A Deleuze Theory of Urban Morphology

Brunei Water City

By
Rémy Leblanc

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ABSTRACT

The impetus for this thesis was the theoretical shortcomings uncovered in the field of urban morphology and its French branch, IPRAUS, when the researcher first attempted to account for the form of the architecture in the case study of Brunei’s water city.

In this thesis’ first part, this field of study is critiqued, and a series of gaps in its theoretical framework are found. This thesis contests the main assumption of the field that there is a relation between the social and the production of architecture. The questions this thesis aims to understand are: how and why do people build their space the way they do? How do we think about the social and ecological relations that create subjects and bodies? How do we think about how the society is organized and organizes subject? How do we theorise and explore how society produces architecture and subjects? How do we conceive how subjects produce architecture and societies? This leads to call for the establishment of a new philosophical base for urban morphology.

The thesis then argues that work in other disciplines points toward Deleuze’s philosophy as a means through which to understand the reasons for the production of space. This philosopher provides ways to engage with a site, to create new research methodologies and to analyse and report findings. However, study with Deleuze, in the field of architecture, is still very much in its infancy. As such, this thesis offers an experimental, original work that explores how we might think about Deleuze, how we might bring Deleuze from philosophy to architecture and how we might convey Deleuze’s philosophical thinking through an application in a particular site.

The two sets of critiques, of urban morphology and of Deleuze studies in architecture, establish the two goals of this research: one theoretical, the other practical. The first goal is to develop the means to provide a better account of architectural and urban form. More specifically, this thesis investigates how Deleuzian theory might be suitable for urban morphology studies. The second goal is to experiment with the proposed theory in the study of an actual site, the water city of Brunei Darussalam. The intention of the second goal is to explore the effectiveness of the first.

The second part of the thesis aims to ground the understanding of a series of elements of Deleuze’s philosophical system chosen for their relevance to study the production of architecture in relation to the social. The methodology of study follows Anne Sauvagnargue’s proposed process of understanding Deleuze’s philosophy. It is a step by step work that uncovers the fundamental elements of this philosophy in his early works. These are little known to the architecture field. These findings then ground the philosophy of Deleuze and Guattari which has created an ontology.
and concepts which may be applied to the analysis of concrete social formations and their production. In this ontology, put simply, the world is understood as composed of forces. This thesis put forth that these are social, cultural, political forces—what is term power and desire forces, and ecological forces—that relate to organic and non-organic, human and non-human forces.

A first major contribution to this thesis is Deleuze and Guattari’s proposal of the concept of assemblage as the fundamental element of analysis. Assemblages are composed of forces; they have a certain power—an intensity and an ability to do, and a sense that comes with this power—an ‘incorporeal transformation’. An incorporeal transformation is ‘attributed to bodies’. The second contribution is Deleuze’s philosophy of immanence and its related philosophy of time. These allow researchers to conceive how assemblages are composed, formed and dissolved, and how they function. Assemblages are not fixed in time; as forces they assemble, produce, but also always look for better opportunities. They always become; and at a point in time, they disassemble and recompose into different assemblages; that is life.

From this work on Deleuze’s philosophy, this thesis proposes an ontology and a research design to study architecture in relationship to what we tend to understand as social, cultural, political, and ecological forces. It is defined that the form of architecture is part of assemblages, form-as-part-of-assemblage, in relationship with other assemblages. This thesis proposes to understand architecture-as-part-of-life. And a major shift that this thesis proposes for within urban morphology is not to give meaning to the form, but to give sense to it. To give sense is to find a series of expressions that relate to these social and ecological forces. Another outcome of this thesis is a research methodology termed a genealogical inquiry. It is a way of researching in time and space, transversally, the assembling and disassembling of all these forces which-architecture—is-part-of. The aim of this methodology is to understand and explain the form, process of formation, of architecture, and to give sense to these by describing a series of expression to forces.

The third part of this thesis experiments with this research framework in the site of Brunei’s water city. The genealogical inquiry defines three main eras of the relationship between the forces of interest. The first era concerns the period before the arrival of European powers in Southeast Asia. In this period, this thesis established two elements of importance. First, there is a significant impact of the political and the religious forces in the formation of the social organisation. If was found that there is an emphasis on the politic of the family group, the close and extended family. Also, there is the discovery that the social is organised in a strict hierarchy of ‘social assemblages’ following a nobility system, with at the top a Raja/Sultan. Second, there is a great importance of the relationship of the social with the water. This relationship shapes the economy, the relation to
other cultures, and social formations. Having given expressions to all these forces, the thesis argues that these as they are shaped, in parallel shape the form, process of formation, of the diversity of architecture. Brunei is built in the water, and the forms of the diversity of urban area reflects the powers and the opportunities that are acting in the social field in relation to ecological forces. What is associated to social and environmental forces shapes the built environment.

The second era happened when European powers took over the region. As they did so, they transformed the political system at the top only, and changed fundamentally the economic system. The thesis proposes that even if the form and diversity of architecture seem to remain the same as the previous era, a different sense to the form has arisen. This thesis’ description of the new composition of all the forces at play revealed this new sense.

The third era came forth with two factors. First, the colonial power gave back to the head of Brunei’s social system, the Sultan, all the country’s powers: political, economic and religious. The second factor was the change in the world economic system and its dependence on oil. Within an IPRAUS urban morphology framework, the meaning of Brunei water city’s current diversity of architecture would be given as follows: it is a form that is a modern vernacular form with the basis of that form being the form of the past, actualised by modern practices.

This thesis, however, proposes different findings: The diversity of architecture carries a different sense that reflects the struggles between political powers and subjects taking opportunities that are present. There is more than the form. The forces at play reflect the Sultan’s will to rectify the water city because the city is dying, slowly disappearing. The social fabric of the villages is dissolving, and so is its architectural fabric. Once only comprising only financially-independent Bruneian families, the water city now houses only poor Bruneians that cannot access the mainland or its economy, and immigrants that have found cheap accommodation and an entry into that economy. The sense of the water city's diversity of architecture is thus better understood by giving expression to the interplay of all these different forces: the form of architectures—built in the past, along with that lived by the lives of today.

This thesis conclusion theorises how the philosophical and experimental findings of this research might open a different approach to discussing and studying architecture than the current approaches offered in urban morphology and through IPRAUS. By returning to a discussion of the questions: How do we “explain the form, process of formation and diversity of urban areas [?]” (Kropf, 1993, 3), and ‘how do we theorise the relationship between the social and the architectural in urban morphology?’ the thesis identifies an ecology of problems, concepts and
presumptions. It proposes that Deleuzian philosophical concepts allow the limitations of current approaches to be transcended. Finally, by drawing on examples of the analysis of Brunei’s water city, the thesis emphasises a shift in ontology and method, which may be of use to others in broader efforts to work transversally within urban morphology in the future.
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My dear parents Bernadette et Jean Claude, Suzanne, Peter, and Sarah

And very importantly to Joanne, et notre little Marcellin
ABBREVIATIONS AND NOTES ON SOURCES AND REFERENCES

CITATION FOR KEY TEXTS DELEUZE

All but two references to Deleuze’s work relate to French editions

CITATION FOR KEY TEXTS BY KANT AND SPINOZA

Kant: Book title and section of the quote noted §
(CJ §49)

Spinoza: Ethic—E—Ethic title of the Book; II—book number; Ax Axiom, Dem Demonstration, Sc Scolies
(E; II; A1; Dem)

All other books are quoted following academic conventions

IN TEXT ABBREVIATIONS

MIB  Malauy Islam Baraja
ANBD  Arkib Negara Brunei Darussalam
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PART I—INTRODUCTION
- **Theory—Deleuze**

“I believe in philosophy as a system” (Deleuze, 2003b, p. 338)

- **Practice—Brunei as a case study**

“Allow me to offer a piece of advice for your work: in the analyses of concepts, one must always begin with very concrete [...] circumstances” (Ibid.)

**INTRODUCTION**

*Institut Parisien Recherche Architecture Urbanisme et Société*

This research started with the intention of using water settlements as an inspiration for studying how cities adapt to rising sea levels. The framework of the task was to perform an architectural analysis with the aim to “explain the form, process of formation and diversity of urban areas” (Kropf, 1993, p. 3). The theoretical background and method of study were those with which I have been trained.

As an architect and researcher, this research would be affiliated with the field of urban morphology. More specifically, I was trained by the French branch,1 the *Institut Parisien Recherche Architecture Urbanisme et Société* (IPRAUS). This multidisciplinary group of researchers includes architects, sociologists, urban designers and geographers. They have been called the anthropologists of space (Depaule, 1995). *This anthropological emphasis differentiates their practices from others.* IPRAUS aim to understand and explain how Wo/Man lives and builds space in Southeast Asia (Lancret, 2008).

In their practice, space is not considered a background object, but as a specific social production and the support of usages that are themselves specific (Depaule, 1995). Like anthropologists of Southeast Asia, IPRAUS consider that architecture “reveals the fundamental laws that regulate and organise the social relations of a group” (Lancret, 2008, p. 42). In their work, architecture “is not examined for what it is but for what it reveals and allows for the understanding of the population’s life and their social space” (Ibid.).

**Research aim**

This research evolved from theoretical shortcomings uncovered in the particular fields of knowledge in urban morphology and IPRAUS, while accounting for the architectural form of a particular case study site: Brunei’s water city. More specifically, it sets to question the existing theoretical framework that assumes the relationship between architecture and the social in urban morphology. This introduction explains why this research turned to the philosophy of Deleuze and what needs to be done to understand how this philosophy addresses these shortcomings.

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1There are three branches for urban morphology: the English branch, the Italian, and the French which shares close roots with the Italian branch (Moudon, 1997).
Notice

As a preamble to the following discussion, this section explains that, as this thesis starts, the word ‘architecture’ refers to the field architecture as the field of space’s study in all its scales. With ‘architecture’, this research refers not merely to the sense of architecture as a building, a material extension with a shape, *firmitas, utilias, venustas* (Vitruvius, 1960). The sense of the word is connected with its French understanding, a different meaning than the common sense meaning of the word in English. Moudon explains that French morphologists and architects refer to ‘architecture’ for the building as edifice, for space, for urban design, and for urban planning (Moudon, 1994). ‘Architecture’ here relates to what urban morphology refers as “form” and “diversity of urban areas” (Kropf, 1993, 3).

Critique of Urban Morphology and IPRAUS Theoretical Framework of Study

This section first introduces urban morphology—the wider field of this thesis’ knowledge—and to IPRAUS theoretical frameworks—its particular area of inquiry. It then critiques them to introduce the reasons for this thesis.

Urban morphology

The theoretical basis—Definition of urban morphology

Historically there are two schools of urban morphology: the British school created by M. R. G. Conzen, a geographer, and the Italian school of architects Muratori and Caniggia. IPRAUS has a relation with this Italian school. The different background of the founders has an impact on the approach both schools have on the scale of study. Conzen, a geographer, barely touches on the problem of the typology of buildings which is at the heart of the Italian and French schools.

With the founding of an urban morphology journal in the late 1990’s in England, the theoretical frameworks of this particular branch of the field were clearly delineated: “Urban morphology is a study of the city as human habitat” (Moudon, 1997). Urban morphologists study “how things fit together on the ground” and aim to understand the laws behind the process of the creation of form (Whitehand, 2001). The city is understood as “the accumulation and the integration of many individuals and small groups, themselves governed by cultural traditions and shaped by social and economic forces over time” (Moudon, 1997, 3). Urban morphologists focus on the concrete outcome of social and economic forces, “the study of the outcomes of ideas and intentions as they take shape on the ground and mould our cities” (Ibid.). Urban morphologists ‘read’ the city and analyse it through the prism of its physical form.

Moudon sets three clear principles common to all urban morphology methodologies:
Urban form is defined by three fundamental physical elements: buildings and their related open spaces, plots or lots, and streets. Urban forms can be understood at different levels of resolution. Commonly, four are recognized, corresponding to the building/lot, the street/block, the city, and the region. Urban form can only be understood historically since the elements of which it comprised undergo continuous transformation and replacement. (Ibid., 4)

There are thus three fundamental components of urban morphology study: form, resolution, and time.

Urban morphology studies are inscribed in time and space. The time component could be of two different natures. The first, synchronic approach, is the study of the structure or the condition of the urban fabric and how it is used or functioned in a single period of time Levy (1999). The second, diachronic approach, is the analysis of the process of transformation or evolution of the considered part or the whole area of study between synchronic periods. Its intent is to explain the mechanism of the urban form’s creation or evolution and transformation. This approach is linked to the history of urban form. It allows the comprehension of the processes by which transformations of the urban fabric happen from one stage to another. The synchronic and diachronic approaches can be used in the same study.

Urban morphology was founded on the study of medieval and classical cities. But the definition of each level of study, or the relation between buildings and open space in the cadastral framework, important in those cities, becomes irrelevant in the modern city. Levy (2005) points to the need for reinterpreting current elements of morphological analysis or to create tools for new means of study.

Urban morphology research question

A conclusion to this section on urban morphology is to re-iterate the clear goal of the discipline that becomes the overarching question of this thesis. Kropf describes it elegantly: how do we “explain the form, process of formation and diversity of urban areas”? (1993, 3)

And as posed by Moudon, there is the assumption of that relation that the social shape architecture, the form, diversity of urban areas (Moudon, 1997).

This thesis will critique this question and this assumption and propose a reconsideration.

**IPRAUS**

As written earlier, IPRAUS is a particular branch of urban morphology. This section exposes its theoretical framework and method of ethno-architectural analysis.

**Typology of living—Elements of access to the urban phenomenon**

The method used by IPRAUS to examine a given site is to isolate selected elements or situations that are considered remarkable in an urban ensemble. These are considered as “parts” that are significant in a system taken in its entirety. Thus a typological analysis is required. This analysis creates “types and systems that allow the analysis and the comprehension of
complex urban realities, of their physical, economic, social structures” (Jaupitre & Yong-Hak, 2001).

To understand the development of the urban fabric, IPRAUS propose the importance of understanding the articulation between two scales: the whole ensemble’s development and the “‘architectural type ’to inhabit”’ (Ibid., 238). IPRAUS refer to the broad sense of ‘to inhabit’: “the housing, the building, and its evolution—commercial activity or workshop, services, their adaptations to the local and urban economy—the social exchanges and the actions that participate in the ‘eco-politic’ of the whole system” (Ibid.).

For IPRAUS, there are two fundamental hypotheses prior to an inquiry. First, the architecture of inhabitation is the ‘emerging’ element of an urban system. Second, this architecture of inhabitation is “an expression of the specificity of an urban situation within which the system is elaborated” (Ibid., 239).

For IPRAUS inquiry on the site is the determinant work when studying an urban ensemble. The site is the only place that shows the reality, the detail, the “intimacy” of ‘the inhabitation’. An onsite inquiry allows for an assessment of the “adequacy and the performance of the ‘inhabitation’” of a given type (Ibid.). This perspective relates to the method of inquiry in this thesis, and therefore a brief overview of their methods is merited.

The investigators survey the building, draw sketches and diagrams, take photographs and carry out interviews with key informants. For IPRAUS it is important to document furniture as it indicates how life takes place. This method is both a form of architectural study and an ethnographic technique. In addition, consideration for the features that frame these inhabitations and constructions interest IPRAUS, such as how the buildings have been financed and their construction techniques (Ibid.).

**The house typology and its evolution**

Over the past thirty years, IPRAUS researchers have studied many different kinds of house typology in Southeast Asia. Lancret describes their work as a study of building typology in relation to the consideration of its inhabitants’ practices of space and to their culture (Lancret, 2008). Until very recently, the whole fabric of cities in the region were built by the inhabitants themselves. This is opposed to contemporary models where these are provided by third parties such as the state or private developers. Thus the house typology is an important element of focus. IPRAUS has identified the cultural practices and the production of particular given house typologies that reflect the traditional practices and beliefs of the people. In reference to the work of Devillier, they call these ‘vernacular’ traditional typologies the *practico-symbolic type* (Devillier, 1974a).

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2 In French: “les types architecturaux d’habiter”. This research proposes ‘to inhabit’ as the translation from the French word ‘habiter’ as IPRAUS use it. Here ‘habiter’ has the sense to inhabit, to dwell, to live in. In their theoretical framework, it refers to the architectural types that have lives in them. It does not refer to the domestic architectural type.
However, since the mid 1980’s changes in wealth, technologies and the culture of the studied societies have occurred in the region. Parallel to this, new typologies of inhabitation have appeared. IPRAUS have identified three new typologies and has linked them with the vernacular studied in the past or continuing to exist. They propose a new type with three categories. The first they name the *actualised type*, the vernacular type “modernised by successive adaptation of local architectures”. The second is the *invented type*. As its name implies, it is a typology created by inhabitants. This type comprises the negotiation and adaptation between models of reference anchored in the collective memory, and new modes of life that appeared with changes in socio-economic conditions. The invented type is built with elements of the past but with underlying intentions to be in rupture from that past. Finally, there is the *appropriated type*—the assimilation and deformation of a culturally exogenous type by the inhabitants. These types, even if dramatically different, are assimilated into local practices of space (Lancret, 2008, pp. 65-67).

Lancret asserts the continuity of people’s practices in the evolution of these types. She contends that this continuity reflects a belief in an ongoing evolution as a result of inhabitants’ deeply rooted social practices. Lancret formulates these assumptions based on her long experience in the field (Ibid., 68).

**IPRAUS research question, ontology, and epistemology**

The following describes the IPRAUS conceptual framework:

- IPRAUS conceptualise the object of study in a manner that attempts to embrace the complexity of the city as a whole made of a complex set of parts.
- They consider the social to explain the urban, and reciprocally the urban to explain the social.
- Typological analysis is their entry point to the understanding of the form and the social. But, in a way, they assume that the typological fact is a transcendental fact that applies and defines the study of the form.
- Similarly, they assume there are fundamental social rules, predetermined and transcendental to the system, that apply and determine all social facts.
- In both cases of typology and the social, they assume the prior existence of a sort of original and pristine culture: a seminal type that reflects the traditional culture of the past, untouched by the modern world.
- They are also interested in change in the system, and in the form.
- They define the concept of architectural type ‘to inhabit’. Architecture is not considered solely as a built form; rather, the building and the life in it and through

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3 IPRAUS early works in the 1960’s were ethnographic accounts of what were seen as traditional cultures in Laos, Thailand, Vietnam and Singapore. IPRAUS subsequently have witnessed and followed the economic growth, the built form and cultural changes in these countries.
it are co-dependent. This relationship is assumed, although no specific explanation is given as to how it comes about.

As a conclusion to this section, this thesis notes the IPRAUS framework of study, like urban morphology, includes the study of form, resolution, and time. However, contrary to the English school and in parallel to the Italian one, its focus is on typological analysis. It should be noticed that what distinguishes IPRAUS from the other two branches is the clearly stated interest in linking architectural and ethnological studies.

So, IPRAUS research questions and methods relate to the wider field of urban morphology:

- How do we explain “the form, process of formation and diversity of urban areas?” (Kropf, 1993, p. 3).
- Within this field, the special interest of IPRAUS is to study how Wo/Man lives and builds space in Southeast Asia? (Lancret, 2008).

Like urban morphology’s statement, but more clearly affirmed, IPRAUS understand architecture, the form and diversity of urban areas, as a result of social, cultural, and political outcomes. This is why their practices of architectural studies are ethno-sociological.

The above sets a theoretical and methodological approach to give an account of built form. The following section explains in brief the initial field study research of this thesis. It shows how this research accounted for the Brunei water village with IPRAUS methods before the necessity arose to turn to Deleuze’s philosophy.

Site—Rationale for case study

As explained above, this research started with the intention of studying the forms of water settlements as an inspiration for studying how cities adapt to rising sea levels. The theoretical background and method of study were those of IPRAUS.

The early research showed that there had been very few studies devoted to water villages or living on the water. The few existing have been done in the field of anthropology and sociology. Google Earth became a useful tool for identifying villages in addition to the few known to researchers. The vast majority of existing villages were found to be located in Southeast Asia, notably along the sea shores and riverbanks of the Island of Borneo. Among them, Brunei Kampong Ayer stood out. A little-known tourist destination, it has not been widely studied: a single study in English related to its architecture was published in 1985 (Brown, 1985). This research focused on this settlement because it seemed to be an actual

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4 The only in-depth research that has been published is about the village of Bangau Bangau in Semporna, Malaysia (Borneo island). It dates from twenty years ago (Sather, 1997).

5 Other villages have been identified. There is the Makoko village in Lagos Nigeria, Africa, studied by Rem Koolhaas and his student; Koolhaas never published this research. Another is Nocoué in Benin, on a lake. Probably the best-known is that on the Lake of Titicaca in Peru. There was also that on the delta of Euphrates in Iraq, destroyed by Saddam Hussein.
city, unlike all the others: it has “modern” houses, schools, police stations and fire stations. Another atypical characteristic of Kampong Ayer is that it was founded 1,300 years ago.

At that time, noticing the difference between Brunei and the other sites, the research shifted its attention to an attempt to understand the architectural form of this water city and how it is inhabited.

The initial aim of the research was to apply IPRAUS methods—to read and inquire about the living built form with the understanding that the social and spatial have to be studied at the same time. Following IPRAUS, the work’s hypothesis was: *the social orders space*.

The first step of the analysis was to draw the figure ground of the Brunei’s water city main settlement and to separate the different typologies of building and infrastructure (following figure 1 and 2).
Contrary to Brunei’s figure ground, in this diagram of an ancient western city, right away one gets a sense of the many urban situations.

Source: Nolli Map of Rome in (Lang, 2005)

**Figure 2** Figure ground plan in 2009

**Figure 3** The Nolli Map of Rome—1748
The result was intriguing. I had been trained to read Western cities, and those I had studied in Asia were settled on Western principles.6 In Brunei, one can recognise indeed an aggregation of buildings that forms a settlement. But from this first diagram many of the Western city’s existing traditional a priori categories cannot be read. There are no roads, public places or back alleys (see Nolli figure ground figure 3). In the ‘water’ figure ground diagram there are only footpaths and ‘canals’ for the circulation of boats. There are no public spaces or car parks. What is the status of the water—an infrastructure; a piece of landscape? House areas on average are a remarkable 300 square metres. There is no city block. So, how is the urban fabric organised? The drawing and study of this diagram revealed this research could not follow western categories of the built form.

This was a first problem that would lead this thesis to question the IPRAUS theoretical framework.

Following the IPRAUS programme, the research started with the typology of the house. At that scale, it was confirmed that there is a spatial order linked to a way of life. It was also possible to understand the evolution from a traditional type—practico-symbolic, to the current model through the 20th century. In time, in all types, there is a persistence in the organisation of life, spatial and social, within the house.

The research then focused on understanding the urban composition. According to IPRAUS, to study the whole urban form, other significant typologies of different built scales must be found. In Brunei, these should be composed of houses and be typical of the whole system. This research quickly understood that the village constituted another type within the system (Brown, 1970). It was also found that the village is composed of groups of houses that belong to the same extended family. It was also found that in the village and in the group of houses, the social orders space.

The research turned to the study of the water city. In Brunei each village has a social function. The thesis first proposed that the water city is simply an aggregation of villages, where the location of villages depended on their social rank and economic importance.

The research proposed that the city was an aggregation of scales. First, there is the house. Second there is the group of houses, then third, the village. In Brunei, social structures determine the whole organisation in time and space of the life and the physical production of space.

This is a sample of the findings at the time, typifying the functioning of the whole system according to IPRAUS theory and practice. With the hypotheses that the social orders space, and with IPRAUS methodology and theories, this research was then in a position to communicate new knowledge in the field of architecture.

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6 Hanoi, Jakarta, Singapore, Tokyo, Kuala Lumpur have strong relations to Western urbanism.
Critiques of methods and theoretical frameworks

However, there was something missing. It was intriguing to think one could approach the study of the form of any city in the world through the lens of the study of the social. This means that for any urban and architectural research, to understand the form, process of formation, and diversity of urban areas, one has to understand the social organisation and relations. This research prompts such questions as: how would one describe the form of Paris—the grand boulevard, the monuments that form the centrepieces of the urban plan; how would one talk about New York’s gridiron; how would one to describe Singapore’s very particular form of urbanism?

The formal requirements for a PhD of having a firm theoretical framework that adequately explains one’s research led this research to question urban morphology and the IPRAUS framework.

The primary question this thesis raises is how and why does the social organise the production of space? IPRAUS states that relation (Lancret 2008, Moudon 1997), but fails to provide an explanation. It is almost as if they assume this relationship. In their works, this thesis has not found a coherent theory to explain why it is so or how it operates.

Secondly, a first look at the analysis of the site as described above shows that the thesis could have explained in some ways the form, process of formation, and diversity of urban area. But again, this thesis asks what is the theoretical background of the main question and its ecology of related interrogations of the field of urban morphology. How do we explain why the form is as it is? Why is the process of formation performing as it does? And why is the diversity of the area as such?

