Challenges and opportunities in the reuse of abandoned urban space.

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ABSTRACT

Contemporary cities have emerged as a result of diverse urban and architectural transformations, new interventions and redevelopment as well as through a cycle of abandonment and regeneration. New categories of resulting spaces are generated through these processes. Simultaneously, generic spaces are becoming new urban centralities, arguably to the detriment of local identity. City centre malls, for instance, are flattening the uniqueness of the cities by re-proposing similar characters across various locations and contexts.

Non-places, empty spaces and urban voids are cases in point that deserve and require further investigation. Nowadays, in a period of economic recession, developments based on demolitions and reconstructions, are not always suitable. Against this context, areas of abandonment appear to offer potential for development which is at one creative and sensitive to local contexts.

This research explored the urban and architectural phenomenon of abandonment and investigated the discrepancy between academic expected qualitative design of re-use and real solutions often adopted during projects of regeneration.
The study took Aberdeen city as its concrete focus, exploring methods to connect more strongly the environment of cultural challenges (the academy) and the environment of the urban and social priorities (the local government), in an effort to define a network of reciprocal collaborations.

Typo-morphology and rhythmic urban analysis, together with sites observation utilising mental maps, were the main methods used to investigate specific abandoned spaces in Aberdeen. Furthermore, through three urban workshops delivered in collaboration with Aberdeen City Council, Robert Gordon University, International College RGU and the University of South of Florida, the research explored collaborative ways to expand the knowledge of urban and architectural re-use to the practice.

This work represents an original contribution to knowledge through the presentation of a conceptual system of mutual collaboration between the main authorities and institutions within the city of Aberdeen, and proposes a framework for delivering workshops in partnership. On the one hand the school of Architecture may significantly influence the urban evolution through cultural and creative input. On the other, the city council may consider the cognitive process of academic analysis of the city, developing strategies to improve the quality of the city spaces in terms of liveability and valuable social environment.

Key words: Abandoned spaces, non-places, empty space, urban voids, architectural re-use, collaborative design process, urban and architectural workshop, Aberdeen urban system.

Acknowledgements

To my dad,

Roberto Zecca (1950-2017)

A mio padre,

Roberto Zecca (1950-2017)

Con sensibilitá e sottile ironia mi hai fatto conoscere l'immenso mondo dell'arte.

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Figure 124: Queen Street, proposed views of the new belts. From https://www.collaborativeurbanpath.com

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LIST OF ABBREVIATION

ACC: Aberdeen City Council

DMT: Duty Management team

ICRGU: International College Robert Gordon University

LDP: Local Development Plan

LTS: Local Transport Strategy

RGU: Robert Gordon University

USF: University of South of Florida

CHAPTER 1

THE RESEARCH PATH

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This chapter explains the context of the research, and introduces some key related studies.

The research questions, aims and objectives of the research are highlighted along with a summary description of the structure of the thesis, its originality and contribution to knowledge in the field.

1.1 Introduction

This research concerns an investigation into the manner in which a cross-organisational form of collaboration (public, private, educational, municipal) can be developed and applied to help propose innovative solutions to urban challenges.

The specific context of this research involves an investigation of the contemporary phenomena of obsolescence at both urban and building scale. A key term throughout this research is the concept of *abandoned.* It is used to describe the generic urban spaces and buildings that belong to the category of the places used in the analysis.

Abandoned spaces often represent an image of historical architectural ruins related to military, industrial or political remains. However, more recent urban research (Corsaro 2010) adopted this term to outline neglected areas within the urban landscape as a result of the ongoing city expansion over the last forty years.

This phenomenon has led to the development of various typologies for residual and neglected spaces. These include: urban voids; old industrial unused settlements; obsolete infrastructures; which have become new icons of the contemporary urban scenario (Cariello, A., Ferorelli, R., 2014).

The evolution of contemporary urbanity faces what may be the remains of the extensive construction of the modern period in architecture. Rem Koolhaas refers to this as Junk-space (2006). The idea of these spaces belongs also to the theories of generic place where the lack of human identity and "hyper functionalism" take place which is meant as an overabundance of functions. This

work will also draw on the concept of non-places developed firstly by Webber (1964) and later by the anthropologist Marc Auge' (1995).

The literature review considers significant, recent discourse and theories of these contemporary uncertain spaces.

The concept of *Abandonment* is explored as an urban and architectural phenomenon of context's deprivation (urban identity) and social and human function deprivation.

Furthermore, the literature review considers precedent studies in order to understand design actions for re-using those spaces.

The aim of collecting theoretical data and studying precedents is to explore the discrepancy between the theoretical aspects of regeneration and re-use and the real outcomes of regeneration planning of the cities. As stated, at its core the research investigates these urban aspects and proposes methods of regeneration through a specific form of cross-organisational collaboration, within the context of city of abandoned spaces in Aberdeen.

The research questions:

Observing the evolution dynamics in a contemporary urban context and the transformation of historical and social urban tissues, it becomes relevant to reflect on urban and architectural re-use as an opportunity as well as, for improving and developing a more sustainable urban future for the city.

This work addresses the use of theory and design process in order to generate appropriate and informed solutions of re-use in architecture and the urban field more broadly for two main reasons: on the one hand the current economic and environmental recess is increasingly significant. Changes are required

concerning strategies of reuse and recycling of parts of the city. On the other, the only new construction and new intervention around the city may generate, in the point of contact with the old city system, fragments of neglected places or urban voids. (Piano, R. 2015) It is pertinent then, to question why this happens and if it is possible to create a better balance between new and old, considering the importance of the spaces aesthetical, social and cultural value and not just their economic and commercial value.

Focusing on territorial, (Secchi, 1984), (Setti, G. 2013) social (Auge' 1995) and urban (Webber, 1964) (koolhaas, R. 2006) transformations, the research aims to discuss the reuse of abandoned urban buildings and areas. Abandoned places present a complex phenomenon which requires new design, planning and governance approaches and programs based on the principle of alternative solutions to the whole conservation and whole replacement of buildings or areas. These ordinary strategies of intervention (conservation or replacement) are, in the meantime, opposing and extreme and even though they may be fundamental for a "re-activation" of the areas, they often show problematic issues (public opinion, new architecture challenges, loss of traces, and restoration in style) that a more creative and planned strategic reuse are better able to accommodate.

The strategies of re-use, related to abandoned urban spaces, are developed in Aberdeen city as context, through studies and analysis of its territory, architecture identity, and urban analysis, and also through practical projects elaborated, designed, and recorded as part of a collaboration between RGU and the City Council.

Exploring this specific contemporary context and issues further, the research is organised around three research questions that drive the work and structure its content.

- What are the recurrent characteristics (urban and architectural) of abandoned spaces and neglected areas within the cities and how can they be categorised?

- What are the design principles and criteria of re-use related to different type of abandonment or non-spaces concept and how can they be categorised?

- Can cross-organisational and cross-sector collaboration be applied to help instigate, develop and apply positive change in challenging complex urban settings?

1.2   Research background

This PhD work critically reviews on previous research carried out in different countries in order to understand the state-of-the-art around abandoned places issues, the methodologies adopted by researchers to collect information and similar data and to analyse the similarity or diversity of the findings. The underlying research philosophy is formed from an understanding of collaborative practice, which ultimately produced a design workshop model, which emerged through application in the context of Aberdeen ("Aber-net")

The theme of abandoned and urban neglected areas is broadly internationally studied (Cao, U. Romagni, L. Foti, G., 2006). The reason for this focus is the enormous quantity of abandoned buildings, infrastructures, factories, periphery

houses left empty following the industrial economic boom and the property speculation.

1.3 Aims and objectives

At an over-arching level, the research critically evaluates the theories, processes and practice concerning abandoned or underused urban environments, and the collaborative design-led process which can lead to their recovery and re-use. The process of redesigning these spaces is then explored, pursuing a network of practical and concrete collaboration between universities and local authorities.

Defining what may constitute the discrepancies and the similarities between academic and professional/authorities processes and drivers offers the possibility to explore the development of a solid, longer and more engaged interaction between drivers, (the authorities who raise the briefs) and opportunities (including interaction involving Universities through the definition of challenges, methods and solutions).

AIM 1
Q1 What are the recurrent characteristics (urban and architectural) of abandoned spaces and neglected areas within the cities and how can they be categorised? **Q2** What are the design principles and criteria of re-use related to different type of abandonment or non-spaces concept and how can they be categorised?
- To identity the current stage of knowledge of abandoned spaces and unpack this concept in subcategories as contribution to their categorisation. **- To develop a set of design themes and principles and build a conceptual framework in order to test their replicability within the context of urban abandoned areas.** **Objective 1:** to undertake a contextual review of the field of urban and architectural abandonment phenomenon expanding the theories to highlight the importance of the analysis of these existing spaces and the importance of the theory behind practical design approach. **Objective 2:** to undertake reviews of key successful projects (contemporary –

mainly from the 1980s –post industrialisation period - design precedents) and categorise them together to define a theoretical framework of design for abandoned places. (Precedents study profile).

AIM 2
Q3 Can cross-organisational and cross-sector collaboration be applied to help instigate, develop and apply positive change in challenging complex urban settings?
- To develop and test design methodologies using the context of Aberdeen city as case study, while establishing a net of collaborations between local authority and academia in order to address the gap between theory of the projects and current real results. **Objective 3:** to define, and elaborate strategic instruments of analysis regarding the city of Aberdeen and propose potential project approaches (based on the study of the aforementioned precedents) considering council needs. **Objective 4:** to run and establish the structure of workshops in order to: understand Aberdeen city council and academia priorities, individuate abandoned areas in Aberdeen city, research by design possible solutions for the selected sites (through students work) and define needs, challenges and urban opportunities for future collaborations.
AIM 3
Q3 Can cross-organisational and cross-sector collaboration be applied to help instigate, develop and apply positive change in challenging complex urban settings?
- To gather and share developing Forms and Tools (Taxonomy of the abandoned spaces, Taxonomy of design themes and website of input). **Objective 5:** to describe develop processes/models of the principles used within the workshops projects and collect them in a common and shared taxonomy/platform (design protocol) **Objective 6:** to set Aberdeen workshop guidelines for a net of collaborations (University and council)

Table 1: Aims and objectives of the thesis

1.4 Structure of the thesis

The research is conceptualized as a theoretically based yet applied path of urban and architectural regeneration and explores principles and methods of design projects and collaborative projects, establishing design methodologies for abandoned and under-used areas and buildings. The theoretical concepts are

validated in specific areas in Aberdeen city through a stronger collaboration between council and architecture schools, organizing a series of student-led workshops.

Sections of the thesis	
1st	Critical literature reviews of contemporary phenomena of urban obsolescence and precedents study (the case study). Elaboration of methods/criteria to establish architecture and urban principles for designing.
2nd	Analysis of Aberdeen city ill-defined and abandoned areas. Test and validate the design criteria described in the first part of the research through workshops and projects.
3rd	- Defining Aberdeen city re-use guidelines and guidelines for a net of collaborations between academia (schools of architecture) and council. - Collecting the visions and design guideline proposals in a table of taxonomy and a website.

Table 2: Summary of the structure of the thesis

The first part of the thesis contextualizes the urban phenomena of abandoned places and its various conceptualizations of *non-places, empty space* and *urban voids*. This helps to define a general conceptual and analytical frame of the contemporary urban realities in the last thirty to forty years. The study is conducted through a critical analysis and review of the main literature and journals concentrated on the theme of place, aesthetic criteria and concept of identity of place, before shifting the attention to the opposite that describes the idea of abandoned places.

The concepts and literature considered for this work are related not just to architectural and urban themes of ill-defined spaces, but also to Auge' (1995) concept of non-place that concerns the human and social way to perceive and to live in the contemporary city.

This part of the thesis reviews the broad literature around the phenomenon of contemporary cities and abandoned places generated in the last years, considering and consolidating the concept of re-use through an analysis of selected projects as precedent studies.

Therefore, a taxonomy of re-use design has been selected to analyse their recurrent project actions on these kind of city spaces.

The second part of the thesis is focused on a critical analysis of specific areas and buildings of Aberdeen city according to the characteristics of abandoned areas studied in the first part of thesis.

The aforementioned interpretation of the city represents a work of collaboration between academia and Aberdeen City Council carried out through workshops, reflections and dialogue around different points of views and students' proposals. This section then investigates, through applicative experiences of urban workshops in Aberdeen, the construction of a process around the theme of innovation of these areas. In doing so, new synergies and new forms of cooperation between academia and local authorities are proposed as a way to give more space to design experimentation.

The occasion offered by these summer workshops is to propose architectural and urban themes of interventions studied with the selected precedents and also to validate methods able to offer sharable and accurate answers to the local urban needs.

The third part of the thesis is dedicated to define a conceptual framework of the collaborative net-work between RGU and Aberdeen City Council which is titled in this research as "Aber-net". Furthermore, this part defines the significance as a foundation for future reflections and theories for possible urban collaborations evolution of the city.

The work done during the workshops (2016/2017/2018) is focused on the subject of re-use of specific areas of Aberdeen. Reflections on the possible design modus operandi are based on precedents study and overall through graphic urban and architectural proposals. The latter are collected and organized in a taxonomy and on a website, listing and underlining the different categories of these areas and their potentialities in terms of design.

The workshop, based on the experimentation of processes, is used to demonstrate and establish protocol/methods of re-use design projects where the collaboration between RGU and ACC becomes the key point for more creative and sustainable future urban scenarios.

The final outcomes of the path entitled *From Aberdeen to Aber-net*, is representative of the thesis original results. The Taxonomy is proposed as coherent table articulated in design hypotheses for the future urban transformations.

1.5 Original contribution of the thesis

- To advance the understanding on how the concept of the abandoned and ill-defined (non-) places in the urban environment can be refined throughout application. This is carried out by demonstrating Aberdeen city

	as a real case study, individuating specific ill-defined, abandoned areas in its city center.
•	To contribute to the design methodology of re-use projects through specific process of analysis.
•	To test and verifying the methods within the selected areas in Aberdeen through collaborative work between university and local authority (Aber-net) carried out through architectural and urban summer workshops.
•	Creation of a common and shared taxonomy/platform of input and visions raised during the workshops accessible by the academia and the council.

Table 3: Originality of the thesis

The Aberdeen areas considered and selected in collaboration with the planning department of Aberdeen City Council, constitute disused spaces and sites for potential design project actions.

Through urban workshops in Aberdeen city made in collaboration with Aberdeen city council, the research is exploring both theoretical and practical ways to re-design and give value to abandoned and/or under-used places, non-places and voids in Aberdeen.

The importance of critical connection between old and new parts of the city and the transferability of the design methodologies to real cases, from the academy to practice will be tested here.

From an intellectual perspective, the work represents an original contribution to the study of abandoned and ill-defined (non-) spaces in urban areas taking Aberdeen as its specific focus. In particular, the general concept of abandonment is unpacked in subcategories useful to individuate the features of different urban areas and environment. This would help to clarify their urban nature, their role or absence within the city context and help to address projects of regeneration.

In a broad sense, the research explores the importance and benefits of rigorous theoretical analysis and design theory which may positively influence and accompany the practice process. Finally, this work represents a contribution to the practical process of urban regeneration too, through developing methodologies for delivering re-use projects and improving the social and urban environment with coherent projects guidelines as a starting point of the projects of reconversion.

CHAPTER 2

METHODOLOGY

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2.1 Introduction to the methodology

This chapter explains how the research was undertaken and describes the methods used to achieve the aims and objectives of the thesis. The literature review supporting specific urban analysis methods adopted to investigate areas in the city of Aberdeen, is directly discussed in this chapter, paragraph 2.3, while the broader literature and current debates around the theme of abandonment phenomenon are elaborated in the literature review chapter 3.

The methodology adopted in this research relied mainly on qualitative data from a range of sources. The literature review helped to clarify and direct the topic, providing an overview of the themes and current urban phenomena.

Particular attention was paid to the etymology of the nouns used within urban and architectural disciplines and to the methods used in urban analysis, in order to better categorise the spaces and clarify their characteristics.

In addition to this, specific projects of regeneration and re-use were selected as precedent studies. These precedents are analysed through an interpretation of the design themes and principles, applying the theory of the design project and the urban rapport between context and buildings.

> *Analysis is designing backwards.*
>
> *Jerry Wells*
>
> *(in Simitch, A. 2014 p. 14)*

The precedence projects helped and supported the definition of theoretical framework for applicative design solution in Aberdeen.

The analysis of these projects has been conducted through frameworks based on critical review of key literature of contemporary urban and architectural theories. These theories have been elaborated and critically revisited in chapter 3. The retrospective analysis of existing successful projects is organised through a consideration of design themes, principles and criteria summarised in the paragraph3.11. This theoretical data, obtained from projects analysis, have been validated through a quasi-scientific method where the design themes and criteria are tested using the experience of designing. Researching by design is a specific method to validate hypotheses, to produce knowledge (Buchanan, R. 2001;

Heylighen A., Cavallin, H., Bianchin, M. 2009) and moreover to generate additional data related to the main case study, which in this research is Aberdeen city.

As De Jong (2009) noted, when architectural and urban designs are recognisable then the notion of "category" becomes fundamental to clarify and understand the possible design approaches replicable. Involving the activity of categorising design themes is crucial to research through design. This feeds particularly into practical experiments recorded on a step-by-step basis. In this research the practical workshops, organised with Aberdeen City Council, were based on urban analysis and precedents study as main literature; the activities undertaken during the workshops exemplified the concept of research by design and enabled to communicate the results achieved through the design process used.

Etymological study

Urban analysis & precedents study

Classification

Case study - Aberdeen

SIGNIFICANCE OF THE ABANDONED SPACES AND RIGOROUS GUIDES FOR DESIGN APPROACH (practical and collaborative) OF RE-USE
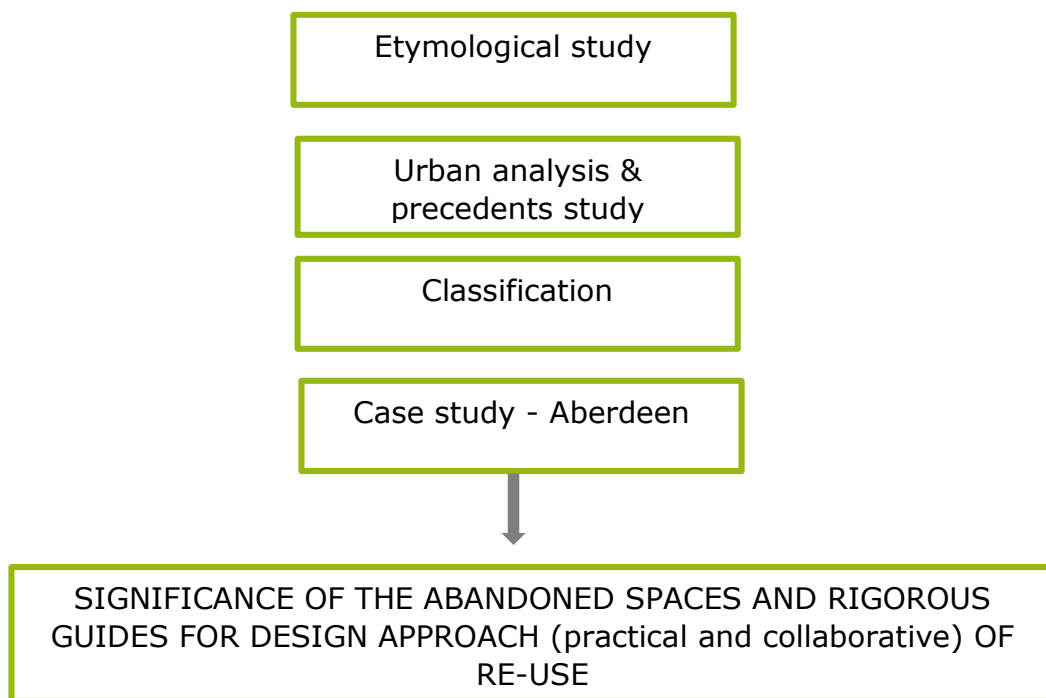
Fig.1 Diagram of the methodology

The theoretical design criteria have been applied through design simulations in specific areas in Aberdeen and the design approaches are also part of the data. In

order to have an objective evaluation of the data, the designs have not been carried out by the researcher rather third party has been involved. In particular, students from architecture schools have participated as designers to the summer workshops undertaken in Aberdeen.

The choice of using practical workshops to test and validate theoretical data and assumptions is based on studies conducted in the literature review (chapter 3) and related to ways of collaboration within urban regeneration projects.

In particular, the analysis of the precedents enabled to better clarify the complexity of dealing with projects of regeneration and highlighted their common characteristic of being delivered through different expertise involvements. For this reason, the literature further investigated three different forms of collaboration, selecting the workshop as valid collaborative method which fills the discrepancy between theory and practice individuated for this research and as stated in chapter 1.

The organisation of summer workshops in Aberdeen specifically used for this research has been described in the paragraph 2.3 of this chapter.

Focusing on urban phenomena, involves different aspects some of which are directly connected to local authority's requirements, decisions and regulations. The summer workshops, have been organised by departments of architecture in collaboration with the planning department of Aberdeen City Council, generating an alternative point of contact between a professional environment and the academy. Despite the school of architecture in Aberdeen being already engaged in other forms of partnership with local authorities, the summer workshops were a new form of collaboration in the city. The impact of the workshops were evaluated through physical observations of the activities and through qualitative

analysis of questionnaire answers given by participants. These methods are explained later in the paragraph 2.4.

 The main active part of each workshop concentrated on students' participation at different stages of their education.

In these respects, the study investigates criteria for urban design solutions while also aiming to generate and intensify this type of collaboration between academia and local authority (Question 3, aim 2 pg.6); for this reason, the literature reviews chapter included a third theme and contextualisation regarding processes of collaboration.

The comprehensive collection of academic and case study resources (Lynch, K. 1960; Rossi, A. 1982; Corsaro, E. 2010; Mareggi, M. 2017), addressed the methodology through a set of research methods:

1) *A Semantic path*, is based on a wide literature related to the use of language and its mental images associations. This method investigated the origin of the words used and addressed the use of them during the analysis and design process.

2) *Information exchange, knowledge exchange*, where data are collected through specific interviews (information) and where the design methodology analysed in the case studies are validated through practical workshops (knowledge).

3) *Reading the city,* is based on the observations of the city of Aberdeen and urban analysis. Through observations of the workshops, this method also practically investigated the city of Aberdeen.

2.2 Overview of the methodology

The combination of theoretical data, case studies, interviews and practical design study enabled the research to triangulate and validate the data.

The collected data was analysed through two methods:

On the one hand a triangulation enabled the research to elucidate comprehensive information and complementary aspects of the same phenomenon ensuring the consistency of the work.

On the other, theory and perspective triangulation method enabled to use the multiple theoretical contents to examine and interpret data from different perspectives.

RESEARCH FOCUS		
1	**2**	**3**
Abandoned spaces investigation	**Applicable design** **principles** investigation	**Process of collaboration** investigation

DATA COLLECTION METHODS		
1	**2**	**3**
• Literature reviews related • Semantic analysis (abandoned place) • Urban analysis	• Literature reviews related • Precedents study • Semantic analysis (design principle) • Practical workshops/observation	• Literature reviews related • Cases study • Interviews • Practical workshops/observation

DATA ANALYSIS METHODS		
1	**2**	**3**
• Triangulations • Categorizing the terms/terminologies • Categorizing the spaces within Aberdeen	• Triangulations • Categorizing the design principle terminologies • Categorizing the design principles/criteria	• Triangulations • Observations (video, final conference of the workshops) • Categorizing design inputs in a taxonomy/website

Table 4: Diagram of research focus, data collection and data analysis methods

In summary, investigating the three main questions of the research (pg. 5) constitutes an original contribution to three main areas:

1) A categorisation of different morphologies of abandoned spaces
2) A categorisation of design solutions connected with the surrounding context
3) A net of expertise

In this regard the methodology is a set of specific methods for each area.

The rationale behind the choice of this selection is related to the phenomenon of abandonment and its urban scale; the necessity to understand and clearly define the design approaches suitable for project of reuse; the necessity to involve different expertise in order to support and master the complex theme of abandonment and its reuse.

RESEARCH FOCUS	APPLICATION	RESULT
Analysis Methods	**Design Methods**	**Collaborative Methods**
- Semantic study - Typo-morphology - Rhythmicity - Observation tour - Mental map	- Precedents study - Semantic study - Interviews	- Literature - Case study - Practical activities - Interviews
Taxonomy	Taxonomy	Workshop structure
SIGNIFICANCE OF THE SPACES AND GUIDE FOR DESIGN	**ARCHITECTURAL COMPOSITION**	**MERGING THE COMPETENCES**

Table 5: Diagram of research focus, data collection and data analysis methods

2.3 The literature review and precedent study

The literature review, analysed for exploring the theme of abandoned areas within the contemporary cities, does not extend back to ideas developed in the eighties.

During this period the debate around derelict places, following the economic industrial evolution, became relevant for the urban and architecture studies and research. In particular, the notion of *non-places* (Augè, M. 1995) has been considered as one of the central fields of investigation and has been applied for the urban and architecture context.

However, the importance of earlier theories in architecture and urbanity, such as the different methods of city analysis and reading proposed by Aldo Rossi (1982) and Kevin Lynch (1960) are adopted as valid approaches for collecting urban data of Aberdeen. Furthermore, the literature review incorporates references related to philosophical consideration on the design process, in particular the notion of etymology of the terms as valid method to consider their significance and thus the significance of the projects.

The precedent studies were selected in order to focus only on cases of adaptive re-use design, and excluded instances that demonstrated historical conservation, restoration, or wholesale demolition.

The project themes of intervention on the existing built environment can be identified through three different macro-categories of approach, conservation, demolition and newly construction and building on built environment.

The thesis investigates the third point of building on within an existing built fabric, thus the re-use of existing buildings or urban areas. This approach explores flexible and innovative solutions of re-use and maintains pre-existing spaces and buildings as collective document of the history. The considered successful projects of re-use (precedents) are related with the themes of conversion, adaptive re-use and coherent affordable intervention of temporary re-use. There is a wide range

of possible project actions and so the analysis is organized around the following criteria:

1) classification of existing abandoned space (e.g. non-place, empty place, void)

2) strategy of intervention and architecture composition (e.g. overlap, fragments)

3) social innovation (e.g. re-appropriation of the space by citizens, new activities)

The use of precedent studies and structured analyses are significant for understanding the value and importance of thought and conscious architecture actions of re-use and for demonstrating that a creative project is not a solo act and reduced to a single idea; rather, it involves knowing several design principles, architectural references and working effectively with the architectural and urban existing context.

Furthermore, on a theoretical level the re-use projects and literature selected do not belong to a specific city or geographical area in order to individuate similar and wider design actions and principle even in different contexts. On the contrary the applied part of the research, where the theories are tested, is focused on Aberdeen city and its abandoned or underused spaces.

Precedents study profile - Summary				
year	**name and use**	**context**	**Architects**	**Rational for selection**
1982	Parc de la Villette 1 & 2	Urban - Paris	Thsumi vs Rem Koolhaas	Fragment of the past
1992	Genoa harbour	Urban/marine - Genoa	R. Piano	Reactivation of obsolete surrounding areas
1998	Parco Dora	Urban - Turin	Jean Pierre Buffi & all, P. Latz	Reactivation of obsolete surrounding areas
1999	Highline Manhattan	Urban – New York	J. Corner, Scofidio	Reactivation of obsolete surrounding areas
2009	Fondaco dei Tedeschi	Urban/marine Venice	OMA	Re-use of historical building
2011	Superkilen Copenhagen	Urban/hilly	BIG Architects, Topotek 1, Superflex	Bird view of the city
2015	Therese Gatein Oslo	Urban	Oslo School of Architecture	Ephemeral reactivation of the urban area

Table 6: Precedents study and rational for selection

The precedent studies demonstrated the importance of the design process and clear design principles related to entire architectural composition that involve different elements, from the context to the old area or building. These projects and the method used to analyse them enabled to define a list of several design criteria (principles) that can be adopted and can lead future adaptive interventions.

For the practical aspect of the workshops, the research literature focused on examples of collaboration underpinned and already established in other cities. The study of different forms of collaboration has been conducted in order to identify the most appropriated format for the case study within the city.

2.4 A Semantic path

The semantic method of investigation was used in this research to explore and unpack the ideas and assumptions embedded in the concepts of abandonment and non-places, and to indicate the design principles' solutions.

Linguistic methods were linked with discourse analysis, which belong to the wider social constructionist approaches and which investigates fixed or changeable meaning of a language. This approach is founded on structuralist and poststructuralist linguistic philosophy (Foucault, M. 1966; Piaget, J. 2015). This involves the notion that human culture can be conceptualised as a text. Its meanings are structured and produced through forms of language and discourse. That is to say, language does not merely describe things it refers to; rather, it actively works to construct them through practices of naming and classifying.

The method used for this PhD research however, is related with the roots of the words and aims to explore their broader etymological context along with their use and abuse in the field of architecture and urbanity. This method helps to gather also important data on the figures and images that these words generate during the design process.

The main purpose of using a semantic method is summarised with Vilèm Flusser's (1995) question:

> How has the word design come to achieve its present-day significance throughout the world?

The philosopher's essay, *On the word design: An etymological essay,* is thus considered as a good method for analysing the words used broadly in urban analysis and design processes. In particular, the approach adopted here is related to an etymological study and related evolutions and changes of the meanings of words. Even if the present research does not focus on the concept of design, Flusser's approach is still a valid option to draw the significance of specific terms used through their etymological and historical changes. Particularly structuring a glossary enabled to identify differences between spaces analysed facilitating their classification, similarly this method helped to construct a table of possible design approaches of re-use.

The use of this method is related to the interest in exploring in depth the relation between architectural/urban discipline and the terms used to describe it and its approaches.

Thus, this relation and cross-disciplines, urban and linguistic disciplines, represent complex social practices (Forty, A. 2000) and the method applied in this research

aims to investigate the etymology and so the meaning of the words (in architecture) to fulfil their objectives according with the idea/image behind them.

Furthermore, this semantic practice enables to create a cognitive-founded and rooted common base of shared discourse during the process of collaboration between academia and local authority.

This consideration is also validated by a document edited in 2013 by Aberdeen city council regarding *Aberdeen Brown Field Urban Capacity Study.* Within the discourse used by Aberdeen city council, *Regeneration Area* is defined and understood in the following way:

> *Areas designated as in need of intervention to improve quality of life, through programmes of **demolition** [emphasis added] and rebuilding of housing. (page 17)*

In a process of collaboration that focuses on neglected or abandoned urban areas, it becomes very important to establish at the beginning the instruments and the methodology of work including the concepts and the significances of the words used from that point forward.

Firstly, this helps to create a taxonomy of significances through an etymological research of the words and their correspondences in other language such as their classic origins (Latin and Greek for example).

This method enables, through an interdisciplinary critical approach, to analysis from different perspectives some key words (Corsaro, E. 2010) that are generally used within the cultural and urban contemporary cities dynamics of transformation.

Every investigated word is analysed in order to locate its meaning in an historical but also theoretical framework that helps to set its purpose within the architecture and urbanity discipline.

The semantic path used here, aims also to analyse and understand the raised images and thoughts generated from the words and how the words direct the way of thinking (Forty, A. 2000). Naming different urban spaces and buildings is the start point to explore the nature of the spaces through a guided analysis.

Abandoned or underused are generic adjectives that should be explored in more depth to generate reflections on these spaces and to elaborate more specific and bespoke design solutions.

What constitutes abandoned and underused is not self-evident. It is important to understand how and why labelling certain places works to reconstitute them as legitimate objects for re-appropriation.

In the urban processes of regeneration, the value of the existing elements is related also to its image that a word could generate. A project of re-use, and so of regeneration, should be a narrative description of the history of that place or building.

Using specific words means indicating the disciplinary and historical context-tradition in which the new intervention will operate and this method allows to contextualise and categorise the entities of some areas of the city and the entities of the project of regeneration.

As Louis Kahn argued (1969), it is important to assign precise sense to the words because they have the role of naming facts. It is *the art of naming the things* (Wurman, R. S. 1986).

In relation with architecture and urban themes it is important to use specific words and clarify their meaning in these contexts.

They are key-words of specific discipline thus, discussing their role is crucial to contribute to the disciplines itself.

As a result of this method, the research tests the effectiveness of selected *analysis-words* and *design approaches-words* through practical workshops where urban studies and project proposals are experimented on Aberdeen city. Practically this method helps to classify and categorise the different under-used urban spaces in Aberdeen city.

The finding and data elaborated are gathered in two glossaries, one for the selected areas analysis in Aberdeen and one for the design approaches proposed. The specific terminologies critically studied through this method are explicitly delivered during the workshops organised together with the university and Aberdeen city council.

Using certain words instead of others facilitates the focus on particular areas helping to classify them in different categories. This study is supported also by explanation of Rossi and Lynch theory and spaces' observations.

2.5 Information exchange, Knowledge exchange

Information and knowledge exchange summarises two main methods used simultaneously to gather data. Particularly, data are related to theoretical aspects of categorising design approach of re-use of abandoned spaces, and practical aspects related to closer collaboration between academia and local authority.

Practically the methods are translated in workshops, where students are called to analyse and design solutions for the council needs (knowledge exchange), and in interviews to the different participants.

This research, drawn on the literature review related to the contemporary urban and architectural abandonment phenomena, has focused on the more physical aspects of those concepts on Aberdeen city. Particularly, **eight areas** around the city were selected with the guidance of Aberdeen City Council for which they have been recognised as in need of regeneration.

Knowledge exchange: **The workshops**

The conceptual explanations investigated in the literature (chapter 3) have been explored through a practical method of workshops delivered with a collaboration between university and city council (knowledge exchange). These concern the study and analysis of abandoned areas and the possible design criteria used as possible methodology of regeneration and re-use projects.

The workshops aimed to gain a wide range of project guidelines for areas around Aberdeen city considered by the council as under-used (or abandoned) and requiring urban improvement.

The planning department of Aberdeen city council have been involved since the first stage of the research, selecting urban spaces and specific function requirements in line with the future masterplan.

Particularly the collaboration involves three institutions, Scott Sutherland School Robert Gordon University (SSS), International College Robert Gordon University (IRGU) and University of South of Florida (USF), and the main city authority, Aberdeen City Council (ACC).

Each institution offered maximum 8 places (24 in total) through a selection criteria based on the quality of students' CV, portfolio of academic/professional works and a motivation letter.

RGU and USF offered this call for participation to their undergraduate and Master Students. ICRGU offers places to the undergraduate.

ACC invites one planner per each group of students and a specific team from the Planning Department for the students' work reviews.

Preparatory work, Project process – steps and methods

The local authority and the universities prepared maps, wrote the brief and questionnaires in advance, and selected the topics of every intervention such as lectures, presentations, tours and reviews days.

The workshop was based on a theoretical and practical approach as outlined in the next steps:

Step 1: the students were informed before the workshop starting day about the reading list on Aberdeen city provided by the facilitators.

Step 2: During the workshop, students received theoretical presentations about the importance and the meaning of a valuable urban and architectural analysis and successive interventions together with practical and technical support through tours meetings and presentations delivered by the practitioners.

Step 3: The students worked on the analysis of assigned area within the host architecture school (RGU) and mainly at the city council (Marischal College) on the concept proposals, receiving feedback from academics and professionals.

Step 4: The final presentation of the students' work took place at the City Council of Aberdeen in front of collaborators and guests from the university and the council.

This research has considered three workshops delivered during the summers 2016, 2017 and 2018. Projects explored during the workshops are analysed in chapter 5 where an example of the typical ten days organisation is shown under table 11.

Information exchange: **The interviews**

Two types of questionnaires are used, both belonging to the *open-ended interviewing* (Patton, 1987). Questionnaires, involving students and professionals from the Council, aimed to obtain data and critical opinions from the participants of the workshops and also to trace and explore interesting areas for further investigation.

The open-ended questions related to the urban and architecture disciplines have been used for collecting data from students. The choice of open-ended questions was related to the relatively small number of participants and aimed to allow them to describe and elaborate ideas around multiple topics related to theme of urban abandonment, urban regeneration and cross-collaboration.

A set of questions have been carefully arranged for the purpose, including graphical explanations (k. Lynch, 1960) of the notions explored during the workshops. The graphical explanations can be also considered as non-verbal interview that are specifically related with architectural research involving drawings and sketches (Lucas, R .2016).

A similar questionnaire is also proposed to planners who actively were involved in the students' work during the third workshop 2018.

On the other hand, an open-ended questionnaire related to the organisation of the workshop was chosen for the facilitators of the workshop in order to give the freedom to explore and comment the process of collaboration and elaborate suggestions for future possible experiences.

Therefore, the purposes of the questionnaires aimed to gather different information in relation with the different role of the respondents within the collaboration process:

- The questionnaire was sent to students participating to the workshops in order to elaborate considerations on their understanding of these particular spaces and their interpretation of the city and the collaborative work of regeneration.

In particular these were useful for testing and analysing the clarity and effectiveness of the methods (of urban analysis and design principles applicability) used during the workshops and raised in this research.

- The questions was sent to planners in order to achieve an understanding of the respondents' point of view in relation to more theoretical aspects of the city regeneration.

- The questions were sent to management team of the planning department of Aberdeen City Council in order to achieve a holistic understanding of the their point of view in relation to strengths and limitations of the collaborative process.

2.6 Reading the city. Observations

Reading the city is a practical approach to define two categories of observations adopted for this research and discussed in chapter 4: the first one is related to referenced analysis methods for urban purposes; the second one is related to the analysis of practical experience embarked with the workshop, thus used for collaborative approaches purposes.

In this paragraph the main methods used for analysing the areas selected are drawn on consistent urban references. In this regard, this paragraph contains part of the literature review considered as valid and coherent urban analysis methods applicable on the selected areas in Aberdeen. Thus, the areas in Aberdeen city have been read through a wide spectrum of observation methods and described later in this paragraph.

- To gain urban data through graphic maps, photos and diagrams have been used in order to understand the existing conditions of the areas and to classify them within different urban categories, particularly focused on different cases of abandonment. The choice of these methods of analysis have been used accordingly to the characteristics and the nature of the areas, for instance a rhythm analysis has been used mostly to monitor the use of those spaces.

- To gather collaborative processes data for this research, during the workshops, all activities and meetings between students, academics and planners have been filmed and recorded prior being discussed and analysed in the chapter 5.

Finally, the effectiveness of the urban analysis for abandoned areas, the importance of the use of precedents and the workshops activities have been observed and reported to critically evaluate the impact of this research.

2.6.1 Observation of the areas

To gain data on the areas around Aberdeen, five methods have been selected according to their extensive and well referenced use for analysing the city. Particularly, these methods are described as follows:

2.6.2 Mapping

Firstly, by mapping the areas on a broader and general view of the context, has enabled to contextualise and understand the relations between different parts of the city.

The areas have been highlighted on the map on a large scale, and their relations with the surrounding urban systems have been then explained graphically through a map of urban layers.

This first layers-relation observation method has helped to obtain a scheme of Aberdeen urban territory and a scheme of the areas characteristics in relation to the city.

The areas are firstly marked within the settlements which are highlighted homogenously. The areas are individuated under their morphological position (Barresi, A. Pultrone, G. 2009). The areas are also individuated on a second level of decomposition of the map and confrontation between each other (ibid).

Similarly, to Emerson's (2014) approach for the abandoned industrial areas in Glasgow, isolating the areas on the map appears to be a useful method in order to clarify their dimensions and relations in terms of distances and visual connections.

2.6.3 Typo-morphological analysis

The purpose of using this method to collect data related to the areas selected in Aberdeen is to use a particular lens to effectively identify the characteristics that define the identity both natural and constructed.

Every area has been analysed at an appropriate scale in order to read the form generated by solids and voids and the settlements stratification over different ages; the architectural typology of relevant buildings presented in the areas have been selected and extrapolated from the map in order to be analysed in their use and architectural features. In particular, the relations between pedestrian accesses and urban space have been highlighted on the maps in order to understand the urban accessibility weakness and potentialities. The main urban spines, if any, have been read in their twofold role of connection and separation between urban space and built environment.

This method enables to understand the relation between the evolution and the expansion of the city in terms of urban form and typology of the built environment. The Rossian concept of permanence (1982) is particularly highlighted through this analysis as demonstrated historically, for instance, in the evolution of Lucca piazza dell'Anfiteatro where the medieval constructions are distributed around the remaining form of the ancient amphitheatre. In this regard, the urban morphology persists and establishes different relations with later interventions.

Fig.2 Piazza dell'Anfiteatro, Lucca, Italy

As Formato (2001) argued, urban morphology is a strong sign of identity for a city and is able to resist to functional changes over the time. In this sense analysing both the urban form and the typological functions and features of the buildings helps to comprehend the genetic code of the city.

The word morphology has been extensively utilised to indicate a certain level of investigation delivered on an appropriate dimensional scale where the complexity of urban relations is higher than a single building investigation (Gregotti, V. 1966).

> *Since urban morphology can make use of a broad range of critical and practical instruments, it can play a valuable role here, as a disciplinary bridge between history and contemporary urban design. (Maretto, M. 2013)*

Saverio Muratori (1967) can be considered the pioneer of the morphological urban studies. Morphological analysis does not have just the aim of recognising solely the current conditions of an urban space. On the contrary, the aim is to evidence the internal structure and all elements through a critical analysis of their potentialities intrinsic to their development process. By analysing Muratori urban projects, Maretto (2013) describes the development of Muratori's perception in

relation to the urban structure formative logic. Specifically, the author describes his concept of transition from bringing together theory and architecture to morphology analysis as planning discipline. In this regard, it is noticed that morphology analysis has been recently reconsidered as an important step for mastering complex urban projects (ibid), particularly for two main reason: on one hand the growth of contemporary cities and their population requires deep consideration of settlements forms and transformations' mechanism over time; on the other the necessity of developing more sustainable cities is directly connected with society and not just with energy consumption. In this sense, Maretto states that the form of existing cities and their use should be transformed according to daily life.

> *Morphology criterion of scale, both architectural and social, lends itself perfectly to drawing together the various operative levels of sustainable strategies, and indeed can contribute to launching a new urban culture for the twenty-first century. (Maretto, M. 2013)*

The typo-morphological analysis method aims to read the DNA of the city (Barresi, A. Pultrone, G. 2009) and is a resource for encompassing the transformations' possibilities. In this respect, this method may be considered as both an interpretation and a guide for urban development and transformation considering all levels of complexity within the urban forms and the architectural features (ibid.).

2.6.4 Rhythm analysis

Rhythmicity defines a mode of experiencing spaces and places within the city with direct implication for the urban design. In this sense, observing how the areas are experienced by the users helps to encompass the sense of the places and their intrinsic uses.

This method has been applied on the selected areas through a map that highlighted human flows and their intensity with the help of diagrams.

The rhythmicity of the areas selected has been also analysed with photographs taken at different times of the day in order to study the frequency and the use of the spaces. These data are reported and graphically schematised within a taxonomy in the chapter 4.

Urban spaces are geometrically different; generally, the linear ones, such as infrastructures, fit for a specific purpose which is moving from one point to another, while the aerial ones are inhabited more randomly. The main morphological and typological character of urban long element is the forced and directional flow of humans which differs completely from the flow of an aerial geometry such as a park.

human flows in aerial space   human flows in linear space
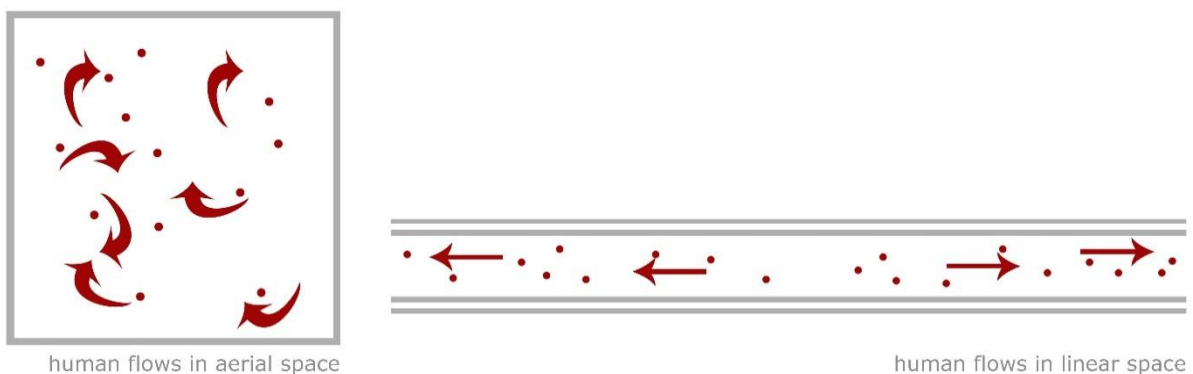
Fig.3 Diagram of human flows in different spaces

Rhythm analysis as method for investigating urban spaces is an approach to analyse the relation between space, time and society. (Hetherington, K.; Smith, R. J. 2013)

The concept of rhythm is given by the repetition that regulates and reproduces the sense of urban space and its relational aspects of the place life. Lefebvre (2004) argues that rhythm analysis offers the possibility to understand the complexity of the spaces, their interactions, mobility and the connections between particular and universal.

The rhythm of inhabiting an open public space is completely different, for instance, to the rhythm of public transportation. In this sense this analysis enables to clarify the different relations between the factors of the equation spaces-dimension-speed-time-tempo.

In terms of graphical description, according to Mareggi (2017), representing the rhythm of urban space considering the activities and the intensity of frequentations would be more an interpretive approach against the more objectives. This seems however appropriate for the purpose of this research because the interpretation of urban rhythmicity may suggest the potential of future design actions (ibid.).

Mareggi (2017) describes seven different types of temporality and variety of the urban environment, which can be represented in static or dynamic maps. Two of these seemed to be more appropriate for the context of Aberdeen. Particularly the areas selected have been analysed considering the opening time of the activities and the intensity of users' frequentation (ibid.) collected through a series of photo frames.

2.6.5 Tour observation

Another type of observation was conducted through guided historical visits of Aberdeen. The visits were organised in collaboration with Aberdeen City Heritage Trust who also has been involved in the workshops to support the work with historical maps, historical pictures and perspective drawings of the city.

The aim of the tours was to understand the history of Aberdeen and its physical territory from different perspectives. In particular, participants were accompanied on the old route of the historical city, which is now occupied by car park buildings and main roads, crossing neglected spaces and forgotten areas on different topographic levels.

2.6.6 Mental map

Using interpretative diagrams to summarise the main urban feature of the areas enables to select and identify the urban environment within pattern. This concept derives firstly from the Gestalt theory (Sema Uzunoglu, S. 2011) which recognise common perceptive process related with various forms. In this regard, it is possible to understand which urban forms and characteristics of the areas are relevant for future design processes. The most recognisable and clearest parts of the city, thus, play important roles in terms of identity and they contribute to the drawing of the form of the city.

Although the original method adopted by Lynch (1960) was intended as graphic interview directed to citizens in order to study their perception processes of the city, in this research, mental map is intended as graphical schemes based on map observation and discussions raised during the workshop between students and planners.

According to Lynch (ibid), mental maps are useful to clarify the common perceived elements of the city plan that are fundamental for defining a collective idea of the city. From the mental maps collected by the author emerged that there were some perceptive constants that could be classified.

Particularly, Lynch noted that linear infrastructures, such as railways but even beaches, were seen as *barriers or edges;* rather typical street, roads and occasional routes were classified as *paths* to localise other elements or monuments; the junctions and crossing points were identified as *nodes;* the homogenous areas were selected as typical *districts;* finally, relevant elements helpful for the orientation were defined *landmarks*.

It can be argued that Lynch introduced a new urban geography, different from the spatial traditional analysis of the city. His approach and method are, in a certain way, similar to the typo-morphological analysis based on the concept of plan, site-location, typology and historical evolution, with the difference that Lynch introduced the concept of environment perception and subjective liveability.

2.7 Classification and taxonomy of the areas

The aforementioned urban analysis methodology has supported the study of Aberdeen areas and allowed to collect data in order to understand the issues and lack of urban and social relations of those spaces. In particular, by examining the data and by triangulating the information collected, it has been possible to categorise every area within particular sub-category of space belonging to the general notion of abandonment, such as empty-place, non-place and fragmented void. To better support and reinforce the results obtained, a simple calculation has been used to quantify the level of abandonment in proportion to the entire area expressed in square metre. According with the common urban density/floor ratio

(Dell'Aguzzo, M. 2013; Yu-Hsin, T. 2014), used to calculate the index of built areas or open spaces in relation to a specific area considered and which is generally expressed with the formula *factor to be determined/ total square metre of the area,* the abandoned spaces within the areas selected in Aberdeen have been divided by the total square metre of the areas. In this sense, the taxonomy (table n. 10 Chapter 4) presents also the index of abandonment within every area which is also, logically no greater than 1.

2.8 Ethical consideration and evaluation of risks

The research has been conducted with the involvement of students, academics and professionals from Aberdeen city council who have participated actively to workshops and to interviews.

The participants have been not subject to harm in anyway and they have been all voluntaries and with the full right to withdraw from the study at any stage.

All students interviews have been conducted anonymously while the interviews for planners and academics have been delivered in a non-anonymous way given the nature of the guided interviews and the roles of the stakeholders within the organisation of the workshop.

The ethical clearance permission have been consulted before the interviews, thus letters and informed consents have been read and signed by participants before the acceptance to participate to interviews (Appendix A, B, C, D, E, F).

There have been not any specific risks associated with this research. Despite the research focusing on academic and professional projects in which have been involved other figures (students, academics, planners), the related risks can be considered to be very low. Particularly the involvement of the researcher has not

directly influenced with the work of the students. The information and presentations delivered at the commencing week of the workshop have been drawn on objective and well referenced historical evolution of the European cities and selected re-use projects have been described in order to introduce general examples of urban design approaches. The purpose of these presentations was mainly related to support an international cohort from a broad-range of backgrounds, with a holistic overview of the urban debates, conditions and challenges within the contemporary European scenario. During the more practical week, where students have been required to propose conceptual projects of regeneration, the researcher has not played a direct role related to design decisions and criteria. Instead, the role has been limited to observe and record all phases of the practical week related to the process of developing projects through an exchange of comments between students and planners.

The workshops have been closely organised in advance, with detailed timelines and list of the activities followed during the ten days. The whole organisation has been undertaken with consideration of any site specific risks. To mitigate the risk of potentially negative results, specific theoretical and practical activities have been planned together with planners and academics before the beginning of every workshop. It has been conducted considering the ages and the level of the students (undergraduate and master students) and their academic background. A collection and analysis of well known architecture design projects (the precedents case study) have been prepared to support the students design principles and procedure of works.

