

# **BIOGRAPHY OF A BUILDING AS AN INTERDISCIPLINARY APPROACH FOR THE JAVA RAILWAY STATION ARCHITECTURE CONSERVATION**

**Harmilyanti Sulistyani<sup>1</sup> & Freek Schmidt<sup>2</sup>**

<sup>1</sup> PhD Student, Vrije Universiteit Amsterdam, Graduate School of Humanities;  
De Boelelaan 1105, 1081 HV, Amsterdam, The Netherlands

[h.s.sulistyani@vu.nl](mailto:h.s.sulistyani@vu.nl)

<sup>2</sup> Associate Professor of Architectural History, Vrije Universiteit Amsterdam, De Boelelaan  
1105, 1081 HV, Amsterdam, The Netherlands

[f.h.schmidt@vu.nl](mailto:f.h.schmidt@vu.nl)

## **Abstract**

*In recent times, the biographical approach has been applied to study variety of topics. It is known that this model can help explain the circulation of things and can offer interesting new insights into the study of objects. Using this point of view makes it possible to understand the history of an object, its life cycle and its meaning. Moreover, it enables us to see how one object related to another.*

*Architecture forms both a tool and a result in the framework of the socio-technological systems. The built environment lends itself well to be described with the biographical approach. The ways in which architecture forms an expression of contemporary society, constitutes a tradition and ideology, shows a relatively unified visual and structural pattern. The architecture of railway station cannot be separated from the context of technology, concession and the sources on which its creation based: materials, producers, and geography. By using the biography of a building, people can find and understand the context of architecture in the micro, meso and macro level.*

*In my study of railway station architecture in Java, I have selected a series railways station that will be presented from a synchronic and diachronic perspective related to its development. The history behind the Java railway station development will be reconstructed by departing from its architectural appearance using a visual chronological catalogue. In the next phase, the architectural context of the selection will be explained by studying the development of the railway companies, railway constitution, and concession negotiations between the colonial government, private company and local rulers.*

*The general aim of the research is to provide a thorough understanding of the aim and concept of the railway station on Java. The results of this critical comparative investigation through a biographical approach can help establish both the intellectual framework and the visual background for future plans for the construction of new, or the repair and/or transformation of old stations that are conceived as cultural heritage.*

**Keywords:** a biographical approach, socio-technological system, heritage, a visual chronological catalogue

## **Introduction**

### **Background**

Nowadays, people just pass by the railway station as a transit building. They did not notice the complex spaces and activities in the railway station. Those spaces have a specific order and have been changed from the beginning of the railway establishment. It was changed to support the activity in the railway station which changes time after time.

The European imperial specifically the Dutch colonial power introduce railway system in Java. The history of the Indonesian railway network and the stations starts in the 19<sup>th</sup> century when concessions were allowed to governmental and private companies to create the infrastructure in Java. Caused by the policies of various companies the railway stations have a different outlook, each track having a unique style. At the same time, they are part of a tradition that is related to the colonial system, which facilitated the exploitation of natural resources of the island. Each company had its own targets and policy to develop the line. The engineer, the materials and the workers to construct the infrastructure and the stations were chosen based on the target investment of the company.

To better understand the typology and morphology of the Java railway station architecture, this paper will discuss the different stage of the building. It is a kind of a biography of the building. It will focus on the railway in the Dutch colony that called Dutch East Indies specifically Java. A complex set of factors makes the Java railway stations have a historical value and manifested in the architecture. The period 1867-1942 was chosen because the railway system which develops and managing by Dutch Colonial Government in this period became the main part of Indonesia Railway. It was laying the foundation for Java railway system that still can be seen today.

### **The Study Area**

Located in coordinate 7°29'30"S 110°00'16"E<sup>74</sup> and covering by an active volcano as parts of the ring of fire were providing Java with a specific geographical condition. Agriculture and cultivation were easy to done in there since ancient times because the rich fertile of soil and enough water from rainfall. The increase in plantation products - sugar cane, coffee, and indigo - from the Java's inland in the middle of the 19<sup>th</sup> century caused a plea for connection between the plantations and the port for mass transportation. The implementation of the railways and the stations implied a cultural and economic transformation, as animals like horses; cows and buffaloes were used to transport people and goods on the island. The long distance and 'cruel' paths took much time which reduced the quality of the tropical products. The costs for delivery rose gradually. Therefore the private investors of the plantation made pressure to develop the railway network in Java. A part of the colonial system that facilitated the exploitation of natural resources of the island the Java railway has a cultural value. The development of the railway station in Java has its unique identity.