The following is an overview of the questioning that arose while returning to the analysis of the site’s study.

Looking at the analysis, the thesis asks, in relation to the form— or exploring the more general question of how individuals conceive and build their spaces:

- Why did Bruneians build these types of houses in the past? Why did they choose that form? Why in the 1990’s did they choose to build these new forms but still choose to live on the water?
- This led to the more general question: why is it that we build our living spaces the way we do? How do we create our places and inhabit them?

This thesis was unable using the IPRAUS urban morphology theoretical framework to give a coherent account of the forms of architecture or the urban areas as they are.

In relation to the questioning of how we explain the process of formation of urban areas, the research asked a series of questions:
- How did change happen in the form and diversity of urban areas in Brunei? As mentioned above, Lancret conceptualises the production of the living type and its evolution. She proposes at first a practico-symbolic type, a sort of vernacular type. She then describes three types that result from changes in economic background. This research has found the same phenomena. In Brunei, villages change in parallel to the change in the house. But there seems no plausible explanation of why this change happened. Why, as Lancret says, even in all these modified types there is still a sense of traditional life? What are the mechanisms of this change?

- Why in the particular aquatic setting of the Brunei settlement, did Bruneians proceed to build on the water? This research aims to understand how individuals use their environment and how it affects the choices made to build their homes and the form of their habitats.

Dealing with the theoretical background to explain the diversity of urban area, the thesis asks another series of questions:

- When considering the houses and villages in Brunei’s water city, this investigation asks how to account for both the commonality and diversity present. Literature reveals that villagers agreed on a common form of house; typologists and morphologists aim to define that type. This research on the organisation of a few villages showed they shared common features. There seems to be a shared culture that predicates the production of the whole city, to all its parts. However, an analysis of the planning typology reveals that all villages and their houses are different in form; each has a distinct form. This research would like to investigate whether there is a theoretical framework that implies this relation of commonness and singularity? If so, how can one explain why villagers follow one culture of construction but also experiment and produce something that is personal and singular?

- What theoretical framework replaces the study of the city as an aggregation of elements following different scales? The research initially followed the IPRAUS approach to give an account of the form of the city by initially proposing the city to simply be an aggregation of the elements comprised in the successive urban scales of house, group of houses, village. But two comments made by Lancret changed this approach. Lancret (Lancret, 2008) reports that with the change of scope in their research the IPRAUS method came to be challenged. She suggests that typological studies cannot apply to the study of cities in general, as the city is too complex to be apprehended as a type. In addition, IPRAUS are now no longer studying only building and urban typologies but exploring wider urban territories, cities, and regions. For Lancret, typology can no longer be assumed to be the way to understand these kinds of studies. Given these constraints, this thesis seeks to find an alternative theoretical framework.
**A call for theory**

Following on from the previous point, Lancret described how IPRAUS started to reflect on their theoretical framework and methodology. Exploration of the selected site revealed a series of problems that have become apparent in urban morphology and the IPRAUS theoretical framework and methods. While this research is able to provide an account of the form, process of formation, and diversity of areas, it also questions the value of this account in relation to the social. Using urban morphology and IPRAUS theoretical framework, *this research was unable to propose a coherent argument to support it.* This inability set the goal of this thesis.

In 1999, Mugavin in an urban morphology journal calls for a “philosophical base” for the field (Mugavin, 1999). He states that while a debate occurred, the ideas upon which it was based have long been surpassed. This thesis aligns with Mugavin in this call for a philosophical base.

As Hubbart writes (Hubbart, Kitchin, Bartley, & Fuller, 2002), philosophy is simply the theory of the theory. The goal of a theory is to provide a set of principles to engage and understand the world. A theory aims to create a set of consistent rules, it aims to create internal consistency to minimize erroneous beliefs and contradictions (ibid., p. 3).

With fieldwork and its analysis, this research has confronted more shortcomings in IPRAUS and urban morphology’s theoretical framework than they acknowledge. This sets the agenda of this research:

> The primary aim of this thesis is to find new elements to rework the ontology and research methodology for the field.

**Thesis research questions**

The research questions remain those in the field of urban morphology and IPRAUS.

- In relation to the wider field, this research continues to ask:
  > How “do we explain the form, process of formation and diversity of urban areas [?].” (Kropf, 1993, 3, emphasis mine)

- In respect to IPRAUS, the thesis aims to explain:
  > How Wo/Man lives and builds space in Southeast Asia? (Lancret, 2008).

- But also, the research aims to question IPRAUS and urban morphology’s main and unfounded assertions:
  > How do we understand and theorise the relationship between the social and the architectural in urban morphology?

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7 Only three papers are quoted and, since 1999, no other paper has been published positing or proposing a theory to account for the form of architecture.
Along with Mugavin (Mugavin, 1999), this research questions elements of the theoretical foundations of urban morphology and IPRAUS. This sets the goals of this thesis:

1. To define a theoretical framework that establishes the relationship between the social and the architectural.
2. To experiment with that framework on a given site.

The rest of this introduction focuses on explaining why Deleuze’s philosophy was chosen for the theoretical framework.

**DELEUZE’S PHILOSOPHY AS THEORETICAL FRAMEWORK OF STUDY**

*Critiquing looking outside architecture: Deleuze’s field of study*

It seems the problems this thesis found in IPRAUS relate to the following arguments. Architecture critic Andrew Leach defines the end of the 20th century as a period of crisis of thought for the field. Architecture must engage substantially with other disciplines, and cross boundaries to expose the weakness of past arguments. By doing this the nature of the architectural domain will be altered (Leach, 1997). At the same time, in the field of critical urbanism, Brenner identifies a related phenomenon: urban studies were mired in an “urban impasse” (Brenner, Madden, & Wachsmuth, 2011, p. 226) because of outdated research agendas: the urban question needs to be reposed in the light of contemporary conditions.

In the light of Mugavin, Leach, and Brenner, this thesis proposes that IPRAUS thought about space conventionally. Even if they understand the life in space, space is still understood as “measurable and calculable” in the words of Grosz (Grosz, 2001, p. xix).

Grosz led the way for new research to explain the production of architecture. She asks how we can understand space differently. She proposes and champions “experiments, conceptual or philosophical experiments [...] to render space and building more mobile, dynamic, and active, more as force”, to look more in the direction of “time, duration, or temporal flows” (Ibid., xvii). In two seminal works Grosz uses the philosophy of Gilles Deleuze to conceptualise architecture differently (Grosz, 2001, 2008). Jobst (Jobst, 2013) and Brott (Brott, 2013) show how this philosopher has been of interest for architects since the 1990’s. They explain how, with him, architects have been able to think and talk about architecture differently. Frichot asserts that currently the study and the experiment of Deleuze by architects and researchers is intensifying (Frichot, 2013).

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8 This is linked to a different understanding of the social.
This research is placed in this field of study. To understand the relationship between architecture and the social, to rethink the theoretical framework of how to explain the form, the process of formation, and the diversity of urban area, this thesis will experiment with the philosophy of Gilles Deleuze.

This leads this research to another series of research questions:

What is Deleuze’s philosophy? What are the parts of Deleuze’s thought that relate to this thesis?

This next section briefly introduces Deleuze. Who is Deleuze? What has been done about Deleuze in the field of architecture? What has been done in the social field? It establishes what work is left to be done for to use Deleuze’s philosophy to answer this thesis research questions.

**Deleuze in context**

To better explain Deleuze it is necessary to make a short genealogy of his work, to put the evolution of his thinking and the translation of his work into English in an historical perspective.

There are two main phases of his work which are of interest to me: before and after his collaboration with Guattari. The first phase has two parts. First, Deleuze writes monographs and articles on different philosophers. These works will provide the components and departure points for his own philosophical thought. Even if these works are about others, they include philosophical views that are important for his later work. Second, between 1968 and 1969, Deleuze publishes what he considers to be his two first personal philosophical works, *Difference and Repetition* (Deleuze, 1968a) and the *Logic of Sense* (Deleuze, 1969). In them he develops a philosophy named transcendental empiricism. These books contain his particular ontology, epistemology, and method. They were translated into English after the publication of his next two works in French and in English. *Difference and Repetition* was translated in 1994, ten years after the volumes subsequently presented. 9 For this reason they are much less known in fields outside philosophy (including architecture). But also, these two works are purely philosophical. Contrary to the next two, a student in architecture would be hard pressed to read them and find anything to work with. But these works are essential to understand all the concepts that are important for this study.

The second phase happened when Deleuze and Guattari started collaborating. Guattari, a psychiatrist and Marxist, contacted Deleuze after the publication of *Difference and Repetition* and *Logic of Sense*. The collaboration led to the production of the two famous volumes of *Capitalism and Schizophrenia*: *Anti Oedipus* (Deleuze & Guattari, 1972); *A Thousand Plateaus* (Deleuze & Guattari, 1980); and a late work that had a lesser impact *What is Philosophy?* (Deleuze & Guattari, 1991). This collaboration, as Sauvagnargues describes, produced the

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9 26 years after its publication in French, and importantly fourteen years after the publication of *A Thousand Plateaus* (Deleuze & Guattari, 1980).
operationalisation of Deleuze’s philosophical concepts (Sauvagnargues, 2009). *Anti-Oedipus* and *A Thousand Plateaus* touch upon great practical examples. Many of the addressed themes appear extractable, and usable. Many architectural documents refer to these works. But this thesis contends that they do not understand the ground of this philosophy. The point is that the philosophy underlying the examples in *A Thousand Plateaus* is difficult. The explanation of it, in many parts of the books, is very succinct and obscure. This is because it often relies on concepts that are only really understandable through engagement with Deleuze’s previous works. The transcendental empiricism of *Difference and Repetition* and *Logic of Sense* is assumed (Sauvagnargues, 2009). Deleuze and Guattari’s work relies on thoughts developed earlier.

Deleuze and Guattari’s aim was to subvert conventional logic and traditional norms of intellectual etiquette. As Bogue writes, commentators have stressed the “mischievous nature” of their production. However, he challenges the claim that they have said little about the systematic coherence of their work (Bogue, 1989). More than a series of concepts, there is coherent and established thinking in Deleuze and Deleuze and Guattari’s work.

Two points are to be made here. Firstly, this research argues that Deleuze’ philosophy can only be understood if the ground work is done to explain Deleuze’s earlier philosophical system. This is because Deleuze and Guattari’s philosophy and the ontology it contains are elaborated in *Difference and Repetition*. Secondly, this research argues that there exists a coherent and established system in Deleuze. In two articles he lays it out: “What is structuralism?” (Deleuze, 1988d) and “The method of dramatisation?” (Deleuze, 2002b). This thesis is interested in determining enough of that philosophical system to be able to understand and use Deleuze to study architecture.

The following sections attempt to discover whether Deleuze’s philosophy can be used to study social thinking and architectural thinking. First, it is examined if Deleuze talks about architecture at all.

**Deleuze and architecture**

This is only an introduction about Deleuze’s work relating to architecture. This section focuses on five points that seem important for the research’s argument.

First, Flaxman points out that Deleuze develops a “whole variety of spatial modalities” (Flaxman, 2005). For example from *A Thousand Plateaus* (Deleuze & Guattari, 1980), there are the famous concepts ‘smooth/stratified’, ‘molar/molecular’, ‘territory’, ‘milieu’, ‘deterritorialise/reterritorialise’. These concepts are *relational*; relations are in time and space. This relational effect renders the description of space dynamic. So, Deleuze and Deleuze and Guattari talk about space, and his philosophy relates to space.

Second, in the same text, Deleuze speaks briefly about home: “now we are at home. But home does not pre-exist: it was necessary to draw a circle around that uncertain fragile centre, to organise a limited space” (Ibid., 382). To create a home “involves an activity of selection”,
to “keep the forces of chaos outside” (Ibid.). Later he writes of home as the territorial assemblage of a human (Ibid., 692). Here again, Deleuze talks about space, in a relational manner: a productive activity that is dynamic. That creation of home starts with the subject. This means here that there is a co-creative relationship between the social and the architectural.10

Third, in _Foucault_ (Deleuze, 1986),11 Deleuze talks explicitly about architecture. He describes how, for Foucault, powers organise space and such spaces affect our power. He talks about the _panopticon_, a form of prison from the late 19th. Describing that form of architecture is not to talk about prison-form, but to talk about a series of expressions that describe the social and political forces in the society of the time. For the moment, what is important for this thesis, is that Deleuze aims to talk about architecture through a series of statements that have a social and political character. Again, Deleuze links architecture and the social in his philosophy.

Fourth, in _What is Philosophy_ (Deleuze & Guattari, 1991), Deleuze and Guattari include several pages specifically discussing architecture. Their discussion is the result of a dialogue with architect and theorist Bernard Cache, Deleuze’s former student. For Cache, architecture “would be the art of introducing intervals into a territory in order to construct frames of probability” (Cache, 1995). For Cache, and subsequently for Deleuze and Guattari, architecture is the art of the frame. Deleuze and Guattari link this to their thinking that art is a block of sensations. Grosz writes that for Deleuze and Guattari, the contribution of architecture is to create territory, taming the uncontrollable forces of earth (Grosz, 2008). She explains that territory is a fabrication of space from which sensations emerge, through extracting rhythm from the earth (Ibid.). Walls, floors, windows, etc. frame and produce blocks of sensations. Inside space, from our bodies, an abundance of sensation and actions are extracted from the outside. She continues, “Territory frames chaos provisionally, in the process produces qualities”, and “framing is how the chaos becomes territorialised” (Ibid., 16). Sensation is possible because of this taming. But Payne points out that Deleuze and Guattari always bring the action of de-territorialising, de-framing following lines of flight that pass through the territory only in order to open it onto the universe, that go “from the house-territory to the town-cosmos” (Deleuze & Guattari, 1987, p. 187; Payne, 2012, p. 22).

So Deleuze, with Guattari, talked explicitly about architecture late in his career. He talked about walls, roofs, windows, architectural elements. But it is not the form that is important. It is what _architecture does_. Architecture is dynamic and relational, composed and recomposed; provisional. Importantly here, architecture relates to the subject, that which enters in relation with it; and it is a mutual relational creation. Architecture affects and is affected, the subject is affected and affects. This thinking demonstrates a link in Deleuze’s philosophy between architecture and subject—that is the social. One last element, the house-territory is linked

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10 This research acknowledges that in _the Fold_ (Deleuze, 1988c), Deleuze talks about the very particular baroque house. But this is a conceptual house. His reflexions are purely philosophical and do not concern architecture.
11 He develops a point made in a _Thousand Plateaus_.

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through different scale to the cosmos. In Deleuze’s philosophy, many different scales of space are related.

Finally, for Flaxman (Flaxman, 2005), there appears to be difficulty in giving an exact definition of how Deleuze conceptualises space. This is because an exact definition would be against Deleuze’s work: to rethink how representation is thought, what Flaxman terms the “malady of representation” (Ibid., 177). Deleuze’s philosophy aims to “de-territorialise the ground of representation” (Ibid., 176) because representation is a “second order process” (Ibid., 177). Representation is an actualisation that is happening by “grafting order to the ‘delicate milieus of overlapping perspectives, [...] of heterogeneous potentials and intensities’” (Deleuze, 1968a, p. 72). Differences and intensities are concomitant to space and appear as “a linear limitation and flat opposition” but really they “live and simmer in the form of free differences” (Ibid.). Behind the mask of representation there are forces, acting and reacting, coagulating and dissolving. How one engages with space is born out of the depth of perception: we feel the depth of representation. Flaxman asks what it would mean to define space as depth, difference and intensities, rather than “according to the diversity of extension and figure?” (Flaxman, 2005, p. 182).

Flaxman here discusses the aim of Deleuze’s philosophy. An exploration “against representation” underpins the construction of Deleuze’s philosophical system. To rethink representation, Deleuze brings back sensation, and affect thinking. His philosophy theorises the link between subject and space within one continuum of co-creation. So, in conclusion, for Flaxman, the entirety of Deleuze’s philosophy is to understand and theorises the relation subject/space.

This section shows some of the relations between Deleuze and architecture/space. First, a series of concepts, each with different conceptualisations of space, are described. Then, this section shows that Deleuze’s philosophical system aims to reconceptualise how to think about space, with the subject—a concept related to social thinking—at the centre of his philosophical reconstruction. This shows the importance of understanding Deleuze’s philosophical system for the study of architecture.

**Architecture/Space and Deleuze**

Deleuze talks about architecture, but does scholarship relating to space and architecture (really) talk about Deleuze? This section provides a brief review of how Deleuze is talked about in these fields. This of course cannot be an exhaustive work. This introduction relies on Edinburgh University Press’s collection of books about Deleuze, the titles of which all start with *Deleuze and...*. These books are understood as an indicator of how architectural discourse considers Deleuze and space. The hypothesis is that these books, of different
themes, represent a good cross-section of the discussions occurring in the fields of interest for this thesis.\footnote{There are currently 24 books in this collection. From this research’s readings four are presented in this introduction, but it is to be acknowledged that some others could be relevant. \textit{Deleuze and Performance} (Cull, 2009), \textit{Deleuze and the Body} (Guillaumé & Hughes, 2011), \textit{Deleuze and Ethics} (Jun & Smith, 2011), \textit{Deleuze and Post-Colonial Studies} (Bignall & Patton, 2010), \textit{Deleuze and History} (Bell & Colebrook, 2009) are interesting reading. But except for part of one or two articles, they do not inform this research directly.}

**Deleuze and Space**

In \textit{Deleuze and Space} (Buchanan & Lambert, 2005), the editors present Deleuze’s philosophy as solving the need to overcome Euclidian, Kantian, dialectic and triadic thinking of space. They present this book as a partial description of how Deleuze and Guattari’s ideas have transformed the way of thinking about space in various disciplines.

In one essay, Harris describes Cache and Deleuze’s talk about space commented on above (Harris, 2005). Of interest is how Harris briefly uses the way of thinking to describe Rodia’s Watts Towers. Harris uses affect and perception to reveal the forces that create the space. Deleuze’s concepts give life to the form, demonstrating his relevance. However the space is talked about without a social and ecological account. Some powers of Deleuze’s philosophy are lost.

Frichot describes a series of concepts, though each not in relation to each other (Frichot, 2005). She suggests that architects are pickpockets. They take concepts and experiment. She does the same, putting a series of concepts side by side. This research do not agree with this kind of presentation. This research proposes that there is a logic in Deleuze’s philosophy and that it is lost in this presentation.

Flaxman’s article was discussed above. It revealed that Deleuze’s philosophy is about rethinking representation (Flaxman, 2005). Conley’s article has the same aim but uses different material from Deleuze’s writings. He shows that Deleuze’s philosophy is deeply related to spatial thinking (Conley, 2005). These two articles are fundamentally philosophical and do not relate at all to any practical outcome. They show that Deleuze’s thinking is about space, but do not aim to explain Deleuze’s philosophy in detail or how it can be applied.

Colebrook’s article is also a philosophical account (Colebrook, 2005). But what it presents is an introduction to the importance of Deleuze’s thinking of the subject’s process of creation. Of importance here is the demonstration of the concept of affect.

Finally, Dewsbury and Thrift’s chapter attempts to explain how the discipline of geography also questions its own foundations when confronted by Deleuze (Dewsbury & Thrift, 2005). They ask, “How does space fare when we set out onto the open seas of Deleuze’s transcendental empiricism?” (Ibid., 89). They state that “Deleuze turns space into a moving concept” (Ibid.). Their article is a series of statements describing Deleuze’s philosophy rather
than an explanation. In this chapter they do not give answers as to how Deleuze’s philosophy affects studies in geography.

For this, this introduction turns to two particular references in the field of geography. The Deleuze and ... collection is left for a moment. These two articles, in a sense, show how geography took an ‘affective turn’. They place themselves in the framework that “architecture design operates beyond the symbolic and representation interpretation” (Kraftl & Adey, 2008, p. 213). They both refer to non-representational theories in vogue in the early 2000’s identified mostly with Thrift—the co-author of the above book chapter. Thrift argued that the focus of geography and cultural studies at the time was too much on textual explanations, the search for meaning of representation. However, Lees suggested that in fact a focus should be on practice and affect (Lees, 2001, p. 53). Lees writes that for Thrift, buildings indeed are built, with some intent. But they are also lived, inhabited, and practiced. Places are embodied and performative, thus the turn to affect. There are some connections with Deleuze in Thrift’s theorisation (Thrift, 2004). So what is presented here is not Deleuze per se, but non-representational theories that also refer to affective thinking.

Lees is interested in Moshe Safdie’s Vancouver library (Lees, 2001), then new. The design is an elliptical building with a classical façade and some interior spaces that take other ideas from the Roman era. As a representation, it would be easy to interpret the symbolism in relation to the Colosseum. But what interested Lees—and what the current theory could not or did not want to account for—is the diversity of inhabiting practices that have appeared within the buildings. Lees accounts for the practices of homeless people, some appropriations done by the elderly, for example the use of the cafe inside the atrium. Users of all sorts came to create different relations with the space. For Lees, both the symbolism and the account of everyday life, of affect, tell the story of the space. She calls for changes in geographers’ theories.

Kraftl and Adey write that not enough has been made in the field in the affective direction (Kraftl & Adey, 2008). Contrary to Lees’ work, they looked at two places that have been designed with the intention of creating a certain affect. Their focus is how the buildings have been designed to intentionally limit certain affects, on how they “inflect affect” (Ibid., 215). Their interest is that creation of affect, the manipulation of material and discourse to create certain sensations. Their practice departs from textual research and those that see space as neutral. What this thesis found interesting is that their conclusion appears largely oblivious of Lees’ perspective. Space creates affects, which can be manipulated. But they show in their text that how the space is inhabited often does not reflect what it was intended for.

What is of interest for this research is how the two articles introduced an affective approach to space. They both point out, with affect thinking, a subject that relates to a space and vice versa, the relationship that exists between the social and the architectural. These works have

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13 In my reading, Dewsbury is a Deleuzian (Dewsbury, 2000). Thrift is connected to Deleuze but he is not Deleuzian. He works with many more references. See Lees’ note 33 (Lees, 2001, p. 80).
shown how to use affective thinking as a theoretical framework and how to use Deleuze. But both of these ask for more studies in that direction, more experiments.

**Deleuze and architecture**

The following section returns to the field of architecture. It seeks the relations that have been made between Deleuze’s philosophy and architecture and how they can be used for this study.

The editors of *Deleuze and architecture* argue that architecture has “renewed its investments in social concerns and the politics of space, becoming increasingly more open to new and vibrant material understanding of a fragile world that is intricately and globally connected” (Frichot & Loo, 2013, p. 5). Their aim for this collection was to “provide critical genealogies of Deleuze’s influence in architecture as well as critical commentaries [...] on the relevance of this philosopher to the discipline” (Ibid., 6). Five chapters that are relevant to this thesis are discussed in the following section.

The first chapter is a genealogy of how Deleuze influences the field of architecture. Jobst surveys anthologies of architecture’s theory. He details three different periods of engagement between the field and Deleuze (Jobst, 2013). He asserts that architects would take Deleuze’s concepts from the 1980’s and play with them, and identifies problems with this period. First, the architects approached these concepts very pragmatically. Deleuze’s words offered them different ways of talking and justifying their practice of space production, but for Jobst, architects of the period did not really engage with the philosophy. Second, in many cases, the vocabulary used was Deleuzian, but Deleuze was never quoted. This practice reflected what might be considered a plagiarism of concept.

The second period comes in the 1990’s. At that time, architecture practices were rapidly adopting computers. New ways of generating space were appearing, notably parametric architecture. Two of Deleuze’s concepts were primarily adopted: the ‘virtual’ and the ‘fold’. Jobst is adamant that while all these practitioners were using concepts as a toolbox for thinking, the real foundations of the philosophy was not at all understood or even thought about. According to Jobst, this led to many misinterpretations of the work of Deleuze (Ibid., 66).

Jobst noted two books by Andrew Ballantyne (Ballantyne, 2005, 2007), linking Deleuze and architecture. Ballantyne clearly stated, “most of the time I have avoided the metaphysical aspect of [Deleuze and Guattari] work, and have preferred their pragmatic side” (Ballantyne, 2007, p. xi). This research agrees with Harbison’s assessment of this work (Harbison, 2008): it is impossible, if one starts from either of these books, to really understand Deleuze’s philosophy and work with it in the field.14

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14 This research makes the same assessment about all the books that relate the fields of philosophy and architecture. If one relies only on these books, it is impossible to understand the philosophy of Deleuze.
For Jobst, it is through the critique of phenomenology (by architectural theorists and not practitioners) that the study of the “real” Deleuze began. He asserts that Deleuze was a welcoming source of thinking to renew, to overcome the hurdles that appeared in that old field. Jobst describes how it was the concepts about architecture developed in *What is Philosophy?* (Deleuze & Guattari, 1991) that led architectural theorists to use Deleuze. But looking at the field, Jobst suggests that the study of Deleuze’s theory in architecture is still not developed. A profound inquiry into Deleuze’s concepts of sensations and immanence are still to be made (Ibid.).