2.9 Validity of the research

The research included procedures of data collection based on interviews, case studies analysis, observations and applicative urban projects experiences applied on Aberdeen city, in order to define guidelines and protocols for future interventions in the areas of abandonment.

The triangulations elaborated as process to evaluate the data and the engagement through applicative experience enabled to test the consistency of this research and its findings gathered through multiple research methods. This helped to demonstrate the credibility as internal validity, of the research objectives.

Furthermore, the wide literature review and the analysis of similar PhD research methods enabled to identify the consistence of the transferability of this research. This external validity is also supported by the international cultural education (University of South of Florida, RGU, ICRG, ACC) brought within the practical workshops.

The theoretical transferability is also validated and the procedure of collecting data regarding abandoned areas and to collect a list of design criteria may be used in other cities and countries.

CHAPTER 3

THE CITY SYSTEM. Literature review and conceptual explanations

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3.1 Introduction

This chapter provides an overview of previous and current research focusing on the concept of abandonment and possible re-use within the urban and architectural literature.

The research investigates abandoned and underused spaces in Aberdeen, the processes and the methods to bring them back within the city system.

Analysis of successful design projects of re-use principles and successful examples of processes of collaboration have been considered for the practical part of this research.

The purpose of reviewing previous research is to define the research framework described in this thesis, to collect primary data and to critically revise the data collections. The literature reviews can be divided into three different categories. These address the three main areas of this study:

1. <u>Critical study</u> of the previous research concerning abandoned spaces phenomena and related methods of analysis of these spaces, which informed the topic and support the sense of the focus perspective.

2. <u>Critical analysis</u> of previous design projects precedents study, which helped to categorise the design principles applicable within the case of urban and architecture re-use.

3. <u>Critical analysis</u> of the cases of municipal collaboration (academia and public authorities) implicated in the process of design within several cities, which addressed the practical application, testing and validating the theories (points 1 and 2). This was done through collaborative urban workshops held in Aberdeen.

3.2 City as a system

The contemporary city is structured by a variety of relations, objects and infrastructures, which make its reading complex and multi-layered. (Rossi, Eisenman 1982; Tschumi, B. 1983, 1996).

Daverio (2013) indicated new aspects of contemporary city. He describes the main visual aspects of the urban environment, such as the skyline and landmarks as memorable aspects for how humans to imagine and represent the city in their mind. The landmarks and the skyline represent an *aggregate of psyche* (Daverio, P. 2013).

Discussing the *aggregate of the psyche*, the critic intends the strong recognisability and the identity load of the city image, fixed in the minds.

Through its skyline and landmarks, the city may be recalled by inhabitants and be part of their unconscious capability of associating icon and place.

This idea is similar to Aldo Rossi's (1989) concept of *urban artifact* which denotes all relevant elements, such as the landmarks, the main streets, palaces, buildings that comprise the city.

> *At this point, we might discuss what our idea of the building is, our most general memory of it as a product of the collective, and what relationship it affords us with this collective.*
>
> About Palazzo della Regione in Padua. Aldo Rossi 1989 The MIT press.

The definition of artefact, according to the Oxford English Dictionary (2018), is:

> *An object made by a human being, typically one of cultural or historical interest.*

At the urban scale the architect Aldo Rossi (1986) used the word *artifact* instead and defined it as:

> *A form that persists through a set of transformations*.

In fact, the concept of *urban artifact*, as well as of *permanence*, becomes an element that is the base of Rossi's intention. Namely the author determines an analysis method to collect the traces of history comprising the city. Rossi's purpose is to define a transferable theory of architecture that provides concrete research tools.

Rossi's intention seems to be to develop, or propose, an analytic path that aims to define an effective studying method of the complex urban phenomena that create a city.

Rossi explored the *comparative method* to compare the differences and also introduced the *historical method* as a critical reading of the city.

This means that the history of a city is never crystallized, but is something dynamic and in motion because it is always evolving.

For Rossi, (1989) the complex urban structure is marked by urban artifact, elements characterised by their own form and architecture. A typical example is Palazzo della Regione di Padova, which has been transformed functionally and architecturally but imprinted in the collective memory and so forms part of the image of the city of Padua. The city is a product of engineering and architecture, integrated with urban artifacts.

The urban artifact is something that breaks the rules of urban evolution and which sometimes represents the exception.

The evolution of the urban artifact over time, is the main driver of the nature and morphology of the city. A city is a human achievement and the urban artifact contributes to the collective individuality and recognisability of the city itself.

Urban artifacts are primary elements, solids and areal, such as squares for example, and they are dynamic because they are able to accelerate the urbanisation process of the city.

Evolution of the city takes place as part of a dynamic process and its form derives from an accumulation of history. The collective memory is not reified and blocked and does not recall objects from the past. The collective memory is the consciousness that there has been an historical process and this process is going to evolve over time. (Rossi, A. 1982; Aymonino, C. 1977)

In defining the notion of urban artifact, Rossi (1982) described several examples such as Palladio Basilica in Vicenza where the narration becomes pervaded with emotionality and subjectivity. In this sense the notion of urban artifact is connected with personal experience of the places and with personal memory which influence the perceptive connotations of an architectural or urban element. In this regard, the physical form represents, finally, all aspects of urban artifacts from individuality, memory and social function to locus.

The architecture and urbanity of the city are the concrete manifestation of the society and of the city's economic and cultural evolution. The city analysis today is more complex. It is necessary to consider social, economic, political, and visual aspects too.

If Rossi (1982) proposed a typological and morphological analysis with focus on the study of urban phenomena, earlier Lynch (1960) proposed instead a more perceptive analysis related to concept of *imageability.* This involves an overlapping of the city's fixed components, edges, spines, paths, and the city dynamic components such as people. The perception of the city is an image of

mind and is subjective, but it is possible to individuate some urban scheme constants.

These constants are linked with Gestalt psychology (Khamsi, J. 2012) for which there are fixed tendencies of organization of a system and its parts. (Popczyk, M. 2016)

Lynch and Rossi's approaches are methodologically different and developed in different contexts, one in the US cities and the other in the European cities, but today they may be a source for understanding the complexity of the city system.

The complexity of a city is also explored by Aymonino who, on numerous occasions, defined the analytic method for individuating relations between types of building and urban form in relation to their changing nature over the time.

Aymonino (1977) defined a form of glossary in which to ground his theory. *Typology* is the comparative study of physical characteristics of the built environment into distinct *types. Urban Morphology* is the study of the city form created by urban artifact and different parts of the built environment. *Relation* is a rapport between typology and morphology of a city and its development over time is fundamental to understanding in depth the nature of a city.

Aymonino argued that architecture is an urban phenomenon and its important character is its urban quality and its capacity to dialogue with the context. Mainly it is its capacity to establish a relation with other buildings, with the landscape and infrastructure and the capacity to be part of a process (urbanity).

The knowledge of the history is vital for good urban analysis enriching the critical and creative consciousness of the architect, providing more information used for the project process.

The type-morphologic analysis aims to obtain 1) knowledge as disciplinary contribution to the construction processes of the city and 2) knowledge as

disciplinary contribution of the transformation and stratification processes of the city. Both are fundamental for the cultural background of all professional involved in city projects of regeneration and urban transformation.

One of the Aymonino's most important contributions is the idea of completion. Every historical city has incomplete places, buildings or urban areas. Imposing new constructions cannot be always a reasonable action. Building new architecture becomes legitimate when the other resources, such as scientific restoration, building recovering, do not have any functional and operative sense but overall any resolving approach.

On the other hand, the complete historical part of the city tends to have a crystallised value into the historic process and so it becomes a permanence in the physical relations of the parts of the city.

The formal complete part of a city, as whole, is fully proposed as *urban artifact* by Aymonino.

Urban analysis means to assign a role and to establish a clear opinion on the parts of the city that set the parameters for the design project. In this sense, architecture and urban projects are the reinterpretation of the context morphology, which is in turn their derivation and base of their form.

The structure and narrative form of Aymonino and Rossi's theories have been analysed by Stefano Boeri (Boeri, S. 2016) who sought to discover new modalities for reading and study the urban phenomena.

As Paul Ricoeur (2016) argues, architecture is to space what literature is to history. Boeri tries to find in Rossi, Aymonino and Gregotti's language, the configuration of space, time and architecture, using study tools that belong to architecture discipline and philosophy too.

Boeri's literature studies allow him to give shape to another and more contemporary theory of the city system. The author divided his notion of the city into:

Internal city, mainly the thought of the architect, thus the more academic and conceptual vision of the city that precedes the narrative idea of the city.

External city, the consensual, that is the city as a common and codified description belonging to the disciplinary tradition.

This new possibility of reading the city system might give rise to an idea of solitude of the architect thought, and its lack of generating a common concept of the place.

Boeri's views belong to a depth study of the main literatures that have characterised the last architecture and urban history but also to a new urban and city scenario constituted by new types of spaces, often residual or simply empty spaces.

His research approach consists in an analysis of the three main authors: Rossi, Aymonino and Gregotti. Through an original examination of the texts and the words used, he seeks to understand the meaning of the city, its territory and its architecture.

The city scenario of today is also made by new locations non-properly defined, such as the abandoned places, brownfield or the peripheries which contribute to compose the city form. It becomes important then, to understand what the new reading methods of these types of places are, beginning from the consciousness of their new historical, social and morphological value (Secchi, B. 1984; Piano, R. 2015).

3.3 Research focus background

The phenomenon of urban and architecture abandonment and their related study on adaptive re-use have been explored by previous research, typically using cities as case studies.

In particular, two theses have been analysed from Camerino University (Italy). Both relate to abandoned buildings and areas but with two different approaches. On the one hand, the first thesis entitled "Disused industrial site: Which architecture approach? Conservation, renewal/re-maker, re-form, redesigning industrial disused space" (Medori, S. 2011) studies and focuses on the architecture approach and design methodology applied to these empty building and areas. On the other the second thesis entitled "Abandonment: from anomaly to principle" (Corsaro, E. 2010) investigates specific brownfield in relation to urban and landscaping context, arguing that it is crucial to preserve the diversity expressed by these areas.

The first thesis (Medori, S. 2011) adopts case studies, mainly in Germany and Spain with practical and recorded site visits, as replicable examples of re-use project principles. The emblematic characteristics of the selected projects are re-interpreted and proposed as possible design methods of re-use for the Italian case. These are discussed through open interviews with professionals and significant figures on the international architectural scene.

The second thesis (Corsaro, E. 2010) analyses the case of abandoned spaces and brownfield through the etymological method of research, focusing on the relationship between time and space. The Italian expression of *dismissione* (brownfield, decommissioning in English) is studied exploring its role as anomaly and then exploring its contradictory role as a rule.

This method enables the researcher to classify and map the various building and areas taken in examination.

The applied part of the research uses a *charrette* as a collaborative method to experiment the adaptive design on the selected areas of research in Italy. The method is methodically recorded in all steps and proposed as a valid instrument for addressing the plan and design of brownfields.

Here the researcher interviews Professor Peter Latz, a worldwide firm expert on project of re-use, who personally adopted the Design Charrette for Westerholt and Duisburg North projects.

These two examples are part of a wider interdisciplinary research project underpinned by three different universities along the Adriatic coast in Italy entitled PRIN research and coordinated by professor Barbieri, P. (2006, 2008). This is a research programme of National Interest and financed by MIUR (Ministry of University and Scientific Research) for the years 2006-2008.

The departments involved were the DART – Department Environment Nets Territory – of Pescara Faculty of Architecture; PROCAM - Department of Environmental Planning and Construction - of Ascoli Piceno Faculty of Architecture; DCA - Department of Construction and Architecture – of IUAV Venice Faculty of Architecture.

The main work is concentrated on individuating along the coast, and so crossing several cities, some constants that allow the definition of possible intervention modalities and project criteria for neglected and abandoned spaces.

The aim is the identification of possible coordinated transformation scenarios with strategic use for the different categories of Public Works (the collective use of public spaces, buildings).

The research conclusions are based on an agenda of re-qualification approaches of urban and territory transformation projects where useful instruments for the evaluation of the transformations' quality of projects are listed.

The theme of adoptive re-use has also been the subject, of an Australian PhD research from Bond University of Gold Coast.

The research identifies a gap in the knowledge related to an absence of clear criteria for future adaptive reuse project and a lack of consensus as how to maximise adaptive reuse potential (Conejos, S. 2013).

The aim of the research by a PhD candidate entitled "Designing for future Building Adaptive Reuse" (Conejos, S. 2013) is to review the design principles used so far to adapt them to new typologies of the space such as brownfield or neglected and abandoned buildings.

The direction of that PhD includes the idea of existing building and its reuse as a main and primary starting point of the built environment sustainability.

The methodology adopted here is focused on the analysis of case study of successful projects of reuse as primary data collection. The criteria gathered are then classified in order to establish and test a multi-criteria decision-making model that can be applied to new design projects.

The research moves its form to specific tools of new rating that can offer a more unified criterion for assessing adaptive reuse potentiality of an old building in relation to function, technology, social and political issues.

For this particular aspect that investigates instruments and specific tools to calculate and give weight to a sustainable project, the researcher has used mixed methods, qualitative and quantitative, included anonymous online surveys to professionals and more open-ended and non-anonymous interviews aimed at other specific professionals (Conejos, S. 2013).

The present research has considered the aforementioned previous research studies. It has referred to them in order to understand the current state of the art concerning the concepts of abandoned spaces and to form the research itself, linking the theme within Aberdeen city. The previous research are also analysed in order to follow and articulate acknowledged methods of collecting and analysing data.

3.4 The idea of the city today

A problem that emerges in contemporary cities is a loss of identity and the character of these spaces. Their expansion, in the last years, has been due to unrestrained construction and has not considered the local identity of places (Auge', M. 1995; Barbieri, 2010).

Koolhaas (2006) extends this concept to describe Eastern cities constructed within very short scales and which do not belong to any historical root.

The generic city (Koolhaas, R. 2006), is a city without context and the big architectural buildings, from Koolhaas *bigness* concept, are self-determined.

The theory of bigness dissolves the classic language and logic of architecture, and generates a new type of city unable to establish confrontations with the past. It is not able to create relations with the old city and it is in a sort of competitive condition with historical zones.

Bigness is urbanism against architecture and all of its containers will represent the post-architectural landscape.

The dialogue between histories, renovation and modern architecture is then not very evident.

The new interventions are often based on the predominant presence of constructed objects out of scale (Koolhaas, R. 2006).

The risk may be that oversized buildings impose their self-referential nature on the existing urban context, with a potential non-long relation with the heritage.

The renewed idea of the city centre as a place of exchange, meeting and of the stratification of history can disappear and the main and potential urban artifact can become weaker in terms of city *imageability*, (Lynch, K. 1960) beauty and sense of belonging.

A contemporary urban difficulty concerns a lack of relations between spaces and a lack of application with regards to reuse planning and regeneration, rather than the current abandonment and sterile expansion approach.

On the terms it is interesting to follow Koolhaas' comparison of the generalisation of the city described using the image of airports, characterised by a lack of their own identity.

Lack of identity leads to the idea of void or even specifically to the notion of nothing. Ritzer, (2004) argued that the culturally controlled social forms are basically lacking in content. This is especially the case of the new social spaces defined non-place by Auge' (1995) such as the shopping malls. Drawing on this concept, Ritzer (2004) described the globalisation of nothing as a combination of re-proposing localism within the globalism and the growth of capitalism.

In this sense the concept of *globalisation of nothing* (ibid) is expanding and globalizing forces tend towards homogeneity of architectural and urban design

particularly in their programmed functions, which are related to the notion of non-places in a more specific sense.

Identity has always been a centralizing force that insists on a specific point on the map. When the settlements are expanding, the centre loses its authority and power until an irreparable breaking point.

The generic city is a city without history, while a city centre should be continuously renovated as both the oldest and the newest place.

Koolhaas, with a clear but pessimistic thought, comes to the conclusion that the generic city is not improved but just abandoned and that the idea of stratification and intensification is just an extraneous concept; the generic city does not have any stratification.

Through this theoretical and intellectual path Koolhaas arrives at the concept of Junk-space, a theory of the present, a contemporary product of the non-quality of the designed space.

With this provocative name, Koolhaas echoes Le Corbusier's exhortation Architecture or Revolution. (Le Corbusier, 1931)

The architect should contribute with a progressive dimension of architecture, otherwise the junk-space, thus the contemporary, will be just the aesthetic form of the progress and not the progress itself and everything will be reduced to an iconic form of *machine célibataire,* Celibate machine, (Duchamp, M. 1923) as prodigious as useless.

> *Junkspace is the total sum of our current achievement; we have built more than all previous generations together, but somehow we do not register on the same scales. We do not leave pyramids. According to a new gospel of ugliness, there is already more Junkspace under*

construction in the 21st century than survived from the 20ᵗʰ. It was a

mistake to invent modern architecture for the 20th century.

<div align="right">(Koolhass, R. 2006)</div>

The three papers, *Bigness*, *The generic city* and *Junkspace, (Koolhaas, R. 2006)* offer a clear view of ungovernable forces that control the space in the city and that make it a junk-space.

The relation between history and identity here is exposed to a critical notion where identity, intended as a way of sharing the past, becomes a losing statement.

In a century where populations are expanding there are fewer and fewer models to share and the more the history is used, the less it is important. Koolhaas, with this statement, argues that misusing the history reduces its significance within a place. That it is particularly the case of the huge influx of tourists and their constant search for original characters, which leads to an exaggeration of identity and local reproductions. In this sense Koolhaas investigates the relation between history, identity and the way of sharing the past.

The result cannot be just the worn-out concept of non-place but something broader.

Junkspace becomes a new way to conceptualise space, exactly as the *third landscape* of Gilles Clement, introducing new concepts of the contemporary space (Clément, G. 2005).

It can be argued that horizontal European city growth is not sustainable anymore, neither in terms of cost, recycling (construction side, gas or electricity supply, general and urban waste, infrastructures, etc.) nor in terms of space. According to Piano, (2015) this concept is inevitably connected also with political, social and economic reasons.

This research will not focus particularly on political, social or economic debates around the role of architecture within the society, but it is considered necessary to clarify some points in order to have a more holistic view of the contemporary urban cities phenomena and evolutions.

What emerges, particularly from Koolhaas reflections on the contemporary cities is a lack of discussion on political and social conflicts within the urban spaces. (Aureli, P.V., 2008)

This is probably due to the climate of the second half of the seventies, characterised by new thematic expositions within the cultural panorama, which were focused mainly on the new phenomenon of the archistar, to the disadvantage of all bigger research groups that earlier worked on the urban improvements problems. The political climate was at the end of the social classes conflicts (sixties period) that the cultural and political establishment tried to overcome with new movements such as the postmodernism. The postmodernism, during which Koolhaas participated to the installation of Strada Novissima at the Biennale in Venice, probably depicts the cultural block that neutralised and de-politicalised the architectural and urban theories and discourse. This process contributed to transform architecture in a sort of private field with no relations with the society. However, it is in its public character that architecture should find its deeper meaning. Moneo (1986) argued that architectural language, in order to be meaningful and able to draw the features of the city, should be firstly sharable.

Probably, as Wouter Vanstiphout argued, during an interview conducted by the architectural journalist Magliozzi (2015), the architecture, in order to reclaim its social and political role, should face the concept of democracy, participation and

political uncertainty. At the end, architecture and urban space are the incarnation of politics. (ibid)

Focusing on design possibilities, this research draws around current themes on which contemporary debate remains open (Abitare journal 545, 2015) and include building reuse and conversion of places, buildings and roads.

Although the re-use debate is open for almost thirty years (ibid), (Conejos, S. 2013), the morphologic and qualitative characteristics are not yet defined. Giving a coherent form to these places becomes emblematic because the form has always been the expression of our language and because the form has always been the expression of our identity for almost twenty-five centuries.

3.5 The significance of words in the context of this research

> *I have no need whatsoever to draw my design. Good architecture, how something is to be built, can be written. One can write the Parthenon.*
>
> *Adolf Loos, 1924, 139 (in Forty, A. 2000)*

> *Architecture does not exist without drawing, in the same way that architecture does not exist without texts.*
>
> *Bernanrd Tschumi, 1980-81,102 (in Forty, A. 2000)*

Complexity of linguistic analogies in designing has been extensively explored over time. Words in architectural processes of designing, play an important and relevant role in shaping the decisions, defining the spaces and even relating the project to the context. Words generate the idea and create reality on their own.

> *My own words take me by surprise and teach me what I think.*
>
> *Deridda, 1978,11 (in Forty, A. 2000)*

Lakoff and Johnson (1980) argued that metaphors are able to modify human perceptions and understanding of particular concepts and objects. In urban and architectural disciplines, the use of specific terms to refer to a space or a composition is crucial and enables to identify right issues and to guide towards right articulations of the design process.

Particularly, articulating and individuating specific terms helps to avoid generalisation and helps to demonstrate how words shape the kinds of imagery and semantic associations they make (Forty, A. 2000), and how in turn this feeds directly into and informs decision-making and practice. Critically reflect on the language raises awareness of the relationship between mental processes imagery, design and building practice.

Shön (1979) analysed how the perception of a community may change in relation to the metaphor adopted to describe it and how the language's associations can affect the decisions for improving a certain situation. During the 1950s a debate was raised on what could be done to improve the quality of the life and the buildings in the dense residential areas of Washington city. The obsolescent phenomena were defined as *disease* and thus city planners decided to *cure* it by demolishing, re-designing and re-building the entire area. In this sense Shön referred to the slums condition *as seeing slums as congenital disease.* Opposite to this concept, he later proposed to look at the *slums as natural communities* (1993, p. 145). In this circumstance the way of looking the slums' future was orientated towards their preservation and improvements.

Each definition highlights certain aspects and hides others, thus each one generates a specific frame where its imaginary should be located.

When a metaphor or a term become redundant even its possible solutions become limiting. To this assumption Shön responded that

We need to understand the metaphors, and generate a new, all-encompassing metaphor that incorporates elements of both, transforms both into a new generative metaphor.

(Shön, D.A. 1993, p. 139 in Ritchie, L. D. 2013)

Providing and studying key terms that can describe particular spaces and their features (Forty, A. 2000) even through linguistic associations, can locate the problems within a more historical and perceptive framework, setting out consistent support to approach the issues.

Moreover, conducting etymological studies related to words used in architecture (Daverio, P. 2013) enable to encompass the deep significance and to re-establish theoretical analogy, such as in the case of the word *beauty* and *symmetry* better explored in the paragraph 3.8 and earlier in the next paragraph 3.5 where the meaning of words is explored in order to investigate particular spaces.

Words accompany spaces and signs, in their descriptions and in their meaning within the urban context, so it is important to explore the terms' origins, thus the etymological roots, and their significance in order to redefine a common understanding of those spaces.

In this regard, the following paragraphs offer a set of explanations and reflections on the use of the terms *place*, *non-place*, *empty place* and *urban void,* as declinations of the wider and more generic phenomena of abandonment.

3.6 Places, non-places, empty places

In the city mapping and reading, it is possible to recognise particular areas characterised by a lack of relations and connection with the surrounding context. The characteristics of an area and the ways the relations are interrupted are different and open to re-categorisation. These urban spaces, have several aspects connected to their past and it is also possible to highlight a number of constants.

On the one hand, they are defined and differentiated by their urban and architectural configuration, their morphology may be linear, aerial or pointed, but also by their typology in terms of particularity of the place.

Generically, these spaces could be described with the adjective *abandoned* but, as wider literature (Secchi, B. 1984; Augé, M. 1993; Gilles, C. 2005; Barbieri, P. 2010) has tried to identify, they have different variants and develop different subcategories. On the other hand, abandoned spaces have a common denominator: it is their indeterminateness that creates, in some cases, the feeling of getting lost and of identity deprivation.

Using the adjective *abandoned* however, is arguably too generic and the risk may be that this term is used more from habit than to refer to specific characteristics of particular spaces.

The study of these relatively new residual spaces around the city has been underpinned in various disciplines but it is important to analyse critically first the opposite concept of the real *place*.

Introducing the concept and the use of the term *place* can lead later to some reflections on morphological and typological natures of the abandoned spaces.

3.6.1 The Place

The term *place* may be understood through a sense of recognisability, and it has social, anthropological and urban significance.

The city and its material and immaterial heritage, is a dense system of *urban artifacts*, where it is possible to read and recognise its identity.

For Rossi (1966), the complex urban structure is marked by urban artifact. The city is a work of engineering and architecture integrated with urban artifacts.

Palazzo della Regione of Padua contains a multiplicity of new functions which are completely independent from the form, but the form itself, as Rossi argued, belongs to the wider urban system of the city.

Its form is organized into space and over time; the city has evolved, taking into consideration the Palace's presence. For this reason, it is still possible to recognise its value and its importance as urban artifact.

The evolution of the city is a dynamic process which is formed by historical accumulation, where the collective memory is not a static image of the city past. The collective memory is more the awareness that an historical process has been there, and this process is always evolving (Rossi, A. 1989).

If the city evolves over time through architecture, then architecture

> *Is the fixed scene of human events, full of generation sentiments, public events, private tragedies, new and old facts.* (Rossi, A. 1966)

Place, therefore, is the city made through relationships: Its historical relations, urban connections between various spaces and juxtaposition between solids and voids.
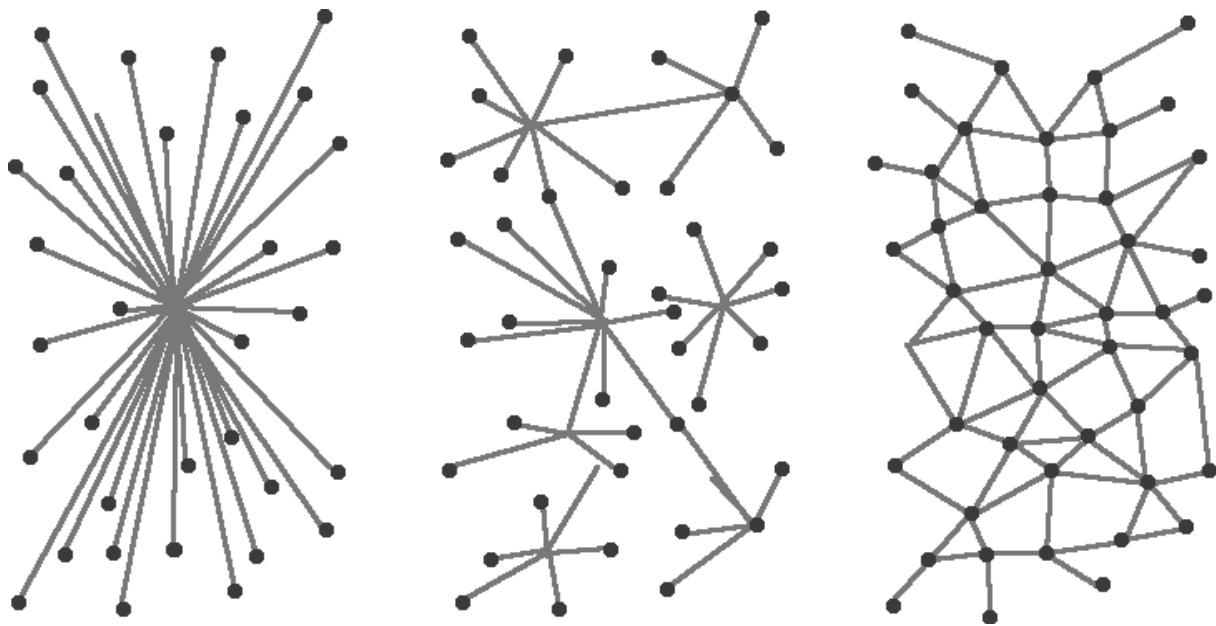
Fig.4 Relations between parts of the city system. Radial, scattered and grid

Augé (1993) came to reinforce the concept of place as *identity, relational and historical*.

The concept of place involves the active interpretation of spaces. The place quality, and consequently the life quality, has historical roots and lies in the idea of beauty.

The identity of place represents the main data for a positive growth of the city and its recognisability as a sum of different ages. Paradoxically, the identity is generated by two opposites:

It is the image constructed by those outside of the place and not belonging to the city; and the image of those embedded in and feel a sense of belonging of the city.

The identity is, therefore, an image and belongs to urban and architecture language techniques. (Daverio, P. 2013)

3.6.2 The non-place

Places without identity are described through different neologisms.

The sense of indeterminacy and approximation of these spaces, on an architectural and urban level, are the result of places thought, regardless of their relationship with the surrounding context and with the history of the place.

If you do not look at the landscape as an object of human activities, discovering a quantity of informal spaces with no purpose, of which it is difficult to give a name.

(Clement, G. 2003)

Rotenberg (2011) defined *Atopia* as a space where people have to affirm themselves through the same space.

We are guided with instructions, rather than relationships.

Spaces offer messages that inform about the permissible activities that each is prepared to contain. In ordinary spaces, we read the semiotics of the space by observing the people who are already in the space. The messages of Atopia are written on the walls.

(Rotenberg, R. 2011 p. 254)

Rotenberg gives to these spaces a sort of human interpretation, describing the atopia through people's behaviour.

One leaves the shopping centre with one's purchases having confirmed one's sense of self.

This over-arching valuing of the experience of place as an experience of self is the primary characteristic of atopic spatial practices.

(Rotenberg, R. 2011 p. 254)

An etymological study suggests that the opposite concept of place can be investigated through two different but similar words respectively originated from Greek and from French: ατοπία, atopía and non-lieu, non-place.

Atopia, from Greek ατοπία, atopía - placelessness, unclassificable, where "a" is the privative of *topos* (place), represents a condition of non-belonging and describe all parts of the city which determine a variation. That variation is given by the lapsing of its function and therefore by its abandonment. It could be said that atopy is the absence of territory and environment.

The relation between the concept of atopia and the notion of non-place resides in the concept of absence. On the one hand, it is the absence of relations with the environment. On the other, it is the absence of relation between humans so, absence of social function relations.

Manzione (2012) argued that the concept of non-place should be sought in the infrastructures spaces of the city and its periphery, which are already territories of atopia.

The neologism, non-place, defines a space thought independently, without any relations to context and for specific functions only. The main relation, as Augé described, is between individual and place, not between people in a place.

Augé's definition derives from ethnology and anthropology and entered in the architectural discourse and urban world recently.

In the city it is possible to find also uncertain conditions which may be described with the name non-place.

The non-places, in the city reading, have different declinations but are extremely important for describing territory changes. In fact, Augé's vision is more concentrated on *time* analysis as the *overabundance of events* that create an

acceleration of history, and on the *ego* as excess of individuality. These points converge in the concept of place. Non-places are closed to the heterotopias of Michel Foucault (1966); namely the reality founded more on transience than presence. Particularly, the heterotopias are spaces that correspond to the notion of utopia with the difference that they are realised and localised. Their function is to compensate and to be related to all other spaces as for instance, the garden or the cemetery. Heterotopias helped to shape the definition of all urban and architectural spaces with multiple functions and multiple dimensions.

Augé's non-place analysis however, does not belong to an urban and architecture study but more to a social and anthropologic sphere.

The author coined the word and its concept that has consequently been object of study of the urban and architecture disciplines which have adopted the term with a shift of meaning.

Augé's concept of *overabundance of events*, in this sense, becomes relevant in the urban and architectural comparison between the notions of place and non-place.

Place is a system of relations between solids, voids, public and private spaces, connections and infrastructures. The balance and, thus, the relation between these components generate the place. As such, the important aspects of the place are the rhythm, the intensity in-between the component parts.

Dwelling on the rhythm is a key point for generating a certain equilibrium even between uncompleted parts of the city.

In this sense, an over-designed and over-structured space may flatten the concept of place. Conversely exaggerating the ratio of a place generates a non-place.

The expression of non-place is a space with a lack of identity, an anonymous place disconnected from any social relations and from the history and tradition of the context.

The common denominator here is anonymity, and in the case of a building, such as stations and airports, the concept of non-place is expressed in the serial reproduction of the architectural spaces.

> *Non-places are the installations required for the accelerated circulation of people and goods (fast-running roads, turn-offs, airports), as well as the means of transport themselves, big shopping malls or even refugee camps where the planet's homeless are parked away.*

> (Marc Augé, 1995)

The neologism non-place is often associated with Augé however, already in the sixties Webber (1964) noticed that the nature of communications could change radically the notion of place and city. For Webber (ibid.) the essence of the city was interaction and so considering the mobility, rather than specific settlements and introduced the notion of urbanity as lifestyles, collective uses of the spaces and interactions.

Humans interact with the city in order to have access to different goods, needs and desires; in this sense mobility is fundamental to approach those opportunities.

Based on this assumption, Webber formulated for the first time, the fission between *urbs* and *civitas,* between built environment and urban community defining a renewed idea of *post-city-age.*

Paradoxically Webber's non-places are the city spaces that appear impersonal, anonymous and abstract probably because ideologically the city is generally associated with an historical and nostalgic idea of *civitas*. Those spaces are inevitably affected nowadays, as well as in the sixties, by *commodification, thingsification* (materialisation)*, speed up* and *mass media* (Amin, A.; Thrift, N. 2002).

It can be argued that Webber anticipated the crisis of places role as exemplification of culture and identity containers, thus a weakening of the places meant as containers of information. This has led to an overcoming of the traditional spatio-temporal delimitation of the urban places but simultaneously to a need of re-appropriation of those spaces in order to have local experience which may become cultural and collective memory. This means that, on one hand there is a de-localisation of interests and the intensity of human interactions is no longer depending on proximity and the place itself; on the other there is the constant attempt, by humans, to characterise the experience in relation to places which belong to the cultural memory attitude of elaboration, a sort of typical human reification.

In this sense Webber anticipated, by almost thirty years, a new form of urban evolution no longer local but instead non-local. It has to be noticed, however, that Webber observed the urban space purely in term of human use and behaviours (Teitz, M. B., 2007).

The dissemination of other forms of communication and transversal lifestyles, due to the medias and web interactions, has demonstrated in some ways Webber's hypothesis.

Nowadays citizens establish relations, services and community initiatives without using physically the urban spaces, traditionally meant as civic place such as a

piazza. In this sense today people can make a city without the city. Basically they can concretise the traditional meaning of *civitas. Civitas,* from the original etymology *citizen*, for which being together creates the city and not the opposite. If *civitas* is human interaction and if through the acceleration of technology communication people can interact without a common place, then the concept of physical urban space and so the city is overturned and requires new interpretation in order to be mastered with new projects.

For the philosopher Umberto Curi (2016), who pays more attention to the physical space of the city, the non-place is the space where the communication is interrupted but in the last ten years several artists and photographers tried to capture images which may describe the notion of these spaces.

The photographer Edward Burtynsky (fig. 5) investigates through his images how industry has changed the landscape. Chinese women in the manufacturing or the infrastructural tangles are the expression of the hyper-modernisation and also are the dilemma of modernity.

Fig.5 Manufacturing 16, Burtynsky, E., 2005

His work is incredibly realistic and describes every details of the relation between work and life, attraction and repulsion nowadays.

The built environment of his pictures is standardised and the feeling, which comes out, is degrading while the natural human emotion of the discovery is flattened. This is caused by the standardisation and repetition, where the notion of different cultures, different periods and even different colours is completely cancelled.

The discourse around places without history, as a result of the post-industrial era, the new polyvalent functions of the architecture (use meaning and icon meaning) and the transient places, evokes Frampton's theory towards an architecture able to resist to the *universal non-place* of megalopolis (Verebes, T. 2015).

The non-place, in a more urban perspective, is sterile and over geometrised; this concept is represented in the film-documentary *Megalopolis* (Conversano, F.; Grignaffini, N., 2007) where the complex structure of six metropolises is shown through the problematics of crowed slums and their standardisation, which generates in turn social issues related to the squatting, inclusion and exclusion, tolerance and violence. The film investigates these aspects arising the relation between non-place and lack of humanity where the solitude of modernity becomes the central point along the six film.

Fig.6 Carpark. Goldman, M. 2019. Example of non-place

The notion of non-place has been formalised by Augé in 1995 but as early as the sixties the group of architects Archigram (1962), originated in a cultural environment at the beginning of the technologies, were studying the phenomena of networks. They focused on all type of nets, visible and invisible, and on these nets' power of remodelling the landscape as a sort of holistic and global village.

The communication and the movement between humans and objects are represented through networks and the pop-city *Instant city,* a sort of social module, is the representation of the new man habitat and the consumer society. It may be argued that the Archigram's archetypal image is the prediction of Augé non-place thirty year later.

3.6.3 The empty place

A linear consequence of the physical action of abandonment become, in terms of space, the empty place. Empty places are, for definition, uninhabited places but

yet with a reflection of their past life where the social and cultural events of the country are overlapped. They are the evidence of a presence of the past, expresses through their current absence.

An empty place is a space that does not have significance anymore and that has lost its reason to exist in the composition of city urbanity.

In this case, the empty place, does not need to be physically divided by a fence or barrier. It is inaccessible. It is almost a forbidden place; or, even more so, an invisible place within the city.

The concept of void has been wrongly associated (Sposito, C. 2012) with the emptying of buildings or industrial sites, which also generate complex phenomena of new relations with the city.

The specific category related with industrial sites has been analysed, earlier than Sposito's theory, by Secchi (1984) as a specific and uncertain space that appear in the dense and morphological and well defined city tissues.

As early as the eighties, Secchi argued that voids appear as urban fractures, as areas with no current function or use and with a lost relation with the physical, social and functional aspect. Despite the extended and radical aspect of voids, there are not project indicators that take consciously the opportunity to redefine the whole urban structure (Secchi, B. 1984).

These empty places have typically always been related to abandoned industrial areas where the most problematic aspect concerns their oversized dimension.

The metric data bring an important aspect to reflect on for project of renovation within the consolidated urban tissues.

By looking at an empty urban place, it becomes important to reflect on the correct new role starting from a specific architecture and urban methods.

Fig.7 Empty buildings.

The dimension often is related first of all to the real estate values rather than to a proactive possibility of urban, aesthetic and social-economic regeneration.

In this sense, the empty places are out of proportion to the purchasing and expropriating capacities of the local authorities.

These spaces cannot be brought back just to the simple concepts of conservation or recycling. They should be related to more complex reflections of their new significance within the modern urban context. The design process of these particular cases should start with a clear theme and observation (Secchi, B. 1984).

Speaking of urban empty place means reflecting on their roles over time (e.g. history, current and future) and their physiognomy in relation to the modification of the city.

3.6.4 The roles of the buildings within place, non-place, empty place

The several conditions of the aforementioned type of spaces often are typically related with the presence of buildings. It is possible to identify the different role of the built environment in these categories of spaces:

- In the _place:_ the heritage, buildings or roads are the tracks of evolution. They persist with the present, with the time and with the lifestyle. The contemporary concept is clear because different historical periods are part of the same system; they create a material and immaterial network.

- In the _non-place_: the buildings or infrastructures do not belong to anyone. They are used with indifference and are conceived as abstract entities.

- In the _empty place_ the differences between inside and outside do not exist anymore. The open space is empty; the building is empty.

One of the common themes of these last two categories, non-place and empty place, is that there is a lack of identity.

3.7 Urban voids

Several interpretations of the word _Void_ have been provided within the urban and architectural literature and debate regarding the contemporary city.

For Eastern civilization, the void is the positive complementary entity of the solid and imbued within of intellectual and spiritual values (Roveroni, S. 2008).

In this section, however, the research considers Western appropriations perception of void.

The nature of the urban void is a component of space and may be interpreted as both absence and presence.

The question that arises regarding the notion of void is related to its twofold aspect. Is it an object absence or a significance absence?

There are two typical explanations associated with concept of _Void_ in the architecture and urban discourse; on one hand the voids are all components of

the city without constructions and this category includes public spaces too, such as squares and parks. The void is assumed to be an important part of the city.

Furthermore, the term has been elaborated as a form of architectural significance with reference to classic spaces such as the Pantheon (the temple of all Gods) inner void which represents, through absence, the universal concept of its monumentality (Espuelas, F. 2004). In this sense, the void has a positive and important interpretation as part of the project. The concept associated with this idea is a conceptualisation of void as *designed subtractive space*.

This first interpretation of the notion of void defines the main characteristic as an important part of the context form and even of the buildings form.

Its role is to regulate the relation between new and past objects. Furthermore, the void reorganises the spaces and such highlights new images as well as recomposing the figurative continuity of the places.

On the other hand, a void is generically understood as an indefinite emptiness. The solid has however, to be assumed in order to define this type of space.

Colin Rowe (1979) proposed, through Collage City, an analysis of the city that implicitly describes the void as negative element and as opposed to the positive. This type of reading, however, was already present in Nolli's scientific map of Rome, produced in 1748, where for the first time the measured plan of the city was represented solely through solids and voids and thus structured on an iconographic relation between viability and built environment.

There is also a third interpretation of the void as element, as part of a more complex system. Roger Trancik (1986) argued that spaces which do not make a

positive contribution to the surrounding areas and which do not provide any coherent connections, are ill-defined as voids. He later refers to these as *lost spaces* (ibid).

Michael Greenberg (1990) analysed urban voids and gave the description of these spaces as *Temporarily Obsolete Abandoned Derelict Sites*.

There are also other definitions and adjectives which are used and considered for describing and giving meaning to voids. These include the latest *terra incognita*, and *urban ruins*. To date, however, a terminological consensus has still not been reached on the definition of uncertain urban spaces.

deFilippis (2010) analysed the concept of void and its interpretation starting from the etymological meaning. Through a precise study of the words he associated to the notion of void, the concept of *fragment*.

The definition of fragment according to the Oxford English Dictionary is *a part broken off or otherwise detached from a whole; an isolated or incomplete part of something*. (2018)

The concept of fragment is strongly closed to the idea of unplanned, marginal and residual condition described further by Groth and Corijn (2005) regarding the issue of urban voids.

Fig.8 Fragmented void between roads

Furthermore, the idea of fragment has been also used to describe specific characteristics of urban voids in the city of Milan. The fragments are present in the city but are not an active and connected part of the complex city system. In particular, *fragment* has been the name of Milan urban design workshop which was focused on the design possibilities around the city voids.

As an interpretation of urban voids, this research considers, the concept of *fragmented voids* to analyse the open urban spaces that have the potential to become an urban social *place* for the city.

VOID AS DEFINED BY WESTERN CULTURE

in project concept: subtractive space

in urban analysis: negative spaces (void/solid)

in some cases ('80s): industrial decommissioning

in underused spaces reading: fragmented urban void

Fig.9 Diagram of urban and architectural concept of void typologies

Non-place	Empty place	Fragment (urban void)
- humans can pass through it - no limits - functional meaning - used space - designed only for the purpose/ undeveloped space with only connection function - no history	- no humans - limits are not needed - no meaning in the context - unused - generated by the emptiness/designed in the past for specific function - presence of history	- May include humans - delimited by a margin - meaning into the context - may occasionally be used - may be undeveloped - historical roots - may contain traces of history

Table 7: Categories of abandoned spaces
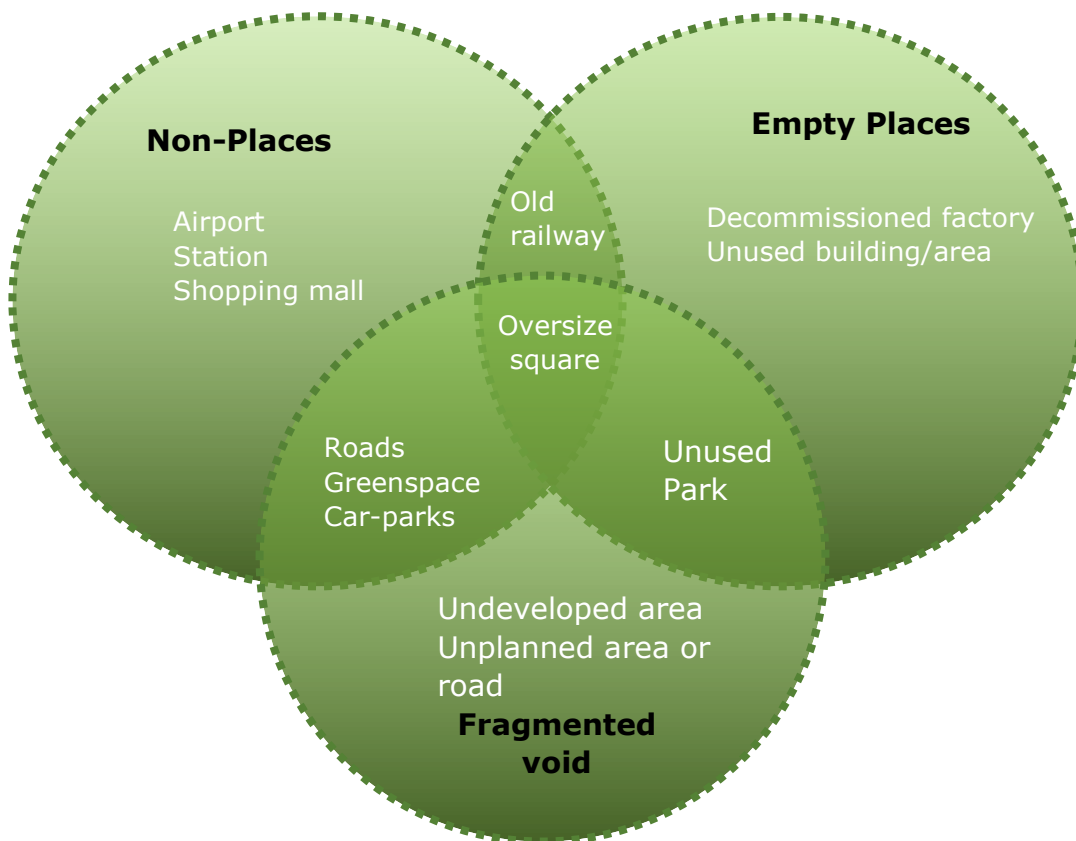
Fig.10 Diagram of interconnections between the categories of abandoned spaces

3.8 Logic of the fragment and the loss of place

In the built environment, building is a concept that determines today a fragmentation of the city. This fragment, with a view to historical stratification, can only be a vital connotation of the contemporary city.

A fragmented city could be intended as a system of different parts with different functions and different morphologies. The fragment could also refer to the delicate balance between different parts.

At the 2008 Biennale of Venice architectural exposition in the space was recognisable because was a broken space, made through fragments. This was the case of David Rockwell's art work *Hall of fragment* of with.

In art theory, concept of entropy, replicable in the city and its urban system, becomes a place made by different elements and objects, namely a variation of solids and voids, as thematic diversification of artifacts and events.

Building in built environment is, therefore, a need due to lack of spaces, but is also an ethic duty for the architects (Conejos, S. 2013). Before imagining how our countryside will be, it is important to first question how our city will change.

Paradoxically, absolute fragmentation could become a standardization of itself. For this reason, only a continued comparison with order (urban artifact, landmark) could generate an exception. Within the plurality of these fragments there are recognisable elements which together create an urban composition of old and new.

The city of today is comprised of a degree of fragmentation. This heterogeneity defines the idea of quality which becomes interaction, overlapping and mixture marked by contrast and vagueness.

The contemporary appears as a puzzle of parts which emphasises, in their points of contact, the difficulty of connection and the lack of communication (Bozzelli, A. 2008).

3.9 Reflections between perception and belonging. Concept of beauty

Architecture and urbanity have to answer to a certain level of urban quality, environment, housing, mobility, more sustainable buildings and economic development.

The image of the city (Lynch, 1960) follows the idea that the form affects the social behaviour and then the concept of beauty assumes a sense of grace, harmony of the place, going over the idea of isolated area or building. The project has to respond to perceptive, functional and morphological relations because relations create interest which in turn creates more sustainable and economic development, tourism and improvement of the urban life.

In the paragraph 3.6.1 the concept of place has been analysed as opposite of the concept of non-place, empty place and void in their different declinations of the meaning of generic *absence*. From this assumption it is possible to elaborate a discussion related to the architecture and urban meaning of *presence.*
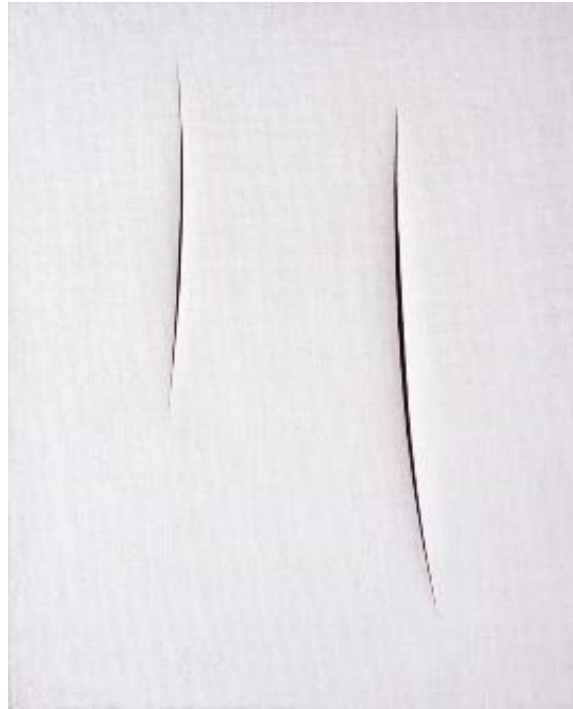
Fig.11 Concetto spaziale. Fontana, L. 1959

The presence, in terms of *conceptual space,* is a *sign*, a *signifier* and *signified* because is part of an agreed system and composition, exactly as the de Saussure's semiology (1967) defines the word as part of the language.

This linguistic analogy is common in architecture and within the arts in general, especially because the signs are combination of elements, the signifiers depict the meaning in the mind of the receivers and the signified are the object idea that is communicated. These concepts are explored for instance by Thsumi who played with signifiers in his Parc the La Villette project through relations and broken relations between old and new elements.

The presence, in terms of space, is the concept of place which has been associated several times to the idea of beauty both in architectural and philosophical-artistic literature. In the following description and explanations, it is possible to notice as the concept of beauty has been objectified within these

disciplines, associated to the harmony thus to numerical balance. In this regards, the hypothesis of harmony may help to fill the theoretical void of the concept of beauty.

The idea of place associated to the concept of beauty, in the urban and landscaping context, is both useful and beautiful (Turner, T. 1987). To have a good place it is helpful to consider and create archetypes (Turner, T. 1995).

A set of archetypes can provide better goals for the landscape planning process than the vacuous concept of open space.

