes as well as the sizes of classes are not changing in progressive and linear way. Compared with other elements of built environment the plots and building footprints show the highest variability through time.

**Persistence of the smallest size classes-streets**

In order to analyse the levels of persistence of the classes of sizes only the extra small classes were selected due to the fact that they are most important for the persistence of the identity of the place in Yanesen. The persistence is defined with the range of the sizes that each class has and which exist through all periods. The analysis is conducted separately for each system of elements (streets, blocks, plots and building footprint). The persistence is observed at two levels: (1) persistence of the size of the class (2) sizes of classes and number of elements that they contain. Persistence is defined as sameness in two successive periods (in this case sameness of the size of the class). Size of the class is represented by the actual sizes of the elements of built environment-their highest and lowest values in the class. In
both cases the areas which appear in all years are considered to be persistent. The level of persistence represents the relation of the persistent size to all sizes in all periods.

The analysis of the streets shows highest and lowest values of the extra small class sizes in all years (Fig. 5.4.). The results show that in first three periods the size of extra small class has low persistence, since it exhibits large variations and no clear pattern in change of the size. However in last two periods persistence of size of extra small class is very high. Following this we can say that size of the extra small class was not persistent through all periods, and that it exhibits persistence only in the last two periods.

In order to define the relationship of the size of the class and number of streets which makes significant difference in understanding of the state of assemblage the sizes of each period and number of streets were plotted (Fig. 5.5.). In terms of numbers of streets and size, streets also exhibit very low level of persistence in first three periods (from 1888 to 1932) while last two periods show high persistence. The calculation of ratio of area defined by all overlapping years compared with the whole surface in the graph, can give the insight into how much of the elements are persisting throughout all periods. Although, it does not give the important data about the persistence of each element it is used here to compare the same data at the level of blocks (since the plots and buildings cannot be compared due to the lack of data in all periods). The area of all overlapped years at the extra small classes of streets is 20% of all area covered in all periods.

**Persistence of the smallest size classes-blocks**

The analysis of sizes of classes of blocks shows great variability through all periods and therefore low persistence (Fig. 5.6.). The ways in which sizes of blocks were changing do not show any patterns. The size of extra small class was largest in 1888 and reduced its size in the next period of 1919. Furthermore in 1932 it increased in size and in following two periods is constantly decreasing. Interestingly, period of 1919 and 2003 show similar size of the extra small class. That does not prove persistence but the fact that the change has produced similar structure of assemblage in the two periods.
The numbers of blocks and their sizes in each period are also showing variability (Fig. 5.7.). In first three periods number of blocks varies from low to high and again to low. In the last two periods number of blocks is persisting. However, the size of two classes does not show significant overlap and therefore represents a different situation than in the case of the streets. In general extra small class of the blocks is exhibiting lower level of the persistence than at the example of the streets. The area common to all classes in all periods is 8% of all area. That is significantly smaller than in the case of the streets. Confirming lower level of persistence compared with the streets.

**Persistence of the smallest size classes-plots**

The analysis of persistence of sizes of classes of plots was conducted for three successive periods: 1888, 1919, and 1932, due to the fact that the data about the plots are lacking in two last periods. The analysis for two last periods was conducted separately at the level of the buildings. The analysis of the plots shows low level of persistence of the size of the extra small classes (Fig. 5.8.). From 1888 the size was increased in 1919 in order to decrease in 1932.

In relation to the number of plots present at each class the sizes also vary (Fig. 5.9.). In 1888 the number of plots was lowest and in 1919 the highest. In general the persistence is lower compared with the streets and blocks. The common area was not considered in this diagram due to the fact that we are observing only three periods and therefore we are unable to compare with the streets and blocks. However, it was possible to compare only first three periods for blocks, streets and plots. In this analysis the common area was at the
street level 27\% in relation to the whole area covered in these three periods. At the level of the blocks the area was 13\% and at the level of plots was 11\%. This shows that plots are least persistent from all elements observed.

**Persistence of the smallest size classes-building footprint**

The analysis of persistence of extra small classes of building footprint were conducted for two last periods (1956 and 2003) due to the lack of available data for previous periods. The results show low level of persistence (Fig. 5.10.). The size of the class of buildings in 1956 is larger than the size of the class in 2003. However, the lowest values in the both classes are the same.

Considering the number of elements present in the classes in both periods there is low persistence as well (Fig. 5.11). There is a decrease in the number of buildings from 1956 to 2003. In this analysis common area was not calculated due to the fact that there are only two periods that cannot give us much insight.
Considering all results we can conclude that extra small class at all levels has low persistence at all elements of built environment. Namely, the sizes of elements were changing through all periods. Furthermore, the smallest elements of the assemblage in Nezu and Sendagi are most important for the persistence of the identity of the place in Yanesen. However, in terms of elements of built environment, their numbers and sizes are changing showing low level of the persistence. This analysis has shown that there are low levels at the persistence of the sizes of the classes. Further analysis in this chapter will show the persistence at the level of each element.

5.1.2. Spatial distribution of classes of sizes over time

The second part of the analysis represents the ways in which classes of sizes were distributed in space in all periods. This analysis aims to show the ways in which elements of built environment are interacting between themselves, how they are distributed in space and how this distribution was changing in time. Namely, each element has acquired the function in assemblage according to the class that it belongs to. That function is determined with the degree of smallness and therefore specific character that it generates. The maps are shown separately for each element of built environment as well as each period (Fig. 5.12.).

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68 This analysis was largely developed in collaboration with Emilio Garcia-PhD candidate at the Faculty of Architecture, Victoria University of Wellington, New Zealand.
Streets

The sizes of classes of streets show that most numerous classes are those of extra small and small length of the streets. In 1888 map smaller streets are mostly located in the northern part of observed area, in Sendagi. The extra large streets are located at the borers of observed area and smallest streets in the inner part. In 1919 smallest streets are located in central and northern part of the area. In this period high numbers of new streets appear at northern part of the area and they belong to medium or small classes. The extra large streets keep their position from the 1888. In 1932 streets in extra small class are dispersed through all area and extra large streets follow their position from previous two periods. Streets which belong to small class are homogeneously distributed in observed area. In 1956 and 2003 the trend of homogeneously distributed streets of small and extra small classes still persists. In the same time the streets in biggest class remain the same. Although results of numbers of elements per each class show that small and extra small class tend to be relatively constant per each period there is a change in the distribution of those streets. The change in built environment shows appearance of new streets and tendency towards homogeneously distribution in the area. It is interesting to note that the biggest streets are not changing their position although they largely vary in numbers, which implies that there is a change in the classes of large and extra large in terms of their proportion and numbers through periods but in spatial terms they tend to change less (Fig. 5.12.).
Blocks

The changes of distribution of blocks that belong to different classes of sizes show high dynamics in all periods. In 1888 the smallest blocks are clustered in the northern and southern parts of observed area. All classes are territorialized showing very clear boundaries. In 1919 there is less territorialisation of classes. Smallest blocks tend to be dispersed throughout whole area, creating dynamic and heterogeneous qualities of smallness. From
1932 to 2003 the results show tendency towards more non-coherence of the area in terms of spatial distribution of classes. In 2003 the extra small and small class blocks are scattered throughout all area. The extra large blocks remain through first three periods in the same territory and change in 1956. From 1956 to 2003 the blocks in extra large class are changed in their position. Unlike at the level of streets that shows that the elements belonging to class of extra large do not change their position, at the level of blocks that change can be observed. In general all classes show variations between years in terms of their spatial distribution with tendency towards more dispersed elements in the space (Fig. 5.12.).

**Plots and building footprint**

From 1888 to 1919 the distribution of classes shows low degree of change. In 1919 the distribution of classes shows higher value of heterogeneity where elements of the extra small class are scattered throughout all area. In 1932 the plots that belong to the extra small class show tendency to be located in the Sendagi area. In 1956 the heterogeneity is also produced. In 2003 there is a tendency of creating aggregations of elements of same classes in the space creating more territorialized zones of classes (Fig. 5.12.).

In all periods and for all levels results show that there are different degrees of coherence and heterogeneity of spaces. The distribution of classes proves that complexity of the space and that complexity and position of all classes (except at extra large streets) are changing all the time. There is no significant permanence throughout all periods. The elements are exhibiting high levels of flexibility in terms of their functions and positions in assemblage.

The results are showing the function and position that each element of the built environment has in the assemblage. That function is related with production of different levels of smallness, forming different zones of smallness in space. Those zones are changing throughout all periods in terms of their position, size and number in space. They also exhibit different levels of territorialisation. Namely, in 1888 and 1932 the boundaries between zones are clearer than in other periods. In order to assess how they are contributing to assemblage as a whole the relationships of interiority are further analysed.

**5.1.3. Relationships between classes within the scale (relationships of interiority) over time**

In order to show the ways in which different elements and their different functions as agents in the assemblage are interacting the maps of all periods showing spatial distribution of classes of sizes were overlapped. For that purpose the Adobe Photoshop software was used, where maps of streets, blocks and plots or building footprint that belong to the same period were overlapped with the same level of transparency of 30%. This method allows
determining the spaces in which elements that contribute to the smallness are gathered in the space producing zones of different levels of intensities of smallness. Intensity of smallness is defined with number of elements that have the same function per area. More specifically, the intensity of smallness is higher if different elements (streets, blocks, and plots or building footprint) that belong to the extra small class (therefore have function of generating character of small in space as part of assemblage) are gathered in the same space. By using this method those spaces are shown in the darkest shades of grey (Fig. 5.13.). Similarly, the lowest intensity of smallness is generated when all the elements of built environment that belong to the extra large class are gathered at the same area. At the map that is presented with the lightest shades of the grey. By overlapping the maps that show all the classes, different intensities are created and presented at

Fig. 5.13. Zones of intensity of smallness
the different shades of grey. Consequently, the maps are showing zones of different intensities in the analysed areas of Nezu and Sendagi. Furthermore, the zones of intensity of sizes represent the way in which the whole assemblage is organized. In the same time they are product of the relationships between elements and not based on the elements themselves. Observing the way those zones of intensity are changing through time represents a way of describing the identity through its processes and relationships of interiority that contribute to the irreversible courses of individualization. Each period in time represents the product of those processes. In the same time difference in intensities of elements creates possibility for the identity to emerge.

The map of 1888 shows that classes of different elements are significantly overlapping and the small number of different shades of grey is created (Fig. 5.13.). In the same time, zones of intensity of sizes of elements are clearly distinguished and have large territories. The map shows that smallest elements are located at southern part of Nezu and north-west part of Sendagi. There is only one zone of very low intensity of small and is located in eastern part of Sendagi. In 1919 map there is much higher number of zones and they are consequently covering smaller territories producing more heterogeneous landscape. There is also larger number of zones of different intensities of smallness. The zone of highest intensity of smallness in Sendagi area is located at the same place as in 1888 despite the great change of structure of built environment. The zone also shows change in its boundaries, however it is located at the same area. In the area of Nezu zones of highest intensity of smallness are fragmented and dispersed throughout space. The compact and highly territorialized zone from previous period has disappeared. The zone of lowest intensity of smallness is showing the persistence (from 1888 to 1919) of its position in space despite the change in the size of the zone. In 1932 zones of different intensities of smallness are showing less fragmentation than in previous period. The zone of smallest sizes of elements in Sendagi is showing persistence in its position; however the zone is larger in its territory compared with the previous period of 1919. In the same period in Nezu there are two zones of high intensity of smallness. They do not show any link with the previous period. The zone of lowest intensity of smallness in Sendagi shows persistence in terms of its position in space but high degree of change in terms of its size. In 1956 the zone of highest intensity of smallness in Sendagi area has significantly decreased in its size compared to the previous period. The position of this zone has also changed towards central area of Sendagi. Nezu also proves existence of zones of intensity of smallness; however they are different in number and their position compared with the previous period. The zone of lowest intensity of smallness has disappeared compared with the previous period and the new zone is also located at Sendagi. In 2003 the zone of lowest intensity of smallness is persistent in its position and size compared with the
previous period. The zone of highest level of smallness in Sendagi shows high degree of change compared with the previous periods. In 2003 there are fragmented zones of higher intensity of smallness dispersed in Sendagi. In area of Nezu there are three zones of high intensity smallness.

In general for all periods the results show that zones of highest intensity of smallness are more numerous and present in both areas of Nezu and Sendagi. Furthermore, they are exhibiting higher levels of persistence, particularly in Sendagi area. The results also show high dynamics of change in terms of the position, size and level of intensity of smallness. The different zones are important for the expressive capacity of built environment, and therefore identity. Those zones are not static, they change through time; their number and sizes varies as well, and are produced through change of built environment.

Another important aspect of this analysis is that it opened the questions of persistence. Namely, the area of Sendagi has exhibited very high degrees of change (especially in the period from 1888 to 1919, when the structure of built environment has changed significantly, and area was transformed from rural to urban). However, this area shows persistence of the zones of intensity of smallness. In the same period Nezu has shown much lower levels of change but exhibited high level of change of zones of intensity. That raises the questions of relationships of change and functions that each element of built environment has in the assemblage. This is further developed and analysed in next sections. Firstly, the degree of change was measured and secondly it was compared with the zones of intensity.

It is also important to notice that when elements are observed from the aspects of whole assemblage in terms of their relationships in space, the areas show higher levels of persistence than in the cases of observing the elements separately. That fact contributes to the importance of the relationships between different elements of the assemblage.

5.1.4. The degree of change of elements of built environment

In order to define how the whole area and each of the elements of built environment was changing through time the degree of change was introduced. The degree of change represents the difference of size in two successive periods of each individual element (appendix B tables). The average degree of change was calculated for Nezu and Sendagi separately and for the whole area, as average of degree of change of sum of each individual element’s degree of change to the area where it belongs. First part of the results represents

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69 The method and part of the results were developed in collaboration with Emilio Garcia, PhD candidate at Faculty of Architecture, Victoria University of Wellington, New Zealand

70 The method and variables are explained in detail in section 3.4.4.
the average degrees of change and the second part shows the degrees of change of each element and their positions in the space.

The areas of Nezu and Sendagi were separately analysed due to the two significant differences that might affect change related with the identity. First important period is the period from 1888 to 1919 in which Sendagi has changed its identity from rural area to urbanized area. Due to shift in the identity of the place the comparison with Nezu in the same period should give an important insight of what is happening in the built environment when identity changes and persists. Namely, since Nezu continues its identity in that period by comparing degree of change with Sendagi will provide significant characteristics of the relationships between built environment and identity. The second important period is between 1923 and 1956, due to the fact that during the Second World War (largely in 1945) the area of Sendagi was destroyed while area of Nezu was preserved. However, both areas continue their identities despite of the different changes in their built environment. The comparison between Nezu and Sendagi in this period gives important insight of the relationship between built environment and identity of the place.

**The average degree of change**

In order to compare and define the quantities of change of each area the average degree of change was calculated. The results of average degree of change show the percentage of each area of Nezu and Sendagi as well as the whole analyzed location in the four periods: 1888-1919, 1919-1932, 1932-1956 and 1956-2003. The average degree of change was calculated separately for the streets, blocks and plots or building footprint.

Fig. 5.14. The average degree of change over time

In the first period (1888-1919) Nezu area exhibits the higher degree of change of streets compared with the degree of change of blocks and plots. However, blocks and plots have the same degree of change (Fig. 5.14.). In same period Sendagi area shows very high degrees of change of streets and plots. However, blocks are showing significantly lower degree of change. In both areas streets are showing high degrees of change and blocks lower. The largest difference between Nezu and Sendagi is shown on the level of plots in which Sendagi exhibits much higher degree of change. In general, the average degree of change of all
elements of built environment in Sendagi is higher than in Nezu. Since in this period there is a change of the identity in Sendagi the link between identity and built environment is exhibited at the degree of change of built environment. Therefore, the change of built environment can affect the change of the identity of the place and supports the definitions of their interconnectedness.

