Co-creating as the enhancement of the social value in a 20th-century Shopping Mall

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Abstract

Today, malls face various problems, such as vacancy, outdated aesthetics and the changing market. However, these shopping malls are an essential part of our 20th-century heritage. Therefore research on a future-proof design is need to make the mall more locally relevant again. This paper examines how a form of adaptable architecture, with lots of opportunities for informal interventions, can contribute to the mall's social and economic value. For this research, two case studies, De Lijnbaan and Amsterdamse Poort, will be researched on their originally intended social and economic value, the interventions that have happened since then and how they have influenced the social and economic value nowadays. This research will conclude with an architectural model that supports the social and economic value of a 20th-century mall, with enough room for unexpected changes, to allow people to adapt spaces according to their needs.

Keywords: Heritage, 20th-century, shopping mall, adaptable architecture, social value, economic value, formal interventions, informal interventions.

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1 INTRODUCTION

A. Motivation & Problem Statement

The shopping mall, as we know it today arose after World War II. This new typology was introduced by architect Victor Gruen. He designed the shopping mall to be car-free, the shops were supposed to be broken up by attractions and the mall would be surrounded by dwellings, offices and other facilities that made a community (Gruen & Smith, 1985). These shopping malls were merely only a place to shop; they functioned as a center for cultural enrichment, education and relaxation. The shopping mall was the suburban alternative to the decaying downtown, it formed its own social space (Goss, 1993).

Today, however, these malls face several problems. Retail vacancies are rising, while shoppers continue to stay away. The most important reason for this would be that people do not need to go to the store anymore to buy something. Shopping is faster, easier and more convenient online (Danziger, 2018). The vacancy of shops is also recognizable within the urban fabric; where the shopping mall once functioned as the social centre of a suburb, the mall nowadays is a dying place with fewer visitors. Finally, the aesthetics of the shopping mall seem outdated, the architecture does not match the current requirements anymore. In order to be more resilient in the future, the shopping mall will have to undergo several changes to match the standards of today's society.

Malls are dying. The thriving ones are spending millions to reinvent themselves.
(November 22, 2019 Washington Post)

The history of the mall, from its origins in the 50s to the dead malls of the 00s and beyond
(October 14, 2022 ABC News)

Luxe of leegstand? Veel winkelcentra staan voor een zware keuze
(March 18, 2021 Volkskrant)

Winkelcentrum Magna Plaza staat nagenoeg leeg: "Het staat op de verkeerde plek"
(February 20, 2022 NH Nieuws)

Figure 1.1-1.4 Newpaper Articles (several sources)

From political, social and functional considerations, there have been many transformations since the creation of the shopping mall. These transformations were often led by formal organizations. However, since the financial crisis (2008), when large-scale redevelopment projects had been put on hold and budgets for restoration projects were shrinking, there has been more room for informal transformations. Formal interventions are often scripted master plans or design strategies led by experts, such as governments, historians, engineers and architects (Plevoets & Sowińska-Heim, 2018; Boer, Otero Verzier et al., 2019). In contrast, informal interventions are often user-led, unscripted, more spontaneous spatial activities (Plevoets & Sowińska-Heim, 2018; Boer, Otero Verzier et al., 2019). Informal interventions can also be attempts by marginalized groups to create a more livable environment (Beeckans, 2022).

From Steward Brand's How Buildings Learn (1994), we already know that buildings adapt best when they are constantly redefined and reshaped to changing cultural currents, real estate value and usage. He has already researched the influence of the user on a building. However, the combination of the user as a co-developer in a transformation process and the shopping mall's social and economic value is less researched. Therefore, this research focuses on a new, innovative approach to complement official policies. A long-term strategic model is sought in which there is enough room for unexpected changes, such as, for example, temporary use but also the involvement of non-institutional and non-investor initiatives. These approaches should be more holistic to allow people to adapt spaces according to their needs.

2 RESEARCH APPROACH AND PROCESS

A. Research goal

This research seeks to better understand the way forward for the shopping mall. It focuses on the contrast between formal/structured processes and informal/open processes involving co-creating. These processes will be examined within the social value of the mall; the community feeling and the economic value; the use. Indeed, this social aspect has been central to the shopping mall since its emergence and is still highly valued today. This research will investigate how a form of adaptable architecture, with lots of opportunities for informal interventions, contributes to a mall's social and economic value. Which functions are valued and which are not, how was this in the past, how is it now, and how does it leave enough room for adaptations in the future? The research aims to create a long-term model in which the mall appears dynamic enough to cope with unexpected changes, leaving enough room for the involvement of non-institutional and non-investor initiatives.

B. Research question

How can a form of adaptable architecture, in which an informal process of co-creation is central, contribute to the social and economic values present in a 20th-century mall?

Subquestions:
- *What is adaptable architecture?*
  Explain theories about adaptable architecture, co-creation, support-infill with Habraken's theory about open building and Brand's theory about shearing layers.