(Turner, T. 1995 pg. 276)

The concept of beauty within the city is made of several conditions. These include density, (Daverio, P. 2013) intensity (Piano, R. 2015) and time, but also clarity and readability are the main elements defining the order.

The logic of the fragment is a rational path that describes the relations between different public and private spaces, between mobility and the business system of the city and how these relations are perceived by the citizens in terms of beauty.

The concept of beauty is not an aesthetic solution, rather the result of all arguments on urban and architectural clarity, readability, connections, scientific and humanistic definitions are aesthetic solutions.

The concept of beauty is more complex and articulated by a variety of historical overlays and it is consistent to analyse and control for the semantic load of this notion.

Ka'los kay agatos, (Daverio, P. 2013) in Greek represents on the one hand an aesthetic idea of proportions and on the other the idea of usefulness. It means

that beauty is a concept which expresses the ethical relation between them. Campo Baeza defines the action of architect as "establishing the order of the space" and reminds that Platone (Baeza, C. 2013) said that beauty is "splendour of truth" and so when the idea is clear and readable, the beauty is expressed.

As Daverio (2013) argued the notion of beauty, within Western culture, began in ancient Greece and represented the good, the true and the belle. The philosophical notion related to the ancient idea of beauty was the *Kalokagatia*, term constructed on the concept of *Kalos* = beauty, and *Agathos* = honesty (Durrigl, M-A., 2002).

Neoplatonist philosophers revised the concept of beauty, directing it into a more transient condition which has in turn anticipated its Christianized form of expression. (ibid)

In fact, Sant'Agostino, almost coeval of the Neoplatonism period, defined the Christianity salvation as an effect of the *Pulcritudo Dei*, ergo an objective beauty which may be shifted in architecture with concept of archetype (Daverio, P. 2013).

It is possible to notice that beauty has been a concept explored from different perspectives and investigated through centuries.

In architecture, Vitruvius argued and defined the *Ratio Venustatis* (Venustas = Venere = Grace and Beauty) thus the *eurythmia*, ratio between Firmitas (strength), *Utilitas* (utility, function) and *Venustas* (aesthetically pleasing). Again, the beauty is not just a subjective consideration, but it is a relation between different and various factors.

In architectural and urban field, beauty, thus the harmony, is the expression of relations between urban artifact, (Rossi, A. 1966) paths, buildings, humans,

perception of the space, and the voids between them can be a resource of beauty.

In the Baroque era, voids represented the beauty of the urban system. The Fontana di Trevi project is into the disposition of roads and buildings which create a soundless atmosphere thus in the designed urban voids.

Passing from a dimension and so a context to another (for example from solids system to infrastructure and paths system of the city) is the key for reading and understanding the whole system of the city and the balance between its different parts.

Pythagoras realised that the relation and balance between objects may be represented through numbers but this balance was going to change in relation to the context. His concept of *tetractis*, relation between numbers from one to four, defines the equilibrium, and thus the beauty, through the concept of *harmony*, elaborating a balance between *entity* and *quantity* (Daverio, P. 2013).

In this sense, it is possible to argue that the harmony of the line is different from the harmony of the square:

In the linear mathematical context, the sum of three plus four would be seven, but in the areas context that sum would be equal to five (Daverio, P. 2013).

From this assumption and from the notion of beauty as objective characteristic in architecture emerges that it is important to find the units of measurement of the relation and balance, thus the harmony between different systems and elements. Those elements or parts may be translated in urban and architecture discourse as alignments, vertical or horizontal paths, solids and voids.
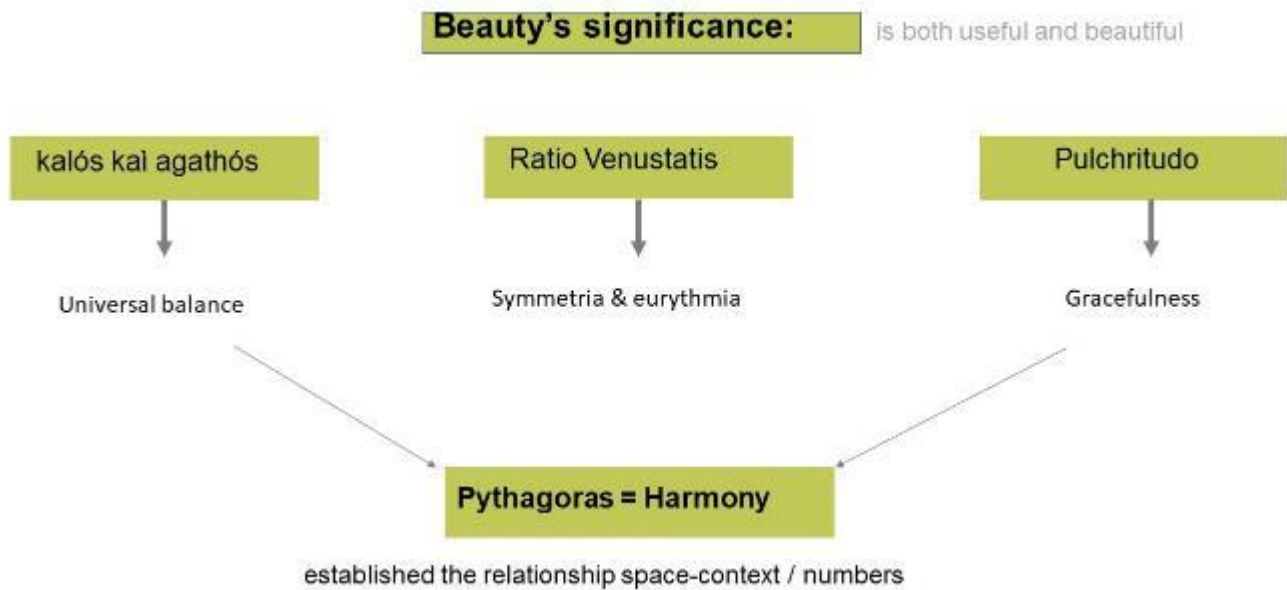
Fig.12 Diagram of beauty significance in architecture

In the contemporary city, the variables that classify different parts of the city and then their relations are increasing so, *establishing the order* of today space means opening different urban debates.

Beauty will save the world is a Dostoevsky quotation used by Renzo Piano (2015) to describe order, proportion and harmony between parts of the whole and as fundamentals of the architecture.

In the urban and architectural systems, these characteristics do not have to coincide with a formal and aesthetic enclosed result but more flexible and open.

Often in the field of perception an enclosed system is associated with the concept of symmetry and so to a mirrored image, but the semantic density of symmetry is more complex.

Symmetriais composed by Syn and so Sym (Oxford, 1996) means 'with' 'whole' and 'Metron' which means 'to measure'. The deep meaning of symmetry is measuring, the ratio and relationship between entities, yet the harmony between elements in a certain system.

In the city, that concept shades and becomes possibility of open systems which hybridise and contaminate each other and which is open to new evolutions.

> *The relationship between the thing and its space is key for the beauty. […] That beauty must be open enough to allow things to happen, to move inside, and to imprint a context (Hecht, S. Colin, K., 2015).*

Bernando Secchi (2013) argues that architecture and urban discipline have to take responsibly for worsening inequalities and can be one of the causes of economic crisis.

Leaving an open urban system is to the base of European history of architecture and urbanity: designing means exceeding the time limits and giving a concrete value to an idea and a relaunching of social and economic growth.

The concept which emerges from the idea of beauty is that the social, economic, urban, architectural and sustainable balance depends on the way in which the city is read and the relations between its parts.

Today, this analysis reveals that a dimensional expansion of the city (for European city) is not enough in itself and it is fundamental to understand in which contexts the city is read, and which idea of the city the urban and architectural theory is moving towards.

3.10 Cases of regenerations

This section aims to analyses successful projects of regeneration of abandoned places, considering and consolidating the concept of re-use. As Fisher-Gewirtzman (2016) states, studying precedents is one of the most important

part in the architecture process, not just in terms of academic task but even in the professional process of design elaboration. Particularly her formal analysis of precedents is based on identifying formal principles and abstraction process in order to classify projects of re-use and summarise them with diagrams. This method has been considered to return to and adopt in the precedents studies later in this paragraph.

The reason of classifying precedents within a table of diagrams through naming the different design approaches and compositions of re-use proves to be fundamental as designing with existing built environment requires different level of knowledge, of design capability of carrying out multiple works, and of planning the design process.

Fisher-Gewirtzman analysis (2016) are based on Ching (1979), Clark and Pause (1985) and Baker (1985) theories and are considering twelve characteristics of the projects, design approach and compositions, such as repetition, symmetry and balance, hierarchy, planes, surface, etc. In conclusion all projects are classified crossing the *strategy* and *tactics* of interventions.
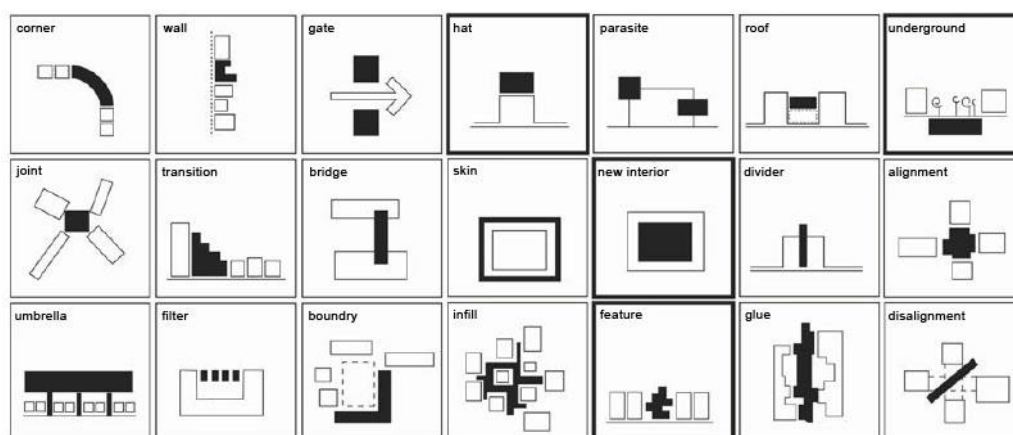
Fig.13 Diagram of precedents. Fisher-Gewirtzman, D. 2016

Figure 7: Map of the strategies and intervention tactics involved in the adaptive reused projects. Categories are based on Brookner and Stone (2004).
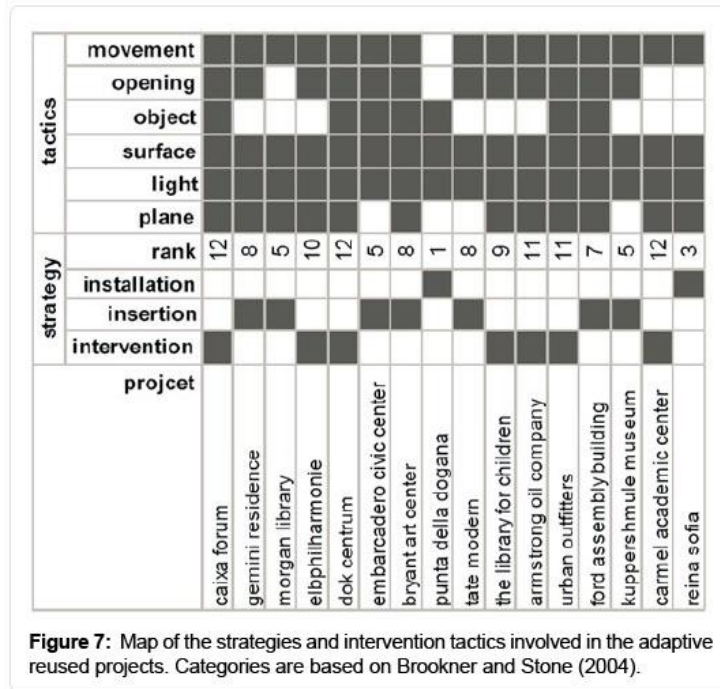
Fig.14 Matrix of intervention approaches. Fisher-Gewirtzman, D. 2016

Similarly, to Fisher-Gewirtzman paper, in the following paragraphs, selected projects of regeneration are analysed and discussed in order to guide the process of re-use design.

The classification here has not considered strictly the strategy and tactics, as Fisher-Gewirtzman's proposal, particularly because the projects selected are more at an urban level of intervention rather than just at a single building level.

A taxonomy of re-use designs has been selected and classified in a table (paragraph 3.10) which highlights and summarizes the main characteristics considered for the purpose of this research:

1) the type of existing space

2) strategy of intervention and architecture composition

3) social innovation

A question raised from these projects relates to the possibility of defining a specific *modus operando*, a common design approach to the project of the existing as a resource of urban transformation, and if this approach derives from a specific characteristic of the space.

The hypothesis is legitimated by the project of *Parc de La Villette* of Bernard Tshumi first and Rem Koolhaas then, who both participated to the competition of re-designing the park as cultural public space. The projects are very similar even if the designers come from different cultural environments and background forma mentis. This highlights, in a certain way, the importance of projects based on theoretical principles of coherence and sharing.

3.10.1 *Parc de La Villette*

The competition theme was related to the larger urban regeneration of the East parts of Paris, *l'aménagement de l'est de Paris,* approved by the city council in 1983. The public spaces' masterplans were combined with a view of residential expansions of the city and the idea of the park was based on a new vision of innovation and pluralism.

The winning intervention (Bernard Thsumi 1982) can be considered one of the most influential architectural projects for the new contemporary architectural theory, although was not so distant from Koolhaas' idea.

In that historical moment, the urban scenario was changing. The architects were in front of new landscapes made of old historical fragments (the old city walls such as the Berlin one, for example), industrial ruins, natural elements and desire and necessity of progress.

The *Parc de la Villette* itself represent the first live experiment of a new design methodology where the general rules and the new methods were based on a multitude of urban evolutions through the centuries. (Hardingham, S. 2012)

It is the first time that an architectural project is not presented as unique and crystallized object, but as a deconstructed and unlimited space instead.

Even if that project can be considered, in the meantime, both an overturning and a denial of the classic urban interventions of the eighties, the new design method and principle is enormously clear. The relation with the existing environment is established here through a project of three layers: lines, surfaces and points, and each of them defines a level of a specific function (flows, folies, green spaces and buildings).
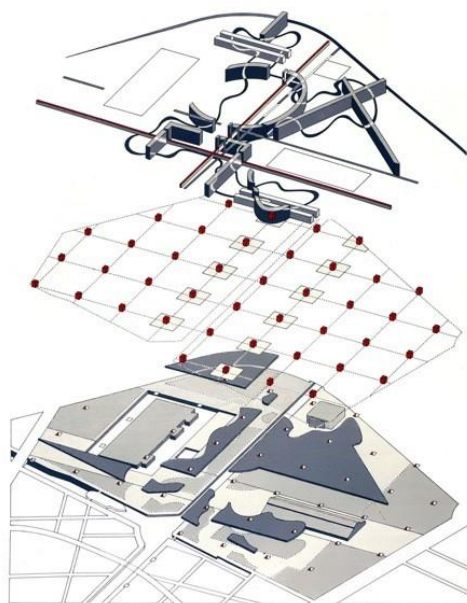
Fig.15 Exploded axonometric of Parc de La Vilette. Bernard Tshumi's project

Parc de la Villette represents a reflection on the time: the past; the present; and, future, and their relation and balance. It is a relevant starting point for thinking and reflecting on projects of regeneration and on the overall process of

critically studying the current urban phenomena, in order to define methods for appropriate re-use projects.

On the other hand, Koolhaas project reflects the idea of layering but in a more congested way as interpretation of unexpected social activities. It is visible Kandinsky influence on exploring the relation between geometric and organic forms. Particularly, within the dense and geometric juxtaposition of lines, Koolhaas contradicts his own rule by adding over-dimensioned spaces.
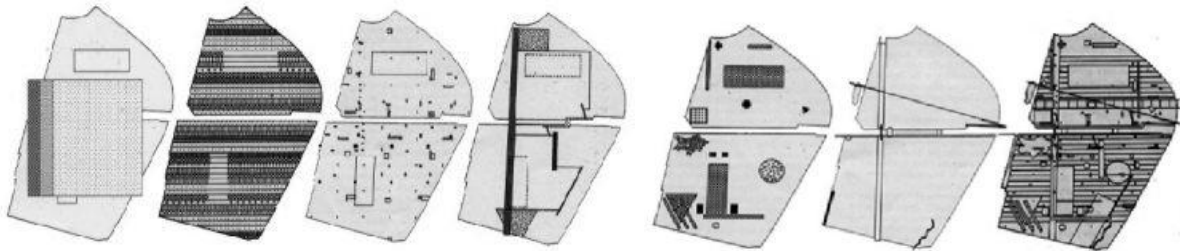
Fig.16 Conceptual layers of Parc de La Vilette – Rem Koolhaas's project

Looking at the two different solutions (e.g. by Tshumi and Koolhaas), it is possible to recognise the same thematic and formal conclusion; a project based on different morphologic and functional layers as main landscaping theme. The aesthetic solutions and the configuration of both projects are different, but the methodology and the design approaches are similar.

The historical and social context and the natural and built environment are the major elements that affect the choice of a design principle, both in terms of form and architectural language.

3.10.2 *Genoa Harbour*

The regeneration of the old harbour may be considered as a re-use of an archaeological industrial space that preserves its original connotation.

Interestingly, as Piano explained (2018) the culture of the city and its citizens is more orientated to do not lose anything. This attitude is probably a consequence of the geographical conformation of the region, crushed on the coastline. In this sense, this project of regeneration is not just an evidence of the past but also a reflection of its cultural and social environment.

The design of the harbour enhances its original function of connection with other places reinforcing the relation between the city and the sea.

By designing a unique surface for the pavement, Piano overlaps a rigorous rectangular grid for positioning streetlights, trees and wind spinners, all elements present within the harbour, ground, water and air.

Fig.17 Bigo elevator. Genoa harbour

These elements became the most iconic landmarks of the project. Particularly two out-of-scale objects, not distant from Koolhaas exceptions for Parc De La Villette, were added to the water; the Bigo, an elevator for viewing the city from above, that redraws the old shapes of the harbour cranes and the Sfera, a transparent biosphere with twenty meter of height.

The old factories, Magazzini del Cotone were reused without altering their structural modularity. However, and interestingly, just the secondary partitions were removed in order to have flexible internal spaces for shops and café.

Fig.18 Magazzini del Cotone. Genoa harbour

3.10.3 *Parco Dora*

Parco Dora was one the largest abandoned industrial area (Fiat Ferriere, Michelin, Paracchi, Savigliano) in Turin close to the river and the main spines of the city. The project designed by Peter Latz (2004) aimed to create a sort of hybridization and intertwined overlap between old industrial ruins and modern elements characterized by the predominant presence of nature.

Historically these type of industrialization represented for the city, the materialization of an economic rebirth. In this sense, the project shows an acceptation, almost respect, of the rigid old structures and the form of the spaces and buildings. This approach, however, is not passive, rather tends to interpret the history with unexpected contrasts and de-compositions.

The landscape design and the nature are the heart of the project. Greenery, trees and water are balanced between the remaining parts of the massive buildings.

Fig.19 left: View of Parco Dora. Right: Internal space of re-used factory at Parco Dora

Some continues façade made of concrete were re-used as artistic canvas and the buildings themselves were refunctioned with new social activity spaces.

Fig.20 Re-used factory at Parco Dora

The main concept behind the entire project is based on a central spine which leads to the areas through perpendicular secondary paths.
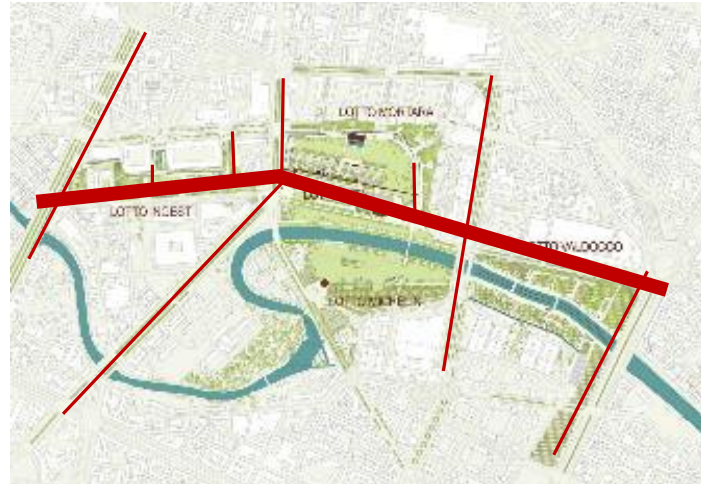
Fig.21 General Masterplan of Parco Dora

The park is today the largest green lung and most important example of successful re-use of the city.

3.10.4 Highline Manhattan

The old railway in Manhattan, New York, is probably the most famous project of railway line re-use where the ability of using different species of plants and the concepts itself of transforming the entire long bridge in a "suspended forest" above the city, is what remains the most in the collective imagery.

Fig.22 Highline walkway

The choice of maintaining the rails and re-use them with a new idea of mobility – the rails are used for movable deckchairs – and highlighting their presence through a pavement that simulates the idea of movements, does not destroy the memory and the past function and purpose of the Highline, rather demonstrates that the old urban elements can be reactivated through modern functions and design languages.

Nevertheless, the main design principle is still vague if we do not concentrate the attention to the interconnections. The Highline re-use project is based not just on the idea of rehabilitating the line but rather the spaces in between it and the city. Many stairs, elevators and lateral connections are the heart of the project itself.

Fig.23 Highline. Vertical connections

The micro-economy and different functions have been generated around the highline. The line remains constant in its length but on the contrary, the spaces around and so the borders of the line have been elevated to social places.

Fig.24 Highline. Micro-activities underneath the Highline

3.10.5 *Fondaco dei tedeschi*

The old building is located in Venice, thus in highly historical place. In this sense the external features of the building are completely renovated with no evident modern intervention. Yet the relation with the context and the sea water has remained unchanged. Interestingly, at that time the population of Venice was decreasing and for this reason the project, before focusing on the design, considered the programmatic aspect of the building. Particularly, the functionality of the building was thought as a sort of urban storehouse with various activities related to shopping, cultural events and social spaces in order to attract both, tourists and citizens.

In terms of relations with the context, all spontaneous external paths and accesses, used by citizens as shortcuts, were kept in order to maintain and consolidate the urban character of the projects direct firstly to the residents.

The original structure was a mixture of several interventions made during the past. Basically it was not just one building but multiple buildings at once.

The main architectural theme is, thus developed inside of the building through unexpected vertical dispositions of new devices and paths. The vertical direction of these inserts reveal the overlap of multiple historical structures. What

emerges from this approach is mainly an acceptation of all historical stratifications, without considering which one was more authentic or important. In this sense the contemporary project becomes a witness of the past periods.

The new roof is a silent horizontal plane, reminding miesian play of geometries, slightly detached from the existing structure.
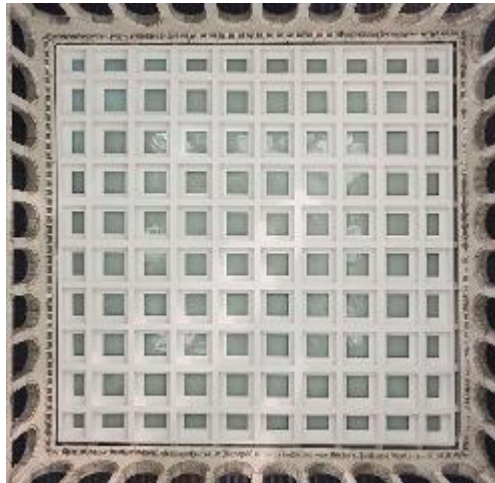
Fig.25 New roof of Fondaco dei Tedeschi
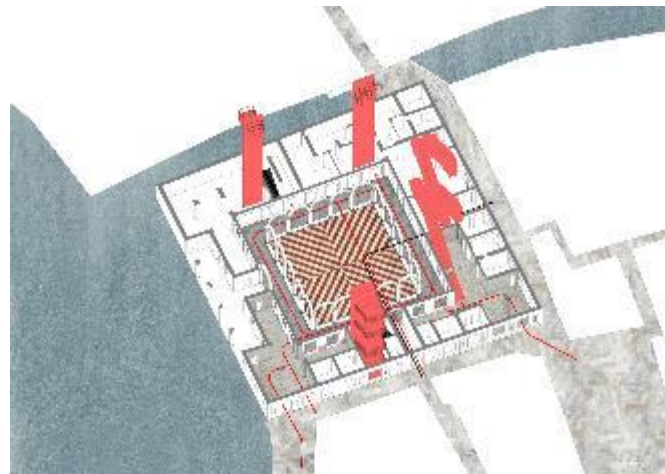
Fig.26 Axonometric of Fondaco dei Tedeschi

All new elements are clearly declared and even reinforced by the use of bright colours. The main architectural principle seems to follow the idea of interpenetrating the old mass with new scattered volumes.
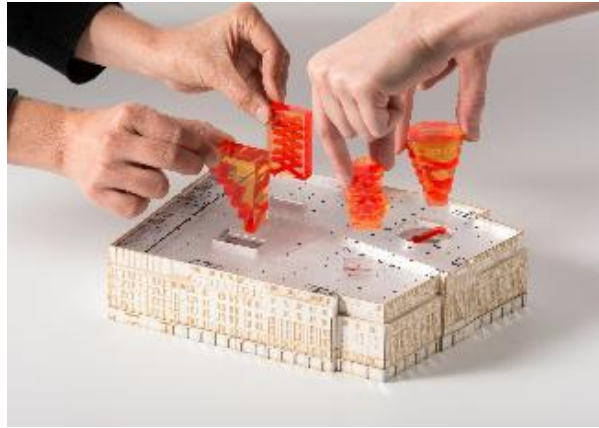
Fig.27 Project concept of Fondaco dei Tedeschi

The project revitalises the building, and overall the surrounding small areas and re-opened the old market space to the public; this happened against the first conviction of the client to just convert it in an anonymous hotel.

3.10.6 *Superkilen*

The project came from the necessity to regenerate one of the most ethnically diverse area of the city. The area is located at the junction of three main streets in a highly built environment.

The design theme is related to modelling the ground by adding artificial dunes, various urban furniture and artistic installations, but the main focus is on the use of three different colours for the long square pavement.

Uninterrupted curved lines are in contraposition with streetlights, greeneries and event spaces, which are treated as fragments within the common square space.

Fig.28 View of Superkilen

The choice of using different colours for the pavements of the three main areas of the square, seems to be related to a more aero-photogrammetric view and taking the colours from the landscape and surrounding built spaces.

Fig.29 Concept behind the colours of Superkilen

All different derivations convert in the central point of the new long public square depicting the new social focal place of meeting for all citizens.

3.10.7 *Therese Gate in Oslo*

The temporary project for Therese Gate was a temporary installation set during a workshop by students from Oslo School of Architecture. The aim was investigating ways of regenerating the area through ephemeral elements placed and geometrically distributed in a triangular square at the intersection of two streets.

The strong geometry of the area was contrasted by a dislocation of fragmented volumes that, if recomposed, would have generated a solid cube.

Fig.30 Removable volume on Theresa Gate, Oslo

Yet, the function of these elements is contrasting the multiple functions of the busy area mainly related with business and advertisements. Each volume hosts artistic exposition that can be seen through small scattered openings, with the aim of slowing the human flows and invite it to pause.

The distribution of the volumes creates inner voids and the diagonal cut of the volumes create a system of nooks-and-crannies.

3.11 Precedents. Criteria for future projects

The precedents analysis enabled to have a clear idea of the approaches both urban and architectural, which are summarized in the following taxonomy and that may be useful as guides for future projects with similar context's condition.
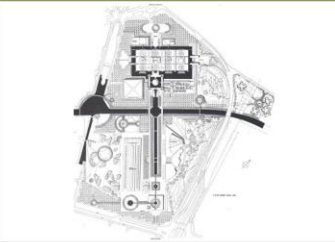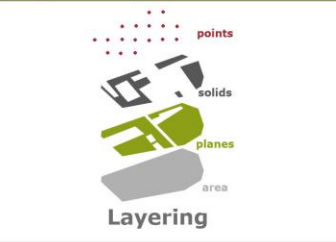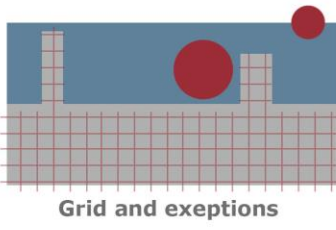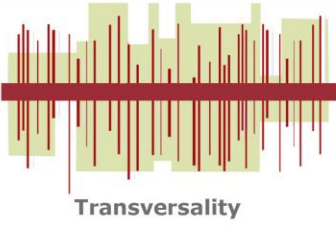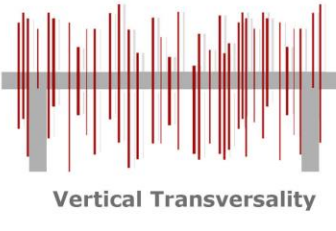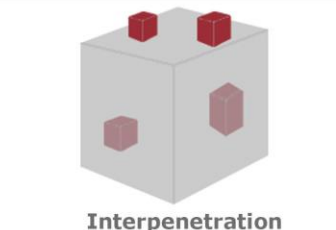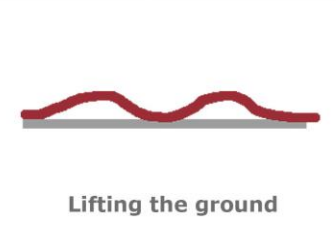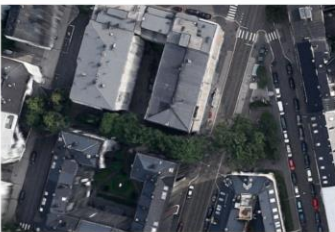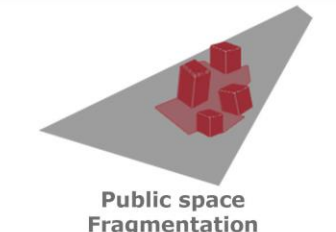
	Existing spaces	Frag. void	Empty place	Non-place	Urban Themes/ strategies	Design elements
Parc de La Villette			●	●	Layering	Folies Greenery volumes Ramps
Genoa Harbour		●	●		Grid and exeptions	New landmarks Platform Trees Streetlights
Parco Dora			●	●	Transversality	Paths Greeneries Water Old structures
Highline Manhattan		●		●	Vertical Transversality	Vertical connections Urban furniture Greeneries
Fondaco Tedeschi			●		Interpenetration	Inner volumes Paths Plane
Superkilen		●		●	Lifting the ground	Dunes Lines landmarks Greeneries/Color
Therese Gate		●		●	Public space Fragmentation	Volumes Voids Crannies

Table 8: of precedents study – Urban themes & strategies and Design elements

What emerged from the analysis of the precedents study is a set of clear urban themes and architectural principles feasible for projects of re-use and more in general for the regeneration of abandoned and neglected post-industrial areas and buildings.

All projects reveal a certain level of complexity not just in terms of design but even related to programmatic aspects and organisations. In this sense it is also possible to notice the multiple involvements which took part in the projects phases.

This is particularly the case of broader projects such as Parc de la Villette and Dora park which began with a competition, thus with multiple expertise as committee board, and later involved historians, philosophers, landscape architects, communities and local authorities in order to have more holistic approach to the site.

The renovation of the Highline in Manhattan commenced with the determination of the citizens to preserve the infrastructure, later congregated in a new community association, which launched the design competition.

The Fondaco dei Tedeschi as well as Genova Harbour involved various professionals and different authorities such as the cultural heritage public body.

Superkilen project and Therese Gate project may be seen also as a sort of social experiment where the first one involved residents from different cultures and second one involved students from architecture schools.

In this regard, the next paragraph focuses on process of collaborations related to urban and architectural projects of re-use, selecting those examples which are pertinent for the practical aspect of this research and its practical focus on Aberdeen city.

3.12 Process of collaborations for urban and architectural projects of re-use

A common characteristic, related to urban regeneration projects, in particular with adaptive reuse designs, is the methodology adopted for the process. This involves several stakeholders, communities, authorities, universities and students.

The typical urban design collaborations comprise the urban Charrette and the urban Workshop. Both of these can be configured in different ways and several stakeholders are involved.

Both processes have been studied in order to objectively define their strength and understand what the best approach is, in order to address issues related with urban abandoned areas.

Before going into the main characteristics of the Charrette and Workshop collaboration, which are more related to dealing with specific themes of design projects of re-use, interesting is the case of Macerata Council (Italy) that underpinned a particular and innovative collaboration with a professional and selected citizen. In the final document, Rigenerazione Riqualificazione Urbana *Macerata* (2015) issued by the local authorities, are illustrated deep urban analysis particularly related to urban voids around the city, studies of successful cases in other cities and specific methodologies and techniques for regenerating the city of Macerata. The aim of this work carried out by a professional was mainly based on 1) involving selected citizens based on their participation, in order to facilitate the creation of new public spaces to discuss urban issues related with the abandonment phenomenon, 2) creating specific reporting form

for abandoned buildings or areas within the city, to be populated by citizens, 3) writing up a detailed urban analysis and related methodology of regeneration.

This particular case can be considered as a live experiment to test new type of city planning through a plan of re-use and regeneration, facilitated also by a more conscientious involvement of the citizens. Probably it represents one of the main starting points towards a more sustainable way to plan the urban evolution of the city. However, as the conclusions also highlight, this model may be applicable and suitable in areas spatially delimited and with a low number of population or in areas where citizens are already culturally prepared to play a more active role within the city decisions plans. Macerata case is still an isolated case of new type of collaboration created appositely to approach urban issues of regeneration and the relationship are established mainly between specific planning department and the citizens, moderated by a professional.

The other two processes of collaboration, Charrette and Workshop, have a more variegated participation and includes more professionals at different stages of their career.

Previous PhD research, analysed within the paragraph 3.3, adopted the *Charatte* as a process of collaboration and a design instrument for the guidelines of abandoned building reuse in the city. (Corsaro, E. 2010)

The *Charette* process can be organized through different configurations of participation, however, there are few common points very similar in every *Charette* regarding adaptive re-use project.

This collaborative process has been successfully adopted, for instance, in the project of Westerholt. (ibid)

Charette is a process which involves various professional figures. Generally, it is organized through a first phase of *round table* where owners, politicians and representatives of the citizens, discuss public needs and aims. The second phase of the *design workshop* is realized through the work of architects and urbanists who propose projects and possible solutions for the round table requirements. The nature of the work is to have specific guidelines as possible adaptive solutions and these are generated during a short time (generally 2 weeks). For this reasons all corrections are immediately drawn and changed and all professional groups are updated in the meantime.

The third phase is related with a *moderation* where a specific professional figure is employed to moderate and guarantee the flow of communications between the round table and the professionals of the workshop. The moderator plays a key role in taking responsibility for the exchange process.

The final phase relates to the presentation of the works to a public authorities' panel. The aim is to collect all solutions and proposals and add them to the interventions planning program of the council.

Charette Summary:

Principles	Context	Use	strength
- continuos feedback - interdisciplinary - citizens' involvement - feasibility - work on site	- urban regeneration - urban planning - masterplan	- complex urban problems - high number of decision makers	- visioning idea/feasibility - short duration of the process

Table 9: Charette details

Another example of collaboration is the workshop. There are various possible configurations for the workshops, but in the case of urban regeneration and

design re-use it is appropriate to consider the involvement of both academics and local authorities as they are significant actors for the urban future.

Roberts (2016) notices that contemporary urbanism and architecture is more comparable to a tabula plena as opposite to the rasa one. In this sense, it appears inevitable to work in-between and on existing parts of the city and buildings. This type of assumption introduces the necessity of stronger and wider collaborations which involve different fields of investigations. In particular Roberts's book is an example of experimental collaboration between Oslo School of Architecture and Design, Columbia School of Architecture and the Planning department of the government quarter in Oslo. This collaboration explores urban and architectural themes, addressing theoretical questions related to design strategies, pedagogical strategies and professional engagement, and exploring methods to develop partnerships.

Alain and Melluso (2016) argued that the academia and the council are deeply involved in the urban scenario. Even the city urban crisis may be read as a consequence generated within these environments.

The contemporary scenario of the city is characterized by two main crises (Alain, P. Melluso, V., 2016). One is related to the architecture university and the lack of re-definition of its role within the city, where the schools are not able to create systematic relations with the city and its council.

The other is related to local authorities that have not been able to update the city planning process during the sudden passage from the urban expansion (1960s) to the urban regeneration (1980s).

These considerations have been raised by authors to propose a more consolidated collaboration between university and local authority within the city of Parma in Italy.

From 2014, the summer workshops organised for regeneration's projects in Parma, were transformed in a longer process of collaboration between university and Parma Council. *Parma cittá Futura*is is a long term urban planning program, where the concept and innovation is firstly discussed within the university, involving several disciplines and studios. They experiment, over the years, new urban opportunities and innovative methods to respond to the needs of new urban interventions. For this program the university and council established a stable union to improve the quality of the city plans and to offer even better services for the communities.

The collaboration is seen as a resource for the society that they called the *third mission*, where the potentiality of the academic methodology and the cultural richness are highlighted in order to elaborate valuable urban projects.

Again in 2014 the University of architecture G. d'Annunzio in Pescara signed a memorandum of understanding with the city council and other seven international architecture schools to establish periodic workshops called Pescara Summer School. The memorandum is called Universitá *e cittá – Pescara Polo della cultura e della conoscenza,* University and city – Pescara Centre of culture and knowledge, and represents the scientific support of the architecture school to the city council (Fusero, P., 2016).

The various meetings, organised to discuss the issues and possible regenerations around the city, are meant as strategic occasions and tools which have as common denominator the universities knowledge.

An interesting reflection on the nature and purpose of the workshop has been argued by Curto, R. (2007) in the presentation of a workshop's publication carried out by students from Turin Polytechnic University and a telecommunication company. The professor insisted on the relation between the actors and their reciprocal interests where research and business can find common spheres on which to make a system of collaboration.

The results are the proposal projects craft by academics and students and also represent reflections for future workshops inputs.

The confrontation between academics and professionals is, according to Curto, vital for the growth of both and it is constructive in terms of possible collaborations.

Workshop Summary:

Principles	Context	Use	strength
- continues feedback - interdisciplinary - academia involvement - theoretical methodology - exchange of knowledge between academics and local authorities	- urban regeneration - urban planning - masterplan - landscaping	- complex urban problems - when there is high number of decision makers	- visioning idea/feasibility - short duration of the process - innovation/cultural discussion - intense educational program - intense focus on an area

Table 10: Workshop details

3.13 Summary of the chapter

The literature review was elaborated around the contemporary post-industrial urban and architectural phenomena of obsolescence. The investigation ranged from architectural discourse to broader declinations used to describe those spaces, encompassing anthropologic, historical and etymological studies.

In this regard, it was consistent to draw a critical analysis on the nature of these spaces and their association with specifics terms.

Looking at possible pragmatic actions of regeneration and re-use, the chapter analysed a range of relevant precedents in order to understand how the issue can be approachable. The analysis revealed a set of urban themes and design principles (pg. 104) but also revealed that projects of regeneration require multiple professional figures. In this sense, in order to achieve the aim 3 of practically testing those principles within the city of Aberdeen, the last part of the chapter argues the most common form of collaboration used for these types of projects.

The investigation of urban abandonment and the precedents study enabled to target and frame the focus and achievements of the summer workshops in Aberdeen. Particularly, they enabled to individuate the issues related to abandonment phenomenon around Aberdeen city and initiate discussions on possible action of regeneration. The theoretical approach, based on the conceptual findings of this research, have been undertaken within the workshops as described and elaborated in chapter 5.

Furthermore, the literature reviews, discussing similar cases of workshop collaborations, enabled to define a first structure of activities for the Aberdeen summer workshops. Particularly, the study of similar collaborations raised the

necessity of dividing the length of the workshop in two parts, one more theoretically supportive in order to inform participants on conceptual explanations and one more practical and based on methodological approach of design reuse. In this regard, the conceptual explanations elaborated in this research fed into the introducing week of the workshop as valid way to stimulate urban observations and individuate the possible lacks of connectivity of the areas. The support of precedents study fed more into the practical activities of the workshop, supporting the approaches and validating the method of researching by design.

The structure of the workshop is based on a series of meetings with academics and professionals where projects examples, scenarios of transformation and the areas of interventions are explored and discussed.

The originality of this project of collaboration is the possibility of sharing the visions between universities and council, experimenting methods of research by design, projects outputs and receiving feedback from professional and council.

The aim of the workshop is to deal with themes related to the city, to the landscape and to the territory without any new constructions and focusing on re-use operations.

The workshop process of collaboration is very common, but also a strong way to stimulate discussions around the city, involving different stakeholders from different environment.

Before moving on the workshop activities undertaken during the summers 2016, 2017 and 2018, the next chapter 4 presents the urban analysis results gained by using the combination of urban methods detailed in the methodology.

In particular, the phenomenon of urban and architectural abandonment described within the literature review, is investigated more pragmatically within the context of Aberdeen city.

Firstly, chapter 4 draws an overview and interpretations of the abandonment's declinations of non-place, empty place and urban fragmented void, through practical examples within the city. This has been done in order to clarify any physical meaning of each category.

Sequentially and as consequence of the discussions undertaken with Aberdeen City Council, eight areas around Aberdeen are selected. In this regard, the Aberdeen City Masterplan 2015 and the Local Development Plan are reported as starting points of the investigations.

Finally, the areas are analysed with urban maps and methods described in the methodology chapter 2 and categorised in a taxonomy of urban and architectural conditions of abandonment.

CHAPTER 4

ABERDEEN VIEWS

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4.1 Introduction and chapter overview

The literature review dealt with relevant aspect of the concepts of non-places, empty-spaces and fragmented voids. These allowed to conceptualise and categorise a range and type of spaces that are currently ill-defined and/or occupy a liminal status. In paragraph 4.2 these theoretical notions are applied to concrete examples taken from the urban context Aberdeen city.

Given that the urban abandoned spaces within Aberdeen city provide a practical context for this study, it was appropriate to approach Aberdeen City Council in

order to initiate discussions related to underused spaces – abandoned – and their possible reconnection within the urban city system. In this respect, to develop further investigations on these urban spaces within the city, it was proposed to actively involve students from architecture schools.

Referring to the Aberdeen City Centre Masterplan 2015-2035 and the Local Development Plan (LDP), Aberdeen City Council (ACC) proposed critical areas in need of regeneration, defined as opportunity sites and key areas for future interventions, which could be explored through different lenses, more academic and particularly by the students.

The selection of a limited number of areas listed on the Masterplan was decided in order to meet the objectives of all parts involved related to urban study, student's outcomes and different insights proposed for the council.

Paragraph 4.3 describes the areas selected as they are reported in the Aberdeen City Centre Masterplan, report and Local Development Plan, together with the strategies individuated by ACC.

Paragraph 4.4 concernes the areas are analysed for the purpose of this research, following urban analysis methodologies listed in the Chapter 2, in order to understand their degree and typology of abandonment.

The literature related to urban analysis (Chapter 2) demonstrated the importance of specific methods of urban analysis in order to categorise the spaces within the city, and create a taxonomy of spaces able to indicate the main characteristic of each of them. The importance of these spaces/buildings categorisation helps to recognise the specific problems related with these areas in order to address and identify the future suitable design methods and approaches. (which will be explored in chapter 5)

If there is no significant problem or no perceived need for intervention, there is generally no basis for affirming the value of a programme that purports to address this non-problem. (Rossi et al., 1998, p.64).

Subsequently and supported by the data collected from the urban analysis, in the paragraph 4.5 the areas are summarised and classified under the three main subcategories of abandoned spaces already individuated in the literature as fragmented voids, empty spaces and non-place.

Finally, in the paragraph 4.6 the areas are listed in a taxonomy which explicitly emphasises the main aspects and characteristics of each area.

The areas selected were:

1. Castlegate - Marischal street – Aberdeen harbour front

2. Aberdeen waterfront

3. Golden Square

4. Bon Accord area and gardens

5. Aberdeen train station – Union and Market street

6. Hazlehead Park

7. Queen Street

Furthermore, one area has been identified by the researcher as relevant and pertinent case study in Aberdeen which was not included in the ACC masterplan and as a consequence for the workshops. The area is the old Aberdeen-Ballater railway, used nowadays as a shared space pedestrians / cycle path. The importance of analysing this linear resulting space is related to its nature of abandoned line and

its subsequent re-use which still maintains its twofold and contradictory function of connection and separation as conceived on different scales.

8. Aberdeen Deeside way - old railway

4.2 Interpretations of abandoned areas

Before analysing the selected areas within Aberdeen city, we require to critically re-consider the notion of empty place, fragmented void, and non-place, making, at this stage, general connections within Aberdeen city. The concepts are reinforced and shaped in order to clarify and describe the ideas raised after the study of the literature, and to pragmatically use certain names and terms to describe existing urban issues and urban design expectations as semantic approach for the research.

The notions of non-place, empty place and fragmented urban void are interrelating to each other by the lack of various urban relations with the other parts of the city and between the users, so a lack of physical, social and urban functions.

Fig.31 unhuman space. From the film Matrix

The three categories are analysed through their constant architectural and urban characteristics but also their de-contextualisation within the city.

In this regard, before focusing on the areas examined in the next paragraphs, the concepts of empty place, fragmented void and non-place are summarised and reflected on some examples within Aberdeen.

4.2.1 Empty place

The areas selected for analysis contain a number of empty buildings. These can be categorised as empty *places* in view of their possibility to be re-converted as social and more public places.

The main phenomenon of emptiness in terms of urban consequence, is related to the generation of urban borders. The lines between outside and inside are more strongly marked and defined once the building becomes abandoned.

Fig.32: left: Empty station of Cults on the Deeside line. Right: Empty Bon Accord Bath. Aberdeen

Paradoxically the emptiness of a building raises and reinforces the presence of the past and thus the history of a place.

4.2.2 Urban fragmented void

Urban fragmented voids may have different configurations within the cities and this can be described through various adjectives. Particularly for this research

three subcategories of fragmented voids are described as theoretical deductions based on the literature reviews.

As discussed previously in chapter 3, fragmented voids are unconstructed parts of the city with no particular significance.

Marginal fragmented voids can be categorised in those spaces which are at the margins of others, for instance a road. They probably have been planned in the past or, as in the case of the picture n. 33, they are just unused and unpleasant.

Fig.33: example of marginal fragmented void, Aberdeen.

Residual fragmented voids are the results of unconsidered spaces and generally between two constructed or planned areas.

Fig.34: example of residual fragmented void.

Derelict fragmented voids are generally those spaces considered normally empty within the city, thus not constructed, but in a neglected condition which sometimes generates unsafe urban spaces and a sense of degradation.
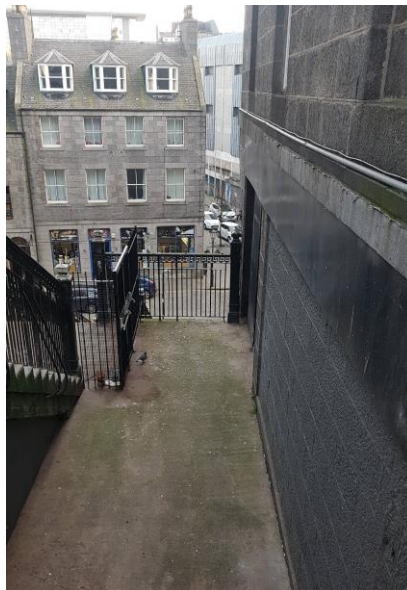
Fig.35: example of derelict fragmented void, Aberdeen.

Figure 35 shows an old well used side entrance to a shop when it was in the building. However, as soon as the entrance became disused, the quite large space became fragmented, disconnected and unpleasant.

4.2.3 Non-place

The notion is not just related to functional spaces, such us train station or airport, but to all spaces not thought for social activity and as a possible destination within the city. A city with a high ratio of non-places in comparison with its places is then not a city liveable at a human scale. In this regard establishing and naming a subcategory of non-places may be strategic in order to define what should be maximized and what should be minimized in view of an urban regeneration design.

Road and Street

A road is a functional connection, an element within the city, used and designed to be occupied by transportations vehicles mainly. The pavements of a road are generally not designed for high amount of human presence. The declination of non-place in this sense is also related to the urban proportions and measures of a road. The width of it exceeds the human scale and consequentially the places around appear to be scattered.

By extrapolating the principle of place and non-place, it can be assumed that within the city there are potentially many streets converted into non-streets.

Fig.36: Example of road. Union Street, Aberdeen

Streets thought as a place are, on the contrary, designed for human interactions and as part of the social environment.

Fig.37: example of street. Back Wynd, Aberdeen

The presence of vehicles does not preclude the nature of a place. The proportions between the width of pedestrian space and vehicles space instead, the entire width of the street, the height of the buildings along it, and the density of activities within the buildings play a predominant role in the definition of a street-place.

Green-space and green-place

The concept of green-space may be considered already part of the more generic concept of non-place issue. Green-space is generally between spaces and with the purpose of dividing different functions, thus there is not any human factors related with the nature of it.

Fig.38: example of green-space. Industrial estate, Aberdeen

In a situation such as that illustrated in figure 38, the greenspace cannot be a destination for social activities but also it cannot add any value to the surrounding spaces in terms of pleasure, beauty/harmony, function and sustainability for its reduced size.

Green-places on the contrary are designed with particular attention to the proportions, variations of the natural landscape and in relation to the urban surrounding areas.

Fig.39: Example of green-place, Aberdeen

The purpose of the green-place is to have social and symbolic functions that enable the space to be rooted within the context. This aspect is crucial for the citizens' perception of the urban green-place. Symbols and social functions of green-places are fundamental to create a recognisable city with specific genetic code. Their importance in the urban tissue is related to the identity of the city since they are the open spaces of the city but also part of the broader landscape.

Wide space and square

Both wide spaces and squares are open spaces within the city but with different function and social purpose. A wide space within Aberdeen is often used nowadays as car park, thus can be qualified as part of the non-place category. The twofold aspect of being an open-space and a non-place shows the incompatibility of overlap, in equal proportions, two different functions. On one hand an open space is closed to the concept of square, of piazza; on the other can be used as functional non-place.

Fig.40: example of wide space, Aberdeen

By definition, a square, occupies a privileged space within the city and a genetic heritage of the urban tissue evolution. This to say that public square can be

considered important elements that contribute to the identity of a city as well as monuments, traditions, and social habits. The symbolic function of social place - and its importance as a citizen destination - make it an important organisational element of the urban environment, therefore an element of balance and relation between buildings, streets and roads.

