

**THE METABOLISM
OF ARCHAEOLOGY**
RESEARCH AS CRITICAL PRACTICE

The visual essay of this research consists of images not only from the site where it had origin, the MarineTerrein in Amsterdam.

The aim is to provoke a more broad investigation on the topic presented. I find fundamental the use of visuals and images to enrich and describe the amtoshpere and realm this research is touching.

With the support of images from different locations this visual essays will give “a possible face” to the topic and methodology investigated in the text.

More than that, the hope is the one of (re)considering the possibilities of associating words and photography as tools to investigate and interrogate a landscape time after time.

VISUAL ESSAY		ESSAY	
CONNECTION	6	INTRODUCTION	2
WHERE/HOW TO LOOK	8	METABOLISM AS METHODOLOGY	6
PAST PRESENT PRESENCE	10	ARCHAEOLOGY AS A NETWORK	10
CASE STUDIES	12	CASE STUDIES	14
ARCHAEOLOGY OF FEELINGS	14	CONCLUSION	18
LOOKING THROUGH	16	BIBLIOGRAPHY AND LIST OF IMAGES	22
STRUCTURES	18		
THE NEW OLD	23		



INTRODUCTION

It matters what thoughts think thoughts.
 It matters what worlds world worlds.
 It matters what stories tell stories.
 Donna Haraway¹

Every once in a while cities are confronted with a period of transition due to their changes in urban settings, to their adjustments in infrastructures, to the demands of climate change and environmental needs. The analysis of the flows of the materials and energy within cities is commonly known as urban metabolism². It creates a framework to study the interactions of natural and human systems in specific regions.

Although urban metabolism literally refers to the conversion of a matter from one form to another, it signifies more than that. Since it is about the flows and exchanges of materials, it can be defined as a system of sharing. Indeed metabolism represents the connection of people, biotopes, ecosystem and molecules³. In these terms urban metabolism is not that far from the definition of social metabolism which represents the connection between nature and society, between different societies as well as within societies⁴. I would then say that metabolism is a system creating flows of resources through social relations. In these terms metabolism carries with it the potential of the production of an urban perspective on the world.

As a designer I am deeply interested to examine through this paper whether **metabolism** can be studied not only as a system of production but as a **methodology** of investigation of the built environment.

¹
 Donna Haraway,
 Staying with the
 Trouble: Making Kin in
 the Chthulucene, (Duke
 University Press, 2016)

²
https://en.wikipedia.org/wiki/Urban_metabolism#:~:text=Urban%20metabolism%20is%20a%20model,human%20systems%20in%20specific%20regions.

³
 OASE Journal 104,
 The urban household
 of metabolism, (Oase
 Journal for architecture,
 2019)
 p.5-6

⁴
https://en.wikipedia.org/wiki/Social_metabolism#:~:text=Social%20metabolism%20or%20socioeconomic%20

My speculation started coming into existence during the research process of the Marine Terrein in Amsterdam. By facing the complexity of the site, rich in history and in urban transformation, this research takes into consideration the relevant archaeological value the site presents. If indeed urban and social metabolism constitute necessary systems to investigate a city and its development, a question came urgent: **is it possible to include archeology as a method to investigate the social and urban potentiality of a built environment?**

Archeology is by definition “the study of human history and prehistory through the excavation of sites and the analysis of artifacts and other physical remains”⁵. As a matter of fact archeology deals with socio-cultural contexts as well as environmental ones, being a bridge not only between past and future, but especially between knowledge.

The deep variety of information the archaeology of the Marine Terrein is involved in, represents an interesting angle of exploration. What matters, indeed, is not only what is left and in need to be preserved, evaluated and transferred to the next, but the criteria according to which this is happening. Such relevance also includes the methodology used to create out of that information system, a rich **body of knowledge**.