This article helps to position this research in the field of architecture. Arguably, Jobst detects gaps in Deleuzian scholarship in architecture. The first workers with Deleuze, to put it simply, do not really deal with the philosophy. The second works are of little relevance for this research as they dealt with a different topic. They also largely reflect a DeLandian emphasis. This is the reason this literature review does not deal with a large part of the works in architecture that (claim to) relate to Deleuze. As Jobst writes, these works do not really deal with Deleuze. The third gap Jobst points to is that, in a sense, architectural theorists have started the work to explain Deleuze, but this work is far from completed. This is relevant to the necessity to engage with Deleuze.

In a second article of the book, Dovey focuses on defining the part of Deleuze’s philosophy that will be important for this thesis: assemblage theory (K. Dovey, 2013). His explanation here seems to ground assemblage in Deleuze’s work, but this thesis argues that this work has the same problems as his previous study of the subject (Kim Dovey, 2010). First, his references are to his own work, which in turn refers to DeLanda’s work, which is a radical departure from Deleuze. When he refers to Deleuze, it is to *A Thousand Plateaus*, which contains concepts that are not explained and grounded, and which he does not explain or ground. Dovey talks about the sensuous aspect of Deleuze’s philosophy, but he does not dwell on it, even though it is important. Also, as in 2010, Dovey does not use Deleuze but Bourdieu to talk about the social aspect of his work, notably power. But Deleuze also talks about the social and power, as described in the following sections. So why turn to Bourdieu if he wants to use Deleuzian theory? Dovey’s presentation of assemblage theory is not theoretically grounded in Deleuze’s philosophy.

Two works attempt to link the study of architecture and the philosophy of Deleuze. Brott seeks to draw out Deleuze’s concept of subjectivity (Brott, 2013). This allows her to link the problem of what is architecture with the problem of subjectivity’s constitution. Put simply, Deleuze’s theory of the subject—which is related to his theory of affect, involves the co-constitution of architecture and the subject. As she writes, “when architecture is truly

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15 See above section.
16 This refers to architect philosopher DeLanda. His work is critiqued later in this introduction. In brief, DeLanda is referred by many academics as being a Deleuzian, as having defined what is Deleuze’s philosophy. For this thesis, DeLanda’s work cannot be used to ‘truly’ define Deleuze’s work.
inhabited, it inhabits us” (Brott, 2013, p. 156). For Brott, architecture is no longer thought of as a container or ‘extensive and measurable’ space.

Brott proposes to speak about space differently. The emphasis is on the theory of effect, a relational theory between subject—linked to social thinking—and architecture, the concreteness of experience. Here the importance of understanding the process of the production of subjectivity is pointed out. That process entails understanding affects, but also to speak about the built form. This work though remains highly theoretical, despite the few short examples presented.

Duff’s article focuses on the constitution of subjectivity in the city’s environment (Duff, 2013). He calls upon Deleuze’s work on Spinoza about affect, and the process of subjectivity’s production. He is particularly interested in the concept of ethology. He explains that “ethology calls attention to the composition of complex bodies; human non-human bodies, materialises, bodies of ideas, sounds, infrastructure, crowds and forms” (Ibid., 217). Once again, this article touches on the importance of the theory of affect to talk about the dynamic of space. He links the understanding of the relationship between the social—through the thinking of subjectivity—and architecture. Duff hints that Deleuze can help map forces in place that simmer under the becoming-representation. However, he does not really expand on why and how. But in other writings he published, he places Deleuze’s work in the reality of the field (Duff, 2014). He describes how, with a Deleuzian theoretical framework, to paint a feeling of the many forces—material, organic, political, ecological—in a given place. He shows how they enact different forms of subjectivities. In his chapter, Duff contends, like many authors in this book, that the study of how Deleuze can relate to architecture is still not well developed. This research aims to respond to this call.

Assemblage theory and DeLanda

This research acknowledges assemblage theory and the work of the philosopher DeLanda. Both claim to use Deleuze to study the production of space.

McFarlane and Farias seem to position themselves as the curators of assemblage theory. They have produced anthologies and books relating to this theory (Farias & Bender, 2011; McFarlane, 2011b). The first critique of their work here is that the authors attempt to codify the assemblage field, but, they rely almost exclusively on actor-network theory literature (Latour, 2005). Actor-network theory is not built on Deleuze’s philosophy (Brenner et al., 2011, p. 228).

Also, the vast majority of their references to Deleuze’s work are in fact secondary references to the work of DeLanda. There is little evidence the authors have engaged with Deleuze’s primary sources.

This research chose to not refer to DeLanda’s work on Deleuze, despite many academics relying on his interpretation of Deleuze. DeLanda recomposes Deleuze’s philosophy but explains it through concepts of science and mathematics, not with the philosophy of
immanence thinking with which Deleuze creates his theory (Fröchot, 2012). Also, DeLanda’s recomposition fails to include key Deleuzian concepts that will be been articulated in this thesis. The theory of affect, and the theory of sense, the theory of immanence, and the philosophy of time are noticeably absent in DeLanda’s work (M. DeLanda, 1997; M. DeLanda, 2006). DeLanda uses his assemblage theory to propose a new philosophy of society (M. DeLanda, 2006). While he does propose reconceptualising the social, which could have been a useful theory for this thesis, at no point does he use or refer to any of the key concepts Deleuze employs to relate to the social, most notably those outlined in this thesis. As Fröchot pointed out, DeLanda forgets the ethic of immanence (Fröchot, 2012).

This is the same problem encountered in McFarlane’s work. He does not refer to Deleuze but to DeLanda to define assemblage theory or to study concepts linked to social concerns. For example, his work aims to theorise how subjects learn from the city—as a means to then create the city, or what is dwelling (McFarlane, 2011a; McFarlane, 2011b; McFarlane, 2011b). These are concerns close to this thesis’ aims. To define these, McFarlane brings in concepts from the social sciences. But at no point does he relate to Deleuze even when he calls for assemblage thinking. This research will show how this process to learn is central to Deleuze (Deleuze, 1953, 1968c, 1988a). McFarlane do not use Deleuze for his work.

The other critique of these assemblage theorists is that they use assemblage theory as an orientation, as imagery (McFarlane, 2011a, p. 207) or as a metaphor (Farias & Bender, 2011). But Deleuzian notions of assemblages are developed within a given ontology. At no point do they research or present that ontology. They use concepts of Deleuze as toolbox, understanding them through secondary sources, and not defining them conceptually. These self-ascribed assemblage theorists have not done the pre- *Thousand Plateaus* groundwork. They have not linked assemblage theory to Deleuze’s philosophy.

As a conclusion to this section, this thesis argues that these assemblage theorists and DeLanda cannot inform this research in a productive way. Either the works do not have Deleuze as philosophical ground or, as is the case with DeLanda, the work is not satisfyingly grounded in Deleuze. Thus, this thesis deliberately chose not to refer to the work they have produced.

**Critique**

The above sections have presented what is termed to be a cross section of different engagements between Deleuze and space/architecture. It has been shown that those using Deleuze talk about architecture in a different manner. They point toward a different understanding of the relationship between the social and the architectural.

By nature, these chapters use one concept or a series of concepts to make a point. In Deleuze’s words, they use concepts as a toolbox. But this research has a particular aim: research on the field, a site and the overturning of a particular way of talking about space. To this research knowledge, no studies have been found that bring Deleuze to the site as this thesis
intends. What this research aims is to be able to draw the life of the villagers, the lives in the houses, the many lives of the city.

These writings talk about processes of subjectivity’s production and the need to talk about politics (Parr, 2013). But none of them link their study to how Deleuze speaks about the social and politics. To answer the question of the relation between architecture and the social with Deleuze, this thesis has to inquire: *can one talk about and study the social with Deleuze, since it appears that architects have not seriously engaged with him on that topic?*

To answer these questions, this research must engage with another field of knowledge.

**Deleuze and the Social/Politics**

The aim of this section is to find out if it is possible to use Deleuze to talk about the social. Can Deleuze be used to speak about the social in relation to this thesis work on space? Here Deleuze’s conception of the social will be discussed. A review all the literature that discusses Deleuze’s conceptions of the social cannot be done thoroughly. This section will be limited to four collections and the references found in them: *Deleuze and the Social* (Fuglsang & Sorensen, 2006), *Deleuze and Politics* (Buchanan & Thorburn, 2008), *Deleuzian Encounters* (Anna Hickey-Moody & Malins, 2007), and *Deleuze and Research Methodology* (Coleman & Ringrose, 2013a). This thesis considers them as a potential cross section of work in the social sciences that relates to Deleuze’s philosophy.

Similar to the crisis of thought in architecture at the turn of the century, there seems to have been a crisis of thought in social science. Clough comments that engaging with Deleuze and affect requires the social sciences to work against the conventional theory of the time that focused on representation, subjectivity, ideology, and institution (Clough & Halley, 2007). Put simply, Deleuze and Guattari’s work brings a sociology of multiplicity, of flows of desire, of becoming of beings and bodies. Bogard writes that Deleuze and Guattari challenge social theory: “what they propose is nothing less than a new ontology of the social” (Bogard, 1998, p. 54).

**Deleuze and the Social**

With the study of *Deleuze and the Social* (Fuglsang & Sorensen, 2006), this thesis wants to show that it is possible to ‘talk and study the social’ with Deleuze.

In this collection, all the chapters relate to how Deleuze conceptualises the ‘subject’, as a production process. This production is within a nexus of forces’ flow. Bodies and subjects are in relation to one another and are formed through relationships. The formation of a relationship is both in the social realm and involves all manner of aspects of the world, among them the ecologies of matter and organic things. Then the question arises: what does the subject want? Why does it do what it does? This brings us to Deleuze and Guattari’s concept of desire. Desire is the force underlying their whole philosophical system. These two
conceptualisations are linked to the questions this thesis asks: why do people do what they do? Why do they build the way they do?

Patton theorises the nature of order. Using Deleuze’s ontology he defines his concept of (social) order as being characterized solely by the idea of change (Patton, 2006). Thanem and Linstead (Thanem & Linstead, 2006) and Kornberger, Rododes, and Bos (Kornberger, Rohodes, & Bos, 2006) aim to conceptualise what organisations are. They make similar comments: what characterises (social) organisations is they always change. These chapters point to the relation between main powers, established powers, stratified structures, the molar, and the singular, the flow of forces and desires, life, and the molecular. What these chapters bring is how to think about the composition of the social field and how it changes.

These essays show that Deleuze talks about the social. However, they are highly theoretical, and do not provide a method for studying the field.

**Deleuze and Politics**

In *Deleuze and Politics* (Buchanan & Thorburn, 2008), once again the emphasis is on the constitution of the body and processes of production of subject and the importance of affective thinking. Prominent are the concepts of desire and powers, and the interrelation between stratified forms of institution and powers against the flow of desires.

This research particularly relates to essays by Krause and Rolli, and by Holland. They show how to think about the relationship between individual, subjects, and social formation, communities, institutions, and societies (Holland, 2008; Krause & Rolli, 2008). The authors demonstrate this relation and how Deleuze and Guattari conceptualise it. It is important because it allows a description of how communities and subjects’ lives are in relation to one another. This research aims to be able to talk about the lives in one house, but also the lives in a village or in a city, and how they are all related.

These chapters suggest how to study the social. Deleuze’s work introduces a sociology of the ‘inhuman’ (Bogard, 1998, p. 57), where bodies are not just human, but also organic and inorganic composite mixtures. In it, there is the potential for this research to link ecologies—non-human, social and spatial—and bodies and buildings into one framework of thought. But once again these articles are theoretical. They do not suggest a method of how to study and discuss the social.

**Deleuze and Research Methodology**

To explore the practical application of Deleuze in studies, this section investigates *Deleuze and Research Methodology* (Coleman & Ringrose, 2013a). In the introduction to the book, Coleman and Ringrose are adamant that the aim for the contributors is to think with Deleuze’s concepts and not simply use them as metaphor. The aim is to engage with the site and with data differently (Coleman & Ringrose, 2013b). The compilation brings together authors from many different social fields.
To think differently is to use Deleuze to understand the relationship between the main strata of powers and the subject. The strata of powers are the molar, the institution and order—which subjugates. It captures the desire of subjects—the molecular, life. But also it shows how subjects immanently contesting the stratified practices are always in a process of becoming. This is micropolitics and involves the ‘molecular’. In that process, the molar is transformed. All is always in a process of becoming and changing.

All contributors point to the importance of studying the singular, the life, the subject, not the institution, the category. They explain that to understand the singular nature of subjectivity, what it does, involves a genealogy of the process of the subject’s production.

These works obviously relate to this research: why do subjects create and inhabit their spaces the way they do? Why is there commonness, shared practices in a society, but also why is there also only singularity? The literature demonstrates that it is possible to describe this process with Deleuze. This emphasis on the social is what this research is looking for with Deleuze.

**Deleuze and Research Methodology**

There is a second stream of knowledge that *Deleuze and Research Methodology* (Coleman & Ringrose, 2013a) informs. As mentioned above, Deleuze proposes a new ontology for the social sciences. With this comes the necessity for new research designs, aims, and methodologies. This means a (re)definition of how to engage with the field and how to analyse the data.

First, how to engage with the field. Within that ontology, with a Deleuzian approach to research, the aim is to attune to what cannot be represented, what simmers behind/within representation. The main work is to discern affects, to map connections (Blaise, 2013; Grinberg, 2013), and to do micropolitics. The essays present a different focus of research. But they also reveal two ways of researching in the site. First, there is the use of traditional ways of researching: observation, all different sorts of interviews, photography or videos. But these are used for a different objective. Yes, they search for the cliché, the coding of commonness, categories. But they also aim to reveal the coming of difference, the particular moments of intensities that lead to transformation. But second, there is also the invention of methods to attune to new problems: how to record affect; how to record sounds; how to record smell and noise. What Lorimer proposes is that these new aims and methods are complementary to traditional methods.

There is a second part of the research: how to engage with the data. Authors engage with their results and describe the data that show commonness, that reveal the molar, the main power of forces. They labour through the data and code to give sense to the common (Cole, 2013). But then they also turn their focus to the molecular, identification of the singular, the moments of intensity and potential. This is the ‘data’ that cannot be accounted for using
commonly understood categories (Cole, 2013; St. Pierre, 1997). These are as important, as they are differences, as they are the account of life.

There is another important aspect to these methodological shifts. The works presented in this book are qualitative research. That is, there is a connection between the researcher and the field of research. The authors are connected to the site, the fieldwork, and the data. In Deleuze’s words, they became the site and the data. But also, they are themselves, and what they present is part of them. So they are not neutral in their connections. What is called for as an outcome of this finding is reflexivity (Hultman & Tagushi, 2010; Jackson & Mazzei, 2008; St. Pierre, 2008). This thesis takes two things from this proposition.

First, Tamboukou undertakes narrative and historical research, which this research will also undertake (Tamboukou, 2008). She studies a female painter’s life and she critiques a particular account of that painter’s life. She asserts that she has been reading a lot about that person, that she has immersed herself in her. She has become her, part of her assemblage. She also explains that she has had much experience of similar studies. Thus, Tamboukou claims she can speak for the painter to a certain extent. This is because she connects to assemblages of the painter in the past. This is important for this thesis as certain parts include historical research. I also lived on the site and in Asia for some time. This thesis aims to claim to a certain degree that I have become the site and that I can talk on its behalf.

In this example, the outside(r), the other, is folded inside the researcher (St. Pierre, 1997). But the researcher remains his/her own subject, connected to his/her own rhizome of forces. So, on the second point, there is the necessity to acknowledge some of the forces an author brings to the research. This is important for this research as what forces I bring to my commentary have to be exposed.

**Deleuze and …—Conclusion**

Three points about this brief literature review:

First, these sections have shown that Deleuze speaks about space. They have shown that the fields of space and architecture relate to Deleuze. But they have shown that they engage in a theoretical way and not experimentally, as this research requires. They also do not address the relationship between architecture and the social. The literature review has also shown the social field relates to Deleuze. Thus this thesis can talk about the social differently. It can link the human and non-human, organic and non-organic. The literature review has also hinted that Deleuze’s philosophy links spatial and social studies.

So, this literature review allows this research to claim that, by using Deleuze’s theoretical framework, it will be possible to speak about space differently, and it will be possible to link social and spatial thinking.

Second, the review has shown that studies exploring Deleuze’s thinking provide a template for how to engage with the site, to create new research methodologies and to analyse and
report findings. This demonstrates the relevance to engage with Deleuze and so to re-engage with IPRAUS research methods.

However, it has been shown that the study with Deleuze, in the field of architecture, is still very much experimental. This means that this research won’t be able to follow anyone’s method. As such, this implies this research is an experiment. It is an original work that explores how to think about Deleuze, how to bring Deleuze from philosophy to architecture and how to bring it from philosophical thinking to its application in the field.

**STUDYING DELEUZE AND ARCHITECTURE**

In this introduction the research has first hypothesised that, to achieve its aims, the research should study Deleuze’s philosophy. Then, with a literature review, it has been shown that indeed working with Deleuze it was possible to do so. Now it is proposed how this thesis should engage and write about Deleuze.

The books, essays and articles presented in the literature review do not explain Deleuze’s philosophy; it is not their main focus. They only present one or a few concepts, dwell on them, and study a particular matter. Should this thesis do the same? Deleuze says concepts are like a toolbox (Deleuze, 2004, p. 290). They should be taken and used for a given purpose. But the scope of this research is large and relates to numerous works. So what this thesis could do is to “pickpocket”, as Frichot writes, about architects (Frichot, 2005). It could use numerous concepts, relate to how they have been explained, and work with them.

But this research argues for two problems. Lambert suggests the first. The continual use of concepts as a toolbox leads to the misunderstanding of their essence, then to their misuse (Lambert, 2006). Second, this research would need many of these concepts to address its large scope. This could lead to problems of coordination and coherence.

I now present how this thesis proposes to engage with Deleuze. My position is twofold. First, like Hale (Hale, 2011) and Duff (Duff, 2014), I believe a study should use a series of concepts where each determines the others. Together in relation, the series of concepts is powerful and grounded. Second, the explanation of Deleuze’s philosophy has not been done for architects. Ballantyne’s books, as explained earlier, try to determine the background of Deleuze’s philosophical thinking (Ballantyne, 2005, 2007), but do not give any idea how to use Deleuze in architecture. So the grounding of Deleuze’s knowledge in architecture is to be done. Third, I comment on the field of philosophy this research has engaged. According to the findings of this research, the work of linking Deleuze’s earlier philosophy and his work with Guattari does not seem to have been engaged with in great depth—at least not in English.

So this thesis proposes a hypothesis. If this research engages with Deleuze’s work, particularly the early work, this research will be able to create a ‘stronger’ ground for a theoretical basis to study and talk about space differently. This hypothesis is based on the
belief in an overarching system to Deleuze’s philosophy. I believe Deleuze proposes ‘a way of seeing and thinking’ about the world,\textsuperscript{17} how it is composed and how it works. Deleuze writes that “he believes of philosophy as a system” (Deleuze, 2003b, p. 338). I believe this system is composed of elements and that he explains how these work and relate to one another. I believe this system is developed in \textit{Difference and Repetition} (Deleuze, 1968a). The different chapters of this work present his system, its ground, its elements, and how they work. I argue that two of his articles summarise this system, “\textit{What is structuralism}” (Deleuze, 1988d) and “\textit{The method of dramatisation}” (Deleuze, 2002b).

But why should this thesis engage so much with a philosopher for research undertaken in architecture?

First, this thesis searches for a theoretical framework to study the relationship between architecture and the social. So this thesis should contain a part on theory.

Second, this research takes on Deleuze’s own thinking. He writes that: “you will never know anything through concepts if you have not first created them” (Deleuze & Guattari, 1991, p. 12). To understand and use Deleuze, this research wants to engage with him, not with secondary and tertiary sources, as often happens in academic writings. This thesis also relates to Bonta’s analysis about bringing Deleuze to the field: it necessitates a deep engagement with his philosophy (Bonta, 2009). To use Deleuze, one has to engage deeply with him. This leads me to conclude that I believe a strong engagement with Deleuze is necessary, rather than pickpocketing a series of concepts.

\textbf{Methodology of study}

\textbf{Philosophical study}

How does this research propose to study Deleuze? The reading of Deleuze is not intended to be a full account of his work. Instead, it is proposed to engage with him with a double strategic aim. The first strategic aim is to describe this system, its elements and functioning. But the aim is also to apply it to the study of space. The second strategic aim is not to present all Deleuze’s philosophy, but only to present elements relevant for this work, without leaving out too many details that provide necessary support for the relevant elements. This research has to make clear how this changes the way of speaking about space and its relation to the social.

The inspiration for a way of explaining Deleuze was Zepke’s \textit{Art as abstract machine} (Zepke, 2005). In this book, Zepke ‘progressively’ studies Deleuze, explaining relationships with Spinoza and Bergson. Each chapter clarifies the ground, and the elements of Deleuze’s philosophy and also relates to the study of how to talk about particular arts. This research is also inspired by the work of Anne Sauvagnargues: \textit{Deleuze—L’empirisme transcendental} (Sauvagnargues, 2009) follows a similar format. She gives a detailed explanation of Deleuze’s

\textsuperscript{17} My formulation.
transcendental empiricism philosophy. In these works, the explanation of Deleuze’s work is more apparent than if only his later works had been studied.

But it remains for this research to link these early work to Deleuze’s later philosophy, that which Sauvagnargues describes as “operationalised” (Ibid.). The bridge between the two philosophies must be done. This thesis does not aim to explain in great detail the change of transcendental empiricism into the complex thought of Anti Oedipus and A Thousand Plateaus. But it will clarify how the chosen elements of transcendental empiricism inform the understanding of the key concepts needed from A Thousand Plateaus. This work is mainly going from a philosophical transcendental empiricism, to a more social, political, and ecological way of thinking in A Thousand Plateaus.

The methodology for studying Deleuze’s philosophy follows the programme that Sauvagnargues sets for her work. She explains that Deleuze’s thinking is “complex and necessitates step by step discovery” (Sauvagnargues, 2005, p. 9). She proposes a “methodical explanation of [Difference and Repetition] that renders in section [...] all the themes and directions through which Deleuze, from book to book, builds the transcendental empiricism philosophy” (Sauvagnargues, 2009, p. 12, emphasis mine).

But this entails a “dynamic double reading”. As a matter of fact, each concept, each element of this philosophy has a history. They were elaborated in certain conditions by a certain philosopher in the history of thought that Deleuze has appropriated. The work, for Sauvagnargues, is to meticulously uncover this history and the relation of Deleuze and the particular philosopher. As she proposes, part by part, she follows “the way Deleuze learns from these authors and proceeds to their intensive variation” (ibid., p. 13). Each part can be read as “the cartography of the reading of the relation between Deleuze and an author, and a treaty of history” (ibid., p. 14). It has to be emphasised that as the research elucidates the relationship between Deleuze and the philosophers, it does not engage in the details of these other philosophers. The thesis will talk about Kant, Spinoza, Bergson, Foucault, among others. They have immense intellectual weight, but the thesis does not engage with them. It will engage with how Deleuze talks about and uses them.

Sauvagnargues focuses on transcendental empiricism, philosophical work. This research’s target is A Thousand Plateaus. In each of the parts of the work on Deleuze there will be a second more succinct section explaining the relation between transcendental empiricism and A Thousand Plateaus.

This thesis has a parallel aim. Each chapter contains a third moment: in each chapter of the philosophy part, it will be explained how the philosophical concepts touched upon bring new thoughts, and displace the thinking of the study of the form of architecture. In true Deleuzian spirit, this thesis is an experiment.
Architecture’s study

This research’s aim is to study a site. In order to be able to talk about it more coherently than allowed by the theoretical framework this research started with, Deleuze’s philosophy was chosen. But, as argued in this introduction, details of how the study should be done cannot be proposed in this introduction. As the literature review explained, Deleuze’s philosophy is a new ontology, and with it comes a different way of engaging with the site. Deleuze’s ontology and Deleuze’s philosophical system must be defined first. Once this work is done, it will be possible to propose how this research will do this engagement.

Chapter layout of this work

This thesis has four parts.

Part I—Introduction

The introduction describe some problems in architecture’s theoretical frameworks. The research questions are set:

In architectural and urban morphology studies, how do we explain the form, the process of formation, and the diversity of areas?

How do we understand and theorise the relationship between the social and the architectural in urban morphology?

This leads to Deleuze. His work and studies of it are reviewed to explain how to answer the gap in knowledge.