Fig.41: examples of square. Left: St Nicholas Square, Aberdeen. Right: The green Sqaure, Aberdeen

As highlighted so far, the notion of urban non-place may have various conditions and declinations, depending on its configuration and role within the city.

4.3 Aberdeen Masterplan. Reading and vision of the local authorities

Aberdeen masterplan is intended to direct twenty years' development of the city centre, from 2015 to 2035. The main objective of the masterplan is the economic growth of city and the improvement of the quality of the life based on

> *Creating an inclusive energised and sustainable future for Aberdeen City and Shire. City centre regeneration is a key facet of this vision.*

> *(Aberdeen city centre masterplan report, 2015, p. 16)*

The issues individuated in the report of Aberdeen city centre masterplan are mainly related to the economy and business development which have been dominated in

the last years mainly to the oil and gas sector. The potentiality of this feature is the internationality of the Aberdeen population but despite this multiculturalism, the city centre does not show cosmopolitan aspect either in the retail and leisure or in the use of public spaces. It also underlines the failures of the more recent building developments in terms of quality of design.

> *In summary, Aberdeen has a strong international economy, workforce, history and outlook. The city centre should reflect this international character.*

> *(Aberdeen city centre masterplan report, 2015, p. 16)*

The Aberdeen Masterplan arranges the future interventions under four thematic strategies which aim to improve: 1) Economy, 2) Community, 3) Environment and 4) Infrastructure.

These strategies are addressed across forty-nine areas in the city centre, through eight objectives and are divided in subcategories in relation to the improvement needed according to the council and developers vision for each area.

Below is the image of the table that summarises the objectives, the themes of the four strategies and the areas:

Fig.42: Objectives and strategies. Aberdeen City Centre Masterplan 2015, p. 29

areas and strategies		Culturally distinctive	Technologically advanced and environmentally responsible	Revealing waterfronts	Made in Aberdeen	A living city for everyone	A metropolitan outlook	Growing the city centre employment base	Changing perceptions
EC01: Marsichal Square	Economy: Energy and more							✓	✓
EC02: North Dee Business Quarter			✓	✓				✓	
EC03: Aberdeen City Rooms		✓			✓	✓	✓	✓	✓
EC04: Global Energy Hub			✓		✓		✓	✓	✓
EC05: Aberdeen Creative Space		✓			✓			✓	✓
EC06: Aberdeen 365 Events Programme		✓		✓	✓	✓	✓		✓
EC07: Aberdeen Art Gallery		✓			✓		✓		✓
EC08: New Hotel Development		✓						✓	
EC09: Mither Kirk Project		✓			✓	✓			
EC10: Music Hall		✓					✓		
EC11: Aberdeen Works						✓	✓	✓	
EC12: Hotel Academy				✓				✓	✓
EC13: Retail Academy								✓	
CM01: Castlehill	Community: A city for people		✓			✓			
CM02: Queen Street			✓			✓		✓	
CM03: Torry Waterfront			✓	✓		✓			✓
CM04: Regent Quay						✓			
CM05: Woolmanhill			✓			✓			✓
CM06: Aberdeen Indoor Market						✓		✓	
CM07: Bon Accord Centre							✓	✓	
CM08: Independent Aberdeen		✓			✓	✓		✓	
CM09: St. Nicholas Centre							✓	✓	✓
CM10: Trinity Centre							✓	✓	✓
CM11: Union Street Conservation Area		✓	✓		✓	✓	✓	✓	✓
CM12: Union Square							✓	✓	
EN01: Broad Street	Environment: Light of the North	✓				✓			✓
EN02: Guild Street			✓			✓			
EN03: Langstane Place - Windmill Brae			✓			✓		✓	✓
EN04: Rose / Thistle / Chapel Street					✓	✓		✓	✓
EN05: Union Street		✓	✓		✓	✓		✓	✓
EN06: Upperkirkgate / Schoolhill		✓	✓			✓		✓	
EN07: Bon Accord Square						✓			
EN08: Castlegate					✓	✓	✓	✓	✓
EN09: Golden Square		✓				✓			
EN10: Union Terrace Gardens		✓		✓	✓	✓	✓		✓
EN11: Aberdeen in Colour		✓	✓	✓		✓			✓
IN01: Walkable Aberdeen	Infrastructure: The connected city		✓			✓	✓		✓
IN02: City Centre Car parking			✓			✓			
IN03: Cycle Highways			✓	✓		✓			✓
IN04: Cycle Hire			✓				✓		
IN05: Cycle Hubs			✓			✓			✓
IN06: Bus Priority Measures			✓			✓			✓
IN07: Bus Stops and Station			✓			✓			✓
IN08: Aberdeen station			✓			✓	✓	✓	✓
IN09: Airport Rail Link			✓					✓	✓
IN10: Aberdeen Suburban Rail Network			✓			✓		✓	✓
IN11: Accelerate Aberdeen			✓			✓	✓	✓	✓
IN12: District Heat Network			✓			✓		✓	✓
IN13: Underground Bins			✓			✓			✓

Furthermore, the report classifies specific areas within the city centre, from the list of the Opportunity sites presented in the 2017 Local Development Plan (LDP), that are less utilised and are closed or that coincide to a number of sites which are already under development, such as Marischal Square. The classified areas are described as Areas of Interventions and each of them presents a description section divided into: 1) The Vision, 2) The opportunity, 3) Development objectives, 4) Development Summary.

Fig.43: Intervention areas. Aberdeen City Centre Masterplan 2015, p. 63

The areas are here described and listed according to the LDP and the Masterplan Areas of Intervention. The intention of the following sections is to outline the strategy within the Masterplan. This provides an important understanding of context for the original research exploration (in chapter 5).

4.3.1 Aberdeen Masterplan and Local Development Plan. The seven areas

1. Castlegate – **under Areas of Intervention - AM**

The area should be an attraction of visitors and tourists and link to the harbour to the south and the beach to the east.

The Vision:

Castlegate will be the new centre's civic square as it has been in the past portrayed in the masterplan as a popular place to enjoy the city life.

The opportunity:

Castlegate needs substantial repaving and measures to improve microclimate. Also it will be the comfortable place of events such as market and concerts. These changes of functions will stimulate interest from building owners and new businesses to invest in new leisure uses around the square.

Fig.44: Castlegate. Aberdeen City Centre Masterplan 2015, p. 85

Development objectives:

The development approach should deliver:

- New paving surface for the area including Justice Street to simplify the space and take a lead from the building edges to square and streets.

- New landmark such as lighting scheme of permanent or temporary installations.

- New protection from the winter weather condition in the square

- The shops front should be attractive and limited to the use of retail, food & drink and assembly and leisure.

- The upper floors on Castlegate should be limited to the use of office, hotels & hostels and residential.

- The development should consider the area behind Castlegate

- Better connections and use of the ground space at Castlehill for public use

- Replacement of the roundabout connecting the area to the Beach Boulevard with a crossroads junction, improving the pedestrian and cyclist paths.
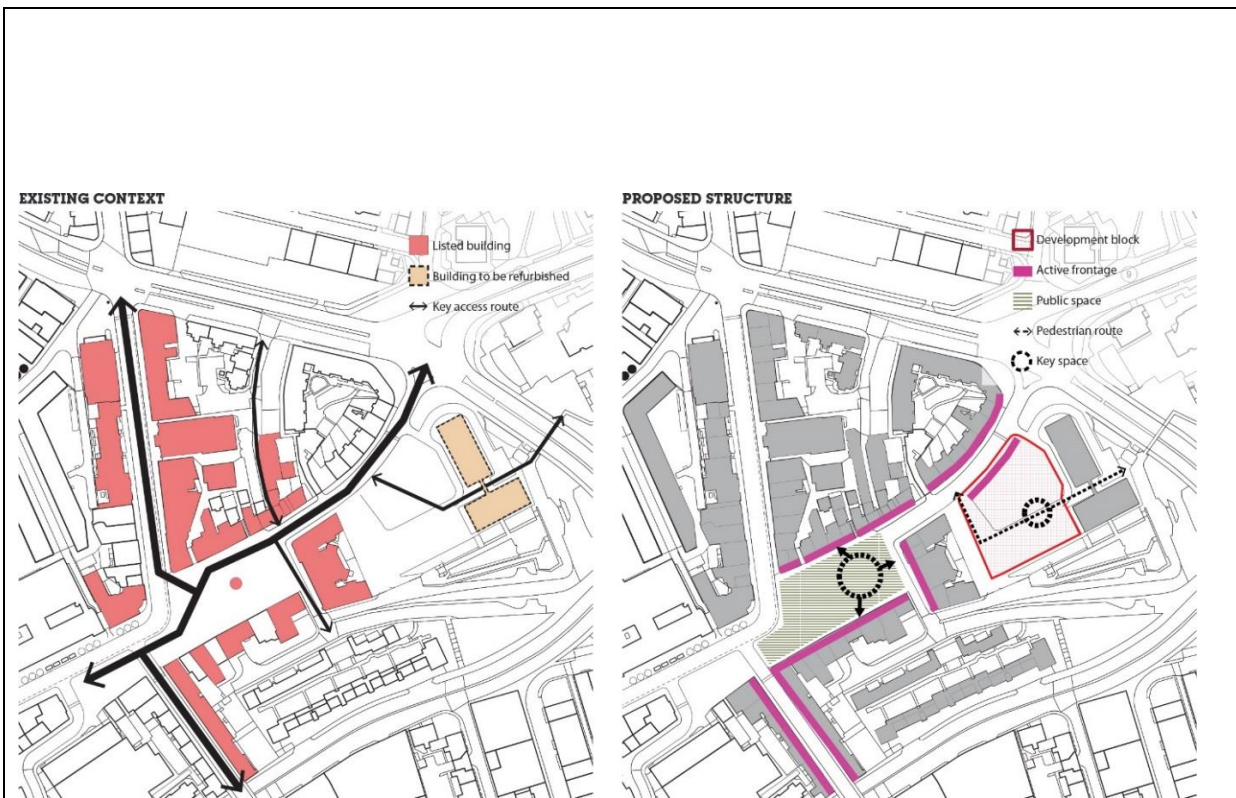
Fig.45: Castlegate. Aberdeen City Centre Masterplan 2015, p. 86

Development summary:

- Refurbishment of properties on Castlegate with limitation of the ground floor uses: 1. Retail, 2. Food & drink, 3. Leisure. Upper floor uses: 1. Offices, 2. Hotel and Hostels, 3. Residential.

- New residential apartments.

LAND USES - GROUND FLOOR
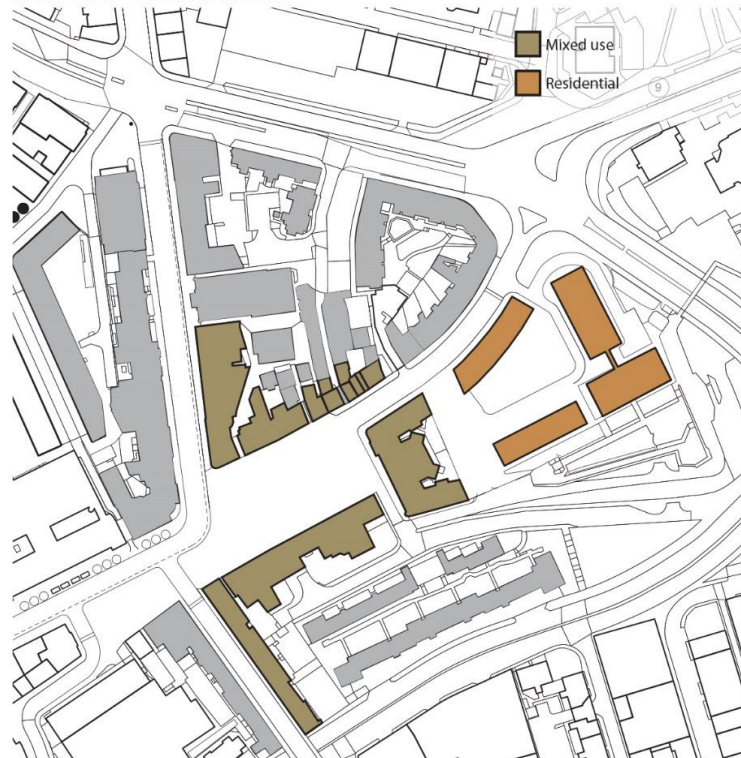
Fig.46: Castlegate. Aberdeen City Centre Masterplan 2015, p. 87

Fig.47: Castlegate. Aberdeen City Centre Masterplan 2015, p. 87

2. Aberdeen waterfront – **under Opportunity sites - LDP**

The Coastal Planning classifies the waterfront into two types of area, developed and undeveloped coast. The undeveloped coast is unsuitable for development. The developed part is already a focus of economic and recreational activity and is suitable for further developments. All developments should consider strategies which consider nature protection, aquaculture, fisheries, agriculture, industry, off shore wind energy, shipping, tourism, development of infrastructure and mitigation and adaptation to climate change such as flood risk, sea-level rise and weather event. (LDP pag 41)

3. Golden Square - **under Areas of Intervention "Union Street West" - AM**

Golden Square is part the of Union Street West Vision where the refurbishment of the Music Hall and the new City Rooms will increase the cultural, civic and commercial character of the city. Golden Square is under the Environment: Light of the North strategy (figure above n. 42) and future development are mentioned in the Development objectives of Union Street.

Development objectives:

Golden Square should be redesigned in order to remove the car parking and to create outdoor performance space as continuation of the Music Hall. The design should involve the regeneration and redefinition of South Silver Street as pedestrian street mainly.
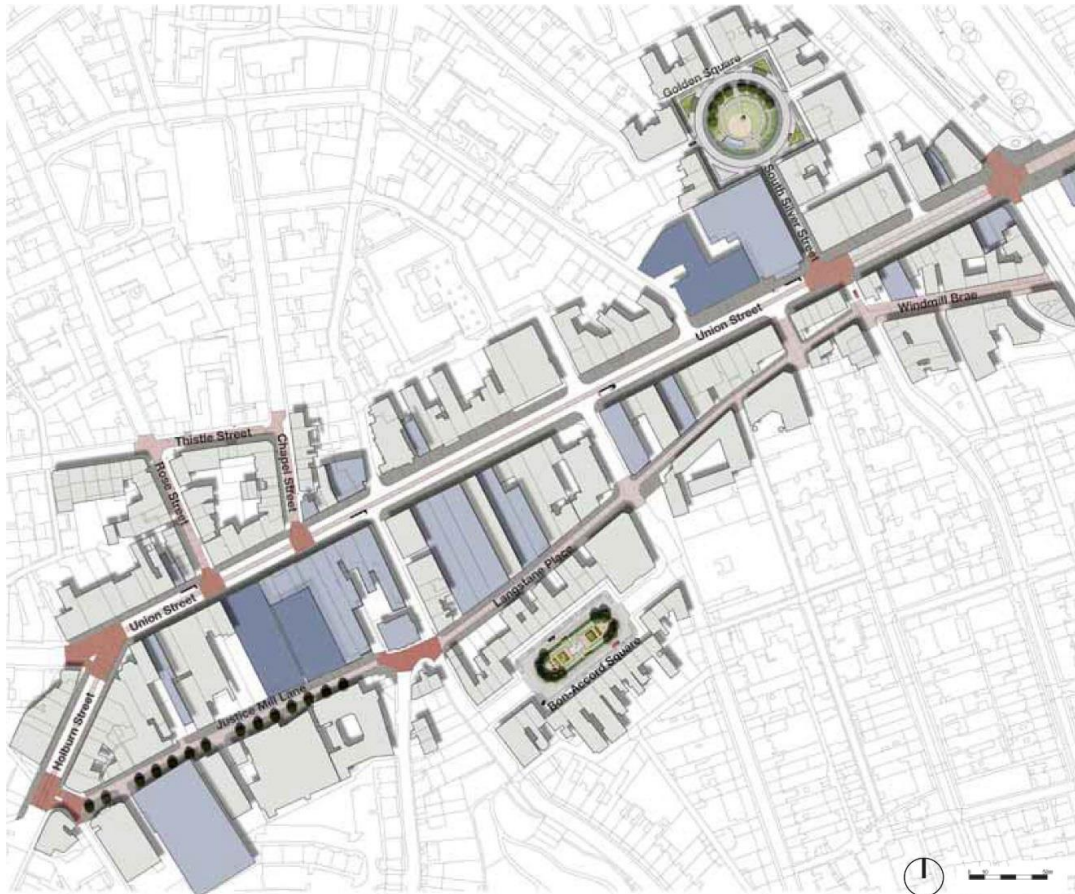
Fig.48: Castlegate. Aberdeen City Centre Masterplan 2015, p. 77

4. Bon Accord square - **under Areas of Intervention "Union Street West"**

Bon Accord is under Union Street Intervention and is considered a key space for the redevelopment of the entire area in the city centre.

Development objectives:

Bon Accord should be redesigned to have an urban garden with more plants and biodiversity, raised beds and seating areas to encourage meetings and stays. The accessibility should be redesigned and the new pavement should be considered. The illustration of the vision is together with map above, fig. 48.

The Station and the surrounding area extended until the Aberdeen Market should represent the gateway experience and should have a better connection with the city centre.

The Vision:

The vision for the Station Gateway aims to improve the areas by pedestrianizing the routes between Union Street and the station. New hotels and retail facilities will improve and animate the public space as entrance to the city centre.

The Opportunity:
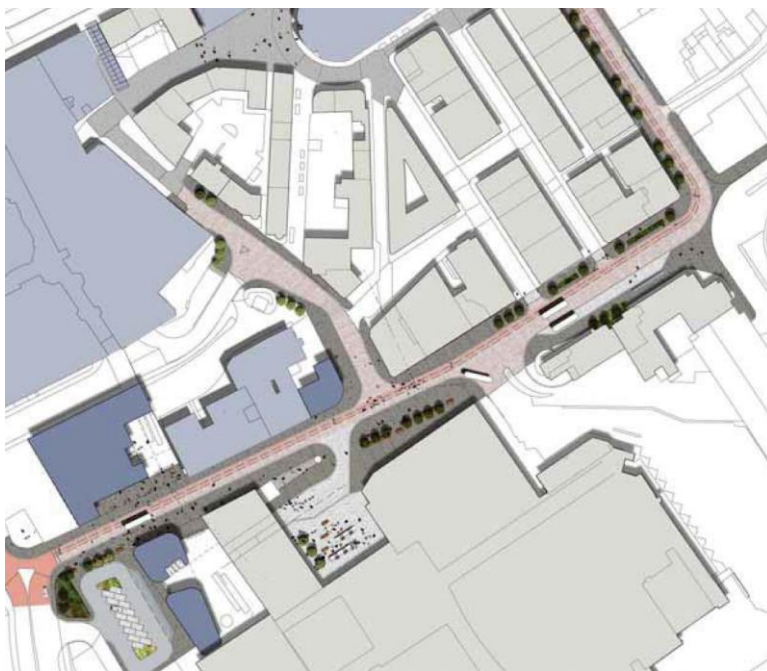
Fig.49: Train station area. Aberdeen City Centre Masterplan 2015, p. 81

The station taxi rank will be relocated and the station concourse will be expanded. The Atholl House would provide a better gateway and facilitate the connections to the Trinity Centre and Union Street.

Development objectives:

- Remove cars on Guild Street and part of Carmelite Street and Wapping Street

for more pedestrian footways.

- Guild Street will be the new public place with high quality materials and simple unfussy design.

- Relocation of the drop off and taxi rank to College Street.

- Redevelopment of the existing taxi area to expand the station concourse with retail uses and hotel above.

- Redevelopment of Atholl House and Trinity Centre entrance replaces with high quality foyer/atrium space and new bridge link to the trinity Centre

- Programme of enhancement and improvement for the Trinity Centre.
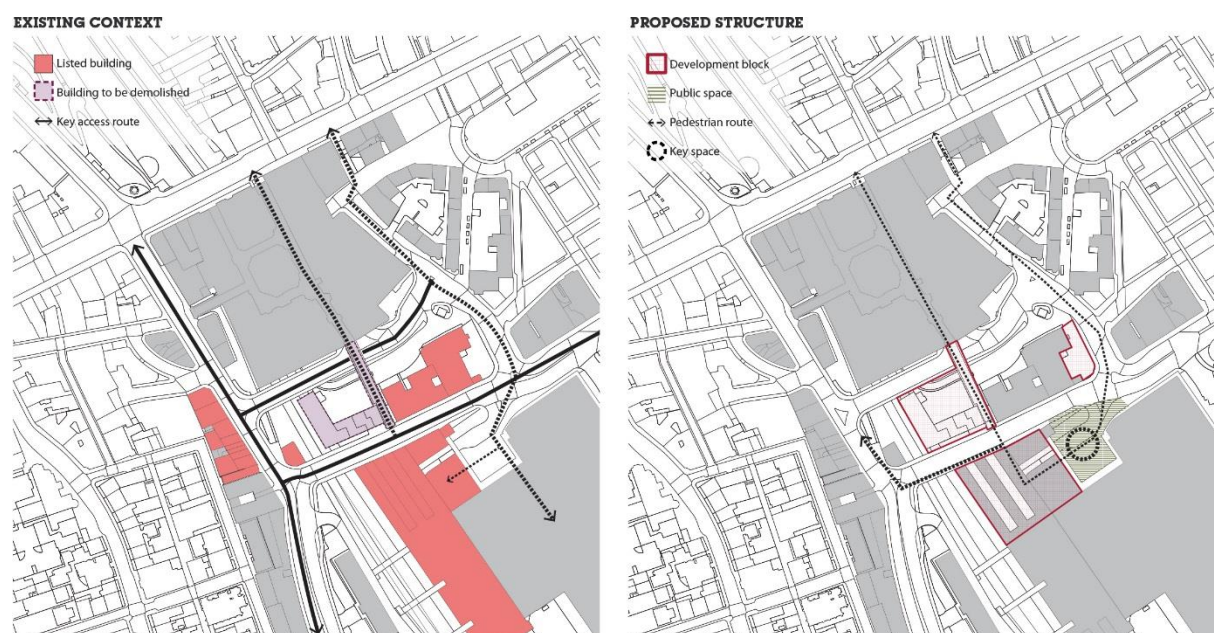
Fig.50: Train station area. Aberdeen City Centre Masterplan 2015, p. 82

Development summary:

- expanded station concourse to include retail and food & drink functions

- new station hotel above the concourse

- New Trinity Centre entrance and bridge

- Hotel on Atholl House
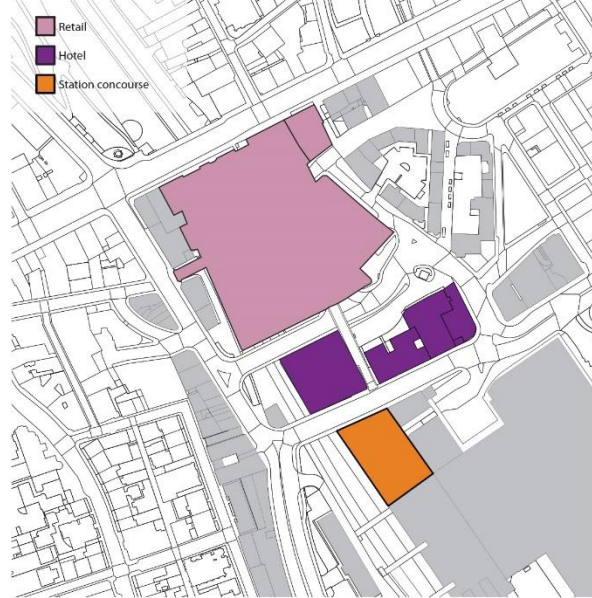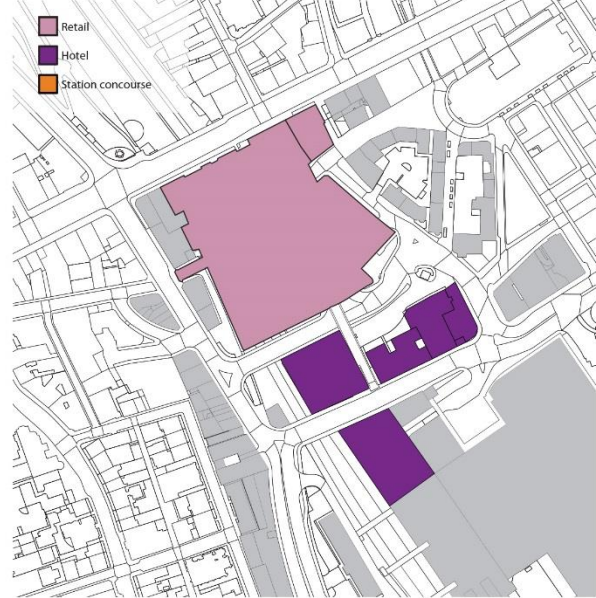
Fig.51: Train station area. Aberdeen City Centre Masterplan 2015, p. 83

6. Hazlehead – under Opportunity sites LDP

Hazlehead is located out of Aberdeen city centre and is part of a vision called Green Belt which has the purpose to maintain the distinct identity of Aberdeen by defining with greenery the physical boundaries of the city. No development will be permitted in the Green Belt apart from those essential for the agriculture, woodland and forestry.

Buildings in the Green Belt which have a historic or architectural interest or a valuable traditional character will be permitted to undergo an appropriate change of use which makes a worthwhile contribution to the visual character of the Green Belt.

Extensions of the existing buildings will be permitted in the Green Belt if the original remains predominant; if the design is sympathetic to the original one; if the siting of the extension relates well to the setting of the original one.

7. Queen Street - under Areas of Intervention

The vision:

Queen Square is the new name of Queen Street to indicate the transformation of the area into new mixed use urban quarter.

Cafes, shops and apartments will populate the public space which will be pedestrianised. The vision aims to activate the area during the day and the night with cultural events in the Lemon Tree and the Arts centre.

The opportunity:

The aspiration is to downsize the Police Station to alternative accommodation and to redevelop the Town House extension and former Grampian Police headquarters together with other buildings and under used spaces on Queen Street. The uses will be commercial and food & drink for the ground floors and residential for the upper floor.
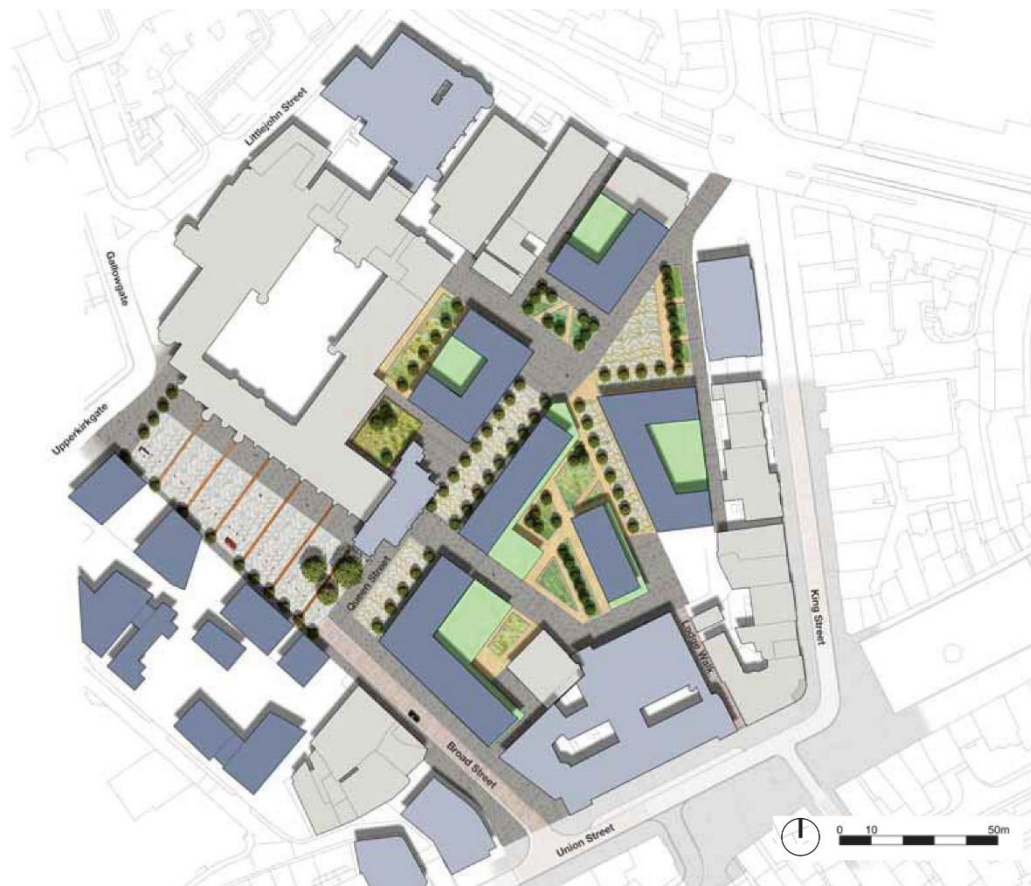
Fig.52: Queen Street. Aberdeen City Centre Masterplan 2015, p. 73

Development objectives:

- Refurbishment of the Marischal College eastern annex and Greyfriars John Knox Church.

- Redevelopment of the Town House extension and former Grampian Police headquarters

-Development of the pavement with pedestrian use only with the extension of Lodge Walk as a link from Union Street and the new square adjacent to Aberdeen Arts Centre.

- Attractive and coherent contemporary architecture respecting the Marischal College, the Greyfrias John Knox Church, the Town House, the Arts centre and Queen Street Church.

- Retail and food & drink on Queen Street.

- High quality of the public area.

- Broad Street will have access restricted to buses and taxi and will be designed as a high quality space used for temporary events.
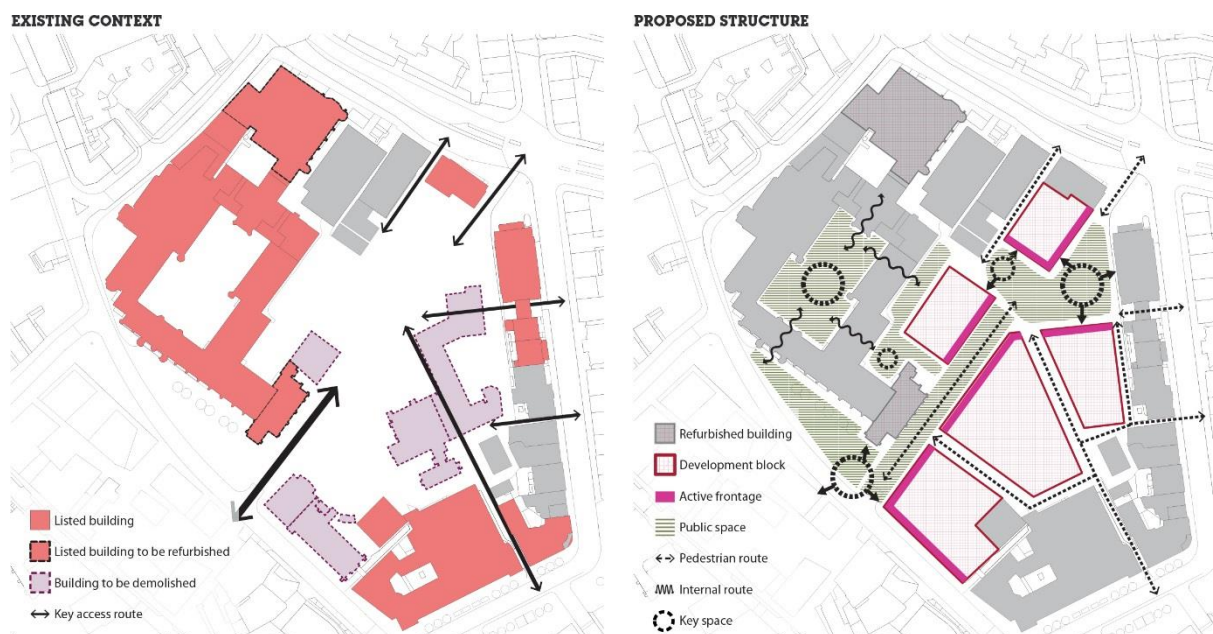
Fig.53: Queen Street. Aberdeen City Centre Masterplan 2015, p. 74

Development Summary:

- Refurbishment at the eastern annex of Marischal College with offices, assembly and leisure.

- Refurbishment of Greyfrias John Knox Church with food & drink uses, business, hotels and hostels, assembly and leisure.

- New retail, financial, professional and other services, and food and drink at the ground floors.

- New upper floor for residential use.
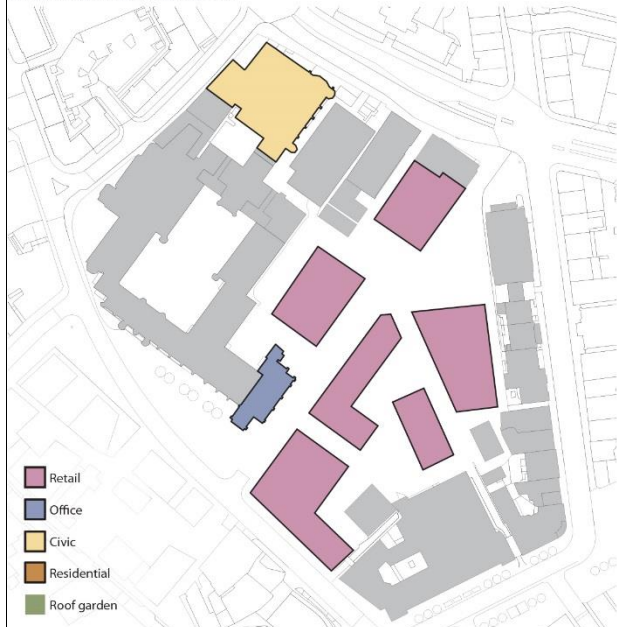
Fig.54: Queen Street. Aberdeen City Centre Masterplan 2015, p. 75

The Local Development Plan is a guide for the urban interventions and includes a list of policies for every area described. Another city plan is related to the mobility and transport. In particular, the Local Transport Strategy 2016-2021 aims to implement the long-distance pedestrian routes such as the Deeside Way analysed in paragraph 4.5.

The masterplan is a proposal, adopted by the council, which influences every future intervention, forms the backdrop to every decision, although it is not a prescriptive template. It also indicates size of possible buildings, functions and materiality.

The indications and the guidelines proposed in the Masterplan are similar, despite the areas have different urban characters. Almost all of them, excluding Hazlehead Park, Golden and Bon Accord Square, have been addressed with the retail, food & drink and residential destinations only.

It also appears a sort of discrepancy between the descriptions and the proposed maps of the new structures. In particular, the strategy of refurbishment and the idea of visual connections with the existing context are mentioned several times, but then all existing buildings are clearly evidenced to be demolished on the maps.

4.4 Reflections on the LDP objectives

The objectives of LDP seem more oriented toward an economic and marketing development at the disadvantage of a harmonious urban and architectural development of public space. The risk of using the statement *growing city centre employment base (*objective n.2) may fall in an urban plan based on mimicry and reiteration of the same structure and development's formula, which have been already applied for the renovation of the train station, Union Square, and the

Marischal Square new building. Interestingly, for both interventions the term *square* has been used even if the predominant elements are more constructed and less orientated to architecturally define the public and urban space in its civitas and agora declination. According to Rogers (2017) planning means considering the spaces in-between and the quality and nature of public spaces where the voids, thus the non-constructed spaces such as squares and streets, define the urban harmony.

The objective (n.2), *growing city centre employment base,* already defines some intentions related to the functions and activities, which have to take place in the city centre. This seems to aprioristically exclude other forms of public space use and a mix of activities for people and citizens from different backgrounds, and it seems to go against the objective n.4 *Living city for everyone.*

> *Public space – big or small, noisy or quiet – reflects civic values.*
>
> *(Rogers, R. 2017)*

Aberdeen is a relatively a small city (232,000 Population Projections for Scottish Areas, 2016) with a strong architectural character due to its materiality and architectural style; regenerating historical city centres and developing the harmony of spaces over time, might mean both design approaches of juxtaposed consistency and contrast. Giving a *Metropolitan outlook* (objective n.3) and particularly using these generic terms may be open to various interpretations; the risk may be to generate a weakening of the city identity and local community, reinforcing on the contrary, the notion and the appearance of Koolhaas' generic city. Furthermore, metropolitan, despite its Greek etymology of *mother-city*, is generally referred to a modern and dynamic city (Enciclopedia Universale Mondadori, 1989) which does

not envisage a *Changing of perception* (objective n.1) of the city centre and the typical local productions defined under the objective n.5 *Made in Aberdeen*.

More specifically, observing the objectives in relation to the area studied in this thesis, there are incongruent associations. For instance, Castlegate, which is the oldest piazza of the city, is associated to the objective of transforming it in something with more metropolitan outlook. Yet changing perception for a historical place as Castlegate seems challenging, particularly, as discussed later in the chapter, the issues related to a space which is not constructed and so a void, are generally related to the other non-constructed spaces such as streets, connections and pedestrian paths. This suggests that what should change is the connection of Castlegate with Union, King and Marischal Streets, rather than its perception. Interestingly, one of the Golden Square's objective is becoming culturally attractive, but this is not the case of Castlegate.

In conclusion, what emerged from the LDP is a long list of generic objectives which are repeated several times for almost all areas, but their vague and not specific aspect is sometimes contradictory and confounding.

4.5 Identification of abandoned spaces within the areas. Reading methods

The vision of the Council articulates the priorities that need to be addressed in a specific time frame, according to the masterplan 2015.

On the other hand, as constructed through urban and architectural discourse, there is the possibilities to explore even more the borders of these selected areas trying to emphasise the importance of interconnectivity between them. By considering the character of identity of Aberdeen and the areas mentioned in the Aberdeen

masterplan 2015 and in the Local Development Plan 2017, other areas at the borders and other existing issues emerged from the study of the city urbanity.

The methodological analysis approach underpinned by a more academic reading, enables to identify particular urban problems and address them through specific solutions according with similar precedents examples.

Analysis brings to a work a type of deep reading whereby probing and questioning reveal the potentials and significances of a precedent. Analysis becomes, furthermore, a mode of seeing and understanding a work.

The analysis of urban areas are based on broad literatures and specific methods that help to understand, not just the area itself, but also its borders and the related relations with the surrounding context. The relations and the borders are indeed indicators of urban identity. Relations and connectivity, archetypes (Turner, 1995) or their declination in the Rossian *urban artifacts* (Rossi 1982) therefore, are fundamental for the concept of place.

According to this, the lack of relations and significant urban and social elements generates placeless-ness.

Two main categories of relations are useful to explore the meaning and the issues of an area. Relation means that presences have effectively taken place. In terms of urbanity and landscaping relation can be:

1) With the surrounding and so made through paths, connections, steps, emphasizing particular parts of the city.

2) Between the users and so through social functions.

Based on this assumption specific analysis methods are used in the following paragraphs to individuate and classify the type of abandonment of the areas examined and to link the issues to specific cases study.

Reading   Principle

- Mapping   **Precedents study**   - Transversality

- Typo-morphologic analysis   - Contrast

- Rhythm analysis   - Repetition – Flows

- Observation   - Entropy – Variety

- Perceptive/interpretative   - Flows & Grids
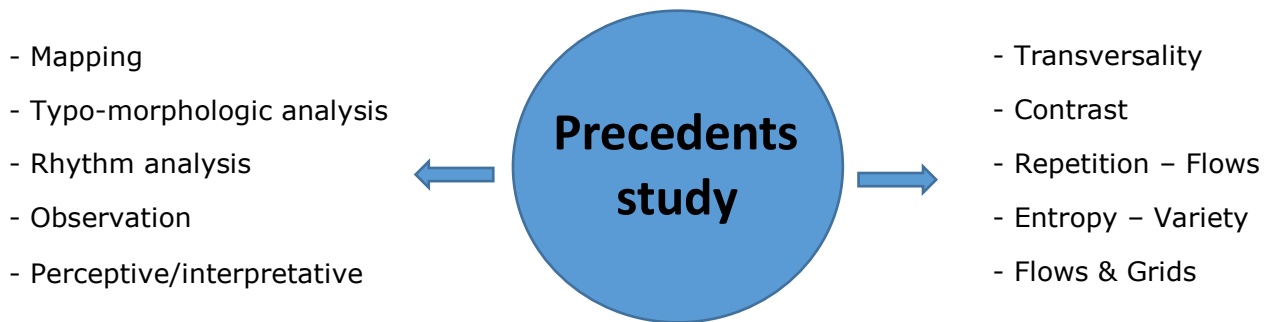
Fig.55: Diagram of design process

In the following analysis it is explored the nature of the areas selected for proposals of regeneration by the ACC Planning Department and reported in the paragraph 4.1, investigating their urban characteristics and the subcategories of abandoned spaces they may fall into.

The areas are studied through specific methodologies of urban analysis (Chap.2) adopted in the urban and architecture disciplines characterised by a more theoretical approach.

The urban and architecture analysis, particularly mapping, typo-morphologic, rhythm, observation and mental maps, are the main instruments within a more research orientated context. They aim to investigate the city in a more holistic way, interpreting the various aspects of the city. By defining the potentialities of the spaces through the data and information shown on the drawing maps, these types

of analysis-instruments enable to address a process of design methodologically structured.

4.5.1 Mapping – relation with the urban context

As a first phase in analysing the areas selected in Aberdeen by ACC, photographic areal images from Digimap have been used to map and identify the areas within their surrounding urban context. In this respect a first visual interpretation has helped to identify their dimensions, physical forms and positions within the city (fig. 56). From this first view of the areas it appears clear that they are almost fractal urban spaces, thus are not just constructed solids but mainly spaces in-between the built elements. The diagram drawn on the map then, has been isolated to better understand the relation between the areas and also to clearly visualise and evaluate the fragmentation and the proportions of the selected abandoned spaces within the city.
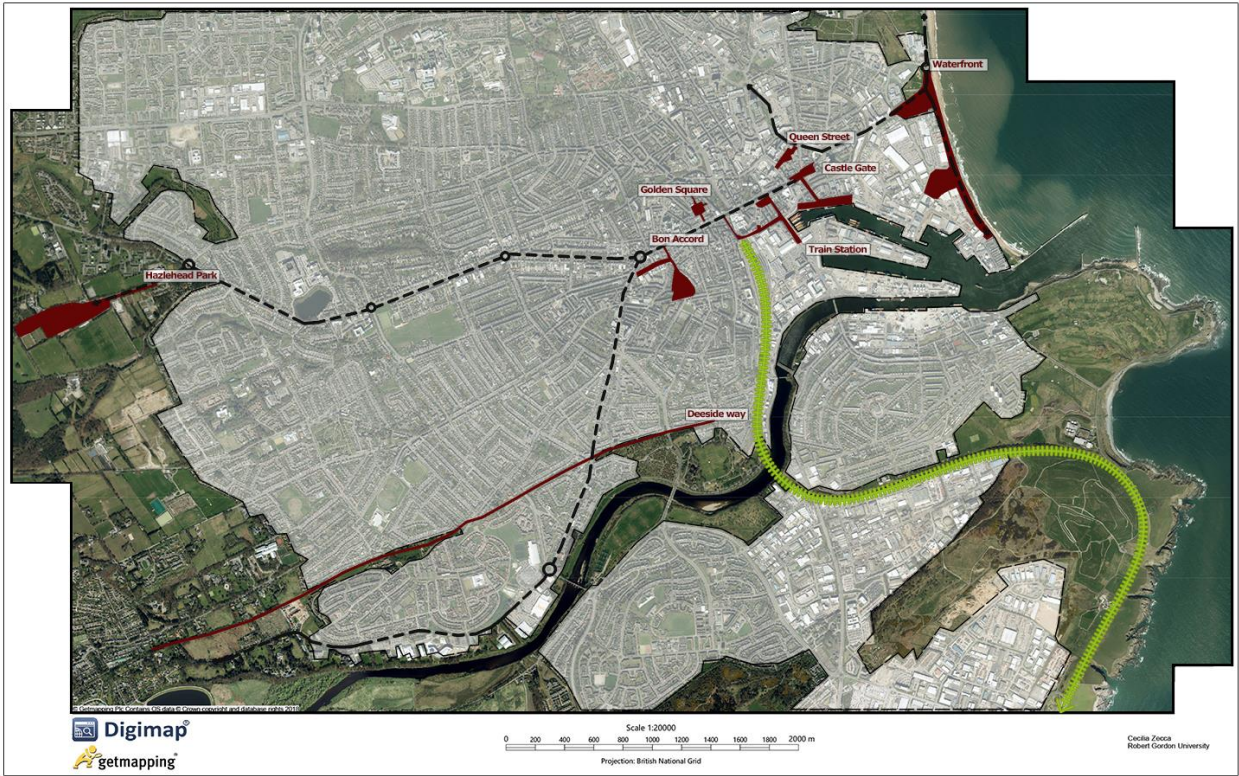
Fig.56: Aberdeen, map of abandoned areas on photogrammetric picture
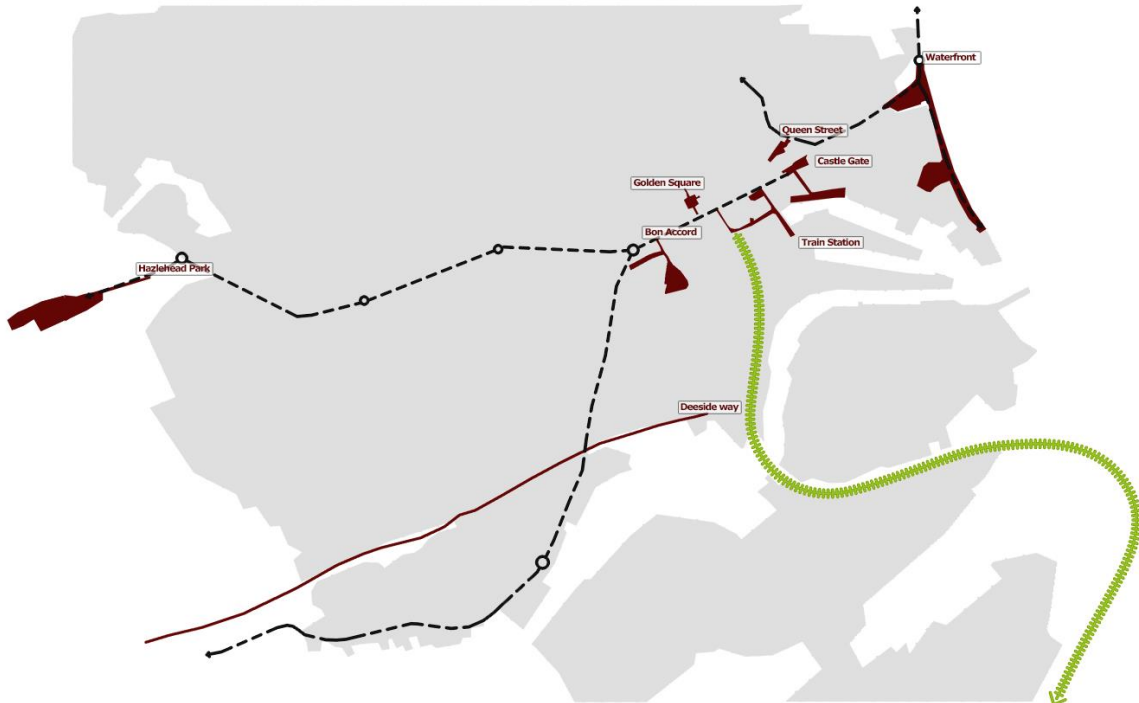
Fig.57: Aberdeen, representation map of abandoned areas

What emerged from these maps is a regular distribution of the areas along a spine, mainly Union Street and its continuations of Queen's Road and the Beach Boulevard. The exception appears to be the railway for its linear configuration and isolation from the city centre.

From this scale the areas within the city centre seem closed to each other, suggesting a net of abandoned urban spaces, which could potentially become a widespread net of re-connections.

medieval

mid C18th

mid C19th

late C19th

Fig.58: Aberdeen, historical evolutions

The historical evolution of the city (fig. 58) suggests that in a first moment the growth followed a centripetal configuration around Castlegate and the Green.

The later establishment of Union Street and the dense constructions along it, generated a spine of isolation between different parts of the city. If on the one hand Union Street is a west-east connection axis, which does not lead to the sea due to the orthographic conformation of the land, on the other it separates the south and north areas. The areas selected, with the exclusion of Castlegate and Queen Street, are situated in the most recent expansion of the city.

Subsequently, in order to have a clear understanding of the areas, each one has been analysed, on a bigger scale, in order to identify the connections and relations with the surrounding built environment and the city infrastructure system. Scaling the images in this way affords for the buildings and monuments to be individuated and categorised within the areas in need of regeneration. The following typo-morphological analysis are described for each area of intervention.

4.5.2 Typo-morphologic analysis

In this paragraph are presented the typo-morphological analysis conducted on all eight selected areas and the related discussions on the data collected.