⁵
 Oxford dictionary

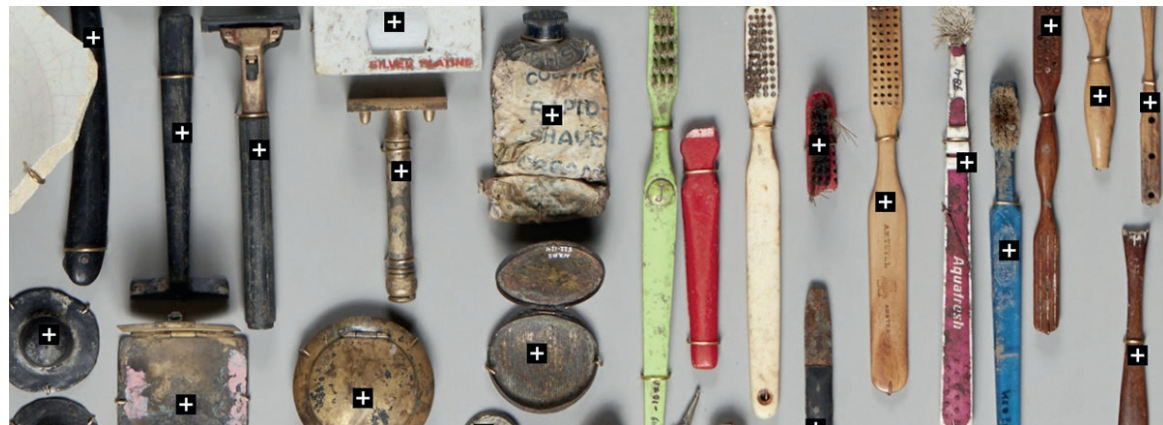
The **metabolism of archaeology** represents the methodology this research will investigate, setting up a new vocabulary creating parallels between the “language” of archeology and the one of design. I hope to show a stimulating field of speculation with the aim to reconnect the different domains and layers of past, present and future of the Marine Terrein.

6
Bruno Latour, Ou
atterrir? Comment
s’orienter en politique
(Paris: La Découverte,
2017) p.22.

“It is necessary to reconcile two complementary tendencies that have been labelled contradictory in the modernist discourse: from one hand, the attachment to a place; on the other hand, the wish to have access to the rest of the world. [...]this has hitherto been considered impossible, the assumption being that a choice had to be made between the two. It is precisely this apparent contradiction that contemporary history may be in the process of bringing to an end.”⁶

Bruno Latour

VISUAL ESSAY:CONNECTION
Images on the left
_Findings from the Marine Terrein.
_Swiming area on the Marine Terrein.
Images on the right
_We are all connected. Santo Stefano,
Italy.



METABOLISM AS METHODOLOGY

As a **methodology of research** archaeology enlarges its boundaries across many disciplines such as anthropology, history, sociology and chemistry. It creates a body of knowledge people will investigate and testify year after year. Despite being related then to the social transmission of information, I do believe that the way this information gets meaning for the public realm of a city is weak.

Metabolism as an instrument to look at the world in a meaningful way “works completely different from architecture”.⁷ If thinking about a set of stones covered by a roof, we can easily recognise it as a building, but a meaningful discourse about that building as architecture and as part of a culture requires different instruments and sets of mind. The words of Ilya Prigogine⁸ and philosopher Isabelle Stengers explain how tempting it is to signify nature and our living environment:

“ Out of the same bricks we may construct a factory, a palace, or a cathedral. It is on the level of the building as a whole that we apprehend it as a creature of time, as a product of a culture, a society, a style. But there is the additional and obvious problem that, since there is no one to build nature, we must give it its very “bricks” - that is, to its microscopic activity- a description that accounts for this building process”.⁹

As the expressions above point out, there is the urgency to reintroduce the metabolism perspective in the conception and design of urban environments. This implies the need and the difficulty of choosing how each singular fragment (as the brick) can be relevant to the city’s common heritage.

⁷
OASE Journal 104,
The urban household
of metabolism, (Oase
Journal for architecture,
2019)
p.5-6

⁸
Nobel Prize winner in
chemistry

⁹
IlyaPrigogina and
Isabella Stengers,
Order out of Chaos:
Man’s New Dialogue
with Nature (London,
verso books, 2017
(1979)p. 7.

In the history of metabolism there has been a recent revaluation of the concept in urban design and architecture.¹⁰ Nevertheless a great deal of attention has been paid to the mapping and controlling of the material flows that were severely disrupted by industrialisation. So far much less attention has been paid to the “contextualisation of the places in which this metabolism took place.”¹¹

This notion could appear to be quite the opposite of the one of archaeology as it is perceived as a discipline focusing attention on situ.¹² Archeology is also considered as a form of destruction and intervention because excavation is an irreversible process after which the “context is lost”.¹³

Through my research on the Marine Terrein I wondered whether these notions are really the opposite or not.

Supported by case studies and interviews the research will provide visions to these questions, approaching them from different perspectives. Sharing the thoughts of the British geographer Matthew Gandy¹⁴ I indeed see metabolism not so much as a unified field of study, but as a collective term for a multitude of approaches. The need to highlight and take an urban perspective is necessary since it’s complex, diverse, and collective.