Part II—Philosophy

This part contains an exploration of Deleuze’s philosophical system, which asks:

What components of Deleuzian philosophy help inform the understanding and the theorising of the relationship between space and social?

This part has six chapters. The first sketches the context and the aims of Deleuze’s philosophy. It briefly explores his discussion of Plato and Kant and shows how his aim is to overturn them. The second starts to define the functioning of the Deleuzian system. This revolves around Deleuze’s work on Spinoza’s ontology, which becomes the grounding for Deleuze’s philosophy. The third looks at the important relationships between Deleuze and Bergson. The fourth engages in detail with the complexity of the system, explaining in detail the elements of Deleuze’s philosophy. This allows to relate this philosophy to architectural thinking in relation to social systems. The fifth presents the last pieces of transcendental empiricism theory. It explains how Deleuze’s thought is a philosophy of change and life. It points to the necessity for understanding the theory of affect and the process of subjectivity.

The final chapter summarises Deleuze’s ontology and how it relates to architecture. A new ontology for architecture is proposed and a research design and research methodology linked to this ontology is recommended.
Part III—Practice

This part look at how Deleuze’s system can be experimented with, to do architectural and urban morphology studies. It focuses on the analysis of the form, the process of formation, and diversity of urban areas of the Brunei’s water city, Kampong Ayer within the new ontology described in the previous part. In this part, it is asked:

Does the study of Kampong Ayer’s historical development within the proposed Deleuzian theoretical framework demonstrate its validity in theorising the relationship between the spatial and the social?

This part has five chapters. In the first, the study of Brunei’s water city within a Deleuzian theoretical framework starts; it is the test of the philosophy. This chapter establishes the historical, ecological, and social background of the study. The second focuses on the era from 1904 to 1955. It gives the sense that the built environment expresses a life linked to a lost past. The third looks at the three eras: 1955-1965, 1965-1975, and 1975-1990. They give a sense that the built environment expresses a positive change toward modernity and re-affirmation of a certain Bruneiness. It is argued that the built environment expresses change in the social, political, economic and technological paradigms. The fourth chapter looks at the now, the era from 1990 to 2013. It is contended that the built environment expresses a dramatic change in the location of power in society. The fifth and final chapter draws a conclusion for this part and reflects on the experimentation of the new research method.

Part IV—Conclusion

This part evaluates how the theoretical framework answers the research question and moves beyond the identified limitations in knowledge in architecture. Finally, possible future research is proposed.

LIMITATIONS AND DELIMITATIONS

Delimitations. As developed clearly in this introduction, this thesis is placed within the particular field of urban morphology. It aims to resolves problems encountered within that field. This thesis does not aim to rethink the field of architecture; it does not aim to redefine what is architecture or what is a building. It does not aim to reform the field of space studies, urban studies, or critical urban and architectural studies.

Philosophical constraints. First, Deleuze’s philosophical system is more complicated than can be covered in this thesis. This thesis is obliged, due to space constraints, to leave out important studies.

Second, Deleuze’s thought is complex and evolving, and depends on the subject he engages and connects with (Sauvagnargues, 2009). This research has a certain form and content. It might be that my interpretation of Deleuze might not seem to be very Deleuzian to a Deleuze connoisseur.
Literature constraints. First, as the literature review showed, the study of Deleuze is still evolving. During the writing of this thesis, major works have appeared that have displaced how Deleuze is understood. It is impossible to discuss all of these works here. Choices had to be made. Second, the number of publications on Deleuze concerned with space and the social since the 1990’s is so vast that it is impossible to relate to all of them. I hope that the choices made still show the relevance of Deleuze’s work.

Architectural constraints. Other limitations relate to Brunei fieldwork. First, this research’s work has mostly been limited to the part of the city on the water—a thorough study under Deleuze and Guattari’s ontology would require more work on the relation with the land. Second, the site fieldwork was conducted before understanding the limitations of my method. Deleuze’s study of difference entails the study of as many elements as possible to make light of singularity and differences. Full compliance with Deleuze’s demands would require further surveying of elements of the built form and the social.

While I have done my best to coherently write this thesis, it without doubt reflects my sinuous journey in Deleuzian thought.
PART II – PHILOSOPHY
INTRODUCTION

Chapter objective

One of the aims of the thesis is to retrace the construction of Deleuze’s philosophical system. This chapter introduces the ground of Deleuze’s transcendental empiricism theory, the ground of Deleuze’s operationalised philosophy (Sauvagnargues, 2009).

This chapter aims to describe, very simply, Deleuze’s philosophical aims. The aim is not to detail how he explains the philosophy of the two philosophers this part relates to. Contrary to the philosophers examined in the next chapters, Deleuze does not appropriate their arguments. Here, the goal is to explain some points of his thinking. These will be the framework of everything that this thesis in the philosophy part is doing.

OVERTURNING PLATO—A PHILOSOPHY OF DIFFERENCE\(^{18}\)

Plato—Idea vs. Simulacrum

Deleuze aims to overturn Plato (Deleuze, 1969). The simplified argument is as follows.

For Plato, for a considered object, there is the representation of that object and the Idea of it. The object’s representation disappears, the Idea remains. Plato came up with this argument to compare claimants and find the right successor for a king. Compare is the key word here. The compared element is judged to be within a certain distance to an original, something in a sense considered pure. For Deleuze, the problem is that this thinking focuses on similarity and commonness. For him, this thinking is against a philosophy of life. Life is about differences, a certain kind of difference. Deleuze brings the simulacrum into the discussion. It is an object whose representation is the same, here the image of the claimant, but its appearance shakes the Idea, here the Idea of the claimants’ image (Ibid.). Put simply, this thesis sees that for Deleuze, ‘behind’ the representation there are forces at work. For research, what is important to focus on are these forces; life. These forces are differences.

Diagramming Deleuze

This research sees this discussion as follows. For Plato, there is as an object and two planes. The plane of representation and the plane of Idea. Deleuze transforms this: there is the representation, ‘what is’, and a plane that ‘structures’ ‘what is’; a plane of forces.

\(^{18}\) For a full explanation of Deleuze’s take on Plato read Daniel Smith’s PhD (Smith, 1997).
**KANT**

**The structure of thought**

In this section, the exploration of Deleuze’s fundamentals are continued by sketching his interpretation of Kant. Deleuze’s whole philosophical purpose was to redraw Kant’s philosophical diagram (McMahon, 2004; Sauvagnargues, 2009). In the following section, only elements of this diagram are described.\(^\text{19}\)

Deleuze explains that Kant’s aim was to understand the structure of thought: put simply, how to get the Idea of a thing.\(^\text{20}\) Kant elaborates a theory of the faculties. He decided how one apprehends an object. The system is the sensory motor scheme. For Kant, it starts with the sensation of the object. Then there is a series of syntheses by the faculties of thought that leads to the search of the Idea of the thing, on the plane of thought, a plane transcendent to the plane of representation.

The series of syntheses to apprehend the object goes as follows. First, on a first plane is the representation of the object. The faculty of intuition apprehends the object ‘bit by bit’. It ‘creates’ schemes (Deleuze, 1978a). Then the process of recognition occurs on a second plane, the plane of thought. The schemes are presented by the faculty of imagination to the faculty of understanding, judging. This is a second synthesis. Then there is the faculty of reason that presides over the understanding. Reason pre-exists thoughts that are forming. Reason *orientates* how information is received and processed, and how thoughts are produced. Kant explains that if we have knowledge it is because we have *a priori* representations, thanks to which we are able to judge. Our understanding holds concepts that are *a priori*, not related to experience. In a way, for Kant, the ‘plane of thought’ is populated by concepts.

For the moment, the process is only to recognise an object. For Kant, the faculty of understanding ‘offers’ concepts to the faculty of reason. As the concept of understanding is given to reason, reason seeks another concept which, taken in its full extension, conditions the attribution of the first concept to the object it is referring to (Deleuze, 1963, p. 29). Reason always seeks to overcome knowledge.

When reason encounters a concept, it has to be able to find a concept that in all its extension conditions the attribution of a category to *all* objects of possible experience (Deleuze, 1990b, p. 342). Reason has to form *Ideas* that overcome the possibility of experience. Reason comes to form *transcendental Ideas*. Ideas are, approximately concepts of concepts (Smith, 1997, p. 48). They represent something unconditional, as if the *limit* of knowledge has been reached, an ideal *focal point* outside of experience toward which concepts of the understanding converge.

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\(^{19}\) For a full explanation of Deleuze’s take on Kant read McMahon’s PhD (McMahon, 2004).

\(^{20}\) There is a relation between Kant’s Idea and Plato’s.
Diagramming Deleuze

This thesis takes from this short discussion that for a thing, there are two planes. First, there is the plane of representation; the plane of experience. Then there is a plane, transcendent and independent of the first, that which structures it. That plane is populated by elements independent of experience that are in relation. Importantly, the limit of the relation is the Idea of the thing. The two planes are related by a series of processes. This diagram is the sketch of Deleuze’s philosophical system. This thesis’ philosophy part aims to detail it.

Overturing Plato and Kant

The following section explains how Deleuze rethinks Kant’s system. For Deleuze, to recognise or to know is not to think. This is not to have an Idea. Ideas have to be produced. For Deleuze, also, Kant’s *a priori* concepts are not really independent from experience since they can be defined.

Deleuze, to overturn this system, refers to Plato and Kant. From Plato he takes this comment: ‘there is the sensation that brings recognition.’ Recognition is not thinking. What Deleuze has in mind is that there are sensations that force us to think, to have ideas (Deleuze, 1968a, 180-182).

Deleuze turns to Kant. For Deleuze, Kant expresses a system where all the faculties are in agreement. But before the faculties are in agreement they must be in a different order. Deleuze refers to Kant’s work “Analytic of the Sublime” (Kant, 1905, pp. §23-§LIII). For example when faced with an immense object—a Himalayan mountain or an endless red sand desert, the imagination strives to comprehend the *sensations* that are happening to it (Deleuze, 2002a, pp. 79-102). Imagination is exposed to immensity and power, which are ideas of reason. Imagination is forced to confront its own limit. It is reason that compels it to do so. The resulting painful sensation “expands the Soul” (Deleuze, 1963, p. 74). The described situation shows that the faculties are not always in agreement. There are two interpretations for Deleuze. First, the agreement is *generated* in the disagreement (Ibid., , p. 75). Second, Ideas expand.

Diagramming Deleuze’s system

The Deleuzian diagram this thesis began to elaborate is developed with his interpretation of Kant. An object exists on two planes. One structures the other. On the transcendental plane, the structure is composed of elements that cannot be related to experience. The totality of these elements are ideas. The development just made means the structures existing on the transcendental plane must not be thought of as fixed. Ideas are not fixed. They are engendered and they can vary. There is the continual re-creation of the structure. It is dynamic thinking. The encounter of one system with another system can lead to its transformation.
DELEUZE AND SPACE

How can Deleuze’s overturning of Plato and Kant relate to the study of architecture? This section explores how Deleuze’s use of these philosophies can help critique urban morphological and typological analysis.

Typological studies with Plato and Kant

This research critiques the theoretical approach of IPRAUS in relation to the philosophies outlined in the preceding sections. This approach seem to be the “essence” of typological analysis as conceived by French morphologists. The following quote is the foundation of the method of analysis of IPRAUS.

If we observe the houses built during the same era in a city one can distinguish some different varieties that are reproduced in large numbers with individual variations that can be considered as secondary. Thus, the shared characteristics that have been identified provide a justification for a typological analysis. (Devillier, 1974 emphasis mine)

This quote can be understood as a Platonic approach of architectural studies. Devillier justifies the use of type in reference to identify. For him, (visible) differences are “secondary” and not relevant. In this method, typology refers to the Idea as essence, to a determined ideal model.

This thesis follows Deleuze’s philosophy and aims to work against Devillier’s attitudes. First, it questions the focus on sameness; and instead emphasises the singular—each house is different, but not any kind of difference. This relates to the point Deleuze made about Plato. The focus is not on the difference between representations, but about the difference of forces behind the ‘representation’, ‘what is’. The forces that give structure and life. This is difference that comes from the productive relations between the forces that create and make a house alive. As Deleuze argues, life is about creativity. To account for life is not to look for similitude. The emphasis of a piece of research should be to give life to the singularity of each house.

This leads to the second point, relating to Deleuze’s reading of Kant. In time there are always shifting productions of forms, and there are always new impressions of sameness. This research aims to investigate how change occurs and will promote a thinking away from the search for identity. The common practices and the agreements defined by the morphologist, to exist, must have been established at one point in time—that is, they became new. As shown in the introduction, the IPRAUS morphologists using that approach in the field were confronted by a shift in social practices and a shift in the forms of architecture they studied in time. The typological ideal model was changing. They do not propose a sufficiently coherent framework to think about ever-changing cultures, the ever-changing nature of the production of architecture.

This research contends that the approach using typological analysis by IPRAUS has to be modified. Deleuze’s philosophy can provide this ground.
CONCLUSION

This chapter starts to lay the foundation of Deleuze’s philosophy including a brief overview of the elements of Deleuze’s philosophy. With the critique of Plato, Deleuze advocates for a philosophy of difference. With the critique of Kant, he hints at a system whose composition is based on understanding the structures of human sensation. This chapter suggests how this system could be the ground for modification of the IPRAUS theoretical framework.
INTRODUCTION

Aim—Spinoza’s aim

This chapter focuses on Deleuze’s interpretation of Spinoza, notably in *Spinoza et le problème de l’expression* (Deleuze, 1968c). A selected series of elements from Spinoza’s philosophical system are explained here. This groundwork is required because Spinoza’s system is one of the main foundations of Deleuze’s philosophy.

Deleuze writes that in Spinoza there is an ontology, and an ethics (Deleuze, 1980-81), which is the practical experimentation resulting from this ontology. The first part of this chapter reconstructs Spinoza’s speculative diagram. This is the building of an ontology. The second part of the chapter describes the experimentation of Spinoza’s philosophy—the elements that will be used to produce an ethics. The third part is the realisation of the ethics. It focuses on the creation of knowledge.

ONTOGONY

Spinoza’s system describes the composition and functioning of the world and its parts—an ontology (Lin, 2006).

Singularity, Univocity, Power

For Spinoza, there are three categories of elements: substance (God), attributes, and modes. First, there is *Substance*. In short, this is God. God is everything, the whole reality; it is singular, univocal and contains all power. Spinoza often uses God and Nature as synonymous. Second, God is expressed in *attributes*. There are an infinity of attributes. They express the essence of God. An attribute is that which understanding can attribute as qualities to God. Third, the attributes are expressed in modes. A mode is a degree of an attribute. Modes can come, or not, to existence as representations, actual things. Creatures, individuals, are in some ways modes. As such, they are modal expressions of God, the whole.

In this system, the most particular, the most singular, is related through a series of relations to the most universal, absolute, infinite (Hardt, 1993, p. 58, emphasis mine). The relationship between the singular and the infinite is central to Deleuze and for this research.

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21 For in depth commentary on Deleuze’s *Spinoza et le problème de l’expression*, see Hardt (1993).
Three ontological characteristics of God

Singularity

What are the properties of God? What are the consequences of these properties on the composition and functioning of the system?

God (Nature, Substance) is thought of as infinite. God contains an infinite number of attributes. Importantly, the distinction between attributes is not numerical. This distinction is not a difference in degree but in nature, qualitative intensity. This means that God contains only differences. There is no externality. These differences are said to be differences in itself.

This type of difference is the foundation of Deleuze’s research. As Hardt explains: the “unique Substance directly infuses and animates the entire world: what is itself, composed by itself, through itself” (Hardt, 1993, p. 62).

Univocity

A second ontological characteristic of the substance is its univocity.

Attributes. First, the distinction in attributes has to be of qualitative character. Two attributes are necessarily distinct. Each attribute is also infinite, but in its genre (Delbos, 1893, p. 24), it has an infinite degree of quality. But also, attributes are expressed “in reality”, “as actual”, as mode. Modes are the expression of God, they can be expressed in an infinity of modal expressions (Deleuze, 1968b, p. 37).

Immanence—First ontology of Being. God is both cause and essence of the world. There is a common form between God and its creation. In a first moment, there is an infinity of attributes. In a second moment, these attributes are infinite in their genre. This means that they have common form, but also there is no attribute more important than another. Finally, in a third moment, the attributes are expressed through modes.

There is no external cause to the world. God is the cause of everything. The divine is absolutely expressed. Through the attributes as expressions, God, as the expressing agent, is absolutely immanent in the world of modes as the expressed (Hardt, 1993, p. 64, emphasis mine).

Univocity of Being (God)—Second ontology. The univocity of God is that God is said in the same sense in these three expressions even if they are not the same “modal” expression. God does not change in nature while changing in modality (Deleuze, 1968b, p. 54).

To take an example often used by Deleuze, how to qualify the star that is known in its form from the different expressions as both the morning star and the evening star? The formal distinction is real distinction, it exists. It expresses different states of reality and composes one unique being.
The univocity of a being is defined as follows: a being is within an attribute and is expressed through a modal form. But there is also the same relation between God and the attributes.22

There is one more speculation to develop.

**Substance and Power**23

**God’s power to exist**

This concept of power is crucial for this research. That notion of power does not relate to the sense “oppression”. It is about the power to do, a certain capacity to do.24

Spinoza states a starting point: a cause must have at least as much reality as its effect; this means all that is caused by God must be as real as what creates it (EI P11D1). So, in a nutshell, to be able to exist is to have power.25 This means the more a thing has reality, the more it has power, and the more forces it has for its existence. This means that God has by itself an absolute infinite power to exist. God has an absolute capacity of power (Deleuze, 1968c, p. 78).

**Attributes, Modes and power**

Question: how to describe the reason to exist of a finite being—a thing, an individual? In the perspective of power, starting from the God: God creates by itself, for itself. First, God is unconditioned; it contains all the attributes that are all the conditions of its power. But there is also, individually, the distribution of that power. Second, attributes are common to God and the mode. The modes are distributed power, expressing power from the attribute they express. Thus, God distributes itself and communicates to the finite creatures its perfection through its attributes. The power of a thing, an individual, is a part of the infinite power of God (Ibid., 80).

A finite mode “gets” its essence—or power in this ontology, from the attribute it expresses, but it is only itself a degree of essence—power, of that attribute. A finite mode possesses a singular essence, which is a certain singular power—puissance, that power is related to the attribute it is “from”.

**Power and Affect**

Deleuze states that for Spinoza, “the identity of power and essence means: power is always an act, or at least in an act” (Deleuze, 1968b, p. 82). For Deleuze, Spinoza’s conception of power is a principle of affection. Power as action is giving, that is to affect. Then there is another side: receiving, to be affected.

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22 See for demonstration *Spinoza et le problème de l’expression* (Deleuze, 1968c, pp. 56-58)
24 In English, to be able to is the translation of the French word pouvoir that is also synonymous of power as puissance.
25 The English sentence has to be read as: “to have power to exist is to have power” or “to have the pouvoir to exist is to have a certain puissance”.

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A mode’s essence is power and with it goes the matching power to be affected. As part of Nature, the mode’s power is always affected. The mode effects its power, but there are effects produced by external things over the mode receiving the power. They are of two kinds: passive affections, effects which are produced as a result of external forces; and active affections, which are produced from within (Ibid.).

So, God’s power to exist leads to the diagramming of the structure of power. A power to exist corresponds with a power to be affected. That affect can be passive—externally caused—or active—internally caused.

This is Deleuze’s ontology

This chapter so far has established the general framework, speculative and logic of Spinoza’s system. It was necessary to detail all the different elements and the logic of the system. This is Deleuze’s diagram in broad terms. Deleuze’s ontology is built from this thinking. Studies that refer to Deleuze’s theory of affect and theory of the body eschew to explain how these theories are grounded.

PARALLELISM—BODY/MIND AND CONSEQUENCES

In the following sections is developed the details to study how a subject, within the world just speculatively built, can find the means to reach freedom.

Parallelism

Deleuze aims to demonstrate the absolute equality of all attributes. The reasoning starts with the question: why does God produce? (Deleuze, 1968b, p. 87). It has been shown that, for Spinoza, God exists, thus God acts. This means that he produces necessarily as he understands himself necessarily.

This is linked to the problem of expression in Spinoza’s philosophy. God produces and is expressed in an infinity of attributes. But God has two powers, the power to think and the power to act. It produces and it understands. The more it produces, the more it understands himself.

This leads Deleuze to assign to this part of Spinoza’s system the concepts of parallelism between the attributes. There are three elements that constitute the theory of ontological parallelism between attributes: identity of order or autonomy, equality, and unity (Ibid., 95).

This parallelism is for all the attributes and their produced mode. But there are two attributes that we know exist with certainty, those from which an individual is composed of:

26 This chapter does not enter into debate as to why this is necessary. For an explanation see Hardt (Hardt, 1993).
• the attribute of extension
  o the Body
• and the attribute of thought
  o the Mind.

**Autonomy, Equality, Unity**

*Autonomy.* For Deleuze, God produces following an order (Ibid., 92). God produces an infinity of attributes, the order of production is the same for all the attributes (Ibid., 93, emphasis mine).

It follows from this thinking that to the production of one thing in the attribute of extension, corresponds the production of the idea of that thing in the attribute of thought.  

Spinoza asserts full equality between attributes of the mind and the body (Ibid., 100). Each attribute follows its own autonomous rules. The mind obeys the laws of thought (Ibid., 101). The body obeys only the laws of extension.

*Equality.* The second formula that extends the first one is the identity of connection or equality of principle (Ibid 95, emphasis mine). Spinoza’s proposition is that attributes are not only autonomous, but they are also organised in parallel order. There is an isonomy, an equality of principle between an autonomous or independent series. The equality of attributes ensures that in parallelism, the connection between series and between orders of things is the same.

This is true also for the two attributes that we know, thought and extension. The body and the mind both take part in being in equal and autonomous manners.

*Unity.* This third formulation of parallelism asserts the unity of being. As Deleuze describes, the modes produced from different attributes at the same degree have not only the same connection or the same order, they are the same being (Ibid., 97).

For example, a mode of a thing is produced in the attribute of extension. In parallelism, there is at the same time the production of an idea associated with that thing’s mode. Both modes are that thing. To the production of a body there is a related production of an associated idea.

This demonstration is critical for all Deleuze’s philosophy.

*Adequate idea*

This chapter has focused on the production of modes in Spinoza’s ontology primarily through all the attributes, without specifically considering the attribute of thought. God has two powers, the power to produce and the power to think. This section focuses on the second aspect of the parallelism.

Spinoza’s question is how an individual can perceive an idea. For Spinoza, more often than not, what is perceived as an idea is not a true idea; it is not an adequate idea.

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27 See SPE (Deleuze, 1968c, pp. 93-91) for full demonstration.
In the previous part it was explained that with the production of each mode of the attribute of extension that comes to existence, in parallel, comes to existence a mode of thought. To each thing there is an associated idea. Two comments can be made about this statement. First, as each attribute is autonomous, this idea associated with the thing is not the “full” idea of that thing. It is only secondary and partial. It is an affection of the mind. Second, as this idea is produced, within the attribute of thought, an idea of this idea is also produced. This is the rule of production: for each mode produced, there is an associated idea produced with it; and so on. There is a concatenation of ideas.

For Deleuze the true idea is concerned with the content of the idea. The formed idea of the object by the individual is “second hand”, an idea of an idea. According to Spinoza, to get the adequate idea of that object, the internal idea must be ‘correct’, agreeing with the thing that it expresses.

What is to have an idea of an object? As described earlier there are two moments in the creation of an idea of an object. First there is the production of the object and, in the same order, the production of its associated idea. But that idea is a different modal expression than the object and thus does not contain all the qualities of that object.

As this process is only a “secondary” apprehension of the object, the formed idea rarely contains a full “representation”. This idea is rarely a full knowledge of that object. To be expressive, an idea must explain or envelop its cause. This is where the epistemological search joins the ontological one. Just like God is cause of itself and is distinct within itself, the true idea must be defined through its internal causality, all the causes that predicate that object to be.

For example, Deleuze talks about the sun and its effect on our bodies (Deleuze, 1980-81). The sensation of heat is only one partial knowledge of the sun. But we can’t know all the causes of the sun... This means it is very difficult to have adequate ideas.

As individuals we are having ideas

So, we rarely have adequate ideas, we rarely access the truth. What is really happening and is there a path to reach that truth?

The process of having an idea that was just described requires further refinement. What was not included in the description is that an idea is formed within us. An individual, in a given moment, is always composed of both a body and a mind, extension and thought. The body participates in the capacity and power to exist, the soul in the power to think of God. The individual is part of God, composed of modes of two different attributes, body and the mind.