1 Castlegate:
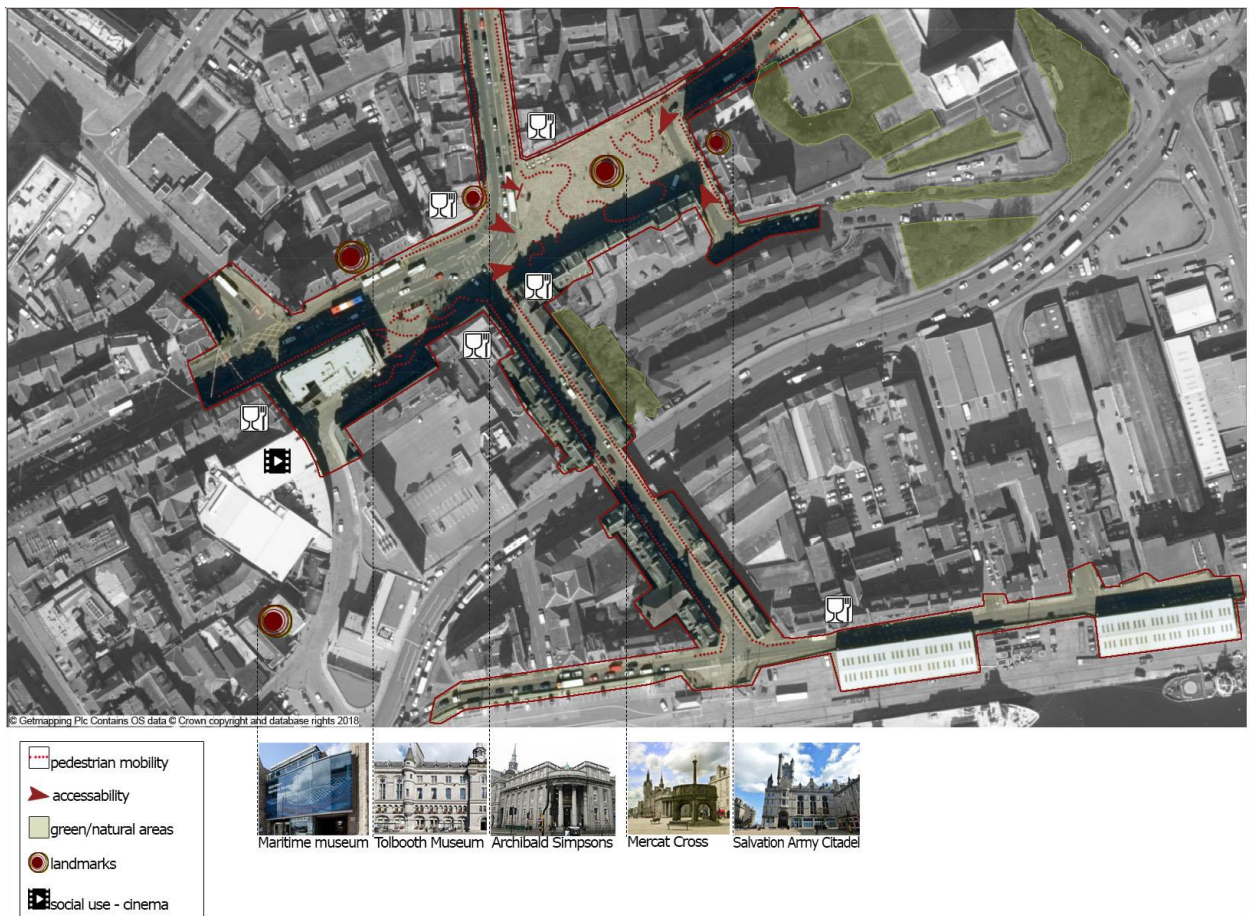
Fig.59: Castlegate typological map

Maritime museum
-contemp. construction
in between
-low human flow
-isoleted from social a
ctivity

Tolbooth Museum
-17th-c. prison
-conveerted in a
musuem
-low/medium flow
-closed to social activity

Archibald Simpsons
-19th-c. construction
-converted in a pub
-medium/high human
flow
-social activity in it

Mercat Cross
-17th-c. construct.
-low human flow
-slightly closed to
social activity

Salvation Army Citadel
-medieval/17th-c construct.
-community function
-medium human flow
-slightly closed to social
activity

Legend:
- pedestrian mobility
- accessability
- green/natural areas
- landmarks

Fig.60: Castlegate morphological map

Castlegate is situated near to the headland of Castlehill in a dense and historical area. It is the only public open space presented there but the accessibility is limited by the intense traffic of Union and King Street.

The accesses on the east end are less utilised and not directly connected with other parts of the city. Particularly Justice Street, which descends on the north side of the square, leads down to a traffic junction, node of four main roads.

In terms of urban morphology, the orientations of the buildings and their configurations seem to converge on Castlegate space which becomes the focal point of the city space. It is evident a predominant direction of the flows on the

east-west axis and a lack of connectivity in the perpendicular direction which would lead to the harbour.

The presence of green spaces is not evident apart from some residual areas on the east side of the hill.

The built environment is an overlaying of different periods particularly on the harbour areas included Marischal Street, which appears as transitional space with not particular attractive character or social function.

Some main buildings may be distinguished and categorised as landmarks for their specific historical meaning or social use. Particularly from the typological analysis it emerges that Tolbooth, Archibald Simpson and Salvation Army Citadel buildings have significant architectural and historical values, which are not highlighted through the open and in-between spaces of area. The lack of pedestrian and public confluences, particularly from Marischal, Castle and King Street pulls the focus on other directions to the disadvantage of urban permanencies as a sign of the city identity.

2 Aberdeen waterfront:

Fig.61: Aberdeen waterfront typological map

[...] pedestrian mobility	**Aberdeen waterfront general view** -20th-c./contemp. construct. -social functions -high human flow -closed to social activity
► accessability	
green/natural areas	
◉ landmarks	
🎡 social use - panorama	

Aberdeen Ballroom
-20th-c construct.
-events function
-high flow
-slightly closed to social activity

Waterfront
-coastal strip
-leisure function
-medium/high human flow
-slightly closed to social activity

Aberdeen Footdee
-19th-c construct.
-village
-low human flow
-far to sovcial activity

Fig.62: Aberdeen waterfront morphological map

In comparison with Aberdeen city centre, the area is scattered and less dense in terms of urbanity.

The natural environment of the waterfront and the extensive presence of green spaces are the main feature of the area, worth of preservation. Despite the presence of green areas, particularly those one along the Boulevard, they seem to appear disconnected from the rest of the environment and without clear and specific social and attractive functions. The lack of designed green places is here

predominant and the presence of the three roads along their sides increases the sense of discontinuity and fragmentation.

The accessibility is limited to the Beach Boulevard spine and the Esplanade road but with multiple possibility for pedestrian accesses and flows on the coastal strip.

Interestingly the linearity of the coast is respected even in the paths that lead to the beach, giving a sense of landscaping continuation. In fact, there are not perpendicular accesses from the pedestrian esplanade to the beach area but rather there are ramps, which follow the natural conformation of the contours.

The buildings along the coast are not of particular relevance; their appearance recalls more temporary structures. There is a lack of architectural dialogue between buildings distributed on a linear system and this highlights different times of construction.

Footdee gives the main historical presence; the old fishing village characterised by local cottages, intimate neighbourhood and eccentric houses owners' paintwork.

The village is compressed on the coast and hidden by industrial buildings on the west side.

3 Golden Square:
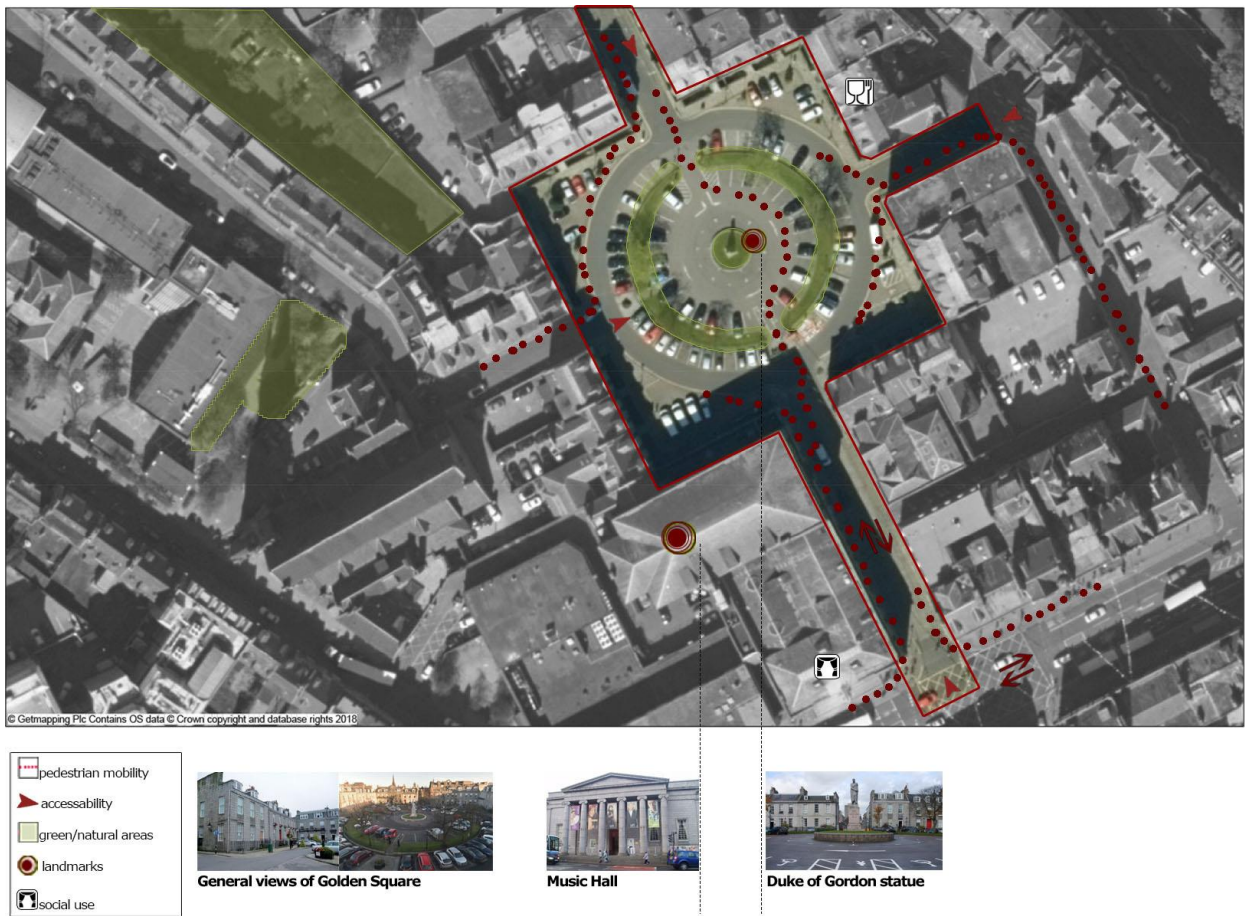
Fig.63: Golden Square typological map
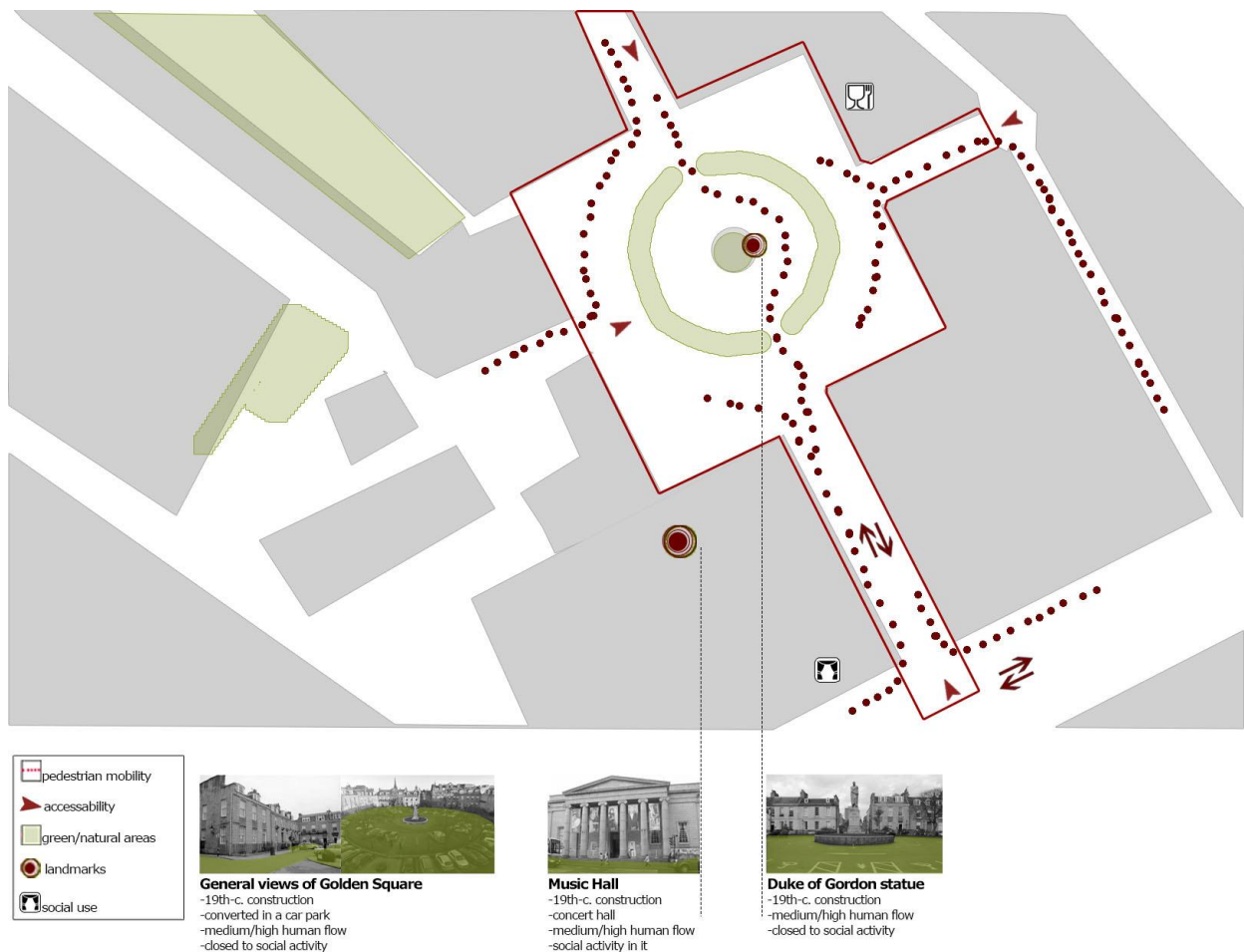
Fig.64: Golden Square morphological map

The proximity of Union Street, the Music Hall and the accessibility on all sides of the square give a strategic location to Golden Square. This highlights its important potential as public open place.

Currently the square is used as transitional part of the city centre, the majority of the space is used as carpark, which also supresses the valuable presence of the statue of Duke of Gordon, positioned in the centre.

What emerged from the morphological analysis is mainly an incongruence in linguistics terms; de facto Golden Square can be consider a space more suitable for vehicles rather than for human interaction. Its function is mainly to divert the

traffic in many directions. There is a complete lack of urban and social relation with the main landmark on west side, the Music Hall.

The green spaces are limited and help to separate two rows of carpark.

The recent restoration of the Music Hall added more functions to the building in order to be visited and used throughout the entire day. This contributes to recognise even more the historical building as a landmark for the city and renovate place of meeting. In this sense Golden Square may potentially become a place where the original idea of square is related to social functions, even as open space extension of public buildings.

4 Bon Accord area and gardens

Fig.65: Bon Accord area and gardens typological map

Fig.66: Bon Accord area and gardens morphological map

The park, situated in the city centre presents a sloppy terrain which connects the upper area of Bon Accord to the lowest of Willowbank Road. It appears to be a transversal spine of Union Street and potentially an aerial place of connections between different zones, residential, workplaces and commercial.

The garden is currently underused and the lack of street illumination and the abandoned brick structure contribute to make the space unsafe for citizens.

The park itself expresses the morphological idea of delimited area but the adjacent green spaces suggest possibilities of more hybridisation between part of the constructed city and the green areas.

Few forgotten *permanencies* (Rossi, A. 1982) could potentially become renovate landmarks for regenerating the area. Bon Accord bath is an abandoned Art Deco building, the Brick Garden Terrace was the major selling point of Bon Accord Terrace, and Bon Accord Square hosts Archibald Simpson Memorial but is currently used as carpark. Bringing back these dislocated buildings and the square and linking them together would generate congruence within different context of the city.

5 Aberdeen train station, Union and Market Street:
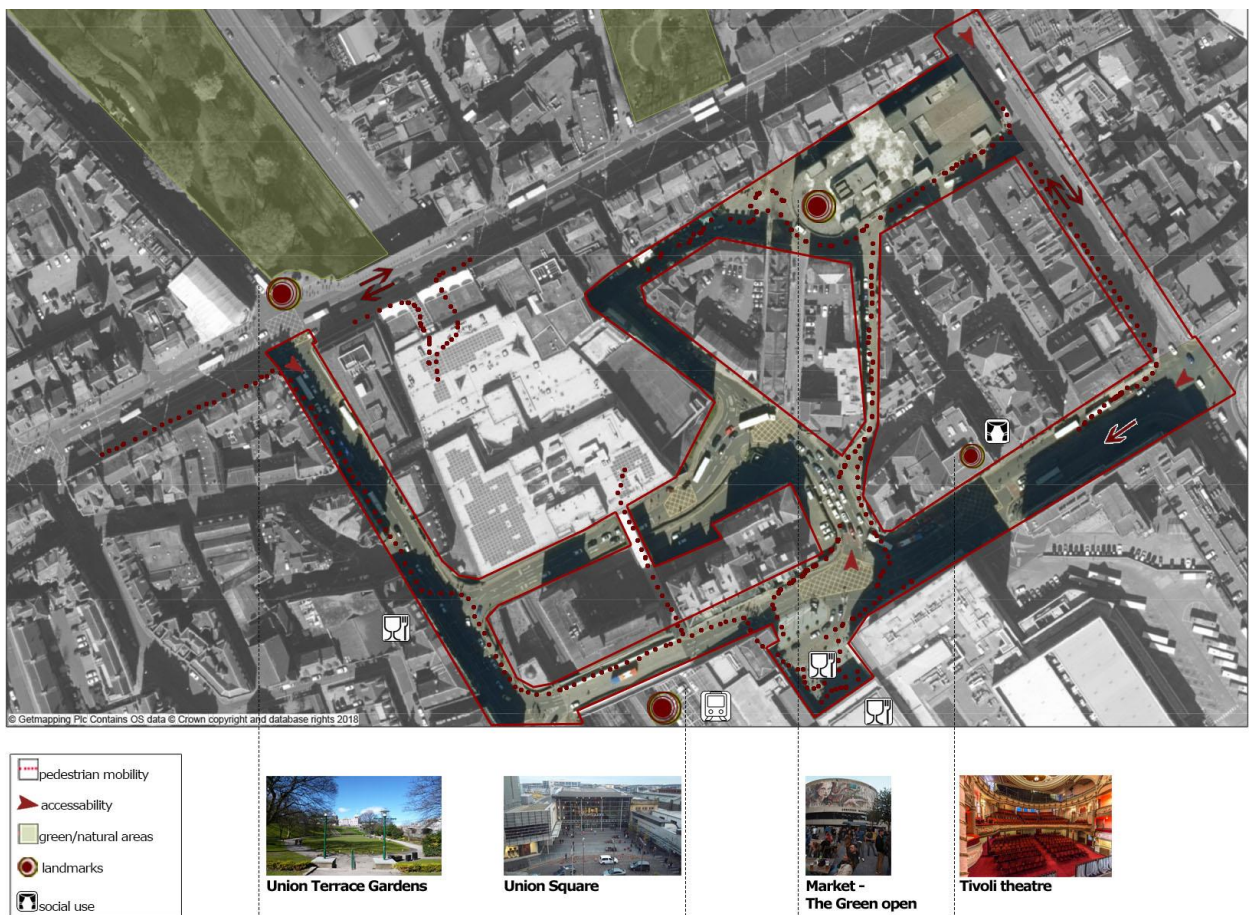
Fig.67: Aberdeen train station, Union and Market Street typological map

Union Terrace Gardens
-19th-c. construction
-medium/high human flow
-social activity in it

Union Square
-20th-c. construction
-converted in centre mall
-high human flow
-social activity in it

**Market –
The Green open space**
-19th-c. construction
-market
-medium human flow
-closed to social activity

Tivoli theatre
-19th-c. construction
-converted in a pub
-medium/high human flow
-social activity in it

Fig.68: Aberdeen train station, Union and Market Street morphological map

The main issue related with the train station area seems to be the pedestrian accessibility which is restricted by the intense traffic. The presence of two shopping malls in the area, Trinity centre and Union square, and their predominant configuration which supresses and hides other historical buildings such as the station, generate a sense of massivness reducing public open spaces and their transversal pedestrian flows.

The presence of the Trinity centre's carpark creates cramped spaces around one of the oldest area in Aberdeen. Furthermore, the market in its neglected condition represents a massive and predominant volume facing the public space namely, The

Green. Its public function can potentially be transformed somehow in order to modify the surrounding urban tissues and to increase the identity of the area.

6 Hazlehead Park:

Fig.69: Hazlehead Park typological map

pedestrian mobility

accessability

green/natural areas

landmarks

social use

Provost Alexander's Maze
- 20th-c. prison
-abandoned state
-no human flow
-closed to social activity

Pet corner
- contemporary construct.
-animals' atraction
-medium human flow
-closed to social activity

Gate house
- 19th-c. prison
-abandoned state
-no human flow
-closed to social activity

Tram stop
- 19th-c. prison
-semi-abandoned state
-low human flow
-closed to social activity

Fig.70: Hazlehead Park morphological map

Hazlehead Park has three main entrances, two along Hazlehead Avenue and one on Hazlehead Road. The pedestrian circulation along Hazlehead Avenue however is not well solved. In fact walking from Queen's road, the pavement is unexpectelly interrupted on the left side, forcing pedestrains to cross the road and reach the right side. Since Hazlehead Park is on the left side, pedestrians are forced to cross the road again in proximity of the first park entrance.

Furthermore, the carparks do not have designed structure with the consequence of having disorganised parking spaces.

Inside the park the circulation is mainly concentrated on an existing path but users can easily cross the greenery and reach different areas.

There are mainly three abandoned buildings within the park; specifically, the Gatehouse is listed building situated at the first entrance of the park. It is a significant construction for its position and structure. Inside the house almost all of the internal partitions materials were burned and destroyed due to a fire. This helps to open up, arguably, a possible freedom in organising the space inside during a preliminary re-use design.

The second building is an old toilet block situated close to the second entrance of the park, precisely behind an existing café building. Contrarily to the Gatehouse, the toilet block does not present any significant architectural value and its appearance is strongly derelict.

The third building is located near to the labyrinth and it was the old highest point of view for monitoring people within the maze. The structure is particularly interesting, constituted by an accentuated pitched roof.

7 Queen Street:
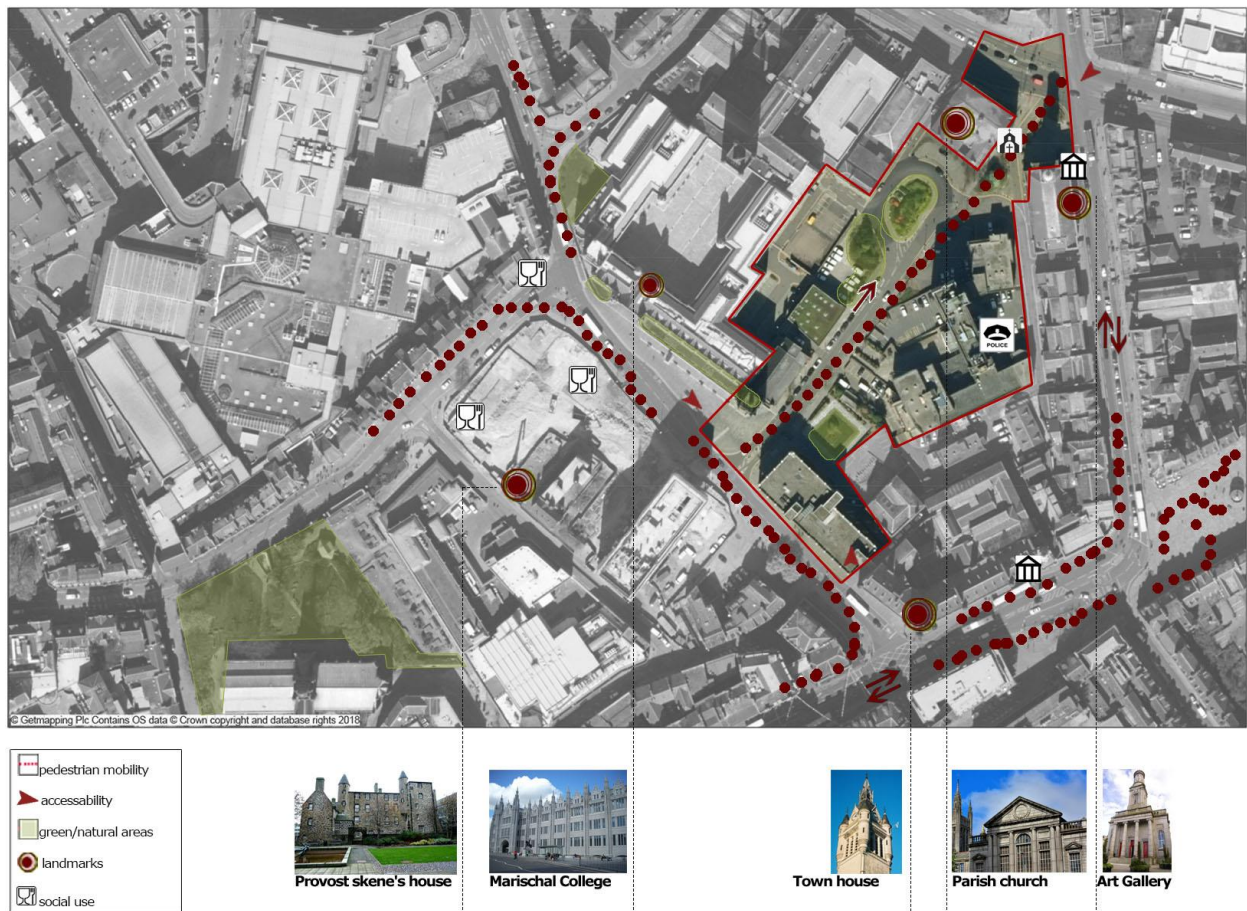
Fig.71: Queen Street typological map
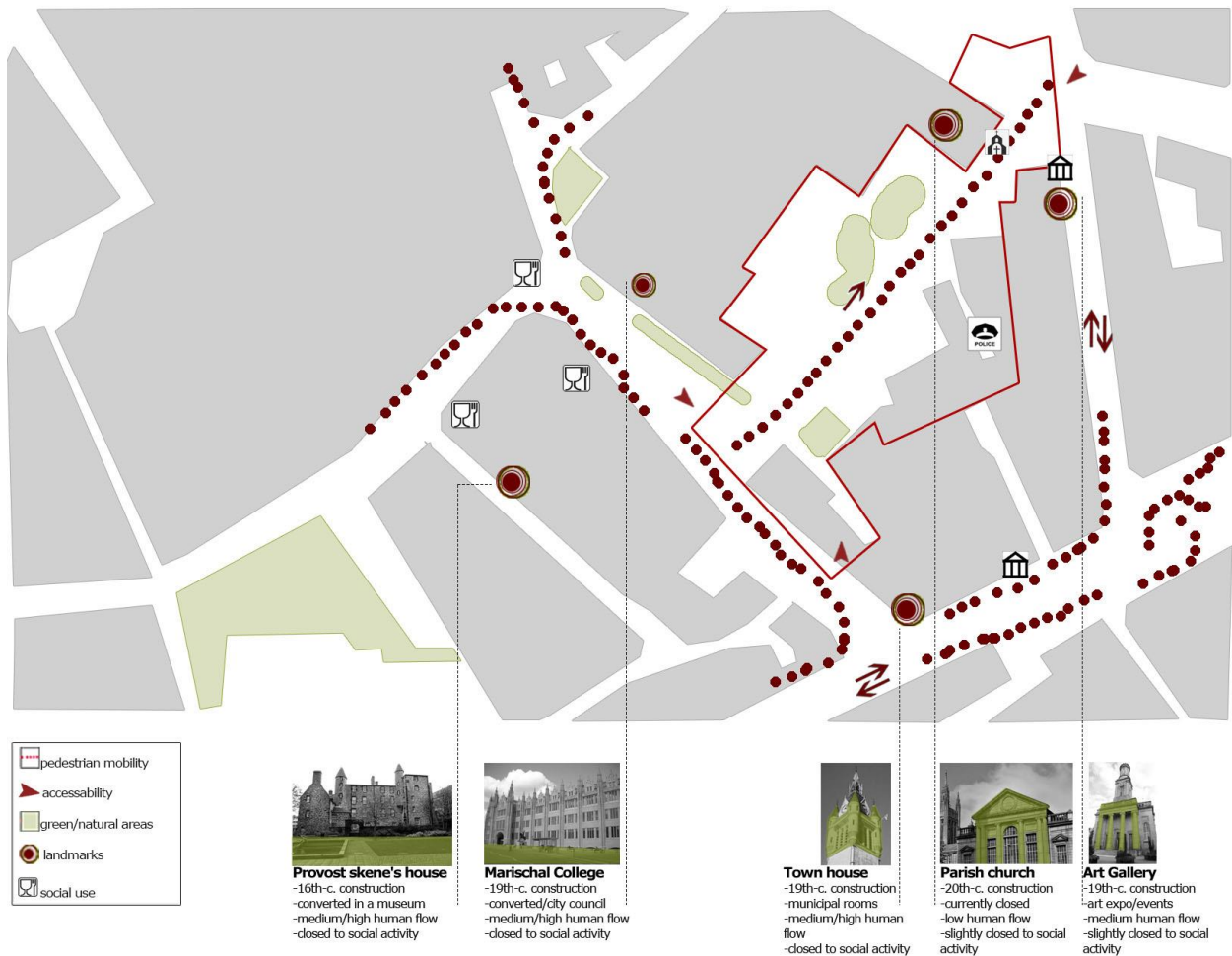
Fig.72: Queen Street morphological map

The isolation of Queen Street with respect to the surrounding area highlights its only function of connections but this is also limited in one way when closed to King Street. There are two greenery roundabout which are completely de-contextualised and suggest the need of improving the quantity of green within the city centre.

The area is located in a rich part of Aberdeen city in terms of architectural heritage and landmarks. The presence of Marischal college, the Art centre, the Parish church and the new intervention of Marischal Square contribute to characterise the city and its appearance.

The police station in this sense, appears as a massive volume out of scale which does not have any dialogue in terms of architectural language and urban

connectivity with the surrounding buildings and streets. Walking on Queen Street, the presence of many landmarks is not obvious and some of them go unnoticed. Ultimately, the connections with Union and King Street seem to be poor, highlighting the need of repairing this fragmentation.

8 Deeside railway:

The Deeside way was a 43¼ miles of railway from Aberdeen to Ballater patronised by royalty to visit their residence at Balmoral Castle. (Holland, J. 2015)

The line was used as a passage of the royal trains but also as a track of the modern battery-operated railcar. It was introduced in conjunction with steam power and had a certain level of passengers estimated to increase. Despite the introduction of the battery-operated railcar in 1958 the railway closed in 1966. The battery railcars are now preserved as museum pieces.

The transformation into a pedestrian and cycle path generated some deviations of the original route and from the Western side the conversion offers today different views of the natural landscapes and historical castles. The presence of the royal castle at Balmoral, even just as tourism attraction, preserved the surrounding spaces at the borders of the railway but also contributed to the historical restoration of characteristic elements related to the railway such us the Milton of Crathes steam carriage (The Royal Deeside railway, 2018).

The first section of the reused Deeside line runs from Duthie Park in Aberdeen to Banchory and the first significant trace of the old railway and stations appears at Peterculter station. For the purpose of this research just the length from Aberdeen to Peterculter is analysed.

Fig.73: Deeside railway typological map

Fig.74: Deeside railway morphological map

Fig.75: Deeside railway, buildings along the line

A railway leads people from an origin to a new destination by train, but the new re-drawn way cannot lead so rapidly and so easily along the complete historical route. Its paradoxical isolation and connection is presented at different scales. Aberdeen Deeside line connects two far points, separating two lateral areas. It is indeed at once an element of connection and isolation.

The nature and history of the Deeside railway is important to this line and represents a significant aspect of identity for the city. The identity of place represents the main image of the positive growth of the city and its recognisability demonstrates the sum of different ages. It is then important to reconstruct and redraw this image before it disappears within the landscape.

Nowadays, on the Aberdeen segment of the line, many examples of construction are oriented facing away from the line. The greenway therefore, can still be considered a back and not a 'new frontage'.

The Eastern part of the entire old railway, close to Aberdeen, is less considered as natural heritage and unfortunately some recent interventions have weakened the open spaces at the border of the path (fig. 75).

The Aberdeen greenway still connects, even if with some deviations, the points A and B, Aberdeen and Ballater. In the re-conversion of this long distance various nodes and points have been forgotten.

The secondary stations in some cases are in abandonment apart from the historical and listed station of Pitfodels, built in 1894. It has been redeveloped as a private house. This intervention has limited the historical and social sense of that building, erasing the connectivity between the Pitfodels place and the railway.
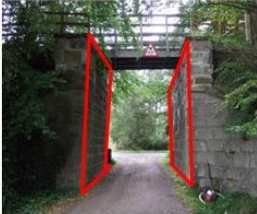
Station	Platform	Tunnel	Bridge
Nodes Empty-spaces	Space profile	Corridor Materiality	Infrastructures node

Fig.76: Diagram of constructed elements along the Deeside railway

The original conversion of the Deeside railway aimed to recreate a natural wildlife environment and this objective has been successfully addressed. Nevertheless, the path itself has been poorly replaced with tarmac, erasing completely the nature of that space and it still remains in its isolation despite it is still connecting two far points, A and B. It is not so obvious that a person can walk or cycle for so long distance and with a specific mobility purpose and moving reason.

Generally, the greenway is used for a mono-directional walkway, back and forward, with not any interaction with the surrounding green-places or towns, or artifact.

4.5.3 Rhythm analysis

Aberdeen |Collage of the areas

Waterfront

Castle Gate

Queen Street

Train Station

Golden Square

Bon Accord

Deeside way

Hazlehead Park

9.00 am - 11.00 am
13.00 pm - 16.00 pm
18.00 pm - 21.00 pm
frequentation/working day

opening time 9.00 - 17.00
opening time 17.00 - 22.00
opening time 9.00 - 22.00
frequentation/working day
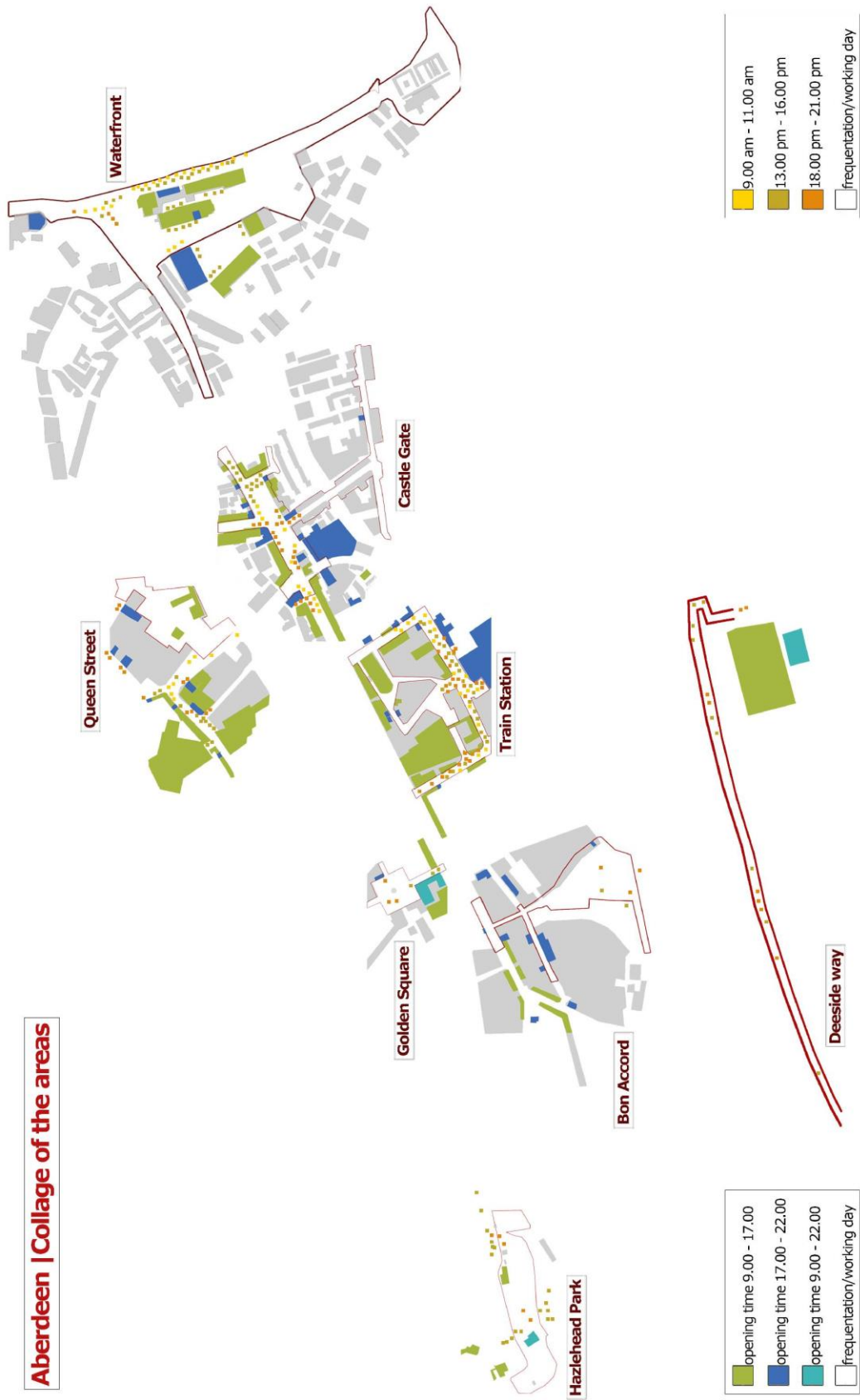
Fig.77: Rhythm of Aberdeen areas

Castlegate 9.00 - 11.00 13.00 - 16.00 18.00 - 21.00

Waterfront 9.00 - 11.00 13.00 - 16.00 18.00 - 21.00

Golden Square 9.00 - 11.00 13.00 - 16.00 18.00 - 21.00

Bon Accord area 9.00 - 11.00 13.00 - 16.00 18.00 - 21.00

Train station 9.00 - 11.00 13.00 - 16.00 18.00 - 21.00

Fig.78: Example of frequentation time. Photos of the areas, rhythm at different times.

The data collected with the rhythm analysis are crucial because they represent the social practices and the characters of the area. The map (fig. 77) represents two different experiences both spatial and temporal.

Firstly, the opening times of activities divided in two categories, 9.00am to 5.00pm and 5.00pm to 22.00pm, create a patchwork of the typical places of congregation within a specific frame of time. This is particularly useful in order to understand the flow of users, the new or changing life styles and consumptions and to propose bespoke and new activities related with that frame of time during the design proposals.

Secondly, with help of photographs and urban webcams images, the pixelated diagrams create an image of the intensity of users' frequentations of the area during a working day. The data were collected in morning, afternoon and nights. The map shows an overage of the frequentations.

From the opening time of activities, it is possible to notice as the day activities are more predominant than during evenings. Particularly they are distributed along Union Street while the few activities are disappearing at the edge of the city centre, such as on the Queen Street area as well as the area of the waterfront. This represents a sort of fragmentation on the map and suggests that an increment of activities, or a better balance between day and night could be a way for regenerating the spaces.

From the frequentations map it is possible to notice that during a working day some areas are not experienced, particularly both parks and the waterfront for their location far from the city centre and core of the main activities. The Beach Boulevard however seems to be highly frequented and this can be due also to the presence of supermarkets and shops.

Castlegate, Golden Square, Bon Accord, Queen Street and the Deeside areas appear as transient spaces with no activities able to generate social places of staying.

The train station area is generally crowded, even in a weekend day, and this is due to a combination of functions and streets infrastructures. The issue of being an unsolved urban area seems to be related to pedestrian flows relegated to narrow spaces and the closed pedestrian connections after the day opening times.

The rhythm of Hazlehead and the waterfront appear to be sharply defined by the seasons and the weather. Particularly, all activities are mainly focused during the day and rarely they are prolonged over the night time.

The general rhythm map enabled to raise various consideration even in terms of projects. This is due to its essence of being both a description of the territory and a description of what is missing and should be implemented. The map also suggests that possible regenerations can be done through micro-local temporal actions, such as the opening times, and through selecting specific functions for the area.

4.5.4 Observation tour

A tour was organised during the summer workshops in order to show particular angles of the city and having a general feeling of the city and its history. The tour was entirely organised by Aberdeen Heritage Trust and followed the medieval route of the city. Interestingly, where there were medieval parts of the city, there are today mainly non-places in fact part of the tour happened inside a multi-storey car park.

Fig.79: Observation tours of the workshop 2016 and 2017

The possibility of attending this tour enabled the researcher to have a clear idea of the evolution of the city and a better understanding of some rich architectural elements still hidden around the places. Particularly, some buildings or rooms which are still closed to the public, were opened by the council in order to show to the participants, inner historical and important landmark of the city. The Mitchell Hall (fig. 79) within Marischal College, for instance is an impressive room adjacent to Queen Street and presents lattice structure supporting umbrella vaults. Furthermore, wider polychrome pointed arched windows are on the main three sides of the nave.

Parish church on Queen Street presents similar architectural connotations to the Mitchell Hall and its strategic location, together with Aberdeen Art Centre are the main historical structure within the area.
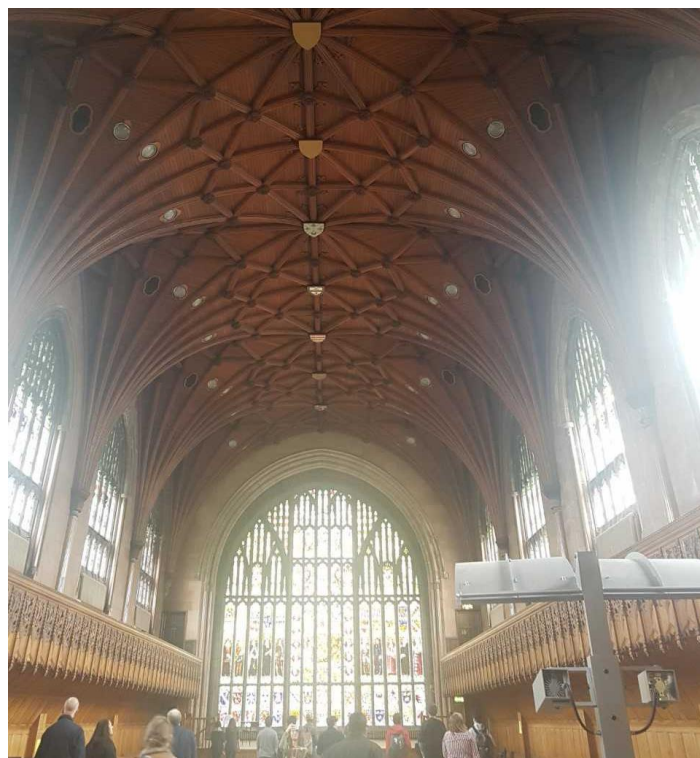
Fig.80: Observation tours of the workshop 2018. Mitchell Hall

4.5.5 Mental map
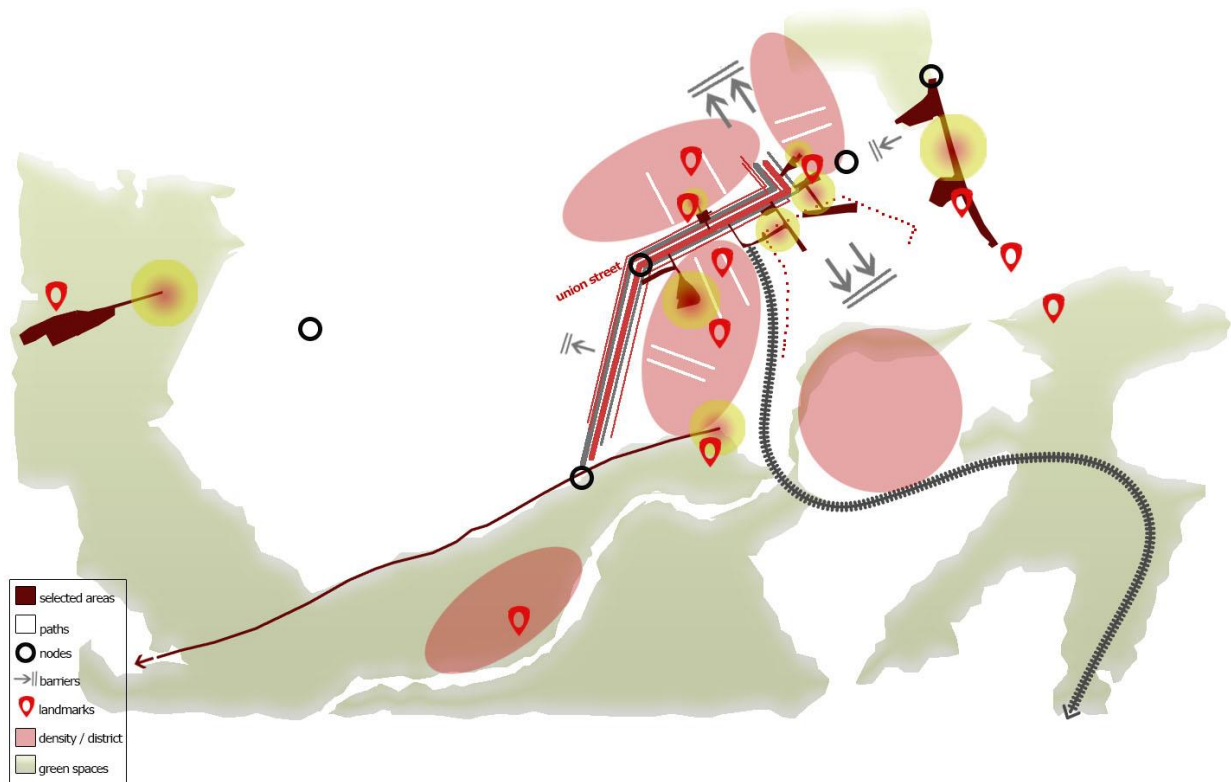
Fig.81: Aberdeen mental map

The mental map (fig. 80) was graphically summarised collecting data during the meetings with local authorities and students attending the workshops.

Firstly, the abundant greenery around Aberdeen city characterises its particular natural aspect but it is also visible as it is almost completely missing within the city centre and the west settlements.

Holburn, Union and King Street are evidenced as a unique spine which divides the main city areas, marked with red circled patterns. Furthermore, the spine often generates barriers in crossing the urban spaces, making difficult links between main roads and urban paths.

Various landmarks are present within the city but they tend to disappear visually on urban scaled map and this is probably due to the congestion of the built

environment; by using a mental diagram it is more evident the quantity of historical and social landmarks and their potentiality in view of a regeneration's plan. Particularly they seem also strategically located within the central areas along Union Street and aligned in the surrounding areas such as the waterfront and the parks. This potentially suggests a crossing (Union Street areas) and linear geometry (waterfront and parks) for setting urban design projects.

4.6 Categorisation of Aberdeen abandoned areas

By adopting these type of analysis, methodologically illustrated in chapter 2, it was possible to gather objective data on the areas taken in examination, which have supported the following considerations regarding the nature of these spaces and their level of abandonment. Particularly what emerged is a general level of isolation and lack of connectivity with the social places within the city as thoroughly described for each site hereunder:

1. Castlegate should be one of the main squares in the city but currently it is isolated and not connected with the other urban environments and this makes it fall in the category of fragmented voids. Analysing also the potentiality of its transversal connectivity with the harbour waterfront, what emerged is a system of underused buildings including those one with more industrial features. In conclusion the entire area may be described as both a fragmented void with punctual empty spaces which potentially can contribute to reinvigorate the area if re-used.

2. The Aberdeen waterfront presents many fragmented voids around its line, particularly those one underneath within the esplanade ramps' creases. Yet some green spaces are underused and their being encircled with roads reinforce this

connotation. The presence of unrelated buildings closed to each other but mainly the presence of massive supermarket and carparks, highlight also a non-place connotation.

3. Golden Square, as noticed during the analysis phase, is a roundabout serving carpark spaces. The only function of carpark attributable to the area lies mainly in the non-place category.

4. Bon Accord garden and its surrounding area represents an urban green fragmented void within the city. Its isolation does not allow a whole use of the park by citizens and the presence of abandoned buildings within the park and the area such as the brick garden and Bon Accord bath fall within the empty space category.

5. The train station area, seen as a system of different buildings, streets, shopping malls, market and pedestrian areas, is a complex overlap of disaggregated factors which do not dialogue with each other. This sort of urban entropy together with elements out of scale, such as Trinity centre, the market and the shopping mall attached to the station, generate a certain level of non-place feeling.

6. Hazlehead Park, for the presence of the three derelict buildings, presents empty spaces connotation but it can also be categorised within the non-place. This is mainly due to its accessibility and its uncertain connotation at the borders, between the park, the road and the carpark.

7. Queen Street, as emerged from the morphological analysis, represents a fragmented void in-between the city and its main landmarks. Its function of connection is limited and the absence of a specific urban and social purpose make it fall also within the category of non-place.

8. The Deeside railway is a fragmented void albeit its linearity, which separates the areas at its borders and does not allow any perpendicular crossing. The old function of connecting two remote cities is missing today and the transformation in a walkway without any changes in its linearity and dimension, make it fall within the category of non-places.

4.7 Table taxonomy of the areas

The beauty of a city, ergo the concept of harmony elaborated in the chapter 3 through conceptual explanations supported by the literature review, suggests that a certain level of density and intensity of urban relations, but also the rhythm such as time, tempo and infrastructures, defines the quality of a place.

Following the classification and the identification of non-places, empty places and fragmented voids within the areas taken in examination, it is helpful to quantify those spaces to better understand their roles within the city and thus what strategies of intervention are more suitable to address the issues.

In this regard, according with the common urban site ratio used to calculate the index of built areas, an indicator data-set is proposed, considering the relationship between the sum of the abandoned areas and the area upon which they are situated. This simple calculation enables to measure and compare the quantity but also the quality of the urban and social spaces selected around Aberdeen city.

The result of this formula may be defined as an index value no greater than 1 which defines the urban character of areas in need of regeneration.

The following table shows the data collected through the urban analysis and the categories of the spaces related with the areas within Aberdeen city.