The opening stimulus to combine the notion of metabolism with knowledge of archeology seems appropriate. It allows me to wonder how the metabolic process can be combined with the archeological value of a site to create a methodology of research.

¹⁰
OASE Journal 104,
The urban household
of metabolism, (Oase
Journal for architecture,
2019)
p.5-6

¹¹
Ibid., p.8

¹²
Situating in the original
place

¹³
Bjerketvedt,L.;
RethinkingArchaeology,
the role of
archeologists in
heritage management,
spatial planning and
design, (2019) [http://
heritagestudies.
nl/?p=398](http://heritagestudies.nl/?p=398)

¹⁴
OASE Journal 104,
The urban household
of metabolism, (Oase
Journal for architecture,
2019)
p.7

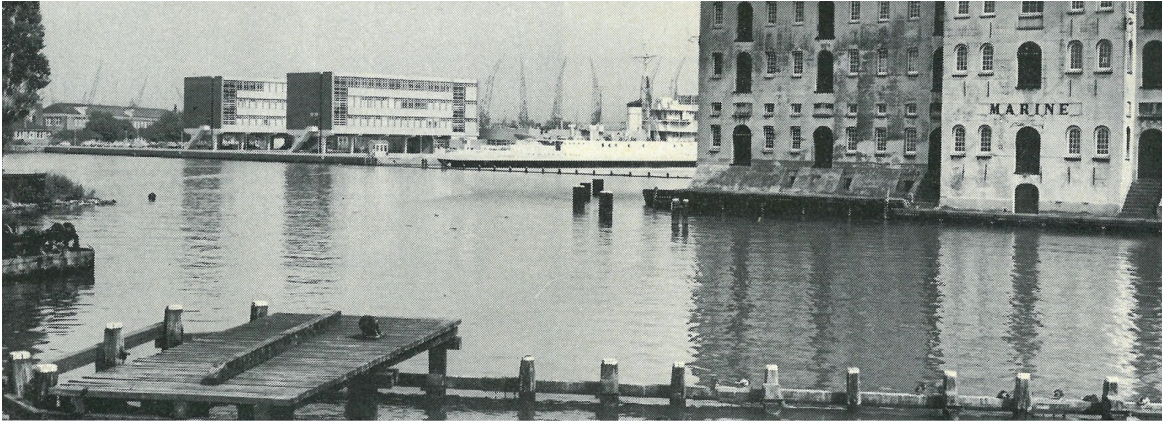
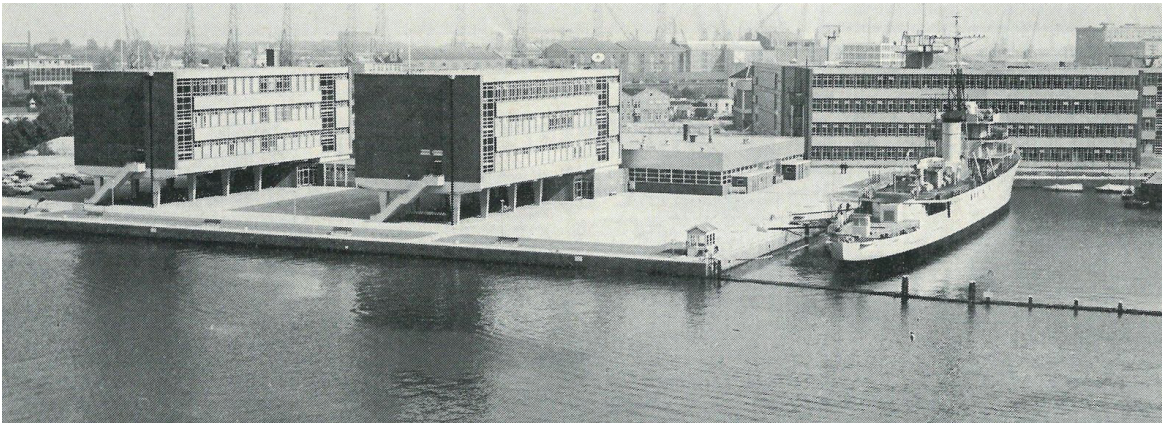
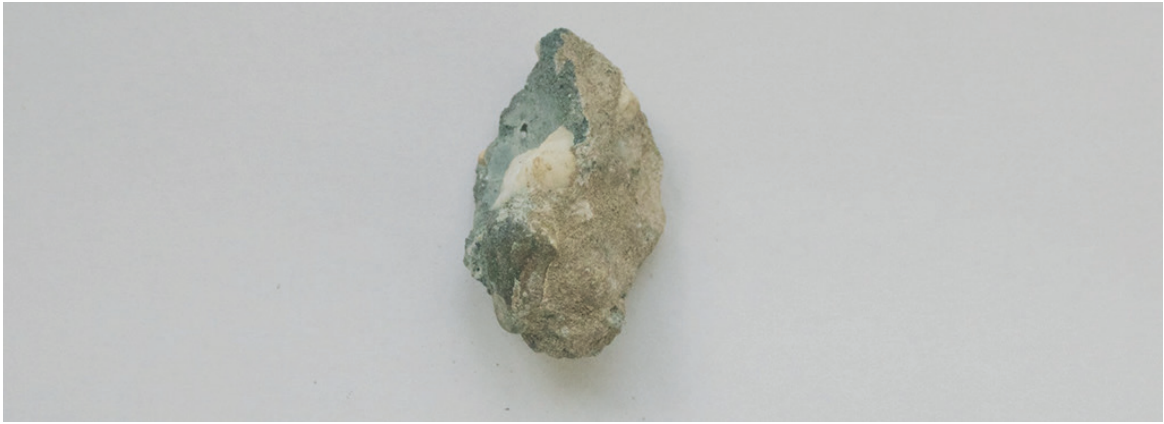
VISUAL ESSAY: WHERE/HOW TO LOOK

