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Digging4Data

How to do research on the built environment in Indonesia, 1620-1950

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Colophon

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About the authors

Ir. Nadia Purwestri is an architect who has undertaken a large amount of research on heritage buildings and who is active in the field of the conservation of built heritage in Indonesia. She graduated from Tarumanagara University in 1994, is the co-founder of Pusat Dokumentasi Arsitektur (PDA, Indonesian Centre for Architecture Documentation), serving as its Executive Director. She is experienced in making inventories, collecting documentation and research on heritage buildings and historical districts. Purwestri has (co) published several books; for example, *Gedung Balaikota Jakarta. Jalan Merdeka Selatan No. 8* (about Jakarta's town hall), *Rumah Hindia di Tepi Sungai* (about Dutch waterfront houses in Indonesia), *Warisan De Javasche Bank* (about the first head office of the current Bank Indonesia), *Tegang Bentang. Seratus Tahun Perspektif Arsitektural di Indonesia* (an overview of 100 years architecture in Indonesia), and *Inventory and Identification of Forts in Indonesia*.

Dr. Pauline K.M. van Roosmalen holds a MA in the History of Art and Architecture from the VU University in Amsterdam and a PhD in History of Architecture and Town Planning from Delft University of Technology. She also holds an MA in Contemporary Dance from Codarts in Rotterdam. Van Roosmalen's PhD-thesis is the first comprehensive study of late and post-colonial planning in Indonesia. Van Roosmalen regularly lectures and publishes her research. Recent articles include 'Bouwen in turbulente tijden. Het werk van Ingenieurs-Bureau Ingenegeren-Vrijburg (IBIV) (1936-1957)', 'Netherlands Indies Indian town planning: An agent for modernisation', 'Confronting built heritage: Shifting perspectives on colonial architecture in Indonesia' and 'The Dutch East Indies: An Ineffective Shot Across The Bows' about the Bandung entry to the CIAM 4 Exhibition in 1934. Van Roosmalen is the founder and director of PKMvR heritage research consultancy. PKMvR focuses on the many issues related to (colonial) built heritage: research, presentation, communication, preservation and development. In addition to her work for PKMvR, Van Roosmalen peer reviews for various international journals and acts as guest lecturer at Delft University of Technology. At Delft, she initiated and managed the development of a repository for sources on European colonial architecture and town planning.

Drs. Huib Akihary is an art and architectural historian and writer of several books and publications. His book *Architectuur en Stedebouw in Indonesië 1870-1970* is the first overview of the shared architectural heritage in Indonesia. Presented in Jakarta in 1988 at the seminar 'Change and Heritage in Indonesian Cities', a second edition of the book was published in 1990. His second book, *J.F.L. Ghijsels. Architect in Indonesia 1910-1929* was published in 1996. Akihary studied at the Bandung Institute of Technology in 1984 and holds a MA in the History of Art and Architecture from the University of Amsterdam. In the 1990s, Akihary conducted research for the Rijksdienst Monumentenzorg in Zeist. In the following years, he worked as an art historian for several Dutch museums in the field of conservation and restoration. From 2009 until 2012, Akihary was director of Museum Maluku in Utrecht. In 2012, Akihary returned to his old field of expertise: researching shared heritage of Indonesia while writing and lecturing at Indonesian universities.

Introduction

In the last decade, a growing number of Indonesian professionals have been engaged in the study of the built heritage of Indonesia's historic inner cities. The economic centre of such cities has shifted from the old town centres to newer parts of the city. The empty buildings and public spaces that been abandoned are in need of new allocations and redevelopment. The heritage-led development of historical inner cities requires a thorough understanding of the history of buildings and urban planning. It is therefore extremely important to collect and analyse historical data in order to integrate these into planning processes.

On 27 and 28 October 2014, the National Archives of Indonesia (Arsip Nasional Republik Indonesia, ANRI) hosted the workshop 'Collecting and Connecting: Historical Data for Inner City Development'. Building upon the growing awareness in Indonesia of the benefits of combining heritage conservation and urban development, the workshop aimed at bridging the gap between theory and practice. In reality, as indicated by professionals from government institutions, NGOs and universities in Indonesia, knowledge on how to collect and manage historical data was lacking. Obviously, the workshop provided only the first few steps in addressing this deficiency rather than offering a final solution. During the evaluation of the workshop, the participants signalled the need for a guideline to support professionals undertaking archival research for the sake of heritage conservation and inner city revitalization; and it was at this very moment that *Digging4Data: How to do research on the built environment in Indonesia, 1620-1950* was initially conceived.

This publication is a practical tool kit that describes how to collect and manage historical data. The goal is to support research on the built environment: buildings, town plans, landscape, infrastructure, garden architecture and interiors. The tool kit focuses on the skills required to carry out research on the built heritage and environmental planning during the Dutch presence in Indonesia, c. 1620 to 1950, ranging from the buildings of the VOC (Dutch East India Company) period through to the modern urban planning of the 1940s. In addition, although this tool kit responds to a need expressed by architects, urban planners and government officials, it is intended for anyone interested in this area of research.

The tool kit is the result of intensive collaboration between Indonesian and Dutch researchers and institutes: the Indonesian Centre for Architecture Documentation (Pusat Dokumentasi Arsitektur: Nadia Purwestri) worked closely together with the

Cultural Heritage Agency of the Netherlands (Rijksdienst voor het Cultureel Erfgoed: Jean-Paul Corten, Jinna Smit), the National Archives of the Netherlands (Nationaal Archief: Johan van Langen, Frans van Dijk), Heritage Hands On (Hasti Tarekat) and experts Huib Akihary and Pauline K.M. van Roosmalen. The Shared Cultural Heritage Policy of the Netherlands Government was also instrumental, providing a framework and funding for the sustainable preservation of the heritage shared by the Netherlands with several partner countries. Indonesia and the Netherlands have successfully collaborated within this framework since 2009.

Digging4Data was written by three authors: Dutch architectural historians, publicists and experts in the field of colonial architecture and town planning in Indonesia, Pauline K.M. van Roosmalen and Huib Akihary. During the workshop 'Collecting and Connecting: Historical Data for Inner City Development', their systematic and hands-on approach on how to undertake research on the built environment was much appreciated by the participants. Through this tool kit, they are sharing their experience with a wider audience. The third author, Nadia Purwestri, has been involved in numerous architectural heritage projects. Drawing on her experiences with heritage conservation and urban planning practices in Indonesia, she has ensured that this tool kit will meet the needs of researchers in Indonesia.

Doing research

Digging4Data is a tool kit that will teach you how to collect data and tell you about the possibilities that archives and libraries have to offer in this respect: a practical guide that aims to:
- describe the appropriate methods of doing research on architecture from the Dutch Colonial Period (1620-1942);
- provide information on sources of support and institutions that supply historic information;
- provide tools and methods for collecting historical data and information.

Digging4Data is for everybody who is interested in undertaking research, but particularly for those who are involved in heritage projects, including:
- architects;
- urban planners;
- government officials;
- researchers from various backgrounds.

This tool kit describes how to collect historical data, explaining in six basic steps how to carry out research, beginning with the need to define your research question and moving on to where to find and how to use sources, and then how to organise them. This systematic description is a simplified form of the research method applied in architecture historical research. We have kept this tool kit simple and general, so that it will be useful to anyone who is interested in the history of the built environment.

Architectural history research

Before you start digging for data and searching for sources, it is important to be aware of the following aspects of architectural research:

1. Posing the right research question is an absolute necessity. If you do not ask the right question(s), or if you make it either too broad or too vague, it will be impossible to start looking for data.

2. Based on your research question(s), it is also necessary to ascertain where you need to look for sources.

3. Once you have identified your sources, you need to find out which ones are accessible to you. Are the people who were involved still alive? Can you travel to the sources? Will the custodian or owner of the sources allow you access? Can you read and understand – and thus interpret – the sources?

4. When using online sources, make sure you use the contemporary and/or locally prevailing names and spelling, because original names/terms are not changed or updated in digitized original sources, looking for information using modern names/terms will fail. Take for example www.delpher.nl, a Dutch website that offers access to all Dutch newspapers. It is a great resource generally but also for research on Indonesia in colonial times. However, to find relevant data, you will have to enter searches using the contemporary names. When searching for information in newspapers from before 1950, for

example, you will have to write 'Tjitjoeroeg' instead of 'Cicurug', and 'Buitenzorg' instead of 'Bogor'. Accuracy is of paramount importance when using search terms.

5. Research is not always easy or rewarding: occasionally, information will be handed to you on a plate, but this is an incredibly rare occurrence. What you will find instead, are bits, pieces, or snippets. It is up to you to utilise these scraps of information, to make sense of them and reconstruct events, based on both your findings and your knowledge. To achieve this, you have to work in an 'associative' way.

6. References to your sources allow others to check how you arrived at your interpretation of events. They show what data you used, and how it supports your narrative. When, at some later point new data become available, your references will help others to revise or update your interpretation using the new material.

6 research steps

1	2	3	4	5	6
Defining your research question(s)	Identifying collections and sources	What collections and sources to use and why	How to use sources	Interpreting sources	Filing and referencing sources and data

Research steps

Step 1: Defining your research question(s)

Before you start your research into a specific object, it is essential to formulate a clear and concrete question of what it is you want to know or hope to find. To formulate the right question, it might be helpful to ask yourself *why* you want to know this.

Examining the object: Collecting '5 Ws'

The starting point of your research is the object itself. It is your primary source for basic data, such as the original name, function, location, date, the name of the designer, of contractors and of the owner or user. Collecting these data will help you to formulate your question as precisely as possible; therefore it is always preferable if you examine the object in situ, i.e. at the location itself.

Try to collect as much basic data as possible. The more basic data you collect, the better you can formulate your research question and the more precisely you can carry out your research into specific sources. When you are collecting basic data, you are essentially looking for five questions that require an answer: What, Where, When, Who, and Why. The fewer 'Ws' you have, the less specific your research question will be and hence the harder it will be to find the information you are looking for. Indeed, answering these 5 Ws can provide you with leads to (new) sources.

Using the 5 Ws

1. What (name, typology)

To find more information within Dutch sources it is important to know the original (Dutch) name of the object. How was or is it known? What kind of building or structure is it, or what is the name of the complex, the area or the district where the object is located? Sometimes you will find a name on the object itself. If you cannot find a name, try to ascertain what kind of object it is; what type of building, what kind of function, or what type of area?

Het Huis van Semarang of Soerabaja

SAVOY HOMANN HOTEL, BANDOENG, JAVA.
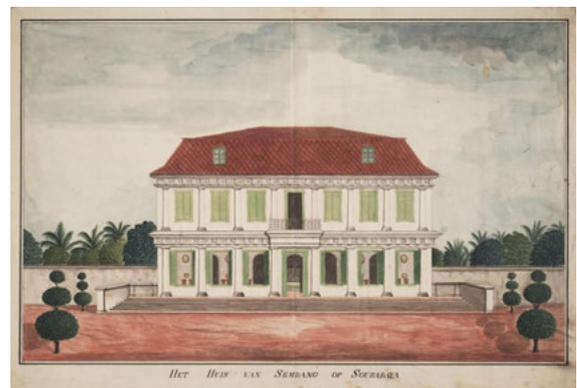
2. Where (location)

Where is the object located? What are the historical and present address and house number? What is the district? What is the name of the city? The more accurate the current location or address, the more easy it will be to find the corresponding address in the Dutch period. The old Dutch address is of great help in your research: it is mandatory for a good documentation and necessary when checking old maps and archives such as 'Kadaster' (the Land Registry).