- *Which social and economic values were originally intended in the 20th-century mall? (t-1, t=0)*
  Analyze and categorize original intended values by the architects and formal organizations.

- *What interventions have been done in the mall since its original design? (t+1, t+2)*
  Analyze and categorize user interventions vs. formal interventions (include interventions in ownership)

- *How have these interventions influenced the social and economic value of the mall?*
  Research how these interventions influenced the values described by Pereira Roders

- *How can aspects of an architectural design foster the mall (still) functioning as a community centre in the future?*

How can a form of adaptable architecture, in which an informal process of co-creation is central, contribute to the social and economic values present in a 20th-century mall?

Goal

Time-frame

Object

Figure 2.1 Research question (own figure)

design theory

problem field   problem frame

desgin product

case study research   data analysis & production design scenarios   integral elaboration scenarios

design result

data & scenario validation

| 20th century mall | heritage value? | | social value | |
| | | | economic value | |

INTRODUCTION
PHENOMENA

TAXONOMY
WHAT/HOW?

TEST
WHERE?

RESEARCH BY DESIGN
WITH?

CONCLUSION
VALIDATION

| interventions | lifespan rehabilitation | case study research | formal intervention | process of co-creaton | recommendations |
| | | | informal intervention | | |

identify   *identify*   *operationalise*   *explore*   *test/answer*   *answer*

RESEARCH QUESTION   RESEARCH SUB-QUESTIONS   RESEARCH QUESTION
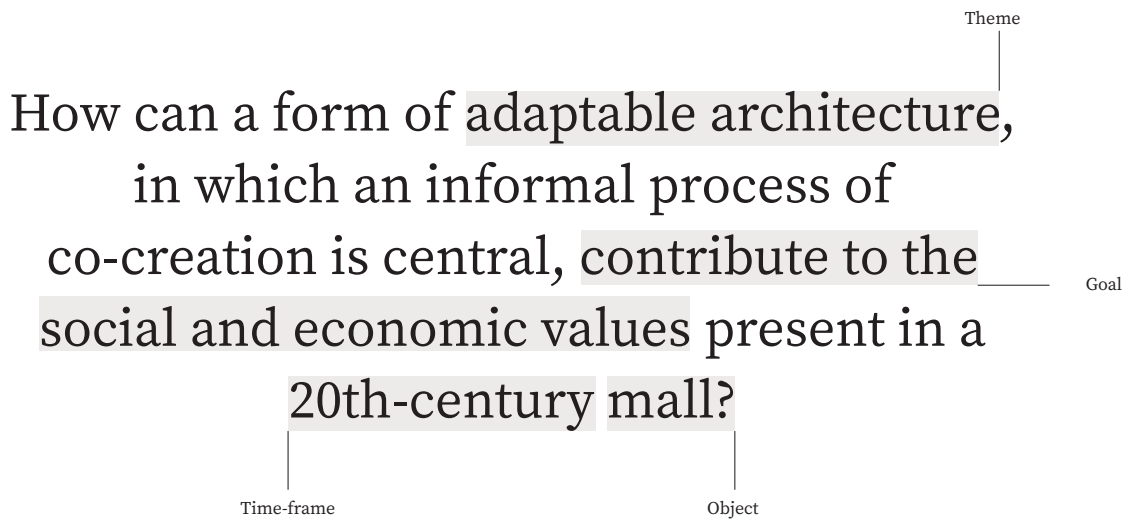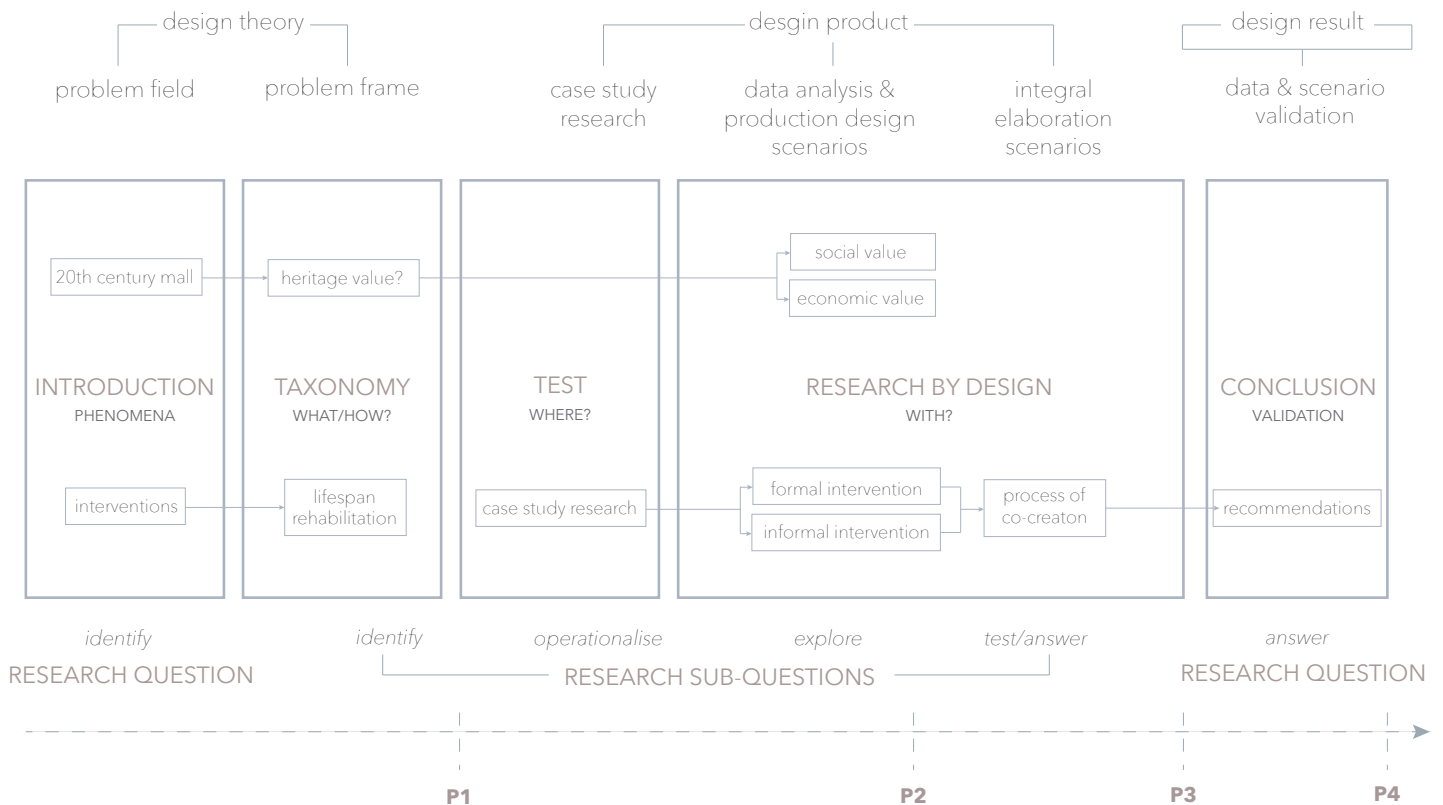
P1   P2   P3   P4