Images on the left

- _ Pole in the navy area of Marine Terrein.
- _ Walking metaphore. Santo Stefano, Italy

Images on the right

- _ Findings on the North Line Amsterdam
- _ Becoming Xerophile, Cooking Sections



**ARCHAEOLOGY AS
A NETWORK**



With a history of military and navy domain, the Marineterrein rises on an island whose openings to the sea and the city have incredibly changed over the years. The water has been gradually transformed into a pond and then covered and transformed into land.

During the 60s the Western part of the island was demolished to allow the construction of the IJtunnel. Part of the dock was filled up and the construction of new buildings took place to substitute the old ones. Nowadays on the terrain there are only two of the original buildings.

In 2013 it was announced that the Navy would have left the Terrein, which from that moment on, would have gained a public function creating a new layer of connection with the city of Amsterdam.¹⁵

A brief narration of the history of the site clarifies why it is interesting to approach the Marineterrein from an archeological point of view. In this research archeology is used as a tool to disclose a larger discourse about openings of a city and way of reading the use of its space. Knowing about the past and how it can be used as a source today, is indeed important to understand the potentiality of certain locations.

Enlightening is an interview¹⁶ with Tim Ingold,¹⁷ British anthropologist, where he traces a path from the perception of archaeology to the anthropology of perception.¹⁸

I certainly see in this transition the base of my methodology to approach the Marine Terrein.

While investigating the archaeological role of the site I faced two opposite realities: from one side the tangible heritage of the findings collected over years

¹⁵ Information got on the Marine Terrein thanks to historical graphs present near one of the access to the Navy part of the island.

¹⁶ University of Aberdeen, From the perception of archaeology to the anthropology of perception, an interview with Tim Ingold, (McDonald Institute for Archaeological research, Cambridge, 2001) <https://journals.sagepub.com/doi/>.

¹⁷ Social anthropologist working across the discipline of archaeology

¹⁸ University of Aberdeen, From the perception of archaeology to the anthropology of perception, an interview with Tim Ingold, (McDonald Institute for Archaeological research, Cambridge, 2001) <https://journals.sagepub.com/doi/>

under the soil; and from the other the **intangible heritage** constituting all the historical and cultural connections the Terrain had over years. Thanks to its openness to the sea it constituted for a long time an important trade point between the city of Amsterdam and other countries. Many of the findings of the site indeed originated from places like Italy (Tuscany), Denmark and others.¹⁹

Particularly relevant to the extent of my research has been the archeologist Jerzy Gawronsky.²⁰ During one of the conversations I had with Gawronsky he stressed the importance to see archaeology not only as a tangible collection of traces. He indeed stated that the relevant archaeological value of the Marine Terrein lies in its potentiality as a **network system**. With this term I want to express the solid historical structure the Terrein presents. The problem to me lies in how that structure is perceived today and how it can be acknowledged from a spatial point of view.

Reflecting on the intangible heritage as an archeological value brings my research to consider archeology as a metabolism. The application of it as a methodology on site can provide new scenarios to engage with the space.