3. When (date)

To know a date is helpful. It is an indication that helps you to delimit your research period. If you do not know a date, you could try to place the period through its style within an accuracy of 25 years. Only do this if you can recognize different building styles and if you feel confident in doing so.

If you find a date on the facade of a building, it is usually the year of completion. Commonly you will find something like 'Anno 1908', meaning 'In the year 1908'. Sometimes the year is recorded in Latin: 'Anno MDCCLXXVI', meaning 'In the year 1776'. If there is no date on the building, check if there is a plaque or a foundation stone in the facade or inside the building that mentions the name of the architect or records the consecration (in the case of a church) or the opening of the building. The location of the object can also give you clues. In a residential district designed in 1925, for example, houses in that district will clearly not have been constructed prior to 1925.
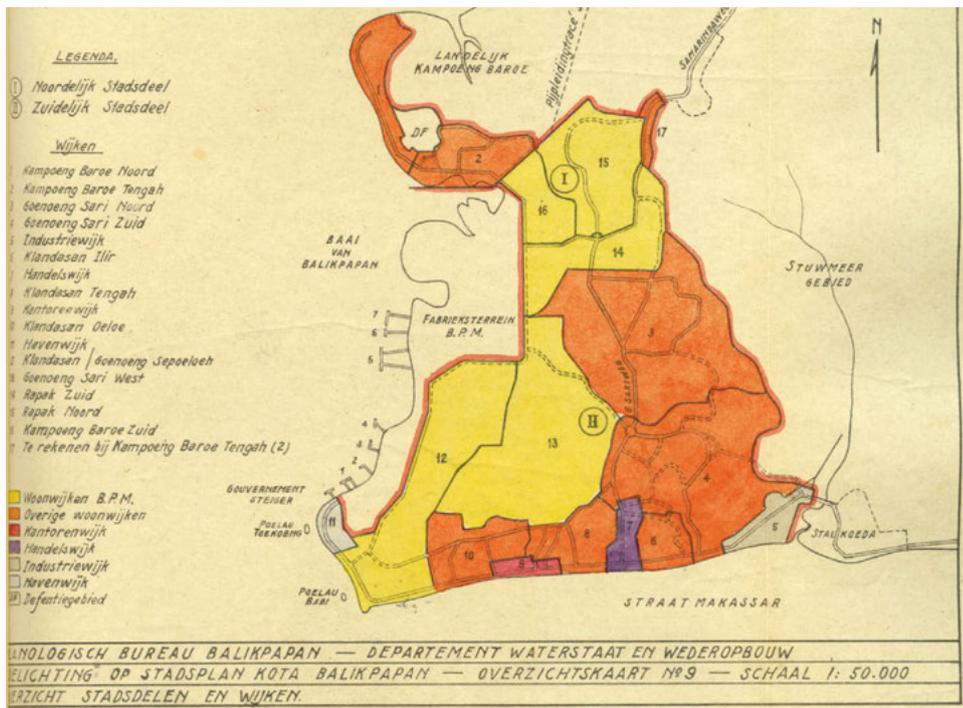
4. Who (designer, commissioner, owner)

For most of the objects in Indonesia, from old buildings to town plans, the names of people involved in the making of the object are not recorded. As mentioned above, sometimes you will find the name of the architect or contractor ('aannemer') on a plaque on the façade or interior of the building; however, in most cases you really have to rifle through sources like libraries and archives.

However, as more people engage in this type of research, more names of designers, architects, constructors and town planners are being rediscovered. In recent decades, their names have been found in archives and in reference books like *Regeeringsalmanak voor Nederlandsch-Indië*, published annually under various titles from 1817 until 1942, *Nieuw adresboek van geheel Nederlandsch-Indië* published between 1901 and 1925 and its successor *Kleian's adresboek van geheel Nederlandsch-Indië*, published annually from 1926 until 1942, and the *Naamlijst der Europeesche inwoners van Nederlandsch-Indië en opgaven omtrent den burgerlijken stand (1865-1902)*.

While looking for names, keep in mind that the first trained architects in the Dutch East Indies arrived around 1900. Beforehand, military engineers and contractors tended to design and construct buildings.

The original function of an object can give you a clue about the commissioner. The Dutch East Indies Government was the commissioner of all governmental properties such as offices and their premises, schools, post offices and housing for personnel. After 1870 private persons, business and industry also began to commission buildings and between 1903 and 1942, local governments followed suit.

When you are unaware of the architect, contractor or commissioner, the owner or user of the building may provide give you with hints for starting our research. Remember, the owner or user could be a private individual, a company, a government institution etc.

5. Why (motive)

Try to find out why the object was designed, planned, built or even – if it no longer exists – why it was demolished or destroyed. What was the occasion? Is there a historical event or reason that can be associated with the object? Why was the building erected and why on this location?

Partial answers to these questions often require common sense as well as general and historical knowledge. For example, housing estates accommodating railway company employees are usually situated near a railway track and/or railway station.

Formulating a research question

After collecting the basic data, formulate your research question as clearly and concretely as possible. A good question contains more than one 'W', every one of which will offer a separate lead to follow. A poor question is a vague question and will make the scope of your research too wide, ensuring your research is time-consuming and with little prospect of success.

An example of a bad question might be "I am looking for old maps of Surabaya." This question is problematic because of the adjective 'old', which could apply to anything dating from the seventeenth century to yesterday. It is better to delimit the research period: "I am looking for maps of Surabaya from 1900 until 1942."

Another example of an inadequate question is "When was the church in Bandung built and who was the architect?" Despite the fact that it contains two Ws (When, Who), the question is too broad. After all, more churches may have been built in Bandung and the question does not specify which one you are interested in researching.

These are examples of good questions:
*   "I am looking for data of the housing estate near the railway station in Tegal." (Three Ws)
*   "Are there any original drawings of Bank Negara Indonesia at Jalan K.H. Ahmad Dahlan in Jogjakarta?" (Two Ws)
*   "I am looking for information about the building at Jalan Hindu in Medan that has two plaques in the façade, one stating G. Bos as the architect, the other that the foundation/first stone of the building was laid by Daniël baron Mackay, mayor of Medan'." (Five Ws)

Spelling

Writing requires accuracy. Not only when it comes to content, but also when it comes to style and, finally yet importantly, to references. Indeed, in this digital era, the latter is paramount.

The reason is simple: searching for a name with an incorrect spelling will be fruitless and get you nowhere, certainly not to where you were hoping it would. It is therefore vital to be careful when writing and copying names.

Step 2:
Identifying collections and sources

After you have formulated your research question, the next step is to connect your question to the relevant sources. In other words, you need to decide how and where to look for answers to your question(s). What kind of sources and collections of data are available, and where can you find them? In order to make the right choice, you need to identify useful sources and collections beforehand and then decide which of these sources and collections is the most relevant or promising for your research. How to do this is described below in four steps (A-D).

A. Check the 5 Ws in your research question(s)

A good and simple method is to check which of the 5 Ws you are addressing in your research question. Each W will point to specific sources and collections and together the other Ws give you an indication of which of those sources are the most relevant or best to begin with.

These are examples of questions and the Ws they address:
- "When was the new town plan A for town B designed?" (When, What, Where)
- "Who designed the office of company C in town D?" (Who, What, Where)
- "Are there any drawings of the elementary school E on street F in town G, designed by architect H?" (What, Where, Where, Who)

B. 5 Ws indicate sources and collections

By checking the 5 Ws you will get an indication of what kind of sources you have to start with. Let us return to the question "When was the new town plan A for town B designed?" In order to find the year of the design, you need to find and check:
- sources related to town plan A;
- sources related to town B.

For the question "Who designed the office of company C in town D?" the Ws point to:
- sources related to company C;
- sources related to town D;
- sources related to the persons involved.

For your question "Are there any drawings of elementary school E on street F in town G, designed by architect H?" you need to find and check:
- sources related to elementary school E;
- sources related to street F in town G;
- sources related to architect H.

Note that in this case the name of the school may also provide you clues. For this, online search engines, dedicated websites and reference books can be useful.

C. Select sources

Now that you know what sources the Ws in our research question point to, you need to decide which ones are most relevant to check. You also need to find out where they are located. Let's take the last question to see how you can work this out.

When it comes to sources, there are a few things you need to be aware of for your next steps:
- There are two kinds of sources: primary and secondary.
- Sources can be analogue (hard copy), digitized or born-digital.
- Sources are cared for and maintained by public and private institutes (archives, libraries, museums) and individual persons.
- There are many collections, sources and data in the Netherlands concerning the Dutch presence in Indonesia.
- There are also many kinds of collections, sources and data sources in Indonesia.
- Records of the brief period of British rule in Indonesia under Governor Raffles are generally kept in the United Kingdom.
- France may hold records concerning the short period Holland – and thus the Dutch East Indies – was ruled by France.
- Most sources in the Netherlands are registered and accessible (online).

Although printed overviews of references and sources become outdated due to new research and institutional changes, they are still a very informative to start of your research. The following publications are good points of departure and will assist you to identify sources available in the Netherlands:
- Huib Akihary, *Verslag onderzoek naar de 19e en 20e eeuwse in Nederland aanwezige bronnen over architectuur en stedebouw in Indonesië*, Zeist: Rijksdienst Monumentenzorg, 1990.
- Francien van Anrooij, *De koloniale staat (Negara kolonial) 1854-1942. Panduan Archief van het Ministerie van Koloniën (Arsip Kementerian Urusan Tanah Jajahan), Kepulauan Nusantara*, Leiden: Nationaal Archief, 2014.
- F.G.P. Jacquet, *Sources of the History of Asia and Oceania in the Netherlands Part II: Sources 1796-1949*, Munich: K.G. Sauer, 1983.

D. Study sources

Depending on your research question, you need to decide which sources are most relevant: archives, libraries, photographic collections, etc. You also need to find out and decide where these sources are located: in private or public, local, regional, provincial, national and international collections.

Which of the collections are most useful depends on what sources you expect to find there. 'Logic' does not always apply here unfortunately. Although one would expect that sources on locally relevant objects would be maintained in local collections, this rule does not always apply. Tracing relevant sources therefore often requires an associative approach based on previously required knowledge.

The traditional way of checking sources in archives and libraries is by physically visiting the archive or the library. As we live in a rapidly digitizing world though, checking sources online, certainly at the beginning of your research is now standard. After all, how you find your sources – online, on paper or in person – is less relevant than finding them in the first place.

When you plan to visit an archive or library, be sure you prepare your visit. For example, check whether the sources you want to consult are accessible and what is required to gain access (letter, passport, ID-card, etc.).

Identifying collections and sources

A	B	C	D
Check the 5 Ws in your research question(s)	5 Ws indicate relevant collections and sources	Select sources	Study sources
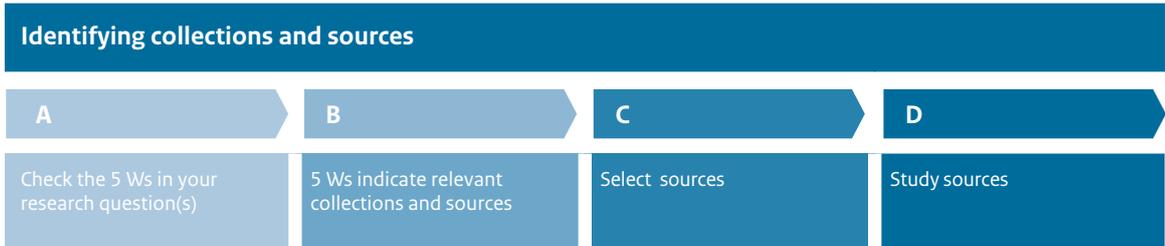
Archives & libraries: does & don'ts

Working in in archives or libraries often implies you will work with old, unique, irreplaceable and often vulnerable material. To ensure the documents can be studied and enjoyed by others, it is of the essence you treat the material with utmost care and behave accordingly.