The second period (1919-1932) shows that area of Sendagi has higher degree of change of streets and plots compared with the Nezu area. In the same period blocks in Sendagi area exhibit slightly lower degree of change compared with Nezu. In both cases blocks show the lowest degree of change, which is followed with the streets and finally plots change in highest degrees. The difference in degree of change of streets and blocks is less significant in Nezu in comparison with the Sendagi area. In both areas blocks and streets have lower degree of change in comparison with the previous period (1888-1919). In Nezu area plots exhibit higher degree of change compared with the previous period. In Sendagi plots show slightly lower degree of change compared with the previous period.

The third period (1932-1956) shows that in both Nezu and Sendagi there is a large difference between degrees of change of plots, on the one hand and blocks and streets on the other. At all levels, streets, blocks and plots in Sendagi area are exhibiting slightly higher degree of change in comparison with Nezu. In both areas streets and blocks are changing in similar degree. In Sendagi plots show very high degree of change of 99%. In the same period in Nezu, plots are also exhibiting very high degree of change of 92%. In this period Sendagi area was destroyed in Second World War fire bombings (1945), while Nezu was spread. That destruction could be seen in the results of degree of change of streets, blocks and plots; however, there is no large difference between the degrees of change in Nezu in the same period. Furthermore, the distribution of different degrees of change among streets, blocks and plots has the same hierarchy in both areas. In comparison with the previous period Nezu shows decrease in degree of change of streets and blocks while plots are increasing their degrees of change. Sendagi area is increasing the degree of change at all elements compared with the previous period. However, block and streets are not reaching high degrees of change as in the first period. Streets are changing in slightly higher degrees and blocks are changing with the difference of 20% compared with the previous period. That fact supports the links between built environment and the identity of the place in Sendagi. Namely, the identity of Sendagi did not change in this period and the built

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This analysis raises interesting questions related to the change of elements of built environment its difference for different elements and assumes that perhaps not all of the elements are equally important for the identity. In the same time these results are raising the questions of what is the maximum degree of change that built environment can afford and still have the same identity. However, that is not part of this research.
environment also does not show high degrees of change despite the destructions and possibilities to rebuild in a different way.

The fourth period (1956-2003) is represented with lower degrees of change at all levels. In Nezu area streets and blocks are showing the same degree of change of 44% which is slightly different from the previous period. In the same time building footprint is having much lower degrees of change compared to the other levels and other periods. Sendagi area is showing much lower degree of change of all levels compared with the previous period. It also shows that the degree of change of streets and blocks in Sendagi is lower than in Nezu in the same period. Building footprint is showing slightly higher degree of change in Sendagi compared with the Nezu area. In Sendagi area streets are changing in highest degrees which are followed with the blocks and building footprint that has lowest degree.

Through all periods in Nezu the degree of change of blocks is decreasing over time. Streets are always changing in higher degrees compared with the blocks. Plots and building footprint are exhibiting more dynamic change of the degree through time. Through first three periods Sendagi shows higher degrees of change compared with the Nezu area (except for the blocks in the second period). Only in the last period Sendagi shows lower degrees of change at the levels of streets and blocks. Change of the degrees through time at each level is not showing any tendencies. First and third period are clearly showing increase of the degree of change at all elements. The first period shows very high degrees of change compared with other periods and therefore marks transition in its identity.

**Degree of change of streets-spatial distribution**

The degree of change was calculated at all periods and for each street separately (appendix B, table)\(^{72}\). The variable is shown on the level of each street for two successive periods on the map of the latter period. The streets which have disappeared from one period to the other are shown with dashed line and contributing to the degree of change with 100%. For the purpose of analysis of change the standard deviation was used in order to classify the values of degree of change. The number of classes of standard deviation shows not only the amount of change, but which elements are changing with largest difference from the average. In that sense number of classes shows the diversity of change at the level of whole assemblage (the higher number of classes higher level of diversity of change). In the same time, higher number of classes indicates that change appeared in higher number of types of the streets, and lover number of classes indicates that change was located at only certain types of the streets.

\(^{72}\) Details of the ways of calculation were explained at the section 3.4.4.
The results are shown on the map (Fig. 5.15.). There are four periods which represent the change between years 1888 and 1919; 1919 and 1932; 1932 and 1956; and finally 1956 and 2003. The number of classes defined by standard deviation show that the highest diversity of change is at the period between 1919 and 1932. In that period there are five classes of degree of change. The lowest diversity of change is during the period from 1932 to 1956. That means that streets were changing in similar ratios, close to the average value of all streets in that period. The high diversity of degree of change is defined with high level of difference between degrees of change of streets. Diversity of change does not necessarily imply greater number of change, but that elements change in highly different degrees. Two other periods (1888-1919 and 1956-2003) show the same level of diversity of change and number of classes is four.

First period marks transition of Sendagi area (northern part of selected area) from rural to urban landscape. Therefore the highest levels of change in this period are located in this area. The change is defined through streets that are emerging in this area as consequence of urbanization, but in the same time significant number of streets have disappeared. Although, Sendagi area marks transition from its rural to urban identity the diversity of change is very low. Most of the streets belong to the group of 0.5-0.52 Std. Dev. with high degrees of change. The shift from one identity to another is marked with less diverse change, but high degrees of change. The part of Nezu area shows significantly lower values of change and smaller number of new streets appearing and old disappearing. Main streets southeast-northwest orientations are not changing in this period. The streets which are connecting those are showing higher values of change. The highest degrees of change are located at the smallest streets. The whole area in general is showing the tendency of increasing connectivity.

Fig. 5.15. Spatial distribution of the streets based on the classes of degree of change
The second period (1919-1932) shows different degree of change compared to the previous period. The streets which exhibit highest degree of change are the streets that have disappeared from the previous period. Those streets are mostly clustered in the Sendagi area. The highest degree of change of the streets that managed to persist in these two periods is located at the smallest streets. The longest streets show lowest levels of change. Although

Fig. 5.16. Most persistent streets through all periods (from 1888 to 2003)
diversity of change is higher compared to the previous period, the degree of change is lower compared to the period 1888-1919.

The third period (1932-1956) shows the lowest degree of change compared to the previous two periods. In this period only three streets have disappeared. The highest degree of change is exhibited at the smallest streets. In this period the change is equally distributed in both areas of Nezu and Sendagi. It is also important to note that in this period the Sendagi area was directly affected by the destructions of Second World War fire bombings (Fig. 4.24). However, this area does not show different degree of change compared to the area of Nezu. The change of streets was not affected by the destructions caused by fire bombings. Rather, both areas show similar degree of change, and therefore possibility for the identity to persist despite the destructions of buildings.

The fourth period (1956-2003) exhibits lowest degree of change of streets. Similar to the previous period there is small number of streets that have disappeared. The highest degree of change is exhibited at the smallest streets. The streets that have changed the most are equally distributed through both areas of Nezu and Sendagi. The Sendagi area shows higher number of streets that have medium degree of change compared to Nezu area. In general the longest streets show lowest degree of change.

In all periods locations of highest degrees of change are always shifting. Namely, there are no significant patterns of change, nor areas or streets that are changing through all periods. Change appears at different locations, starting from the Sendagi area in first period and homogeneously dispersed through all area in following periods. The highest degrees of change are located at the streets which are appearing or disappearing, contributing to higher or lower degree of connectivity in whole area. In general, through all periods numbers of streets that are showing high degrees of change are reducing.

The streets which are exhibiting the lowest degree of change, in all periods are the longest streets in the area. Those streets are contributing to the general sense of persistence in this area by being most resistant elements of street network (Fig. 5.16.). Therefore, the dynamics of change are produced by the smallest streets and the locations of highest degrees of change are also changing through time.

The identity of this area, characterized as Shitamachi is linked with the smallest elements in structure of its built environment. The smallest and narrowest streets are named as those that preserve the sense of Shitamachi, but in the same time those are the streets that have exhibited the higher degree of change in all periods. Elements that are linked with preservation of the identity of Yanesen are those which are changing the most in all periods.
The analysis has also shown that there is a link between the degree of change and the diversity of change with the identity of place (at the examples of 1888-1919 and 1919-1932). Namely, in the period of 1888-1919 Sendagi area has exhibited very low diversity of change and in the same time very high degree of change. That shows that the change is located at one class of the size of the streets and is very intensive. In that period the identity is also shifting. In the next period, 1919-1932, the diversity of change is high and the degree of change is low. That means that the elements were changing in all classes of sizes and with lower intensity. The identity in this period is persisting. This represents an additional argument for the link between built environment and the identity of the place, where certain changes can affect the shift in the identity. It also shows that built environment can change to a certain degree and still preserve its identity. In the same time the change should not be observed only in degree but in its nature. It is not sufficient to define only the degrees of change in order to analyse the persistence of the identity.

**Degree of change of blocks-spatial distribution**

Degree of change was calculated for each block separately and shown on the map of latter period (appendix B, table). For the purpose of analysis of change standard deviation was used as method for classifying blocks based on their degree of change. As explained at the level of streets the number of classes of blocks defines the level of diversity of change. The results are shown at the fig. 5.17. for the four periods, change between 1888 and 1919, 1919 and 1932, 1932 and 1956 and finally 1956 and 2003. The number of classes was defined by the standard deviation classification method. Degree of change is highest in first two periods: 1888-1919 and 1919-1932. In those periods there are five classes of degree of change of blocks. Compared to the diversity of change at the street level it is clear that they operate in different manner. Namely, highest diversity of change at the level of streets...
appears in second period (1919-1932) and not in the first period. The degrees of change at one level do not necessarily affect the degree and diversity of change at different level. The two latter periods (1932-1956 and 1956-2003) show lower number of classes, four classes for each period.

The first period (1888-1919) shows that blocks with higher degree of change are equally distributed in both Nezu and Sendagi. Furthermore, blocks which show lowest degrees of change are located mostly in the southern area of Nezu. The concentration of blocks that show higher degree of change is located in central zone of observed area of Sendagi. The transition from agricultural to urban area of Sendagi is not that clearly distinguishable as in the case of streets. It appears that blocks are following the patterns of agricultural division of land. However, in general there is higher number of blocks located in Sendagi that exhibit high degree of change compared with Nezu. There are only four blocks that show the lowest degree of change in the whole area and most of the blocks are exhibiting high degree of change.

The second period (1919-1932) shows in general lower degrees of change compared to the first period. Although, there is smaller number of blocks that show higher degrees of change compared to the previous period, the diversity of change is the same. Blocks which exhibit higher degree of change are clustered at the boundary between the two areas of Nezu and Sendagi. Blocks which show lowest degrees of change are equally spread throughout all area. Most of the blocks exhibit medium degree of change.

The third period (1932-1956) shows in general lower degree of change compared with the previous two periods. The number of blocks which have lowest degree of change is significantly higher than in the previous periods. Those blocks are homogeneously dispersed throughout all area. The blocks that show highest degrees of change are shifted to eastern parts of both Nezu and Sendagi compared to the previous period. The number of blocks that have high degree of change is slightly higher than in the previous period. The number of blocks which have medium degrees of change is significantly lower than in the previous periods. The classes of blocks of different degree of change are not showing any significant clustering in space despite the destructions of Second World War in 1945. Namely, the area of Sendagi does not exhibit any significant difference compared with the area of Nezu which was not affected by the destructions. All the classes of degree of change are equally spread in both areas of Nezu and Sendagi.

The fourth period (1956-2003) shows the lowest degree of change in general compared with the previous three periods. The number of blocks which have the smallest degree of change is significantly higher compared to the third period. Those blocks are located in
both Nezu and Sendagi peripheral areas. Blocks which exhibit highest and medium degree of change are dominantly located in inner part of observed area. The cluster of these blocks in Nezu is clearly distinguishable. In Sendagi the location of blocks that changed the most tends to be more scattered throughout area. The smallest blocks show higher degrees of change in this period. The area of Nezu shows higher degree of change compared with the area of Sendagi.

In all periods locations of blocks which exhibit highest degree of change are constantly changing. There are no significant areas that constantly change in all periods through history. In the same time, there are no blocks which show general persistence in all periods, like in the case of streets. The blocks with highest degree of change start from both Nezu and Sendagi areas, shifting in next period towards their boundary, to be dispersed in the Nezu and finally clustering in middle of both areas.

Highest degrees of change are mostly located at the blocks of smallest size. This trend is highly distinguishable in the last period and similar to the results from the streets. Therefore, the elements which are emphasized to be persistent in the identity of Yanesen are actually exhibiting highest degrees of change in both cases of streets and blocks. That raises the question of what is actually persisting in terms of built environment. Previous analyses have shown that persistence is not based on the actual size. Further analysis in this chapter will assert the link between the function of an element in the assemblage in relation to the degree of change.

Throughout all periods number of blocks which show low degree of change is constantly increasing. That implies that this area is reaching towards the stabilization of blocks. However, their position is changing in time. There are no blocks that show low level of change in all periods.

Clusters of blocks of similar degrees of change are mostly territorialized in the last period which has smallest degree of change and low diversity of change as well. In all other periods the blocks with different degrees of change tend to be equally distributed and scattered in all analysed area.

In terms of change from rural to urban area in Sendagi in period from 1888 to 1919 blocks are not exhibiting the same importance as the streets. Namely, the change in this period is not drastically different from the Nezu and therefore not clearly distinguishable as at the level of streets. That also supports the fact that not all elements in the assemblage are equally important for the identity of the place.
**Degree of change of plots and building footprint - spatial distribution**

The results are shown in Fig. 5.18, for four periods: 1888-1919, 1919-1932, 1932-1956, and 1956-2003. All periods show high diversity of change, with five classes defined with standard deviation, except the third period (1932-1956) which has four classes of degree of change. Despite the high number of classes their spatial distribution defines different kinds of diversity of change in Nezu and Sendagi.

In first period (1888-1919) the plots that have highest degree of change are mostly located in Sendagi area. The lowest degree of change is located in Nezu. This distribution is similar with the distribution of degree of change of streets in the same period. The plots with highest degree of change in Sendagi area are territorialised showing clear boundaries. Plots with highest degrees of change in Nezu are in much smaller number and scattered through all area. The shift from agricultural land in Sendagi area is exhibited with the high degree of change of the plots compared with the Nezu area. That change is marked with low diversity of change since most of the plots belong to the group of 0.5-0.53 Std. Dev. but high degree of change. However, in Nezu area there is high diversity of change but lower degree of change.

The second period (1919-1932) exhibits similar situation as in first period in which there are much territorialized plots of high degrees of change in Sendagi area while there are only two areas that show high degree of change in Nezu. The plots with lowest degrees of change are mainly located in the Nezu area. The degree of change at the level of plots in Sendagi area is highly different from the degree of change at the level of streets and blocks. That shows the complex and non-hierarchical relationships between these three elements of built environment.

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Fig. 5.18. Spatial distribution of the plots and building footprint based on the classes of degree of change.

The second period (1919-1932) exhibits similar situation as in first period in which there are much territorialized plots of high degrees of change in Sendagi area while there are only two areas that show high degree of change in Nezu. The plots with lowest degrees of change are mainly located in the Nezu area. The degree of change at the level of plots in Sendagi area is highly different from the degree of change at the level of streets and blocks. That shows the complex and non-hierarchical relationships between these three elements of built environment.
The third period (1932-1956) shows very low diversity of change in both Sendagi and Nezu. Most of the plots are exhibiting very high degrees of change and are equally spread in both areas of Nezu and Sendagi. On the other hand there are three areas that show low degree of change and are located in southern part of both Nezu and Sendagi.