Figure 2.2 Scheme showing the research planning during the academic year (own figure)

3 RELEVANCE

A. Societal relevance

Not long ago, you had to go to a physical store when you needed something. Nevertheless, today, shopping is more of an activity since buying something is faster and easier online. The shopping mall has been a combination of functions, such as stores, restaurants and entertainment, since the beginning. However, shopping and buying have always been the primary experience. To provide a more sustainable future, the mall needs to become locally relevant again and it needs be relevant within for community (again) (Danziger, 2018). To become more locally relevant, the social value of the mall needs to increase. There must be a link between people and buildings, objects and places; people need to have a feeling of identity (Pereira Roders, 2012). To support this feeling of identity, users need to be incorporated during the early design stages; this strengthens the sense of ownership and belonging (Habraken, 1985). For such a co-creation process, it is essential to see the building as two parts; the structure and the infill. With this, the structure is more permanent, while the infill is easier to change to the needs of users (Habraken, 1985). Stewart Brand further elaborates on this theory. He describes six shearing layers of change (Brand, 1994).

Figure 3.1 Shearing Layers by Brand (Brand, 1994)
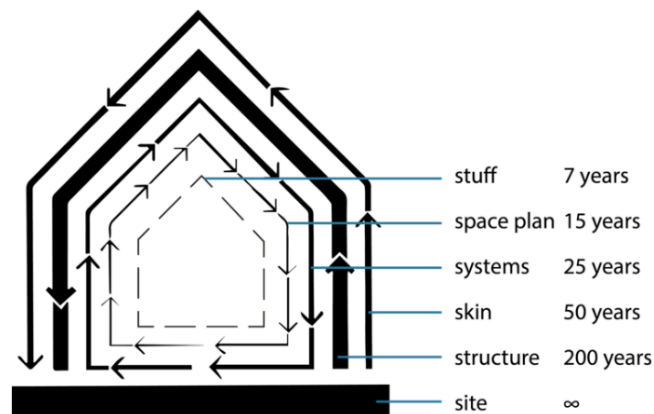
The load-bearing structure needs to be separated from the skin, systems, space plan and stuff to demand the building to be easily adjusted in time. This adaptability of the building endures the lifespan of buildings, which is necessary since the building industry faces the important task of reducing its carbon and environmental footprint (Harbaken, 1985; Open Building, 2021).

B. Academic Relevance

'Not everything is heritage, but anything could become heritage' (Peter Howard, 2003, p. 7).

Monuments are the most recognizable form of heritage. Monuments are often considered heritage because they are of great architectural or archaeological value to society. In the past, this often happened when well-known architects designed buildings or when a building was extraordinary for a particular architectural movement. However, now there is a movement where more attention is paid to everyday architecture (Howard, 2003). Within this context, we should consider the shopping mall part of our 20th-century heritage. The shopping mall is a relatively unexplored part of the 20th-century heritage and therefore offers the opportunity for research and reinterpretation.