Do not bring food and drinks into study rooms. Also, avoid bringing in any kind of pen with ink: use pencils only. Turn pages carefully and don not reorganize the order of loose documents. Definitely do not write in the documents, or cut or rip out pages or parts of pages that are of interest to you.

A study room is for study, not for conversation. In order not to disturb your colleagues, be quite and turn your mobile phone off; indeed, if you need to talk, by phone or otherwise, remove yourself from the study room.

Are there any drawings of elementary school E (What) on street F (Where), in town G (Where), designed by architect H (Who)?

Find data related to elementary school E Be aware that schools were designed by:			Find data related to street F in town G	Find data related to architect H
Central government: Department of Public Works (Burgerlijke Openbare Werken, BOW)	Local government	Private organisations, for example religious orders	Check map and archive of town G	Check • Online search engines, dedicated websites • Reference books on architecture • Archive of architect or the architect's bureau • People who knew the architect
Check BOW archive and publications (annual report)	Check municipal/ local archive and library	Check private organisations: archive, library		

Step 3:
What collections and sources to use and why

Sources are essential for carrying out historical research. Without them, you cannot conduct any scientific or scholarly investigation. When collecting historical data, you should use all kinds of sources to pick up pieces of information. What collections and sources you have to use and why, depends on what you are looking for, on what your research question is and how the sources are presented and whether they are accessible.

Sources come in the form of primary and secondary sources. The best way to use these sources is to start with secondary sources to point you towards relevant primary sources. Information found in secondary sources enables you to identify relevant primary sources. Primary sources enable you to trace relevant first-hand information that allows you to reconstruct the sequence of events leading to the construction of a building.

Sources, primary and secondary, are analogue when the information is in written form or printed on traditional carriers like paper, glass or film. Even when sources have been digitized or produced digitally ('born-digital'), they remain primary or secondary sources. Although more and more sources are digitized and accessible online, be aware that not all information is online yet. Physically visiting collections should always remain part of the research process.

Sources & collections

Sources you use are often part of a collection. Collections can consist of various objects: books, journals, photographs, film, maps, archives but also paintings, pottery, textiles, etc. Except for printed material, most objects are unique items: there is thus only one copy in the world.

Traditionally, individuals and companies create collections. The person or institute that collected the objects thus generally defines the nature of objects in a collection.

Often individual and company collections will have been incorporated into a larger collection. These larger collections are generally organized thematically (architecture, art, fashion, anthropology, etc.) or material (printed matter, photographs, films, maps, archives, paintings, prints, ceramics, costumes, etc.).

In general, collections of objects are kept by and accessible via libraries, archives, museums. These libraries, archives and museums can be national, provincial or local, private (personal, institutional) or public.

Examples of collections on Indonesia's built environment in Indonesia are:
- National library: Perpustakaan Nasional Republik Indonesia (National Library of Indonesia), Jakarta
- Institutional library: Pusat Dokumentasi Arsitektur (Indonesian Documentation Centre for Architecture), Jakarta
- National archives: Arsip Nasional Republik Indonesia (National Archives of Indonesia), Jakarta

Examples of collections on Indonesia's built environment in the Netherlands are:
- National library: Koninklijke Bibliotheek (National Library of The Netherlands), The Hague
- Institutional libraries: Delft University of Technology, Delft; Leiden University Libraries, Leiden
- National archives: Nationaal Archief (National Archives of the Netherlands), The Hague

Step 4:
How to use sources

After you have collected your sources, you are ready to begin using them. It is time to read and digest, analyse, and then organize the information in your sources. For this part of the process, it is of little interest whether your sources are analogue or digital. What is relevant, however, is to differentiate between primary and secondary sources. Both sources come with their own issues and bring their own relevance to the table.

Secondary sources are by definition someone's interpretation of (a selection of) original sources. To understand the thought processes of the author and to verify his or her claims, it is important to be able to check (and that you do check) the references that the author makes to the sources. If no references are given, you need to be extra critical about the contents. Not all text documents contain references and many websites do not provide references either.

This does not mean that you cannot use the information from these secondary sources, but if you do, it is important to regularly check the facts presented. If you fail to do so, you risk building your research on a narrative you are unable to corroborate. Moreover, if you cannot corroborate your narrative, your work could end up containing (demonstrable) errors.

Primary sources, including your main object of research, are of a different nature. Unlike secondary sources, primary sources do not reveal their relevance so readily. Primary sources, notably archives, are customarily maintained in a system and order created by the organization/person that originally created the sources. Consequently, the information you are looking for will be in a certain order. This order might be different from what you would consider obvious or logical. Remember, the information in one source rarely tells the whole story: more often than not, the source contains only fragments of information that are also most likely scattered throughout the source.

As a researcher, it is your responsibility to identify, select and interpret the information your sources offer you in relation to your research question. How you manage this depends on what you are looking for, on the sources you have found, and on the information they contain. The following four scenarios are possible:

1. If the information in your sources relates entirely to and answers your research question, the situation is relatively easy. For example: If you are looking for the name of the designer of a building or town plan and you find a drawing with the name of the designer on it, you have found your answer. In this case, all you have to do is copy the information correctly.

2. If the information you have found partially relates to your research, you are well on your way. It remains up to you to decide how the information helps you answer your research question.

3. If your sources do not contain useful information but give clues to other useful sources, you need to consult those other sources. If the drawing in the above example omits to mention the name of the designer but does contain a stamp with the name of an architectural firm, or the name or signature of an official who signed the drawing, this information could be a useful lead to another source that will bring you closer to an answer to your question.

4. If a source does not relate to your research question at all, the source is of no use to you. Do not waste time: abandon this source and start looking for ones that are more useful.

Although all four scenarios occur, numbers two, three and four are, unfortunately, the most common.

Step 5:
Interpreting sources

Once you have traced and collected your sources, the final question is how to interpret them. What narrative can you distil from your sources?

Your interpretation will tend to mirror your selection and arrangement of sources; particularly when you are a scholar, your decision about what information to include and what information to exclude needs to be a careful one. To ensure your interpretation is as objective as possible, your selection of sources also needs to be as objective as possible. How and why you select your sources is therefore of great importance.

To achieve objectivity, you need to keep two things in mind. The first is that you should collect and select information that addresses more than one aspect of our research question. Only when you study various sources will you be able to find out what answers may lay ahead of you. Striving for objectivity also implies that you keep our text free from positive or negative, judgmental

adjectives – and preferably from exclamation marks. When you stick to these two rules, you will be able to write an objective interpretation. It is important to keep this in mind while writing up your research, i.e. constructing a narrative.

Writing up is the most challenging phase of any research. It will bring out whether your research was sound, whether your sources were useful, and whether you have what it takes to be a researcher. This phase requires creativity, rationality, knowledge, discipline, and importantly, stamina. For although you may have defined what you are looking for correctly and have traced and selected sources that are relevant for answering your research question, your information is almost always incomplete, and interpretation will rarely be easy.

When writing up, you constantly need to consider what information your sources contain in relation to your research question. Consequently, this phase requires a

perpetual back and forth between your research question, your sources, and your interpretation. This can be tedious and time-consuming work, but ultimately rewarding. However, it is also necessary to make sure your interpretation reflects both the research question and the content of your sources.

When the object of your study is a physical object that is still around, you should make sure to include your own observations and analysis of the object in your interpretation. Comparing historical data with an object's existing condition will also provide you with useful information regarding the object.

A common trap for all researchers is the risk of 'going off on a tangent'. Try to avoid this. No matter how much interesting information a source contains, if it is irrelevant to the research question you need to put it aside (although keep a note of it because it may point to another area of research). Writing up research is about answering a research question based on sources, not about filling pages or creating a specific word count. Doing this sometimes requires quite a bit of self-constraint. The advice to 'Kill your darlings' is often valid to ensure you produce quality and not quantity. A rule of thumb that also applies to the selection of illustrations, which are not just images in a text used to fill space; they need to relate to and support your narrative.

In addition, you need to be constantly aware of other limitations of your research. One limitation is that your interpretation is only as good as your sources. If your sources are inadequate, your interpretation will reflect this. A further limitation is that you need to be aware that new or other sources may cause you or others to revise the interpretation. Another is that variations may occur between your interpretation and the interpretation of other researchers, even when you use the same sources. This is not a problem as long as you are aware of this and acknowledge it. The fact that findings of historical research are hardly every absolute is 'part and parcel' of research in the humanities, and thus of architecture historical research.

To enable your audience and other researchers to trace the steps you have taken in your research and your line of thought, and to build further on that research, it is essential to provide your readers with references to your sources. References are presented in a number of formats: notes (footnotes or endnotes), bibliography, and other overviews (archives, interviews, illustrations, etc.). Step 6 describes how to file and reference your data and sources, and what information they provide.

Online information

Search engines (Google, Yahoo) and openly editable websites (Wikipedia) can be helpful to kick-start your research. It is important though that you acknowledge how and why the information in these sources were created, what information the sources offer you, and how relevant or reliable the information is they provide. The way search engines work, may imply that they do not necessarily offer you information that is most relevant for you.

Treat information on openly editable websites with care. For, unless the author of the information is an acknowledged scholar or other references mentioned, how can you ascertain the reliability of the information? When using information provided by search engines and openly editable websites, it is highly recommended that, you double-check the information.

TJOEMS DE GODS | KETIKA DJAM KE
DIEMSTOEFENINGEN | BAKTIAN TA BO-
VERBODEN TE TOE- | LEH MEMBOENJI
TEREN OF TE | KAN TOETER
BELLEN | ATAU BEL

Bank Pembangunan Daerah
Jawa Barat

Step 6:
Filing and referencing sources and data

To enable your audience to trace your research steps – and for yourself to consult and refer to your sources – it is essential to file and document your sources and research data systematically. What system you use and where you store your sources and data (the Cloud, notebook, PC, paper) is irrelevant. What is relevant, however, is that your filing system allows you to find and refer to your sources and data.

If you decide to file your sources and data online, you can consider working with free, open-source software content management systems such as Mendeley or Zotero. Online software programs help to systematically file sources and often come with additional services, for example automatically generating bibliographies and notes in any style used in academia, automatically creating references to quotes, and sharing files with others. However, it is of course perfectly acceptable to devise and use a system of your own. As long as your system is consistent and contains all the information needed for (future) references, you are fine.

The information that may be required for references in the future or to others depends on your sources. Below are examples of the most common sources from which references are drawn: books, articles in books, articles in journals and archival documents. Providing references enable your audience to trace your research and verify your findings by turning to the sources themselves.

In the academic world, enabling others to verify or falsify research by reproducing or retracing it is paramount. It is the system to ensure that the reasoning behind claims, statements and conclusions are traced, questioned, and contested if necessary. By providing your readers with references to your sources, you enable them to verify your narrative. Being able to trace sources is also relevant for yourself: it helps you when you need to double check your narrative.