According to Deleuze we are affected. Our body is in relation with other bodies, our ideas are caused by other ideas; we perceive external bodies only because they affect us. We are perceiving our body because it is affected, we are perceiving our soul by the idea of the idea (Deleuze, 1968b, p. 131, emphasis mine). Deleuze describes perception of an object as only the effect that an
object has on our body. He insists that our ideas are only a state of our body; they do not explain the nature or the essence of external bodies (Ibid., 132). They do not give us any knowledge of ourselves or the object that produces the affect. These ideas are not expressive, Spinoza names them inadequate ideas.

This section’s aim was to introduce, by developing the problem of ideas, the role of the body in the formation of these ideas, inadequate and adequate. In the development of an object’s knowledge, the body is the interface between the outside and the inside, the object and the mind. This points to the necessity of understanding the body.

**THE BODY**

Deleuze repeatedly asserts, “we do not know what a body can do.” (Deleuze, 1968b, p. 205; 1988e; Deleuze & Guattari, 1980). This refers to the doctrine of parallelism outlined above. We do not know the power of our capacity of thought. At the same time we do not know our power to do, the capacity of the body. So, in order to really think in terms of power, one must pose the question in relation to the body (Hardt, 1993, p. 91).

To have ideas is to experiment, with the body, with affection. Experimentation leads from inadequate ideas to adequate ones. There lies the necessity of having proven this parallelism between the body and the mind.

The aim now is to explain how Deleuze considers the body and how this will lead to the definition of how to get adequate ideas.

*From speculation to experimentation—from the infinite to the finite*

The body is placed in the speculative system—God, attributes, modes, as a mode of extension.

As already stated, God is the cause of itself, the cause of all causes, and the cause of the power that is always affected. It is the infinite power to exist and to think. An attribute is part of God’s essence; an attribute has an infinite power to exist, but of a specific genre (Delbos, 1893). So, there is a mode of the attribute of extension. Deleuze introduces a second aspect of the mode: its essence. A mode’s essence is particular to a given mode. This is that mode’s singular essence, that particular power. The attribute of extension contains an infinite number of modal essences, an infinite quantity of power.

A body as mode that came to existence has two sides:

- An intrinsic side—its essence, which constitutes a quantity of intensity or degree of power of the attribute of extension. It is a singular essence. The singular essence of the body is its particular degree of power.
- An extrinsic side—its “material”, actual parts.

Deleuze insists that the singular essence is particular to each individual. A singular essence is a manner of being, a degree of power, and a bundle of power. As he says, the essence of Paul
is different from that of Pierre (Deleuze, 1980-81, p. Cours 11). But what is the relation between the intrinsic and the extrinsic parts of a body?

**The body’s composition**

This section focuses on the body as an existing mode, as composed of multiple dimensions of matter. Duffy points out how Deleuze interprets Spinoza’s work through the lens of a particular history of differential calculus (S. Duffy, 2006).

For Deleuze, the cause of the existence of a mode is not related to its essence. The cause of the existence of a mode is another mode itself existing, being *in relation* with it. But this second mode owes to another mode its existence. And so on through an infinite regression. This means that for Spinoza, a mode, thus a body, *has an infinite number of parts*. Each part is itself composed of an *infinite number of parts* (Deleuze, 1968b, p. 183). That is, an infinite number of parts produces a singular essence—a power.

The question is now to define what is composing the existing mode, what are these simple bodies, elementary elements that, *integrated* together or in relation, bring to existence, compose and give power to the mode/body. Deleuze states that these are elements that have no interiority. 28 Thus these elements are only distinguishable by the relations through which they engage with elements *exterior* to them (Deleuze, 1968b, pp. 187-188). In a lecture on Spinoza, Deleuze gives an interpretation of Spinoza’s work that builds the body as a complex mode through an interpretation of differential calculus (Deleuze, 1980-81). This is the understanding of the relation between the finite, what is actual, and the infinitesimal. Put simply, a body is the integration of the properties of *an infinite number of parts that are in relation*. This entails that the ‘molar’ and the ‘molecular’ are in relation of codetermination.

Deleuze describes how the composition of the blood was thought to comprise two elements, the chyle and the lymph. These two elements, discerning each other’s relations, combined together in one relation. This, then determines the third body of the blood (Deleuze, 1968b, p. 214).

**Surface effects**

The body, as actual form is thought of as an ‘assemblage’ of an infinite number of parts in relation. For Deleuze, *a body then cannot be known through its form*. He refers to the Stoic work on *surface* and *depth*. The form, the *surface*, is the limit of the body. Life in nature does not happen at the surface, but in the *depth* of things. The surface is the limit of an infinite number of relations, it is where the action stops. As Deleuze says the edge of the forest is the end of the actions happening in the forest (Deleuze, 1980-81, p. Cours 10). Things are actions. Each body spreads in space in a different manner. What should be paid attention to is not the form of a body, but the dynamism in the depth, and the relationship between the parts.

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28 Had they had interiority they would also have had an infinite number of parts, which is impossible.
Spinoza’s theory of the body has been developed in this section because the body in his system participates in the process of creation of ideas through the affection of the body. The next section turns now to explain an affection—the second side of the Deleuze’s notion of a body.

**AFFECT**

What is an affection? How it goes through the body? And what the processes are that create adequate ideas?

**Two triads of the mode**

Earlier, the coming to existence of the mode was linked to a capacity of power; it was explained that each mode has a singular essence, that is, a particular power. The power is a double concept, it entails a power to act, but also a power to be affected.

Deleuze links two triads of the mode. These are two ways to consider a mode/body, two different perspectives on the same thing. The first triad relates to the mode as expressed: it has an essence, is characterised by its relation of movement and rest, and has extensive parts. The second triad relates to the mode’s power and its capacity to be affected and to create affection. The mode has a particular essence of power. This power can be realised to a particular degree. It can be increased and decreased by affections that it receives.

Deleuze insists that these two triads have a strict equivalence.

This chapter will now explore the link between affect, power, the body, and ideas.

**The affection**

A mode’s singular essence is a power. A certain capacity to be affected corresponds to this. The mode is part of Nature/God. A mode is immersed in a continual chaos, flows of interaction; this flow involves interactions with other bodies and these interactions affect this body’s power.

Affection. Earlier, the mechanism of ideas’ creation has been described. A body encounters another body. The encounter leads to the formation of an idea of the object in the one’s attribute of thought—the law of parallelism. This is in fact a variation of state within us, that variation is the affection (Deleuze, 1978b).

*There are two kinds of modal affections.* The active affections are caused by the mode itself as an explication of its own essence. The passive affections are affections produced by external bodies.

**Ethics—Variation of power and experiment**

Deleuze in his lectures gives the example of his meetings with Pierre and Paul in the street. He tells that when he meets Pierre, he feels hostility, but when he meets Paul he feels reassured
(Deleuze, 1978b). For Deleuze, this indicates a variation of his power of acting. In the first case there is a diminution of his power of acting, where in the second there is an augmentation (Ibid.).

The capacity of affect is different from the realisation of the full potential of this power. The singular essence of a given body is linked to a certain capacity of power that remains constant. However, through our affection, we exercise a certain power to act that we have at that given moment.

Moreover, as we are always affected continually, our power is filled by a constant reciprocal proportion of active and passive affections. It constantly varies. The more passive affections we have, the more we are affected by the outside, that is, the less “we are in control”. We are powerless. This is the lowest degree of our power of acting (Deleuze, 1968b, p. 202).

This is where the question of ethics comes in, deduced from the ontological system. There is a difference between morality and ethics. Morality demands what we must do, and determines what is bad or good for us. Ethics is about empowerment of the self. Ethics asks what we are capable of and proposes a method to realise this. It is about the empowerment of bodies in terms of ‘us’.

The more power of acting we have, the less we are separated from our power. Spinoza’s method of experimenting leads us to frame how we can build our power. We won’t know our power if we do not try, if we do not become active (Ibid., 206).

**Conatus**

Now Deleuze raises a question: why do modes enter into relation and what is that relation? Deleuze points out that for Spinoza the modes have an essence; that essence is the same, but different, whether the mode exists or not. Spinoza creates the concept of conatus, the essence of the existing mode.

There is a force, the force of life that pushes Nature and everything forward. Spinoza makes the controversial assertion that when a mode comes into existence, its essence wills itself to persevere into this existence. This is the dynamic, feedback side of this conception of the mode.

In terms of individuals, this means that as mode, an individual, whatever it aims, aims to persevere, to keep whatever power—puissance—it has at any given moment.

This concept of conatus exercising its power sets the whole system in motion.

**HOW I MET YOUR MODE**

This part focuses on explaining the physics of that encounter between modes.

**Composition—Decomposition**

As explained, a mode comes into existence. This occurs when it enters into relation with another mode. But an existing mode can also stop existing because of the relations it
establishes. Once a mode comes into existence it composes its relation with the other modes. But the opposite can happen: there can be the dissolution of the relation.

**Variations**

There are two cases of encounters. First case: two bodies come into relation and compose a new body. The chyle and lymph compose to create blood. Their relation of movement and rest is suitable for one another, that is, it is useful. This first type of encounter is linked to the increase in power. An external body increases my power.

But this is a passive affection. For Spinoza, this affection that increases power and is useful, conveys joy.

There is a second type of encounter. Poison entering a body leads to the decomposition of the relations that were composing the body. That encounter for Spinoza brings a decrease of power. There is a feeling of sadness attached to it. From sadness it is impossible to build knowledge.

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**Ethology—Haecceity—A new geography of the body and the individual**

This leads to the introduction of two Deleuzian concepts: ethology, and haecceity. The condition of encounter of modes have to be emphasised here: this encounter is not only between two bodies but it also occurs within certain conditions, in relation to certain elements.

An animal is in relation to nature, and ethology is the research for what is good and bad for the animal as an individual. It studies the capacity for this individual to be affected in nature. Ethics is the research of how to create good and bad for the self; ethology is the research of what is good or bad for the body in the environment. Deleuze brings the two concepts together for his personal philosophy.

Deleuze refers to Van Uexküll’s study of the tick’s affect. The animal has three defined affects: the first is a reaction to light, the second is a reaction to smell and the other is a reaction to heat. With only three affects the animal is in relation to the whole forest (Deleuze, 1988e, p. 168).
The study of affect leads Deleuze to two new propositions. First, a new geography of the body; haecceity is the concept used for this. Haecceity is the speed and slowness of the established relation, the capacity to affect and be affected. Deleuze insists that an individual means any individual—a body (and a mind), a subject, a society, or an animal (Deleuze, 1968c). Second, a new understanding of the relation between an individual and its environment, ethology. *The study of an individual is no more about its form. It is a study of relations and affect.*

Deleuze draws three important lessons about ethology with a focus on haecceity. *An individual is a singularity, conditional to time and space.* Haecceity and ethology provide a medium that allows for the determination and the study of a process of individuation. In that theoretical framework, Deleuze explains that the difference between a racehorse and a plough horse is greater than the difference between a plough horse and an ox. This is due to the list of the difference in affect, how they enter in relation with the whole of nature. The difference of affect between the racehorse and the plough horse is greater than that between the plough horse and the ox.

**COMMON NOTIONS—HOW TO HAVE POSSESSION OF OUR POWER OF ACTION?**

*Maximum power—Still inadequate ideas*

Individuals mostly have passive affections. They neither have an adequate idea of external objects nor of their body. They only have inadequate ideas; they rarely know the cause of another body on theirs. This part will explain the process of how to become active and, by doing so, how to form adequate ideas.

We know that our power of affection can be increased through joyful encounters. The more joy we accumulate the more we are close to our maximum power. But for Deleuze, even if maximum joy is accumulated, the idea that it is produced is still a result of a passive affection. Adequate ideas come from active affections, those produced by the self.

The question is then ‘how do we create these ideas?’

*Common notions*

Deleuze returns to the composition of the body as a set of relations between parts. Two bodies that agree entirely are those whose relations can be combined. They are the parts of a whole, that is, they have a common property of belonging to this whole.

This is what Spinoza names “common notion”. Common notions present a similarity of composition between bodies that agree directly. The common notion that represents “what is common to a human body and certain body external to it” (E,II, 39, prop) (Deleuze, 1968b, p. 255, emphasis me).

That is important because these common notions allow us to understand what relations of agreement exist between modes. The common notion is not observing an external phenomena but uncovering the internal and necessary reason of the agreement between the bodies.
To return to the relation between us and an external object, the common notion uncovers the internal reason of the agreement between our body and the object. This will be important to form adequate ideas, as adequate ideas explain the cause of the relation between our body and the object.

What Deleuze described through the use of common notion is a system of relations between the parts of a body, a “grand principle”. He calls it: the structure. An inquiry about bodies shall no more be about the form or the function, but about relations. The form depends on relations; and the inquiry of commonalities will lead us to understand, from the “inside”, the resemblances but also the differences (Ibid., emphasis mine). For Deleuze, the common notion plays the part of Idea in philosophy of Nature.

This section brings two important ideas, in which Deleuze links Spinoza’s philosophy with Kant’s on structures and Idea.

**Experiment and Apprenticeship**

Only through affection can we apprehend the external world, the other object. To this, affects are related ideas. These are mostly inadequate because they do not express the cause of the object and the one of our body. But through a common notion we form an idea that is both in the object and in ourselves. As defined earlier, adequate ideas are ideas that we have in ourselves. For Deleuze, we form common notions by being proactive: through encounters, affection, we feel our power change.

The construction of common notion is to be related to the thinking of the body touched upon earlier. It is necessary to understand the relation between the parts. The whole depends on the relation between all parts.

Deleuze insists that our creation of common notion increases our power to act, giving us the possibility to conquer this power and become active. He insists that there is an apprenticeship of these common notions, of power becoming active (Deleuze, 1968b, p. 267, emphasis his). There is a process of formation.

**Transition**

This last section concludes the description of what was deemed necessary to explain how Deleuze interprets Spinoza’ philosophy. A full account of this work is not proposed here. Only a series of actions proposed by Spinoza to be able to reach his goal to be free is proposed here. The aim of the section is not to present a full account as this would go beyond the scope of this research. This is an acknowledgement that the explanation of Spinoza’s demonstration is here neither done in detail nor finished.
To conclude this part about philosophy in this chapter, the following section draws quickly a recapitulative glossary of relation between Spinoza’s and Deleuze’s philosophies. This is a necessary work to accomplish because within it lies the basis of Deleuze’s own ontology and the one he develops with Guattari, which is relevant to this research.

From Spinoza to Deleuze’s philosophical system

Univocity and immanence. The whole system, the world, (previously God) is composed of two planes. They are together as two faces of the same system, interlocked in a system of relation. The first, the plane of immanence, is figuratively the ‘above’ or the ‘inside’. The second is the plane of extensions, of the actual. This system has no transcendence. What is happening on it and in it is caused by itself, within itself and for itself.

In the system, following the same reasoning, a thing/individual is a whole, composed of elements on the two planes, extension and thought/expression, body and mind, univocal being. What is, happens as a cause of itself, within itself, for itself.

Power. Put simply, the plane of immanence is composed of elementary particles with no interiority. These have the characteristic to be intensities, particles of power—puissance.

Thing/Individual. Composed of two ‘parts’:

**Body.** The body/extension is composed of an infinite number of parts. These are in a relationship of agreement.

**Mind.** The other part of the individual/thing is on the plane of powers. The two elements are connected by a relationship of quasi-cause.

Structure, Common notions. The extension part is ‘associated’ on the other plane to an ‘Idea’, composed of an infinite number of common notions. These common notions in relation compose a structure. The structure cannot be known in its entirety; an Idea is a horizon. It is indeterminate but determinable.

Deleuze and Guattari in a sense keep the main framework of a Whole, a plane of attribute, and a plane of modes in *A Thousand Plateaus* (Deleuze & Guattari, 1980). But they recompose this framework by rethinking the compositions of the element’s planes.

Assemblages. With this concept of assemblage, Deleuze, and Guattari, go beyond Spinoza’s modified ontology. Spinoza focuses on relations rather than form. This opens the possibility of the study of ‘wholes’ composed of heterogeneous elements (Leclerc, 2007). Assemblages expand from a thing/individual in Spinoza’s ontology. This thinking starts with common notions. The concept of common notion is in “direct connection” to the concept of assemblage (Phillips, 2006). Things are in a relationship, the common notion represents that situation when they have something in common. A body and a poison enter into a
relationship, a wasp and a bee; these are all ‘assemblages’ because the elements considered are in relation to effect a certain action, that is a certain power—pouvoir. The elements of an assemblage are diverse things brought together in particular relations; they constitute a composition, a group, and they express a particular character (Wise, 2005). That composition is an independent unity from its parts. Assemblages carry with them the affects of each part that circulate and are transformed within it (Deleuze & Guattari, 1980, p. 315).

Assemblages have two parts—following the body/mind diagram.

- **The form of content**, these are ‘the material sides’ of things, extensions.

- **The forms of expressions**, ideas that gives sense/signification to the infinite number of elements of the form of content. The experimentation is the research for the common notions that leads to the formation of expressions. These expressions give life, make us feel the power of the related forms of content.

There is a relationship of quasi-cause between the production of content and its expression. This is because they are formed by the same structure.

**Haecceity.** An individual/thing/assemblage is three elements. It is not a form. It is:

1) a certain capacity of power (puissance);
2) an infinite number of parts in a relationship of agreement. These are in movement; and
3) it is that individual/thing/assemblage at that moment in time and space. An individual/thing/assemblage is a singularity.

**Ethology.** Power is always effected, powers always enter relationships with other powers. A singular individual/thing/assemblage is always in relation to another entity. The study of an individual/thing/assemblage is not a study about the form, but a study of relation/connection: ethology. Importantly, these relations can be ‘social’—as it will be argued later, but also with the environment.

**Affect.** Ethology is the study of how power is in relationships, how power has been exercised. This is a theory of affect.

**Conatus.** An individual/thing/assemblage is always pushed by an internal, involuntary force, its conatus. It is always enticed to enter relationships with other powers. It aims to preserve, to keep its ‘level’ of power. An individual/thing/assemblage is the result of formation of relations of agreement, which empower it.

To study what is, for example any extension, ‘representation’, one should not ask what is its form. One should ask what it does. What are the relationships that have been created? How do these relationships empower this creation, those who have created it?

**Becoming.** Powers are always acted; the conatus always pushes to get empowered. This means the whole system, the World, Nature, an individual/thing/assemblage is always
entering in relation, always changing, becoming. Relations are always acted and dissolved, composed and decomposed. Individual/thing/assemblage are seen as blocks of time and space.

This whole, World, for Deleuze is chaosmos, chaos and cosmos. In the chaos there is formation, coagulation, composition, structure; though they are temporary.

**Sense = Expression.** We are a bundle of power, everything is power. Put simply, individual/thing/assemblage ‘radiates’ power, certain powers. Individual/thing/assemblage is expressive—of this power. But also the individual/thing/assemblage, pushed by conatus, always involuntarily and continually senses the World, senses power.

**Naming the assemblages**

The naming of an assemblage is important for this research. For Deleuze what is important in studying an animal is not its form but the relationships it effects with its environment, its affects. For Deleuze and Guattari, it would be how the animal assembles with this environment, how it composes assemblages.

Deleuze and Deleuze and Guattari name different assemblages: human-horse-stirrup (Deleuze & Parnet, 1996, p. 84), 5-o’clock-animals-stalks (Deleuze & Guattari, 1980, p. 264). These examples indicate a series of thought. First, for Deleuze and Guattari, there must be a hyphen between the elements of the assemblage in the name. It represents that the assemblage is composed of elements in a relationship, this is a whole, univocal. For Deleuze and Guattari, the assemblage’s name “must be read without a pause” (B. Buchanan, 2008, p. 183). To pause while reading this expression would “change the nature of the consistency that holds this individuality together” (Ibid.).

Second, the naming emphasis that the animal, the man, is not the centre of around which the assemblage turns. It all goes into the assemblage.

Third, this thinking of a whole composed in part in productive relation is associated to the haecceity concepts. Haecceity focuses on the individuality of a given body. Assemblages are singular, this is that individual at that time, that place: five o’clock this animal, the morning star (Deleuze & Guattari, 1980). The name indicates the thinness of the assemblage. The name relates to its intensities, its capacities, irreducible to this body. It is about as precise as one can get into starting to reveal the nature of the animal (B. Buchanan, 2008, p. 183). Naming carries the sense of the assemblage.
STUDY OF SPACE

The study of the house and Deleuze

This section expresses how this research proposes to appropriate Spinoza/Deleuze for the study of the house with the vocabulary defined. This is an entry into what is intended to be achieved using Deleuze's philosophy.

This research will explore the concept of the house as a concrete extension. It is a concrete surface that indicates the limit of relationships that act in the depth. A house has an infinite number of parts. In parallel comes a certain power. The house is a composition of parts that are together because they agree, but also because being in a relationship empowers these parts. The house has been composed for reasons, a form-part-of-assemblages.

As a methodology of study this research proposes that a study asks “What does the house do?”, and “How does the house express power grabbing, empowerment?”

Each relationship, each room, each assemblage is expressive of certain forces grabbing, of forces in relation to increase some powers. In Brunei, the latest houses have individual rooms for each family. Each room provides privacy, something new at the time of construction, something a family wanted: a form of empowerment. All the rooms together contain one extended family. As it will be explained, being together in one house, empowers each family: looking after the children, sharing everyday chores, etc...

To build the house, the builders have sensed forces, including the social and the environmental context where they will be acting, with their own forces as a background. They then compose with these forces to become empowered. For example, the Brunei Malay people built their houses on the water. Being on the water brings a series of empowerment. Here are just two reasons. First, they want to be close to the water because they are fishermen. Second, being on the water is a means of protection against the wildlife of the deep forests of Borneo (T. Harrisson, 1970).

These are some of the infinite series of relationships that can be drawn in the house as assemblage thinking. The focus is not the form but the relationships that have been created and power—puissance, that have been acted: the house-as-part-of-assemblages.

CONCLUSION

This chapter provides some elements to address the research question which aims to identify the ground of Deleuze’s philosophy. In it is explained Spinoza’s ontology and the categories he creates, how these correspond to Deleuze’s ontology or how they have been reinterpreted. This chapter explains that the importance for a study is no longer thinking of this individual as a form, but in terms of relations, power and affect.
It can be argued here that Spinoza/Deleuze’s philosophy is also the ground to provide answers about the gaps identified in the IPRAUS theory and method. For example, as briefly discussed, it is possible to link the study of the social and the study of architecture. It is possible to link the environment and the creation of space.
INTRODUCTION Deleuze, Bergson and time

The previous chapter introduced Deleuze’s ontology and started to build his theoretical framework. This chapter builds in more detail the elements of this framework and how they work. The study of Deleuze’s interpretation of Bergson’s philosophy supports this section. Here, first is presented a particular view of the world that Deleuze built as an experimentation of his study. Second, a problem that ensues from this thinking is presented: Deleuze’s philosophy of time, the creation of a philosophy of immanence.

The underlying problem of this chapter is the search for tools that will allow one to answer the questions:

- Why do people do what they do? (i.e. for this study, why do they build their space the way they do?)
- Why does change happen?

A WORLD OF IMAGE

Hypothesis and problematic

Bergson seeks a way to describe the world in which he lives. He sets out the problem of perception of the material world, the world as a representation. His reasoning: how do we, as subject with a material body, represent and process our encounter with other material objects of the world? His answer is: through their images. Bergson proposes to experiment. He assumes that “for the moment that [he] know[s] nothing of theories of matter and theories of spirit”. For him, “from a purely experimental and sensual perspective, what remains is that he is only in the presence of images” (Bergson, 1988, p. 17; in Olkowski, 1998, p. 93).

He sets out to build a reasoning, an understanding of the world functioning from a perspective of image, where all things are images.

TIME—VIRTUAL/ACTUAL

Deleuze proposes to follow Bergson’s experiment, to consider the world as a plane composed of an infinite number of images (Deleuze, 1981-1982). Everything is an image: a person, an atom, a society. The images are constituted of an infinite number of parts. The images act and react when encountering other images. He says an image perceives and acts. An action triggers a reaction. In that continual movement, the images vary because of the continual changing nature of relationships that are being enacted and terminated. Images transmit movement. Images are image-movement (Ibid.).
In that perspective, the world has two characteristics: *everything moves*, the images move in relation to each other. But also in an image, *all its parts are moving in relation to one another*. Deleuze insists on that thinking: the *world is not defined in relation to time* or in relation to any centre of particular interest such as an individual (Ibid.).

**Image-subject: Centre of indetermination and its action**

But Deleuze explains that the subject is a particular image: it produces reactions—with a *delay*. There is an interval/gap between the moment of encounter and the ensuing reaction. Deleuze calls the image-subject ‘*centre of indetermination*’ (Ibid.).

As everything is considered as images, particular phenomena affecting the movement of images occur around the image-subject. The delay means something happens in the encounter. Along an image-subject a certain number of its image parts enters a relation with a certain number of image parts of an image-movement. The image-subject senses the image-movement, and forms a *perception* of the encounter; an *image-perception*. The delay between the perception and action characterises the action and reaction, obligatory behaviour of an image-movement. In fact, ‘*inside*’ the image-subject there are movements of transmission of images, an *image-affection* (Ibid.).