And finally, fourth period (1956-2003) shows opposite situation compared with the previous period. Most of the buildings are exhibiting low degrees of change in terms of their footprint. The areas of highest degrees of change are scattered around both areas.

Compared with the diversity of change at the levels of streets and blocks plots and building footprint show their own dynamics of change which are different from these levels. The system is behaving in different ways having different levels of assemblage that are not hierarchically defined in which one element produces the same effect on the different element. This supports the demand to observe the system as a whole.

First three periods exhibit very high degrees of change in Sendagi area at the level of all elements. In first two periods Nezu area has lower degree of change compared with Sendagi. In the third period, however, both areas have very high degrees of change. That period is marked with the Second World War destructions in Sendagi area, however the whole Nezu is showing very high degree of change which is not directly influenced with the destructions of fire bombing. This supports the fact that in both areas the identity of the place is persisting, as well as the fact that change was not influenced by the destructions of the buildings. The fourth period shows very low degree of change for both areas.

5.1.5. Relationships between the classes of degree of change of all elements

In order to define the zones of higher and lower degrees of change in the built environment of Nezu and Sendagi all elements and their classes were considered in this analysis. Zones of higher intensity of change are defined with gathering of elements of built environment that exhibit high degrees of change in certain location. The zones of lower intensity of change are defined similarly by gathering of the elements that show low degrees of change. The zones are shown in degree since there are different zones depending on the number of elements and their degree of change. The zones of highest degrees of change are achieved when all elements (streets, blocks and plots or building footprint) are gathered in the same space.

The analysis is based on the previous results of the classes of degree of change and their spatial distribution. The method consists of re-layering the maps that show classes of degree of change of streets, blocks, and plots or building footprint, for all periods separately. For that purpose the Adobe Photoshop CS2 was used. All the maps are overlapped with the
same level of transparency of 30%. The darkest shades of grey are showing the highest degrees of change and the lightest are showing lowest (Fig. 5.19.).

In first period (1888-1919) the most intensive change at all elements is located in Sendagi area (Fig. 5.19.). Both streets and plots are producing higher degrees of dynamics of change which are balanced with slightly lower degrees of change of blocks. Highest degrees of change are located at the central areas of Sendagi in which all elements belong to the classes of high degree of change. In the same time in Nezu area degrees of change of all elements are significantly lower. The parts that exhibit the lowest degrees of change are located at the periphery of Nezu’s analyzed area. Inner part of Nezu is showing medium degrees of change. At the whole observed area we can distinguish three zones of change: Sendagi with high degree of change, Nezu with low degree of change and area between those two which has elements of low and high degrees of change.

![Fig. 5.19. Zones of different degree of change based on the streets, blocks, plots and building footprint over time](image)

In the second period (1919-1932) location of highest degrees of change is still in Sendagi area (Fig. 5.19.). However, the size of area that has highest degrees of change is reduced compared with the previous period. Nezu area exhibits slightly lower degrees of change. The position of zones with highest degrees of change are not clustering in space, therefore producing more homogeneous change in the space. It also implies that change of one element does not necessarily produce the change at the other elements in the same locations. The connections are not direct and are more complex. There are two zones of lower and higher degree of change. Higher degree of change is located at western part o Sendagi and lower degrees of change are located mainly in whole Nezu and eastern part of the Sendagi (with the exception of two blocks at the border).
The third period (1932-1956) shows that size of the zone of higher degree of change is much bigger than in previous two periods. It is located in both Nezu and Sendagi. Almost homogeneously Sendagi shows high degrees of change. Only south-western part of Sendagi exhibits lower degree of change. In Nezu there are only two areas that show lower degrees of change: one located at south-east and the other locates at south-west, both at the peripheral areas of Nezu. In general there is larger contrast between zones of high and zones of low degree of change. At the level of both Nezu and Sendagi the locations of higher degree of change are homogeneous and with clearly distinctive boundary-territorialized. Those zones also represent larger part of the analyzed locations. The zones that have lower degree of change are much smaller in their size and scattered around both Nezu and Sendagi. Those areas are also clearly distinguishable. In this period, the change is more localized than in the previous period meaning that elements that have similar degrees of change are located at the same areas. That is producing high contrast between zones of high and low degrees of change.

Fourth period (1956-2003) shows significantly lower degrees of change at all elements compared with all periods. The spatial distribution of zones of high and low degrees of change is showing no tendency towards clustering. Zones are rather scattered throughout both Nezu and Sendagi. In Sendagi there are zones that show highest degree of change as well as zones that show lowest degree of change. The zone of northwest in Sendagi shows slightly bigger area of low degree of change. In Nezu there are zones that show medium degree of change and lowest degree of change. The zones of lowest degree of change are less present in Nezu than in Sendagi. That shows that change of elements in Nezu is not based on their location and in Sendagi elements that show high or low degree of change are having the same location.

The position, size and degree of change were changing from one period to the other. We cannot define any location in the observed area which hasn’t at least in one period suffered from high degree of change. The same can be applied to the areas of low degree of change. There are no always changing or always persisting areas in Nezu and Sendagi. We can rather discuss different levels or degrees of persistence or change.

This analysis has shown that there are no preserved areas in Nezu and Sendagi in all periods. More specifically, there are no preserved elements of built environment and therefore permanence of the elements will be examined in terms of their relationships in the following section.
The analysis has also shown that the last period is highly different compared with the first two periods. That also raises the questions of future development of this area. The next period could be crucial for the persistence or shift in the identity of the place in Yanesen.

### 5.1.6. Degree of change and expressive role of elements in the assemblage

In order to assess the relationship between the change in built environment and the function that each element has based on its relationships of interiority (which defines its expressive role) comparative analysis was conducted. The comparison is conducted between the zones of degree of change (Fig. 5.19.) and zones of intensity of smallness (Fig. 5.13). The analysis aims to show how different degrees of change can produce different permanence in the space which is based on the relationships and complexity of the structure of assemblage.

For the purpose of this analysis only highest and lowest degrees of change and intensities of smallness were selected. More specifically, the analysis is based on the concrete locations (territories that have extreme values) in which the change and size are defined by all elements of the built environment (streets, blocks, plots, building footprint). This shows the main processes that are appearing in the assemblage through its change. That is, how change affects the preservation of the structure of assemblage. Therefore, in this analysis, the territories were defined by all elements of built environment and show how assemblage acts as a whole. It is expected that similar processes are appearing at the level of each element individually (all degrees of change and all intensities of smallness); however those processes should be more numerous and more clear at the scale of the assemblage as a whole. That is the reason for choosing these specific cases.

The first step was extraction of the highest and lowest degrees of change as average of all elements of built environment. Degree of highest and lowest values was extracted from the analysis of degree of change (shown on Fig. 5.19.) and was shown for the periods from 1888 to 1919, 1919-1932, 1932-1956 and 1956-2003. The extreme cases of lowest and highest values will have highest and lowest impact at the elements of the assemblage and were chosen for that reason (Fig. 5.21. middle maps).

Secondly, maps that show structure of the assemblage are based on the zones of highest and lowest values of sizes of all elements (shown at the Fig. 5.13) were selected for this analysis. Only zones that correspond to the selected areas of degree of change and are zones of smallest and biggest elements of the assemblage were analyzed. Furthermore, two ways in which structure of the assemblage corresponds to the degree of change were distinguished. First represents the cases in which zones of smallest or biggest elements are differently related to the highest and lowest degrees of change (Fig. 5.21. upper part of the picture).
Namely, those are the cases in which the territory is preserving its function within the assemblage (either as zone of smallest or largest elements). More specifically, territory preserves its function within assemblage in two successive periods and can be linked with highest and lowest degrees of change. Second case represents the situations in which territory changes its function in the assemblage and can be linked with highest and lowest degree of change. More specifically in the second case there is transformation of the territory from the smallest to the biggest elements and vice versa (Fig. 5.21. bottom maps).

Results show that firstly there are more cases that are related to extreme values of high and low degree and preservation of the function of the territory in assemblage than those that show opposite situation. Interestingly, all of those cases are based on the smallest elements. Namely, the biggest elements do not show any correspondence between extreme values of degree of change and persistence of the structure.

The results also show that persistence of the function of the territory in two successive periods is not linearly corresponding to the highest and lowest values of degree of change. More specifically, there are both examples in which the territory is persisting as a result of very low degree of change and very high degree of change (the connections are shown in the red lines between degree of change and the structure of the assemblage at the Fig. 5.21. middle and upper maps). There are three cases that show low degree of change and persistence of the territories of smallest elements. However, there are six cases that show high degree of change and persistence of the territory of the smallest elements in the assemblage.

In 1888 there are two territories that show persistence throughout 1919 (Fig. 5.21. upper part). The northern part belongs to the zone of higher degree of change and the southern part belongs to the zone of lowest degree of change. In 1919 there are three territories of smallest elements that are showing persistence to the successive period of 1932. Two zones (the northern and southern) correspond to the territories of both highest and lowest degree of change (in the period from 1919 to 1932). The third territory is represented with both highest and lowest values of degree of change in its different parts (north-eastern territory). In 1932 there are two territories that show persistence to the 1956 located at southern part of Nezu and northern part of Sendagi. Both territories are belonging to the zones of highest degrees of change. In 1956 there are two territories that are persisting throughout 2003. They are located in north-eastern part and both belong to the zones of highest degree of change.

The results also show that from 1888 to 1956 the territories of smallest size elements which are persisting are more numerous and bigger in size than the territories persisting in the last
period from 1956 to 2003. That shows that the link between average degree of change and persistence of smallness observed through relationships in the assemblage is not linear. Namely, in the period from 1956 to 2003 there is a smallest average degree of change and the persistent zones of elements are also smaller. Furthermore, the northern and southern parts of the assemblage preserve their function through all periods from 1888 to 1956. During those periods the northern part is constantly linked with the highest degree of change while southern part changes from lowest to highest degrees of change. In first three periods from 1888 to 1932 the southern part is marked with lowest degree of change. And in the last period of 1932 to 1956 it is marked with highest degrees of change. The southern territory also tends to preserve its size through all periods while northern changes significantly its size and shape in all periods. There is no clear link between the degree of change and preservation of the size. Namely, in all cases of persistence of the function of smallest elements there are both highest and lowest degrees of change present.

This shows not only that change can produce the persistence of certain characteristics of territories in the assemblage (in this case size) but it also proves that assemblages are wholes and that their structure depends on the relationships between elements and is not only defined by the inner characteristics of the territory or elements. Persistence of those territories is possible because of the higher or lower change of other territories in the assemblage.

The degree of change affects the persistence of the function of territory in the assemblage. However, the complexity of that process is shown by the fact that both low and high degree of change can produce persistence. That confirms the hypothesis that in order to understand the built environment and its relationship with the identity we need complex approach and approach which focuses on the relationships rather than single elements.

The second part of the results is presenting the change of the zones between two successive periods related to the highest and lowest degrees of change. There are only there cases that correspond to this situation (lower maps in Fig. 5.21.). Only the cases that show transformation from the territory of biggest elements to the territory of smallest elements were found. From 1888 there are two territories of biggest elements that are transformed into the territories of smallest elements in 1919. They are both related to zones of higher degree of change. In 1932 there is one territory that changes in 1956 from the biggest to the smallest elements. It corresponds to the zone of highest values of change. The similar cases were not found in periods from 1919 to 1932 and from 1956 to 2003.

In these cases the change of function of the territory from biggest to smallest was produced only in the cases of highest degrees of change. The limited number of cases cannot prove
Fig. 5.21. Degree of change and structure of assemblage-comparative analysis of extreme values

that in all situations highest degrees of change produce the shift in the function of the territory, especially because it is shown that highest degrees of change can produce the
persistence of the function too. These results further support the character of the assemblage as a complex system and necessity to observe it through the relationships rather than singular elements.

Another important aspect of these results is that in all three cases the change was conducted from the territories that have biggest elements to the territories of smallest elements. That characteristic is important for the identity of this area which is based on the characteristic of the small. The production of small elements and their dynamics are important clues in how the place has managed to maintain its identity. It also shows how assemblage operates through interaction of its parts where change of some elements has impact on others. In this case the part in Nezu kept the sizes of its elements, but when the place is observed as a whole those elements have decreased their intensity of smallness.

Also the fact that territories of smallest elements are actually those which are persisting despite the degree of change is important factor that describes the state for the identity and its invariability. Namely, smallest elements are important for creation and persistence of the identity in Yanesen and therefore that persistence is crucial for the diachronic definition of the identity.

Finally, these results are showing how elements in the assemblage are connected to each other in complex and non-linear ways. It also shows that assemblage in its persistence can be dynamic, rather than static, because it links change with the relationships of interiority.

5.1.7. Dynamics of change of the structure of assemblage

The comparative analysis of degree of change and function of elements in the assemblage has show complex connections in which change can produce persistence as well as shift in the function. That is possible due to the relationships of interiority, relationships between the same elements as well as between different elements of built environment. That raises a need to explain the ways in which the whole structure of the assemblage was changing. In order to assess this question the cluster analysis was introduced73.

73 The details of analysis were explained in the section 3.4.3. This analysis was developed in collaboration with Emilio Garcia, PhD candidate at Faculty of Architecture, Victoria University of Wellington, New Zealand
The analysis was performed for three variables (streets, blocks and plots or building footprint) at each period (1888, 1919, 1932, 1956, and 2003). The clusters of all elements are visualized in order to show the structure of the assemblage at each period and the number of elements that each cluster contains in percentage to the number of all elements separately for streets, blocks and plots/building footprint. The sizes of clusters were shown as the actual sizes of elements. Since the sizes of elements differ the scale was adjusted in

Fig. 5.22. The structure of the assemblage based on the clusters of sizes of streets (S), blocks (B) and plots or building footprint (P) in all periods.
order to be comprehensible. The scale is shown separately for each group of elements (Fig. 5.22.).

The results show that there is a great variability of number of clusters at the level of each element in period as well as between different elements. The number of clusters varies between two and four. The highest number of clusters is shown at the 1919 period and the lowest in 2003. The sizes of clusters also vary among periods.

The numbers of elements at all levels (streets, blocks, plots and building footprint) show clear tendency. Namely, clusters of smallest elements contain the highest number of elements, in average more than 50%. At the level of the streets from 1919 to 2003 the cluster of smallest elements contains more than 80% of the elements.

In order to analyse the dynamics of change of structure of built environment through time the clusters were gathered by years and the discontinuities were marked (Fig. 5.23). The structure of the system was defined through four variables: 1. number of clusters per level (richness), 2. number of elements in each cluster (distribution) 3. size of the clusters (range) 4. size of the gap or discontinuity (difference). The change of the variables in time is showing the change of the structure of assemblage.

The results show that richness of the whole assemblage comprising all elements was varying throughout all periods. First three periods (from 1888 to 1932) show slightly higher richness in which the highest number is in 1919. The last two periods from 1956 to 2003 show lowest richness (with only eight clusters). The general tendency for all years and all levels is that the highest number of elements is present at the smallest clusters. 