Area	Frag. void	Empty place	Non-place	Diagram	Data
Castlegate	●	●		8941.4 m²	function: * temp. social events * parking * mixed use **index: 0.6** **rhythm (4hours):**
Waterfront	●		●	57217.6 m²	function: * temp. social events * parking * retail **index: 0.8** **rhythm (4hours):**
Golden Square			●	6276.6 m²	function: * parking * offices * connecting **index: 0.5** **rhythm (4hours):**
Bon Accord area	●	●		35188.7 m²	function: * parking * offices * greenery **index: 0.3** **rhythm (4hours):**
Train station			●	19981.5 m²	function: * travelling * retail * connecting **index: 0.8** **rhythm (4hours):**
Hazlehead Parak		●	●	30760 m²	function: *green space/park *parking *cafe' **index: 0.2** **rhythm (4hours):**
Queen Street	●		●	36468.1 m²	function: *road *parking *retail **index: 0.5** **rhythm (4hours):**
Deeside railway	●		●	2763.1 m	function: *walking/cycling *green space *connecting far points **index: 0.4** **rhythm (4hours):**
LEGEND				▮ area & connective areas ▢ perimeter of the ratio ◹ accessibility ▮ empty/neglected building	$$\frac{(\text{frag. void m}^2)+(\text{empty space m}^2)+(\text{non-place m}^2)}{\text{total m2 considered for the area}} = \text{index of abandonment}$$

Tab. 11: Taxonomy of abandoned spaces in Aberdeen

4.8 Summary of the chapter

This chapter analysed the areas selected for the workshop together with Aberdeen city council – planning department, highlighting the urban and architectural issues raised in the local Development Plan of Aberdeen city and Aberdeen City Centre Masterplan 2015. Furthermore, all areas have been analysed through the methods described in chapter 2 and the data collected and results have been categorised in table 10 in accordance to their nature of being fragmented void, empty place or non-place.

Alternative urban analysis enabled to deeply understand the areas from different aspects. This was particularly suitable for recognising and studying the three categories of contemporary abandonment phenomenon, fragmented void, empty place or non-place. Specifically, the frequentation map, the urban rhythmicity and mental map highlighted how the spaces are used or unused, pointing objectively out the weaknesses and potentialities of these urban environments.

These selected urban analyses have also proven to be analytically effective for identifying and quantifying the concepts of urban abandonment introduced in the preceding chapters.

The next chapter describe the complexity of dealing with urban project of regeneration and so the need of a more collaborative design process.

Particularly, to address the complexity related to urban projects of regeneration the chapter investigates a methodological process of collaboration between the main institution of the city, the council and the school of architecture. The experience of this collaboration took place in the form of workshops during the summers 2016, 2017 and 2018. These three experiences are also described in Chapter 5.

CHAPTER 5

AN EMERGING COLLABORATIVE PATH

_____

Chapter 4 presented two approaches to reading the issues related to the built environment in Aberdeen city. On the one hand, current challenges and possible ways to address them are reported in the 2015 Aberdeen City Masterplan and Local Development Plan. On the other, and through this research, the physical areas under consideration have been analysed with specific academic methodologies in order to address and formulate rooted design hypotheses in response to different level of abandonment such as non-places, empty places and fragmented voids.

The differences between the two approaches illustrate the complexity of dealing with urban projects of regeneration and highlight the necessity of critical and additional discussions.

Chapter 5 critically discusses design proposals based on deep urban analysis and academic research undertaken during the design-led research workshops, exploring approaches of consolidation of collaborative programmes between educational institutions and authorities, thus addressing the research questions, aims and objectives set out in the Introduction (Section 1.1).

The purpose of this exploration is to explore possible forms of contact and cooperation in order to improve the quality of the urban spaces in Aberdeen within a climate of synergic and mutual collaboration. Additionally, the workshop experiences are used instrumentally to categorise within a taxonomy of design criteria the design approaches linked directly to the urban studies conducted.

5.1 Theoretical analysis approach

> *I am enough of an artist to draw freely upon my imagination. Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution (Einstein, A. 1929. Originally in "What Life Means to Einstein"; Calaprice, A. 2000).*

This statement is particularly relevant to underline the concept that theoretical approaches are not simply subservient to the practical one, but rather are fundamental to shape and find bespoke solutions especially within the urban and architecture field where knowledge is both humanist and scientific. Theoretical and

multidisciplinary approaches, such as the investigation of urban and architecture semantic meanings, may have relevant pragmatic consequences. Theoretically investigating urban context influences the capacity to take design decisions and it may be reinforced in particular cases of regeneration needs.

The economic recession sensibly affected Aberdeen city, which revealed its vulnerability related to an economy so heavily focused on the oil and gas sector. Notably, the masterplan guidelines reveal proposals for urban improvements based only on proposal led by developers from the private sector which may be arguably seen just as pragmatically orientated.

Approaching these urban scale problems requires a holistic effort from both intellectual and practical perspectives. Different knowledge and multidisciplinary studies on the current urban issues related to Aberdeen city could help to recognise other aspects and reconsider the possible solutions through a different lens overcoming the risk of lack of imagination. Therefore, the emphasis on collaboration within the research study carries both intellectual and immediately applicable value.

Despite the concept of Renaissance collaboration, the old shop, is nowadays reminded mainly for its art and craft productions, in reality it represented a deeper form of collaboration. It was an interdisciplinary space in which a holistic approach was the basis for all work. In a Latin spirit of *cum-laborare,* (collaboration) "working together" (Enciclopedia Universale Mondadori, 1989), even the nature was seen as the result of art and science confluence. This concept seems today overcome while other and more individualistic forms of work take hold, particularly in relation to private construction sector. In this sense, and as specified in this thesis, the gap between theory and practice or institutions and authorities can be

filled if the historical meaning of collaboration were restored. In the urban and architectural field, the concept of collaboration becomes even more pragmatic and suggests a path that from theoretical explanations and concepts leads to tangible results. *Tangible results*, ergo *works* made through a combination of expertise, thus the Renaissance old concept of *shop*.

Work-shop, based on the examples described in chapter 3, is a laboratory where participants with different background actively work together on a topic. Within a workshop there is not the classic and unique interaction mentor-participant but rather a bidirectional exchange of thoughts.

Workshop means, first of all, active involvement of all participants based on confrontations, discussions and contaminations as basis for practical results.

This intense moment of communication represents on one hand, a way for the University and the Council to relate with external parties and on the other, a way to intensify the communications within the respective places. This type of collaboration thus, facilitates the reciprocal knowledge within a practical framework.

5.2 A point of contact. Active collaboration

Working on a complex theme such as the urban environment and its regeneration means working on heritage, identity, culture, and re-use. The different point of views of the academia and the authorities are useful to enrich the possibilities and the quality of the future urban development. This overlap of different point of views may be articulated in closer relationship between the public facility (planning department) and teaching and research facility (university).

Merging the competences and the perspectives may help to create more theoretical-rooted design solutions which can bridge the gap between academic work and professional work.

A work is constantly renewed by its encounters with new perceptions, new works.

Simitch, A. Warke, V. 2014, p. 132
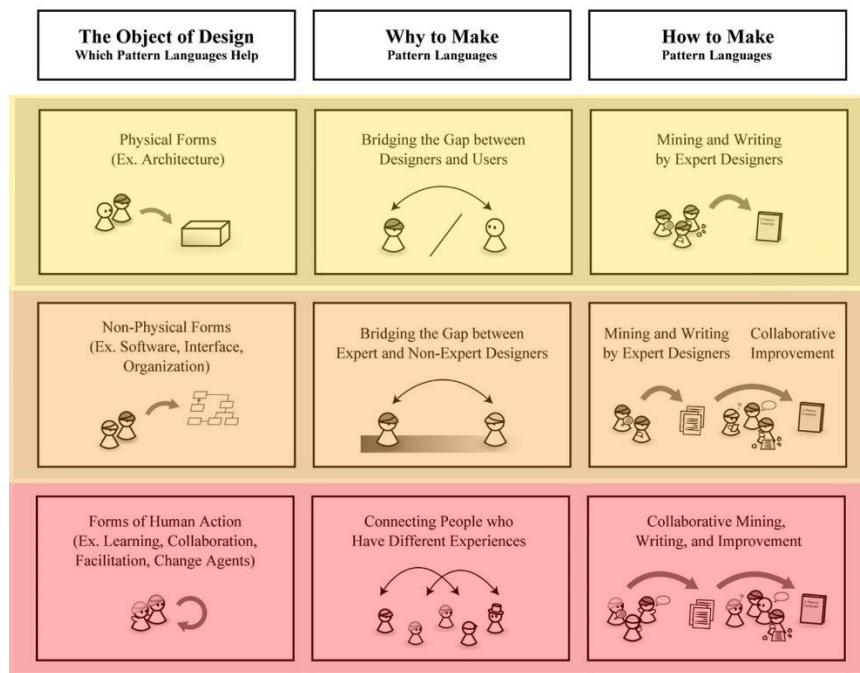
Fig.82: Collaborative project. From Alexander's theory of a pattern language, 1978

The need of having coherent design proposals elaborated in a medium-short time and with the involvement of both academics and professionals, has led, according to the literature, the possibility of organising summer workshops. The timeframe of a workshop, generally around two weeks, is long enough to achieve a certain level of details of the masterplans and is coherent with the desired objectives. The

collaboration between professional and academic environments, thus the participants, excluded other forms of co-working such as the *charrette* which is organised just for professionals and often with private owners.

On the one hand, a workshop represents for the students a moment out of the ordinary academic pedagogical schemes and more orientated toward a professional approach with a deep involvement of planners. On the other, it represents for planners a possibility of deeply analysing the urban tissues and following methodological process of design regeneration based on acknowledged methods.

A more active interaction between university and public authority help to redefine the ethic purpose of the urban project and its relation with the historical identity of the city.

The summer workshops emphasise the dialogue between university and council through active participations to the discussion of Aberdeen urban issues.

The workshops in collaboration with ACC represent an opportunity to experiment the design theories around the relatively recent urban theme of abandoned places and non-places.

The combination and confrontation between varied entities - the authorities and the educational institutions - provides a powerful model to fill the discrepancy between these two different work environments.

On one hand the students from the university have the occasion to work under the supervision of academics and local professionals together, and join efforts to generate spatial ideas for a number of neglected areas within the City of Aberdeen. The collaboration allows students to exchange thoughts with several practitioners from the Council's Planning and Sustainable Development Team. This dialogue highlights the real implication of the brief projects. By formulating the right

questions to the right people (council and academics) the students' solutions will be rooted in the real scenario of Aberdeen city.

On the other hand, the council has the occasion to participate to a more methodological and academic design approach that can highlight new urban opportunities through design projects of innovation.

5.3 Aberdeen CUP: *A collaborative urban path*

Aberdeen Collaborative Urban Path takes place in Aberdeen and is a collaboration between Aberdeen City Council, and the institutions Robert Gordon University, International College Robert Gordon University of Aberdeen UK, and University of South of Florida USA.

The stated focus of establishing the collaboration in organising urban summer workshops, was to arrange a system where the students from the two architecture schools work on specific areas presented in the 2015 Aberdeen Masterplan.

Aberdeen's selected areas for the workshops were determined by the Council's agenda but also by the insight of this research and its objectives related to exploring phenomena of urban abandonment and associated methodological ways to address design proposals particularly focused on the nature of those spaces and their urban issues. Discussions have been raised between academics and planners during the preparation of the briefs in order to clarify the objectives of both parts. Furthermore, confronting the urban problems perceptions helped to shape the choice of the areas in order to make them closely aligned for the purpose of exploring possible design solutions and for sharing the workshops' aims of having multidisciplinary contributions to the current urban phenomena of underused spaces within Aberdeen city.

Aberdeen Collaborative Urban Path was established in the summer 2016 by the four main facilitators, lecturers from the three schools of architecture (RGU, ICRG, USF) and planners from the Planning Department of Aberdeen city council.

Robert Gordon University and International College Robert Gordon University Aberdeen, UK:

Architect, lecturer in Architecture Cecilia Zecca

MArch, Research assistant Ruxandra Avram

University of South of Florida, USA:

Architect, lecturer in Architecture Josue Robles Carabello

Aberdeen city council, UK – planning department

MSc Building & Urban Design, Assoc RTPI, Planning officer Sepideh Hajisoltani

Every workshop lasts ten working days for a total of fourteen days of stay, during which meetings and discussions with local archivists, historians, and various university members are scheduled and organised to highlight the features of the city identity.

For the purpose of this research summer workshops may be described as a semi-structured (see later Table 11) experimental experience to better understand forms of collaborative urban projects. In this sense the three summer workshops showed chronologically an increasing improvement over the three years in terms of organisation, urban themes, suitable students' groups' number and clarity of the objectives to achieve.

Fig.83: Diagram of Aberdeen Collaborative Urban Path workshop

The students are all internationals and so far the participants are from Egypt, China, Malaysia and Nigeria (ICRGU) Scotland, Norway, Italy, Slovenia, England, Ireland (RGU), and different parts of the United States of America (USF).

The international character of this collaboration is a particular aspect and offers new points of view and different perspectives to approach local urban problems. The multiculturalism is a strong way to generate cognitive contributions, to enrich reflections and prefiguration of a possible urban scenario that may define the future guidelines for the next city regenerations (Lähdesmäki, T., 2014; Innocenti, P. 2016).

Fig.84: Diagram of workshop involvement

An example of the workshop structure along the ten days is showed below:

	9.00-14.00	14.00-15.00	15.00-17.00
Day 1 Monday	**Free**	**Introduction to the workshop** (S. Hajisoltani-C. Zecca-J. Robles) Marischal College	**Project Brief by Sandy Beattie(Team leader of Design, Masterplanning& Conservation Team-ACC)** Marischal College/ Third Floor West/ Room 1
Day 2 Tuesday	**10.00-11.00**	**12.00-19.30**	
	Site Presentation Town House Committee room 4	**Students city/site exploration-brain-storming** Small room available in Marschal College	
Day 3 Wednesday	**9.30-10.00**	**10.00-12.00**	**13.00-17.00**
	Aberdeen Heritage Trust Presentation on Historical development of Aberdeen Marischal College	**Aberdeen Heritage Trust Guided Walk of Aberdeen** City centre	**Students city/site exploration-brain-storming** Small room available in Marschal College
Day 4 Thursday	**10.00-12.00**	**13.00-18.00**	
	C. Zecca & R. Avram European cities. Principles and methods of urban regeneration RGU – NS326	**C. Zecca& R. Avram Day workshop Concepts elaboration** RGU – NS326	
Day 5 Friday	**9.00-19.30**	**17.00-19.00**	
	Students work room in Marschal College **CRIT on Projects** (C.Zecca-R.Avram-J.Robles)	**ACC, RGU, ICRG, USF Drink** 6 Degree North – Little John Street	

Day 6 Monday	9.300-19.30		
	Students work Large room available in Marschal College **1 planner each group (30min)- exchange** **1 member of Transportation team (30min)- exchange**		
Day 7 Tuesday	9.300-19.30		
	Students work Large room available in Marschal College **CRIT** **on Projects** (C.Zecca-R.Avram-J.Robles)		
Day 8 Wednesday	9.00-14.00	14.00-16.00	16.00-19.30
	Students work Large room available in Marschal College	**Design Review with** **Nigel McDowell** **(architect...PD)**	**Students work** Large room available in Marschal College
Day 9 Thursday	9.00-19.30		
	Students work Large room available in Marschal College		
Day 10 Friday	9.30-13.00	**Free**	
	RGU, ICRGU, USF **Final presentation** Marschal College		

Table 12: Example of Aberdeen Collaborative urban path workshop timetable

5.3.1 Workshop 2016

During the 2016 workshop students investigated new opportunities for creating urban regeneration around the city centre and worked on the first four areas:

1. Castle Gate

2. Aberdeen waterfront

3. Golden Square

4. Bon Accord areas and garden

The projects aimed to bring new ideas of using these spaces through a specific program of different and new functions and through a balance between regeneration, historical places and re-designed sense of identity.

All solutions followed the idea of a project as a path, a renewed idea of visual connection within the city, restoring the underused spaces with different activities for the citizens.

5.3.2 Workshop activities 2016

The first workshop activity took place in Aberdeen in the summer 2016 where eight students from USF were divided into four groups according to the number of the areas selected, while one student from RGU worked closely with all American groups helping to explore the city and its urban character.

The activities began with a research of relevant precedents studies presented the first week at the council as valid examples to address projects of regeneration. Particularly each group selected two cases of regeneration and used them as references and basis for elaborating coherent choices during the design process.

Visiting four sites, interviewing citizens and planners and the tour around the city took the majority of the time during the first week of the workshop. This already seemed to be limiting in terms of time frame management.

In this occasion no questionnaire was prepared because, as first experiment of collaborative work, it was considered more appropriate to observe the process and interactions between students and planners. This enabled to objectify the pro and cons of this collaboration, the changes needed and possible improvements.

During the second week students worked on their design proposals within the council and in some public spaces within the city with the help of the main facilitators.

5.3.3 Final presentation 2016

The final presentation took place in the Townhouse and hosted around forty attendees mainly from various departments of the council.

Each students' group presented a design proposal for the area assigned together with their precedents study again. This congruence between principles extrapolated from the references and their theoretical application for the purpose of regenerating Aberdeen received particular positive comments.

5.3.4 Considerations raised after the first workshop 2016

As first experience the results gathered in terms of consistency of the urban analysis, interviews conducted by students to planners and community and the related proposals based on coherent precedents appeared to be one of the main strength of the workshop.

Despite the contents of the arguments and despite the proposals followed a linear and consistent structure, the organization of the workshop presented some issues particularly connected to the time of working, the workplace and the number of area-people involved.

The scattered way of working around the city appeared to be problematic especially for the facilitators who were required to reach different places to meet student's groups. The need of having a common space, university or council offices, and a common focus for the workshop was thus clear.

More significantly, it appeared clear that the number of areas chosen were too many for the short length of the workshop. Working on different sites means spending more time to walk around, discuss different urban or landscaped

environments and to do not concentrate all energy and synergy on the same issues.

Finally, in terms of theoretical clarifications and workshop plans, it became necessary the use of detailed written brief in order to clarify all objectives stated by the council and the academics for the final outcomes of the works.

During the next months these points were discussed between the facilitators and helped to organise the workshop for the summer 2017.

5.3.5 Workshop 2017

During the 2017 summer, students aimed to complete masterplan of public spaces of Aberdeen related to two areas. The following numbering list is related to the order of the selected areas given in chapter 4, in order to facilitate the reading and the logical structure of the chapters:

5. Aberdeen train station

6. Hazlehead Park

The title of the briefs "Aberdeen gateway, Union Square and the City Centre" and "At the edges of Aberdeen, Hazlehead Park and its buildings between history and nature of a country" have been selected and discussed in advanced with academics and planners as detailed in the methodology chapter 2. Particularly the choice of the areas and the needs that had to be addressed have been specifically stated by the council, while the opportunities and potentials of those spaces, included the importance of referring to the evolution of the history and identity of the city and using consistent precedents in order to form the design choice on knowledge have been articulated more by the academics. Both projects in the city centre and

in the park, are strategically in harmony with the cultural context, where enhancing and providing new architecture themes means working on relations and creating stronger gateway experience for people and tourists in order to improve the first image and impression of the city urbanity and the park.

The brief:

INTRODUCTION

In the spirit of collaboration, for the second year, Aberdeen city Council welcomes University of South of Florida, Robert Gordon and International College Robert Gordon University students for an urban regeneration workshop.

For ten days, students will explore urban projects based on exchange of ideas and design proposals. The students involved in the research, will aim to complete masterplan of public spaces of Aberdeen.

BRIEF 1: ABERDEEN GATEWAY, UNION SQUARE AND THE CITY CENTRE

Historically, the area surrounding Union Square in the proximity of the harbour was dominated by a busy, lively atmosphere due to the industrial appeal within the area.

The 2009 addition of Union Square created a central transport hub that lead to poor accessibility to the waterfront from the rest of the city. This aspect prevents visitors and locals to explore the area, creating an underused public realm. Union Square has also contributed to the weakening of the memory of the place by introducing a hot-spot of transit spaces (non-places) and commercial spaces.

The area represents an uncertain condition of Aberdeen urban configuration which introduces complex themes such as the urban concept of non-places.

The non-place is a space thought independently of relations with the context, just for specific functions. The main relation is just between individual and place, not between people in a place.

The evolution of a city should be a dynamic process, formed by historical accumulation, urban collective memory, sense of identity and spaces designed on a human scale.

The disconnection of the area with the city centre is also the effect of the presence of many office buildings, warehouses and intense traffic. These industrial urban elements sit side by side with historical, eclectic architectural styles and construction techniques present on site. New ideas to regenerate the area are needed to allow for a continuation of urban memory as opposed to the present trend of creating non-places.

The Opportunity

As an urban vision, it would be very important to reconsider the main pedestrian spines from the station to Union Street such as Market Street, Guild Street and also the pedestrian "tunnel" connection with the Trinity Centre.

Along these paths and around the secondary roads (Exchange road, Hadden street, Trinity lane) some old and significant buildings will be re-thought as parts of a broader regeneration project.

Enhancing and providing new architecture themes for these buildings, means working on a re-use project which includes, designed relations with the identity of the city, improving the image of the city urbanity, creating new and more public functions.

Sustainability is one of the main concept in view of an urban and architecture project of re-use therefore the ideas must consider greener infrastructures, alternative energy use for the buildings and the strong relation with the context.

AIMS

A much enhanced gateway experience and better pedestrian routes between Union Street and the station will radically improve first impressions of Aberdeen and the attraction of access by rail. When emerging from train station, people will be greeted with a more welcoming city. More generous public realm will create more space for people to meet and linger with new hotels and retail facilities helping to animate and enliven this important entrance to the city centre.

Relations aims

1)   The train station and bus station can be better linked with the city centre in order to offer a stronger sense of place and to re-define its identity image which should have a visual impact on its main arrival point.

2)   The re-use of the Trinity "tunnel" should be thought as a new internal/urban public link with city centre and be connected transversally with shops and public activity/attractiveness

3)   The project should consider a thematic link between the existing Market and "the green". The regeneration of this part of the city should enhance the cultural link between local urbanity and local space of production and exchanges.

Functional aims

1)   The removal of car borne traffic on Guild Street necessitates the relocation of the station taxi rank and vehicular drop off area, creating the opportunity to expand and enhance the station concourse. This along with the redevelopment of Atholl House would provide a better gateway and enhanced connections to the Trinity Centre itself. Trinity Centre will be subject to an enhancement programme that will seek to improve access and entrance arrangements.

2)   The regeneration of Bridge Street and College Street should be more pedestrian friendly establishing a more public functions for the building along this path.

3)   The Market should have more identity as a place with local specific trades and activities.

BRIEF 2: AT THE EDGES OF ABERDEEN, HAZLEHEAD PARK AND ITS BUILDINGS BETWEEN HISTORY AND NATURE OF A COUNTRY

Hazlehead Park is a very busy natural location not far from the city centre. Its attractions bring hundreds of people around the park and to the surrounding areas, during the summer time, but the pathway to get there (from the roundabout to the park) is completely disconnected with Aberdeen city.

In the past, Hazlehead Park was connected to the city with a tram rails which represented a spine between the urbanity and natural Aberdeen landscape. Today it is transformed in an anonymous road with a running path on the side.

At Hazlehead Park it is possible to admire the nature beauty but also this area is rich of Aberdonian history thanks to historical buildings and monuments along the path and in the park itself.

The opportunity

The bigger masterplan project of re-connection and new relation between the Park and the main streets for the city centre, and the smaller projects of the abandoned buildings must be thought as a sustainable project in line with the re-use principles of architecture.

AIMS

The re-use interventions in Hazelhead Park aim to create a link between the nature and the man-made environment. This relationship should reinforce the connections that has been weakened by the distance between the Park and the City Centre.

Relations and functional aims

- The urban regeneration of the area from the roundabout to the Maze in the park should be reflected in the repurposing of the individual elements in the Park.
- Re-think the running path and the old tram line/vehicle road leading to the park with the possibility to create alternative type of mobility.
The project should enhance the connectivity between these elements in the park
- The gatehouse is the first building, a granite house at the entrance of the park that, together with the old tram stops, should be regenerated as a welcoming points.
- The Maze building represents a very original and characteristic symbol for the city and the local culture and it should be enhanced as a local identity attraction for the area.
- The toilet block immediately after the second main entrance of the park, is an abandoned "back-front" building for the park, which needs to be reconnected with the surrounding areas and natural greenery spaces around.
- The waiting shelter near the gatehouse represents an occasion to re-create and re-use a semi-open public space.
- These interventions can become an occasion to offer to the community engagement possibilities, for example the school could use the new facilities for extracurricular activities.

5.3.6 Workshop activities 2017

During the second workshop there has been more involvement of RGU and ICRGU students who have participated within the activities and focused on the Hazlehead Park project while students from Florida have worked mainly on the Station area despite an exchange of thoughts and short design concept session, which was delivered all together on both areas. The 2017 workshop involved two students from ICRGU, two students from RGU both undergraduate, and ten master students from USF.

The workshop commenced with a formal meeting at the council where the Design, Masterplanning & Conservation Team from ACC presented the objectives of Aberdeen masterplan and described the urban features of the city. That was followed by a site visit of the train station area in order to familiarise with the urban spaces around it.

RGU hosted the students the second day for a seminar concerning notions on urban system its layers and on the meaning of architectural beauty. Furthermore, the concept of contextualisation, based on the theoretical explanations of chapter 3, was introduced starting from an interpretation of the opposite concept of void represented with a blank slide.
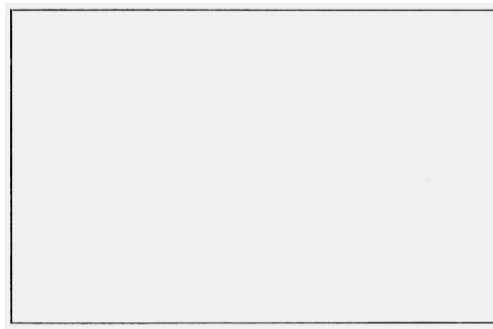
Fig.85: Workshop 2018, presentation on the concept of void

It was particularly useful for stimulating the students to reflect on the Aberdeen urban spaces and to understand the different relations between various elements such as historical buildings, modern buildings, roads, streets and open spaces.

Finally, some projects of re-use within European cities (listed in Chapter 3) were presented to show possible design approaches and urban configurations.

In this occasion a questionnaire was compiled and distributed to the students (see appendix A) Students were required to submit answers at the end of the workshop.

The aim of the survey was to collect data on their impressions after deeper urban study of the city and on their analytical approaches to historical contexts and related regeneration interventions. Furthermore, offering ten days for answering the questions would have facilitated a more holistic understanding of the urban environment, especially for the Americans who were not familiar with the city.

5.3.7 Survey questions 2017

Below, are the questions formulated and their aims.

Q1 *How do you perceive the urban context of Aberdeen city?*

This question aimed to gather experiential data related to the perception of architectural inclined participants.

Q2 *How does this compare with other American and European cities you have visited?*

Aiming to reflect on the identity's character of the city and collect information on experiencing different urban environments.

Q3 *Please draw a diagram of the urban layout of Aberdeen. Feel free to format this however you wish, but try to express what you feel are the defining elements (e.g. layout, features, landmarks, and so on).*

Similarly, to mental maps analysis, this question helped to collect a series of patterns, which schematically highlight the main connotation of the city. This helped to identify perceptive constants within Aberdeen.

Q4 As an architect, what do you feel are the defining elements when undertaking urban regeneration in the context of a historical built environment?

Given the multicultural aspect of the participants, this question aimed to gather data on design approach related to historical context and what the architectural and urban elements are important to preserve, for participants with architectural background.

Q5 *Can you provide examples of such elements which you found in Aberdeen city?*

This question aimed to gather data directly on the city of Aberdeen and its perception, before introducing questions related to design theme of urban regeneration.

Q6 *Please describe possible strategies and methodologies applicable for regeneration of existing buildings. Include mention of their re-use and the relationship between old and new.*

Aiming to collect data on the understanding of academic methodologies of approaching urban problems through design of regeneration and understanding of the historical overlap between old and new interventions.

Q7 *Please give an example as applied in your own project.*

Referring to their project, proposed during the workshop, this question aimed to collect data on the coherence between theoretical methods and their application in practice.

The day after the seminar was used to spend time on exploring the city and its characteristics and to visit Hazlehead Park and its three abandoned buildings, opened by the council specifically for the students.

All other days until the end of the workshops were spent to work on students' projects and interim reviews with planners and academics.

5.3.8 Survey results 2017

Number of students answering the survey: 8 out of 14

Q1 How do you perceive the urban context of Aberdeen city?

Almost all answers demonstrated an understanding of the historical importance and of particular features of the architectural layout. Particularly it was recognised even certain characters of uniqueness:

> "[…] Inspiration from Classical and Gothic periods gives to Aberdeen a strong personality that distinguishes it from other UK cities […]"

However, what emerged was a general feeling of lack of relation between the parts of the city and so a perception of fragmented city centre.

> "Aberdeen is disconnected, and at times unapproachable to the pedestrian. The scale of the street does not address the human, causing streets to encourage movement and not congregation."

Particularly in this assumption it is evident that the fragmentation of the city is given by an over-rhythmicity which does not allow any pause moment between different urban scenarios.

> "[…] Modern building do not seem to fit within their context and can sometimes be placed in awkward locations, such as Union Square. […]"

It is clear that, from an architectural perspective, the evolution of the city of Aberdeen is not perceived as a systemic and reinforced action of new interventions. What emerges, from the first impressions and reflections, is a lack of equilibrium between old and new as first aim. Particularly, new interventions are perceived as suppressing elements of the historical ones, moved forward by economic reasons (Union Square is the old station transformed in a centre mall) at the disadvantage of more connected and thought project of regeneration.

> "[…] I think maintaining this identity while trying to introduce modern elements has caused somewhat of a clash in the city […]."

Furthermore, negative perceptions of the urban system were very common especially for what concern the infrastructures and pedestrian areas.

> "[…] A single street making the city's centre […]"

> "[…] Aberdeen has a lack of gravity in its urban context. […] There is not obvious centre. This, combined with a lack of pedestrianised areas, results in a quite fragmented city."

> "[…] Adapting society's needs to a historical infrastructure can be somewhat of a challenge."

The main students' reflections appear to be focused on the quality of the public urban spaces and on the fractures which caused imbalance between historical centre, society's needs and new interventions.

The answers received were different as everyone used different cities experiences. One of the answer, compared the Aberdeen's character with the London's urban system.

"[…] London seems to have different approach towards its historical context: it tends to cover its historic buildings with modern ones. […] As a result, Aberdeen is different in that if tries to maintain its cultural identity."

The comparison seems to be challenging due to the enormous difference in scale between the two urban contexts. However, it is interesting to notice the importance given to the sense of identity as fundamental character for the urban environment and again the complexity related to the relation between old and modern structures within the city.

"Most European cities I have visited have an obvious centre and focal point where people congregate […] the centre is often defined by: Density of buildings, density of people/circulation, geographical centre. In European cities I have visited these three points are often close to each other. However, in Aberdeen they are not."

Reflections on density show the importance of having a differentiation of the urban layers and how this characteristic is important for the entire city system. What emerges from Aberdeen reading is the lack of clusters and functions variation, which could improve the liveability of the city for citizens and tourists.

Q3 Please draw a diagram of the urban layout of Aberdeen. Feel free to format this however you wish, but try to express what you feel are the defining elements (e.g. layout, features, landmarks, and so on).

Fig.86: Survey 2017 diagram 1

From this diagram it is evident the necessity of more pedestrianised paths and areas as there are just two green element indicated as pedestrian zone. Interesting, the students added another layer indicated as suggested pedestrianisation to reinforce the needs raised during the workshop investigation's phase. The disconnections between different parts of the city is also highlighted. Ultimately, the student added a more schematic drawing stressing the necessity of links between landmarks previously pointed in the diagram, Castlegate, Marischal College, the Art Gallery and the train station (Union Square).
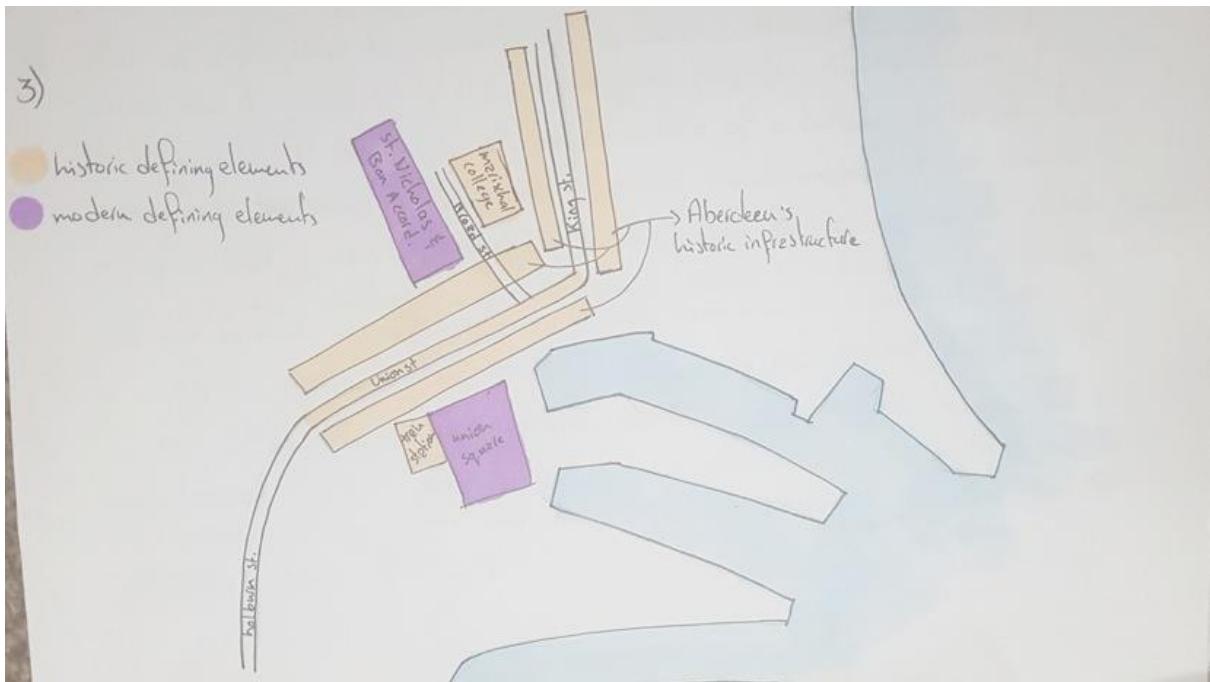
Fig.87: Survey 2017 diagram 2

The second diagram presents a more geometrical categorisation of the spaces and it is evident that the historic defining elements are predominant on the modern ones. Despite there are other modern buildings and interventions within the city, the student highlighted just two centre malls, St. Nicholas & Bon Accord and Union Square.
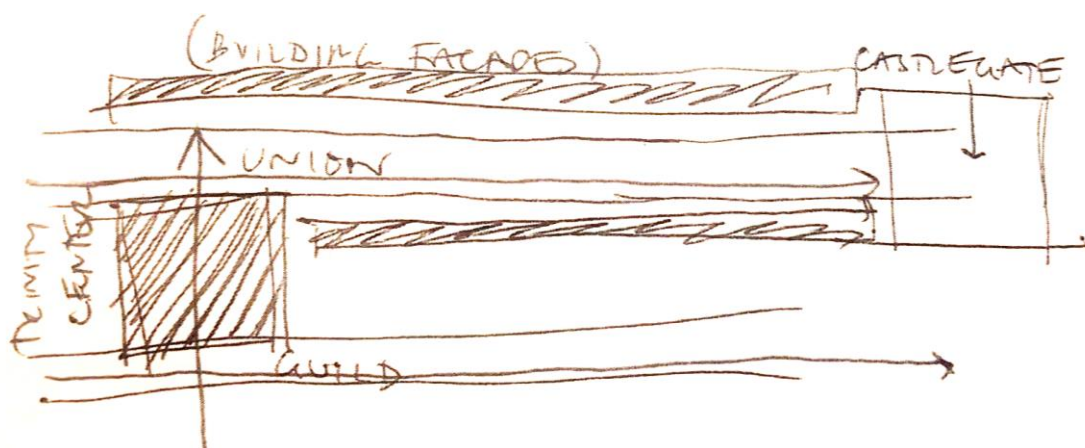
Fig.88: Survey 2017 diagram 3

The third diagram shows a more geometrical and schematic idea of the city. Union Street and Guild Street are separated by linear buildings and despite they are

viable in both directions the arrows are directed toward Castlegate. This probably highlights the importance of the square as potential public space. Trinity centre is drawn as the only connection between the two main streets.

All diagrams are drawn on plan and there is not any insight of section or skyline as memorable perception.

Q4 As an architect, what do you feel are the defining elements when undertaking urban regeneration in the context of a historical built environment?

"[…] it is necessary to keep its identity and flaunt it […]. A city historic infrastructure is what narrates its story, draws people to it, and gives it a unique characteristic that no other city has. […]"

There is not a clear description of the defining elements of a historical built environment, however the answer tried to explain the concept of identity as the main important character to consider in a project of regeneration.

"[…] regenerating a historical environment can be a challenging task because it should aim to make the city as comfortable and interactive as possible to its citizens, but still maintain its historic and cultural infrastructure."

This answer is still generic and does not give more data and information related to possible methodological approaches to projects of regeneration. However, it is still present the idea of creating more balance.

"To design a language that links existing landmarks and respects but accentuates the existing vernacular.

- Pedestrian areas to gather outside landmarks responding to local climate

- Adaptive reuse of existing buildings with appropriate function for surroundings

- Functions of adjacent buildings to work in unison to keep areas populated throughout the day"

Interestingly in this answer there is a list of defining elements together with proposed approaches of regeneration. What emerges is the importance of the architecture language to be used for re-using existing buildings and to re-connect landmarks, buildings and surrounding areas. It seems relevant the idea of using coherent architecture and urban grammar to design a balanced composition of the city.

"Defining moments should be what the essence of the city is. These moments stem from where people congregate and community forms. […]"

The importance of public spaces is here highlighted and they are called moments in order to remark their function of breaking the transitional movements of the city.

Q5 Can you provide examples of such elements which you found in Aberdeen city?

"Adequate reuse of old churches in the city centre. (Nox, Soul casino)"

It appears clear that an adaptive re-use of old structure to new functions, even radical, is considered to be a coherent approach. Probably in these two examples it is evident the relation between old new, obtained through a clear architectural contrast inside-outside.

"[…] historical buildings have been adopted to modern needs rather than being demolished and rebuilt. […] However, in some areas in Union Street, particularly Trinity centre, this has failed to happen, since the mall completely covers some streets behind it, creating very uncomfortable and hard-to-access places."

In this answer, it is possible to notice again a critical approach on imposed modern buildings that generate a sort of obstacle to the complete reading of the city centre.

Q6 Please describe possible strategies and methodologies applicable for regeneration of existing buildings. Include mention of their re-use and the relationship between old and new.

"[…] Combination of both, maintaining some existing features whilst adding modern intervention."

This answer clearly defines once again the need of balance between old and new.

There was also a more practical approach to the questions which pointed to the use of the same material (granite) as a character that should be interrupted.

"[…] playing with materiality and using different material than granite to have contrast throughout the city."

In this sense the urban and architectural theme is more oriented towards a visualisation of the city which should be emphasised through contrasts; different materials may narrate different ages of the city.

"[…] A complete remodelling of the interior can be made while still maintaining the facades. […] If the building is not A listed the exterior can be demolished leaving only the main structure. […] Sometimes an extension can be added to a building or the roof can be cut out to make room for modern block to be inserted into old body."

Few approaches are given and are related to architectural language and composition. Interestingly the adjective "inserted" was used to describe an architectural principle of plugging-in or interpenetration of new element onto the historical structure.

However, most of the American answers were more oriented toward a more radical changes and demolitions.

"Having small urban and community driven installations into the city will allow more regeneration. Re-using the market hall is essential. The market hall is currently cutting off circulation of Market Street to the Green. The old market hall needs to be demolished […]."

This answer shows a certain level of contradiction in terms of general idea of the meaning of re-use in architecture. In this sense, demolishing and re-placing a new building is considered to be an action of re-use.

Probably this misunderstanding may be related to a different cultural background; American architecture and built environment is generally constructed, planning the entire life of the building, including its end (Daverio, P. 2013). This generates an idea of demolition as an obvious part of the construction process.

Q7 Please give an example as applied in your own project.

"Stripping back building to existing structure than adding new cladding elements."

The methodological approach to the design is clearly related to the principle of wrapping with a new skin the old structure but it is not mentioned the general approach at a more urban and landscaping scale.

"[…] we have redefined the functions of some buildings, giving them completely new purposes. […] Maze house will have its walls demolished, leaving only its roof structure.

In this answer the approach to the entire project for Hazlehead Park is not evident and it seems more related to re-functioning the single buildings within the park.

It is possible to notice, from the answers received, that there was a general interest in exploring the concept of identity and more generally the possibilities for re-creating urban relations between different city layers, elements and public spaces. The considerations on the city of Aberdeen and its possible regeneration showed an approach oriented to explore and understand the original urban character and to experiment appropriate design methods to create modern projects while enhance the existing identity.

This approach, oriented to architectural themes and the use of its languages, differ from the objectives of LDP focused on establishing specific functions for improving more the local economy rather than the urban composition of the city.

However, the last questions did not give the expected information related to a more holistic masterplan approach and subsequently a description of the architectural methods adopted for the single buildings within a smaller scale.

5.3.9 Final presentation 2017

The final presentation took place in Aberdeen city council with a significant number of guests from ACC departments, local community associations, RGU and ICRGU.

The first groups of students presented proposals for the regeneration of the train station area stressing the idea of having more bright colours around the urban spaces. These provocative proposals raised some comments on the relation between old and new and the architectural theme of radical contrasting approach as evidence of the time.

What emerged from the presentations and final comments was a general interest for the different approaches that the students had to the project of regeneration. Particularly the Hazelhead Park work group introduced a theoretical method of connecting through the opposite concept of designed fragments and lines. The intensity of fragments of lines would have ensured the restoring unity between buildings, paths and natural elements.

This theoretical assumption generated attentions and discussions between planners and other professionals, generally involved with more technical and bureaucratic work. Particularly the attention was on the meaning of fragmentation and its potential to create links within a structured landscaping system, the Park. Organised fragments can establish a hierarchy of patterns, enables to define new landmarks, and a hierarchy of functions. From this concept, some proposals from the public were raised in relation to use lines for paths, some fragments as benches in particular areas of the park and series of illumination lines.

5.3.10 Considerations raised after the second workshop 2017

The second experience helped to raise mainly two important consideration related to the physical location and dimensions of the area that should be selected for this type of activity and related to the way of grouping the students.

Proposing two areas of engagement, in comparison to the four selected the year before, generated less stressful activities along the ten days, but the area of the train station area was still too wide and difficult to master in ten days. The proposals in fact, were not as clear as they could be with a smaller area such as Hazlehead Park.

Secondly, American and local students were divided accordingly with the area chosen with the result of limited interactions, which did not enable constructive debates and a knowledge exchange. The groups divisions were not planned in advance and so the American students did not benefit from the local students as they should have.

5.3.11 Workshop 2018

During the summer 2018, one area was selected as the subject of investigation. This decision was based on the previous experience and outcomes of the workshops. Concentrating on different areas would have meant dealing with a broader variety of urban issues, different historical characters to respect and different relations with various portions of the city. In particular, given the short time for practical activities led by the students and given the international cohort, focusing on one small area seemed to be more appropriate for this type of collaboration. Furthermore, the regeneration of the area selected represented a

priority for the city council agenda considering the proximity to an urban and architectural intervention completed recently.

In detail, the area is near to the Marischal College building and the new intervention at Marischal Square:

7. Queen Street

The brief:

INTRODUCTION

In a spirit of collaboration, for the third year, Aberdeen City Council welcomes the University of South Florida, Robert Gordon University and International College Robert Gordon University students to participate in an urban regeneration workshop.

For ten days students will explore urban projects based on exchange of ideas and design proposals. The students involved in the research will aim to develop a complete masterplan of public spaces of Aberdeen.

BRIEF 1: ABERDEEN CITY CENTRE, FROM QUEEN STREET TO QUEEN'S SQUARE

Post-industrial European cities are becoming more complex in terms of urban structures, the overlapping of multi-functional spaces and historical and contemporary urban readability.

Within this frame, there has been a gradual transition from urban city expansion to urban city regeneration, which requires alternative solutions to the solely conservation or replacement of buildings and urban spaces.

Strategies of intervention (conservation or replacement) are potentially opposing, and even though they may be fundamental for a "re-activation" of the areas, they highlight often problematic issues (including public opinion, new architecture challenges, loss of history, and restoration style) for which creative and planned strategic reuse might compensate.

For this reason, the workshop aims to develop project ideas that can demonstrate innovative urban and architectural design, including re-use, including an accurate analysis of the existing areas and their potential adaptation for the contemporary needs.

The area of intervention represents nowadays an uncertain urban condition of Aberdeen however, it is characterised by important potentials as social and renewed public spaces. Recent master-planned interventions within various areas in the city centre, including Queen Street, generated particular residual spaces. During the workshop, the Queen Street area in particular will be investigated to explore the meaning and significances of urban voids, fractures and non-places.

The evolution of a city should be here a dynamic process with strong and clear urban and architecture grammar able to link existing buildings and public places together.

The potential offered by Queen Street lies in it offering both urban connection and being an urban spine for major public services including the eastern annex of Marischal College, the Police station, the Lemon Tree building, the Arts Centre and the Town House.

New ideas to regenerate the area are needed to allow for a continuation of urban memory, to reinforce the urban rhythm and to transform the functional corridor of Queen Street in

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public social and vivacious stretched square (the social corridor), as opposed to the present trend of creating non-places and self-referential spaces thus with no relations (references) with the context.

The Opportunity
As an urban vision for pedestrian space and more public activities place, the first architectural approach has to demonstrate a deep understanding of the city urbanity, its historical roots and its rhythmic nature of everyday urban life.
The design proposal must consider the existing urban context and should aim to transform the urban path to initiate a process of cultural and artistic development, to realise possible collaborations and to give back a renewed sense of architectural identity to the city.
Enhancing and providing new architecture themes for the buildings will require working on a **re-use** project which includes designed relations with the identity of the city, improving the image of the city urbanity, and creating new and more public functions.
Sustainability is one of the main drivers for an urban and architecture project of re-use therefore the design ideas must consider green infrastructure, including alternative energy use for the buildings and the strong relation with the context.

AIMS
"Queen's Square" represents the regeneration of Queen Street in order to create better and clearer relations between buildings, landmarks and streets. Therefore, the students' project has to have strong thematic character and coherent relation with the rest of the city.
The existing buildings may be modified, re-used and altered in accordance with concepts of architectural adaptive re-use and within a coherent urban masterplan of the Queen's Square area.

Relations aims
Case Studies must be considered to define the project choices
4)   The pavement of Queen Street can be better related with the different historical buildings and with the new intervention in front of Marischal College. The design should consider the point of meeting between these different spaces.

5)   The project should consider the various entrances (public or private buildings) and create a solution, a sort of designed filters between the Street and the doors/entrances.

6)   The re-use of the aforementioned buildings should be regarded as being part of a more complex urban intervention and not as an isolated case of design. The project of the buildings should demonstrate their relation with the city, with the urban intervention.

7)   The project should consider a thematic link between the existing and local characteristics of the city and the recent interventions. Particular attention should be paid on the greenery as important part of the project itself.

5.3.12 Workshop activities 2018

The third workshop delivered in 2018 involved a total number of fifteen students of which eight master students were from USF, four undergraduate students from RGU and three undergraduate students from ICRGU. They were divided into three mixed working groups of five people.

During the organisation phase, it was decided that the workshop should encourage more interaction between students and planners. This was possible through the organisation of specific working days at the council (two days for the entire length of the workshop) where students would have worked closely with the members of the council.

Fig.89: Workshop 2018, students and planners meeting

During the first day, the workshop started as usual with a meeting at the council, a presentation of the Aberdeen city masterplan objectives and various interventions from the planners.

It was also planned to have American students' presentation of precedents study along the line of the 2016 workshop. This decision was previously taken by

facilitators during the preparation phase of the third workshop in order to have possible design concepts directions to follow for the students' projects of regeneration.

The second day was entirely dedicated to a seminar and guided group works in RGU. Particularly, at the beginning of the day, the students were asked to write on different post-it, maximum two words to describe the current conditions of the area and their considerations. This is based on the semantic associations investigated in chapter 3 and chapter 4.
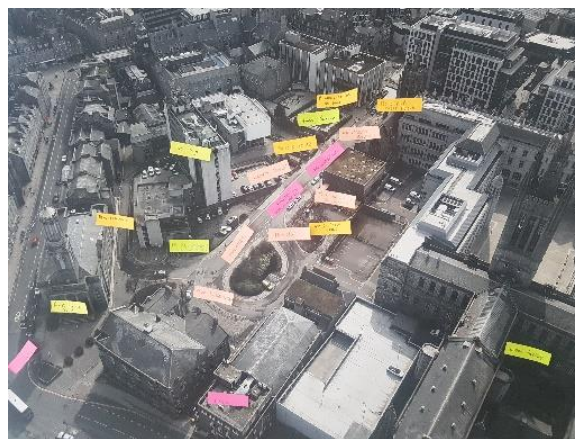
Fig.90: Workshop 2018, Naming the spaces

This exercise was followed by a lecture on the last thirty-year history of European cities and the related phenomena of urban obsolescence, generation of peripheries, decline of the industrial evolution and consequent abandonment of buildings and parts of the cities.

The second part of the lecture was then related to the nature of these abandoned spaces, the use of different adjectives and names to describe their characteristics, their possible declinations and the human feeling, which is generated while crossed.
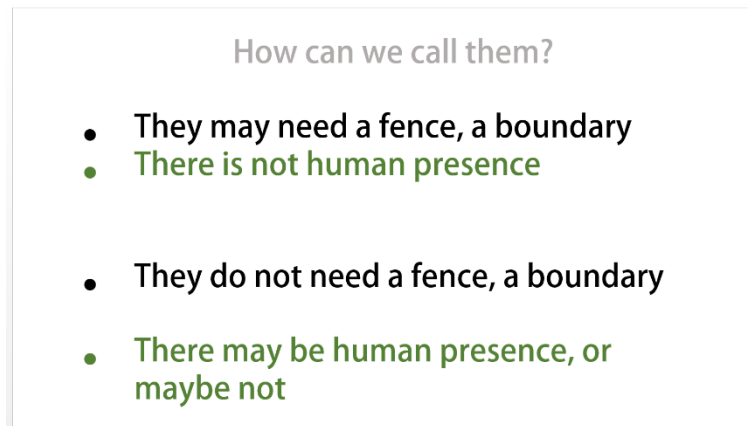
Fig.91: Workshop 2018, Naming the spaces presentation

During the second part of the day students worked in groups on a first urban analysis aiming to individuate critical issues and lack of connectivity within the area. The problems raised were then discussed and first ideas of possible design concepts were proposed.

On this occasion a pre-design questionnaire was compiled and distributed to the students (see appendix B) Students were required to submit answers by the end of the day.