4
FRAME OF REFERENCE

A. Theorectical Framework

The theoretical framework consists of a combination of existing literature and two case studies. The literature is used primarily to explain various terminology. The theory describes three different themes within this research namely; adaptable architecture, social and economic values and formal/informal interventions. The sources currently describe this theory for buildings in general but I would like to specify it for the shopping mall. To do this, the research of two case studies will be used. These case studies serve as a way to examine and test the theories proposed in the literature.

i). Adaptable architecture

Habraken, N. J. (1985). *De dragers en de mensen: het einde van de massawoningbouw.* Stichting Architecten Research.
> In this publication, the author advocates a clear distinction between support and infill. This distinction focuses on the ability to facilitate change. Where support is the more permanent part of the building, while infill leaves the possibility for change for individual users. This makes for a form of adaptable architecture where a process of co-creation and user initiative is central.

Brand, S. (1994). H*ow Buildings Learn. What happens after they're built*. Viking
> With this publication, Brand continues on the lead drawn by Habraken. He advocates that buildings adapt best when they are constantly redefined and reshaped to changing social and cultural requirements. This makes buildings gain character and individuality with every decade. Therefore, every building layer and every intervention tells something about an added value in that period of time. Brand adds nuance to Habraken's twofold of support and infilll. Brand devides the building into six different layers, that each have different rates of change. Therefore, he can be seen as an important complement to Habraken's theory.

ii). Social and economic value

Pereira Roders, A. (2007), *Re-architecture: lifespan rehabilitation of built heritage*, PhD, Technische Universiteit Eindhoven, Eindhoven.
> The author describes that cultural significance is assigned to an object based on certain cultural values. These cultural values consist of eight primary values. For my research, I will focus on the social and economic value. Here the social value associates a place with feelings of identity, distinctiveness, social interaction and coherence. The economic value focuses on market and profit; it describes function and use.

	Secondary Values	References
Social	Spiritual	beliefs, myths, religions (organized or not), legends, stories, testimonial of past generations;
	Emotional, individual	memory and personal life experiences;
	Emotional, collective	notions related with cultural identity, motivation and pride, sense of "place attachment" and communal value.
	Allegorical	objects/places representative of some social hierarchy/status;
Economic	Use	the function and utility of the asset, original or attributed;
	Non-use	the asset's expired function, which has it value on the past, and should be remained by its existence (of materials), option (to make some use of it or not) and bequest value (for future generations);
	Entertainment	the role that might be have for contemporaneous market, mainly for tourism industry;
	Allegorical	oriented to publicizing financially property;

Figure 4.1-4.2 eight primary vaues - social and economic value (Pereira Roders, 2007; Silva 2012)

iii). formal/informal interventions

Plevoets, B., & Cleempoel, K. V. (2019). *Adaptive reuse of the built heritage: concepts and cases of an emerging discipline.* Routledge, Taylor & Francis Group.

> Here the authors describe formal interventions as often led by experts such as governments, historians, engineers and architects. In contrast, informal interventions are often user-led and can be seen as a reaction to the top-down approach, capitalist economy and planning, privatization and commercialization of public space. Informal processes show the shortcomings of modern society.

Boer, R., Otero Verzier, M., Truijen, K. a., & Schwartz, J. (2019). *Architecture of appropriation : on squatting as spatial practice*. Het Nieuwe Instituut.

> This publication followed an exhibition in Het Nieuwe Instituut. The author researched squatting as a form of informal intervention. He gives a few intersting case studies, all with a shared interest in foregrounding a vital community program whil negotiating privacy and public space. This book gives real examples of informal interventions and therefore makes for a good contribution to the theory of Plevoets and Cleempoel.

Pereira Roders, A. (2007), *Re-architecture: lifespan rehabilitation of built heritage*, PhD, Technische Universiteit Eindhoven, Eindhoven.

> In this publication, the author gives an overview of possible intervention strategies. These different interventions have an active and an passive approach. For my research it seems interesting to categorize the formal/informal interventions within the passive and active approaches to see if there is any coherence or difference in approach per stakeholder.