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<sup>74</sup> [http://en.metapedia.org/wiki/Java\\_\(island\)#Natural\\_environment](http://en.metapedia.org/wiki/Java_(island)#Natural_environment)

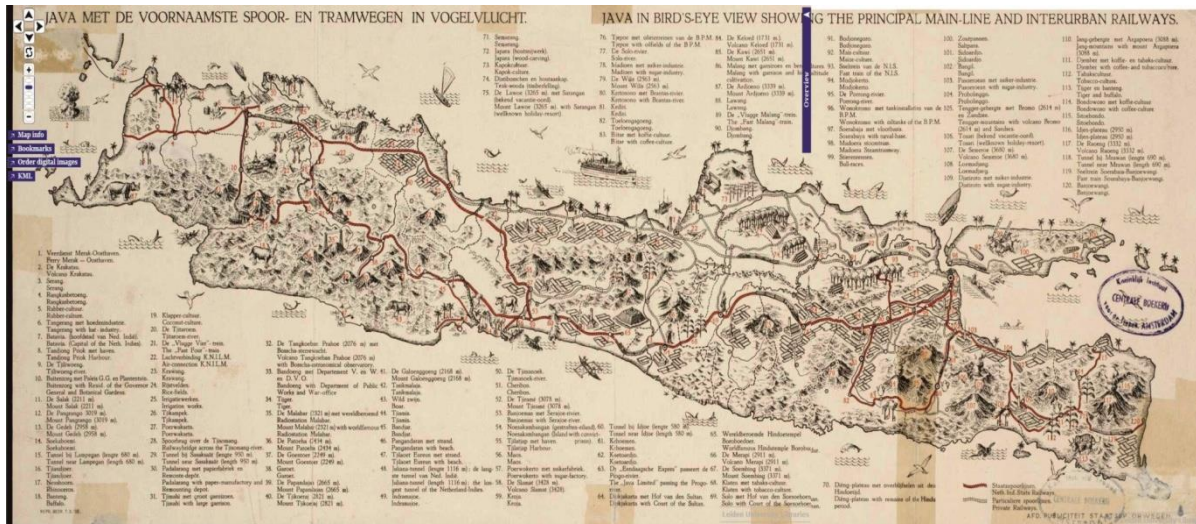


Fig. 1. Java bird's-eye Railway Map  
KIT542010

## Theoretical Frame Work

### How To Read A Building Architecture?

Architecture is a medium of cultural expression only to the extent that we are able to absorb its messages.<sup>75</sup> This statement has a deeply meaning. Architecture, in the end, is nothing more and nothing less than the gift of making places for some human purpose. Kostof asks us to think about why they are there, and why they are the way they are. They must be answered in relation to two extra material concepts: time and purpose.

Architecture, to state the obvious, is a social act-social both in method and purpose. Connect to the identity of the patrons, particulars about the motivation for the building commissioned, the identity and careers of the architects, the nature of the materials of construction and their provenance, matters of finance, and so on.<sup>76</sup> The material aspect of every building should be looked at in its entirety. The building should be thought of in a broader physical framework and not just in terms of itself. Third, all buildings of the past, regardless of size or status or consequence, should ideally be deemed worthy of study. And finally, the extra material elements that affect the existence of buildings should be considered indispensable to their appreciation.<sup>77</sup>

The Java railway architecture formed as a tool and result in the framework of the socio-technological system and the state formation in Dutch colonial age. The intellectual framework, expressing the contemporary society (spatial, commercial, social and cultural qualities of life), constitutes a tradition and ideology and shows a relatively unified visual and structural pattern. For this study, the collection of railways stations will be presented from the chronological time and explain its relation with the development of the railway company, railway constitution, concession negotiations between the colonial government, private company and the local ruler.

<sup>75</sup>Kostof, Spiro, *A history of Architecture: Settings and Rituals*, New York (Oxford University Press), 1995 (Second edition), p. 19

<sup>76</sup>Ibid, p. 2.

<sup>77</sup>Ibid, p. 8.