Fig. 5.23. Dynamics of change of structure of the assemblage in Nezu and Sendagi from 1888 to 2003

The results show that richness of the whole assemblage comprising all elements was varying throughout all periods. First three periods (from 1888 to 1932) show slightly higher richness in which the highest number is in 1919. The last two periods from 1956 to 2003 show lowest richness (with only eight clusters). The general tendency for all years and all levels is that the highest number of elements is present at the smallest clusters. That is
creating high contrast between the large and small elements’ clusters and contributing to diversity. The similar kind of distribution is maintained in all periods. Range of the clusters is varying throughout all periods. The highest range is present in 1888 and reduces in 1919 in order to increase in the next period and decrease in 1956 and again increase in 2003. The range shows great dynamics through time. However in general has decreased from 1888 to 2003, showing the general tendency of the elements in built environment to reduce their sizes contributing to higher complexity and diversity of the assemblage. Difference is showing great dynamics through all periods (shown with grey Fig. 5.22.). It is changing its size in all periods at all levels. The sizes vary from period to period and the largest differences are appearing in the first four periods and are reduced in the 2003. That contributes to lower diversity of the system in 2003.

All variables are contributing to the change of the structure of assemblage of elements of built environment. The period of 2003 shows that the system becomes continuous due to the smaller difference and higher ranges of the clusters.

The results have also shown high level of change of the structure of assemblage. Moreover, that change does not show any clear patterns. It proves the high diversity of Nezu and Sendagi’s elements throughout all periods but also that this diversity is not static. It changes through time. That change in Nezu and Sendagi seems to be very important for persistence of the identity. Namely, since richness, range, and difference are changing in all periods that proves that all elements in all years are changing and that the whole structure of the assemblage is changing. The change of the whole structure gives possibility for the persistence of the function of some of the elements within the change. Furthermore, the systems shows general tendency towards production of small and therefore supports the identity based on the Shitamachi. However, the analysis has shown that although structure varies in time, those variations are not that drastic. Richness varies between eight and ten and range does show dynamics but in terms of size does not vary in high degrees.

In order to assess the levels of change and evaluate whether these dynamics are high or low the comparison with different case study would be needed. The further analysis could use the case study in which the identity has shifted from one point to the other. This method has shown potential to be further developed as tool that could by gathering large amount of data provide more insight of possible changes in the structure of assemblage and ranges within which place can provide basis for invariant identity. However, the purpose of this analysis was not to define the optimal levels of change, but to show how the structure of the place was changing.
Although the system is changing in all periods and at all levels the change should have certain limitations due to the persistence of the identity. In order to address this topic and show the limits of change the analysis based on the principal component was conducted in next section.

5.1.8. Dynamics of change of assemblage as a whole

In order to show the way in which system was changing the principal component analysis was conducted\(^{74}\). The analysis was conducted for two variables: streets and blocks, due to the fact that they were correlated\(^{75}\). The analysis was shown on two principal components which comprised 81.3\% of variability of the system. The analysis was conducted for all years (1888, 1919, 1932, 1956, and 2003). The data were entered as length of the streets and areas of the blocks. If the street has disappeared in some of the periods then the 0 value was used. In terms of the blocks, if the block was subdivided then the value of the previous block was entered number of times which equals the number of subdivisions (appendix E).

Table 5.1. The results of PCA analysis

<table>
<thead>
<tr>
<th></th>
<th>Axis 1</th>
<th>Axis 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eigenvalues</strong></td>
<td>3.157</td>
<td>0.91</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td>63.13</td>
<td>18.203</td>
</tr>
<tr>
<td><strong>Cum. Percentage</strong></td>
<td>63.13</td>
<td>81.333</td>
</tr>
<tr>
<td><strong>PCA variable loadings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td>0.424</td>
<td>-0.617</td>
</tr>
<tr>
<td>1919</td>
<td>0.43</td>
<td>0.187</td>
</tr>
<tr>
<td>1932</td>
<td>0.488</td>
<td>-0.406</td>
</tr>
<tr>
<td>1956</td>
<td>0.483</td>
<td>0.309</td>
</tr>
<tr>
<td>2003</td>
<td>0.405</td>
<td>0.569</td>
</tr>
</tbody>
</table>

The results are showing that along the first axis the PCA values are similar and variations are appearing at the second axis (Table 5.1.). The first two values are showing the 81.3\% of

\(^{74}\) The method is explained in detail in section 3.4.3.

\(^{75}\) The analysis for all three elements of built environment (streets, blocks and plots) was also conducted, however only for three periods (1888, 1919, and 1932) in order to show the whole system. This analysis had shown more regular dynamics of change. However, here the analysis has shown only streets and blocks due to the fact that it shows change through all years.
variation of the system and were selected for further analysis. That variation is producing the shift in the sequence from 1888 to 1956 (appearing in the ranges of positive to negative values). The slight change appears between the 1956 and 2003 which does not follow the previous pattern. That corresponds with the calculations of change of each separate element of the assemblage, where the last period (2003) exhibits the smallest degrees of change.

Fig. 5.24. Dynamics of change of the assemblage as a whole
However, the values of PCA axis are similar to the previous period therefore the system is behaving in the similar manner.

In order to show the dynamics of change for all periods the three dimensional graphic was created (Fig. 5.24.). The two dimensions are represented with the PCA axis and values calculated per each year. The third axis represents time in which all analyzed periods were mapped. This analysis show very regular dynamics of change in first four periods shown as the spiral change. The fifth period is showing the creation of new size in spiral corresponding with the slower change. Although the spiral is showing slight difference it follows the same trend.

This analysis has shown that the change in Nezu and Sendagi is complex and the whole system of elements of built environment is exhibiting dynamic changes. However, the PCA shows that although complex, the changes are not completely random or chaotic. The values of each year are varying but only to a certain degree among certain values. This also opens new questions related to minimal and maximal changes that system of built environment can exhibit within the persistence of the identity. However, that analysis should comprise number of case studies and different states of the identity of place.

This analysis also raises the questions of the future of this area. Namely, the first four periods have shown very clear patterns in change and the last period is slightly changing from that pattern. That means that next period might be crucial for the identity of Yanesen in terms of its persistence.

The limitations of this analysis are related to the fact that only part of the built environment was considered. The plots were excluded from this analysis. According to the analysis of the whole system but only for the first three periods the dynamics were showing higher regularity therefore it could be expected that this data would show more regular shape if all elements were considered for the analysis.

5.1.9. Discussion

The analysis of sizes of elements of built environment and the classes formed with standard deviation classification are showing the function (smallness) that each element can have based on the relationships to the whole system, its average. The function of the element is related with its expressive (qualitative) role versus its material (extensive) role which is related to its actual size. The expressive characteristic of each element of the built environment is in Yanesen defined through smallness (quality of being small rather than small in terms of size). The analysis of the sizes of extra small class has shown that there is very low persistence in terms of the sizes. Therefore, there is no persistence in terms of the
material role of the elements. However, the analysis of the expressive role of elements in time has shown higher level of persistence. Furthermore, that persistence is showing certain permanence of the position in the space as well. That shows that the relationships of interiority between elements are enabling the persistence of the expressive characteristics. Namely, sizes of elements of built environment are relative and can change, but as long as they are having the particular relationships with the whole assemblage their qualitative aspects are persisting. Therefore, the change of size of one element in the assemblage not necessarily produces lower persistence. That is dependent on the change of all other elements in the assemblage. Furthermore, the analysis of dynamics of change has shown that although the structure of assemblage in Nezu and Sendagi is very dynamic it also does change within certain limits.

The analysis has shown that smallest elements have highest degrees of change. The smallness was represented as important quality of Yanesen’s identity which persists through time. This analysis has shown that persistence in terms of smallest elements in the built environment is present within the change.

Consequently, we can conclude that not only smallest elements in the built environment matter for the identity of Yanesen. The smallest elements are defined in their relationships with all other elements of the assemblage, and particularly with the Other, the elements that have opposite characteristics-bigness. The dynamics of change of the sizes and distribution of the largest elements in the assemblage are equally affecting the persistence of the smallest elements. Therefore, the relationships of interiority are important for the persistence of the whole system. Furthermore, the persistence in built environment becomes complex.

The analysis has also shown that streets represent the most persistent element of built environment. That is confirming the theory deriving from the urban morphology. However, this also represents a important impute for the definition of the boundaries of the micro scale of this analysis. Namely, the micro scale was selected based on the area that shows most persistence in terms of all elements, but highly expressed at the level of streets. That area comprises the southern part of the Nezu and its three streets (Fig. 5.2).

The comparison of the elements in Nezu and Sendagi in 1888 has shown that if the change is highly located at certain parts in the assemblage and not the whole system then there is higher possibility that this change will affect the identity. However, the limitations of this study do not allow for firmer conclusions. This finding raises question that should be assessed in future research.
The analyses of the sizes of elements of built environment and their change in time have shown that change is important for the persistence. However, the locations of change, the nature of change as well as the quantity of change are contributing to the complexity of the persistence and the ways in which it is defined. Overall, change of elements of built environment can produce possibility for the identity to persist.

Fig. 5.25. The selected area for the micro scale analysis

The analysis of dynamics of change has opened a new questions related with the minimum and maximum values of change and their links with the persistence of the identity. This analysis has shown how elements can change and the whole system can persist. However, it
would be useful to know the limitations of that change. This analysis would acquire number of case studies and different states of the identity of place.

The limitations of these analyses were related with the lack of the data of plots in two last periods. That was substituted with the analysis of the building footprint. Although there are some similarities in the analysis of plots and building footprint the results are assumed to be slightly different.

5.2. Analysis of public-private interface

In order to address the second characteristic of built environment that is shown to be important for the persistence of the identity of Yanesen the analysis of public-private interface was conducted. This analysis was conducted on the data of contemporary Nezu and Sendagi selected areas. First part of this section explains the distribution of typologies and the second part deals with the connection between the public-private typologies and sizes of buildings. More detail analysis of public-private interface was conducted on the micro scale on the selected area of Nezu.

5.2.1. Typology of public-private interfaces

The analysis of the typologies of public-private interface aims to explain the way private spaces of the houses and public spaces are connected and contribute to the sense of domestic, neighbourhood feelings and spatial intimacy (as noted in the explanations of permanence in Yanesen’s identity of the place). Based on the definitions of typologies of the public-private interfaces76 (see Fig 3.7.) the quantity and spatial distribution of each type were mapped. The results are based on the fieldwork conducted during the Jun and July 2012 and all the houses in selected area of Nezu and Sendagi (Fig. 4.23.) were considered for the analysis. Total number of 1106 houses were observed and mapped in Arc GIS 10

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76 Explained in detail in the section 3.4.7.
software. The results have shown that most numerous type of the public-private interface is type I comprising 43% of all houses. Type VI comprises 19% of all houses followed with the type II-16%, type V-10%, type III-8% and the least present is the type IV- 4% (Fig 5.26.). The most numerous type is the first type and is highly contributing to the persistence of the identity of Yanesen. Namely, in this type the space of the interface is reduced to the minimum represents the link with the characteristic of spatial intimacy in descriptions of Yanesen’s identity. The most direct contact between public and private corresponds to the possibility of the exchange and encounter as well as private sense of the streets and particular domestic feelings. On the other hand the next most numerous type is type VI. This type represents the opposite characteristics of the first type. In type VI the public private interface comprises the largest space and therefore the private and public spheres are strongly separated. That contributes to the general sense of the streets as public spaces, since there is almost no link with the private. Although the most numerous type is related with the persistence of the identity the quantities of the type which does not support that characteristics are also significant. That is clearly exhibited at the level of distribution of types.

In order to analyse the ways in which all different types are distributed and related to each other, the mapping was conducted. The results show that beside difference in the quantity of buildings in each type there are differences in their spatial distribution (Fig 5.27.). The types of public-private interfaces are shown on the map at the level of building that they belong to. Type I is the most numerous, and shows that it is equally spread in both Nezu and Sendagi. The houses belonging to this type tend to create different densities and aggregations in space. They are located at the inner part of Nezu and Sendagi. Type II is more numerous in Sendagi area. It also shows tendency towards creation of aggregations in Sendagi area and not in Nezu. The houses that belong to this type are also located at the inner parts of researched area. Type III is equally spread throughout Nezu and Sendagi with one aggregation in Sendagi area. Houses that belong to this type are also located in the inner part of the observed area. Type IV is the least numerous from all the types of public-private interfaces. This type is mostly located in Sendagi area and does not show any significant tendency towards aggregations in space. Type V is mostly located in Sendagi area, more densely present in its northern part. In this area it tends to create aggregations in space. In Nezu it is mostly located at its southern part. In general the houses that belong to this type are located in the inner part of the observed area. Type VI comprises the buildings that have significantly larger building footprint compared to all other types. It also shows tendency towards aggregations at the outer part of observed area. Furthermore, it shows
greater density of interfaces at the southern part of Sendagi and northern part of Nezu. In general it is equally spread between Nezu and Sendagi.

The highest numbers of buildings in terms of the public-private interface are located in the type I and VI. Those buildings also show the tendency towards generating the aggregations in space. All types are equally spread in both Nezu and Sendagi. The most numerous types are also showing the largest coverage areas in terms of their building footprint. The largest
coverage is present at the type VI followed with type I. That is due to the fact that most of the buildings that have interface which belongs to the type VI are belonging to the largest sizes. That fact also contributes to the perception of the area.

5.2.2. Clusters and relationships between the types of public-private interface

In order to analyse the ways in which similar typologies of the public-private interface are interacting the cluster analysis based on Getis and Ord G statistical analysis was conducted using the Arc GIS software\textsuperscript{77}. The analysis was conducted for four most numerous typologies which were defined by their similarities. Namely, types I and II are most similar in terms of their public-private interface and were considered jointly for the formation of the clusters. Likewise, types V and VI have similar characteristics in terms of their public-private interface structures. Therefore these typologies are contributing to the similar character of the space in terms of the spatial intimacy. The clusters of types I and II are contributing to the sense of higher levels of spatial intimacy between public and private due to the very small space of the interface and direct contact between public and private. Those types are generating the sense of private in the public space of the streets. In the same time, types V and VI are creating the opposite situation. The large public-private interfaces are creating fewer possibilities for the spatial intimacy between public and private. They generate the sense of very public spaces. The clusters are defined with minimum two elements of the similar characteristics aggregated in space (based on their Euclidian distance). The clusters are therefore considered as zones of intensities of sense of public or private. Namely, the number of elements that contribute to the sense of private (types I and II) located at particular area will create the zone of intensity of private. On the other hand, the number of elements that contributes to the sense of public (types V and VI) aggregated in space will create the zone of intensity of public.

The results show number of zones that have different intensities of public and private (Fig 5.28). The existence of clusters proves that different typologies of public-private interfaces influences diversity and discontinuity of the character based on the public-private senses in Nezu and Sendagi. The clusters of same characteristics of public-private interfaces define difference in intensity of the spatial characteristics. That difference in intensity produces juxtaposition between different characteristics of space and influences the expressiveness of built environment and therefore produces possibilities for the identity to emerge. In the same time, it is important to notice that both situations are present (public and private characters), despite the fact that identity is related only to the private character of the space.

\textsuperscript{77} The method is explained in detail in section 3.4.3.
The results show that there are similar numbers of clusters of type I and II and type V and VI. The first has nine clusters and the latter has seven clusters. In terms of their areas both clusters are similar. There is a larger area of the clusters of types I and II (zones of private character) created in Nezu compared with Sendagi. Namely, the zones of private character are smaller in their size but more numerous in Sendagi areas. That creates more discontinuous and therefore more diverse space in this area. In the same time the clusters of types V and VI are less present in Nezu. The eastern part of analyzed area shows a large cluster of typologies V and VI. In general the clusters of type V and VI are larger in number in the northern part of analyzed area. The clusters of type I and II are located at the inner part of analyzed area and types V and VI are located at the borders.