		intervention	description	reality	use	aim	built	impact
DEPRIVATION	passive	abandon	leave the building fall into decay and obsolescence, without any particular concern, etc	remainings	same use	decrease	newness	forms / components materials
DEPRIVATION	active	vandalism	contribute to the building's obsolescence, with destructive and intentional actions, etc	remainings	same use	decrease	newness	forms / components materials
PRESERVATION	passive	inventory	inventory all documentary, oral and physical information about the building, etc	remainings	same use	maintain	heritage	materials
PRESERVATION	active	prevention	clean and arrest decay in a short-term routine to control degradation, etc	remainings	same use	maintain	heritage	materials
CONSERVATION	passive	maintenance	clean and arrest decay in a medium- and long-term basis, repair small scale damages, etc	remainings	same use	maintain	heritage	components materials
CONSERVATION	active	safeguard	repair medium scale damages, treat decays, perform small scale benefactions, etc	remainings	same use	maintain	heritage	components materials
RESTORATION	passive	restitution	repair large scale damages, consolidate fissures, rebuilt small scale lacunas, etc	remainings additions	same use	restore	heritage	forms / components materials
RESTORATION	active	reconstitution	consolidate, rebuilt medium scale lacunas, in harmony with the building aesthetics, etc	remainings additions	same use	restore	heritage	forms / components materials
REHABILITATION	passive	reuse	combine activities from earlier and later scales of interventions; remaining what possible, subtracting merely what exceeding and adding simply what required, etc	subtractions remainings / additions	new use same	improve	heritage	building
REHABILITATION	active	conversion	(see above)	subtractions remainings / additions	new use different	improve	heritage	building
RECONSTRUCTION	passive	rebuilding	rebuild the building partially (large scale lacunas) or totally, based on the inventory results, etc	additions	new use same / different	replace	newness	built environment
RECONSTRUCTION	active	building new	build new buildings, reusing the existing urban fabrics, infrastructures, services, etc	additions	new use same / different	replace	newness	built environment
DEMOLITION	passive	reduce	demount with relocation, reprocess, recycle of forms / components / materials, etc	subtractions	new use same / different	decrease	newness	natural / built environment
DEMOLITION	active	waste	demolish without relocation, reprocess, recycle of forms / components / materials, etc	subtractions	new use same / different	decrease	-	natural / built environment

Figure 4.3 The scales of interventions - active/passive approach (Pereira Roders, 2007))

B. Reference Cases

For this research, two reference cases will be studied. These cases serve as a way to examine and test the specific theories. The references used are Amsterdamse Poort (1986) in Amsterdam and Lijnbaan in Rotterdam (1953). These two cases have similarities but also differences. Van den Broek en Bakema designed both shopping malls, but in a different time period. The Lijnbaan in Rotterdam is a typical 60's design where the architects based the architectural shape on the family model (Blom et al., 2012). While the Amsterdamse Poort is a more typical 80's design where the urban space is based on the theory of Christopher Alexander (Nieuwe Instituut, 2022).

Figure 4.3 Family model, Broek en Bakema 1953 (Blom et al. 2012)
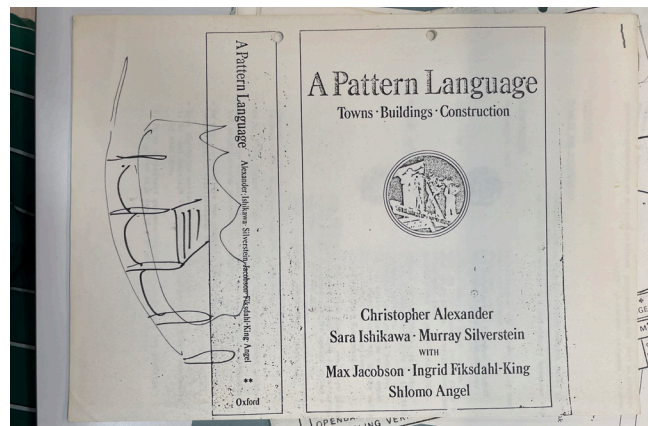
Figure 4.4 A Pattern Language by Christopher Alexander 1977 (Nieuwe Instituut, 2022)

Additionally, the context of both malls is different. The Lijnbaan was designed in the city centre of Rotterdam. It was designed right after the war and functioned as a place where people could finally go out on the streets again and meet each other (Blom et al., 2012). However, Amsterdamse Poort is located in Amsterdam southeast, in the middle of the Bijlmer. Even before Amsterdamse Poort was designed, the Bijlmer had a complicated cultural and social background. Amsterdamse Poort is a problematic area with a stark contrast between the social communal function during the day and many unsafety and drug trafficking at night (Helleman, 2004; Wassenberg, 1990). However, both malls have played a significant role in the social life within the city. Therefore it seems very interesting to further explore both cases in this research.

5 RESEARCH METHODOLOGY

A. Collective Research

The research is constructed during different phases. Firstly, we started with collective research in our studio group of 21 students. Together we reviewed different literature on intervention strategies and theories to establish a theoretical basis for this research. In the second phase of the collaborative research, we studied several research cases. First, we visited different shopping malls in the Netherlands individually. Then, as a group, we chose eleven research cases which we found most interesting. Figure 5.1-5.2 shows two mental maps I made during the visit to Zuidplein and Amsterdamse Poort. The eleven cases have been explored and documented in smaller groups of 3-4 students. This research forms basic documentation of general information such as; floorplans and sections, the historical context of the shopping mall, the urban context of the mall, stakeholder structures, an overview of the users and the documentation of interventions. From this common basis, each student can further elaborate on themselves. Furthermore, this collaborative research formed a base for my personal interest. From visiting and exploring several research cases, it became clear that I'm most interested in the social aspect of the mall and how people use it as a community place.