The aim of the pre-design survey was to collect data on their first impressions of the issues related to the area in terms of urban layout and then in terms of buildings architecture.

Given the involvement of planners during the working days a similar pre-design questionnaire was distributed to the member of the council actively engaged with the students. The questions and answers are described later in the paragraph.

5.3.13 Pre-design survey questions for students 2018

Below, are the questions formulated and their aims.

> Q1 *The choice of Queen Street as the case study, for this year's workshop, came from the necessity of Aberdeen City Council to improve the urban area around the recent intervention of Marischal Square. What are, for you, the main urban and architectural issues related to Queen Street at present? Please at the end of your answer* **list 3 word or adjectives** *that best describe the area taken in exam.*

The aim of this question is to collect data on their point of view and particularly on the language they use to individuate and name urban issues.

> Q2 *Please draw a diagram of the existing area.*

Drawn on the example of mental maps analysis, this question helps to collect a series of patterns, which schematically highlight the main connotation of the area. This helps to identify perceptive constants within the specific area.

> Q3 *Please identify and list/describe those landmarks, urban artefact and important urban elements that you would maintain to highlight the sense of Aberdeen identity in the area being studied.*

Aiming to identify recognisable defining elements of the area on a larger scale and understand if there are common perceptions.

> Q4 *As indicated in the brief and discussed in our first meeting at the council, there are 3 main types of buildings to work on (Police station, Townhouse, ground floors along the road). What are the essential architectural components, elements or characteristics that make them recognisable in terms of an Aberdeen architectural identity?*

Similarly, to the previous questions but with focus on the buildings, this question aims to gather data on the perceptions of Aberdeen's architecture from a multicultural perspective. Furthermore, it helps to collect data on what the architectural elements are important to preserve.

Q5 *Please explain what the terms Urban Regeneration and Adaptive re-use mean for you.*

Aiming to gather data on common or contrasting idea of both concepts to clarify the meaning and importance of urban regeneration and adaptive re-use in a broader theoretical context.

The rest of the days focused on students work at the council with a few hours dedicated to presentations, historical tours and interim reviews with planners and architects.

5.3.14 Pre-design survey for students' results 2018

Number of students answering the questions: 14 out of 15

Q1 The choice of Queen Street as the case study, for this year's workshop, came from the necessity of Aberdeen City Council to improve the urban area around the recent intervention of Marischal Square. What are, for you, the main urban and architecture issues related to Queen Street at present? Please at the end of your answer list 3 word or adjectives that best describe the area taken in exam.

"[…] Queen Street currently lacks an identity. There are not specific attractions or functions around on the street that allow usability. There is potential to make it a great space of intervention that links with the current development around the site.

3 words: Enclosed, Boring, Empty"

Despite the presence of important historical buildings adjacent to the area, and the use of "enclosed" suggests that, identity is seen as missing characteristic probably due to lack of activity and social places. The choice of using the adjectives "boring" and "empty" seems to be referred to public and social activities rather than to urban and architectural aspects of the layout.

"The main urban and architectural issues related to the Queen Street at the present is that it looks like abandoned area […].

3 words or adjectives: in-active, lifeless, lack of economic vitality"

This answer more clearly defines similar concepts of lack of social activities but interestingly it associates the area with the idea of urban abandonment, as if the area were a sort of forgotten fragment of the city.

"Lack of public spaces, lots of noise from King Street Junction, dead-end traffic.

Loud, Alley, Boring."

In this perception a sensorial aspect related to the noise coming from the city is also involved; in fact Queen Street is described as "alley", not as a street, without relevant function for the city area. This is particularly crucial given its location in-between two important spines, Broad and King Street.

"Connection to King Street is not strong. […] Some structures not as desirable as historic structures. […]"

It seems that the presence of traffic spines and the lack of pedestrian and public space predominate on the historical character of this part of the city.

"Randomness, building orientation, vegetation always are not placed in a meaningful way.

Lonely, no character, poor transition into main roads."

The lack of having a common canvas, thus a certain equilibrium, between different urban layers and patterns, appears to be the main issue individuated by the students. In this regard, the aspect of isolation of Queen Street goes in contrast with its function of connection and potential longitudinal public spaces.

Q2 Please draw a diagram of the existing area.
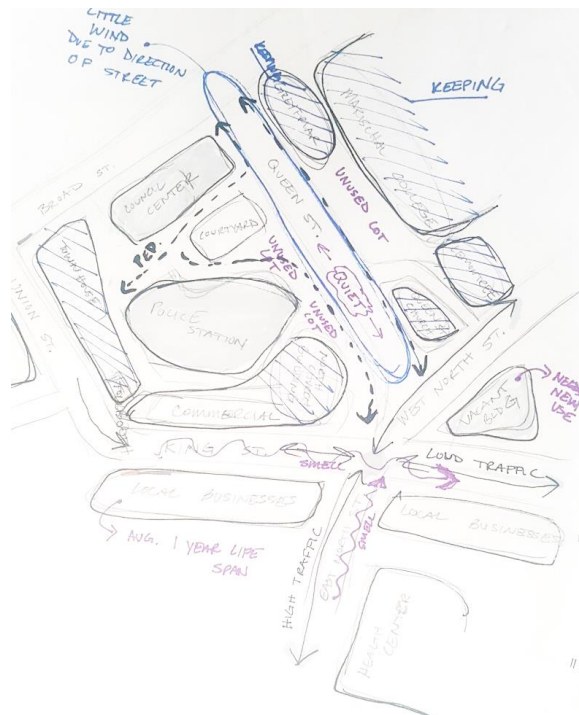
Fig.92: Survey 2018 diagram 1

In this diagram, urban artifacts, for instance the church, Marischal College, and the surrounding districts are individuated as clusters.

In this sense it is clear that the mental perception of the city is of a patchwork. Particularly, different types of transitions are highlighted with different dashed lines and some climatic considerations together with proposed interventions are annotated on the map.

Curiously, in the junction between Queen and King Street, the square Castlegate is not drawn. This is probably because the city structure may be difficult to understand immediately, especially for the American students. The space is also shown as an underused public space.
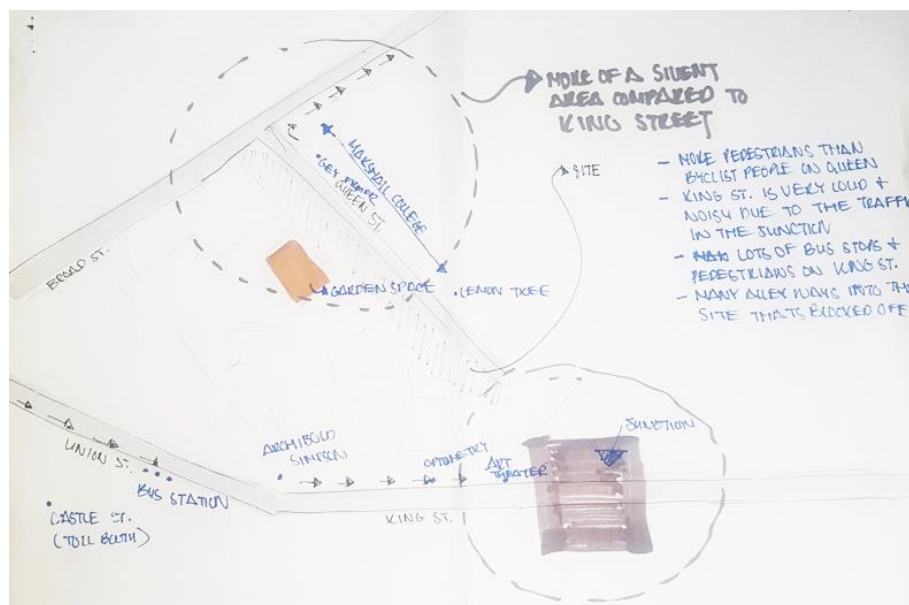
Fig.93: Survey 2018 diagram 2

More schematically, this diagram presents just the main spines and it individuates two contrasting areas in terms of intensity. The junction with Broad Street is, in fact, identified as more *silent* than King Street.

"[…] Sense of scale."

"Aberdeen identity: - Granite - Festivals

Site identity: - Vegetation - Art enriched - Surrounded by important buildings, City Council, Town House, Art Museum, Church, Lemon Tree, University."

"Vegetation plays a key role in making Queen Street more appealing to pedestrians and it can be link social zone city one another. […]"

The sense of scale appears to be an important factor in contributing to the identity of the city.

From the second answer instead, there are also immaterial elements such as festivals.

Vegetation is considered as an artefact playing an important role for the uniqueness of the city image.

"[…] Buildings have a few characteristics of Classical Architecture as well as Gothic Architecture."

"Granite, colours, form, rhythm."

The historical character of certain periods is identified as main factor but interestingly, in the second answer, the rhythm seems to play an important role in defining the city identity. Materials, colours and the layout of the city are mentioned too, thus the rhythm is probably referred to the urban intensity and the historical building consistency within the city centre.

"The characteristics of the police station that currently exist are un-relating to the rest of Aberdeen's built form. […]"

This answer does not identify any defining elements, rather is focusing on the exception given by the modern police station's building which seem to be out of scale in comparison with rest of the area.

Q5 Please explain what the terms Urban Regeneration and Adaptive re-use mean for you.

"Reviving a previously docile urban settlement."

"Urban regeneration: Refuelling an existing space with a design that bring citizens & people together by improving the economic & authentic parts of the space. Adaptive re-use: Reusing an old site/building for other program than what its originally designed for."

"Keeping the identity of original building and the city. For building, adaptive re-use should be as flexible as possible for different possibilities of future use."

"Urban regeneration is an action of reforming the existing area to cope with the prosperity of the community and also creating the sustainable environment for the users. Adaptive re-use is normally related to the historical site where the reuse or re-purpose the old site or building changes the existing function to deal effectively with the new requirements and needs in current period of time."

Similarly, all answers associated with the concept of urban regeneration an action of revitalising the identity of historical places and accommodate the more contemporary needs of the citizens and visitors. On the contrary, adaptive re-use was not described as a specific design theme which aims to investigate relations between old and new or even transform the old structure morphologically.

5.3.15 Pre-design questions for planners 2018

Below, are the questions formulated and their aims.

Q1 *The choice of Queen Street as the case study, for this year's workshop, came from the necessity of Aberdeen City Council to improve the urban area around the recent intervention of Marischal Square. What are, for you, the main urban and architecture issues related to Queen Street at present? Please at the end of your answer **list 3 word or adjectives** that best describe the area taken in exam.*

The aim of this question was to collect data on their point of view and particularly on the language they use to individuate and name urban issues.

Q2 *Within your department, do you discuss themes related to the urban form, urban permanence, values and potentiality inherent to the existing built environment?*

Aiming to understand if there are theoretical discussions on the value of certain spaces and their urban meaning within the department.

Q3 Please identify landmarks, urban artefact and important urban elements that you would maintain to highlight the sense of Aberdeen identity in there are taken in exam.

Aiming to identify recognisable defining elements of the area on a larger scale and understand the perceptions of professionals.

Q4 As a local authority does the council have an up-to-date system of mapping the urban underused/compromised spaces, buildings or urban void fractures? How are they categorised/named?

Aiming to collect data on the modality of categorising the urban spaces within the department and see if there is any specific database of underused areas.

Q5 Please explain what the terms Urban Regeneration and Adaptive re-use mean for you.

Aiming to gather data on common or contrasting idea of both concepts to clarify the meaning and importance of urban regeneration and adaptive re-use in a broader theoretical context.

5.3.16 Pre-design questions for planners' results 2018

Planners involved: two

Q1 The choice of Queen Street as the case study, for this year's workshop, came from the necessity of Aberdeen City Council to improve the urban area around the recent intervention of Marischal Square. What are, for you, the main urban and architecture issues related to Queen Street at the present? Please at the end of your answer list 3 word or adjectives that best describe the area taken in exam.

"Strategically located – Unattractive and visually cluttered – Potential"

"I consider the main urban and architectural issues at Queen's Square to be:

- At the present it is an underutilised, under-visited area with nothing to attract people to it, or keep them there;
- The public realm is poor and the buildings within the area are not of any particular quality;
- Surface car parking dominates some of the smaller spaces adjacent to buildings, which could be used for more public benefit;
- It sits in such close proximity to Union Street, Marischal College & Square and the Town House, yet is not well connected, particularly for pedestrians;
- The existing multi-storey car park serving Marischal College is only accessible via Queen (and Broad) Street, as is the other car parking.

3 words or adjective that best describe the area: Underutilised / Opportunity / Neglected.

Both answers recognise the strategic location of the area and its lack of connections with the main parts of the city.

Interestingly the second answer uses already the new name, mentioned in the vision for opportunity sites published by the council, in fact it is called Queen's Square even if its connotation is linear. It is a road and belt-connection between Broad and King Street.

Yet in the second answer, there are three listed words included "opportunity", which does not describe the current urban and architectural issues of the area. On the contrary the first part of the answer stresses the concept of being a space under – utilised - visited.

> *Q2 Within your department, do you discuss themes related to the urban form, urban permanence, values and potentiality inherent to the existing built environment?*

Both answers were just "yes" and this shows that the question should have been formulated in other words, guiding the participants to more elaborated discourse and reflection.

> *Q3 Please identify landmarks, urban artifact and important urban elements that you would maintain to highlight the sense of Aberdeen identity in there are taken in exam.*

"[…] Particular sympathy would need to be shown in terms of the siting and heights of any buildings within the area to ensure that the settings of those buildings is adequately preserved, or potentially enhanced."

"There are a number of valuable listed buildings on Queen Street. Marischal College and the church on the corner of Queen Street and Broad Street are

the most significant to me. One of the most important urban elements for Queen Street is that it created an opportunity for looking at alternative views to these valuable buildings. None of these views happen to be principal ones, yet they are very interesting angles to look at these buildings. The open space in front of the art centre also has great potential and should be left/extended as an open space. I believe the police station (especially their car park) and the modern extension to the town house are dominating and detracting the visual amenity."

Historical buildings are immediately classified as urban artifact but not the modern one such as the police station or the townhouse. Despite their questionable architectural value, they are dominating the area and so they should be read as potential objects of modifications, regeneration and adaptation. This concept seems to be missing in modern neglected buildings towards easier concept related to their demolition.

Q4 As a local authority does the council have an up-to-date system of mapping the urban underused/compromised spaces, buildings or urban void fractures? How are they categorised/named?

"I'm not sure that we do, although the City Centre Masterplan, along with other Council planning briefs and documents (Union Street Conservation Area Character Appraisal) does highlight key project areas such as Queen's Square which have been identified as being underused and having the potential to be significantly improved to the benefit of city centre and sense of place."

"Normally large scale sites that are underused are identified opportunity sites for future development as part of the local development plan process but not sure if that is the case for smaller scale sites. […]."

From the answer it is clear that different areas considered to be in need of regeneration are generally marked within the City Centre Masterplan which is already a design guideline. This means that apparently there is not any database of the current status of underused, abandoned buildings or neglected areas.

Q5 Please explain what the terms Urban Regeneration and Adaptive re-use mean for you.

"Urban Regeneration – any intervention that injects life to a declining urban fabric, this can be done by design intervention and also introduction of new uses but should ultimately aim to change the perception of the place.

Adaptive re-use – Using the existing tangible and intangible resources to reverse the decline of an urban fabric by introducing new meaning/s to a place so that social group(s) can use the space with no conflict on amenity of people living or working within surrounding properties nor any detrimental impact on the character of the area."

"Urban regeneration to me, means improving a city centre (and some intrinsically linked surrounding areas) for the public betterment, which can be achieved in a variety of different ways, not least in a Planning sense through well-designed redevelopment of existing buildings, creation of new buildings with a mix of vibrant uses and, crucially, the creation or improvement of high-quality public realm/parks and spaces that provide a good quality of urban amenity (see Dundee Waterfront,

Newcastle/Gateshead quayside and Edinburgh's St Andrea Square & bus station).

Adaptive re-use in my mind is the well-thought out, sympathetic conversion of existing buildings for a suitable new use. In Aberdeen city centre in particular, we are seeing an increasing amount of such proposals since the collapse of the oil price and subsequent lack of demand for office space in Aberdeen. This has led, positively in a Planning sense, given the aim of the City Centre Masterplan, to some high-quality proposals for the change of use of historic buildings from vacant office back into residential flats, which was their original purpose in many cases. Adaptive re-use will be key to the success of the City Centre Masterplan as given the historic nature of the city centre, the amount of brownfield land available for new development is relatively low."

There seems to be a clear explanation for both aims and even an explorative way to look at the resources of a space or existing building.

In comparison with students' survey, these two answers highlight an interest in adopting forms of urban and architectural re-use to improve the spaces within the city and draw around material and immaterial thematic related to the urbanity.

5.3.17 Final presentation 2018

After ten days of collaborative work, the final presentation took place within the Marischal college building in front of various professionals from Aberdeen City Council and, RGU, ICRGU, USF academics and a councillor.

From the students' proposals emerged a constructive argument drawn on the idea that public space is a complex combination of urban and architectural elements and multiple functions. Analysing precedents implies a deep understanding of what elements worked, why and how. A successful public space does not function because there is one element that is predominant or particularly evident, but because each element complements each other within continuous changes of balance of permanent and temporary places and functions.

The discussion, raised by the councillor who attended the presentation, however mainly focused on the future urban plans and on the agreements between the council and developers in relation to the need to improve business attractions through urban and architectural developments.

On this assumption, some reflections can be elaborated here. Particularly, it seems instructive to mention Adam Smith, during his Glasgow lectures, (in Settis, S. 2017) who advocated that the Earth belongs to all generations. Following this concept, it is possible to argue that discussing public space's modifications involves multiple professionalisms, and this attributes to the role of architecture a social and ethical commitment. If the social and ethical role of architecture is recognised, then all tangible and intangible elements of the city should be subtracted to the sole logic of profit. In this sense, landscape, monuments, urban artifact, public spaces and new interventions within the city should be encompassed within the same frame of community's rights. This directly leads to reflect on the political aspect of architecture as form of safeguarding the landscapes and the cities for the future generations (Settis, S. 2017). Identifying the social and political importance of architecture and research related to urban and architectural discourses reveals the democratic position of the discipline or, as more openly Rogers (2017) argued its force of democracy.

Arguing about public spaces, thus, is vital for city life because they represent its lungs and are the expression of society. In this sense the final presentation was a way to initiate a broader debate, that otherwise would have mainly been discussed between authorities and developers.

5.3.18 Post design questions for students 2018

Below, are the questions formulated and their aims.

Q1 *Please describe the existing urban space of Queen Street in relation to the discussions and considerations raised within the workshop.*

This question is similar to that one posed in the pre-design questionnaire and aims to understand if after the discussion initiated during the workshop there was any changes in perceiving the area or any different comprehension of the spaces.

Q2 *How did you perceive the methodology of urban analysis we have undertaken?*

Aiming to effectively evaluate the methods adopted to read the urban environment against the sole observation.

Q3 *What are the main urban architectural principles used for your project?*

Aiming to understand if there was a coherent and consequential process between urban analysis and design principles chosen.

Q4 *Please draw a schematic diagram of your main urban and architecture principle.*

A diagram of the proposed urban and architectural concept would help to objectify the clearance of the principles adopted.

Q5 *What are the essential architectural parts of the existing buildings that you maintained and/or highlighted within your project?*

The purpose of this question was to understand how the identity of the city is highlighted through projects proposed.

5.3.19 Post design questions for students' results 2018

Number of students answering the questionnaire: 4 out of 15.

Q1 *Please describe the existing urban space of Queen Street in relation to the discussions and considerations raised within the workshop.*

"[…] it is also aptly situated to create a linking space between Union Street and King Street. We discussed how there are buildings situated on the site that are detrimental to the area that could be repurposed/removed. […] There is also an underutilised commodity in that there are a number of culture-lead activities/buildings that do not relate to the space."

"[…] People (especially families) find no incentive to stay in Aberdeen because of the lack of things to do in its central streets."

"The existing conditions of Queen Street are unused as a destination and is clearly just used as a pedestrian and car throughway. […]"

The nature of Queen Street being just a transition space is described differently in all three answers but all are more orientated to reiterate the concept through its current or potential functions. Interestingly, in comparison with the answers

received for the pre-design questionnaire, the answers are more concise and less explorative, almost aiming to identify a specific problem.

Q2 How did you perceive the methodology of urban analysis we have undertaken?

"We took an in depth look at how people used the given space as well as other areas located within the city, we wanted to identify the main features that are being underutilised and that are lacking within the city, as a whole. I felt that our analysis was heavily focused on the actual site opposed to trying to solely fit analysis untaken about precedent projects."

"[…] The site studies […] gave me a strong understanding of Aberdeen and Scotland in general. It is very interesting to see how locals view the area and have a first-hand look into what they would change."

"We began by learning the history of Aberdeen and the style of urban and architecture language of the city. I found this helpful to design something that fit the culture and town. I think the next steps of talking with city council members from other sectors was the most helpful because of their insight to the project."

The methodology undertaken seemed to be well received by students in order to have a broader understanding of the urban material and immaterial features of the area. Particularly the exchange of comments and opinion helped to gather insights and many ways of observing a city.

Q3 What are the main urban architectural principles used for your project?

"[…] It was important to our group that we create a sort of cultural centre that would attract people to gather here, not only creating a stimulating

day time use but importantly to enhance the space with a vibrant nightlife.

"The Belt" we wanted to create a transitioning loop that encompassed the
site making use of the various nooks-and-crannies around that site to
create area of intrigue and interest."

The objectives of the project, deriving from the urban analysis, are simple and
precise as well as the main principle which seems to be the coherent response to
the problems.

*Q4 Please draw a schematic diagram of your main urban and architecture
principle.*
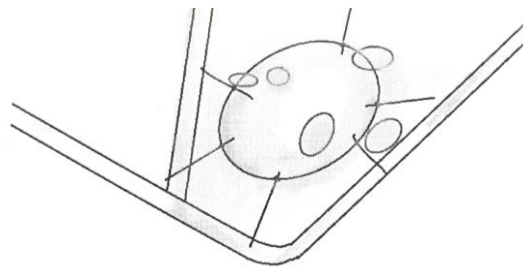
Fig.94: Survey 2018 diagram 3

As the previous answer, this diagram demonstrates a clear interpretation of the
weaknesses of the area and appears to be complete in its simplicity.

The simplicity nevertheless, is a complex theme in architecture, it is a balance
which should be carefully understood and assessed in order not to fall into banality
and reductionism.

*Q5 What are the essential architectural parts of the existing buildings that
you maintained and/or highlighted within your project?*

"We decided to keep the structural part of the police HQ with the intent to
renovate the exterior façade and interior spaces. The idea was to use the

police HQ for accommodation and studio space for people such as artists […]."

"We mainly tried to highlight the materiality and monumental qualities of the existing buildings by contrasting them with the lightness of the interventions. […]"

Two architectural themes are highlighted in the answers, on one hand the concept of re-using an existing out of scale building stakes acceptance and interpretation of the history including both positive and negative events; on the other the concept of revealing the historical context, introducing opposite and undoubted new elements.

The post-design questionnaire showed interesting and positive results related to the theoretical structure and subsequent practical setting of the workshop. The considerations stated in the answers introduced insights and elaborated arguments around the phenomena of urban abandonment and on how it could be approached.

5.3.20 Considerations raised after the third workshop 2018

The third workshop enabled to have a wider view of the experience of collaborating with two different institutions and of the general organization of it.

In terms of pragmatic program of the workshop it seemed appropriate to focus only on one area per year with all students, local and American mixed in one or two groups. The choice of having only one area was dictated mainly by the nature of the workshop of being a short activity. Moreover, mixing the students in few groups would facilitate the reviews activity and would concentrate more the

efforts, improving the quality of the results. Furthermore, the active involvement of planners in the group work ensured a certain consistency and viability of the proposals.

By distributing pre- and post- design questionnaires it was possible to understand if the workshop activities contributed to have various and alternative ways to perceive a space and to describe it using specific or unspecific terminology.

Reflecting on the terminology used, revealed the way students and professionals conceptualise limitations and potentialities of the area. According to Johnson (1980), the use of specific terms and instead of another may affect perceptions and the experiences.

According to the experience of Shön D. A. (1979) and his example of the shift of perception from '*slums as congenital disease*' and '*seeing slums as natural communities*' (paragraph 3.5), it is possible to conclude that the use of particular terms and the activities organised around the use of language enabled to better understand the urban spaces. It also enabled to articulate and more comprehensive discussions between academics, planners and students and to propose sharable design concepts.

Interestingly the post-design questionnaire's answers contain more strategic terms which seem to aim to describe an urban process of mending rather than imposition of new elements and design. "Transitioning loop", "nooks-and-crannies", "tangible and intangible resources" are intended as elements open to have a dialogue with the surrounding areas and buildings, with not over impositions of new volumes or new voids.

5.4 Participations. DM Planning department interviews

The third workshop 2018 was the most constructive in terms of clarifications on the potential synergy between the school of architecture and the planning department of the city. Some considerations, raised during the ten days together with planners, who participated for three years to this collaboration, helped to formulate some possibilities of having a more official memorandum of intentions established between the parties involved. In this sense, appeared to be helpful in the interest of this research, to gain the opinions from the planning department and the management team through four designed questions (Appendix F).

5.4.1 Questions for management team, Planning Department ACC 2018

Below, are the questions formulated and their aims.

Q1. What benefits do you perceive might be gained by the council as a result of the collaboration?

Aiming to clarify the objectives of the council related to the workshops and the collaboration with the academia.

Q2. How does this relate to the aims and expectations you have of the workshops and what you hope they will achieve?

The purpose of this question was to understand if there is effectively a synergy between intentions and results gained during the workshop.

Q3. What contributions and other forms of valuable insight do you think architecture students can make to the issues and challenges relating to the city masterplan?

Aiming to explore other possible forms of collaboration starting from the positive contributions that students can bring to city masterplan discussions.

4. Looking at other successful collaborative experience in some European cities (Oslo, Pescara, Venice, Barcelona, etc.) do you think that it would be beneficial in the future for the architecture school and Aberdeen City council to establish a more formal template for coordinating students' contributions to the city masterplan vision?

Mentioning similar work, the question aims to explore possible typical forms of agreement for coordinating collaborations which include students work.

5.4.2 Questions' results 2018

Q1. What benefits do you perceive might be gained by the council as a result of the collaboration?

Answer1: "Focused delivery of development on vacant land in the city center helping to deliver the objectives of the City Centre Masterplan, Development Plan and the Council's commitment to City Centre Regeneration and increasing residential population in the City Centre as recommended by the recent City Centre Living Study."

Answer2: "[…] the process would only benefit Council if the collaboration were formally being recorded and disseminated and with clear objectives & outputs that the Council would action. […]"

The workshop seems, from these answers, a tool aimed to collect proposals for delivering the city council objectives and needs.

The second answer more explicitly describe the workshop as way for gather broader views and better shape the objectives of the City Centre Masterplan.

> Answer3: "– Exploring a number of options for the same site – Benefitting from the interactions between students and staff – Involving a wider range of stakeholders in the planning process – Informing students of the practical challenges of real projects."

In this view, the interactions between different stakeholders from different backgrounds and the possibility of exchanging thoughts and ideas are more evident and focused on the significance of a collaborative process.

> *Q2. How does this relate to the aims and expectations you have of the workshops and what you hope they will achieve?*

> Answer1: "Greater collaboration will hopefully lead to a shared, deliverable vision and action program for the regeneration of these spaces, improved quality of design of both buildings and public realm and increase the confidence of the development industry that the Council and its partners are willing and able to fulfil these objectives."

> Answer2: "I would anticipate everyone has slightly different aims, mine is to ensure that the students are given a good basis for, and constructive review, of the proposals. What I get in return is to meet people who are exploring a context very differently from ones they are used to and bring fresh ideas and approaches to their proposals for Aberdeen.

This year we were lucky to have the Planning Convener Councilor watching the presentations and giving her views on the approach to students' work […]."

Answer3: "Over the last few years of running the workshop we have covered all the previously mentioned perceived benefits, albeit with varying level of impact."

All three answers show positive impressions and expectations, highlighting more the reciprocal benefits of combining together various approaches.

Q3. What contributions and other forms of valuable insight do you think architecture students can make to the issues and challenges relating to the city masterplan?

Answer1: "Architecture students can bring a design perspective gleaned from their study of buildings and projects that have been catalysts for City Centre regeneration all over the world."

Answer2: "I would expect to see a range of enthusiastic design led approaches to delivering the masterplan. However, this is something better done when shaping the production of a masterplan or in specific delivery of certain projects. I would anticipate the projects in the masterplan will give a good source of project for RGU to take forward in an academic way that could shape future development."

The engagement of students and their genuine passion for design are the main contribution perceived from the council; interestingly, the second answer shows insights for longer collaborations and a broader view of delivering future city developments.

Answer3: "Their presentation skill is a key for visualizing various options discussed in the workshop. Given the financial constraints this approach is often not possible with developer and designers. These can be compiled and can create a package before selecting one development scenario.

The advantages of the collaboration seem to be just related to achieve better goals from the council in developing future urban regeneration actions.

Q4. Looking at other successful collaborative experience in some European cities (Oslo, Pescara, Venice, Barcelona, etc.) do you think that it would be beneficial in the future for the architecture school and Aberdeen city council to establish a more formal template for coordinating students' contributions to the city masterplan vision?

Answer1: "Yes."

There has probably been some inaccuracy in formulating the question. This has enabled for the opportunity to give a short answer.

Answer2: "I am not aware of collaborative programs in other European cities but the collaboration in project delivery in Aberdeen must always start at a local level, regardless of the background of interested parties, however there is a need for representation from formally constituted groups and businesses in order that their interest is known/relevant.

RGU had always had projects focused within Aberdeen at all scales of development and a more collaborative approach is mutually beneficial if it is indeed formally recognized. […]"

Answer3: "Yes, there seems to be room for developing the workshop even further and benefiting from the creativity, knowledge and presentation skills of students."

There appeared to be a general interest in continuing and elaborating the public/academic collaboration. The work delivered by the students and academics, particularly if it is related to precedents study, is perceived as valuable operation and an updating method, which in turn can bring and highlight possible innovative ways to regenerate the city.

Although the benefits discussed are more related to the council party, the workshop is an important opportunity even for academics and students who have the occasion to explore and experiment projects of transformation within the city. In this sense, merging the competencies would mean drawing a future scenario of the city that would be closer to social, cultural and identity needs.

Thus, merging the intentions of both institutions would help to bring outside of the respective sites the urban and architectural work, giving to the city an adding value.

In a moment of economic recession, collaborating is a way of generating nets of expertise to improve the quality of the community places and to remark the social importance of the university and the authority.

The first three workshops were focused mainly on addressing urban issues but they have also been a sort of brainstorming useful to envisage the future outputs. Looking back to other similar experience (Chapter 3), an agreed collaborative plan of work enables to organise a set of confrontations in the form of public presentations for instance, which would help to verify the hypothesis of urban

transformation; it would enable also to draw publications as a manifesto of the theoretical work and results gained.

5.5 Production of significance. The methodological design approach

> *Architecture is a field of thinking rather than doing, field of reflection. The most important thing of architecture is to find the potentials. That means to do more than a building and to do more than a programme. Finding potentials means finding possibilities for the community and for the urbanity.*

(Herzog, J. 2016)

The workshop activities enabled participants, working in a collaborative environment, to raise considerations related to project approaches of regeneration for the selected areas in Aberdeen. Particularly this research may be seen as a lens between urban and architectural study of the abandonment phenomena in general and then in Aberdeen, and the possible transposition of the theory in practical design approaches to the question.

Observing the activities delivered during the workshops, interpreting the discussions raised about the nature of those spaces and the formulations of possible design solutions, helped to articulate the following design methods for the cases presented. The guidelines proposed are intended as pragmatic proposed ideas derived from the urban analysis underpinned and described in chapter 4 and based on the study of precedents examined in chapter 3.

The next section explains the main design themes and principles used to regenerate the areas selected. The whole work carried out during the three

workshops is also published on a dedicated website called Aberdeen Collaborative Urban Path.

1. Castlegate

Castlegate acts as elbow connection of Union Street with King Street but overall it may represent a significant public space for the city in relation to Marischal Street and Regent Quay.

The oil industrialisation has produced in particular areas of Aberdeen, serial of standardised buildings particularly within spaces located to the harbour. The formal and morphological characters of those buildings show a lack of relation with the anthropological system and the surrounding historical buildings.

The co-existence of old historical buildings, industrial buildings and open spaces, which have the potential to become public spaces, have driven some design principles related to the way of maintaining together architecture and historical differences, establishing a dialogue between them.

The analysis conducted for Castlegate suggests that its configuration as public node and converging point of three main urban axes, Union, King and Marischal Street, should be re-thought in order to enhance pedestrian flows without interruptions.

Establishing a pedestrian hierarchy through the square may also provide more fluid transitions, and may lead the users to Marischal Street directly without crossing a roadway. In this sense, the project of re-use for the square could give importance to its location as historical Aberdeen's core and thus bring back its collective significance to the city. The square could become a renewed

interpretation of multifunctional urban place where different events may take place and be catalytic occasion for attracting citizens and tourists. A flexible plaza space would encourage an interchanging core for the city.

In this regard, the emerging architectural design criterion is to give value to the fragmented voids of Castlegate introducing their complementary opposites, various and fragmented solids. Small public removable hubs may strategically inhabit the square generating new flows into the urban voids between them. These "small public rooms" may become the outside extension of the shops, bars and covered spaces for events such as markets and temporary expositions.

Fig.95: Castlegate proposed map

To redefine the distinct and historical value of connection, the relation between Castlegate and the waterfront could be emphasised. A restriction of cars on Marischal Street would allow it to be safe and attractive for pedestrians. By programming the street as a gentle transition from the top of Castlegate to the

bottom of the waterfront, artificial and elevated platforms, intended as functional and architectural thematic steps, may help to highlight the main Aberdeen public activities such as grab-and-go options, storefront opportunities and pop-up food carts. It would represent "Aberdeen in a Street" serving and attracting locals and tourists.

Fig.96: Castlegate, proposed view of Marischal Street

From Marischal Street, citizens and visitors may be led to a waterfront that could become a place of identity re-appropriation. Regent Quay waterfront re-use design may inhabit a portion of the harbour and coexist with the working and industrial activities currently there. By regenerating the portion of the harbour in front of Regent Quay and dividing it from the Trinity and Market Street harbour spaces, it would be possible to create an active public waterfront, symbol of the city.
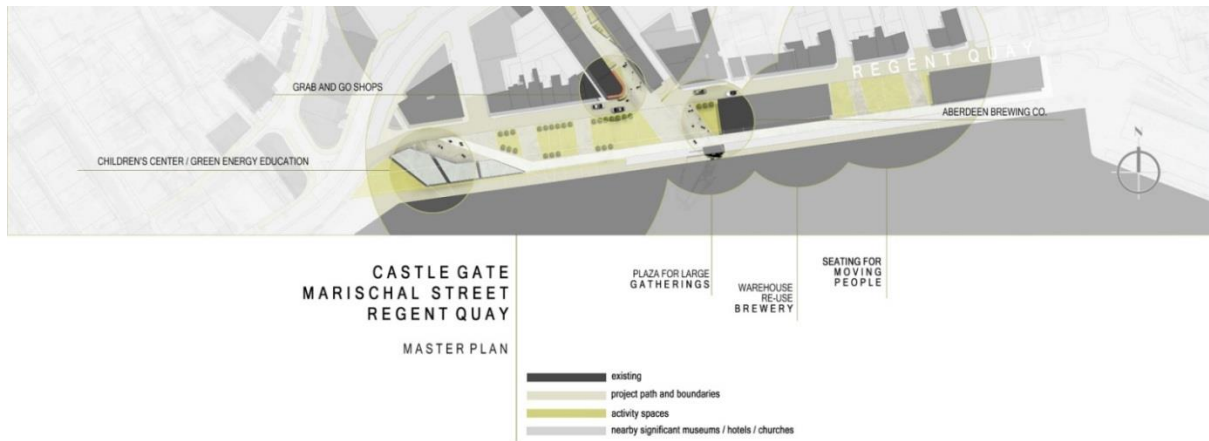
Fig.97: Castlegate, proposed map of the harbour area

Particularly this dimensionally generous portion of the harbour could become home to outdoor events and concerts, kids' playgrounds, a gathering place for people on lunch break and a children's green centre. With a focus on adaptive re-use design the industrial building located within the harbour on Regent Quay may be transformed, with not many historical limitations, in a new hybrid place for people where urban and industrial characters may reinforce the sense of identity. In this sense, the architecture composition could merge strategically the multi-storey internal space introducing common voids within the building.
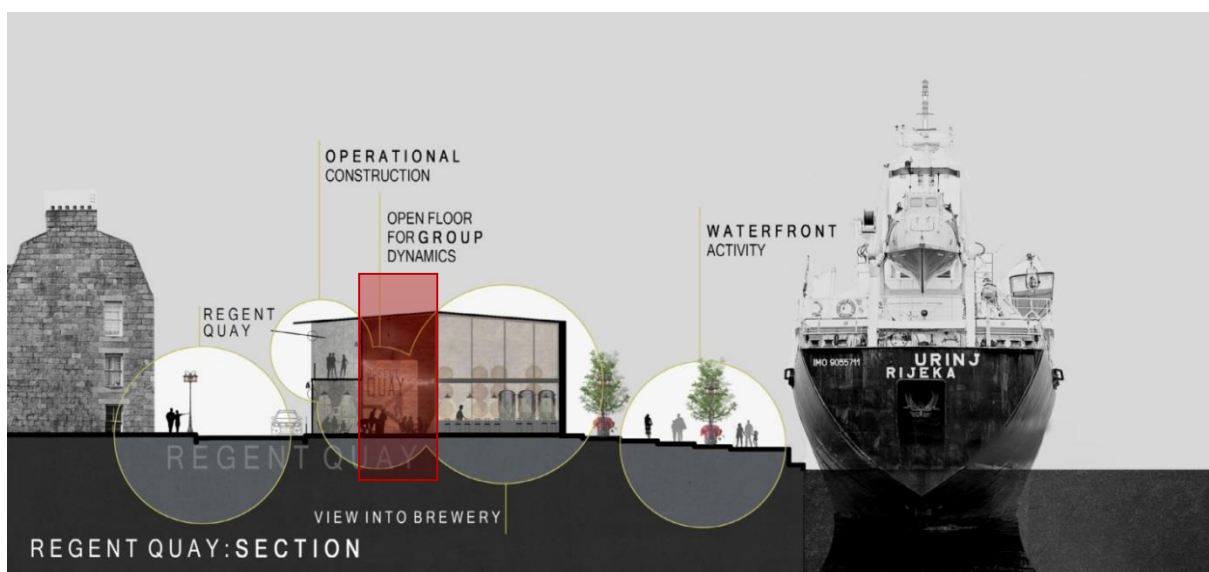
Fig.98: Castlegate, proposed section of the harbour area

2. Aberdeen waterfront

The isolation of the esplanade compared to other parts of the city underlined the necessity to reinforce the connections between the waterfront and the city centre. Particularly the analysis demonstrated the presence of few activities which are not able to attract a collective interest to inhabit the waterfront along the entire day and night. Drawn on example of other cities' waterfronts, a design urban project could consider a repopulation through a string of amenities, restaurants, pubs and provide space for night events.

To connect to the city centre, it would be relevant to divide the length of the boulevard through intermediate sites able to promote walk-ability and to reduce the twenty minutes' walk from the city centre to waterfront into four portions of five minute walks. Furthermore, the streets could be reworked and traffic be slowed down.

Fig.99: Aberdeen waterfront, proposed map

A project of regeneration and re-use of the waterfront has to establish also visual relations between urban places and natural landscape working mainly in sections. The natural configuration of the site allows to inhabit the ground exploiting the natural and steep connotation of the terrain. The residual space, natural dunes, retaining walls could be reconsidered as places for social activity and places for validating the aesthetic identity of the landscape.
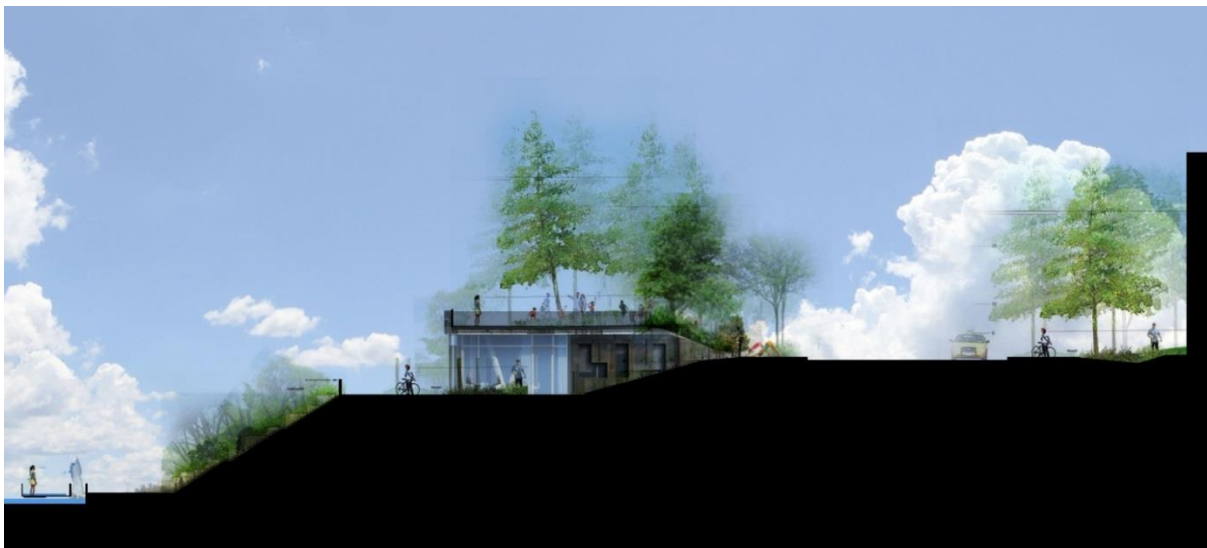
Fig.100: Aberdeen waterfront, proposed section

Reinforcing the transversal connection through designed sections of the site also highlights the possibility of exploring physical relation with the sea water. Introducing open air bath and facilities may become a landmark icon of collective attraction and of seaside skyline perception.

Fig.101: Aberdeen waterfront, proposed long section

The hard sloping retaining walls of the waterfront could be covered by vegetation to soften the edge, increase the visual continuity of the space and help to reduce the harsh winds from the sea edge.

Moreover, all residual spaces underneath which are currently empty-spaces could be transformed in covered public places for staying and for new food and drink activities beside the main walkway of the esplanade.
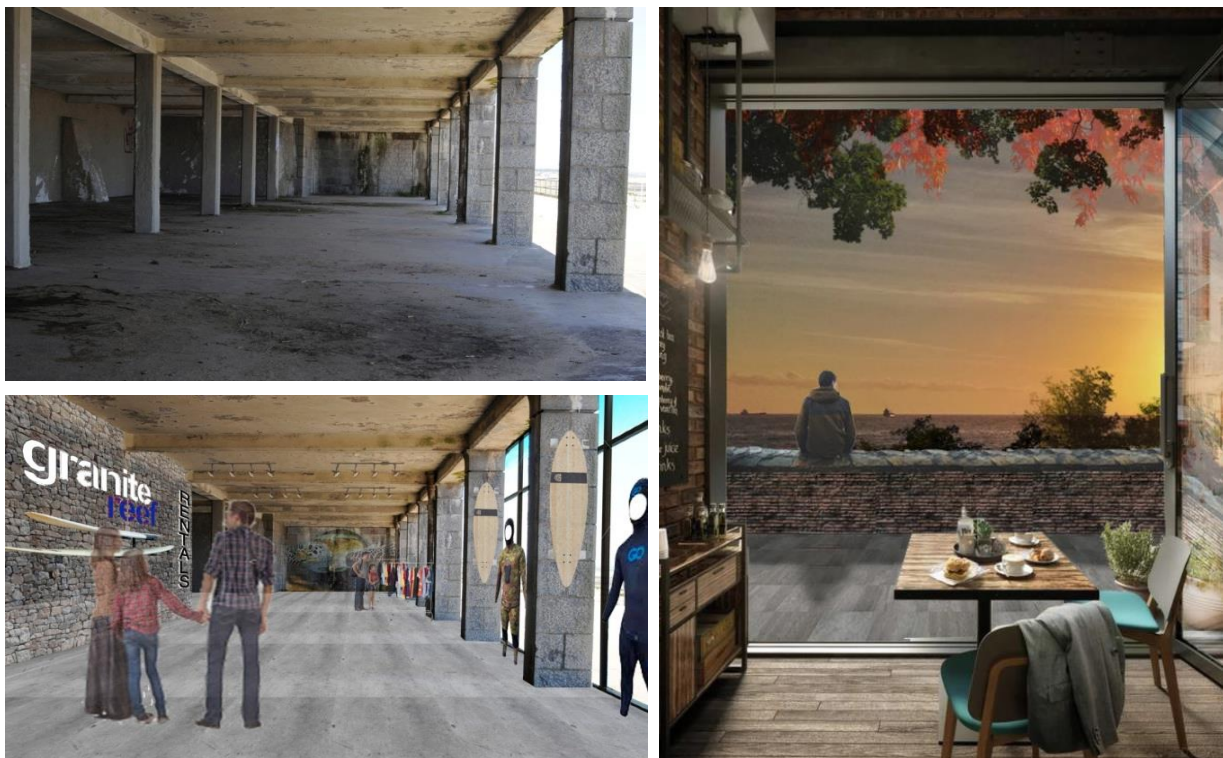
Fig.102: Aberdeen waterfront, proposed views

3. Golden Square

Lynch's concept of *imageability* is here particularly relevant because the form of Golden Square may be described as a fixed element within the mental process of perceiving the urban space. It is able to shape the kinds of imagery associated with that particular part of the city.

A clear form and more specifically a central and symmetrical form, such as a circle, has to be considered as strong symbolic element which has to be reinforced and mastered in a regeneration project of urban re-use. It becomes the main occasion for reasoned strategy of urban improvement using instrumentally its weaknesses, due to isolation of the form compared to the surrounding context, and transforming them in strengths, in open systems able to dialog with the rest of the city.

Golden Square is strongly self-referential, all sides are similar despite their different connections with other urban spines of the city such Union street, with the historical building the Music Hall and with its counterpoint of Union Terrace Garden. Arguably, Golden Square is clearly an infrastructural node of distribution revealing its nature of traffic roundabout rather than its nature of public open space as its name may suggest.

The main challenge in a project of re-use is to use the original central form as advantage and as an element of reconnection with the city. In this sense, the project could highlight the perceptive character through a de-composition of the circle which acts just in section. Portions of the circle may be lifted and transformed in shelters, path and elements that may be visually led toward other surrounding parts of the city.

Fig.103: Golden Square, proposed section

Fig.104: Golden Square, proposed map

All parking on the ground level could be removed from the centre of the square, but the roundabout would remain with access to the other three entrances to the square. The centre circle may be a mix of terraces and seating. The circle may begin to elevate to create a green-covered public space such as a pavilion. This would provide more possibilities to enjoy the events occurring in the square despite various weather conditions.

For the nature of the square, *the civitas*, the project of re-use could have a variety of programmed and un-programmed uses and become an amenity for the surrounding context, especially the Music Hall. The space could be used as an outdoor venue and provide an enjoyable accent during the day and night.

Fig.105: Golden Square, proposed activities

An important aspect for regenerating Golden Street is to reinforce its presence within the view from Union Street. In this respect, the Duke of Gordon's statue may be moved at the crossing point between South Silver and Union Street and the entire spine leading to the square could be pedestrianised and buildings could be covered with green wall as counterpoint of natural sculpture to the old statue.

Fig.106: Golden Square, proposed statue new position
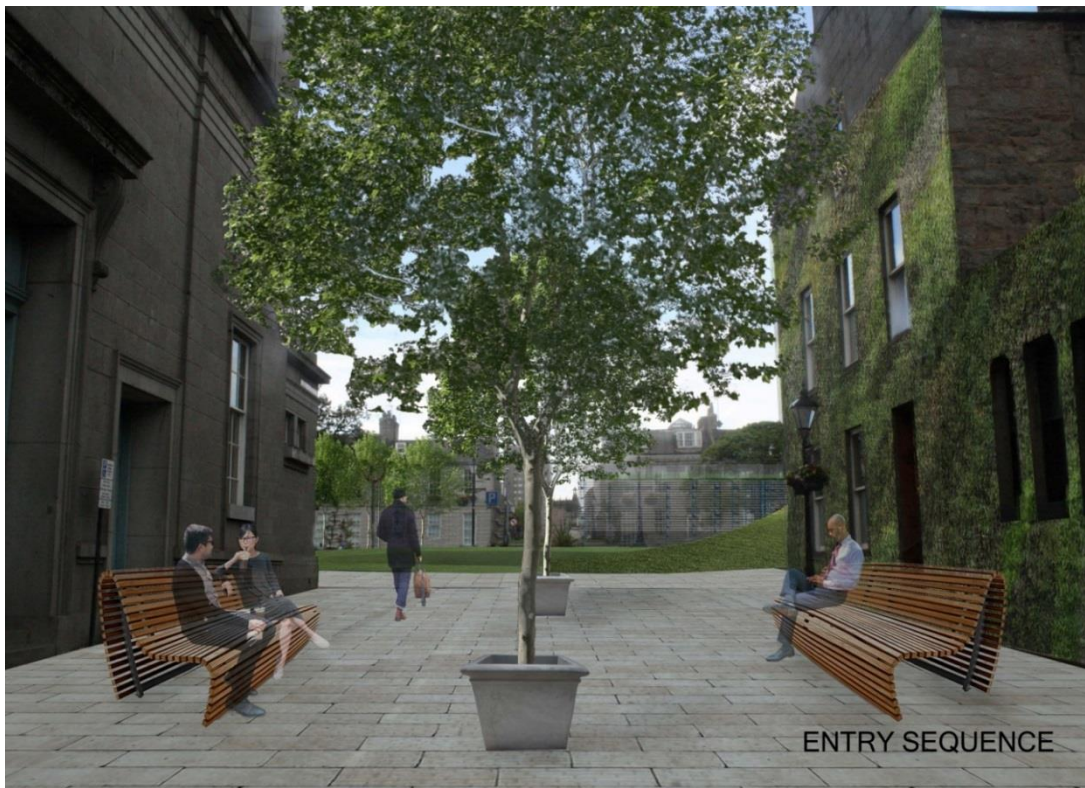
Fig.107: Golden Square, proposed new

4. Bon Accord area and garden

The area is characterised by multifunctional buildings and residential settlements. Paradoxically the garden is relatively closed to the city centre yet is not used by the citizens and visitors as other green areas within the city. In this sense, the diversity of the surrounding program could provide the chance to envision the park as a space for accommodating community activities and more in general different users of the entire area.