The *centre of indetermination*, image-subject is a special image. It cuts the flow of images it enters in contact with, chooses and orientates its reaction. New images are then formed and “sent back”. These new images signify the result of the encounter of image-subject and image-movement. They are *image-action* (Ibid.).

**The subject and time**

As described above, there are two sides of the delay. The action of the centre of indetermination or image-subject defines an affection, the *image-affection*. The image-subject affects the sensory motor scheme: perception, affection, action. In the subject, sometimes a delay occurs; this delay is the fourth aspect of subjectivity. This indetermination is the access of the subject to her/his *duration*, to time. The sensory motor scheme is *how as subject, as an image, we encounter objects. It is about how we integrate perception and react as a result of affection* (Ibid.).

Deleuze establishes that the brain\(^{29}\) has a double function: *sensibility* and *choice*. The brain is an image that selects and chooses to recognise and prepare appropriate reactions and actions. Deleuze explains that what the brain calls upon for its recognition is *memory*.

Building on Bergson’s findings, Deleuze proposes a philosophy that links “past, present and future, that together participate in the subjective constitution of an individual” (Sauvagnargues, 2009, p. 96), *involuntarily*, before thought.

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\(^{29}\) Here the brain is not the conscious brain, not the mind, it is an image.
Two kinds of recognition

Deleuze argues that for Bergson there exist two kinds of recognition: the automatic or habitual, and the attentive (Deleuze, 1989, p. 43). As he points out, there are instances where one doesn’t have the time to think, and others where one has the time to think (Deleuze, 1981-1982).

This is about the subject as an image producing movement as a result of an encounter. What is producing the delay? Deleuze proclaims that it is memory or recollection. In the centre of indetermination, memories are called to ‘react’ to the image that is brought forth. Memories are recollected and actualised. On the plane of images these are image-recollection. The past is called upon into the present, which goes forth into the future. The fourth dimension of the subject is the subject placed in time.

First synthesis of time—Habitual recognition

The image-brain is presented to be the centre of indetermination. In the delay, according to the rules of the world, the image-brain can only call other images. It calls image-recollection. What is called upon are memories of the same image. The aim is to procure an instantaneous reaction that resembles the reaction that occurred when a similar image was presented in past actions. In the sensory motor scheme, an image is produced that will induce a habitual movement.

How to describe the construction of habit? In an example, Bergson considers a swinging pendulum (Lawlor & Moulard-Leonard, 2013). He describes how, once the first swing is launched, there is a series of successive bounces on each side. Ball A swings and hits the other ball, triggering ball B to swing; when ball B swings back and hits the other ball, it launches ball A back. Hence the series of movements A, B, A, B, A…etc. For a subject, there is the expectancy of the repetition. A repetition “changes nothing in the object that is repeated, but in the mind that contemplates it, something changes” (Deleuze, 1968a, p. 96). Deleuze contends that it is the repetition of impression that gives the association of resemblance and ideas. Ideas are always derived from impressions. It is when impressions vanish that something is left.

In repetition, the subject creates habits. It is the property of passively acquiring a relationship with the future. For Deleuze, the subject is made of contraction (Deleuze, 1968a, pp. 96-108). The contraction is passive, in the sense that one does not have to think consciously about it for it to happen.

Deleuze determines habits as the synthesis of habit, the first passive synthesis of time. He finds it by exploring the particular mechanism of the function of the world he is experimenting with. It is a synthesis because the continually passing present and its always contiguous past

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30 Recollection is the translation adopted for the French word “souvenir”, that is “memories”. This is the reason this research is referring to memory and recollection (Deleuze, 1981-1982). They should be understood as synonyms.
are synthesised to create an action toward the future that is always already coming. But for Deleuze, this synthesis of time ought to be passive. To make sense of the actual present, there is the necessity of a synthesis of time to be passive. When we encounter the pendulum, to get the idea of the pendulum, to conceive what a pendulum is, we need to have in ourselves an idea against which to compare it. First, there is a consideration of the presupposition—a passive synthesis, and second, the active synthesis of recognition. The subject has a sense of expectancy (Williams, 2003, p. 93). This first synthesis is the first paradox of time: the present is contemporary of the past (Sauvagnargues, 2009).

**Second passive synthesis of time, memory**

**Virtual/Actual**

This section aims to explain Deleuze’s thinking: what happens when in a second instance, the subject “has the time to ‘think’” (Deleuze, 1981-1982). Deleuze affirms that there is a delay in the sensory motor scheme. As he explains, the centre of indetermination—i.e. the brain, is presented an image from the first moment of the sensory motor scheme. In the attentive recognition’s action, that image does not continue into movement, as in habitual recognition, but it enters a relationship with an image-recollection. The delay is filled with memory. What this means is that, in the brain, the presented image proposed as a result of perception enters a relationship with the past, memory.

Deleuze asserts that what is in a relationship is the “real and imaginary, the physical and the mental, the objective and subjective, the actual and the virtual…” (Deleuze, 1989, p. 46, emphasis his).

**Memories**

For Deleuze, memories are past images that have been constituted and archived. They have been constituted in a present that has passed, that no longer exists. They are deemed useful. As the present passes, memories are archived. All memories, image-recollections, are archived in the virtual plane that was defined above. On the plane, they are pure memories; on the plane there are only memories. These are the images of the past that are called into the present.

It is important to understand that image-recollection actualises a virtuality. As the present, into which memories have been constituted, has passed, memories that are repeated in the present cannot be the same. There is a dichotomy between pure memories and image-recollection. Image-recollection is different in degree to the pure memories to which it refers.

To explain the previous demonstration, Deleuze refers to the Bergsonian diagram of an inverted cone, which has circles in its body and its summit on a plane (Bergson, 1965, p. 211; found in Deleuze, 1989, p. 294, note 22). The plane represents the plane of actual things. The cone represents the whole past that is accessible to memory and the different circles refer to different regions of the past.
Deleuze explains how to access different memories in the past. Following Bergson, he describes how in certain regions of time there are *certain points that are clearer and brighter*. These are singularities, to which the seeking soul will be attracted. The recollection circuits will pass successively through these regions.

The summit of the inverted cone represents the centre of indetermination, the point of interconnection between the whole past and the actual present. It represents the *contraction of the whole past*. As Deleuze describes it, referring to the brain, this point represents an image that has two faces; one is material in the actual present, one is virtual—the image-recollection. At this point of the cone, the whole past contracts and the actual present crystallises together (Ibid.).

Image-recollection and the image provided by the sensory motor scheme, image-perception, are in *relation* (in the centre of indetermination, the brain). This means that at any moment that passes, *the present is in relation to the whole past*, to the virtual.

The present that passes is related to the past that is contiguous. This has important consequences on the thinking of time and the definition of the present. Deleuze insists that the present is always double. It splits itself into two at each and every moment. It is constituting itself but at the same time it is passing. *The present is contemporary to the past*. The virtual time accessible is *the whole past that has been* (Deleuze, 1988a).

For the moment only the virtual plane containing an infinity of certain images—those that have been in the present, has been described. But Deleuze will add that there exist another infinite number of images. Here, he departs from Bergson as his study of Proust and the sign taught him (Deleuze, 1968a, pp. 114-115). In it, Deleuze devises a typology of signs that have a corresponding sensitivity (Sauvagnargues, 2009).

Among them, signs of art develop “a morsel of time in the pure states” (Deleuze, 1964, p. 67) bringing about involuntary memories. These recollections bring back to the subject memories of the past, but not a circuit from a present to a past that was lived. They bring back a *past that did not happen*, the pure past (Sauvagnargues, 2009).

To recapitulate, there are two types of image-recollection. First there are the ones inscribed into the recollection circuit; they actualise a past that was. The circuit navigates from a close past to a further and further one. Second, there are those image-recollections that bring to the passing present images that belong to the pure past, the past that never was. *These two multiplicities constitute the whole virtual plane*; all the image-recollections are accessible. The whole past, the past that was and the past that has never been, can be jumped into for recollection purposes. The virtual plane is an infinite ensemble of regions of the past which contain “shining” points toward which recollection is attracted (Deleuze, 1981-1982).
Matter and virtual

The previous section described a second synthesis of time, the synthesis of attentive recognition, the synthesis of memory. It relates the subject to a sense of passing. This synthesis of time is about how the present passes and becomes archived (Williams, 2003, p. 93).

Deleuze demonstrates that the present is always doubling. It is continuously passing and simultaneously rolling back into the future. In this synthesis, the present passes and is stored. This is the second paradox of time: the present is contemporary of the whole past (Sauvagnargues, 2009). The second synthesis ensures the first synthesis of habit; the present is the most contracted form of the past (Williams, 2003).

In the sensory motor scheme, the delay is the time felt, which Bergson names duration. And the image-crystal, the summit of the cone of the past, is the point of encounter between matter and time. This is important as movements in the material world have a relationship with the virtual plane, a plane made of duration. Matter and memory (the virtual) are in a relationship with one another (Sauvagnargues, 2009).

Passive synthesis

Like the first passive synthesis of time, this synthesis underlying our every action is passive. Deleuze’s deduction from the sensory motor scheme shows that there must be a sense of archiving; there must be a sense that the present passes and becomes stored in the virtual. But there is a sense that this whole is accessible. This synthesis of time is passive because for Deleuze, conscious activity opens and closes different pasts; directs our actions. With the passive synthesis of time we cannot chose something from the past (Connolly, 2013, p. lxxiii).

The movements—Differen-t/c-iation

The composition of the virtual plane and how image-recollections are called have just been explained. An important point, for Deleuze: the whole system is always in movement. This has two consequences.

The first consequence relates to the virtual plane. In the circuit of memory, the brain goes into regions of the past in proximity to “shining points”, singularities. It passes into the regions of the past seeking image memory and brings back image-recollection. But the present always passes, the past always changes. As such, image-recollections are never the same. This process, happening on the virtual plane, brings difference, a process named differen-t-iation by Deleuze, with a ‘t.’ Differen-t-iation explicates that the virtual plane always changes.

The second consequence is that the plane of actualisation also always changes. As explained, the image-recollections chosen trigger in the sensory motor scheme an image-affection and image-action—those are happening in the actual plane. Two sets of consideration have to be made. First, the triggering means the movement in the virtual into the actual can never be the same. Image-recollection and image action are not the same but they are related. Second, what is actualised—’response coming from the virtual’, is difference. The self is expressing difference after each actualisation, each triggering of a sensation, each movement. As a result, image-
movements are related to the ever-changing image-recollections, and these are never the same. Image-movements never actualise the same. They actualise difference.  

This process of actualisation that brings difference is named differen-t-iation, with a ‘t’. There is an asymmetrical relationship between the two differentiations. The virtual one has primacy over the other one. This movement of differentiation, Deleuze insists, brings a positive difference, a creative difference.

What is actualised never resembles the virtual region it refers to. Actualisation is always creation. Actual designates the present state of the things. Virtual is all that is not actually present but is nonetheless real (Sauvagnargues, 2009, p. 94).

The second passive synthesis of time explains that an image-subject, to react to the sensation of an image, searches the past to re-enact movements that have been made in similar situations. But as the conditions of the present are always different from that of the past, the reaction can never be the same. The second synthesis of memory brings upon changes and creations.

This second passive synthesis of time revealed the double process of differen-t-iation. These two processes occur on different planes, the plane of virtual and the plane of actual.

**Diagramming Deleuze**

<table>
<thead>
<tr>
<th>Virtual Plan</th>
<th>Differen-t-iation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Plane</td>
<td>Differen-t-iation</td>
</tr>
</tbody>
</table>

Figure 5 Virtual/Actual and corresponding differen-t-iation

This research interprets this reasoning as a presentation of a conception of the world as a whole that comprises two planes that are real and in a relationship. The first plane is the plane of actual things. The second plane is the virtual plane that conditions the first one. In a nutshell, perception occurs in the actual plane, and calls out memories that are in the virtual plane. Then in continuity, the ‘structure’ of the virtual plane recompose differen-t-iation; what follows is differen-t-iation on the plane of actual.

**Élan Vital**

Deleuze adds a fourth dimension to the dual dualism matter/memory, actual/virtual: how they are generated. He introduces Bergson’s concept of élan vital: a creative and unpredictable process that organises the body it traverses. Deleuze uses the vocabulary he developed and interprets the élan vital as a “virtuality that is always being actualised, a simplicity that is

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31 But not just diversity in time – change, or diversity in space – variety. It is the production of difference, the notion of “difference of” not ‘difference between’. It is it is more like a singular power that varies, a varying power – puissance” (Connolly, 2014b).
differentiating, a whole that is being divided”. For him, “it is the essence of life to proceed by
dissociation and division [...] ‘dichotomy’ is the essence of life”. (Ibid., p. 96) 32

The third passive synthesis of time

Thus far, the work on Deleuze/Bergson’s philosophy has brought about two conclusions
that were related to the problem of creation. In the second passive synthesis of time, the
repetition of actions of the past in the present leads to the creation of new actions. The
conditions of the present are different than those of the past. Bergson’s creative evolution has
proven that nature’s creativity was almost limitless. However, for Deleuze there is the
intellectual constraint of thinking of creation as an evolution of previous capacities. Deleuze
is seeking a concept where creation ‘flees’ existing lines of thoughts (Sauvagnargues, 2009).
We create when we go into a future that is independent from what has already occurred. For
Deleuze, in a sense, Bergson’s creative evolution is not enough creation.

Deleuze finds the need to define a third passive synthesis. He is inspired by the findings of
Proust and Kant. From Proust, he takes that the affection of some signs, in some
circumstances, can trigger the apparition of memories that never happened (Deleuze, 1964,
1968a). These are pure memories, ideas that are real but have never been. In both cases, for
Deleuze, this is pure creation. This is a creation that is not evolutionary. It is a break with what
exists and what is done.

For Kant and for Proust, the senses are pushed to the limits in the face of the work of art.
Reason is overwhelmed by emotion. Deleuze describes this phenomenon as the reaching of
the pure and empty time (Deleuze, 1964, 1968a). In the delay—in the gap of passive reflection—a
break in the succession of time occurs. It is pure time because it is cut from the past; there is
no link to the past. It is empty because there is no link; it doesn’t bring back any past. Under
these particular circumstances, particular regions of thought can be accessed.

For this synthesis, the subject must have a sense of expecting that something will happen in
relation to past and present. To create the new, there must be a sense of risk and openness. It
is passive in relation to chance. The third synthesis of time is the condition to reach newness;
pure creation (Williams, 2003).

Like the two other syntheses that determine actions of the self in relation to the present and
the past, this third synthesis, pure creation, also requires sensual triggering and is passive. The
third passive synthesis of time requires a sense that the future is open, that what is out of
reach is attainable—an openness with respect to habits and memory. There is a need to free
oneself from this past. But without this past there would be no future (Ibid., 102-103). This
sense is passive and underlies our actions.

32 This concept of élan vital can be understood in parallel to Nietzsche and the concept of will to power, and
the connatus of the modes in Spinoza.
**A PHILOSOPHY OF IMMANENCE**

In this discussion of Bergson the functioning and construction of Deleuze’s transcendental empiricism has been elaborated.

![Diagram of the sensory motor scheme](image)

The next section reflects on the importance of the passivity of the passive synthesis of time deduced by Deleuze while exploring the system build from Bergson’s questioning.

**Passivity: an immanence—A life**

Deleuze’ philosophy is interested in life. Every life is a life, every production is singular. There is no determinism; life does not depend on a Being and is not submissive to an act (Deleuze, 2003b, p. 361). For Deleuze in the system there is immanence. This means more than the notion of a system resulting from perpetual self-causation. It is immanence as he found in Spinoza, a system that relates to the notion of cause of itself, in itself and through itself (Deleuze, 1990a, p. 162).

The key for the construction of that system is the system of the three passive syntheses of time, the involuntary dimension of experience. That system links active and passive acts. Whatever is produced by an individual, voluntarily or passively, the three passive syntheses of time are at work underlying the action.

This is very important specifically for the study of the production of architecture. This frames the thinking: why do we do things the way that we do? Why do we produce our space the way we do? That production is immanent, in a sense, there is no social determinism. Every house we build, every room we decorate, all productions are singular. There are no two the same.

We produce; there is a sense of expectancy, a sense of archiving, and a sense of changing underlying our production. So under our act, we build with the passive synthesis of time of habit and memory. What does this mean? We are about to make choices, choose the wood, choose the form we want to build. We are on the ground. We are passively evaluating all the forces that are available to us on the basis of all of the past and anticipated future coming to meet the present actions. Passivity allows “for the feeling of the force or the significance of the feeling of the force”. Without passivity and sense, there would be “no feeling of force, no feeling of the significance of the force or the potential significance of doing something that is not yet done” but that we talked about. It is all “‘based’ on the feeling, the sensation, the involuntary passive sensation” (Connolly, 2014b).
Passivity allows for “trying out new things, relying on past things”. Our “animal-bodily” aspect of force is “connected up to and is made real by the abstract functioning of the involuntarily functioning brain” (Ibid.). The brain abstractly and involuntarily bringing all relevant past—and anticipated actions and their forces to meet the particular problem or anticipated action at hand...to facilitate an evaluation, an alteration, something for conscious and semi-conscious decision-making to take hold of. We produce, we are experimenting together with “the potential and means available to them whenever that is, very concretely... ‘intuition-in-action’ (Deleuze & Guattari, 1980)” (Connolly, 2014b).

All that we do brings only difference of, difference in itself. The definition of the three passive syntheses of time is very important: this is a theory of corporeal drives (Hughes, 2011, p. 2).

**Deleuze system**

This section recapitulates what elements of Deleuze’s philosophy this system brought about. First, the system exposed here is based on a conceptualisation of the world as a plane with two faces. One plane is the actual, which finds its conditions in the second one: the virtual. What is its composition and functioning? The virtual plane is composed of memories, the n dimensions of the past. These are ‘shining’ points, singularities, and their region of influence. They have an aleatory disposition (Deleuze, 1969) and are always in movement. These movements are the abstraction of the three passive synthesis of time. Deleuze says time draws lines (Deleuze, 1988a). These passive synthesis of time draw three types of lines. As explained, the three lines act simultaneously in a relationship, but the intensity of influence of each varies greatly. In some phenomena, one synthesis is more prominent, but in other situations has almost no influence.

The virtual is accessed through the actual, a consequence of sensation, of affect. This triggers a circuit of affects, the sensory motor scheme, the recomposition of the virtual plane. And as a consequence, the actual is recomposed too. The whole planes are two faces of the world. It is continually recomposing. The passive nature of the passive syntheses of time makes the changes immanent.

The knowledge acquired in this chapter adds to the understanding of Deleuze’s philosophical system.

**SPACE AND DELEUZE**

How does this chapter allow this research to talk about space? What follows builds on Hughes’ assertion that the three passive syntheses of time are a theory of corporeal drive (Hughes, 2011, p. 2). This chapter built the tool to answer part of the questions: why do we do the things we do? Why do we create and live our spaces the way we do?
The focus here is how a subject creates. It is the subject that is placed in the world, and is affected by and affects the world.

This thesis starts with an interpretation of Deleuze’s concept of how as subject: we contract the world around us—that contraction is affect. Affected passively, we create habits.

I want to reflect on my stay in a Brunei home in which I lived. Like the two babies born during my stay, I practiced the space of the house I was invited into, many times, through repetition. I saw the families’ lives because I paid attention to them. But most of the time I was just passively participating in the lives that were going on around me. I saw the head of the family with her room at the front—literally at the head of the house. I saw the immigrants renting their room, who always entered it through their window and were not allowed to go into the main room or the main bathroom. I saw them leaving for work every day, I heard them at the back of the house. I saw birthdays, I saw ceremonies for the dead in the main rooms of the houses. In this perception of space, I have found a diagram of the arrangement of rooms. This arrangement is linked to social acceptations, modes of lives in Deleuze’s words (Deleuze, 1995). I have contracted this Idea of space. These are the spaces and practices that will grow in the two babies born during my stay as they grow. They will have contracted these spaces. They will have contracted social untold agreements, they will have lived through the politics of the house and the society.

I also practiced the nearby space while living in the house. I saw children go to play in neighbouring houses belonging to their aunties. They played and ran. Through the repetition of a walk to the water taxi every day, the space around me became familiar; the blue house, the green house, the footpath. I contracted these spaces and they became mine. Also in the space, importantly, there is the water, everywhere. For me this is not comparable to the feeling I contracted on the land. The water is down, and everywhere. I could fall, lose my phone or my wallet, and shame myself in the water. The water is also always changing: high tide, low tide and the stinky mud. It is always making noise. Its colour varies. Its freshness is always welcomed in the continual equatorial heat. The water becomes part of my habits, my perception of the place, my subjectivity, and so does the built environment and the people perceived every day. I became part of the house and village assemblage in my five-month stay.

How would these newborn Bruneians build their new home if they had to? They would call upon habits, what they feel is their place. This is their desire that they have contracted. The modes of life they have lived in are constructed social desires. To build their new home, they would seek the same arrangement, the one that is socially accepted.

In this essay, I wanted to show how I will speak about space with Deleuze. How the concepts and thinking that this chapter brought about allow me to speak about space. I linked the understanding of subjects’ lives; the political and social, and environmental aspects. I used a different description of space in which the relationship between architecture and the social is not assumed but rather is essential to understand the creation of space.
CONCLUSION

This chapter produces a theoretical framework for the two questions underlying my research: Why do people do what they do? Why does change happen? The three passive syntheses of time are the grounds for the answer.

This chapter brings new elements to the question of what composes Deleuze’s system. It also gives some answers to the different questions this research posed to overturn IPRAUS. This research proposed a theoretical framework to think how things gets consistency, and how they change; how things mix, connect, and affect each other. This chapter explains what has led this thesis to propose a different way to study and speak about space.
INTRODUCTION
This chapter elucidates three elements of Idea—an essential piece of Deleuze’s philosophy of difference.

This chapter has two distinct parts. First, Deleuze’s conception of an Idea will be characterised. The relation between the elements of a thing/subject/assemblage situated between the actual and the virtual is explained. Second, the concept of Social Idea, and Deleuze and Guattari’s philosophical thinking of social systems will be introduced. With this, it will be argued that one is able to use Deleuze’s philosophy to study social systems and the production of architecture.

MAÎMON

Deleuze’s aim: Departing Kant
The programme set by Deleuze is a critique of Kant’s transcendental philosophy. Kant creates the transcendental plane to find the structure of real experience. But for Deleuze, he fails to determine that plane correctly, independently of the individual’s experience. From Kant, Deleuze keeps the notion that Ideas are limits, (Deleuze, 1968a, pp. 220-221) and are problematic (Deleuze, 1969, p. 69). But Deleuze understands it differently.

Deleuze uses Maïmon’s philosophy elaborated as a critique of Kant. The philosophy concerns sensation and genesis.33

Maïmon plays Leibniz against Kant
The starting point of Maïmon’s critique is Kant’s theory of the matter of sensation (Sauvagnargues, 2009, p. 227). How do we perceive sensation?

Maïmon takes on Leibniz’s infinitesimal—integral, calculus thinking. Leibniz uses this to think about the rise of consciousness. Leibniz noticed each conscious perception we have implies an infinity of small perceptions that prepare and compose it.34 He proposes that, as subjects, we are affected by minute (or small) perceptions; these act at the level of unconsciousness. When we encounter an object, the entire object does not appear in our mind all at once; there is a process of realisation.

33 See Jones for in depth explanation (Jones, 2009, pp. 106-108).
34 For an explanation refer to The Fold (Deleuze, 1988c, pp. 115-117).
Consciousness of a sensation arises from the integration (the sum) of a series of little perceptions that are in differential relation. The sensation is transformed into a consciousness when a limit is reached. All consciousness is a threshold (Sauvagnargues, 2009).\footnote{For an example see Deleuze explaining Leibniz on the sound of the wave (Deleuze 1968a, 275, Deleuze, 1988c, 113-133).}

Maimon appropriates that demonstration. He places an emphasis on the genetic process that has to occur for a sensation to become conscious.

\textbf{Maimon’s system}

**Continuum sensation/consciousness Immanence**

Maimon’s aim, within the Leibnizian framework, is to place Kant’s understanding and sensation in the same continuum. But, to create a true theory of difference, Maimon needs to ascertain that the elements composing the concepts and the sensation in Kant’s system have no extrinsic relation or predetermined action. To this aim, he creates an immanent system of two planes with a Spinozist conception. In that system, God has an infinite understanding, the subject has a finite one that is placed on that large scale of different degrees, from infinitely small perceptions to the infinite—God. Maimon solves Kant’s schematism\footnote{See chapter 01 of this part.} inspired by Leibniz. He poses a common source between intuitions and categories in Kant’s system.