Figure 5.1-5.2 Mental map Zuidplein and Amsterdamse Poort (own figure)

B. Individual Research

During the collective exploration and documentation, I started on researching my individual topic. To find an answer to my main research question I plan to use a variety of research methods, that can be seen in figure 5.3.

RESULTS **SOURCE** **RESEARCH METHOD** **THEME** **SUB-QUESTIONS** **MAIN QUESTION**

Adaptable architecture

Literature + theory review

Habraken (1985)
Pereira Roders (2007)
Plevoets (2018)
Boer (2019)

Definition of terms

SQ1: What is adaptable architecture?

Original social and economic values

Value chart original design

SQ2: Which social and economic values were originally intended in the 20th-century mall?

Archival research on reference cases

Archival documents analysis

Foto analysis

Newspaper analysis

Formal/informal interventions

SQ3: What interventions have been done in the 20th-century mall?

Fieldwork on reference cases

Observations

Timeline of interventions

Intended

changes

effect

Value chart since interventions

Changed social and economic value

SQ4: How have these interventions influenced the social and economic value of the mall?

WHAT & WHY?

RO: How can a form of adaptable architecture, in which an informal process of co-creation is central, contribute to the social and economic values present in a 20th century mall?

Individual research

Design scenarios

Own research

Applicable design strategies

Social aspect of the mall

SQ5: How can aspects of an architectural design foster the mall (still) functioning as a community centre in the future?
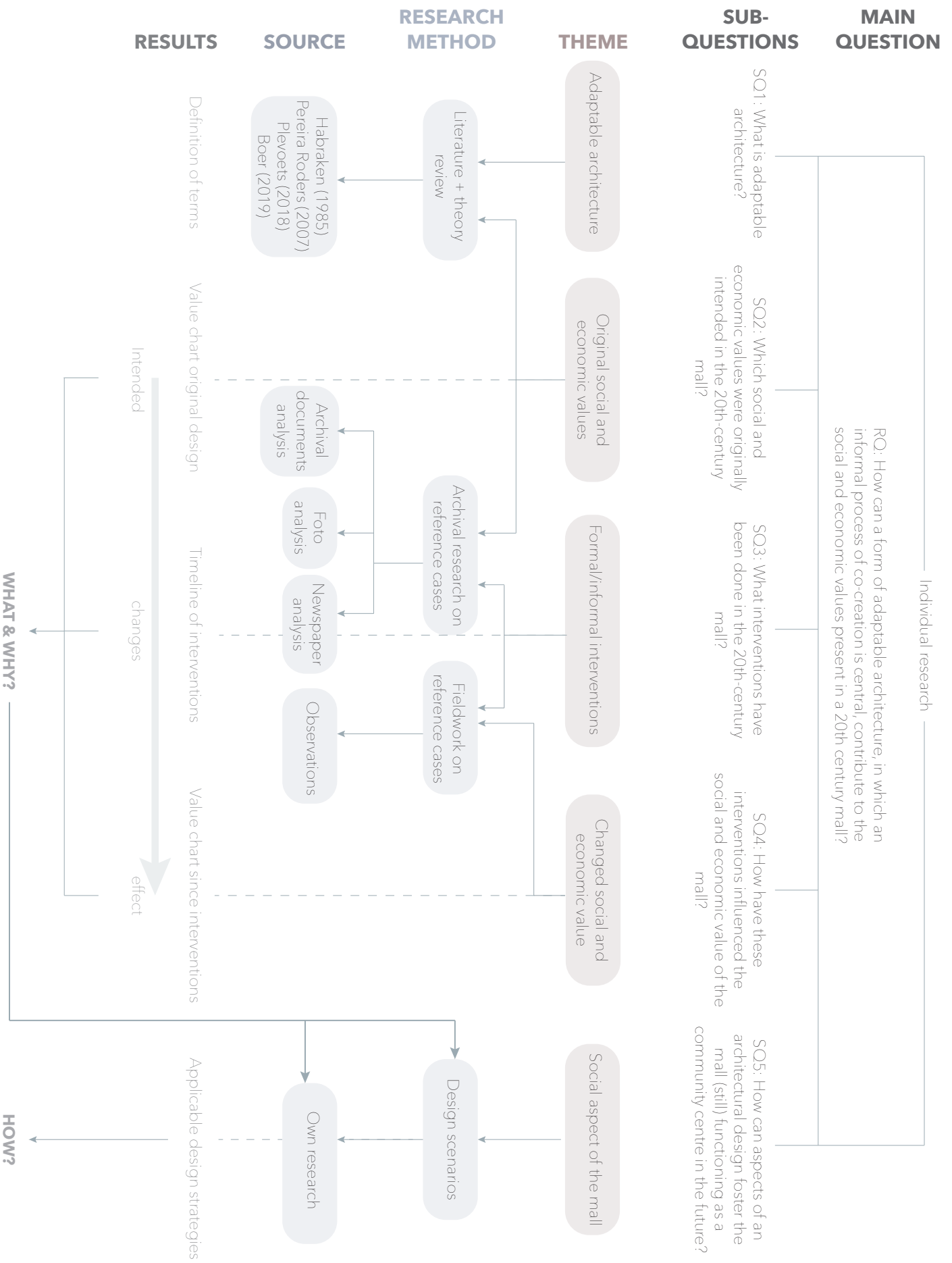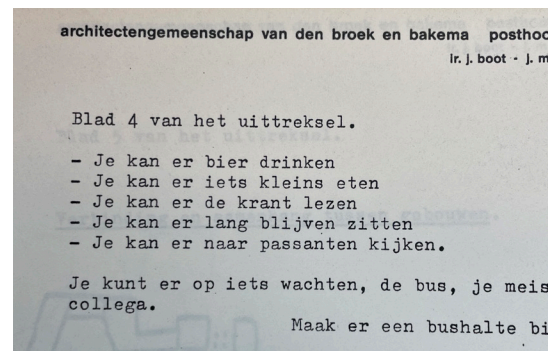
HOW?