Example 1
Reference to book with one author or one editor
Nix, Thomas, *Bijdrage tot de vormleer van de stedebouw in het bijzonder voor Indonesië*, Heemstede: De Toorts, 1949.

Explanation
Surname Author/Editor, Comma, First Name(s)/Initials(s) and potentially Prefix Author/Editor, (ed.) (in case of an edited volume), Comma, *Book Title (in italics)*, Comma, City of Publication, Colon, Publisher, Comma, Year of Publication, Full Stop.

Example 2
Reference to book with more than one author/editor
Colombijn, Freek, Joost Coté (eds.), *Cars, Conduits, and Kampongs: The Modernization of the Indonesian City, 1920-1960*, Leiden: Brill Publishers, 2014.

Explanation
Surname Author/Editor(1), Comma, First Name(s)/Initials(s) and potentially Prefix Author/Editor(1), Comma, First Name(s)/Initials(s) and Surname Author/Editor(2) (eds.), Comma, *Book Title (in italics)*, Comma, City of Publication, Colon (English) or Full Stop (Dutch, Indonesian), Publisher, Comma, Year of Publication, Full Stop.

Example 3
Reference to article in edited book
Karsten, Th., 'Volkshuisvesting 1' in: F.W.M. Kerchman (ed.), *25 Jaren decentralisatie in Nederlandsch-Indië 1905-1930*, Semarang: Vereeniging voor Locale Belangen, 1930, 159-161.

Explanation
Surname Author, Comma, First Name(s)/Initials(s) and potentially Prefix Author, Comma, 'Title of Article' ('in quotation marks') [was published] in: First Name(s)/Initials(s) and Surname Author/Editor, Comma, (ed.), Comma, *Book Title (in italics)*, Comma, City of Publication, Colon, Publisher, Comma, Year of Publication, Comma, Pages Article, Full Stop.

Example 4
Reference to article in journal
Cobban, James L., 'Exporting planning: The work of Thomas Karsten in colonial Indonesia', *Planning Perspectives* 7 (3) (1992), 329-344.

Explanation
Surname Author, Comma, Name(s)/Initials(s) and potentially Prefix Author First, Comma, 'Title of Article' ('in quotation marks'), Comma, *Journal Title (in italics)*, No Comma, Journal Volume, No Comma, (Journal Issue) (in parentheses), No Comma, Year of Publication (in parentheses), Comma, Pages Article, Full Stop.

Example 5
Reference to archival document (text, letter, map, drawing, photograph, etc.)
Het Nieuwe Instituut, Rotterdam, Archief Lüning, Inv. No. LUNI Bijlage III-7: Brief dd. 8-3-1949 van M. Soesilo aan V.R. van Romondt, p.4.

Explanation
The source is a letter from M. Soesilo to V.R. van Romondt. The letter is dated March 8, 1949. The part referred to in the text can be found on page 4 of this letter. The letter is held in the archive of (Hans) Lüning. The inventory number refers to the file in which this letter is kept. In this case, the inventory number consists of the first four letters of the name of the person whose archive it concerns: LUNI. This code is followed by a reference to the file in the archive: Bijlage III-7.
The Lüning collection is kept by Het Nieuwe Instituut. Het Nieuwe Instituut is located in Rotterdam.

References

When writing an article, always check the instructions for references (bibliography, notes) with your publisher (Style Guide). Although there are several generally used styles, variations may occur depending on the publisher. For your own reference and comfort though, write down as much information about your source as you can.

It is easier to eliminate than to add information once you get to writing up your references.

The references in the examples in this tool kit contain all information potentially required in notes, bibliography and archival references.
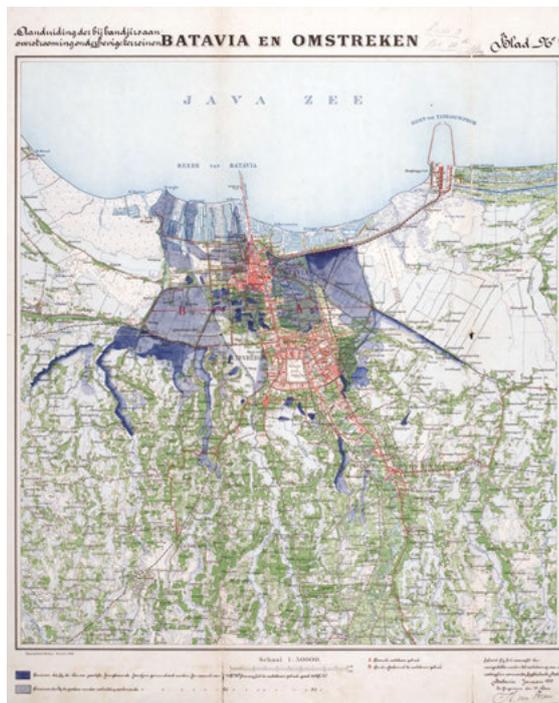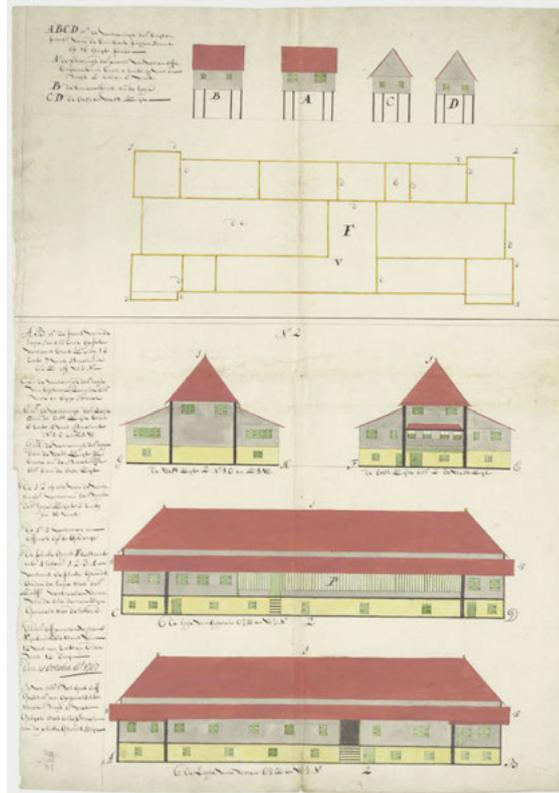
Case studies

The three case studies demonstrate how to conduct architecture historical research. They illustrate how, and what type of questions can be asked and how you find answers to these questions. They also demonstrate that, depending on available and accessible sources and data, the approach and the findings of your research may vary.

Case study 1:
Ministry of Finance Heritage Building in Jakarta

This research project was part of the 'Documentation of the Ministry of Finance Heritage Building Project' conducted by the Indonesian Documentation Centre for Architecture (PDA). The project's activities included on-site surveys, literature and archival research, interviews, a seminar, an exhibition, and the publication of a book. Undertaken by PDA in Jakarta in collaboration with Passchier architects and consultants (PAC) in Den Bosch, the project was financed by the Dutch Ministry of Foreign Affairs and the Dutch Ministry of Education, Culture and Science, with support from the Netherlands Embassy in Jakarta. The research took place between August 2004 and March 2005.

Illustration 1: Plaque on the Ministry of Finance Heritage Building in Jakarta. Photograph: Indonesian Documentation Centre for Architecture, Jakarta.

Illustration 2: Façade of the Ministry of Finance Heritage Building in Jakarta. Photograph: Indonesian Documentation Centre for Architecture, Jakarta.

Step 1: Defining the research question(s)

When the research started, the only information about the building at our disposal was an inscription on a plaque over the entrance door on the northern side of the Ministry's main building: "MDCCCIX – Condidit Daendels – MDCCCXXVIII – Erexit Du Bus". (Illustrations 1 & 2) This means that the building was ordered to be built in 1809 by (Governor General Herman Willem) Daendels and erected in 1828 under (Governor General Léonard) du Bus (de Gisignies).

The data on the plaque, combined with some general knowledge, we had of the history of Jakarta, provided us with the following information:

What	The current name of the building is Ministry of Finance Heritage Building.
Where	The building is located on Jalan Lapangan Banteng Timur No. 2-4, Lapangan Banteng, Jakarta. The original name of Lapangan Banteng was Waterlooplein. The original name of the area was Weltevreden.
When	The building was commissioned in 1809.
Who	Construction of the building was commissioned by H.W. Daendels. The construction was completed under Du Bus.

Starting from this information, we decided to look for data regarding three aspects of the building: the building itself, its location and Daendels.

Data

Related to the building

Commissioner(s)
Architect(s)
Supervisor(s)
Design
Building material(s)
Contractor(s)
Construction workers

Related to the location

The former name of Lapangan Banteng was Waterlooplein.
Waterlooplein was situated in Weltevreden.

Related to Daendels

Role and Involvement
Career
Personal data

If we would be able to trace these data, they would enable us to answer the following research questions:

Research questions

- Why was the building built?
- Why and when was the building designed the way it was?
- What was the building's original design?
- What alterations have been made to the building's original design?
- When were these alterations made?
- Who ordered the construction of the building?
- What role did Daendels play in the construction of the building?
- Who was ordered to design the building?

Step 2: Identifying collections

To identify which collections would be most appropriate for our research, we started our research by consulting secondary sources. Thanks to these secondary sources, we identified many potentially relevant collections and sources.

Secondary sources

- H. Akihary, *Architectuur en stedebouw in Indonesië 1870-1970*, Zutphen: De Walburg Pers, 1990.

- J.F.L. de Balbian Verster, M.C. Kooy-van Zeggelen, *Ons mooi Indië. Batavia oud en nieuw,* Amsterdam: J.M. Meulenhoff, 1921.

- J. Bastin, B. Brommer, *Nineteenth Century Prints and Illustrated Books of Indonesia,* Utrecht / Antwerp: Spectrum, 1979.

- H.P. Berlage, *Mijn Indische reis. Gedachten over cultuur en kunst.* Rotterdam: W.L. & J. Brusse's Uitgeverij-maatschappij NV, 1931.

- E. Breton de Nijs, *Tempo Doeloe. Fotografische documenten uit het oude Indië 1870-1914,* Amsterdam: Querido, 1961.

- Djawatan Penerangan Kotapradja Djakarta Raya, *Djakarta dewasa ini Bertamasja ke ibu kota,* Jakarta, 1955.

- A. Heuken, *Historical Sites of Jakarta,* Jakarta: Yayasan Cipta Loka Caraka, 2000.

- S. Merrilees, *Batavia in nineteenth century photographs,* Singapore: Archipelago Press, 2000.

- P. de Roo de la Faille, S.M. Rassat, *Hal-ihwal Betawi Semasa Dahoeloe,* Weltevreden: Balai Pestaka, 1920.

- C.L. Temminck Groll, *The Dutch Overseas: Architectural Survey, Mutual Heritage of Four Centuries in Three Continents,* Zwolle: Uitgeverij Waanders, 2002.

- G. Tjahjono, *Architecture: Indonesian Heritage,* Singapore: Archipelago Press, 1999.