In this proposed system, first, concepts and intuition or faculties of understanding and sensation are in continuity. Second, on the plane of immanence, the Idea is made of inessential points that composes that plane. These elements have no predetermined object. So, when understanding arises, Ideas are unrelated to the outside that triggered it (Jones, 2009, p. 118).

\textbf{Deleuze’s system}

Deleuze appropriates many aspects of the points developed by Maimon. However, he changes some points. This leads to the definition of two important elements of Deleuze’s system, two of the three criteria to define Deleuze’s concept of Idea.

**First criterion: Elements composing the plane of immanence and Ideas**

Deleuze does not accept God as the limit of all things, as the foundational element of the plane of immanence. To overcome that idealist perspective, Deleuze returns to the plane of immanence as described here in the chapter on Bergson (Ibid., 116). The plane is composed of elements that do not have identities of their own. They are inessentials. They are indeterminate, are all different, free of any subordination. On that plane, an Idea composed of these elements is a multiplicity, composed of pure difference. The elements provide the ‘raw material’ for the ‘integration’, the synthesis.

**Second criterion: Relations**

These elements have no predetermined meaning, the meaning of the elements only “appears” when they enter in differential relation. To return to differential calculus, for Deleuze, the elements, particles
of the plane thought as $dx$ and $dy$ are completely undetermined (they are vanishing quantities). But they are determinable reciprocally in a differential relation ($dx/dy$).\footnote{See \textit{Difference and Repetition} (Deleuze, 1968a) and the \textit{Fold} (Deleuze, 1988c).}

**Diagramming Deleuze**

The aim of this chapter, in providing these two demonstrations—first, the integration of infinitesimals, and second, the coming into consciousness, is to emphasise one point of the diagram of Deleuze’s philosophical system being developed. In all the commentaries made in this thesis, the two planes, actual and immanence, were separated. Though it was emphasised that they are two faces of the same plane. Now, this demonstration shows how these planes are always in a relationship with one another, interrelated, interdependent.

**IDEAS AS PROBLEMATIC—LAUTMAN**

**Lautman—Ideas: Instance Problem/Instance Solution**

Deleuze appropriates many concepts of the Idea and the relation between problems and solutions from the French mathematician and philosopher Lautman. Put simply, Lautman’s thesis is that mathematicians of the same era work on practical problems that are related. For example in the end of the 19th century, many mathematicians were working on differential calculations, each from a different angle. For Lautman, there was a common Idea that structures the work they were effecting. Each work is different but relate to the same Idea. That structure is impersonal; the minds of the mathematicians wondering passively in their work refer to it. (in S. Duffy, 2009, p. 362; Lautman, 1938, p. 120). These Ideas are not, however, susceptible to direct study. They are problematic (in S. Duffy, 2009, p. 362; Lautman, 1938, p. 19).

To frame this thinking, Lautman appropriates Plato’s Idea. For Plato, an object is determined in two worlds, the world of Idea and that of the representation, neither of which are related. Lautman claims that in mathematics there are “instance-problems”—the world of Ideas, and “instance-solutions”—the world of form. But contrary to Plato, for Lautman “instance-problems” are a domain that structures “instance-solutions”. The Idea is on one transcendental and immanent plane that contains its elements and structures the form, which is actual (Lautman, 1938).

This thinking is of two interrelated planes, one is immanent, transcendent, and that structures the other.

Lautman notes that the structure of the Idea is not a given static element. In the history of mathematics, discoveries and resolutions of practical problems led to the redefinition of the meta-problems, the Idea. There is a \textit{genetic} property to the Idea (in S. Duffy, 2009, p. 366; Lautman, 1938, p. 212).
**Singularity—third criterion**

Two criteria of the Idea/structure in the study of Maïmon were described. But there is a third. To the reciprocal determination of differential relationships (1) between the elements (2), corresponds to the complete determination of a set of *singularities* (3).

**Two distinct realities, associated**

Deleuze appropriates Lautman's theory. Lautman developed his research following the history of differential calculus. In it, he demonstrates that the theory reveals two distinct mathematical realities in relation to one another:

- On one “plane”, “problem instance”, there is the field of direction, with its topological accident that relates to the existence of singular points to which no direction is associated.
- On the second “plane”, “solution instance”, there are integral curves that take a determined form in the neighbourhood of the singularities in the field of direction. (Deleuze, 1969, p. 127, note 4).

The plane of reality of the problem-instance is composed of singularities, particular elements, which are in differential relations. The whole of these also define a singularity.\(^{38}\)

In the other mathematical reality, on that plane, the curve is defined by the other plane. In the neighbourhood of the singularities—the composition of all singularities, the curve takes particular forms. The two planes are linked but the realities of elements of both planes are distinct. In this diagram, the problem is independent in its composition from the solutions, and it *does not resemble* them.

The third criteria of the Idea is that an Idea is a structure that is composed of elements in differential relation. That structure is singular. Put simply, it is unique and particular to a given block of space/time.

**A function—Fourth criteria**

There is a fourth characteristic of the Idea. A new important point comes out of this mathematical calculus thinking and it is related to the genetic thinking. On the plane of “problem instance”, here is the plane of immanence, the elements of the plane are in differential relation, their relation is structured following a *function*; let us name it F(x).

But this mathematical function is related to the thinking of production. F(x) expresses a certain continual output. The relation between the elements of this plane is dynamic; the structure is genetic.

In mathematical thinking, the function and what it structures is composed of ordinary points and singularities. When the function is producing in the neighbourhood of ordinary points,

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\(^{38}\) It is important to note that there is a confusing double sense in the use of this word in Deleuze. (There is a third use of singularity: what is actualised is a singularity too.)
on the associated plane, the plane of actual, the associated curve follows a given path. The output is ‘constant’ or follows a tendency. The structure expresses a given differential relationship between its elements of the plane of immanence. But the function also has singular points, the nodes, the centres, bottlenecks. They represent topological accidents of the plane of immanence (Deleuze, 1969, p. 67). In the neighbourhood of these singularities, the relation of the elements of the plane changes. The structure recomposes. In the associated plane, the actual changes in form.  

This section is not intended to focus on thinking change. What is of interest here is the block of space/time when the structure of the plane of immanence effects a constant function, producing similarities in the actual. The structure is the Idea. When the Idea is ‘constant’, its production of actual is ‘constant’.

**Diagramming Deleuze**

This section points out what was learned so far about Deleuze’s philosophical system. It is a continuation of the definition of the relation and composition of the two interrelated planes of virtual and actual.

The above sections have determined that actual things are related to Ideas on the virtual plane, the plane of immanence. First, differential calculus has been shown this relation. The ‘molar’, the actual, is related through certain functions of integration, to the ‘molecular’, ‘non-essential’ intensive elements. Ideas are the sum of elements that are in a productive relationship. Second, it has been shown that Ideas are structures, they effect a function. Ideas structure the actual.

Ideas are productive but also genetic. When the relationship between the elements on the plane of immanence changes, the function of the domain of effectiveness changes; when the production occurs, the actual changes.

**Transition**

This initial philosophical section presents a first conclusion. Here, Deleuze’s philosophical system was presented in an abstract manner. What was uncovered is the diagram of Deleuze’s transcendental empiricism as presented in *Difference and Repetition* (Deleuze, 1968a). The presentation of this diagram was important as this research’s aim is to explain the ground of Deleuze’s philosophy. Anne Sauvagnargues explains that Deleuze and Guattari assume that Deleuze’s work is known (Sauvagnargues, 2009). The rest of this chapter presents how Deleuze’s philosophy is operationalised.

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From abstract Idea to Social Idea?

In an important philosophical move, Lautman hypothesizes that the Ideas that structured the field of mathematical work also structured other fields of thought. There are also a number of realities, including a physical reality, human reality, and importantly social reality (in S. Duffy, 2009, p. 367; Lautman, 1938, p. 209). He did not explore that thought further.

In *Difference and Repetition*, Deleuze hints at this research. He proposes to seek out Ideas in very different domains (Deleuze, 1968a, p. 238). He very succinctly explores three ideas, “atomism as physical Idea”, “organism as biological Idea”, and, most importantly for this thesis, the social Idea (Ibid., , pp. 238-244, emphasis added).

Deleuze asks: are there social Ideas in the Marxist sense (Ibid., , pp. 240-241, emphasis me)? *His answer is positive.*

So, for Deleuze, his philosophical system could be applied to the social realm. However, in *Difference and Repetition*, Deleuze does not dwell much on the problem of social Idea that is of interest to me. Deleuze’s works with Guattari, particularly *Anti Oedipus* (Deleuze & Guattari, 1972), are in a sense the exploration of this social Idea.

A second conclusion is made in this philosophical section: the link between the abstract conceptual Deleuzian philosophy that was developed so far in this these and how it relates to the study of social systems can be made.

Socio-cultural Idea and the Study of Social Production

Deleuze and Guattari’s Social Idea

Deleuze’s transcendental empiricism is an abstract philosophical thinking. Anne Sauvagnargues writes that the association of Deleuze with Guattari led to the operationalisation of his philosophy, particularly in relation to the study of social formations (Sauvagnargues, 2009). The next sections relate some of the concepts of Deleuze and Guattari’s ontology as presented in *Capitalism and Schizophrenia: Anti Oedipus* (Deleuze & Guattari, 1972) and *A Thousand Plateaus* (Deleuze & Guattari, 1980). In effect this is the intensification of all the elements that have been drawn from Deleuze’s system.

This section’s aim is to explore the concept of Social Idea that Deleuze hinted at. Deleuze and Guattari and Deleuze after his collaboration with Guattari did not specifically name the concept of Social Idea. However, their concept of Socius, abstract machine, and assemblage—established in *Anti Oedipus* and *A Thousand Plateaus*—that will be explored here, are a development of the Social Idea concept (Smith, 1997, p. 358). This research works with this denomination of Idea, Social Idea, for three reasons. First, this research starts and focuses on Deleuze’s earlier philosophical theories. Keeping that denomination will allow reference to

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40 For in depth comment see Smith (Smith, 1997, pp. 353-375).
the one concept used so far and that will continue to be used in the next chapter. Second, this also allows this thesis to be consistent, and not use too many concepts. Third, as the new concepts are grounded in the earlier theory, this is not going too far from Deleuze and Guattari’s work by using an ‘old’ concept for them.

In the transcendental empiricism framework defined above, four characteristics must be found to define a Social Idea: 1/ its elements; 2/ their differential relations; 3/ the singularity; and 4/ how it works as a function.

**The Social Idea: Elements**

What are the Social Idea’s elements? Continuing Guattari’s work, one aim of Deleuze and Guattari is to understand the formation of a subject by society. They intend to link the two philosophies that study the production of social reality: Freud and Marx.

In their development, Deleuze and Guattari use the Marxist view that a society’s virtual plane is composed of elements of economic nature, that is, abstract labour. But interpreting Freud, they add another element: the activity of libido (Smith, 1997, p. 356). For them, Freud’s greatness was to have established the activity of libido as desire’s essence.

Deleuze and Guattari propose to link Freud and Marx; they state that “social production and relations of production are an institution of desire” (Deleuze & Guattari, 1972, p. 75). What they name production is the investment of human energy in any and all activity, whether physical or psychical or both (Holland, 2009, p. 151). Libido and labour are immanently constituting desire. They are the elements composing the field of pure immanence (Smith, 1997, p. 358). The thesis of *Anti Oedipus* is that social production of reality and the production of desire are one and the same thing (Ibid., 356).

What are the elements of the plane of immanence? What are the elements composing the Social Idea? Labour and libido, that is desire.

Desire is a positive and productive force that sustains the formation of life as material flows. For Deleuze and Guattari this productive force is a social force (Parr, 2010, p. 66). As force, desire is flow.

**The Social Idea: Differential relations**

The second element of the Social Idea is the type of differential relations that are established between the elements.

It has been established that desire is the elemental force of the plane of immanence and that it flows. But linked to this force is associated power—coercive. Desire and power are two

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41 Deleuze and Guattari desexualise and de-individualise desire (Smith, 1997, p. 366).

42 It is positive because it is productive (for better or worse), it always creates excess. This is against the philosophy of lack. See Colebrook for justification (Colebrook, 2002).

43 Here, power as a word refers to the negative repressive sense, ‘pouvoir’ in French, not power as puissance. It is named following Surin power – coercive (Surin, 2005, p. 26).
forces that have a relationship. Power represses desire (Bogue, 1989, p. 106). In a sense, power is desire repressed, desire captured. Desire is a flow, power is the flow stratified, power’s aim is to capture the flow.\textsuperscript{44} \textit{Anti Oedipus} and \textit{A Thousand Plateaus} are a social history of the interrelationship of desire and power (Smith, 1997).

\textbf{The Social Idea}

\textbf{Singularity}

Desire and power enter in differential relation and form singularities. This topological field constitutes the (Social) Idea (Patton, 2000, p. 41; Smith, 1997, p. 358)

\textbf{The Social Idea, Social production}

What does the Social Idea do? As defined in the transcendental empiricism framework, Social Ideas are functions; as such, they produce. Deleuze and Guattari define this function as an abstract machine.\textsuperscript{45}

An abstract machine does not think, does not act actively. It passively acts following a function that has been assigned to it, that it has contracted. A machine just does.\textsuperscript{46} The Social Idea effects a mechanical process along physical or psychical lines. For Deleuze and Guattari, social production—following the elements that composes it on the virtual plane, is desiring production.\textsuperscript{47}

\textbf{Assemblages}

\textbf{Power, desire and social formations}

This section continues the description of Deleuze and Guattari’s concept of assemblage that was started in earlier chapters. This explanation builds on the philosophy that developed so far in this chapter.

The aim of Deleuze and Guattari in \textit{Anti Oedipus} is to present concepts which may in turn be applied to the analysis of concrete social formations (Patton, 2000, p. 88). And the fundamental element of analysis becomes what they term an assemblage (Smith, 1997, p. 363).

For Deleuze and Guattari, every concrete social formation is an assemblage of desire. To return to their thinking of power and desire, as just explained, desire is immanent to the social field. But for Deleuze and Guattari, power and desire do not exist except as assembled in determinate ways in concrete social formations. They propose that power and desire is a result of a “highly developed set-up rich in interaction” (Deleuze & Guattari, 1987, p. 215) and

\textsuperscript{44} Foucault’s work focused on power. But as Deleuze and Guattari point out, their work is similar but different to Foucault. They believe the social field is not solely composed of power. See note 39, \textit{A Thousand Plateaus} (Deleuze & Guattari, 1987, pp. 530-531).

\textsuperscript{45} The machine concept is appropriated from urban historian Lewis Mumford (Mumford, 1966).

\textsuperscript{46} As Deleuze and Guattari famously profess: everything is a machine. An individual, a subject, a mouth, are machines (Deleuze & Guattari, 1972).

\textsuperscript{47} Deleuze and Guattari replace Marx’s concept of ‘mode of production’ – which is linked to social idioms, with the concept of desiring production (Smith, 1997).
cannot be grasped apart from a determined assemblage, that is concrete social formation (Smith, 1997, p. 365). Desire is immanent to a particular assemblage. In this theoretical framework, all actual social formations are actualisations of power and desire (Ibid., 363). Different conditions actualise different typologies of desire and power. Simply put, to describe the social field is to describe assemblages of desire and power.

Assemblages and abstract machines

Assemblage has elements on two planes. On the plane of immanence, there are elements in differential relation, of desire and power. Their relations form a structure, an Idea—in *Anti Oedipus* concepts, an abstract machine—Social Idea. On the plane of actual, assemblages are concrete social formations. Ideas/abstract machines are vital to the operation of these assemblages (Deleuze & Guattari, 1987, p. 100); they are functions. They are piloting them (Deleuze & Guattari, 1987, p. 142; Patton, 2000, p. 44).

The concept of machinic production forms the point of departure for Deleuze and Guattari’s theory of society as a machine. “We define social formations by machinic processes [...]” (Deleuze & Guattari, 1987, p. 435). Concrete social formations are then identified by the extent “to which the different abstract social machines are actualised within them in varying combinations” (Patton, 2000, p. 88). It is the abstract machine—social Idea, composed of desire and power which defines the nature of a given society in each epoch. Every society has its abstract machine—social Idea, and different kind of abstract machine—social Idea, will correspond to different kinds of social formations (Patton, 2000, p. 58).

*Anti Oedipus* presents a typology of four abstract machines that Deleuze and Guattari name Socius. They provide conceptual tools for examining “the manner in which social formations or assemblages synthesise, integrate, and stratify desire in differing yet determinable ways” (Smith, 1997, p. 373).

Assemblages and strata

In *A Thousand Plateaus*, Deleuze and Guattari continue to develop the assemblage and abstract machine’s theoretical framework (Deleuze & Guattari, 1980). Underlying their proposal is Maïmon and Spinoza’s ontology, as presented in this research. Their proposal goes as follows:

Put simply, in Deleuze and Guattari’s ontology, the Earth is the whole, composed of two intertwined planes, two faces of the same plane. There is the plane of all the forces, of a flow of unformed matter, the plane of immanence.48 There is the plane of actual things, of the composed things.49 On the plane of immanence, there are abstract machines that capture the flow of elements and stratify it, creating assemblages. All machines are productive machines. Assemblages are composed of actual ‘side’ and virtual ‘side’. They have elements on the virtual

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48 Here renamed the Body Without Organ (Deleuze & Guattari, 1980).
49 Here named the plane of composition (Ibid.). This is a simplification of *A Thousand Plateaus* ontology (Ibid.).
side that are in differential relation, forming a structure, a machine. That machine has a given function.

Deleuze and Guattari assert that there are three ‘grand assemblages’, strata, in this whole: the material strata; the organic strata; and the social strata. They state that every machine that functions in the social strata, connects to the three realms. Every assemblage is composed of elements of the three realms. Assemblages have a relationship with the organic, the material and the social.

**Assemblage: Form of content and form of expression**

This research is interested in how Deleuze and Guattari describe the production of assemblages in the social strata. Deleuze and Guattari identify abstract machines—social Ideas. The abstract machines produce all things, physical and psychical, things and words, forms of content and forms of expressions. The abstract machine produces through two machines: the social technical machine produces forms of content, and the social semiotic machine produces forms of expressions (Deleuze & Guattari, 1980, p. 82). Content and expression are actualisation.

Forms of content are not “just a thing but a complex state of thing as formation of power (architectures [...]” (Deleuze & Guattari, 1980, p. 86, emphasis mine). Forms of expressions are not just words that express the visible, they are an “ensemble of expressions that emerge from the social field”—a regime of sign (Ibid.).

**Assemblages—what was learnt so far**

This section emphasises what is important from this discussion about assemblages and what it will enable this research to accomplish.

First, assemblage is the tool to study concrete social formations and to study what social formation produces. This is the aim of this research, to understand the social field, how it is composed. It aims to understand the production of architecture, a concrete social production.

Second, Deleuze describes subjects as social productions, as assemblages (Deleuze, 1986; Deleuze & Guattari, 1980). A certain behaviour is a desire, a certain faith is a desire, and a certain attitude is a desire. The social machine produces: coded suitable behaviour, acceptable religious thinking, the right social relations, taboos. To describe the subject’s production for Deleuze is to describe modes of life (Deleuze, 1995, p. 98). This relates to this research. Subjects produce architecture.

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50 My terminology.
51 Hereby named the Alloplastic Strata (Ibid.).
52 The technique aspect of a society comes with its social aspect.
53 This thinking of form of content and expression relates to Spinoza’s body/mind relationship, attributes of extension and thought.
54 This is the Spinozist ontology of parallelism.
55 More on this in the next chapter.
Third, Deleuze and Guattari creates the concept of Socius, “major social machine” (Patton, 2000, p. 88) as conceptual tools for examining the essential components of concrete social formations. The Socius is the “imaginary body of the society as a whole” (Ibid., 89). This leads this research to reflect on the possibility to consider a given society, and all its productions, among them, architecture.

Fourth, in Deleuze and Guattari’s ontology, assemblages are composed of elements of the three strata. This means that architecture, considered as part of assemblages, must be thought of in relation to social, and ecological forces. This links the study of architecture and the ecological context.

Brunei Social Individual

Building on the preceding findings, this research wants to build on Deleuze and Guattari’s work and proposes that each society, at a given time, in a given place, is the actualisation of a certain Social Idea, in certain conditions. This research also poses a second element: a society can be understood as a Social Individual, and the Social Idea is the abstract machine of a Social Individual.

The Social Individual comes from thinking with differential calculus. Social quantities can be understood as integration of small differences (Colebrook, 2009; Lazzarato, 2006). Integration of individual desires leads to the discovery of a social function of desire. In a sense this research proposes to consider the whole integration of all individuals as the society. But with this proposal, one can think of organisation, associations, and community as integration of individuals. One can study social formations as assemblages, with a certain power and desire, effecting a certain function.

This research then considers one society, one Social Individual as a univocal being. The virtual plane is composed of elements of desire and power nature. A function, the Social Idea, selects the flows of desire and power, ecological forces, and puts them in relationships. This creates a structure. The putting in relationship is done following two functions; the abstract machine and the semiotic machine. These two functions produce actualisation. On the plane of actual, forms of content are produced, and in parallel, forms of expressions are produced that gives sense to the forms of content. Within this production is the production of architecture as part of assemblages. This will be covered in the next section.

FOUCAULT BY DELEUZE—DELEUZE AND SPACE, THE SOCIAL

Foucault, Deleuze and form of architecture

Architecture as form of content and form of expression

This research contends that the philosophical system described above can be illustrated by an example that Deleuze and Guattari develop in A Thousand Plateaus (Deleuze & Guattari, 56 See for similar interpretation (I. Buchanan, 2008; Krause & Rolli, 2008; Lazzarato, 2006).
1980, pp. 86-87) and in *Foucault* (Deleuze, 1986). The following section explains their reasoning so as to finally show how Deleuze’s system relates to the study of architecture.

Deleuze explains in *Foucault* (Ibid.) that Foucault in his theoretical and practical studies came to theorise that in all social fields there are two forms of social production. Foucault names these *forms of content* and *forms of expressions* (Ibid., p. 39). What is interesting for this research is the example he uses to focus his particular analysis on: the social field in eighteenth century in England.

Foucault discovers the particular social production of form of content ‘form of prison’ and the form of expression ‘legal category of “delinquency”’ (Ibid., 40). He acknowledges that these two elements arose together. He conceives that these have presupposed common elements, but “no direct common form nor correspondence” (Ibid., 41). He remarks that the prison is a form—“prison-form”—that relates to other productions of the time, other forms of content such as schools, factories, hospitals (Ibid.). Importantly, for Foucault, form of content, “prison-form” should not be associated with the word ‘prison’ but to the form of expression ‘delinquency, delinquent’. These refer to “a new way of stating, of classifying, [...] of determining and calculating penalties” (Ibid.). For Deleuze, these expressions can also be applied to give expression to the schools-form, factories-form, etc.

Deleuze asserts that form therefore has two meanings. A content-form is not reducible to a thing. It is first a way to organise matter (Ibid.), a complex of things as “the result of the formation of power (*architecture*)...” (Deleuze & Guattari, 1980, p. 86, emphasis mine). Second, expression-form finalises a function (Deleuze, 1986, p. 42); it is not words but an ensemble of statements [*énoncés*] that come from the *social field* (Deleuze & Guattari, 1980, p. 86, emphasis mine).

**The diagram—Abstract machine**

So, if there is no correspondence between the form of content and the form of expressions, this means that something immanent must act as common cause for their correspondence (Deleuze, 1986, p. 41). For Deleuze, the concept of “Panopticism”, described and determined by Foucault, is this immanent cause.

Foucault considers the proposal in 1791 for the plan of an ideal prison design by Jeremy Bentham as an instance of a new social function. Prisons inspired by that model spread in the eighteenth century. But the important thing for Foucault is not that the model of architecture was popular. For him what is important is the fact that the *generalized function* “to impose a particular conduct on a human multiplicity” that was made visible in the panopticon was also *permeating an entire society*. This, not only in numerous spatial configurations—schools, factories, *but also as an organising principle of the society.*

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57 Note that all references are buildings
For Deleuze, this is the abstract machine, as he names it in *A Thousand Plateaus* and *Anti Oedipus*. He qualifies it as a diagram of power, an immanent generalised function. “The diagram acts as a non-unifying immanent cause that is coextensive with the whole social field” (Ibid., 44). It is like “the cause of the assemblages that execute its relations; and these relations between forces take place ‘not above’ but within the very tissue of the assemblage they produce” (Ibid.).

**Operationalising Deleuze’s philosophy**

With the two preceding sections this research proposes that Deleuze describes how to talk about space within his operative ontology.

First, Deleuze exemplifies what is a Social Idea—here called diagram and abstract machines. He shows that there exist Social Ideas that pervade all production of society. He shows how they produce all actualisation of the social field.