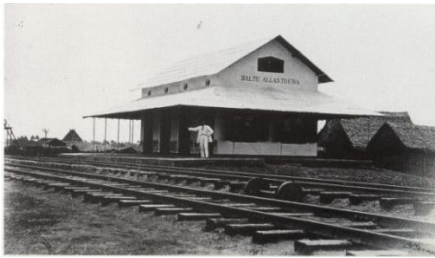


Fig. 2. NIS-Halte AlasTuwo (1867)  
<http://media-kitlv.nl>



Fig.3 SJS-Station Purwodadi (1884)  
Gedenkboek der SJS 1907

### Different Stage of Building

Architecture is, by its nature, a complex, multifaced field of study, meaning that no single approach can tell you everything you need to know<sup>78</sup>. To understanding of the architecture, there were several ways. As any other discipline, the history architecture is useful to learn architecture its self. It can be explained by using a biography of a building. The biography of a building is a story how architecture was created. The story line can be built through several ways. It needs a data such as an archive, recording and photograph. Information from an informant is also important to develop the story.

Biography is a (usually written) record, account, or narrative description of a series of events making up the life of a person (or thing). A biography is usually framed chronologically (from cradle to grave or from construction to the demolition) but it may focus on particular events, transitions, or memories.<sup>79</sup> This term can be used to seeing the life cycle of a building or something. It can construct the history of building from the creation to the end.

For the study of the Java railway station the biographical approach will guide to find the concept and to what happen after the building after has been build. How is it used and how does it work. It will bring to write to the heritage aspect.

### The Visual/graphic Analysis

As any other discipline, the analyzing architecture is useful to learn architecture its self. In the creative work, people observe and make an imagination to produce their work. It stimulates ideas to come up. Graphics analysis will be use in this study to analyze the typology and morphology of the Java railway station architecture. And the biography of a building is needed to explain the idea of the engineer and architect in the colonial era in the development of the railway architecture in Java.

Turning to the detail, Unwin gives a highlight that the person, who wishes to learn a language must listen, read, analyze and try it repeatedly for themselves, making mistakes and getting feedback.<sup>80</sup> There are two facets to our relationship with most subjects: the passive and the active, the analytical and the propositional, acquiring understanding and applying it in practice. In architecture mostly we meet with interplays of order and irregularity. The idea was to explore through the reconfiguration. It will guide the learner to find their own narratives and propositions. By using analyze architecture, the cultural

<sup>78</sup> Lucas, Ray, *Research methods for Architecture*, Laurence King Publishing Ltd, London, 2016, p. 21

<sup>79</sup> Jarvis, H, House Biographies, *International Encyclopædia of Housing and Home*, Elsevier, 2012

<sup>80</sup> Unwin, Simon, *Analysing Architecture*, London (Routledge) 2009, 3th edition



condition that influences the architect work can be refined. The logistical compositional and aesthetic outcome of the patronage was expressed in the series of the railway station.

#### I. Nederlandsch-Indische Spoorweg Maatschappij (NIS)

Name, Year, Architect	Picture, Floor Plan, Elevation	Typology 1860-1890:1890-1920:1920-1950 (I) (II) (III)
I.1. Alas Tuwo, 1867-J.P. Bordes		
I.2. Brumbung 1867-J.P. Bordes		
I.3. Tanggung, 1867-J.P. Bordes		
I.4. Kedung Jati, 1867-J.P. Bordes		
I.5. Padas, 1867-J.P. Bordes		
I.6. Telawa, 1867-J.P. Bordes		
I.7. Gundih, 1867-NIS, J.P. Bordes 1900-SJS		
I.8. Balapan, 1871-J.P. Bordes 1925-H. Thomas Karsten		
I.9. Puwosari, 1871-J.P. Bordes		
I.10. Gawok, 1871-J.P. Bordes 1900		
I.11. Delanggu, 1871-J.P. Bordes 1900		
I.12. Klaten, 1871-J.P. Bordes		
I.13. Kalasan, 1871-J.P. Bordes		
I.14. Yogyakarta, 1873		
I.15. Tempuran, 1871-J.P. Bordes		
I.16. Bringin, 1871-J.P. Bordes		
I.17. Tuntang, 1871-J.P. Bordes		
I.18. Willem I, 1871-J.P. Bordes 1903		