Step 3: Which collections and sources were used and why

Collections and sources related to the building		
Institute	**Collections**	**Sources**
National Archives of Indonesia, Jakarta	1. Cartographic manuscripts (17th-19th century): De Haan Collection (KG.1) 2. KIT Batavia (F.13) 3. VOC Hoge Regering 1612-1811 (K.66a) 4. Batavia Archives 1808-1811 (K.3) 5. Algemene Secretarie 1816-1942 (K.103)	1. **De Haan Collection (KG.1)** is named after F. de Haan, archivist of the Dutch East Indies in the early 20th century. De Haan separated written material from drawings. 2. **KIT Batavia (F.13)** is a collection of photographs of Batavia. 3. **VOC Hoge Regering 1612-1811 (K.66a)** is the Archive of High Government (Governor-General and Council) in the Dutch East Indies. 4. **Batavia Archives 1808-1811 (K.3)** contains documents concerning the Batavia area. 5. **Algemene Secretarie 1816-1942 (K.103)** contains the records of the colonial central government since the restoration of Dutch control over Java in 1816. The Index Folio comprises books with tables of contents for each year, ordered by subject. As of mid-1826, the Index Folio contains a chapter called "Government House at Weltevreden".
Archives of the Special Capital Region of Jakarta, Jakarta	6. Archives about Jakarta	
National Archives of the Netherlands, The Hague	7. Hollandse Divisie Parijs (2.01.27.05) 8. Leupe Map Collection (4.VELH)	7. **Hollandse Divisie Parijs (2.01.27.05)** contains material of the Ministry of Marine and Colonies in Paris (1810-1814). Some documents are related to H.W. Daendels' reign in the Dutch East Indies. 8. **Leupe Map Collection (4.VELH)** contains maps and drawings.
National Library of Indonesia, Jakarta	9. Special collections	9. **Special collections** contains (contemporary) books, magazines and newspapers, including Bataviasche Koloniale Courant (1810-1812).
Leiden University Libraries, Leiden	10. Colonial Collection (KIT) 11. KITLV heritage collection	10. **Colonial Collection (KIT)** 11. **KITLV heritage collection** contain (contemporary) photographs, publications and newspapers.

Collections and sources related to the location

Institute	Collections	Sources
National Archives of Indonesia, Jakarta	1. **De Haan Collection** 2. **KIT Batavia**	1. **De Haan Collection** Maps of Weltevreden and Waterlooplein area (1809-1827). Some maps indicate the location of the building. 2. **KIT Batavia** Contemporary photographs showing Waterlooplein and Weltevreden area.
National Archives of the Netherlands, The Hague	3. **Leupe Map Collection (4.VELH)**	3. **Leupe Map Collection (4.VELH)** Maps of Weltevreden area and a map of Batavia showing Koningsplein and Paradeplaats (1823, 1826).
National Library of Indonesia, Jakarta	4. **Special Collections**	4. **Special Collections** • Contemporary maps of Batavia (17th-20th century). • Contemporary images of Weltevreden and Waterlooplein (19th-20th century). • Information on Weltevreden and Jakarta (19th-20th century).
Leiden University Libraries	5. **Colonial Collection (KIT)** 6. **KITLV heritage collection**	5. **Colonial Collection (KIT)** 6. **KITLV heritage collection** • Contemporary maps of Batavia (17th-20th century). • Contemporary images of Weltevreden and Waterlooplein (19th-20th century). • Publications on Weltevreden and Jakarta (19th- 20th century).

Collections and sources related to Daendels

Institute	Collections	Sources
National Archives of Indonesia, Jakarta	1. KIT Batavia 2. VOC Hoge Regering 1612-1811	**1. KIT Batavia** Contemporary photographs of H.W. Daendels. **2. VOC Hoge Regering 1612-1811** • H.W. Daendels' proposal to build a new residence for the Governor General in Weltevreden and the appointment of J. Jongkind as architect. • Daendels' order to J.C. Schultze and J. Jongkind to build the building. • Short biography of J. Jongkind.
National Archives of the Netherlands, The Hague	3. Hollandse Divisie Parijs	**3. Hollandse Divisie Parijs** • Material collected by H.W. Daendels: mainly political correspondence. • Biographies of civil servants in the Dutch East Indies: information about J. Tromp and J.C. Schultze.
National Library of Indonesia, Jakarta	4. Special Collections	**4. Special Collections**
Leiden University Libraries, Leiden	5. Colonial Collection (KIT) 6. KITLV heritage collection	**5. Colonial Collection (KIT)** **6. KITLV heritage collection** • Information about H.W. Daendels. • Information about J. Jongkind, J. Tromp and J.C. Schultze. • Contemporary images of H.W. Daendels.

Close-up: Sources related to the Ministry of Finance Heritage Building in Jakarta

De Haan Collection
Drawings of:
- Plan of the first floor.
- Several kinds of foundations.
- Plan of the ground floor dated November 1826.
- Elevation of a part of the front façade.
- Plan of the unfinished building.

KIT Batavia
Contemporary photographs of the building.

VOC Hoge Regering 1612-1811
Documents referring to:
- H.W. Daendels' proposal to build a new residence for the Governor General in Weltevreden.
- Appointment of J. Jongkind as architect.
- Order to create drawings.
- General dimensions of the new building.
- Order to acquire construction materials by demolishing certain buildings in Batavia, among them the 'Hollandsche Kerk'.
- Job description of J.C. Schultze and J. Jongkind.
- Start of the foundation works.

Batavia Archives 1808-1811
Documents including:
- Specification of building projects in the year 1809.
- Description of the construction of the foundations.
- Description of contractor delivering stones.
- Kind of accountancy book related to building cost.

Algemene Secretarie en Voorgangers 1816-1942
Many archival documents (19 January 1827 - 5 December 1828) about:
- Approval to finish the building.
- Consent for the sale of buildings and materials to finance completion of the building.
- Formation of a committee to supervise the building activities and secure completion before the end of 1827.
- Report about the construction process, request from contractor and approval during the completion process.
- Three-year maintenance contract with a Chinese contractor.

Hollandse Divisie Parijs (2.01.27.05)
- Two plans of the first and second floor of the building.
- Description of the names and sizes of the rooms.
- Measurements and numbers of windows and doors.

Leupe Map Collection (4.VELH)
Drawings of:
- (Façades of) the building.
- A section of the building.
- Plans of the first and second floor.

The most important and useful sources we identified were held by archives, notably the National Archives of Indonesia in Jakarta and the National Archives of the Netherlands in The Hague. The archives held predominantly primary sources. Our most remarkable find was the discovery of original architectural drawings, both in Jakarta and The Hague. The National Archives of Indonesia archives also contained many relevant and interesting letters and photographs.

Step 4: How to use sources

As we traced copious amounts of original and thus reliable sources and data, we were able to answer most of the questions we formulated at the beginning of our research. In particular, the primary data enabled us to trace the origin of nearly every aspect of the building, including its commissioner, the architects and contractors involved and when and what changes were made.

Step 5 & 6: Interpreting and referencing sources

The abundance of data generated from our research answered the majority of our research questions. In short, the history of the building we unearthed can be categorised in the following manner.

In 1809, Governor General Herman Willem Daendels appointed the construction of a new palace in Weltevreden.[1] Daendels commissioned the new building as part of his plan to move the governmental offices from Batavia to Weltevreden.[2] (Illustration 4) The reason behind the move was that Batavia was notoriously unhealthy. Because Weltevreden was situated a few kilometers inland and on higher and drier grounds, Daendels decided Weltevreden was a more suitable site for his officials and military than Batavia. The name of his new palace-to-be was The White House (Het Witte Huis), but also The Large House (Het Groote Huis) and Weltevreden Palace (Paleis Weltevreden).[3]
Constructed in two phases: between 1809 and 1811 and between 1826 and 1828, the first phase came to a halt in 1811 when Daendels' term in the Dutch East Indies was over. Construction was resumed in 1826 by order of Governor General Léonard du Bus de Gisignies. By the time the building was completed in 1828, it was decided that the building was not going to be used as a Governor General's palace but as a governmental office.[4] The General Secretary (Algemene Secretarie), Directorate of Governmental Resources and Territories (Directie van 's Lands Middelen en Domeinen), Directorate of Governmental Products and Warehouses (Directie van 's Lands Producten en Civiele Magazijnen), Supreme Court (Hooggerechtshof), Governmental Printer ('s Lands Drukkerij) and a post office were among the building's first occupants.[5] After Indonesian Independence, the building was predominantly occupied by the Ministry of Finance (Departemen Keuangan), but also once for the Parliament (Dewan Perwakilan Rakyat) and the State Auctioneer (Balai Lelang Negara).

The original building consisted of a main building flanked by a wing to its north and south side. (Illustration 5) This main building was to be the Governor General's official residence. The two wings were to accommodate government offices and premises for government guests. The main building and the two wings consisted of two high floors on top of a low ground floor. (Illustration 6). To the back of these buildings, stables accommodated 120 horses and carriages.

Three architects were involved in the building's design and supervision: Lieutenant-Colonel J.C Schultze and J. Jongkind (1809-1811), and J. Tromp (1826-1828).[6] For the delivery of building materials and the construction of the building, the Dutch commissioner and supervisors worked closely together with Indonesian and Chinese contractors, suppliers and construction workers. For example, the sources we discovered mentioned that Kio, Oey Sinkiet, Tjoa Poenlau, Tjoa Engkong, Tjoa Kiemsoeij, Sam Soedin and Zimmer supplied the building's bricks, that Lim Fatsien worked on the foundations and walls and that Tjungse was contracted for carpentry and bricklaying.[7]

The first major alteration, the construction of a wooden bridge to connect the main building with its North wing, executed in 1857.[8] In the 1970s, a copy of this bridge was built to connect the main building to its South wing. In the interior, various alterations were made between 1973 and 1975.[9] Examples include the installation of toilet utilities and partition walls to create extra offices. To allow the installation of air-conditioning and keep maintenance lost at a low, ceilings were lowered and all walls were covered with wooden panels.

The appearance of the building at the time of our research corroborated our finds in archives and libraries. While the building had undergone major changes – which thanks to archives and libraries we could now date and identify – the 2004-2005 design and layout of the building turned out to be still original.

Notes

1 Herman Willem Daendels (Hattem 21 October 1762 - Elmina 2 March 1818) studied law in Harderwijk and received his doctor's degree on 10 April 1783. He was appointed Governor General of the Dutch East Indies on 28 January 1807. Daendels ruled the colony until 16 May 1811. His mayor duties were to reorganize the defense of Java and to improve the health situation of Batavia and the situation of slaves and free locals.
2 Daendels proposed the construction of a new building on 26 February 1809. The Raad van Indië (Council of the Dutch Indies) approved his proposal on 7 March 1809. National Archives of Indonesia (ANRI), Archive VOC Hoge Regering 1612-1811 Inv. No. 828: Minuut Generale Resolutien 7 March 1809.
3 Adolf Heuken S.J., *Tempat-tempat bersejarah di Jakarta*,Jakarta: Yayasan Cipta Loka Caraka, 1997, 207.
4 ANRI, Archive Algemene Secretarie, Res. 19 January 1827 No. 19.
5 ANRI, Archive Algemene Secretarie, BT. 26 December 1827 No. 38.
6 J.C. Schultze also designed Social Club De Harmonie (Sociëteit De Harmonie) in Weltevreden. J. Jongkind was given the rank of Government's Architect (Lands Architect) and Supervisor of the Government's and City Civil Buildings ('s Lands en Stads Civiele Gebouwen). No information was found about J. Tromp.
7 ANRI, Archive KIT Batavia Inv. No. 209a 'Conditie en voorwaarden 1808-1809'; Inv. No. 209b 'Verzameling van stukken betreffende de aanbieding, aanbouw van woningen, enz., 1809'.
8 ANRI, Archive Algemene Secretarie, BT. 5 June 1857 No. 50.
9 Interview with an employee of the Ministry of Finance, Jakarta (s.a.).