This analysis shows that space is not coherent in terms of characteristics of public and private. Different intensities of opposite characteristics are appearing in all areas in Nezu and Sendagi. The contrast between those two different characteristics is important for the definition of identity. It also proves that the relationships between different characteristics of public-private interfaces plays important role. Those relationships are characterized as relationships of interiority. The identity of this area has clear link between the opposite
5.2.3. Relationships between types of public-private interface and size of the elements of built environment

The two main characteristics which are important for the persistence of the identity in Yanesen were considered in this analysis. Namely, the assumption is that when both characteristics of smallness and intimate spaces aggregate in the same location they will have larger contribution to the character of space related with Shitamachi than when they are defined separately. In order to explore the patterns of relationships between different characteristics of physical setting two different analyses were conducted. The first analysis is linked with the size of building footprint in relation to each type of the public private interface. The second analysis considers the connections between zones of public or private character and zones of intensity of smallness based on the relationships of all elements of built environment. First analysis uses the calculated classes of sizes of building footprint (explained in the section 5.1.1. for the last period of 2003). The second analysis uses results of relationship of interiority for the 2003 (presented at the section 5.1.3.).

The relationships between public-private interface typology and sizes of buildings

This analysis uses the results from the analysis of the classes of sizes based on the standard deviation classification method conducted on the level of building footprint. Namely, the sizes of classes of building footprint were used to define the structure of each public-private interface type. Firstly, all the buildings that belong to different types of public-private interface were mapped. Secondly the areas of building footprints were measured using the Arc GIS software and quantified in terms of already defined classes of sizes (extra small class: building footprint smaller than 27 m²; small class: from 27 to 90 m²; medium class: from 90 to 150 m²; large class: from 150 to 220 m²; and extra large class: from 220 to 1210 m²). In each type of the public-private interface the numbers of houses that belong to different classes were measured.

The results are showing that type I contains 479 buildings. From that number 29% of the buildings belong to the extra small class (in total 140 buildings), 69% belong to the small class (329 buildings), 1.6% belongs to medium class (8 buildings) and 0.4% to large class (only 2 buildings) (Fig. 5.29.). Most of the buildings in this type belong to the extra small and small class. There are no buildings present in extra large class. Type II contains 174 buildings. The largest number of buildings belongs to the small class. There is 8% of the
buildings in the extra small class (14 buildings), small class contains 80% of all buildings (139 buildings), medium class has 10% of all buildings (18 buildings), and large class has 2% (3 buildings). In this type there are also no buildings that belong to the extra large class. Compared with the type I there is significantly lower number of the buildings that belong to the extra small class. Type III has 89 buildings. From that number the 15% of the buildings belong to the extra small class (13 buildings), 72% belongs to the small class (64 buildings), and 13% of the buildings belongs to the medium class (12 buildings). In this type there are no buildings that belong to the large and extra large class. Most of the buildings are located in the small class, however compared with the type II there is higher number of the buildings that belong to the extra small class, however smaller than the number in the type I. The type IV shows similar situation as the type III in which there are no buildings in the large and extra large class. However, the number of buildings that belongs to the medium class is significantly smaller. The distribution is: 8% of the buildings belong to extra small class (3 buildings), 87% belongs to the small class (34 buildings) and 5% belongs to medium class (only 2 buildings). Type V and VI have buildings that belong to all classes from smallest to largest. There are 109 buildings in the type V. This type has 4% of the buildings that belong to the extra small class (4 buildings), 58% belongs to the small class (63 buildings), 32% belongs to the medium class (35 buildings), 5% belongs to the large class (6 buildings) and 1% belongs to the extra large class (only one building). Most of the buildings belong to the small and medium class. There is significant number of buildings belonging to the large class. Type VI has 214 buildings, from that 4% belongs to the extra small class (8 buildings), 55% to the small class (117 buildings), 21% to the medium class

![Public-private interface types and distribution of size classes of buildings](image)

Fig 5.29. Public-private interface types and distribution of size classes of buildings
(45 buildings), 11% to the large class (25 buildings) and 9% belongs to the extra large class (19 buildings). The largest number of buildings belongs to the small class, however in this type there is significant number of buildings that belong to the medium, large and extra large class.

The results are showing that within each type the most numerous class is the one that contains small buildings. The largest difference appears at the distribution of extreme values of small and large. The highest numbers of buildings that belong to the extra small class are present at the type I. That largely contributes to the character of built environment that is related with identity of the place in Yanesen. The fact that these two values are aggregated creates stronger connections with the qualities that are defined as persistent. Furthermore, the extra large class is most present at the type VI which contributes to opposite character of the built environment. That Other is important for the definition of spatial intimacy in terms of the interfaces and sizes. However, it is also important to notice that most of the types have highest numbers of elements that belong to the small class. This characteristic of equally distributed elements of small among all types of public-private interface is contributing to the general sense of the area, related with small.

**Zones of typology of public-private interface and intensity of smallness of built environment**

In order to define the zones which are related with two most persistent characteristics of identity of the place in Yanesen the comparative analysis was conducted. The comparison is conducted between the sizes of all elements of built environment (Fig. 5.13. for the 2003) and clusters created between the type I and II and type V and VI of the public-private interface (Fig. 5.28.). The clusters crated as the zones in the space were mapped in the relationship to the extreme values of intensity of smallness. The clusters of type I and II are related with the highest intensity of smallness and the clusters of type V and VI are related with the lowest intensity of smallness. The intensity of smallness is based on the relationships between all elements of built environment (streets, blocks and building footprint). The highest intensities are defined with the all elements aggregated in space that belong to the extra small classes. The lowest intensities are produced with all elements of built environment that belong to the extra large classes. The highest intensities of smallness and interfaces of the type I and II are producing the zones of that particular spatial intimacy that can be linked with Shitamachi character. On the other hand, the lowest intensities of smallness and interfaces of type V and VI are producing extremely different character in the space. The one opposed to the persistence of Shitamachi, however important for the definition and perception of the small and intimate due to the contrast.
The analysis is based on mapping only the areas of clusters of type I and II and highest intensity of small (Fig. 5.30. on the left) and lowest intensity of small and clusters of V and VI (Fig. 5.30. on the right). In terms of the persistent characteristics of Shitamachi identity (the smallest elements and the sense of private) there are six zones. The zones are equally scattered around Nezu and Sendagi and dominantly located in inner parts of the precinct. In terms of the zones of biggest elements and public sense of the space there are four zones. Zones are larger in their areas compared with the zones of small and private. They are scattered around both Nezu and Sendagi, with tendencies to be located at the periphery of the precinct.

The aggregations of highest and lowest values of the characteristics that contribute for the persistence of the identity are showing that juxtaposition and the relationships of interiority are important for the expressive characteristics of the built environment. The contrast between the extremes produces the possibility for the identity to be evoked in the experience of this place. These characteristics will be further examined at the more detailed scale of Nezu.

5.2.4. Discussion

The link between the sense of public and private with different sizes of elements of built environment represents important characteristics for the persistence of the identity of the place in Yanesen. Namely, gathering the characteristics of the small in all elements of built
environment and spatial intimacy produced with the particular public-private interface is important for amplifying the character of Shitamachi. Beside the characteristic that derives from the narratives about the identity of Yanesen and Shitamachi that particular interface of direct contact between private sphere of the house and public sphere of the street can be linked with the nagaya type of the house. Furthermore, as it was described in the section 4.1.2. this type of the house was most numerous in the Shitamachi areas. Furthermore, this type was also related with the particular alleys (roji) which are described as semi private spaces. Consequently, when the streets and houses are very small in their sizes and have interface that belongs to the type I and type II then it could be argued that this spaces are evoking the character of Shitamachi, despite the fact that houses have modern forms and materials.

On the other hand it is also important to stress that the same kind of gathering in the space is noticeable at the completely opposite characteristics, those that cannot be linked with the Shitamachi character. Those spaces play important role in the persistence of the identity. These spaces generate the contrast between old and new character in Yanesen. In that juxtaposition the spaces that have characteristics of spatial intimacy are intensifying their characteristics. The fact that they appear in large numbers and comprising small areas creates a certain rhythm of reminiscences from the past. It could be argued that this character is representing a reminder of what is lost but could be still found among new and in a way is precious. That opens interesting questions of mechanisms for evoking the sentimental feelings about the place based on the characteristics of built environment. That would however require further analysis of the meanings related to the place and qualitative study.

This analysis has also shown that although Nezu and Sendagi areas were changing in different ways throughout the time, today they exhibit similar characteristics related to the identity of Yanesen. Namely, the study of the intimate spaces and their opposite based on the sizes of elements and the public-private interface has shown that zones are equally distributed in both areas. Different degrees and natures of change have produced similar characteristics in both areas in terms of the built environment that is important for the persistence of the identity of the place in Yanesen. That supports the notions present in the narratives of the identity of Yanesen in which that Yanesen is coherent in its character. Furthermore, it also proves the complexity of the relationships between built environment, change and persistence.

Another important part of the results is that two different zones of intimate spaces are exhibiting particular patterns in the distribution in the space. That pattern can also be
linked with the traditional urban spaces in Shitamachi. Namely, the zones of more public character and related with big elements of built environment are located at the outer parts of the area of Nezu and Sendagi. The zones of intimate spaces are located in the inner parts of the precinct. It could be argued that this represents a link with the distinction of *omote* and *ura* in traditional Shitamachi areas. The spatial organisation of Shitamachi was divided in those areas (see Fig. 4.6.) where *chō* or the ‘block’ was divided in two areas: outer that comprised types of *machia* (shops and residences) and inner part that comprised *nagaya* and *roji*. Therefore, outer areas could be considered as more public and inner as more private. Although, there are no reminiscence of *machiya* type of the houses the fluidity of the public-private is still present as the quality of the space (produced with different types of the buildings). Therefore, in the broadest sense, *omote* as front, surface and appearance and *ura* as what is hidden and accessible only to insiders is still present (see section 3.4.5. for more detail explanation).

The limitation of this analysis is related with the size of the analysed area. In order to support the distinction between *omote* and *ura* the analysis of whole Yanesen should be conducted in order to examine if the similar patterns are appearing in other areas too. However, this analysis also supports the definition of the boundaries for the second scale. Namely, with clear distinction between *omote* and *ura* the analysed area comprises both characteristics and can be considered as a unit-similar to the *chō* in Edo period.
6. Analysis and results: scale of Nezu

This chapter presents the analysis and the results conducted on the third scale-the micro scale. This scale represents the results based on the more detailed analysis of the public-private interface and therefore frames the relationships of exteriority to the main scale of Nezu and Sendagi. The boundaries for the analysis were defined based on the results of the analysis of change and persistence. The selected area comprises three streets which were exhibiting the highest level of persistence throughout all periods. Consequently, the area is presented as the core area of Nezu. The streets are also different in their character and therefore give an opportunity to analyse different aspects of the public-private interface. The usage stretches from mix of commercial and residential to only residential parts of the streets. Three streets also have different width and comprise different typologies of the houses.

This chapter is divided in four parts. Firstly the analyses of the three zones of public-private interface are presented separately for each zone (Fig. 3.7.) and secondly the synthesis of the results is conducted for the three examined streets. First part of the analysis comprises: visual permeability, public-private interface along the streets and photographic survey and analysis of the streetscape in terms of the quantity of personal ephemeral objects.

6.1. Visual permeability of the facade and street character

The analysis of the first zone of public-private interface is related with the visual permeability of the street facade. Visual permeability defines the level of visual openness of the house to the public space of the street. It is important factor which affects the sense of private and public in the streets and consequently contributes to the sense of spatial intimacy.

First part of the results represents the spatial distribution of the values of visual permeability, shown at the level of house. Visual permeability was calculated for each facade separately and classified in Arc GIS software using the classification method based on the natural brakes. All the classes were mapped in Arc GIS (Fig. 6.1.).

There were five classes of levels of visual permeability. The least permeable class was defined with ratio of Vap from 0.009 to 0.16 comprising 42% of all houses. Second class

78 The scales are explained in detail in section 3.4. and the selection of the boundaries is explained and presented in the section 5.1.9. (see Fig. 5.26.).
79 The mapping and calculations are explained in detail in the section 3.4.6.
was defined within ratio of 0.16 to 0.24 comprising 31% of all houses. Third class had ratio from 0.24 to 0.36 and 19% of all number of houses. Fourth class has ratio from 0.36 to 0.47 and 5% of all buildings. Most visually open class has ratio from 0.47 to 0.59 and only 3% of all buildings belong to this class. Standard deviation has shown that most numerous group is with visual permeability between 0.14 and 0.26 comprising 40% of all buildings showing that buildings in general tend to be less open. Only 7% of all buildings belong to the extreme values of visual permeability.

The spatial distribution of classes has shown that different classes of visual permeability are equally distributed throughout all researched area (Fig. 6.1.). The level of visual permeability does not show any strong patterns based on the difference between the streets. Namely, different levels of visual permeability are present in all streets which contributes to the level of their diversity. It is not showing the patterns defined with function of the
building and width of the streets. Visually open facades can be located at the commercial buildings but also at the residential buildings.

In order to assemble the results from different zones of public private interface the analysis of levels of permeability along the streets was conducted. This analysis aims to show how the character of the street is changing in its different segments. Namely, the analysis is based on the visual representation of different values (in this case visual permeability) on a stripe.
along the street. Each segment of the stripe represents a segment of the street. Therefore, the stripes are defined as indicators of different characters along the street.

For the purpose of the analysis of the character along the street based on the visual permeability there were three operations. Firstly, all the values of visual permeability were mapped on the buildings where they belong. Secondly, each side of the street was examined separately. The values of visual permeability were transferred to the stripe (in the length of the building). In the cases where there is no building the area was considered to belong to the class of highest values of visual permeability. And finally the third operation represents the formation of average values based on the both sides of the street. Due to the complexity of the data the average values were achieved by overlapping the two stripes from the both sides of the street using the same transparency of 50% and Adobe Photoshop CS2 software (Fig. 6.2.).

Fig. 6.3. The selected three streets in Nezu

For the purpose of this analysis three streets were separately analysed. The three streets are located in inner part of the selected Nezu area (Fig. 6.3.).
The results of this analysis based on the data of visual permeability (Fig. 6.4-6) show different distribution, characteristics and numbers of classes for each street. The similarity between these three streets is that there is a large diversity between different values of visual permeability. There are not large clusters of similar characteristics; rather the variety of values largely differs along all three streets.

First street exhibits high diversity based on the length of different values of visual permeability (Fig. 6.4.). Namely, the change between different levels of openness is very high. Along the whole street the shift from one value of visual permeability to the other appears 35 times. In order to explain the sense of visual openness the street was divided on five sections (Fig. 6.4. A, B, C, D, and E). The sections are based on the close values of visual permeability. The sections A, C and E show high values of visual permeability and sections B and D low values of visual permeability. The longest section is D and it comprises different values of visual permeability. The high and low values of visual permeability appear alternately. The transition from one character to another is more frequent at the first part of the street (from A to D).