Figure 5.3 Methodology scheme (own figure)

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The research will be supported by different literature and theories, explained in the theoretical framework. These theories will be used to explain and expound on the different terminology and existing strategies. Then two reference cases will be examined to see if so and to what extent you can still recognize the social and economic value of the original plan today. These two cases have similarities but also differences. Therefore, my intention is not to compare the two cases but to analyze them on the difference in social and economic values between the original design and the present day.

These reference cases will be researched by archival research and fieldwork. The archival research consists of analyzing archival drawings and documents, photo analysis, comparing old-new photos and newspaper analysis. An example of analyzing the archival document is given in figure 5.4. From this archival research, I plan to create a value chart showing the original values in the 20th-century mall. Besides this value chart, I plan to create a timeline showing the different formal and informal interventions in the mall. This timeline categorizes these interventions within the active/passive approach by Pereira Roders. Lastly, these reference cases will be analyzed during fieldwork. For this fieldwork, I plan only to do observations. Observing seems more useful. Because when you interview people, they may overthink their actions and therefore give different answers than you would get by observing them. Observing shows clearly how people use space without you interrupting them in their daily activities.

	Secondary Values	References
Social	Spiritual	beliefs, myths, religions (organized or not), legends, stories, testimonial of past generations;
	Emotional, individual	memory and personal life experiences;
	Emotional, collective	notions related with cultural identity, motivation and pride, sense of "place attachment" and communal value.
	Allegorical	objects/places representative of some social hierarchy/status;
Economic	Use	the function and utility of the asset, original or attributed;
	Non-use	the asset's expired function, which has it value on the past, and should be remained by its existence (of materials), option (to make some use of it or not) and bequest value (for future generations);
	Entertainment	the role that might be have for contemporaneous market, mainly for tourism industry;
	Allegorical	oriented to publicizing financially property;

architectengemeenschap van den broek en bakema   posthoo
ir. j. boot - j. m

Blad 4 van het uittreksel.

- Je kan er bier drinken
- Je kan er iets kleins eten
- Je kan er de krant lezen
- Je kan er lang blijven zitten
- Je kan er naar passanten kijken.

Je kunt er op iets wachten, de bus, je meis
collega.
                    Maak er een bushalte bi

	Secondary Values	References
Social	Spiritual	beliefs, myths, religions (organized or not), legends, stories, testimonial of past generations;
	Emotional, individual	memory and personal life experiences;
	Emotional, collective	notions related with cultural identity, motivation and pride, sense of "place attachment" and communal value.
	Allegorical	objects/places representative of some social hierarchy/status;
Economic	Use	the function and utility of the asset, original or attributed;
	Non-use	the asset's expired function, which has it value on the past, and should be remained by its existence (of materials), option (to make some use of it or not) and bequest value (for future generations);
	Entertainment	the role that might be have for contemporaneous market, mainly for tourism industry;
	Allegorical	oriented to publicizing financially property;

- 'Je kunt er bier drinken' | 'You can drink beer there'

- 'Je kan er iets kleins eten' | 'You can eat something small there'

- 'Je kan er de krant lezen' | 'You can read the newspaper there'

- 'Je kan er lang blijven zitten' | 'You can sit there for a long time'

- 'Je kan er naar passanten kijken' | 'You can look at passers-by there'

Figure 5.4 The figure shows a document from the architects, telling the ambitions for the public space. This document can be analyzed within the value framework of Pereira Roders (Pereira Roders, 2012; Nieuwe Instituut, 2022)

'The presence of the interviewer on the spot may overstimulate the respondent, sometimes even to the extent that he may give imaginary information just to make it interesting. He may tell things about which he may not himself be very sure'. (Desai, n.d.)

I plan to observe people from different gender, age and cultural background to get a complete overview. I want to observe these people during different stages of the day: morning, afternoon and evening. For these observations, I plan to take a passive role to observe people's behaviour from a neutral starting point.