How to use the past as a heritage source in designing spatial intervention?

¹⁹ From the conversation with Ronald Klein, archaeologist on the Marine Terrein.

²⁰ Archaeologist working on the MarineTerrain. Maritime and Urban Archaeology of the Late Medieval and Early Modern Periods, with a specific focus on the city of Amsterdam (chair in co-operation with Amsterdam Monument Office). Faculty of Humanities Capaciteitsgroep Archeologie.

It's worth defining what is spatial within the extent of this research. Once again Gawronsky's words gave this investigation a suitable framework.

21

Interview with Jerzy
Gawronsky by Ilaria
Palmieri and Mae
Alderlstein in March
2021

"Archaeology is multidisciplinary and is about creating a narrative."

"It is much more than just material. Per definition archeology is about spatial history. Nature and then man hand. That's spatial."

"It has a strong history, which I classify as archeology, just not in a tangible way."

" Archaeology now is about things you can discover, but also things that are not present in a physical way but are part of the physical world"²¹.

The notion of spatiality goes beyond the physical edge of a space. It is inherent in the history of the site and in the creation of narratives thanks to social connections. The notion of spatiality then lies in the need of a participatory process able to unlock the features of a site and to show the hidden metabolism of it.

VISUAL ESSAY: PAST PRESENT

PRESENCE

Images on the left

_Poles in the navy area of Marine
Terrein.

_Findings by Mae on the Marie Terreine.

Images on the right

_Boardwalk on the Marine Terrein.

_Historical pictures of the Marine Terrein.



CASE STUDIES

To some degree I found compelling the approaches taken by Urban Projects, Collective Spaces & Local Identities (KU Leuven).²² The research they developed is conducted with the aim of unveil, discuss and interpret narrative lines and overlapping of layers in “the making and use of collective space”.²³ In doing it they establish three methodologies.

The first one aims to grasp observation of everyday life practices with the inhabitants. It has a rather anthropological premise.

The second one is particularly interesting to the extent of this exploration as it goes in deep with the narrative approach. The group indeed bases its research not on sequence of events, or one succession of spatial references but on a configuration of space.²⁴ The research group developed a methodology which characterises the narrative approach by multiplicity, trying to reveal the meaning and value of a project through more than one story, more than one voice.

The third states how the systematic unveiling of narrative layers is based on an actualisation of palimpsest analysis approaches.

“As André Corboz⁹ mentioned in the ‘territory of the palimpsest’, urban projects are never-ending processes of constant negotiation and transformation and so their analysis can be understood as a never finished detaching of narrative foils.”²⁵

I see similarities between the research through narrative and the need to include, investigate and interpret the meaning of archaeological value of the Terrein in a metabolic way.

Narrative, archaeology and metabolism are all

22
A transdisciplinary research group working in the field of architecture, urban design, urbanism, heritage practice and history and theory of architecture and urbanism

23
OASE Journal 98, A Narrative Approach to collective space, (Oase Journal for architecture, year) p.64

24
Ibid

25
Ibid

characterized by multiplicity. Multiple are the people who create narratives from a space, who learn from archeology and who are agents of a metabolic system. To me it appears necessary to keep traces of these passages in order to connect the use of a space made by people in the past, with the ones in the present and then the ones in the future. Interaction then appears to be taken into consideration.

How then to research an urban environment in order to grasp all its narrative, eventually adding new ones?

Two interesting case studies support my research. The first one refers to a project investigated by KABK on Walking as a research method in art and design.²⁶ Among all the analysis and stories presented, one caught my attention. Krijn Christiaansen, Cathelijne Montens²⁷ are the authors of Creek Walks. Born as a speculative urban planning project in Sanga City, Japan, the program aimed to reactivate the city’s extensive system of ancient waterways and find points of entry and connection for local communities. Walking has been used as a research tool to generate a deeper understanding of the characteristics and uses of the creek network.²⁸

The **social parameters** of this case study are relevant for this research. Through their practice the authors investigate how public spaces and landscape are made, used, lived in, transformed and shaped by people. Their attention is directed not only to the physical forms of the environment, but include stories, habits and gestures that spread it.²⁹

26
Walking: a research method in art and design, (Kabk Lectorate Design, 2020)

27
Krijn Christiaansen and Cathelijne Montens are tutors at the KABK in Field Research, BA Interior Architecture and Furniture Design.