The second street exhibits very high diversity of different values of visual permeability (Fig. 6.5.). Furthermore, the changes between different values of visual permeability shift from one value to another 35 times (the same amount as in the first street). However based on the values and clusters of visual permeability there are six sections (Fig. 6.5. F, G, H, I, J, K). The sections F, H, J show in average high values of visual permeability while G, I, K show low values of visual permeability. Similar as in the first street, the sections of low and high values appear alternately. The longest section is G and the rest are exhibiting similar sizes. In comparison with the first street the sections are more similar in their sizes; therefore, the highest and lowest values are more equally distributed. The transitions between different street characters based on visual permeability are changing in similar frequency along the whole street.
The third street exhibits lower diversity compared with the first and second street in terms of different values of the visual permeability (Fig. 6.6.). The values are closer to the average.
The changes between different values of visual permeability shift from one value to the

Fig. 6.5. Street2: results based on visual permeability
other 29 times along the street. Based on the similarities and clusters of values of visual permeability there are four sections (Fig. 6.6. L, M, N, O). The sections M and O show lower values and L and N show higher values of visual permeability. However, the contrast between the values is not highly comprehensible. The smallest section is M and other three
sections have similar length. The highest and lowest values appear alternately. The transition between different street characters based on visual permeability is changing in similar frequency along the whole street.

First two streets are having similar diversity in terms of different values of visual permeability. The third street has lowest diversity, and values are close to the average. In terms of distribution of the values all streets are showing similar tendency of high number of different values along the streets. Interestingly, in terms of sections along the streets, all streets have the same distributions of successively changing high and low values along the street. That characteristic will be examined in detail in the next sections of this chapter.

The comparison between the three streets in terms of highest and lowest values of visual permeability shows that all streets have different character. First street exhibits the highest number of lowest values which tend to be small. The second and third street have longer but lower numbers of low values of visual permeability. The highest values are least present

![Comparison of extreme values of visual permeability between all three streets](image)

Fig 6.7. Comparison of extreme values of visual permeability between all three streets

in the third street and are equally distributed along the first and second street (Fig. 6.7.).
It was expected that streets which are only residential and have smaller width will exhibit the characteristics of higher visual permeability of the houses; however that is not the case in Nezu. In general the opposite was found. The street two and three which are dominantly residential are showing higher numbers of lowest values of visual permeability (especially the third street). In these streets there is large number of buildings that show very low level of openness. The fact that large number of buildings shows lower level of visual permeability and that all the classes are homogeneously distributed in this area questions the role of visual permeability in the definition of privateness and publicness of the streets. However, the link between privateness of the street and low values of visual permeability is not a simple one. The detailed analysis of the openings in this area has shown that particular openings (related with the lower values of visual permeability) are creating the possibilities for the appearance of veils and other soft elements which contribute to the sense of domestic. The question between quantitative and qualitative aspects of visual permeability is raised in terms of the measurability. The veils are bringing the meanings and feelings which are not related to simple measurement of the possibility to see. Rather this raises the questions of possibility to feel. That possibility is highly important for the identity. Therefore, the low values of visual permeability are in further analysis considered to be an indicator of the contribution to the private character of the streets.

6.2. Typology of public-private interface and street character

In order to address the second zone of public-private interface (Fig. 3.7.) the analysis based on the types of interfaces was conducted. At the Nezu and Sendagi scale the analysis of the types was focused on mapping the types on the level of the each building. This analysis focuses on the character that each type of public-private interface is generating along the streets. For that purpose the connections between the types of public-private interfaces on the both sides of the street were considered. Based on the relationships of the types of public-private interface on the both sides of the streets the values were assigned to each possible connection. There were six different values (Fig. 3.10.). Type I and II are forming most private character of the street and type V and VI are creating most public sense of the street. The highest contribution to the privatness and sense of closeness in the street is shown with the darkest shades of grey. The highest contribution to the publicness is shown with the lightest shade of grey and represents the lowest values of the sense of closeness. Between those two extremes there are different degrees of public and private character on the streets. The values are representing a intensity of the privatness or closeness in the street, due to their definition of number of types gathered in the area. The values are always

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80 The 2013 master thesis conducted in co+labo by Charles Lemonier
81 Explained in detail in section 3.4.7.
mixture between public and private senses of the streets. Therefore, they are represented as high and low values. The highest values of the private sense of the street comprise the public sense as well. However, the sense of private is dominant. The same is applicable for each assigned value. The analysis was separately conducted on the three streets in Nezu (Fig. 6.3.). The values of privatness and publicness were transferred on the stripes. The length of each value on the stripe is determined with the length of the street facade of the house. In the cases of empty plots the value was calculated as defining the public sense of the street.

The results are showing that all streets have different values of the publicness and privatness. The number and length of each value differs in the three streets. For the purpose of description the streets were divided in the sections. Sections were defined with clustering of the similar values.

The first street exhibits low levels of diversity in terms of the values of privatness (Fig. 6.8.). The change between different values of the privatness is appearing eight times along the whole street. In order to explain sense of privatness and closeness the street was divided in five sections (Fig. 6.8. A, B, C, D, and E). The sections A, C, and E are showing low values of privatness contributing to more public character of the street. The sections B and D are showing high values of privatness and therefore contributing to the character of private on the street. The longest section is B which shows very high values of privatness. The high and low values of privatness are alternately appearing along the street. The transition from one character of the street to another is more frequent on the second part of the street (from C to E).

The second street exhibits higher levels of diversity of different values of privatness (Fig. 6.9.). The changes between different values are appearing twelve times along the street. Based on the gathering of similar values along the street five sections were defined (Fig, 6.9. F, G, H, I, and J). The sections F and H are showing low values of privatness. The sections G and I are showing high values of privatness and contributing to the private character of the street. The J section represents mix between both high and low values. The longest sections are G and I and comprise very high values of privatness. Similar to the first street the highest and lowest values appear alternately along the street. In general, the second street has longer zones of high values of the privatness compared with the first street.
the same time, the low values are closer to the medium values (except in section H).

Fig 6.8. Street 1: Typology of the public-private interface and the street character
Fig 6.9. Street 2: Typology of the public-private interface and the street character
The third street exhibits similar diversity as the second street in terms of different values of privateness (Fig. 6.10.). However, the distribution of the values is different compared with first and second streets. The values comprise smaller lengths of the street. The change between the values appears eighteen times along the street. The sections represent different
mixtures of the values rather than clustering as in the previous two streets. There are four sections (Fig. 6.10. K, L, M, and N). The sections K and M are showing lower values of the privateness, however close to the medium. The sections L and N are represented with the mixture of the high and medium values, and therefore contribute to the private sense of the streets. Those two sections are also longer and therefore contribute to the private sense of the street in general. That is also supported with the fact that even lower values are close to the medium. In terms of interfaces this street exhibits highest levels of privateness compared with the previous two streets.

![Diagram of privateness and publicness for streets 1, 2, and 3](image)

Fig 6.11.Comparison of extreme values of public and private between all three streets

In terms of different values of privateness and publicness in all streets the third street exhibits the higher diversity (Fig. 6.11.). The first street has the longest parts of the street that exhibit the same values. The third street has the smallest length of the same values along the street. The comparison of the three streets in terms of highest and lowest values of privateness all three streets have different characteristics. In terms of highest values first and second streets display similar characteristics. The highest values comprise long parts of the
streets and there are only two zones. The third street has five zones of highest values of privateness and consequently they are smaller. In terms of lowest values only second and third street show their presence. Both streets have one zone of lowest values. The second street has longer zone of publicness.

In general all streets are showing higher presence of the privateness than publicness in terms of public-private interface.

6.3. Assessment of ephemeral elements and street character

In order to assess the third zone of public private interface the photographic survey and streetscape analysis were conducted\(^\text{82}\). The analysis focuses on the character of publicness or privateness of the street based on the presence of private-personal objects in the public sphere of the street. The higher level of privateness is considered to be defined through larger number of private objects present in the street and vice versa. However, the measurement is not based on the actual number of elements present in the street but upon the perceived quantity of those elements. Namely, the level of privateness is defined with the ratio of pixels that represent the objects and the total number of pixels in the whole picture. It is defined in the percentage. For the purpose of this analysis three streets in Nezu were selected (Fig. 6.3.). The values calculated at each segment of the street were transferred at the stripe in order to be comparable with the visual permeability and public-private interface results. Due to the fact that each photograph presents approximately 7.5 m of the length of street the values of each photograph were distributed in that length. Opposed to the first two methods that had length of the values based on the facade length; the length here is the same for each value.

The total number of 61 images was taken and analyzed at all three streets. The highest value for all photographs was 32% and the lowest 0% indicating that there are no ephemeral objects present in the street. Based on the ratio of elements present on the photographs and defined in the percentage, the classes of different ratios were created. Class 1 has the largest and class 5 the lowest coverage ratio of ephemeral objects. To class 1 belong all the photographs that have ratio of ephemeral objects more than 20%. Class 2 has coverage between 15 and 20 percentages. Class 3 between 10 and 15%; class 4 between 5 and 10% and class 5 less than 5% of coverage. Class 1 contributes to the private sense of the street and class 5 to the public sense (appendix D).

First street shows high levels of diversity in terms of presence of each class along the street (Fig. 6.12). Furthermore, the shift between different values along the street appears sixteen

\(^{82}\) The method is explained in detail in the section 3.4.8. and data are shown at the appendix D
times. Based on the similarities and closeness of the values four different segments were defined along the street (Fig. 6.12. A, B, C, and D). The A and C areas show significantly higher range of objects compared with the areas B and D. The spatial distributions shows that A and C areas are significantly longer than the B and D areas. Therefore, the B and D areas can be considered as discontinuities in this street, and furthermore they are appearing alternately, with high range followed by low range (high-low-high-low).

Although similar in quantity the A and C areas have unlike distribution of ephemeral objects. The A area of the street shows tendency towards more equally distributed objects. Namely, objects are located at both sides of the street. The C area of the street has unequal distribution of ephemeral objects, located only at one side of the street. In the same time, although similar in their averages the A and C area have different ratios and sizes on their subsequent segments. The A area is more diverse in terms of different classes of ratio compared with the C area which is more unified.

Due to the fact that longer parts of the street are showing highest values of presence of ephemeral objects contributes to the general sense of enclosed and more private sense of the street.

The second street shows less diversity compared with the first street in terms of the presence of different classes (Fig. 6.13.). Furthermore, the changes between different values of the ratios are shifting from one value to another fourteen times. Based on the similarities of values and their successiveness along the street there are five sections (Fig. 6.13. named: E, F, G, H, and I). The areas that show higher range of objects present in the streets are F and H. Areas E, G and I have lower to medium ranges of the objects present at the street. The values of high and low ranges are distributed alternately along the street following the similar pattern as in the street 1 (low-high-low-high-low).
Fig 6.12. Street 1: the ratio of ephemeral/personal belongings along the street
The areas E, G and I are longer compared with the areas of very high ratios of objects on the streets. In the street 2 areas F and H become the discontinuities compared with the opposite situation in the first street.
The position of the elements along the street 2 also varies. In the E, F and lower part of the G segment (while on the upper segment the distribution shifts to the other side) the objects are dominantly located at one side of the street. The segments H and I show equal distribution of the objects on both sides of the street. In terms of quantity of elements both

Fig 6.14. Street 3: the ratio of ephemeral/personal belongings along the street
F and H areas have the same ratios which belong to the class 1 and show high level of homogeneity.

The third street exhibits high diversity in terms of presence of different classes of ratios (Fig. 6.14.). It contains all the classes along the street. However, different values shift along the street only eleven times. In terms of similarities of ratios and their successiveness there are only three sections of the street (Fig. 6.14. named: J, K, and L). The segments J and L show in average higher ratio of objects compared to the middle segment K. The difference in length is not as clear as in the previous two streets. Segment K is the longest segment, having the lowest values. The distribution of the high and low values of the range of objects follows the similar sequential pattern as in the previous two streets (high-low-high).

The distribution of the objects on the third street also varies. The lower parts of the J segment and the L segment have equally distributed objects on both sides of the streets. The upper part of the J segment has objects present on the one side of the street. Although determined with higher values of ratio of ephemeral elements segments J and L are not homogeneous. They comprise the classes of medium to high range. However, the K section is homogeneous having only one class and contributing to the sense of publicness.

Comparisons of lowest and highest values of ratios of ephemeral elements are showing that lowest values are most present in all three streets (Fig. 6.15.). The highest values are mostly

![Comparison of extreme values of ratios of ephemeral objects between all three streets](image-url)
present at the first street while second and third have the same number of highest ratios. That contributes to the higher intensity of the sense of privateness in the streets; however, the segments are small. On the other hand, the low values of ratio of ephemeral elements which contributes to the sense of publicness is present in higher numbers and significantly larger lengths in all three streets. First and third streets have three segments of lowest values and the second street has five. Interestingly, in all streets the longest segment of the lowest values appears at their middle parts. It is the longest at the third street.

The analysis has shown that presence of ephemeral elements is not equally distributed in all streets. Furthermore, the highest level of presence is showing lower frequency. However, the patterns which were appearing at the analysis of visual permeability and types of public private interface is also found at the level of ephemeral elements. The high and low values are alternately changing along the streets.

6.4. Assembling the zones of public-private interface

In order to assess all zones of public-private interface the relationships of interiority were introduced. The relationships comprise all the elements in one scale and address their connections. All three variables (visual permeability, interface types and ephemeral elements) were considered in this analysis. The relationships were analysed per each street separately.

The analysis is conducted from the aspects of private sense produced by public-private interface at the street. Therefore, if the particular characteristics of different values are gathered in one area then they will produce particular level of intensity of privateness. Namely, if the highest values of all variables which are describing the zones of interface are gathered in one space then they will produce the highest intensity of privateness in the street character. More specifically, if the facades on both sides of the street are visually very closed (visual permeability is low), the interface belongs to the type 1 (the interface is smallest in the size and the contact between public and private is direct) and there is high ratio of ephemeral elements present in the street then that part of the street will have highest intensity of privateness. That intensity is related with sense of the privateness. Namely, the space of the street is public; however, the sense of the street is private. Therefore, it is defined as intensity of privateness meaning that each street always contains both. What is defined with the intensity of privateness is the ratio between the public and private. Furthermore, this intensity is not actual, it is related with the perception, experience and feeling. The assumption is that the more elements that contribute to the private sense of the street are gathered in limited space, they will produce higher intensity of privateness.
In order to analyse the relationships between zones only highest and lowest values were chosen from all variables: visual permeability, public-private interface types and ephemeral elements. The highest and lowest values will produce the highest and lowest intensities of privateness. Furthermore, analysis of each of the variable has shown that high and low values tend to cluster in those three streets in Nezu. Therefore, by examining only highest and lowest values we can assume that similar processes are happening with the other values. Furthermore, highest and lowest values are the ones that highly contribute to the intensity and therefore were chosen for this analysis. On the other hand, analysis of all values will be more complex and difficult to draw conclusions.
The analysis uses the method already developed for each of the variable-the stripes along the street. The method consists of two operations. Firstly, highest and lowest values were
extracted with their original position and size from each of the variable and for each street separately (Fig. 6.16.). Secondly, the highest and lowest values were separated and gathered for each street. The results are shown for each street separately, having six stripes. Three stripes are showing highest and three strips are showing lowest values. Each stripe represents one zone of public-private interface (Fig. 6.17.).

The results are showing that in terms of spatial distribution and sizes of highest and lowest values they tend to cluster in space, and therefore are producing the zones of highest and lowest intensities. Zone of high intensity is produced with clustering of only highest values. Similarly, the zone of low intensity is produced by clustering of only low values. If the values were mixed it was considered as mix zone. There are fifteen different zones present in all three streets. Mixing values are present in only four zones along all three streets (Fig. 6.17.). There are six zones of low intensity and five zones of high intensity.

The first street shows the longest zones and therefore the lowest in number (only four zones), compared with two other streets (Fig. 6.17.). Furthermore, the first street has very long zones of high values and small zones of low values. At the beginning of the street there is a long zone of mixed values of high and low. However, the size of the high values is bigger that the low values. Therefore, this is mixed zone with the tendency towards higher intensity of privateness. This part of the street is also mixed in terms of function; it comprises both residential and commercial buildings.