#### II. Staatspoor Maatschappij (SS)

Name, Year, Architect	Picture, Floor Plan, Elevation	Typology 1860-1890:1890-1920:1920-1950 (I) (II) (III)
II.A.1. Surabaya Kota 1878		
II.A.2. Gubeng, 1878		
II.A.3. Wonokromo 1878		
II.A.4. Sidoarjo, 1878		
II.A.5. Tangelan, 1878		
II.A.6. Porong 1878		
II.A.7. Bangil, 1878		
II.A.8. Pasuruan, 1878		
II.A.9. Probolinggo, 1884		
II.A.10. Klakah 1895		
II.A.11. Rambipuji 1897		
II.A.12. Jember 1879		
II.A.13. Kalisat 1897		
II.A.14. Mrawan, 1902		
II.A.15. Glenmore 1902		
II.A.16. Rogojampi 1903		
II.A.17. Banyuwangi, 1903		
II.A.18. Bondowoso, 1878		
II.A.19. Prajekan, 1897		
II.A.20. Situbondo, 1897		
II.A.21. Panarukan, 1897		

Fig. 4. The Java railway station typology

### Heritage Architecture

The one important thing to manage a heritage is the understanding of authenticity. There is some perspective of what is authenticity in relation to heritage. Authenticity can be a sense, political idea or imaged idea. Those views are not same but there is a connection. Authenticity is broadening, but it is connecting the place and time (the past, present, future).

Authentic elements are some sense a contrast with everyday experience.<sup>81</sup> It means authenticity come from what we fill about the place. It can be the uniqueness of object, an unordinary sign, and the thing that common and become unfamiliar in this day, the daily life that unusual in context. Through the sense people especially tourist will get a different experience.

Davison wrote heritage is essentially a political idea. As a state or nation, a group or people will try to found their identity. The objection of the action is the differences from other.<sup>82</sup> They create and reproduce national heritage. The purpose is to get authenticity.

Ashworth discuss about the objective of heritage is the contemporary consumption of the co modified past.<sup>83</sup> The main thing that should be done to co modified past is finding the authenticity. The target is to use in the contemporary way. In this way people try find an idea

<sup>81</sup> Urry, John, *The Tourist Gaze*, Sage Publication, London, 1990, p. 1-15

<sup>82</sup> Davison, Graeme, *Heritage from Patrimony to Pastiche*, in *The heritage reader*, Graham Fairclough et al London : Routledge, 2008, p.31-41

<sup>83</sup> Ashworth, G.J., *Heritage and the Consumption of Places*, in *Cultural Heritage and Tourism*, Department of Cultural Heritage under Ministry of Culture. Vilnius, 2008, p.193-197

from the past and use in present to generate the economy. We can say that heritage as an imagined idea.

Those three views are difference because the target and object are not a same. The sense, political idea and imaged idea cannot be explained in the same way, but in the term of heritage we can see there is a connection. The source of those perspectives took from the past and use or interpreted in the present. Due to that, those views can become a based to choose the strategy to restore, re-use or redevelop the heritage in purpose to the future.

### Research Design

This is an empirical research, looking the thing and information about it. There are two questions that should be answered in the end of the study of railway station architecture in Java. First, what values does this research expect to find? What will the global contour of this research advice for protection and redevelopment be?

To answer those questions the research starts with a chronological visual collection, categorised according to the railways firm. This is a way to visualise and compare the typology and the morphology architecture of the railway station. Then, the next stage of the research will try to find the position of the object in term of chronological manner. It can be a guide to dig the value in the frame of the historical layer. The things that should be searched from the object are when, why and what for they are there. The building should be looked at in its entirety and find the meaning of the object in its era. The target from that step is to find the value in the several aspects, for example the technology, the material and its contribution to the society. Gain inside into what is crucial in the building as a part of the cultural historical value. It will look at buildings as palpable images of the values and aspirations of the societies that produced them. It can answer the question why they are the way they are. Considered to the protection and redevelopment I will take an option with new activity. Related to the purpose it will be has a new vitality or function for present and future. Building produced with the aspiration of the societies that produce them.