28
Walking: a research method in art and design, (Kabk Lectorate Design, 2020)

29
Ibid.,p.46

“Walking Seminars. Embodied research in emergent Anthropocene landscapes”³⁰ has similar frameworks. These are almost annual seminars taking place on Table Mountain in South Africa. Aim of these activities is to use walking as a **methodology** to **engage** landscape and **histories** and to **rethink time**, materiality and memory.

A key aspect of that project which I find relevant to this research lies in the words of one of its authors who sees the landscape as a palimpsest and states:

“A key source for the walking seminars is an interest in deep time and in history as a form of material inscription on the landscape. Bringing an archaeological sensibility to bear, one can interpret the landscape as a palimpsest of a particular kind.”³¹

My aim is to apply what I learnt from the case studies to the Marine Terrein. In doing it I seek to create the methodology of the metabolism of archeology.

Marine Terrein needs to be read as a **palimpsest**.

Marine Terrein needs to be walked through. The act of walking although does not constitute a physical construction of a space, still **implies** a **transformation** of a place and its **meanings**

Marine Terrein needs to be narrated in every medium people find appropriate to **generate connections** between them and the site; between them and others; between them and history.

VISUAL ESSAY: CASE STUDIES

Images on the left

_Walking as a research method

Images on the right

_Walking Seminar, Table Mountain.

_Narrating urban landscapes.

30

Created and organized by Nick Shepherd, Christian Ersten and Dirk-Jan Visser.

Nick Shepherd is Associate Professor of Archaeology and Heritage in Denmark, Extraordinary Professor at the University of Pretoria and co-founder of the Walking Seminar.

Christian Ersten is an Assistant Professor in Cultural History in the Department of the Faculty of Arts and Social Sciences at Maastricht University. He serves on the advisory board at Mondriaan Fund, co-curates the Atelier aan de Middendijk artist - in-residency in Groningen and is co-founder of the Walking Seminars.

Dirk-Jan Visser is a visual storyteller and photographer based in the Netherlands. He teaches in the Photography Department at the KABK and he is a member of the KABK 2020 Research Group. He co-curates the Atelier aan de Middendijk artist - in-residency in Groningen and is co-founder of the Walking Seminars.

31

Nick Shepherd, The Walking Seminar. Embodied research in emergent Anthropocene landscapes, (ON AIR: Artist-in-Residence Program, Amsterdam University of the Arts, 2018).



CONCLUSION

This investigation has ventured to establish a dialogic discourse toward archeology, design and built environment.

Considering archaeology as only connected to the past and design as only connected to the present of future, would be a mistake.

The speculation on the idea of metabolism tackles this precise point and aims to create a connection between these disciplines using the “language” of archaeology as a driving force. Thanks to its possibilities to work as a connector and as creator of narratives, archeology combines in one precise place different times, stories, and paths. It represents a network that conveys many different aspects of an urban environment.

The Marineterrein works exactly in this way but its times, stories and places are not known by its users and the urgency of disclosing them will be at the core of my design intervention.

Walking as a research method not only provides interaction between users, but creates a **process of regeneration** and understanding of an urban environment and its hidden traces.

Rising awareness of archaeological heritage represents one of the important aspects of the Malta Convention.³²

Integrating the urban archaeological “material” into everyday life allows the past to be accessible while enabling the inhabitants to engage with these traces and create new ones.

Through this research I leave open the hope that presenting this material may facilitate a feeling

³²
The European Convention for the Protection of the Archaeological Heritage (revised) replaced and updated the original London Convention of 1969.

of **collective belonging**, I would call the **archaeology of feelings**, and promote local identity. More than that, using a metabolic perspective to approach a site allows me as a designer to deeply understand the processes behind the use of a space in a city. Including the archaeological language in this perspective draws my focus on the collective aspect of these processes. My task will then be the one of selecting them and understanding which are the ones relevant to establish a full sense of a place.

“ [...] these fragments do not tell a story with a recognizable beginning, middle, and end [...] We also like the fact that they present us with the entangled processes by which they were made and discarded, but also with the accident of their survival, as assemblages without reason. This kind of detritus forecasts the future, in that it is precisely by such signs that our civilization will be known, in the archaeological way.”³³

³³
Nick Shepherd, Christian Ersten, Dirk-Jan Visse, The Walking Seminar. Embodied research in emergent Anthropocene landscapes, (ON AIR: Artist-in-Residence Program, Amsterdam University of the Arts, 2018)