The second street has six zones of different intensity of privateness (Fig. 6.17.). The sizes of zones are smaller than at the previous street. There are three zones of low intensity, two zones of high and one of mix intensity of privateness. The zones of high and low are alternately changing along the street. The zone of mix intensity is dominantly related with low intensities due to the size and number of high intensity values present in this area. The sizes of both low and high intensities are the same, creating certain rhythm of change of intensities.

The third street has five zones of different intensity of privateness (Fig. 6.17.). It has two zones of high intensity of privateness at the ends of the street, one zone of low intensity at the middle of the street and two zones of mixed intensity. The zones of mix intensity have almost similar quantities of both high and low values. The southern mix zone comprises long area of the street. The rest of the zones are similar in their sizes. This street has slightly different structure in terms of the intensity compared with the first two streets. It starts with very high intensity of the privateness, which is then gradually reduced through mixed zone to the zone of low intensity and dominantly public sense of the street. Further along the street, the intensity of privateness is increasing through change from mix zone to the high
intensity of privates on the other end of the street. In terms of change between the intensities this street shows gradual change. The rhythm is less dynamic compared with the first two streets.

The analysis has shown that the highest and lowest values which highly contribute to creation of different characters of the streets tend to cluster. This fact plays important role in creation of the character along the streets. It generates different intensities of privateness. Furthermore, the fact that values are showing tendency not to mix creates larger differences in intensity of privateness along the three streets.

Fig 6.17. The results of all variables and the zones of intensities of privatenueness
The high and low intensities of private character of the streets are appearing in similar numbers. Although there is a link between character of this streets and Shitamachi through spatial intimacy or higher levels of privacy, this analysis has shown that streets are not homogeneous in those terms. There are extreme private and public senses of the streets. Furthermore, they are appearing alternately along the streets.

Walking along those streets, one can experience successive change of the character of the street in terms of public and private. This shows dynamic character of the experience. Furthermore, the contrast between extremes creates certain tension in the space. That tension is intensifying the experience and contributes to the perception of privateness. Namely, there is a constancy of surprise in experiencing those streets. The surprise appears in relation to what is expected to be seen in this place-Shitamachi. Therefore, the narratives about the place have important role, but the existence of the opposite extreme (publicness in this case) also plays very important role. In a certain way it is a reminder of what is lost and belongs to the past. Furthermore, the zones of high intensity of privateness are smaller in their size compared with the zones of low intensity. In that way, the privateness gains higher value, it becomes vulnerable, and more precious.

This analysis shows that there are important relationships between elements of built environment. It also shows that they tend to create more intensive experience when they are analysed as a whole. Namely, the analysis of only privateness in Nezu wouldn’t generate understanding of the role that it has in the assemblage. The analysis has shown that its relationship with the opposite character-public, gives an important insight in the processes of evoking the sense of Shitamachi. Furthermore, the analysis has shown that considering all zones of public-private interface they tend to create very clear characters and boundaries then observed separately. Therefore, the analysis supports the hypothesis that relationships between elements are important for the persistence of the identity in Yanesen.

6.5. Discussion

The analysis of public-private interface in Nezu has shown that there are different characteristics of the street produced in different relationships. Namely, gathering of elements that contribute to the private or to the public sense of the street creates zones of different intensities of privateness. Furthermore, the difference in zones is related with the difference in degree and contributes to the identity of this area. The differences and their repetitions along the streets are generating certain intensity in experience of this place and evoke the identity based on the spatial intimacy and Shitamachi character.
The character of Shitamachi is related to everyday life and ordinary and therefore could be found almost anywhere. It could be argued that due to that fact the intensity of privateness which is opposed to the intensity of publicness and number of their repetitions are evoking the sense of old Shitamachi character. The question raised by this is would the same method and similar findings be possible if the identity of the place is related with extraordinary. Namely, the question related to the necessary difference in the built environment which was found to be important for the identity in Yanesen. If identity of the place is defined through extraordinary elements of the place, then the difference might not be that important as the element itself. Furthermore, it could be questioned if the identity would be then less flexible in terms of change of built environment.

The method of stripes along the streets has been found to be very effective in terms of comparisons of different streets as well as different values in the same street. It allows analysing street in its segments rather than through its average values. The method is useful in description of the street character based on different values. It allows the analysis of the relationships between different elements or values and can combine high number of variables. Therefore, it represents a useful tool for analysis of the street as assemblage.

Limitations of the analyses in this chapter are related with the number of variables and the analysis. Namely, the aim of this analysis was to define the ways in which built environment contributes to the sense of spatial intimacy that was equated with the sense of privateness. Those terms are close but not the same. The spatial intimacy should be closer to the Japanese term of *uchi* that comprises in itself more than just private. It is related to safety, intimacy, informal, friendly and so forth. The analysis conducted in this thesis has covered only one segment of the concept of *uchi*. The need for qualitative aspects of the space that contribute to the spatial intimacy should be further analysed. However this thesis was interested in the physical aspects of the place and therefore the analysis was conducted only on those aspects.

The analysis has shown that visual permeability is not representing the variable that directly affects the sense of privateness. Namely, it was shown that more visually close facades are also producing the sense of privateness. There were number of examples in which the windows or doors were covered with the bamboo screens. Those shutters are reducing visual permeability, however in the same time are contributing to the sense of tradition. The bamboo can be easily linked with traditional elements in Japanese architecture and although not directly creating sense of private it creates sense of old and indigenous.

Analysis of the visual permeability does not completely describe the spatial intimacy. The author had noticed that smell and sound also play very important role in Nezu. Namely, the
narrowness of the streets generates the environment with almost no car, and consequently almost no noise. Those three streets are very quiet. Therefore, in the spaces were public-private interface becomes very narrow and the contact between public and private very direct one can hear the private lives of the people inside their houses (conversations, plates and glasses during the lunch time, cooking, watching television and so forth). Although not visually present, they are present in the public space with the sound. Similar is evoked with different smells from food to laundry. The experience of these streets involves all the senses. However, that was not the objective of this analysis.

For the analysis of the types of the public-private interface the materialization and the structure of the boundary were not considered. Namely, the ways in which public space and private space are marked (fence, difference in pavement, in colour, difference in the height and so forth). Those elements also define the character of the streets. Those elements were included in different types of the public-private interface but not analysed separately (for example the type III of the public private interface will usually have fence and the type I will have difference in the height between the street and the entrance to the building and so forth).

The analysis of ephemeral elements was considering all the private belongings present in the street that contribute to the private character of the streets. However, different elements will have different meanings as well, and evoke more than just a fact that they are private. For example, small potted plants can be in many cases associated with the Japanese *ikebana*. That brings the notions of tradition, indigenous practices, important for the Japanese culture. Bicycles are showing a particular way of life. That life is slow and in a way divorced from the progress and technology. That is related with persistence rather than change. Therefore, not only the quantity of each element contributes equally to the sense of the privateness but different elements have different meanings. Some are therefore, more important than others. The analysis was not considered the meaning of any analysed object. That is due to the fact that the objective of the analysis is related with the contribution of the physical setting of the place to the persistence of the identity. The analysis of the meanings could provide higher comprehensiveness of the understanding of place. However, that analysis would acquire the qualitative approach and address different groups of people and their understanding of the meaning that each element brings to the place.

The final part of this chapter focused on assembling all the elements and understanding the relationships between them. Furthermore, it aims to grasp the ways in which those relationships are contributing to the character of the streets. The analysis was conducted for only highest and lowest values of all variables. Although, the highest and lowest values have
the capacity to produce the highest and lowest intensities all the elements in the space are contributing to the character. Consequently, this represents only partial explanations of the character of the streets based on the intensity of the privateness. Furthermore, the analysis was based only on elements present in the streets and their relationships. In order to gain more comprehensive analysis the qualitative study should be also conducted. Namely, in order to support the intensity of privateness the questionnaire should be conducted, comprising different groups of people and their feelings of private and public. The physical setting with its particular characteristics represents only a stage for those senses to appear. That particular structure of the built environment does not necessarily produce the sense of spatial intimacy. It produces the possibility to be evoked and felt. However, that highly depends on the each person’s individual sensibility as well as culture and knowledge.

In general, the analyses conducted in this scale are more detailed and related with the experiences and perceptions. Therefore, they include direct relationships between people and built environment. Analyses on the scale of Yanesen and Nezu and Sendagi did not include such direct links between person and built environment. This scale has shown that there is a need for more qualitative approach. However, due to the fact that this scale analysis was not primary focus of this thesis, the qualitative analysis was dismissed. On the other hand it has shown that in order to conduct a comprehensive analysis of the place qualitative approach becomes more important in more detailed scales. Furthermore, for comprehensive understanding of the identity of the place both qualitative and quantitative aspects are necessary.
This chapter presents contributions of the advanced method, which is developed within this thesis, to studies of cultural sustainability, urban identity and, in particular, to complex dialectics between change and persistence in built environments. The principal aim of this thesis was to develop an approach to understanding of the relationships between change (of built environments) and persistence (of the identity of place). A complex approach to investigation of the identity of place was developed, by iterative observations and analysis of diverse, concrete relationships between multiple aspects of place. These conclusions discuss achieved methodological advances to assemblage theory in its application to specific case studies. The particular conclusions deriving from the case study of the Tokyo precinct of Yanesen are presented first, followed by the set of general conclusions about concrete contributions to the assemblage methodology.

The subheadings presented below open with brief summaries of the key points, followed by the more detailed elaboration.

7.1. The changes of built environment and mechanisms for persistence of the identity of place in Yanesen

The results from the assemblage analysis of change and persistence of elements of built components of Yanesen developed within this thesis have shown that change of the built environment itself has the capacity to produce significant persistences in the identity of place. Furthermore, the analysis has enhanced explanations of the processes which enable such persistences of the identity of the places, thus answering the question of how persistences emerge and sustain themselves over time (in this Thesis, at the example of Yanesen area of Tokyo).

The results of the developed assemblage analysis have significantly contributed to better understanding of the processes of maintenance of the identity of place. This thesis has identified four mechanisms for comprehensive understanding of the relationship between change of the built environment and persistence of the identity of place. Those mechanisms are:

1) The relationships of interiority between the elements of the built environment

2) The expressive role of the elements of the built environment

3) The relationships of exteriority between the elements of the built environment
4) The persistence of identity, comprehensible when the place is observed as a whole

7.1.1. The relationships of interiority between the elements of the built environment

The relationships of interiority appear at the level of each group of elements of built environment (streets, blocks, plots, building footprint and public-private interface) and across the groups, by clustering of their similar characteristics in particular locations.

(1) The persistence of individual elements of built environment

The example of Yanesen shows that the persistence of the elements of the built environment is not directly related to the elements themselves. The results of the analysis of change of each of the elements of the built environment show that there is no significant permanence in terms of their size\(^83\). The size of elements of built environment is important because it directly supports the identity of place in Yanesen\(^84\). Therefore, the characteristic found to be important for the identity of the place is not preserved, as it is dynamic and it changes over time. The case of Yanesen shows that it is not necessary to preserve the physical elements of built environment for the identity of place to persist.

(2) The relationships between the elements of the built environment in the same group

The results of the analysis of Yanesen also show how the relationships of interiority between the elements of built environment are not preserved. The clusters of elements of built environment analysed separately for each of the groups of elements (streets, blocks, plots, building footprint) change their size and the position\(^85\). Furthermore, there are no general patterns in terms of change in which each element changes in the same way and degree (i.e. decreasing or increasing in size). All elements exhibit different degrees of change. However, the change of elements of the built environment is not entirely chaotic. The results of the PCA analysis have shown that the sizes of elements change within certain limits, exhibiting tendency towards cyclical change\(^86\). These results illustrate that it is not necessary for the elements of built environment to change in the same way in order to cause persistence of the identity of place. Thus, the diversity of change can produce persistence. Furthermore, the case of Yanesen shows that places need to be observed as complex systems,

\(^{83}\) For more details see section 5.1.9. and appendix B tables of degree of change of each element of built environment

\(^{84}\) For more details see section 4.1.3.

\(^{85}\) For more details see section 5.1.2. and Fig. 5.12.

\(^{86}\) For more details see section 5.1.8. and Fig. 5.25.
in which it is not necessary to preserve the characteristics at particular locations, but to be aware of diversity of the system as a whole.

(3) **The relationships between elements of the built environment across the groups**

The clusters of sizes (smallness or bigness) are more stable over time when observed through the relationships between elements across groups (creating the intensity of smallness or bigness). The zones of various intensities of smallness show the tendency to maintain the character of their locations in Yanesen, as well as the sizes of the zones\(^{87}\). Such zones in Nezu-Sendagi exhibit less dynamic changes compared with the dynamics of change of each individual element. Therefore, although the elements of built environment change, their relationships show higher levels of stability. That is in accordance with the key definition of assemblage, where the relationships between elements are identified as equally important as the elements themselves. Furthermore, this stresses that assemblage indeed is the state of affairs, rather than the collection of parts and thus confirms the definition of place as assemblage (Dovey, 2010: 16).

This mechanism enables elements of built environment to change within particular limits and produce the same intensity of the zone, based on the relationships of interiority between elements which belong to different groups. Consequently, in the case of Yanesen, the relationships of interiority make an important mechanism for persistence of the identity of place.

7.1.2. **The expressive role of the elements of the built environment**

(1) **Expressive qualities and the relationships**

The expressive role of elements of built environment is critically related to resemblance, and it makes an important mechanism for persistence of the identity of place. The most common analysis of the identity of place based on the past focuses on objects in space (commonly buildings) and it seeks resemblance over time. The case of Yanesen has shown that expressive role of built environment is not necessary based upon the objects, but can be defined by relationships\(^{88}\) between the objects – and this thesis broadened the definition of expressiveness of built environment. Consequently, the identified mechanism can be further used in the analysis of ordinary places, places with various levels of strength of the identity of the place, and places which do not have any iconic or conserved buildings from the past.

\(^{87}\) For more details see section 5.1.3.

\(^{88}\) For more details see section 5.1.9.
Expressive qualities and change of elements of built environment

The analysis of Yanesen has shown that the elements of built environment do not exhibit persistence in terms of their material role. The persistence emerges from the expressive qualities, which are defined by the relationships between elements of the same group (streets, blocks, plots, and building footprint), at the same scale. The analysis has shown that elements can persist in terms of their expressive role even if they change. That is possible only if the relationships with other elements of the assemblage exhibit similar characteristics before and after the change in built environment occur. Namely, the quality of smallness is defined in relation to the other extreme in the assemblage - the bigness. Thus, if after the change of all elements in the assemblage the smallness can be still distinguished (perceived) in the relationship with the other extreme, then the expressive role of the element is preserved, and the identity is persistent. These situations were found in Yanesen in both cases of change and preservation of elements of the built environment and therefore highly depend on the complexity of assemblage as a whole. Consequently, this supports the argument that there is a need for the characteristics of built environment to be approached without losing the complexity of the whole assemblage.