Kampong Noordwyk

Kampong Noordwyk
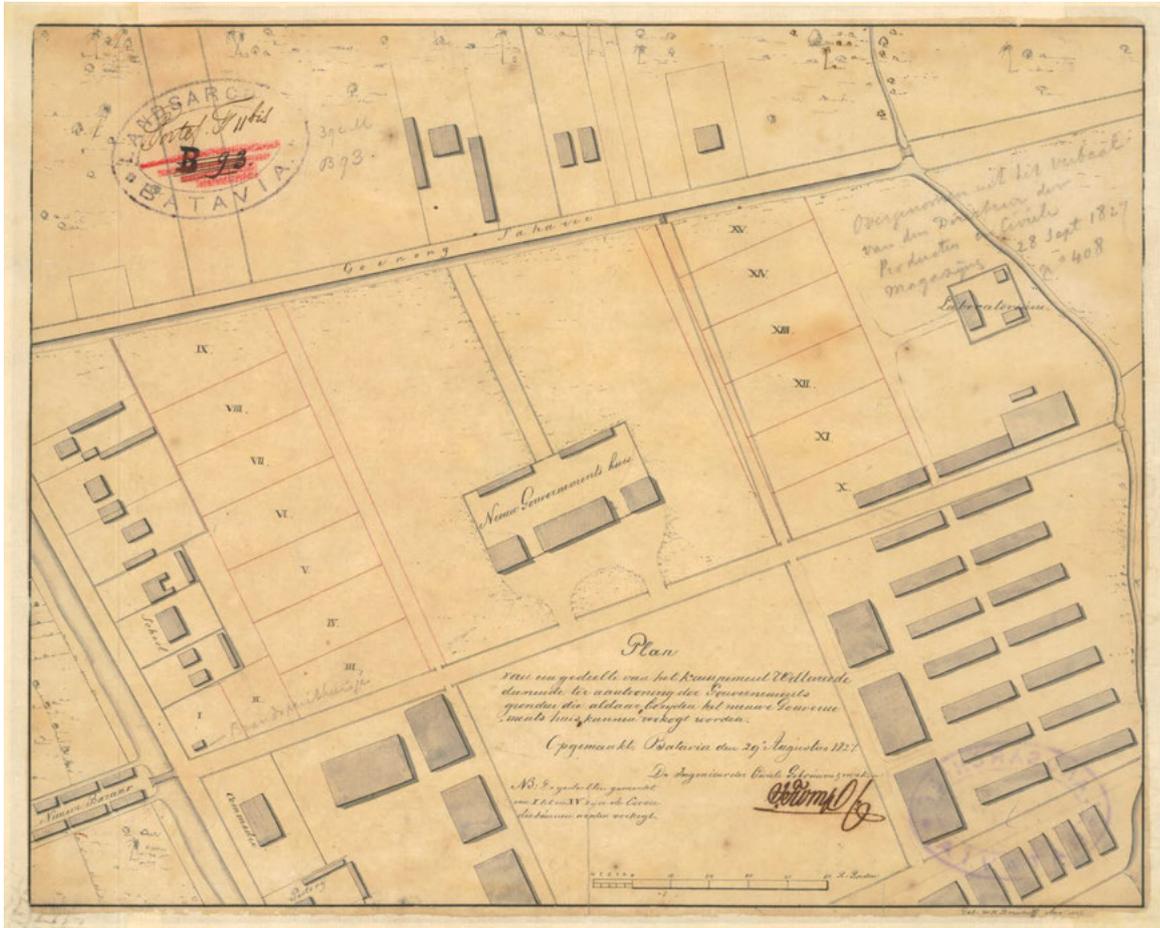
Plan
van het kampement Weltevreden
met deszelfs omtrek

Illustration 3: Maps of Weltevreden, a district of Batavia (now Jakarta).
The image left shows the area of Weltevreden with the Ministry of Finance
Heritage Building in the top right corner. The image right shows a detail
of Weltevreden with Ministry of Finance Heritage Building situated in
the centre.
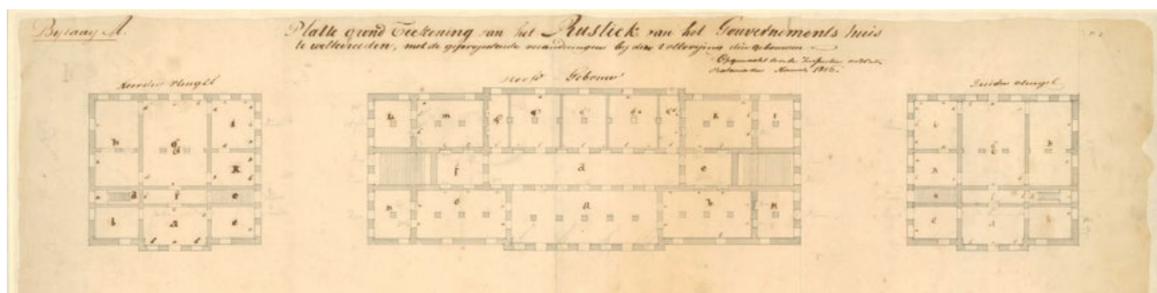*Sources: National Archives of Indonesia, De Haan Collection,*
Inv. No. B93 (left), Inv. No. K47 (right).

Illustration 4: Original drawing of the original plan for the ground floor of the
main building and adjacent wings of the Ministry of Finance Heritage Building
in Weltevreden.
Source: National Archives of Indonesia, De Haan Collection, Inv. No. K2 1826.
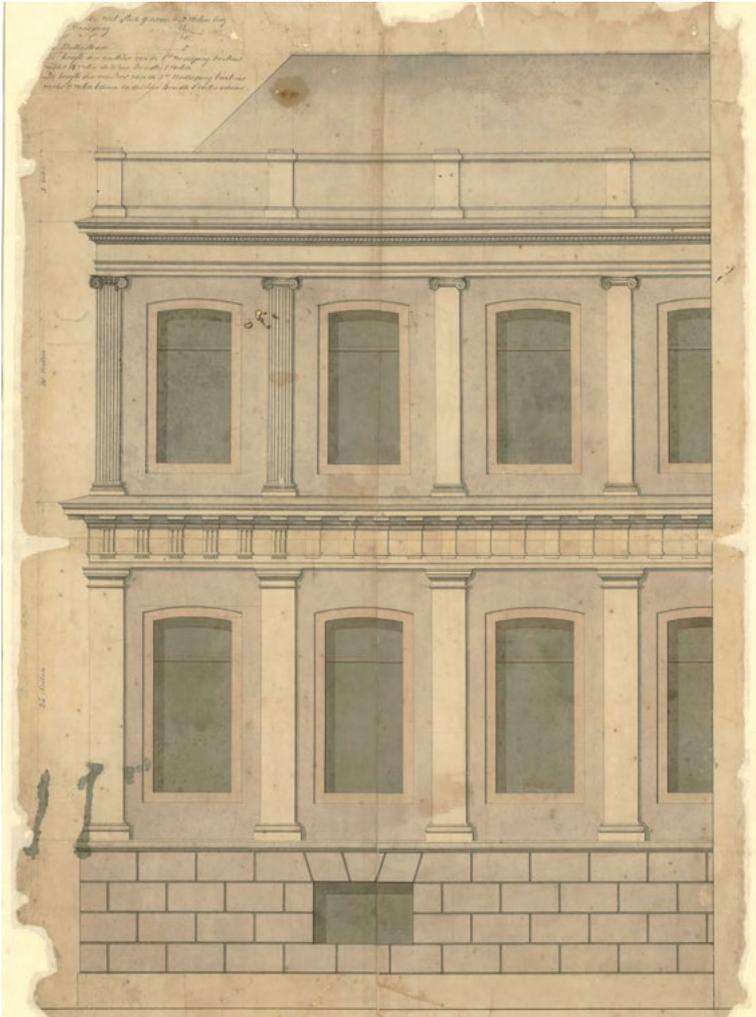
Illustration 5: Original drawings for the Ministry of Finance Heritage Building in Weltevreden: part of the façade (above), section (below).
Sources: National Archives of Indonesia, De Haan Collection, Inv. No. K21 (above); National Archives of the Netherlands, 4.VELH Leupe Map Collection, Inv. No. 455 (below).
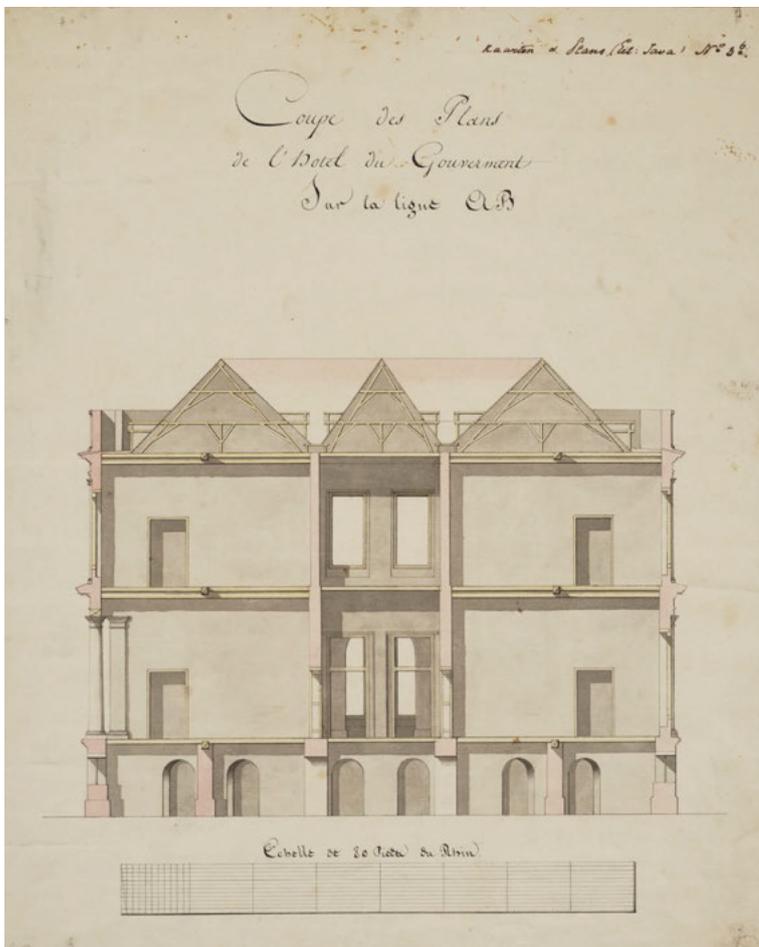
Illustration 6: Photographs (late 19th century) showing the front façade of the Ministry of Finance Heritage Building in Weltevreden, Batavia (now Jakarta).
Sources: National Archives of Indonesia, Collection KIT Batavia, Image Code 81/23 (above); Leiden University Libraries, KITLV heritage collection, Collection P.J. Veth, Image Code 87486 (below).

Case study 2:
Pawnshop Museum in Sukabumi

This research was part of the project 'Documentation of the Pawnshop Museum in Sukabumi'. The activities included measuring and redrawing the building and architectural historical research: literature, archives, interviews and on-site surveys. Executed by the Indonesian Documentation Centre for Architecture in Jakarta between December 2010 and May 2011, the project was funded by the Pawnshop Company.