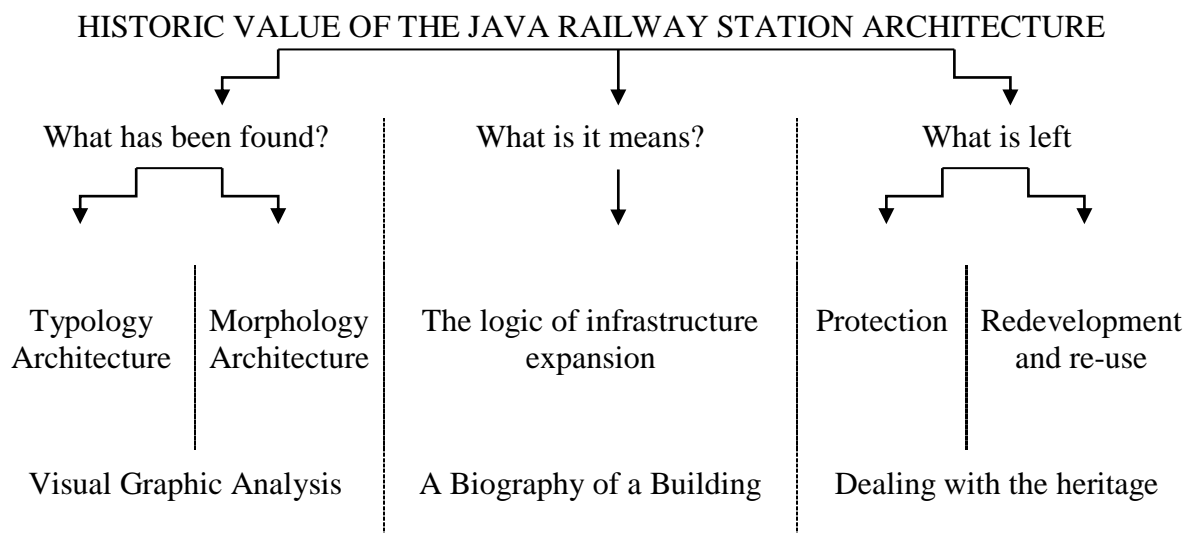


Fig. 5. Research framework diagram: Biography of a Building as an Interdisciplinary Approach  
For the Java Railway Station Architecture Conservation

This study allows the context to take the lead the research process. It is one way of establishing the primary importance of the physical, social or historical setting. The typical context will determine as one case and then provides an example of conditions the other place. As Lucas explanation, examining a context as a case study of a type-particularly with

reference to other circumstances following the same rules-allows a typology to be established: a repeating pattern.<sup>84</sup>

As an effort to write a history of the Java railway station architecture, the concept of what railway station should be on Java from the company were different. By the biographical approach, the material to what a story need to tell about the building will completely understand.

The concept can be traced from the policy of the java railway development. This policy would include different faces which are the planning of network as a vision in the whole system and the operational stage. The planning means the strategy and tactical plan such as a business stimulate, access to extend the line, financing and issuing concessions. The operational stage can be the condition what happen in practice. How the system was operated. What happen in real life when people use it? It is automatically turn to the heritage part because it is follow the building from the origin-genesis up till now. Then how is the future?

## Implication

How is the outcome for the Java railway station architecture heritage?

There is a lot of definition for heritage. Some scholars have their own perspective and argument to talk about heritage. From the authenticity idea, heritage issue can take a look further in the political idea debate. Ones of the definitions come from Sharon Macdonald (2013). She talks about heritage as an arena, from which selection can be made and values derived. In this study, Macdonald statement is important due to the point of view of heritage specifically in architecture. It cannot be separated to its arena which is the city development. Heritage in architecture cannot deny that it's colouring by the dynamic of the social-economic and political world.<sup>85</sup> It will proof the practices that did not survive, but that reveal a great deal about the dominant thinking in that time and place.

The architectural history of the Java railway station architecture and its heritage are a part of railway conservation discussion. The conservation issue followed cannot separate to the political condition. The historic building or area becomes a motor to re-development action in the economic need. No doubt, although there is some policy in conservation and preservation, the issue twist into another issue such as environment and economic issue in the shadow of political context (some case in Java).

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<sup>84</sup> Lucas, Ray, *Research methods for Architecture*, Laurence King Publishing Ltd, London, 2016, p. 11

<sup>85</sup> Macdonald, Sharon. "The European Memory Complex." In *Memorylands: Heritage and Identity in Europe Today*, London: Routledge, 2013, p. 17-19

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