Expressive qualities and becoming

The results of the analysis of Yanesen have shown that expressive qualities of the built environment can be linked with concepts of being and becoming. The results, thus, contribute to further definition and illustration of key characteristics of the concept of becoming. In the case of Yanesen, the identity is based on the quality of smallness (that is its expressive quality). Other places might have different qualities. For example, the place can base its identity upon particular kind of facades of buildings. In that case, the shape, colour and other characteristics of the facade will play an expressive role in the assemblage. The change of the facades will result in the shift in identity. In that particular situation, the identity will be based on being, and not on becoming, due to the static character of expressive role defined by certain concrete objects. This illustrates that being and becoming are dependable on the expressive qualities of place. Thus, being finds its place in the general idea of becoming. In the case of Yanesen the identity is based upon characteristics which are not linked with objects in space, but with their particular quality. The smallness is a generic quality that can be produced in space in multiple ways. It, therefore, offers high level of flexibility of built environments, and good examples of places in becoming.
finding reframes current debates about place and identity, and advances definition of becoming explicitly related to place. The being and becoming are states which any location can have and lose through time.

7.1.3. The relationships of exteriority between the elements of built environment

(1) The macro relationships of exteriority

The built environment in Yanesen is characterised by both qualities of bigness and smallness at the same time. The capacity of smallness to become dominant expressive quality of that area is due to macro relationships of exteriority, derived from the narratives and the structure of the built environment as a whole (Fig. 7.1.). The narratives about Yanesen emphasize smallness and spatial intimacy in its built environments. Therefore, the visitors expect to experience the small and intimate spaces. In that sense the opposite character becomes very important for definition of the relationship with the expected small. In contact with the small, the big creates necessary contrast and tension. Furthermore, the

For more details see section 4.1.1.
experience of Nezu-Sendagi emerges primarily through smallness which is seen as precious, vulnerable and important, especially when contrasted with bigness at an emotional level.

The second relationship of exteriority is related with the structure of assemblage. The analyses of structure of both Yanesen and Nezu-Sendagi scales have shown that built environments are dominantly constituted of elements that possess the quality of smallness. Therefore, the majority of elements of that built environment belongs to the small (size) and they support persistence of the identity of place, within the processes of change. That relationship is highly important, because it supports the sensations which stay in memory - the sensations of small and not the sensations of big.

The two relationships of exteriority equally contribute to the persistence of the identity of place in Yanesen. They are interrelated and they re-produce the identity of place. That is due to the fact that the narratives are based upon concrete built phenomena. They are not external to the identity of place in Yanesen. In that sense, there is no hierarchy between scales and elements. They are all part of the assemblage of place in Yanesen.

**(2) The micro relationships of exteriority**

The micro relationships of exteriority show similar characteristics as macro relationships (Fig. 7.1.). They are related to the analysis of public-private interface. The analysis of public-private interface at the scale of Nezu-Sendagi has shown that the most dominant types are related to two extreme characteristics of the identity of Yanesen. Those characteristics contribute to production of intimate spaces. One is directly linked with Shitamachi (particularly the types I and II, as well as low level of visual permeability and high presence of the ephemeral objects), while the other represents its opposite extreme. The relationships between those two cases and their tendencies to cluster produce similar state of affairs as in the example of sizes. The type of public-private interface linked with Shitamachi is amplified in relation to the opposite extreme. The perception of spatial intimacy can be also linked with the narratives, the characteristics which are expected to be seen. That is possible due to the relationships within the micro scale. More specifically, in Nezu, the elements which contribute to the sense of privateness in the streets show tendency to cluster, and that supports the sense of intimacy. Therefore, the type of interface is supported by elements present at the smaller scale. The character of Shitamachi is amplified by clustering of elements of built environment which create the sensation of intimacy.

94 For more details see section 4.3.; 5.1.1. and Fig. 4.17; 5.1-5.3.
95 For more details see sections 5.2.1. and Fig. 5.28.
96 For more details see section 5.2.2. and Fig. 5.29.
97 For more details see section 6.4. and Fig. 6.17.
Finally, the link between small elements of built environment and direct contact between public and private is important for the persistence of identity of place in Yanesen. The characteristics of the small in built environment and the clusters of types show tendency to gather in the particular parts of Nezu-Sendagi\(^98\). Those zones show tendency to cluster in inner parts of the precinct. That follows general definition of intimate spaces in Shitamachi, which tend to be associated with \textit{ura}\(^99\). Therefore, the resemblance to Shitamachi division of publicness and privateness is supported by the micro relationships of exteriority.

The relationships of exteriority demonstrated significant contribution to definition of the expressive characteristics of elements of built environment. The analysis of Yanesen has shown that none of the relationships between the elements is dominant. They are all part of an assemblage. This supports the fourth mechanism for persistence of the identity of Yanesen.

7.1.4. The persistence of identity, comprehensible when the place is observed as a whole

The methodology developed in this thesis has shown that description of persistence of the identity of place is an assemblage; where one characteristic of the built environment is further amplified by another, forming complex relationships which support the persistence of the identity of place. The persistence of the identity of place in Yanesen is not produced by any single element or the type of element, but in the relationships between all elements of the assemblage. From combination of all relationships, emerges the persistent identity of Yanesen as a place.

In this study, the complex approach to understanding of the relationship of change of built environment and the persistence of the identity of place is achieved by multiplying and re-assembling singular analyses into an assemblage of conclusions. Each individual analysis of any particular aspect of the place conduced in this research belongs to the domain of the measurable. However, the complex relationships between them, which are shown to be the most important for the definition of the place, are challenging our current capacities to measure (as diagram 7.1. has suggested). The assemblage methodology developed in this thesis is advancement in the direction of comprehending the place in its full complexity.

7.2. Key contributions to knowledge

The assemblage methodology developed in this thesis advances application of assemblage theory in urban and architectural studies by redefining and translating the core

\(^98\) For more details see section 5.2.3. and Fig. 5.31.
\(^99\) For more details see the definition of omote/ura at the section 3.4.5. and the structure of the Shitamachi landscapes at 4.1.2.
philosophical concepts into the practice of analysis of place and built environments, in their full physical complexity and dynamics. The thesis contributes to understanding of identity and becoming in assemblage theory from the aspects of place.

Methodological improvements developed in this thesis advance the complex understanding of dynamics of change in built environments, and in particular the analysis of direct relevance to the fields of urban morphological preservation and conservation. The project refines analytical tools for investigation of urban morphology by providing broader view of persistences and their roles in the definition of the identity of place.

The study also advances an intrinsic interrelatedness of assemblage and place theories and provides methodological contributions to the analyses in the field of place making, by broadening the scope and including the commonly overlooked ordinary urban places and practices. As confirmed by application to the concrete case, the refined method enabled an observation of the processes which usually stay hidden behind the expressiveness of various elements of built environment.

7.2.1. Key contributions to the assemblage theory

For the purposes of this investigation, five principal philosophical concepts (non-coherence, becoming, multiplicity, ambiguity and relationships) derived from the assemblage theory were repositioned within place theory, at the example of identity of the place and built environment.

**Non-coherence** in built environment is an important part of the genesis and persistence of identity. Application of this concept has proven to be of critical importance for definition of expressive qualities of the elements of built environment. It also helped confirm that places needs to be observed as whole, and that focusing on only one aspect or dimension of place produces only partial explanations\(^{100}\).

**Becoming** reaffirms change as central to persistence of identity of the place, by connecting two conflicting states: change and conservation. Application of this concept allows observation of change as the non-linear process, because it is part of the complexity of the place\(^ {101}\). It also shows that the built environment can work at multiple states in time, producing persistence of the identity of the place. This thesis also provided evidences that

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\(^{100}\) That was clearly shown at the example of the expressive role of the smallness which was largely supported with the opposite quality of bigness in Yanesen. If the analysis has only focused on smallness, the important aspects emerging from the bigness would be lost.

\(^{101}\) See Fig. 7.1.
becoming is not the only state that place can obtain, that being and becoming are not the opposite points of view, but rather compatible states that each place can have\textsuperscript{102}.

**Multiplicity** advances our understanding of persistence of the identity of the place which is not related to return to any of its previous states (the state before change); rather the new state created which supports the overall, complex identity\textsuperscript{103}. Those multiple states define the persistence of the identity of place and, thus, its becoming. The place has no single state (arche-state) which has to be conserved.

**The concept of ambiguity** contributes to better understanding of the identity of the place as assemblage. The thesis has shown that all descriptions deriving from the various singular analyses of the built environment create explanations of the identity of the place which, themselves, are the assemblages. There is no single statement which defines identity. There are only multiple statements which, when observed together, produce ambiguous descriptions of the place, shedding the light on its complexity.

**The concept of relationships** contributes to understanding of the place in its complexity. Application at the example of Yanesen has shown how the relationships between individual descriptions were necessary for understanding of the mechanisms and processes which cause the persistence of the identity of the place\textsuperscript{104}. Furthermore, the relationships of exteriority were found to be important for stabilizing the identity of the place. In that sense, the analysis of the place from the aspects of scales was found to highly contribute to understanding of the persistence of the identity of the place.

This research shows evidence that assemblage theory can be applied to the study of built environments, and that it is valuable for better understanding of the identity of places through complexity and dynamics. The results of application of the assemblage methodology at analysis of place of Yanesen have shown four mechanisms under which the built environment of place changes and identity of place persists\textsuperscript{105}. Thus, the thesis has proved that the application of assemblage theory is of critical importance for deeper understanding of the persistence of the identity of place.

**7.2.2. Advances toward a complex understanding of the dynamics of change in built environments**

The assemblage methodology developed in this thesis advances urban morphogenetic studies related to preservation and conservation of urban landscapes. The analysis
conducted in this thesis produces a broader view at persistence of the identity of place in which the elements of built environment are not necessarily conserved. The contribution advances an approach to interrogation of built environments as dynamic systems, which can exist in multiple, simultaneous states which can be classified as neither totally conserved nor completely changed.

7.2.3. Advances toward a complex understanding of identity of place in place theory

This thesis advances urban research methodology towards broader understanding of the identity of place. The identity of place is not necessarily based upon elements of built environment. The case of Yanesen has shown that the identity can emerge from various relationships between the elements which constitute a certain place. The thesis, thus, broadens the analyses of the identity of place, which is commonly focused on extraordinary places that contain buildings of high importance, by adding and emphasizing the importance of the generally overlooked, ordinary places.

Assemblage thinking emphasizes the importance of built environments in creation and persistence of the identity of places. In this approach, the identity of places is not merely a transcendental, subjective, and elusive (non-measurable) category, but the one which emerges from all relationships between different elements of a concrete place, by multiplying singular (measurable) points of views. Thus, the analysis developed in this thesis and an understanding of the identity of place mediates between the material and phenomenological, objective and subjective, measurable and non-measurable approach to the identity of place. The thesis advances thinking towards an understanding on places and identities in their full complexity.
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Glossary:

**Assemblage**: is a whole which properties emerge from the relationships between parts. All entities, no matter what is their level of complexity, are defined as assemblages.

**Assemblage methodology**: is based on the concepts deriving from the assemblage theory. The assemblage methodology in this thesis assembles different methods and analytical tools in order to produce the thick descriptions.

**Assembled method**: is a concrete tool for the analysis which represents the part of assemblage methodology. The emphasis is on the interdependence and position of singular method within the larger field of methods which are compatible and illuminating the identity of the place from multiple aspects.

**Assemblage theory**: is complex and non-coherent theory which derives from Deleuze’s (1925–1995) philosophy. The philosophy is largely conceptualized by Delanda into a theory and it is applied to many different fields.

**Becoming**: (opposed to being) is a quality of an assemblage that determines its constant state of morphogenesis.

**Built environment**: human-made surroundings that provide setting for the activities and meaning in process of place making. It can be observed at different scales (e.g. city, neighbourhood, street, house). It consists of different elements (selected elements for the analysis in this thesis are: streets, blocks, plots and buildings).

**Degree of change**: is defined as relative change between the sizes of the same elements of built environment in two successive periods. It is expressed as ratio and is unitless number. Furthermore, it is multiplied by 100 and presented in percentage.

**Deleuze, Gilles**: (1925 –1995) was a French philosopher who, from the early 1960s until his death, wrote influentially on philosophy, literature, film, and fine art. His most popular works were the two volumes of *Capitalism and Schizophrenia: Anti-Oedipus* (1972) and *A Thousand Plateaus* (1980), both co-written with Félix Guattari. His metaphysical treatise *Difference and Repetition* (1968) is considered by many scholars to be his magnum opus.

**Diachronic identity**: relationships between single object in different points in time.

**Edo**: former Tokyo also the name of the period from 1601 to 1868.

**Essence**: is an element (or group of elements) or quality which defines what the thing (place) is. It is present from the birth of the identity to the final shift in the identity.

**Extensive and qualitative properties**: are defining the characteristics of any entity of the actual reality. Extensive properties refer to the manner of occupying space. They comprise the aspect of dimensions defining the **material role** of an element in an assemblage. The second property of all entities is referred to its qualitative aspects (which define its
**expressive role**. Any entity is never purely extensional or qualitative; they are both simultaneously present in different ranges.

**Expressive qualities**: of the place are deriving from the relationships between the qualitative properties of the elements of the assemblage. Expressive qualities are essential for the definition of the identity of the place.

**Identity of the place**: is defined in this thesis as the quality that is attributed to certain location and highly related to its durability. The identity of the place is one of the essential characteristics of the location which defines it as a place.

**Intensity of smallness**: quantity of elements of built environment that exhibit the characteristics of small per unit of area.

**Mass images of the place** are images of the location constituted by the mass media. When they are used consciously in promotion of certain location they are becoming part of the branding and marketing.

**Multiplicity**: is structure of the space of possibilities that guides morphogenetic processes (becoming) and are not given all at once. It replaces essence in definition of diachronic identity.

**Omote/ura**: represents possible interpretation of the division between public and private, highly related with the particularity of the Japanese culture. It is important aspect of the Shitamachi as an urban character.

**Persistence**: sameness in two successive periods. It can be defined through qualitative or quantitative properties.

**Place**: meaningful location, which finds its basis on people’s experiences.

**Public image of the place** is constituted image of the place based on the consensus between various groups of people.

**Public-private interface**: is the space between the private enclosed sphere of the house and public sphere of the street and posses qualitative characteristics of both public and private.

**Relationships of exteriority and interiority**: important attribute of the elements of the assemblage. First refers to the relationships of elements across scales and latter to the relationships within single scale.

**Resemblance**: is when things are perceived to be the same despite the existence of real change. Therefore, the change is imperceptible.

**Shitamachi**: is complex and floating concept that exhibits high degree of change through time in terms of its meanings and geographical boundaries. It can be defined from the historic, socio-economic and nostalgic aspects. In broadest sense it refers to history of Tokyo and particular part of the city and its urbanity, people and way of living.

**Synchronic identity**: quality which emerges from the relationships between various objects in one point in time.
Territorialization/Deterritorialization: defines the levels of stabilization of the identity of assemblage. It refers to the structure of assembled elements related with homogenization and heterogenization within the processes of individualisation. Any identity represents the mixture of those two extreme states.

Thick and thin descriptions: derive from anthropological research and refer to the method to illuminate the meanings which are hidden behind the appearance of realities. In this thesis the thick description refers to the multiple points of view at the place and their connections.

Virtual, actual and intensive: are three main aspects of reality and in their interaction the identity of an assemblage emerges. Virtual defines the number of possibilities, which are not actual (because they are the possible future states of the assemblage) but are real. Actual is defined with the extensive characteristics of the assemblage (material ole). Intensive is defined with the number of processes which are producing the assemblage.

Visual permeability: level of visual openness of the street facade to the public space. It defines the level of possibility to see from the public realm into the private realm of the building, and as such is defined as important variable that influences the sense of privateness and publicness of the streets.

Yamanote: a hilly part of the Tokyo, which appears during the Edo period (opposite to Shitamachi). The boundaries are hard to determine, however it comprised the high lands west of the castle. During the Edo period it was populated with the high rank warrior class.