VISUAL ESSAY: ARCHAEOLOGY OF
FEELINGS

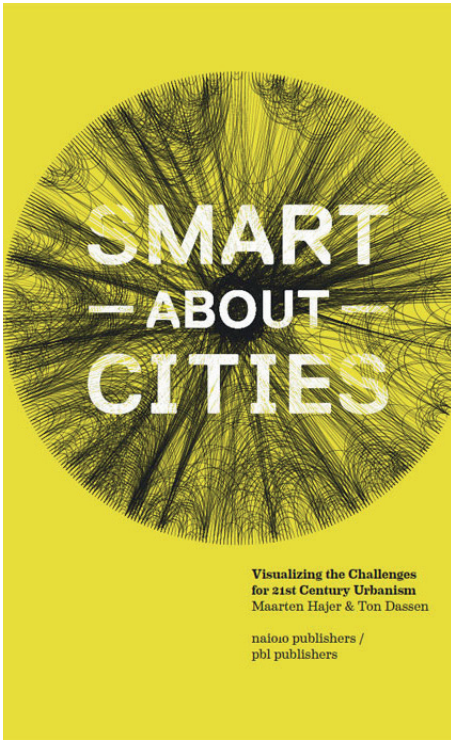
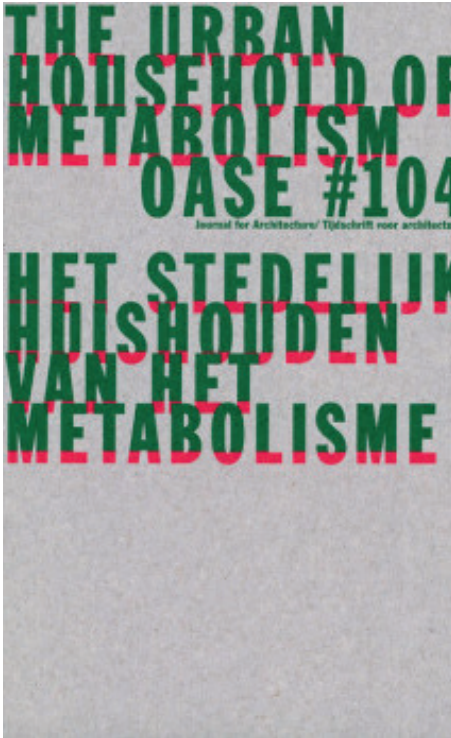
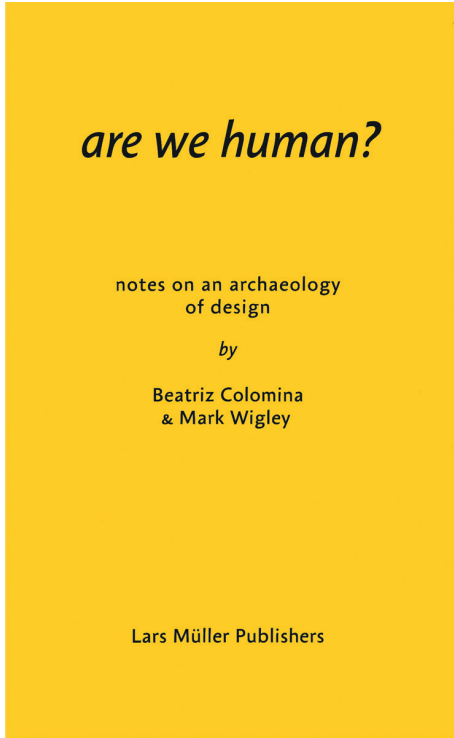
Images on the left

_Naval findings of Marine Terrein.

_Findings by Mae in Scheveningen.

Image on the right

_History and layers, Santo Stefano, Italy.



SOURCES

Bjerketvedt, L. *Rethinking Archaeology, the role of archeologists in heritage management, spatial planning and design.* 2019.
<http://heritagestudies.nl/?p=398>
 Consulted 29/04/2020

Colomina, B.; Wigley, M. *Are we human? notes on an archeology of design.* Lars Muller Publishers, 2018.

Hajer, M.; Dassen, T. *Smart about cities. Visualising the challenge for 21st century urbanism.* Naiaio publishers/PBL publishers, 2014.

Haraway, D. *Staying with the Trouble: Making Kin in the Chthulucene.* Duke University Press, 2016.

OASE Journal 104. *The urban household of metabolism.* Oase Journal for architecture, 2019.

OASE Journal 98. *A Narrative Approach to collective space.* Oase Journal for architecture, 2017.

OASE Journal 69. *Positions. Shared Territories in Historiography and Practice. Ambivalent Positions on modern heritage.* Oase Journal of architecture, 2006.