Step 1: Defining the research question(s)

When we started our research, we were aware of the following:

What	The name of the building is Pawnshop Heritage Building. The building was constructed for the Pandhuisdienst.
Where	The building is located on Jalan Pelabuhan II No. 119, Sukabumi. The Dutch name of Sukabumi is Soekaboemi.

We wanted to know what the building originally looked like and who commissioned and designed the building; therefore, we formulated several research questions:

Research questions

- What is the original/former name of the building?
- What is the the building's original/former function?
- Why was the building built?
- Who commissioned the building?
- Why did the commissioner locate the building in Sukabumi?
- Why was the building situated on Jalan Pelabuhan II?
- What is the original name of Jalan Pelabuhan II?
- What was the building's original?
- Why was the building designed the way it was?

To answer these questions, we focussed our search for data on three aspects of the building: the building itself, its commissioner, and its location.

Data

Related to the building

Pawnshop is the English translation of Pandhuis.

Related to the commissioner

The commissioner is the Department of Public Works (Departement van Burgerlijke Openbare Werken, BOW).

Related to Sukabumi

The contemporary spelling of Sukabumi is Soekaboemi.

The building is situated on Jalan Pelabuhan (to the West) and Jalan Tipar (to the North).

*Illustration 7: The former Pawnshop residence in Sukabumi is currently being
used as a Pawnshop Museum.*
Photograph: Indonesian Documentation Centre for Architecture, Jakarta.

Step 2: Identifying collections

To identify which appropriate collections for our research, we started by consulting secondary sources. Thanks to these secondary sources, we were able to identify potentially relevant collections and sources.

Secondary sources

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Step 3: What collections and sources were used and why

	Collections and sources related to the building, the architect, the commissioner, the location	
Institute	**Collections**	**Sources**
National Archives of Indonesia , Jakarta	1. **Preanger Archive** 2. **West Java Archive** 3. **KIT Batavia** 4. **KIT Jawa Barat**	**1, 2 & 4. Preanger, West-Java, KIT Jawa Barat** Some information on Sukabumi and contemporary photographs of Sukabumi. **3. KIT Batavia** Much information about the establishment of Pandhuisdienst in Dutch East Indies and the the company until Indonesian Independence.
National Archives of the Netherlands, The Hague	5. **Map Collections**	**5. Maps collections** No relevant maps of Sukabumi.
National Library of Indonesia, Jakarta	6. **Special Collections**	**6. Special collections** Some information on Sukabumi: • Pandhuisdienst Jaarverslag • Staatsblad van Nederlandsch-Indië • Contemporary maps.
Leiden University Libraries, Leiden	7. **Colonial Collection (KIT)** 8. **KITLV heritage collection**	**7. Colonial Collection (KIT)** **8. KITLV heritage collection** Several contemporary images and a map from 1946 of Sukabumi.
Pawnshop Company, Jakarta	9. **Company Archive**	**9. Company Archive** Lots of information about the company after Indonesian Independence: photographs, publications, annual reports, minutes of meetings.
Pusat Dokumentasi Arsitektur , Jakarta	10. Library	**10. Library** Limited number of publications on and a contemporary map of Sukabumi.

Step 4: How to use sources

Unfortunately, the collections and sources we consulted failed to provide us with detailed or relevant information about the building and its architects. Although we knew the building was situated on the corner of Jalan Pelabuhan and Jalan Semaiji and was commissioned by the Departement van Burgerlijke Openbare Werken (Department of Public Works), we traced very little information about the establishment of the Pawnshop office in Sukabumi. What we did find was a great deal of information about the Pawnshop Service (Pandhuisdienst) in Sukabumi.

As digitization of archives has gathered pace and sources and data are increasingly made available online, it seems likely that we would be able to find more information about the Pawnshop Museum in 2016 than we did in 2010-2011. For example, the archives of the Departement van Burgerlijke Openbare Werken can be consulted at the National Archives of Indonesia in Jakarta and Indisch newspapers can be studied via Delpher. As these sources were not available to us at the time of our research though, our findings in 2011 were somewhat limited.

Step 5 & 6: Interpreting and referencing sources

As a result of the limited sources available at the time of our research, we only found out that the building of the current Pawnshop Museum was once the official residence of the head of the Pawnshop in Sukabumi.[1] Connected to this residence were the Pawnshop's office and warehouses at the back. The front of the Pawnshop complex was, and remains, situated on one of Sukabumi's main roads: Jalan Pelabuan with the ware-houses situated along Jalan Semiaji. (Illustrations 8-9)

In 2016, a short article in the online version of the *Bataviaasch Nieuwsblad* provided us with a lot of additional and interesting information. (Illustration 10) It not only confirmed that new Pawnshop office and the official residence of its director are situated on the Palaboeanweg – today's Jalan Pelabuhan – near the railroad, it also confirmed that the new building was built because the Pawnshop Service in Sukabumi was very successful and consequently required larger premises.[2] What the *Bataviaasch Nieuwsblad* also mentioned, is that the existing, very solid accommodation of the Pawnshop Service in Sukabumi, dates from the 1890s and that, due to its location, will be hard to rent out once it's been vacated. For this reason, the author of the article assumes that the central government will sell the building in due course. Finally, the *Bataviaasch Nieuwsblad* offered an interesting novelty: the Pawnshop building in Sukabumi was the first Pawnshop building in the colony built 'under the new regime'.[3]

Notes
1 *Verslag van den Gouvernements-pandhuisdienst over het dienstjaar 1912*, Batavia: G. Kolff & Co., 1913.
2 *Bataviaasch Nieuwsblad*, 7 August 1915.
3 *Bataviaasch Nieuwsblad*, 7 August 1915.

Illustration 8: Bataviaasch Nieuwsblad *dated 7 August 1915 mentions, among others, that the Pawnshop building in Sukabumi was the first Pawnshop building in the colony built 'under the new regime'.*

Illustration 9: Google Maps Street View shows the situation and condition of the Pawnshop Museum.

Illustration 10: Google Maps indicates the locations of the current Pawnshop Museum and adjacent buildings on Jalan Pelabuhan and Jalan Semaiji in Sukabumi.

Case study 3:
Medan's Warenhuis in Medan

When I visited Medan in 2014, a local architect asked me whether there were any data known about the building at the corner of Jalan Hindu and Jalan Ahmad Yani VII in the centre of the city. (Illustration 12) "Is there any data known?" is a standard question questioned by many involved in 'pusaka' (heritage) when starting a research. This case study describes the very first steps of my quest to find data about the building in Medan.

Illustrations 11: Plaques on Medan's Warenhuis in Medan.
Photographs: Huib Akihary, Rotterdam.

Illustration 12: Medan's Warenhuis in Medan in 2014.
Photograph: Huib Akihary, Rotterdam.

Step 1: Defining the research question(s)

The research started with a site visit to the building. During this visit, I discovered two plaques on the building on either side of the main entrance. These plaques provided me with important information about the building. (Illustration 11) The left plaque read: "G. Bos architect. Anno 1920". This confirmed that G. Bos was the architect of the building and that the building was completed in 1920. The right plaque read: "Op den 16:2:1919 werd voor dit gebouw de eerste steen gelegd door Daniël baron Mackay Burgemeester van Medan". This provides evidence that on 16 February 1919 Daniël baron Mackay, mayor of Medan laid the first stone of the building.

The site visit and the data on the two plaques provided me with the following information:

What	The building is a corner building. The building's entrance is at the corner of two streets.
Where	The building is situated on the corner of Jalan Hindu and Jalan Ahmad Yani VII in Medan.
When	The first stone was laid on 16 February 1919. The building was finished in 1920.
Who	The architect of the building is G. Bos. The mayor of Medan at the time of the construction of the building was Daniël baron Mackay.

Starting with this useful information, I focused my data search on five aspects of the building: the building itself, its architect, its commissioner, Daniël baron Mackay, and the building's location, including the area and the city of Medan.

Data

Related to the building
Commissioner(s)
Supervisor(s)
Design
Building material(s)
Contractor(s)
Construction workers

Related to architect G. Bos
Career
Personal data

Related to the commissioner
Name

Related to Daniël baron Mackay
Involvement
Career
Personal data

Related to the location, the area and the city
Original name of the street
Character of the area
Selection of the location

If I would be able to trace these data, they would help me answer my research questions:

Research questions

- What is the original name of the building?
- What was the original function of the building?
- What is the original design of the building?
- Why was the building built?

Step 2: Identifying data and sources

To start my research, I first turned to Delpher (**www.delpher.nl**). The decision to begin with Delpher was because the online repository offers a large amount of contemporary data. As I suspected contemporary newspaper would have published about the new store, Delpher would be a most useful tool to verify this. With the data found from searching Delpher, I would be able to continue my research elsewhere.

De Sumatra Post, 5 October 1917.

This article mentions the erection of a new department store, its dimensions in square meters and the expenses involved.

The spelling of the name of the new department store is different from the name in the article published on 6 July 1918.

De Sumatra Post, 6 July 1918.

This article is more specific about the building's floor space.

The spelling of the name of the new department store is different from the name in the article published on 5 October 1917.

De Sumatra Post, 27 August 1918.

This article mentioned the various contractors who tendered for the new department store.

De Sumatra Post, 18 April 1918.

This advertisement confirms Bos' involvement in Medan's Warenhuis – and reveals his full first name Gerard.

This advertisement regarding the tender for the building, is signed by the architect of Medan's Warenhuis: G. Bos.

This article announces Bos established his own architecture company in Medan.

This reference confirms G. Bos' registration as architect in Medan.

This overview confirms Daniël baron Mackay was the mayor of Medan around the time of the construction of Medan's Warenhuis.

Step 3: What collections and sources were used and why

Delpher turned out to be most helpful. After entering the name of the architect, the mayor and the year 1920, I very quickly found numerous articles about the building in De Sumatra Post, Medan's local newspaper. The articles, published over a longer period of time, revealed interesting information about the building, the architect and its commissioner:

1. 'Monumentaal winkelgebouw', *De Sumatra Post*, 5 October 1917.
2. 'Nieuwe bouwwerken', *De Sumatra Post,* 6 July 1918.
3. 'Medan's Warenhuis', *De Sumatra Post,* 26 July 1918.
4. 'Nieuwe verbindingsweg', *De Sumatra Post,* 24 August 1918.
5. 'Aanbesteding Medan's Warenhuis, *De Sumatra Post,* 27 August 1918.
6. 'Medans Warenhuis', *De Sumatra Post,* 17 February 1919.
7. 'Van bouwen', *De Sumatra Post,* 29 January 1920.
8. 'Medan's Warenhuis', *De Sumatra Post,* 1 June 1920.
9. 'Een nieuw architecten-bureau', *De Sumatra Post,* 16 June 1920.
10. 'Medans Warenhuis', *De Sumatra Post,* 12 November 1920.
11. 'Het Warenhuis', *De Sumatra Post,* 16 November 1920.

A wider online search led me to another useful, born-digital publication about the city of Medan: Dirk A. Buiskool, 'A Plantation City on the East Coast of Sumatra 1870-1942', Yogyakarta: ArchaeologyWorld, 2009. (http://archaeologyworld.blogspot.nl/2009/04/plantation-city-on-east-coast-of.html)

Step 4: How to use the sources

At the start of the research, the existing building of Medan's Warenhuis proved an important and valuable primary source of information, notably the two plaques on the façade. They provided me with the name of the architect, the person who laid the first stone of the building, and the building's construction and completion dates. This data was quite literally 'set in stone' and therefore very reliable.