Urban parks have generally been organised according to a geometrical scheme where borders are scrupulously delimited through precise lines generated by a change of materials, greenery and pavement.

A design composition criterion may invert this concept, proposing a continuation of the Bon Accord Terrace Garden greenery on Bon Accord Terrace overpassing the junction with Union Street. Particularly the line of junction may be interpreted through a hybridisation which fray the edges establishing transitional relations between the park and the city hiding the point where the natural elements end and the urban element begin.

The vehicular flow along Bon Accord Crescent may be reduced to one lane in order to enhance prominent pedestrian path to the garden from the city centre. The creation of a main pedestrian corridor perpendicular to Union Street can be considered as reinforcement of the connections along with more opportunities to accommodate different activates for residents and visitors.

Fig.108: Bon Accord area and garden, proposed map
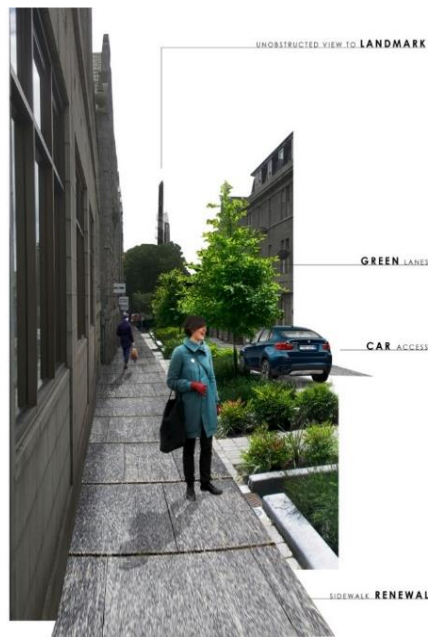
Fig.109: Bon Accord area and garden, proposed view of the street

For a project of re-use would be particularly helpful designing directly in sections and creating gradual steps from the Bon Accord Crescent to the residential area along Hardgate Street.

The park itself could become a common platform crossed by paths as its original features, which enables the users to navigate the place while having access to amenities and residential areas. In this sense, the connection becomes areal rather than linear.

Fig.110: Bon Accord area and garden, proposed view of the park

The three level brick terraces of earlier 19th century garden architecture could be reused reminding the historical function of the entire garden as Market Garden and reintroducing on the lower levels strategic small urban allotments for the residents.

Fig.111: Bon Accord area and garden, view of the terraces

An intervention of reuse could also investigate design possibilities related to the near Bon Accord Bath building which represent an example of Art Deco interiors.

The design criteria for this type of existing building, according to the references analysed, may involve themes of contrasting new intervention with the old structure through removable and smaller rooms while highlighting and preserving, with not in-style reconstructions, the original character of the building and the traditional internal spaces and furniture. More explicitly, new elements could not be attached to the old structure but clearly independent from the structure and old materials. While the old damaged original furniture and elements could be preserved but left incomplete as they are today, as evidence of city's history evolution and identity. There are no reasons for imposing radical changes and permanent modifications to the historical structures, rather new elements could be flexible enough and open to further modifications and removal.

Fig.112: Bon Accord area and garden, internal view of the bath

Partially all facades do not present any decoration on the upper level which may be more connected to surrounding social areas with new and non-attached skin that may act as new attractive connections and also as a protecting screen which emphasize the original fronts' rhythm.

Fig.113: Bon Accord area and garden, external view of the bath

5. Aberdeen train station

The area around the train station is highly congested; the traffic and the overlap of modern constructions have hidden the oldest pedestrian part of the city. The composition of the built environment is not clear and does not follow any juxtaposition rule, thus there seems to be a lack of balance and harmony between solids and voids.

An intervention of urban regeneration could then consider the possibilities of recreating harmony by adding more voids intended as public and green places. The main urban theme would be based on "milling" the area transversally in order to re-connect Union and Guild Street and reinforcing the existing connections.

Existing buildings, such as the old market, may be manipulated by subtracting portions of the entire volume, in order to create more open spaces, and the remaining structure may be wrapped with renewed skin.

Fig.114: Aberdeen train station, proposed map

The public places could be meant as extended, stretched squares able to host ephemeral temporary volumes, greeneries and urban furniture organised within a designed imaginary grid, where its orientation would follow the existing perceived urban directions.

Fig.115: Aberdeen train station, proposed view

The uniformity of the pavement symbolically would represent a unique canvas to reinforce the distributions of different layers of functions. All elements could be aligned on both horizontal and vertical surfaces proposed.

Fig.116: Aberdeen train station, proposed green-places

Yet, green beds could be in line, extruded and modelled in their surfaces in order to be inhabited by people and visitors.

6. Hazlehead Park

Hazlehead Park is mainly perceived as an aerial natural space divided in three parts, the entrance with the old empty gate house and the pet corner, the central zone accessible from the back with a café and an empty toilet building and the final one with the rose garden, a labyrinth and the old maze empty building. These subcategory of the space highlights the necessity to find a continuation and design criteria able to bring back the empty buildings within a landscape design mastered by a common architectural language.

The natural environment may be seen as a complex system generated by a set of single elements where the whole is perceived starting from the exaggeration of natural diversity. From this concept it would be possible to address a landscape project based on intense fragments which can draw a visual continuity between the three areas. These fragments may have different functions and be paths, seats and greenery.

Diverse and fragmented lines, as main theoretical theme, can be used to imitate the irregularity of nature all around the park. Curved lines and fragments of lines could start to diverge and direct the walk all around the three empty buildings which could be brought to a new life through a project of re-use. Particularly the three empty buildings have different configurations and different historical meaning therefore, the architectural approaches will consider these aspects and

will link every building to the site using different declinations of the same design language adopted for the site regeneration.
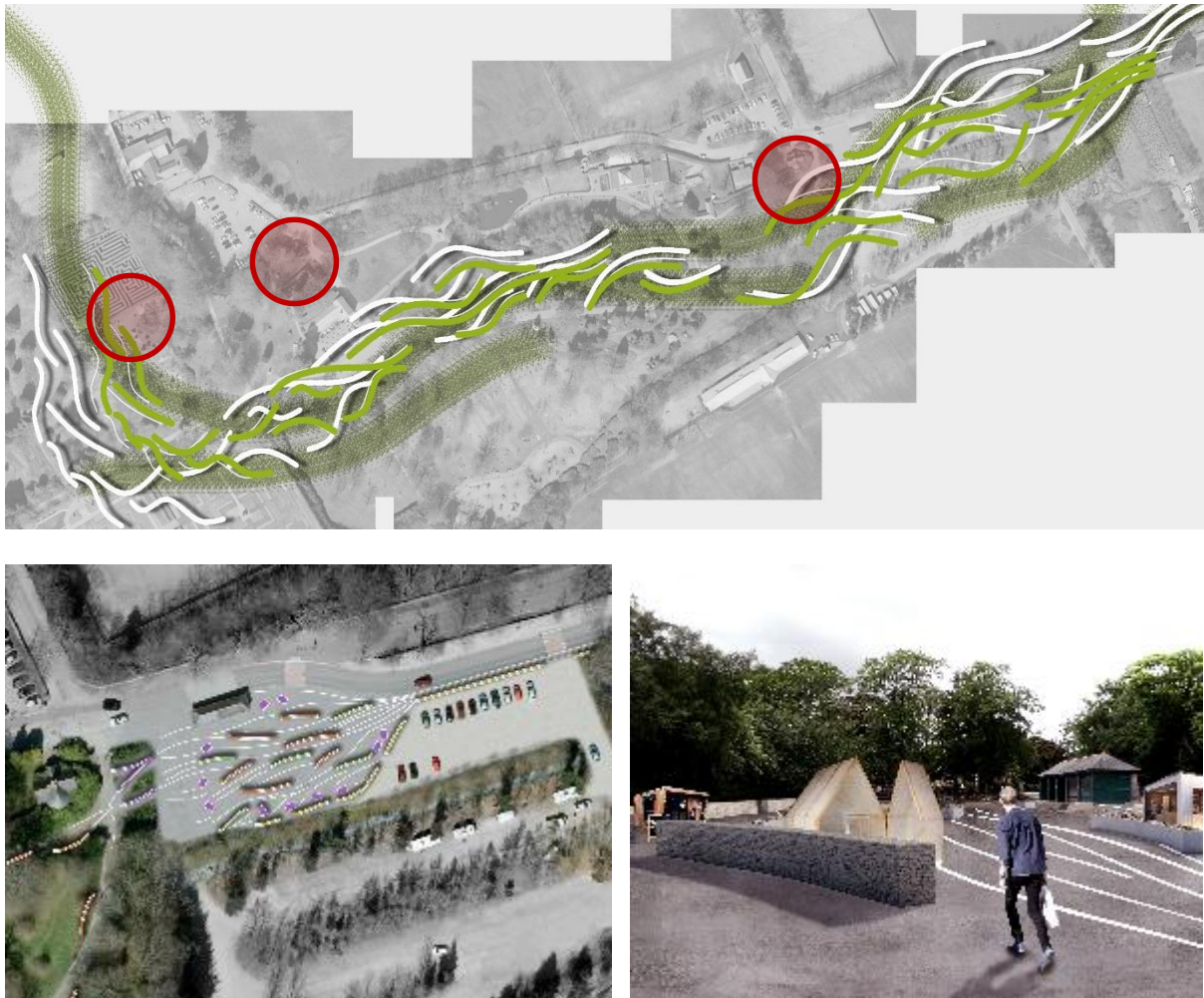
Fig.117: Hazlehead Park, proposed map and intervention

The first empty building, the gate house, is a historical building at the entrance of the park and may be converted in a welcoming information point. Its presence may be reinforced through light extruded volumes positioned on the existing openings. Small new volumes, clearly diverse and treated with different finishing, represent a declination of the main architectural theme of the entire project.

Fig.118: Hazlehead Park, proposed Gate House re-use

Dealing with architectural projects of re-use includes a deep understanding of the general context and its uses. Hazlehead Park is a natural area used mainly during the weekends for resting and being more in contact with nature but, given its aerial extension, it is also used as a space for practicing various sports especially in the central space closed to the toilet block.

In relation to this, the empty toilet building may be transformed into a more utilised facility say for renting sports accessories such as bikes and as changing room for runners.

The empty toilet block is facing the central entrance of the park giving an unpleasant first visual experience to the users and visitors. The designed fragment and lines on the ground may guide the users to use yet, this building and visually invite them to explore underused parts of the garden through unexpected views. The architectural criterion for re-connecting this building to the park could consider to enfold the original structure with a new skin. The use of timber cladding would

increase the relation with the park through a material which is more in harmony with the entire natural context.

Fig.119: Hazlehead Park, proposed Toilet block re-use

The third building is positioned at the entrance of the labyrinth and its morphological configuration is related to its function. It was the highest point of view over the maze. This building may be reused to enhance the visits within the labyrinth but also as a new place for visualising the natural configuration and topography of Aberdeen. Sitting on a hill, from Hazlehead Park it is possible to have a view of the city and of the North Sea. In terms of architecture principle, the particular triangular and characteristic form of the old structure could be reinforced and different points of view may be introduced to better appreciate the landscape.

Fig.120: Hazlehead Park, proposed Maze building re-use

7. Queen Street

Queen Street is compressed within multiple functional buildings and main urban spines. It is almost hidden from Union Street and the only two accesses are at its ending points.

The main architectural and urban proposal for the area could be based on the theme of introducing a multifunctional belt, which encircles and highlights the other accesses to Queen Street, particularly from Union and King Street. In this way Queen Street can be re-absorbed within the urban tissue and its function of connectivity would be included within the belt.

The idea of creating a multifunctional circular path around the area would allow to treat the Queen Street's surface as a unique canvas where different historical and modern buildings can coexist together.

Fig.121: Queen Street, proposed map

The massive presence of the police station can be provocatively reinforced as memory of a recent past and re-used for as performing space in the lower floors and as apartment on the higher levels.

Looking at this modernity ruin with a renewed interest, can contribute to avoid a process of cancelation and destruction of the urban identity and the memory of the places, exploring the potential of transformation.

The architectural composition theme of adapting an existing modern building out of scale, could improve its presence within the city. In this sense the police station is re-used by re-proposing a new skin able to establish a dialogue with the context and by becoming a sort of vertical junction.

Fig.122: Queen Street, proposed external view

The role of the envelop thus, becomes not just a design action aimed at the building itself, but at new ways to inhabit the urban spaces transforming the built environment and its urban areas in new central and crucial clusters.

Therefore, the new skin acquires significance and new expressive and aesthetic value, enhancing its communicative aspects on the urban scenario.

According to Portoghesi (2007), the derivation of the term envelop is from the past participle of the Latin verb involvere, which reveals a more general and ambiguous meaning: the result of a wrapping or packaging that encloses, conceals and masks a content.

In the language of architects, the word has retained all of its ambiguity, being used both for something that conceals complexity by reducing it to a homogeneous block, and a meaning of conferring transparency on and unveiling something that is not intended to be displayed but to be let glimpsed. (ibid.)

Fig.123: Queen Street, proposed Police Station building re-use

Playing with the police station's skin would create new urban views through the building itself and from the building.
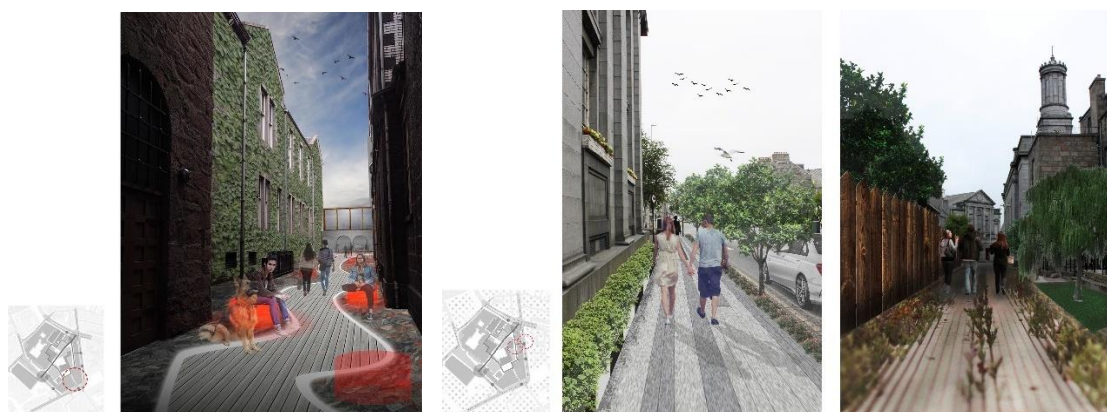
Fig.124: Queen Street, proposed views of the new belts

The belt would lead users through new thematic areas highlighted by different colours of the pavement and the urban furniture.

This would reinforce the different public activities, such as performing spaces retails' areas, event spaces, but also would help to highlight the urban functions changes along it.

8. Deeside railway

As anticipated in chapter 4, the eighth area analysed, has not been considered for the workshop activity but it is part of a study conducted in 2018 for urban themes around the idea of urban material and immaterial borders. In this sense, the research on Aberdeen Deeside line explored the connotation of abandoned linear space, particularly looking at its twofold function of connection and separation at different scales.

From a symbolic point of view, decommissioning an old rail track represents an action of re-appropriation of particular urban and collective space. Being a way in the past automatically allows to use it as new green-path particularly suitable for cycling and walking. The gentle slope, the longitudinal configuration and its isolation are safe conditions for the new users. The automatic idea of using this natural corridor as new functional "way" in its various declination, green- natural- walk- cycle-way for new forms of mobility represents, at the same time, an innovation and a limitation:

It is innovation in terms of renewed interpretations of the past through different possible mobility; it is a limitation in terms of its length and non-variation, which affects immediately the slow mobility.

The analysis underpinned suggest to investigate and explore, in terms of re-conversion, what the borders are and what type of architecture objects and landscapes are there, at the borders.

All elements could be transformed in places of memory of the old identity of the line and in occasions to better connect the main way with the surrounding contexts.

In this regards the line itself may become a multifunctional line connected with different micro spaces. The result would be a transition from the apathetic concept of renewed "way" to historical- touristic- green- natural -"place".

By enhancing new and variegate mobility, the functions of old building and constructed elements along the tracks can assume various configurations:

Stations

The re-use project could re-activate the station as a node through a programme of social, meeting activities and functions and enhancing the connections with the main line but also with the micro-areas of the city. This will be possible laying aside the mono-directional idea of human flows and enhancing a principle of perpendicular and more aerial flows and interactions.

In a perspective of new mobility, the station may become a "new" station for coming and going, for instance serving the recent sharing transportation initiatives.

Platforms

Platforms are part of the station and with it could evolve in terms of architecture choices and details. Looking at the platforms from the old railway instead, they are naturally and already suitable in its dimensions for resting, staying and sitting.

Tunnel

The re-use of tunnels is an important moment within the project because it is already and architecture work, is underground and so has also poetic relations with the materiality itself.

In this regard, it is helpful to look at other languages use of the words tunnel and corridor. For example, the literal translation from the Italian is "galleria", in French "galérie", which would be gallery.

This concept suggests that a corridor or a "galleria" was a narrow and long space within a building connecting different spaces. Those long corridors used to be decorated within the buildings.

Following this concept rather than just functionally connecting two spaces, a tunnel may be designed as an open-covered long gallery where the transition from outside and inside modifies the footstep, and the surface of the walls can be used to reinforce the collective memory related to that space.

Bridges

Exploring the relations between two infrastructures defines the basis for interpreting and exploring two different typology of mobility; in this respect how can the vertical path between a car way above and a cycle path below be possible? The architectural elements considered such as the existing walls and pillars may be exaggerated and intensified in order to activate and re-use the spaces underneath making possible the vertical connections for different uses.

5.6 Table taxonomy of design approaches

The projects carried out during the three workshops are based on theoretical insights, precedents study and principles.

The following taxonomy re-proposes the connotations of the areas examined in chapter 4 and describes the urban design themes and the related architectural design elements used to address project of re-use.

The approaches' principles are summarised through an explanation of the urban themes, which are highlighted in red in the diagrams. The design elements used to reinforce those theoretical concepts are also listed in the last column.

The table below summarises the design principles and criteria of architectural and urban re-use of non-places, empty places and fragmented voids and it represents the main findings which are directly linked with aim 1 and 2 (Chapter 1, page 6). Furthermore, the process followed in the workshops represents a research-led and a merging working method which is connected to aim 3 and enabled to record and share the workshops results.
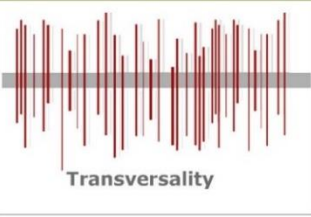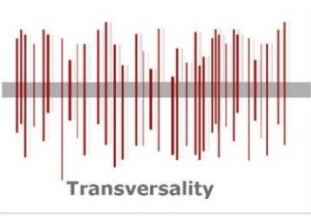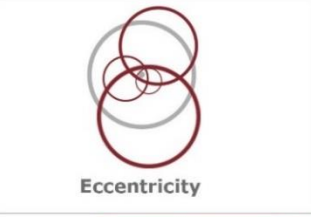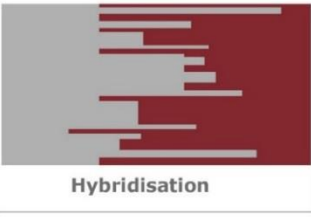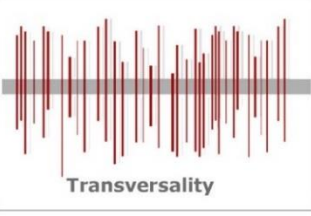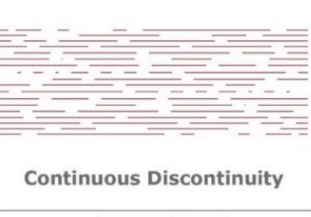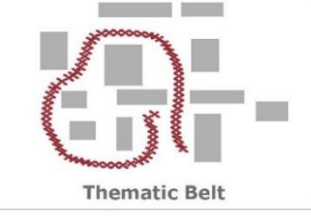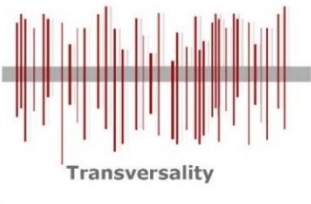
Area	Frag. void	Empty place	Non-place	Urban Themes	Design elements
Castlegate	●	●		Transversality	Platforms / Ephemeral volumes
Waterfront	●		●	Transversality	Terrain pocket / Ramps
Golden Square			●	Eccentricity	Green ramps / Terraces
Bon Accord area	●	●		Hybridisation	Green lines / Terraces
Train station			●	Transversality	Fragments / Ephemeral volumes / Skin
Hazlehead Park		●	●	Continuous Discontinuity	Fragments / Skin
Queen Street	●		●	Thematic Belt	Colored pavement / Skin / Colored lights
Deeside railway	●		●	Transversality	Platfomrs / Materiality

Table 13: Taxonomy of design approaches used during Aberdeen Collaborative Urban Path workshops

5.7 Summary of the chapter

Projects of regeneration are inevitably connected with the re-use of the existing spaces; the two concepts are interrelated and indivisible, otherwise there would not be any need of regenerating a space.

Complex urban and architectural project of regeneration, which include different expertise, should be based on clear and strong principles derived from a careful urban analysis. It should also include a strong programme, based on the study of frequentations of the area and its rhythmicity and include innovative functions for site.

The modernist concept of *form follows function* is overturned within the project of regeneration. The form of the existing space, according to Latz (in Corsaro, E. 2010), must be accepted and it is fundamental to research different processes of re-using those spaces.

The complexity of the investigation leads to the need of multiple involvements, thus chapter 5 investigated the process of organising practical workshops through a collaboration between academia and the city council. Three live experiences were undertaken in order to collect data and understand the most suitable and successful formula for the context of the case study, ergo in relation to Aberdeen city its actors.

All three workshops are described in the chapter along with some consideration related to the organisation, length and method to select the areas of engagements.

Later in the paragraph all urban themes investigated during the workshops in order to address the problems of the existing areas and their declinations of

fragmented voids, non-places or empty places, are described and shown through significant images. All urban themes and related architectural design elements used are categorised within a taxonomy (tab. 12).

The next chapter 6 illustrates a summary of the entire thesis and argues the conclusions formulated on three main areas of investigation.

Firstly, it describes the importance of consistent urban analysis and methods in order to understand the emerging urban phenomena and to deliver them coherently. This also highlights the importance of intellectual expertise within the preliminary phases of possible project of regeneration.

Secondly, the chapter draws on the concept of non-place, empty place and fragmented voids, what the design approaches may be and which related theoretical considerations seem to be appropriated.

Finally, to ensure deeper discussion on the urban environment of Aberdeen city, a network of collaboration, which include university and local authority, is encouraged and proposed as Aber-net.

CHAPTER 6

FROM ABERDEEN TO ABER-NET

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This research has explored the application of a collaborative approach to the re-design and re-purposing of abandoned urban spaces, through parties from the public sector and academia.

The study moved from wide and theoretical investigation of urban and architectural abandonment to the definition of three sub-categories non-places, empty spaces and fragmented voids which can be employed to describe different types of abandoned space within the contemporary city (chapter 3). Particularly it investigated urban design themes and architectural principles which could be

applied in the design of their regeneration, starting from the determination of defined re-use. With the intention of having more pragmatic results, the study focused on Aberdeen and its abandoned spaces in order to verify the theoretical aspects previously investigated (chapter 4).

Discussions initiated with the local authority raised the possibility of employing a more collaborative process to understand and plan for regeneration of those spaces. In particular, the designed semi-structured form of the workshops seemed to be appropriate because it could involve both institutions on reflecting on nature and design possibilities related to the areas (chapter 5).

From the detailed analysis undertaken in chapter 4 and the proposal urban and architectural themes proposed in chapter 5, three main ideas related to projects of urban re-use, regeneration and their complexity emerged as possible strategies.

The above mentioned concepts have explicit implications for the practice of re-use which requires a methodological reading of the historical urban significances of the urban spaces and specific design approaches of recreating interconnections.

On the one hand, a more sustainable approach would include the reuse of abandoned and underused spaces as a method to maintain and reinforce historical and more recent interventions within the city. This concept has been investigated through a taxonomy of design principles which differ from the principles adopted for the whole conservation or demolition and new construction.

On the other hand, the study of abandoned areas and their regeneration evidenced that working within the urban environment involves multiple factors,

not always so tangible and even different professional figures and authorities. In this respect, the presence of the university, particularly the schools of architecture, at the beginning of the regeneration process appeared to be consistent and a significant contributor to approach the issues through a more theoretical and intellectual urban analysis. A more balanced relation between practical and theoretical approaches aimed to identify what the real and possible collaborations are and how they can be set for reintegration of two different work environment, institutions and authorities.

To answer the three main questions posed in chapter 1, the research adopted multiple methods ranging from etymological analysis, urban graphical analysis and experimental collaborative workshops with focus on urban and architectural design. The next three paragraphs summarise the results gained related to each question.

6.1 Analysis as designing backwards

- What are the recurrent characteristics (urban and architectural) of abandoned spaces and neglected areas within the cities and how can they be categorised? **(AIM 1)**

Projects of conversion involve a higher level of urban and landscaping analysis that specifically investigates the urban context, the existing objects to be redeveloped, and the interrelated connections between the existing elements and the surrounding areas.

This research has demonstrated methodological and rigorous analysis to deeply understand the complex urban, landscaping and architectural systems related to abandoned spaces in Aberdeen. By considering their roles within the context,

their function of connections, their specific urban declinations of abandonment, this research classified and named those spaces in order to deeply understand their nature and subsequently to identify ad hoc interventions of regeneration.

In particular, from a critical analysis of the literature and from conceptual explanations of abandoned urban and architectural spaces, three categories of recurrent characteristics were considered:

1. *Non-place* is an impersonal space characterised by a lack of localism. Its structure is often standardised and over geometrised, creating sterile spaces for human interactions even if it is used by human.

2. *Empty place* represents an absence within the city system. It is an old building or urban space that is no longer used. In this case the border between inside and outside is not so important because the building is not inhabited, thus the adjacent space around is empty.

3. *Fragmented urban void* is not an active and connected part of the city and its role generally is related to dividing spaces, a sort of threshold. It does not make a positive contribution and it generally does not have a human use. (flowerbed, green roundabout, etc.)

In doing so, the analysis allowed to categorise those urban spaces in a taxonomy useful for individuating their identity and urban characters within the city.

This taxonomy, where non-places, empty places and fragmented urban voids are categorised, enabled to have a more complete picture of the current urban conditions and a clearer understanding of the dimension of abandonment phenomenon.

In other words, following a rigorous analysis helps to individuate the specific problematic issues related to the essence of isolation in order to find the related specific solution of re-use.

Selecting methodological urban and landscaping analysis has proved to be fundamental for coherent urban projects of re-use, especially in dealing with particular interstitial urban spaces. Furthermore, the ability to name those abandoned or underused spaces and its related ability to find declinations and different meanings in the context appeared to be consistent.

Existing abandoned urban spaces cannot be just replaced indistinctively with a new function or simply erased with a superimposition of new infrastructure-buildings, ignoring the micro-localism interactions and connections.

In dealing with regeneration of urban abandoned spaces within the city, however, one cannot be exempt from morphological and deeper theoretical studies focused on the history and significance of those existing spaces. This is necessary in order to be conscientious of the semantic and structural role of those spaces within the city urban tissue.

Analysing urban abandoned spaces within the city can be compared to analysing a narrative text and understanding the significance of the terms used. Every term assumes its significance in that specific context. The whole sense can be read starting from the understanding of the relations between words.

The analysis, thus, appears to be fundamental for any further action of regeneration of the components of the city.

The interpretative aspect of urban analysis is essential for design projects based on the existing spaces. Therefore, from analysis it is possible to select what to preserve and what to change in order to re-establish and enhance connections with the context. In this regard, projects of re-use are intended to be processes of historical evolution.

6.2 Re-use and re-form as a theoretic strategy

- What are the design principles and criteria of re-use related to different type of abandonment or non-spaces concept and how can they be categorised? **(AIM 1)**

The concept of using precedents is considered valid at all stages and should be reintegrated as a coherent method even at other stages more related to the practice. In particular, as Fisher-Gewirtzman (2016) noted, this type of study, related to existing successful projects, involves complex analysis and different level of categorisations, ranging from formality approach, historical context, quality of the spaces, level of conservation and condition of the building or urban space which has to be re-used. Crossing these analysis enables to methodologically identify the main characteristics and condition of an abandoned area or building, to strictly recognise the design strategies and relations with the existent. In this sense, the research explored ways of categorising and naming design themes and approaches based also on relevant urban analysis. These design principles have been theoretically explored and tested through the practical workshops in order to formalise and classifying possible themes of reuse within a table of recommendations for regeneration projects within Aberdeen city.

What emerged from the studies conducted during the workshops, was a set of different design approaches in respect to the three cases of abandonment individuated during the urban analysis phases.

6.2.1 Alternative use of non-places

The different aspects and various scales of non-places suggest that rebalancing the spaces through logics of variations between solids, voids, finished and unfinished enable to master these type of spaces.

Others have argued that non-places can be mono-functional such as car parks, or alienating such as train stations and shopping malls where the functionality of the services predominate on human and social activities. In this sense, a project of re-use should reconnect the space to the surrounding context breaking the original design logics fit to the purpose, and may well introduce a discontinuity or a fresh direction.

The interventions on the rigidity of non-places would aim to add a certain level of imperfection to the spaces by harmonising the relation between functions, services, temporary structures and unplanned open spaces. In this case, discontinuity and imperfection become a guiding concept because they help to take coherent distance to take in order to respect a context. A project of re-use of a non-place can be obtained by subtraction rather than by addition.

6.2.2 Re-use of empty places

In the case of empty place, the adaptive re-use seems to be the most appropriate design action when the technical and structural characteristics of the old building allow it.
Accepting the existing connotations and reinforcing the adjacent open spaces may potentially create icons of renewed identity within the city.

Experimenting through design ideas with old buildings, re-writing their relations through architectural principles of composition, help to master the projects toward the main elements of the context.

Maintaining an old structure and establishing a dialogue with its form, skin, functional and visual characteristic means to imprint contemporary signs on a building which belong to the past.

The architectural principles are numerous and their clarity and harmony should re-establish the relation with context. Massive appendixes, additions of volumes, subtractions of old building's portions, wrapping with new skin are examples of principles which can give back to the building reasons to be in that urban context and sense of identity.

6.2.3 Re-use of fragmented urban voids

Dealing with non-constructed spaces involves semantic declination of the essence of a void. It means that space should be renewed starting from its bi-dimensional connotation as a public crossing area. The aim is changing the public significance of the void within the urban tissues but not its geometrical characteristic of being an open space, a void.

Re-drawing an existing fragmented void should highlight its contribution as part of the genetic code of the city and not just contemplate actions of filling it with permanent solids. Particular attention may be paid on the contemporary architectural themes (Cucinella, M. 2018) of relating the surrounding built environment with nature investigating stronger relations between them.

Reconnecting abandoned spaces		
Non-places	**Empty spaces**	**Frag. Voids**
Generate imperfections	Wrapping with new skin	Highlight the area
Functional balance	Plugging-in	Temporary uses
Visual harmony	Playing with old structures	Unified canvas
Over-drawing	Harmony between old and new	Functional balance
	New interior	Visual harmony
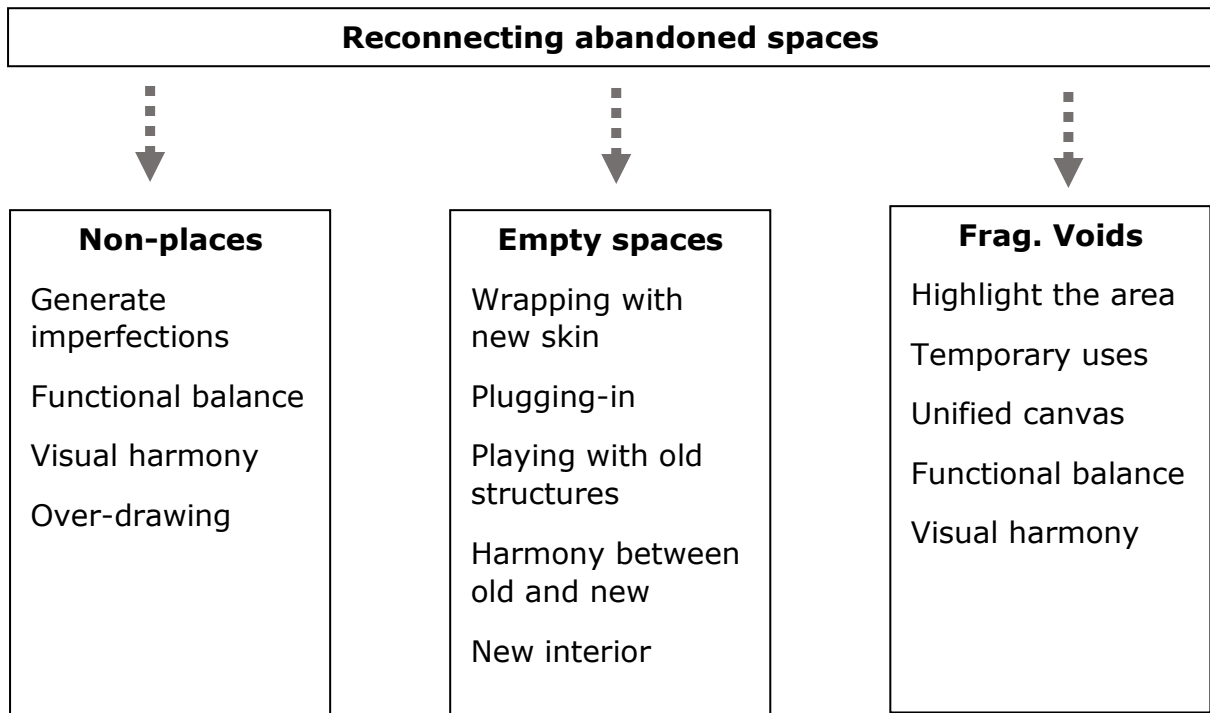
Table 14: Summary of design approaches in relation to the space abandonment condition

In the complex mechanism of designing in a built environment with recognisable urban and architectural elements appear fundamental to understand how to redefine the original forms and renovate the function, avoiding the simplistic act of demolition.

Growth of the city should be intended not just as an expansion with new constructions, but rather as a reinforcement of its inner structure. This can be possible through leading the existence to a new contemporary life. In this way, the identity and all elements, which contribute to the city's genetic code, shall be made exposed, depicted and critically understood.

As Peter Latz (interviewed by Corsaro, E. 2010) argued that the functionalist attitude of individuating specific uses as the first step of a project of regeneration may prove to be limiting. The question should be reversed in: what

are the abandoned structures within the city and what can we do with them? (ibid)

6.3 Aber-net, a network of collaborations

- Can cross-organisational and cross-sector collaboration be applied to help instigate, develop and apply positive change in challenging complex urban settings? **(AIM 2 & AIM 3)**

Through categorisation of the declinations and natures of abandoned urban spaces, the research demonstrated that deep intellectual urban studies may positively inform the practice and guides towards a consistent, more collaborative and effective project of regeneration.

This analytical process can be transferred to the practice through a more synergic and collaborative work which may involve various expertise. Analysing critically the territory and its elements, is a more theoretical and intellectual approach which may positively influence and accompany the preliminary and feasibility study of the project, as a starting point of the entire reconversion.

By interrelating the expertise and following specific methods of analysis and multi-scales design approaches, it would be possible to configure other and new ideas of renewed urban places within the city.

The reintegration of architecture schools within the process of defining design urban strategies within the city they reside, may help to address the basis of a more specialist and practical approach. The risk of generating alienated urban spaces that Koolhaas (2006) defined as junk-spaces within the sole logic of business development, in other words within a generic city (ibid), together with a lack of design elements rooted in the history and identity of the city, maybe

contrasted through a more holistic view of the process of planning the city where the academics and intellectuals would play a more active role.

The proposed Aber-net is a planned process of collaboration, aimed at supporting and providing qualitative guidelines for project approaches related to the re-use of spaces. The process is also aimed towards the design of more sustainable futures, and represent a path towards initiating deeper theoretical discussions about the nature of the abandoned spaces within the city, their characteristics and features which then can be addressed.

Aber-net is practical method to discuss urban complex themes related to the phenomenon of abandonment. It may also enable to raise, initiate and mediate complex choices on the urban and architectural evolution of the city, involving different expertise.

The areas analysed during the workshops are subject to different opinions; often public, political and marketing positions are in contrast and this can lead to a dilution of potentials and more holistic solutions of regeneration.

In this sense, Aber-net can collect and distinguish the different opinions and interests and discuss them with the presence of planners, professionals and with the presence of the university which can assure a scientific and multidisciplinary debate. The aim of moderating complex urban themes is to draw new design inputs for projects of regeneration based on the existing spaces within the city. These methods of collaboration may lead, in the future, to a broader community acknowledgement and to a more shared guide for the city masterplan.

In conclusion, Aber-net is a process of collaboration for individuating equally shared urban project themes which can be the starting points for faster regenerations and urban improvements. It would also be a way to facilitate every year the reintegration of abandoned areas within the city system, securing better investments for the developers.

The presence of the university can facilitate the process of researching, analysing and categorising the spaces, ensuring the data-sharing.

This collaboration may help to draw tangible and more participated urban views for the city future.

6.3.1 The essence of the workshop. Opportunities for Aberdeen

Proposing workshops, organised by schools of architecture and local authorities, helps to analyse the urban environment and to conduct design orientated research for specific areas within the city, with focus on spatial and architectural developments. The deep reading of the urban tissue and the pre-figuration of possible design solutions are the main activities of the workshop underpinned by planners and students who, from being involved parties, come to be interested participators.

The aim of the activities:

- Deep reflective and critical analysis of the selected urban spaces

- Experiencing the spaces

- Working within the council departments to deeply understand priorities, limitations and challenges.

- Constantly receiving multiple and different feedbacks

- Working process based on interdisciplinary groups

- Local and external knowledge exchange and cooperation

- Short timeframe

- Students' participation brings design interpretations out of today's all-commanding market economy-ordinary, but rooted in a feasibility frame (alternative solutions)

The flow of communication within the workshop is based on a mutual learning process related to both, academic research approach led by students and viable reviews oriented on the feasibility of the concepts conducted by the planners.

6.4 Original contributions to knowledge

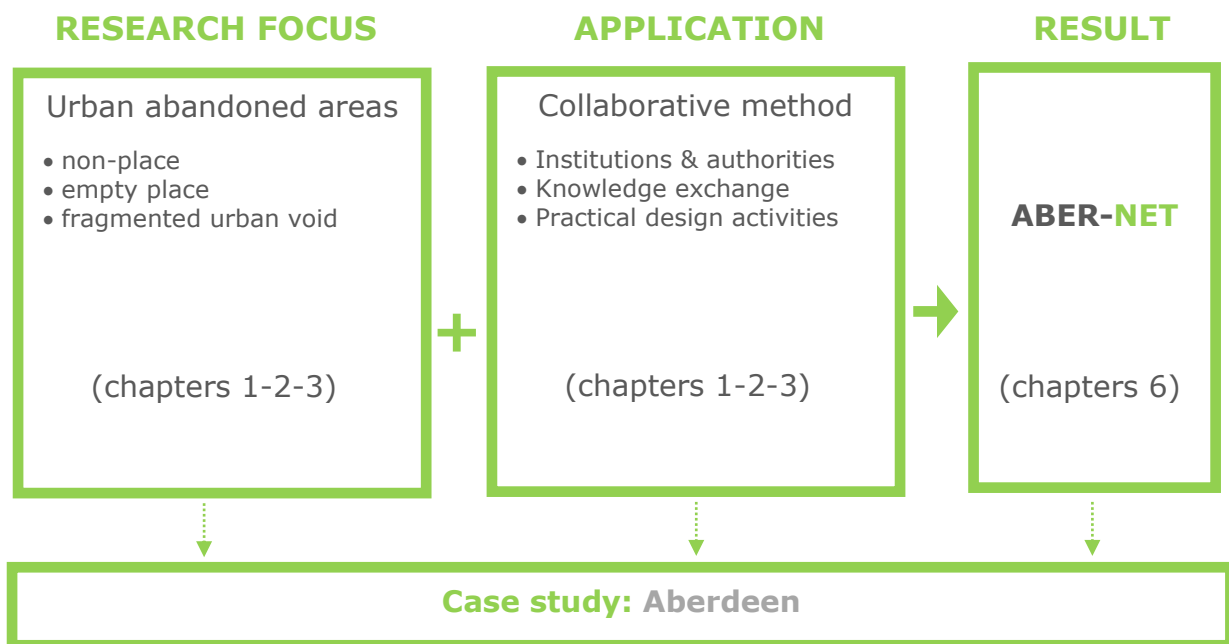| RESEARCH FOCUS	APPLICATION	RESULT
Urban abandoned areas • non-place • empty place • fragmented urban void (chapters 1-2-3)	Collaborative method • Institutions & authorities • Knowledge exchange • Practical design activities (chapters 1-2-3)	ABER-NET (chapters 6)
Case study: Aberdeen		

Table 15: Original contributions to knowledge

The research explored and contributed to expand the concept of urban abandonment, clarifying and distinguishing three subcategories such as non-places, empty places and fragmented urban voids. In doing so, applicative urban analysis were carried out in eight specific areas within Aberdeen city.

Furthermore, the research contributed to expand the supporting theories for designing methodology of re-use projects. The supporting theories were verified through applicative and collaborative workshops focused on the areas previously selected.

The work carried out during the workshops enabled to categorise both the urban analysis and the design themes and principles within specific taxonomies. All works are also available online on a specific website called Aberdeen Collaborative Urban Path.

6.5 Suggestions for further research

The main contribution of this work lies within the subject of Aber-net collaboration, but the thesis also explored other two aspects related to urban and architectural themes constructed around the contemporary phenomenon of urban abandonment. In particular, it proposes urban and architectural analysis methods suitable for these spaces; urban and architectural process of re-use design. Therefore, three fields of further investigation are here proposed.

6.5.1 Urban and architectural analysis

The use of different urban analysis is a fundamental practice for having a comprehensive picture of the city and its feature. Crossing various disciplines, such as anthropological and etymological studies, enables to better understand the changing phenomena of the contemporary cities due to new life styles, political, social and cultural evolution or de-evolution. Furthermore, this

approach would enable to name precisely the new aspects in order to master them in a subsequent phase of conceptual solutions.

Additional contributions might focus on new graphical maps of the cities, which may be gained through a further study related to urban and architectural analysis methods. Particularly the urban rhythmicity appears to be an explorative way to understand and categorise the spatial-temporal phenomena of an area, not just in relation to what can be seen, but also to what can be heard. Recent research (Mareggi, M. 2013) are investigating static and dynamic maps to represent the different declinations of the temporality, such as intensity of the use, repetition of activities, scheduled functions or the historical layers of inhabiting the spaces. The graphical representations techniques are still experimented in order to collect data on the existing spaces but even in order to simulate practices of inhabiting new designed places.

6.5.2 Urban and architectural process of re-use design

Researching by design is a tangible method to experiment if urban and architectural hypothesis, related to principles of re-use, may be viable and may enhance the social and cultural value of a place. In this sense, the concepts elaborated during the workshops have been categorised and synthesised in a taxonomy of approaches intended as general guidelines, which can be developed through different types of more detailed projects.

The criteria used to categorise the coherent themes and principles are based also on precedents study and may be expanded through future work. Subcategories and further criteria may go in depth more. Furthermore, the entire collection of Aberdeen's areas in need of regeneration may be expanded and updated even with more technological and computerized resources. Design

principles' categorisation may be also accompanied by students' design proposal elaborated during the workshop as a physical guide for the feasibility phase of the real project. It can be considered as an open-ended tool to gather urban information and specific guides for approaching and for addressing urban areas issues, weaknesses and potentialities.

6.5.3 Process of collaboration within projects of regeneration

Planners and architects need to recover their confidence and re-engage in political debates, on how we can build a better society, as we chose to after the Second World War. Professional education, and professional institutions, should be about identifying common ground, rediscovering the multidisciplinary spirit of the Bauhaus, working and training together, not about defending territory or the purity of professional practice.

(Rogers, R.2017 p.319)

Investigating the process of practical workshop enabled to understand the reciprocal needs of the academia and authority concerning, on one hand pedagogical strategies, overall structure and aims of the brief, viable concepts and more articulated ideas of design on the other.

The length of the workshops and its organisation enabled this research to investigate and highlight what the points of contact between the institutions, planners and students could be.

Further contributions may be orientated in exploring longer-term collaborations along the academic semesters where students, academics and planners would work on similar themes but approached from different perspectives.

Merging the competencies would help to bridge the discrepancy between university studies and working field of application, generating a circle of continues updates for academic staff, students and planners.

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APPENDIX A SURVEY QUESTIONS 2017

QUESTIONNAIRE

REFLECTION ON URBAN REGENERATION (2017)

NAME_____SURNAME_____

SCHOOL_____YEAR_____

1. How do you perceive the urban context of Aberdeen city?

2. How does this compare with other American and European cities you have visited?

3. Please draw a diagram of the urban layout of Aberdeen. Feel free to format this however you wish, but try to express what you feel are the defining elements (e.g. layout, features, landmarks, and so on).

4. As an architect, what do you feel are the defining elements when undertaking urban regeneration in the context of a historic built environment?

5. Can you provide examples of such elements which you found in Aberdeen city?

6. Please describe possible strategies and methodologies applicable for the regeneration of existing buildings. Include mention of their re-use and the relationship between old and new.

7. Please give an example as applied in your own project.

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Signature

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Your feedback is important, and will help to form future workshops, and will feed into ongoing research at Robert Gordon University.

APPENDIX B PRE-DESIGN SURVEY QUESTIONS FOR STUDENTS 2018

NAME_____SURNAME_____

DEPARTMENT_____

1. The choice of Queen Street as the case study, for this year's workshop, came from the necessity of Aberdeen city Council to improve the urban area around the recent intervention of Marischal Square. What are, for you, the main urban and architectural issues related to Queen Street at present? Please at the end of your answer list 3 word or adjectives that best describe the area taken in exam.

2. Please draw a diagram of the existing area.

3. Please identify and list/describe those landmarks, urban artefact and important urban elements that you would maintain to highlight the sense of Aberdeen identity in the area being studied.

4. As indicated in the brief and discussed in our first meeting at the council, there are 3 main types of buildings to work on (Police station, Townhouse, ground floors along the road). What are the essential architectural components, elements or characteristics that make them recognisable in terms of an Aberdeen architectural identity?

5. Please explain what the terms Urban Regeneration and Adaptive re-use mean for you.

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APPENDIX C PRE-DESIGN SURVEY QUESTIONS FOR PLANNERS 2018

NAME_____SURNAME_____

DEPARTMENT_____

During the summer workshop you will work directly within a student group. Please answer to the questions below. Your contribution will be used for an urban and architecture research undertaken at Robert Gordon University.

1. The choice of Queen Street as the case study, for this year's workshop, came from the necessity of Aberdeen City Council to improve the urban area around the recent intervention of Marischal Square. What are, for you, the main urban and architecture issues related to Queen Street at the present? Please at the end of your answer **list 3 words or adjectives** that best describe the area taken in exam.

2. Within your department, do you discuss themes related to the urban form, urban permanence, values and potentiality inherent to the existing built environment?

3. Please identify landmarks, urban artefact and important urban elements that you would maintain to highlight the sense of Aberdeen identity in the area taken in exam.

4. As a local authority does the council have an up-to-date system of mapping the urban underused / compromised spaces, buildings or urban void fractures? How are they categorised/named?

5. Please explain what does the terms *Urban Regeneration* and *Adaptive re-use* mean for you

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APPENDIX D POST DESIGN QUESTIONS FOR STUDENTS 2018

POST DESIGN QUESTIONNAIRE

REFLECTION ON PROJECT METHODOLOGICAL APPROACH

(Students) 2018

NAME _____SURNAME_____

SCHOOL_____USF_____YEAR_____

During the summer workshop you analysed and worked on the regeneration of Queen Street. Please answer to the questions below. Your contribution will be used for an urban and architecture research undertaken at Robert Gordon University.

1. Please describe the existing urban space of Queen Street in relation to the discussions and considerations raised within the workshop.

2. How did you perceive the methodology of urban analysis we undertaken?

3. What are the main urban and architectural principles used for your project?

4. Please draw a schematic diagram of your main urban and architecture principles.

5. What are the essential architectural parts of the existing buildings that you maintained and/or highlighted within your project?

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Your feedback is important, and will help to form future workshops, and will feed into ongoing research at Robert Gordon University.

APPENDIX E LETTER

Dear ……….

I am a doctoral research student at Scott Southerland School at RGU and my research focus on underused and ill-defined urban areas and buildings in Aberdeen city. It investigates the methods and ways to reactivate these spaces through specific urban and architecture design approach while exploring possible processes of collaboration between academia and local authority.

For this reason I am involved in organising the summer workshops in Aberdeen since 2015. The urban workshops are an occasion for both University and Council to collaborate together for creating possible and future visions of specific areas in Aberdeen city. This year the participants are from the schools of architecture of Robert Gordon University, International College Robert Gordon University and University of South of Florida.

Answering the questions below you will contribute to form future workshops and feed into my research.

Many thanks for your time.

With kind regards,

Cecilia Zecca

c.zecca@rgu.ac.uk

APPENDIX F SURVEY QUESTIONS FOR DM PLANNING DEPARTMENT 2018

NAME_____SURNAME_____

DEPARTMENT_____

1. What benefits do you perceive might be gained by the council as a result of the collaboration?

2. How does this relate to the aims and expectations you have of workshops and what you hope they will achieve?

3. What contributions and other forms of valuable insight do you think architecture students can make to the issues and challenges relating to the city masterplan?

4. Looking at other successful collaborative experience in some European cities (Oslo, Pescara, Venice, Barcelona, etc.), do you think that it would be beneficial in the future for the architecture school and Aberdeen city council to establish a more formal template for coordinating students contributions to the city masterplan vision?