Figure 5.5 shows an overall scheme of this research. It shows schematicallly how my own facination led to my research question. The research goal should lead to design principles which I can use during the whole design period of this academic year, and maybe even beyond.
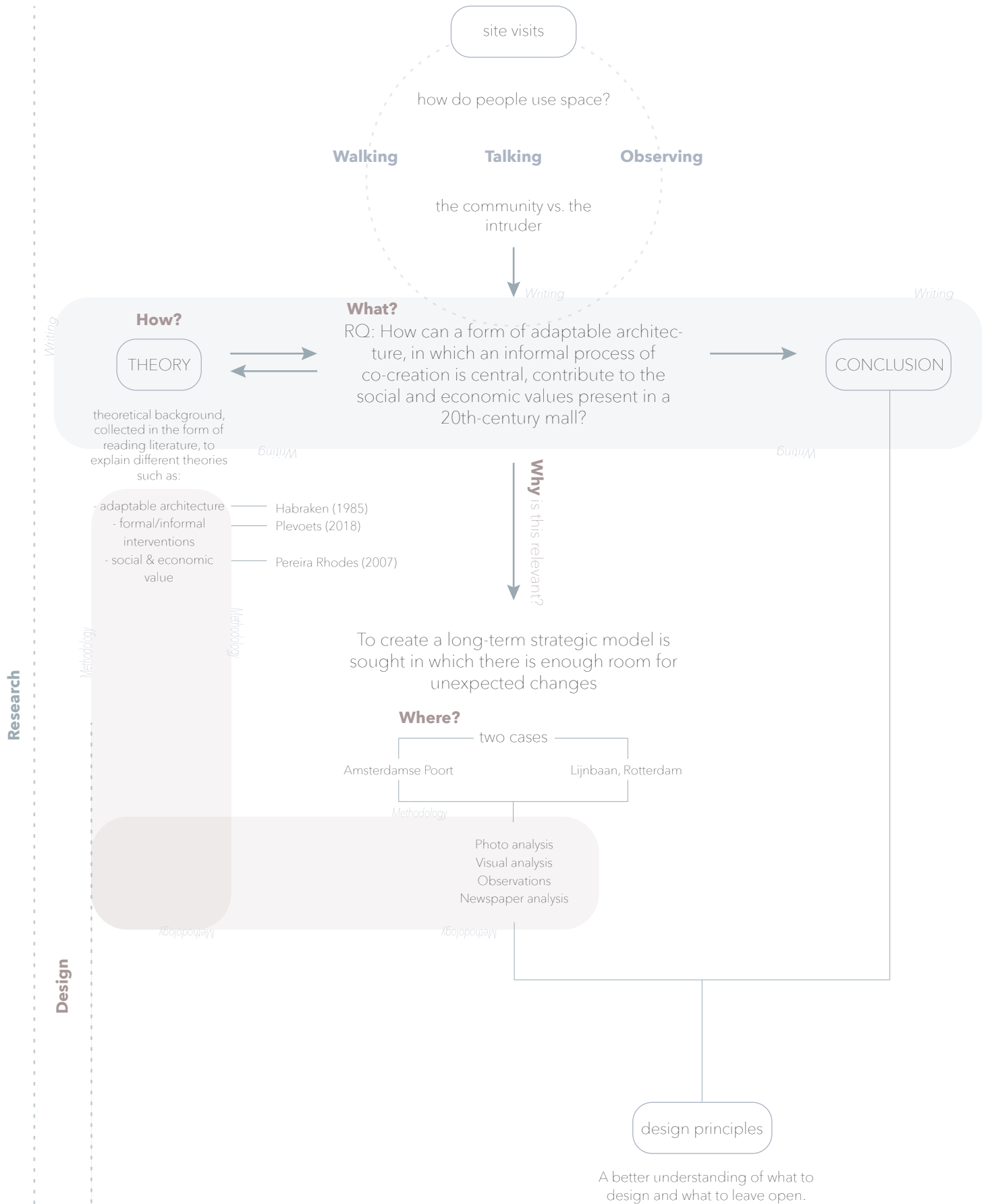
site visits

how do people use space?

Walking   **Talking**   **Observing**

the community vs. the
intruder

Writing   *Writing*

How?   **What?**

THEORY

RQ: How can a form of adaptable architec-
ture, in which an informal process of
co-creation is central, contribute to the
social and economic values present in a
20th-century mall?

CONCLUSION

theoretical background,
collected in the form of
reading literature, to
explain different theories
such as:

- adaptable architecture   Habraken (1985)
  - formal/informal   Plevoets (2018)
    interventions
  - social & economic   Pereira Rhodes (2007)
    value

Why is this relevant?

To create a long-term strategic model is
sought in which there is enough room for
unexpected changes

Where?
two cases

Amsterdamse Poort   Lijnbaan, Rotterdam

Methodology

Photo analysis
Visual analysis
Observations
Newspaper analysis

Research

Design

design principles

A better understanding of what to
design and what to leave open.

Figure 5.5 Research scheme (own figure)

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