Using the data on the building as my point of departure, I continued my research on Delpher. Via Delpher, I was able to trace relevant information about the architect and the development of Medan's Warenhuis. What was most interesting about the information in the newspapers was that data did not always correspond; indeed, at times, it was contradictory. The result of this was that, although I did find a lot of information, I was (and am) still not sure about all aspects of Medan's Warenhuis.

Despite this drawback, the data I discovered via Delpher enabled me to reconstruct the early days of Medan's Warenhuis. To establish the relevance and reliability of these data – and consequently to corroborate or refute my current interpretation of these data – additional and more in-depth research is required. The data found so far provide good entry points for this next step.

Step 5 & 6: Interpreting and referencing the sources

Although the research has so far not revealed any drawings, the articles in De Sumatra Post had already exposed a host of information about the building, its location, architect and commissioner. The interpretation below is an indication of the information I collected based on these newspaper articles so far – including some inconsistencies and errors. To substantiate my reconstruction, the narrative contains footnotes (they refer to the sources I used and contain some background information).

At the time of its construction, the building on Jalan Achmad Yani VII and Jalan Hindu was named Medan's Warenhuis, Medan's Department Store.[1] The new building was commissioned by the trading company N.V. Medan's Warenhuis. The building was located at the corner of Hüttenbachstraat and Hindoestraat, at present Jalan Achmad Yani VII and Jalan Hindu and replaced a wooden store of Dutch trading company N.V. Handel Maatschappij.[2] At the time of the building's construction, N.V. Medan's Warenhuis was under the direction of I. Cornfield.

Architect G. Bos designed Medan's Warenhuis in 1918. The building's design was approved by the municipal 'Schoonheidscommissie' in July 1918.[3] The store consisted of two high floors that in total covered 8,000 square meters: the ground floor covered 1,400 square meters, the first floor 1,000 square meters.[4]

The construction of the building was estimated at 200,000 Dutch guilders.[5] The public tender for the building was issued on 27 August 1918.[6] On this day, four contractors/architects handed in their tender.[7] Until 1 August 1918, a certain 'C. Bos' could be contacted to obtain technical specifications and drawings.[8] Bos was the architect and supervisor of the Technical Department of Medan's Warenhuis. The architect's first name was Gerard.[9] Bos established his own architecture firm in Medan in 1920, the same year Medan's Warenhuis was opened.[10]

Notes

1   One article writes 'Medans Warenhuis'. *De Sumatra Post*, 5 October 1917. Noticing differences like this is relevant: without being aware of variation in spelling, I would have found far less data.
2   *De Sumatra Post*, 5 October 1917. The main shareholder of N.V. Medan's Warenhuis was Hüttenbach & Co. Hüttenbach & Co was the forerunner of Dutch trading company N.V. Handel Maatschappij. The Hüttenbachstraat is clearly is a reference to the main shareholder of N.V. Medan's Warenhuis, or to the commissioner of the wooden store the new store replaced.
3   *De Sumatra Post*, 26 July 1918. A 'Schoonheidscommissie' is an external advisory committee to the municipality that assesses the architectural merits of building designs.
4   *De Sumatra Post*, 5 October 1917, 6 July 1918. *De Sumatra Post* of 13 July 1918 mentions a total of 1,600 square meters of covered area. *De Sumatra Post*, 13 July 1918.
5   *De Sumatra Post*, 5 October 1917.
6   *De Sumatra Post*, 13 July 1918.
7   *De Sumatra Post*, 27 August 1918.
8   *De Sumatra Post*, 13 July 1918. Taking other references into account and assuming only one 'Bos' was involved in the building process, it's likely the C in the source is a typo.
9   *De Sumatra Post*, 18 April 1918.
10 *De Sumatra Post*, 16 June 1920.

Selected bibliography

This bibliography is a selection of predominantly secondary and some primary literature to help you kick-start your research on Dutch architecture from 1620 to 1950 – the time frame of this tool kit. This bibliography aims to introduce you to literature that can guide you to other relevant sources. It is therefore not a comprehensive overview of all (potentially) relevant literature for your research.

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Selected online sources

This overview contains online sources that can help you with your research about the built environment in the Dutch East Indies and Indonesia. Please note that this overview does not aim to be complete and that institutes and website addresses are subject to change.

Atlas of Mutual Heritage, Amsterdam
- VOC and WIC Documents:
  http://www.atlasofmutualheritage.nl/en/

Cultural Heritage Agency of the Netherlands (Rijksdienst voor het Cultureel Erfgoed, RCE), Amersfoort
- Image Collection:
  http://beeldbank.cultureelerfgoed.nl/

Delft University of Technology, Delft
- Repository on European colonial architecture c. 1850-1970 (text documents, photographs, films, maps, archives): **http://colonialarchitecture.eu/**

Erfgoedcentrum Nederlands Kloosterleven, Sint Agatha
- Archives & Images:
  http://www.erfgoedkloosterleven.nl/zoeken/collecties-zoeken.php

Indonesian Documentation Centre for Architecture (Pusat Dokumentasi Arsitektur, PDA), Jakarta
- Collection (books, measured drawings):
  http://www.pda.or.id
- Database of forts in Indonesia:
  http://www.benteng-indonesia.org

Leiden University Libraries (Universitaire Bibliotheken Leiden, UBL), Leiden
- Colonial Collection (KIT) (maps, text documents) from the Heritage Collection of the former Library of the Royal Tropical Institute (Koninklijk Instituut voor de Tropen, KIT):
  https://digitalcollections.universiteitleiden.nl/
- KITLV heritage collection (text documents, archivalia, photographs) from the collection of the Royal Netherlands Institute of Southeast Asian and Caribbean Studies (Koninklijk Instituut voor Taal-, Land- en Volkenkunde, KITLV):
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Nationaal Museum van Wereldculturen (NMVW), Amsterdam/Leiden/Berg en Dal
- Museum Volkenkunde (Collection & Library), Leiden:
  http://www.volkenkunde.nl/collections/
- Tropenmuseum (photographs, objects), Amsterdam:
  http://collectie.tropenmuseum.nl/

National Archives of Indonesia (Arsip Nasional Republik Indonesia, ANRI), Jakarta
- Collection (archives, library, photographs, films, maps): **www.anri.go.id**
- Sejarah Nusantara (VOC Archives):
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- Archives, maps and photographs:
  http://www.gahetna.nl/ and **www.nationaalarchief.nl**
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National Library of Indonesia (Perpustakaan Nasional Republik Indonesia, PNRI), Jakarta
- Catalogue (text documents, manuscripts, prints, photographs, maps): **http://perpusnas.go.id/**

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- Delpher (books, newspapers, journals, magazines):
  http://www.delpher.nl/

Het Nieuwe Instituut, Rotterdam
- Collection (Archive & Library):
  http://zoeken.hetnieuweinstituut.nl

Towards A New Asian Partnership (TANAP)
- Portal: **http://databases.tanap.net/**
- VOC Archives: **http://databases.tanap.net/ead/**
- VOC Documents:
  http://databases.tanap.net/vocrecords/

Illustrations

Photographs and archival material in the tool kit originate from the following sources:

Cover: Bird's eye view of the city of Surabaya (early 19th century). National Archives of the Netherlands, Map collection 4.MIKO, Inv. No. G1.7.

Page 4: Design by Moh. Soesilo for Kebayoran Baru satellite town (1949). Private collection Ir. R.J. Clason, Arnhem.

Page 6 above: Jakarta History Museum, Kota Tua, Jakarta. Photograph: Johan van Langen (2015).

Page 6 below: Fatahillah Square with Café Batavia in the background, Kota Tua, Jakarta. Photograph: Peter Timmer (2014).

Page 7: Participants, tutors and organizers of the 2014 workshop Collecting and Connecting held at the National Archives of Indonesia. Photograph: National Archives of Indonesia (2014).

Page 8: Impression of the 2014 workshop Collecting and Connecting held at the National Archives of Indonesia. Photograph: Huib Akihary (2014).

Page 10: Participants of the 2014 workshop Collecting and Connecting held at the National Archives of Indonesia. Photograph: Huib Akihary (2014).

Page 12 above: House Sembang, Surabaya (early 19th century). National Archives of the Netherlands, Map collection 4.MIKO, Inv. No. G1.12.

Page 12 below: Hotel Savoy Homann, Bandung (c. 1942). National Archives of the Netherlands, Photo collection ANEFO 2.24.01.04, Inv. No. 934_8071.

Page13 above: Intersection of Jalan Sei Ular and Jalan Abdullah Lubis in Medan (c. 1952-1953). National Archives of the Netherlands, Collection Deli Maatschappij 2.20.46, Inv. No. 827, Photograph 34 (52/11).

Page 13 below: Plan for Balikpapan designed by the Balikpapan Reconstruction Planning Department (1949). Het Nieuwe Instituut, Rotterdam, Collection H. Lüning, Inv. No. LUNI-30.

Page 14 above: Foundation stone in a building on Jalan Braga 99, Bandung. Photograph taken in 1988. Cultural Heritage Agency of the Netherlands, Collection Temminck Groll, Item Number TGKL-14-021.

Page 14 below: Foundation stone of an early 18th century hospital in Semarang. Photograph taken in 1988. Cultural Heritage Agency of the Netherlands, Collection Temminck Groll, Inv. No. TGKL-16-019.

Page 17: Kantor Jiwasraya, Jalan Letnan Jenderal Suprapto, Semarang. The office was built for the Nederlands-Indische Levensverzekering en Lijfrente Maatschappij (NILLMY). Photograph taken in 1988. Cultural Heritage Agency of the Netherlands, Collection Temminck Groll, Inv. No. TGKL-16-007.

Page 19: Former VOC warehouses, Jalan Pasar Ikan, Jakarta. The former warehouses currently house the Maritime Museum. Photograph taken in 1983. Cultural Heritage Agency of the Netherlands, Collection Dorresteijn, Inv. No. DO-BD-006.

Page 21 above: Unidentified building, probably in Jakarta around 1947. National Archives of the Netherlands, Collection Dienst Legercontacten 2.24.04.03, Inv. No. 10766.

Page 21 below: Interior of one of the assembly halls of Bandung's former Polytechnic (Technische Hogeschool) designed by Henri Maclaine Pont (1919-1920). Photograph taken in 1988. Cultural Heritage Agency of the Netherlands, Collection Temminck Groll, Inv. No. TGKL-14-034.

Page 23: "Chicken market bridge" (Pasarhoenderbrug), Jakarta: a Dutch style double drawbridge. Photograph taken in 1985. Cultural Heritage Agency of the Netherlands, Collection Dorresteijn, Inv. No. DO-LD-044.

Page 25 above: Churchgoers leaving a church after a service. Photograph taken between 1947 and 1949. National Archives of the Netherlands, Collection Dienst Legercontacten 2.24.04.02, Inv. No. 8729.

Page 25 below: Bank Karya Pembangunan, Jalan Braga, Bandung. The office was commissioned by and for De Eerste Nederlandsch-Indische Spaarbank (DENIS). Photograph taken in 1988. Cultural Heritage Agency of the Netherlands, Collection Temminck Groll, Inv. No. TGKL-14-012.

Page 27 above: Images of buildings of the trading post in Jambi (1707). National Archives of the Netherlands, Map collection Leupe 4.VEL, Inv. No. 1137.