Walking: a research method in art and design. Kabk Lectorate Design, 2020.

Shepherd N., Ersten C., Dirk-Jan V. *The Walking Seminar. Embodied research in emergent Anthropocene landscapes.* ON AIR: Artist-in-Residence Program, Amsterdam University of the Arts, 2018.

University of Aberdeen. *From the perception of archaeology to the anthropology of perception, an interview with Tim Ingold.* McDonald Institute for Archaeological research, Cambridge, 2001.
<https://journals.sagepub.com/doi/abs/10.1177/1469605303003001095>
 Consulted on the 28/04/2020

LIST OF IMAGES

VISUAL ESSAY: CONNECTION

Page 6

_Archaeological site by Mae Adlerliesten. Amsterdam, Netherlands, 2021

_Swimming area of the Marine Terrein by Mae Adlerliesten. Amsterdam, Netherlands, 2021

Page 7

_Antenna. By Tommaso Anceschi. Santo Stefano, Italy, 2018

VISUAL ESSAY: WHERE HOW TO LOOK

Page 8

_Pole in the sea at Marine Terrein. By Mae Adlerliesten. Amsterdam, Netherlands, 2021

_Entrance in Santo Stefano. By Tommaso Anceschi. Santo Stefano, Italy, 2018
 Pag 9

_Archaeological findings Amsterdam's North/South Metro Line.
belowthesurface.amsterdam/en

VISUAL ESSAY: PAST PRESENT PRESENCE

Page 10

_Pole in the sea at Marine Terrein. By Mae Adlerliesten. Amsterdam, Netherlands, 2021

_Findings on the Marine Terrein. By Mae Adlerliesten. Amsterdam, Netherlands, 2021

Pag 11

_Walkpath on the Marine Terrein. By Ilaria Palmieri. Amsterdam, Netherlands, 2021.

_Historical pictures of the Marine Terrein.

www.marineterreinbureau.nl/en**VISUAL ESSAY: CASE STUDIES**

Page 12

_Walking as research method. kbk.nle/en/lectorates/design/kabinets-walking-as-a-method.

Pag 13

_Walking seminar. Embodied research in emergent Antropocene landscapes.

VISUAL ESSAY: ARCHAEOLOGY OF FEELINGS

Page 14

_Archeological site. By Mae Adlerliesten. Amsterdam, Netherlands, 2021

_Findings by Mae. By Mae Adlerliesten. Scheveningen, Netherlands, 2021

Pag 15

_History and layers. By Tommaso Anceschi. Santo Stefano, Italy, 2018

VISUAL ESSAY: LOOKING THROUGH_STRUCTURES_THE NEW OLD

Page 17

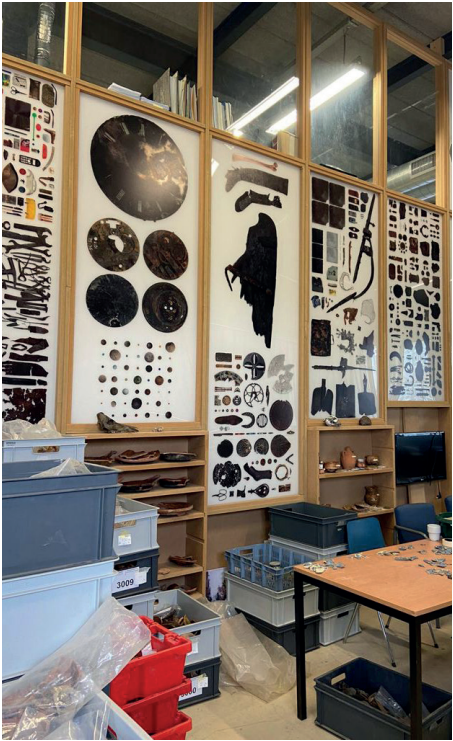
_Grids. By Tommaso Anceschi. Santo Stefano, Italy, 2018

Pag 18

_Marine Terrein. By Georgina Pantzopolous, Amsterdam, Netherlands, 2021.

Pag 19, 23

_Marine Terrein, Archaeological site and the rest. By Mae Adlerliesten. Amsterdam, Netherlands, 2021



Inside MA Interior Architecture

First Year 2020_2021

Research and visual essay by **ILARIA PALMIERI**

Site research with **MAE ALDERLIESTEN**

Guidance for content: **ANNE HOOGEWONING**

Guidanc for graphic: **ESTHER DE VRIES**

Special thanks for his time, care and lessons to
JERZY GAWRONSKI