Second, two things about architecture in Deleuze’s ontology can be learned. First, the building is not reducible to a concrete thing. It is organised matter as a result of the formation of power. Linked to this, to give sense to this formation is a series of expression that are formed within the social field. These are words that express, that make visible, that give sense, to a form. To describe ‘actual’ form is to find a series of expressions that have social sense. To describe ‘actual’ form is to talk about the social, to describe assemblages of desire and power.

This sections shows that in Deleuze the means to talk about both the social and about space can be found.

**Desire and Power**

**Different kinds of Desire**

Throughout this thesis the concepts of force, power (puissance), and desire as operating on the plane of immanence have been emphasised. In the philosophical demonstrations they remained abstract notions. Now this thesis introduces concrete notions of desire and power—coercive, defined in a social context.

This introduces that there exist different forms of desires, different types of assemblage.

**Nietzsche and Force**

Deleuze’s notion of desire is linked to his study of Spinoza and the conatus. But Surin writes that drawing upon Nietzsche, Deleuze builds a “full-blown ontology of constitutive power [puissance]”. Desire is a power—puissance, in Spinoza, and is synonymous with force in Nietzsche (2005, p. 23).

Nietzsche conceptualises that the whole of reality is a quantity of force (Deleuze, 1962, p. 46). I am a force, part of other forces, a word is a force part of other forces, etc... Two forces always enter a relationship, compose a body (Ibid.). For Nietzsche there are two sorts of forces, the active and the re-active one. 1/ Active forces designate forces that are form-giving, creative. They

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58 An assemblage of coercive power would be the equivalent of Foucault’s dispositif.
have the power of acting, commanding. 2/ There are also re-active forces, which are form receiving. The holder of re-active forces are being acted upon. They abide by other forces, and are dissociated from their power.\(^{59}\)

In this chapter, desire has been defined in terms of forces. The above discussion shows desire exists between two poles. On one side there is the totally free state of the forces; free of any hindrance and repression. On the other side there are the coercive, repressive forces. Here, “subjects cling to their identities” (Bonta & Protevi, 2004, p. 76).

For Deleuze and Guattari, assemblages are composed of an infinite number of forces that have a given quality of power between these two poles. There are the free creative forces that are battling with the coercive, cutting and dispersive forces—i.e. with power—coercive. Assemblages contain these powers. In it, they are the forces that cut lines of creativity, that deterritorialise and, decode difference, then reterritorialise it back into recoded bundles of forces. But for Deleuze and Guattari, creation, the involuntary performing of positive desire, is primary (Deleuze, 2003a).

This research has sought here to develop a physic of forces to be able to give expression to different kinds of desires. What was of interest is that the desires traverse any studied social assemblage. In a sense, desire is a positive concept (Colebrook, 2002), but not all that it is incarnated in is ‘optimistic’.

Deleuze and Guattari studied the State or the individual as assemblages. This research aims to talk about the desires of power of the Sultan, one of the nobility, or one of the commoners. Whatever society’s composition, it is always productive and has a consequence on the forms of architecture as part of assemblage and the modes of living associated with them.

**Foucault and a new thinking of power—coercive**

Deleuze explains that for Foucault, power is a relation of forces (Deleuze, 1980, 1986). From this perspective, there is a field of possible relations that occur between the forces. He finds a list in Foucault’s writing: power as force acts “to instigate, to induce, to facilitate, to make difficult, to enlarge, to misappropriate, to divert, to limit [...]” (Deleuze, 1980). What this means is that a force can induce another force to do something.

Foucault also creates a second list of categories. The first is force acts “to distribute space” with a corresponding relationship of the forces of the type “to confine, to surround, to arrange [...]”. The second category is force acts “to order time”. This is to subdivide time itself. This is to programme the act of individuals. The third category set is force acts “to compose space-time” (Ibid.).

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\(^{59}\) The physics of force are more complicated. See Surin (Surin, 2005), and Deleuze Nietzsche (Deleuze, 1962).
Importantly, Deleuze explains Foucault’s methodology of work to uncover the categories of power. Foucault asks: what is happening in school? What is happening in the prison?” (Ibid). Then his analysis mobilises the categories of power.

**Deleuze’s new thinking of desire?**

This previous section only presents one of the forces present in assemblages’ study, but it gives life to the concept by providing expression of it. Desire and power are related, these lists and Foucault’s method set a template for how to decipher the makings of desire. How do these help to think beyond Foucault? How to think about Deleuze and Guattari’s assemblages? Inspired by Foucault’s work, this research proposes a list of desires to look for: to facilitate, to appropriate, to make things happen, to experiment. It is hypothesised that desire orders time/space. Foucault’s methodology is also important. To discover the power that is at play in assemblages, this research will follow this template. It will ask: what is happening in the house? What is happening in the village? Then with the different lists as inspiration, it will be possible to talk about space. It will be possible to link speaking about architecture with speaking about the social.

**Studying social production with Deleuze**

This research contends that the two previous sections give tool to study social formations. The first tool is a series of lists to describe the forces at work in the social field. These descriptions gives expression to the forces. The second tool are the question to ask: what is happening in...?

**Ontology**

Here is a recapitulation of the ontology and concepts touched upon in this chapter.

The World, the Whole, Earth, composed of two intertwined, interrelated planes. On the one hand is the virtual plane, the plane of immanence. One the other hand is the plane of actual, the plane of composition.

The virtual plane is composed of a chaos of forces in low, elementary matter. They are quintessentially desire and power intensive forces in social strata, ecological and material in the other strata.

On this plane, there are blocks of space/time that are stratified and structured. Structure, Machines, Ideas, Social Ideas, Socius, capture the flow of forces that circulate in the chaos, and integrate following a function. What these do is to produce actuals on the plane of actual, concrete social formation. They mechanically produce following two machines. The concrete machine produces form of content. The semiotic machine produces forms of expressions. This production involves a relationship of power and desire; the production follows a diagram.

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60 Also related, the transcendental plane, the Body without Organ.
an abstract machine of power and desire. What is produced is actualisation of power and desire.

A thing, assemblage, individual, subject, or Social Individual, each are singularity. They are *that* thing, assemblage, individual, subject, Social Individual, at *that* moment of time space. Thing, assemblage, individual, subject, Social Individual, are composed of both elements that are on the two planes. They have a given singular Machine, structure, Idea. And on the other plane, they are form of content and form of expression.

**SPACE, THE SOCIAL AND DELEUZE**

This section aims to experiment with the ontology developed above. How to talk about the house in Brunei?

Let’s consider the Brunei Social Individual. The integration of individuals, in a given block of time/space. A Social Individual is a collection of desires and powers. The different individuals agree to enter a relationship. Pushed by their desires, sensing the forces available to them, they aim to become empowered.

There is the associate abstract machine, the *Social Idea*. The coming together of individuals results in formations of power and desire, a diagram. This diagram pervades through all the production of society (Deleuze, 1986). The social machine produces, codes suitable behaviour, acceptable religious thinking, social relations, taboos, and many other modes of life.

How to uncover this montage of desires? What about the house? I ask *what is happening in the house*. I see that in a particular house the house *facilitates* the lives of the families that live together. A room *gives opportunities* for a given family to have privacy. But that room is located with other rooms, other families, together their lives in common make a better life possible, *empower each one of them*: you look after my children, it is your turn to cook, can I borrow money to invest there, and so on. But then the room location also shows how power is exercised. The room of the elder is at the front, the room of the immigrant is at the back. Rooms are assembled, *ordered by power and desire*.

The landscape and ecologies also participate in the agencing of the house. What is happening there? The house location on the water for fishermen *facilitates* their activity. The location *empowers* them. One assemblages linked to this house is water-house-fishing. But there are families that are now worried about having their house on the water. At night there is no water taxi, they are afraid of medical emergencies. What is happening there? On one side, living on the water is an opportunity for cheap living, empowerment. But on the other side this reveals how certain powers *induce* poor people to live on the water. The water people do not receive money to relocate on the land. Power and desire order space.
Here, the house has been talked about, but it is not the form that has been talked about. What was described was different assemblages, different relations of forces, how the social orders space. Forms of architecture are part of assemblage, form-as-part-of-assemblages.

**CONCLUSION**

The first part of this chapter defines Deleuze’s transcendental empiricism in more depth. Elements of its composition were found: its structure, and its functioning. Then it has been demonstrated how Deleuze and Guattari experimented with this philosophy in social and ecological thinking. Connections between transcendental empiricism and assemblage theory were drawn. This continues this research’s aim to understand assemblage theory and ground Deleuze’s operationalised philosophy.

The explanation of key concepts of Deleuze’s work has allowed to reveal that with Deleuze’s system there is the possibility to understand and study the production of space. This thinking importantly is embedded in ecological, social and political thinking.

This chapter shows that with this theoretical framework it is possible to link the thinking of architecture and social, with that of architecture and ecology.
INTRODUCTION
The previous section explored the general, the Idea, and the structure. This part considers the singular, the subject, change, and creation. It is about life. It is about how to think about the now.

This section introduces the last set of Deleuze’s concepts. First, the concepts of Event and intensity are developed. Second, Deleuze and Guattari’s ontology within which assemblages are created and change is explained. Then, the importance of the subject in social and ecological assemblage thinking is emphasised. Finally, the last elements for assemblage thinking are presented.

EVENT—SINGULARITY

A plane of points and the associated curve

This section returns to Lautman’s definition of two mathematical realities, the plane of the geometrical curve—the plane of actual, and the plane of the solutions—the Idea/structure on the plane of immanence.

On the plane of immanence, a structure is composed of an infinity of elements in differential relation that are always composing and recomposing. That structure, between two singularities—two states of constant relational position between its elements, effects a function. The structure on the plane of immanence produces the curve on the plane of immanence. This is a dynamic system.

The curves show two circumstances. First, it remains constant, this means the relation between the elements of the plane of immanence remains constant. But second, it shows changes: bottleneck, centre, nodes ... (Deleuze, 1969, p. 67). This means that at the neighbourhood of these remarkable instances, on the plane of immanence, the differential relation between the points on the plane of immanence has been redefined.

Event

Event as concept

This thinking corresponds to the philosophy of the Event that Deleuze develops in The Logic of Sense (Deleuze, 1969). This focuses on the coming of a new singularity as an “event”. For Deleuze, events are to be found in the actual and the virtual, though differently. What is, the actual, always depends on virtual structures. The actual event relates to a pure virtual Event.
That Event happens on the plane of immanence and involves a re-composition of the structure. And when it happens, it then subsists. This subsistence means the structure is, from that moment of inception, in a new state, effecting new relations. That subsistence persists until the coming of a new Event, the creation of a new structure, a new Idea.

The Event affects two series. There is the series of actual production and the series of the structure effecting its differential relations. The first series affects differen-\_iation on the plane of immanence, and in an asymmetrical relation, the second series is the effectuation of differen-\_iation on the plane of immanence. On this plane, the change involves bodies and mind, form of content and form of expression (sense)—a transformation of the signification of things that subsists with the transformation of bodies/content.

For Deleuze, the Event as it happens on the plane of immanence can never be known. We can only see its effect, the event on the plane of actual. It has happened or will happen, but never is. It is Ideal. The Event is the “shuffling” of the structure’s points and it is random, immanence (Ibid., pp. 75-77). And importantly, it is unpredictable.

**How to study change**

**Methodology**

An event on the plane of the actual points towards the fact that a pure Event has occurred. If the production of actual changes in quality, this means the structure/Idea that predicates its production is modified.

To return to the study of social production, a social assemblage produces actuals following a certain diagram. But at certain moment in time, the production of actual seems to be produced by a different diagram. This means that at a moment of time and space an Event has happened at the level of forces. The relation between forces—of power and desire nature on the plane of immanence—has changed. Not only that, to link this thinking to the findings in the previous chapter, the change means the relation has changed because the assemblage has been affected by external forces. An encounter has happened that has led to a change.

This thesis proposes to use this philosophical proposal as a methodological point. In working out the production of architecture in history, it is possible to get leads, indications and clues that point to where research about changes should look. Changes in the built form—the actual—indicate changes in the social and ecological field, changes in the Social Idea. Noticing the changing of the quality of actual production orientates the research towards changes in the social and ecological forces.

**Architecture**

How to apply this succinctly to the study of the production of houses in Brunei? At a period in time, a number of houses are produced, each different, but as a whole there is the sense of a diagram, a social function, and Social Idea is established in that given era. But historical research shows that during a different era, a series of houses exhibit a different diagram. This
means that relations between the elements composing the Social Idea have changed. At a moment in time, new relationships, new structures, have been established. This leads one to question what has changed, when and why? The research can then focus on understanding what has caused the change in the relation between desire and power forces.

This above section introduces a dynamic system. The next section explains what causes change, and its mechanisms of change. The study of the appropriation of Simondon by Deleuze supports this research.

**Simondon**

*Process of individuation*

Parts of Deleuze’s philosophy relate to the French philosopher Simondon. Simondon proposes thinking about the problem of form/matter. He takes on a simple example: the formation of a brick by imposition of clay—matter—into a mould—form (Simondon, 2005, pp. 39-55).

Simondon argues that the clay and the mould *both have matter and form*. The mould is a matter that is realised in a form. Before the operation, the clay is a matter that is full of *potential*; it has, in itself properties and potential that will allow it to take in certain conditions, certain forms. That is what he names a *pre-individual* state. That this state contains the potential to take certain forms is a *metastable* state. The potential forms can or cannot be realised; this depends on the *conditions* a pre-individual in a metastable state faces.

Importantly, Simondon proposes to consider this process of *individuation* at the level of forces. His interest is not the form but the forces. He argues the mould is matter of low force; it is a realised potential. The clay however, as a *metastable* state, is matter of high potential.

There is a *disparity* between the two forces—those of the clay and the mould, a difference in potential; this difference might allow for exchange of information between the two materials. When the clay is pushed into the mould, *the two energies exchange information*. The ‘putting-in’ communication means the two intensities enter into *resonance*. In that process, the mould forces set the limits of the realisation of the individuation of the clay. It communicates that the form has been realised. @

But Simondon argues that a third force has to be considered: the force applied by the brick maker. Without this force, the *conditions* for the process to take place are not realised. Simondon considers the ensemble of the two matters, their potential, and the conditions of the operation as a *system*.

Simondon’s study of form-shaping at the level of force replaces the abstract study of matter and form with a *dynamic analysis of form as an intensive variation of forces and materials* (Sauvagnargues, 2009, pp. 239-269).

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@ This part on Simondon follows the important work of Anne Sauvagnargues (Sauvagnargues, 2009, pp. 239-269).
The study presupposes that there exists a system in a metastable state that can individuate itself.

The process of individuation of the mould or the clay involves the material world. In that world, more often than not, there exists a certainty in the process. But in more complex systems, the certainty disappears, requiring consideration of a philosophy of a chaotic field of changing relationships. For example, in psychic systems, the differential relationships are not all apprehensible (Simondon, 2005, pp. 148-153).

The process of individuation means that being is relational. This is a relationship that triggers the process, and the milieu is also a determining factor of individuation. These relationships are exterior to their terms; the information received is outside the being.

For Simondon, an individual is a particular form realised at a particular condition of time and space.

**Transduction**

The next concept founding Simondon’s work is transduction. This is a process that determines the phenomenon of successive metastable states. Each state is the support and serves as principle for the constitution of the next region (Sauvagnargues, 2009). For the brick made of a certain clay when wet, i.e. under certain conditions, can be remodelled into different forms. These are different transductive phases.

Transduction is an operation in progress. An activity propagates, step by step, inside a domain. Each metastable state is a structure for the constitution of the next one, as primer and model. This means that an individual is linked with their milieu of formation and its current state before it changes.

As a very important consequence: an individual is unique, it is relative, phased, and always includes a process that is associated with their milieu.

**Simondon and the living—the membrane**

The living

This previous sections studied the material realm. This following section shows how the concepts elaborated in that realm are applied to study complex systems: the organic realm. Simondon applies his concepts to living formations but the living is an individuation process that is different from the material (Sauvagnargues, 2009).

The process of life is transductive and the initial terms are contained in the individual. Living is an individuation process that is continuous. A formed individual is not the end of a process that has exhausted its potential energy.

Simondon considers two systems, the living body and the milieu with which the body is in communication. There is a limit between the living system and that outside: the membrane.

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62 There is the material, the organic realm and the human realm with its psychic capacities.
The many systems that compose the internal system are in constant communication of a resonant nature. This system communicates with the outside system, and like material systems, it modifies its relations because of the milieu it is in. Importantly, the living things not only adapt but also modify themselves and invent new internal structures.

The process not only functions by phase and thresholds, but also at every phase of the relation there is potentially the creation of an element of surprise. Being doesn’t have only one way of becoming. This is why an individual has to be considered with its associated chronology.

The internal system composed of many instances has two important features. First, every system communicates with another system. The outcome of a system is the intake of another. Simondon refers to this disposition as a chain of systems. Second, through this chain, all systems are connected and communicate with the surface—the membrane. With this disposition, any information from the outside can have an effect on the deepest level of the chain. The inside is, whatever its depth, in communication with the outside. The exterior, whatever its distance to the surface, can potentially affect the inside.

These two geographical positions in space delineate the two sides of the surface: the exterior, i.e. the whole outside contracted on the exterior limits of the surface; and the interior, i.e. the whole inside contracted on the interior face of the surface. In complex system thinking, this conceptualises that, to any degree, system or point in the system at any distance, interior or exterior can affect another system. What is proposed is a flat ontology.

**The membrane**

The membrane is the element that allows the communication between the interior and the exterior system. The membrane is a surface, but it is more importantly the limit of all internal phenomena.

**DELEUZE**

Deleuze rarely mentions Simondon in his work, but the philosophy he appropriates is fundamental for his own, both transcendental empiricism and his operationalised theory (Sauvagnargues, 2009). As this research’s aim is to ground Deleuze’s philosophies, it was necessary to describe this work. The following sections return to explain Deleuze’s philosophy implementing the use of these concepts.

**Intensity—Fifth characteristic of the Idea**

For Deleuze, the composition of the plane of immanence is intensive. The forces, the powers that have been referred to many times, are now put in an ontology inspired by Simondon.

The plane of actual is ruled by phenomena that science can measure; but, ‘underneath’ that plane is the world composed of intensity, the plane of immanence. The form of a thing is not the object of Deleuze’s study. For Deleuze, a study has to be placed at the level of forces. The
world is only composed of forces, these have a potential that is always exercised. In Simondon’s framework, two systems are forces; there is always a difference of potential, an asymmetry in their intensity. *Intensity is difference.*

So, between two systems encountering, for example, an individual and a thing, there is always communication of intensity. These systems exchange intensity. Under certain conditions of time and space they can enter into relation. Then, if the phenomena of resonance occurs, the next phase of development occurs. For Deleuze, there is a difference of form between the actualisation and the virtual plane from which it is created. But, almost as importantly, actualisation develops in unpredictable ways. The thinking of randomness, that pure creation is possible, is very important. And the process of actualisation is an intensive process.

Another implication of Simondon for Deleuze is that the Idea defined in this thesis as a field of singularities is now thought to have a metastable character. The Idea is composed and structured in a certain way. During a certain intensive process, it effectuates a certain function. The singularities spread over the plane of immanence in a certain configuration. The field, when entering in resonance with another intensive field, recomposes into different configurations.

For Deleuze, *an individual is not a form, but a state of intensity. It is phased, it has historicity attached to it, and produces in an associated milieu* (Ibid.).

In the previous chapter of this research four characteristics of the Idea have been defined. This section adds another: *the Idea’s nature is intensive.*

**Psychic systems and complex system—From Kant to Deleuze**

The following section attempts to complete Deleuze’s diagrams. Deleuze’s philosophy is placed into the Simondonian framework; this entails the use of the two concepts of intensity and the membrane. Here, the discussion is placed in the organic and psychic systems. An individual is thought of as a system composed of a system of bodies and a system of thoughts that communicate. That system is always in relation to the outside, i.e. connected to other systems.

The membrane is a limit between two systems, two durations. The interior is a constituted system—*a memory.* The outside, unknown, is always connected with the inside through the membrane. It is a potential. An individual is within a given milieu, effecting a given function. In continual set conditions, it is passive.

The encounter of a subject with an object has to be thought at the level of forces, within given conditions of time and space. In an organic/psychic system, the systems inside the membrane are in a constant state of resonance. There is a certain potential. The encounter with an object is one of two potentials. In certain conditions the two potentials enter in
resonance and a transformative ensues. For the psychic system, this means that a new thought is provoked or potentially provoked.

So, there is a chain of processes within the membrane. Systems of thought and systems of bodies are linked—what happens to one happens to the other. The resonance between intensities means the passing of a threshold of exchange. There is a continuity between sensation and thought; the threshold is the limit. And in Deleuze’s thinking, what is created are thoughts that are new.

The membrane delimits a territory—a limit between the outside and the inside. But the inside depends on this outside for its creation. Inside and outside are linked by intensive processes and a limit. The surface is the limit of that process.

Deleuze conceptualised that to think is not a conscious act. It is an encounter with ‘signs’, something external that forces the passive mind to interpret it. This encounter is with the outside and forces thinking. Deleuze showed that consciousness is a threshold of intensity, a limit. Deleuze links sensation and the production of thought (Sauvagnargues, 2009).

**Complex systems**

The theoretical framework just described relates to the production of thoughts. But it was presented because, abstracted, this thinking is linked to complex system thinking. On one side there is a series of systems interacting, the milieu, and on the other side another series of systems interacting. What is important now is what these systems do. What is important is first to consider them at the level of forces. Second, it is essential to understand how they encounter, this is encounter force to force. Third, as part of this emphasis on the putting into a relationship, it is important to understand the conditions and the milieu of encounter.

This work adds to this research’s definition of Deleuze’s theoretical system.

**Complex social systems and architecture**

In Brunei, a great number of houses are produced; they are different. But all together, they express the existence of a certain diagram of power, of a Social abstract machine. A Social Idea is in effect, in a certain function, within certain determined conditions, within a given milieu.

At a moment in time, the conditions of commercial exchange that Brunei had established with the outside changed. The British and Dutch cut the traditional ways of commerce. The conditions of production of Brunei Social Ideas, of the Bruneians, were disrupted by the encounter with a new system. There was resonance, the two systems communicated then there was transformation. A new Social Idea emerged, a new diagram of power stratified. That new social Idea is another metastable state of a Brunei Social Idea. The previous state is the support

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63 This links Deleuze’s framework with that of Simondon and Maïmon’s framework.
of the new state. There is a reconfiguration of the forces of the Idea. With this new Idea came new production. The production of forms of houses changed; these new productions expressed different configurations of power and desire.

**Subjectivity**

*Deleuze’s subjectivity*

The Simondonian framework leads to explain how Deleuze thinks about subjectivity. The aim is to return to the question: why do we do the things we do? Why do we create and inhabit space the way we do? This section returns to the study of Simone Brott (Brott, 2013). She rethinks the relation between subject and architecture.

This research proposes that the background of their studies is the thinking of the world understood as forces and intensities. Subjects are forces; architectures, the city, are forces. All of these are produced.

Brott specifies that for Deleuze there is no such thing as subjectivity (Brott, 2013). Subject is not a conscious and determined individual in possession of its thought.

A subject is passive. It “emerges from a phenomenon immanent to the production of perception” (Ibid., p. 152), a result of a successive series of perceptions. The subject is “perception and memory”—following Bergson (Ibid.). A subject is only one of the many possible actualisations that emerge from the flow of perception. It is a process of individuation, and the encounter has the primacy in the construction of subjectivity.

**Architectural, social, and ecological subject**

This section relates this thinking to architecture. Architecture is bundles of forces; the subject in pre-individual state is forces. There is then that primordial encounter, forces to forces. Brott’s thinking is that subject and architecture are defining each other. The subject emerges, becomes, in connection with the encounter with architecture. She argues this is the *architectural subject* (Ibid.).

Brott’s study is now widened by making some comments. First, Brott indicates in her text that perception is visual. In a moment, the importance of other types of perception—smell, touch, and sounds—will be shown.

Second, this research proposes to place the encounter in the framework that was defined with the work done on Bergson: the passive encounter with the three passive syntheses of time. The encounter is not one sensation that encounters another sensation. The thinking of the self, in Deleuze’s philosophy, is related to the thinking of the body as an infinite number of parts. The self is in fact composed of a thousand little selves that passively contract the forces of the outside, in certain conditions, in certain milieu. The subject is not a unified ‘I’. Under the surface there is the simmering of thousands of forces that are affected and are

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64 “the architectural encounter, the irreducible moments of pure visuality […]” (Brott, 2013, p. 152).
affecting thousands of other forces (walls, colour, windows, carpet floor, wood drawers’ smell, airplane noise and so on).

This thesis proposes here to think about the contraction of habits and certain Ideas, the creation of a certain subjectivity. This creation is not a short burst of an overwhelming perception. It is the long and molecular process of repetition of contraction of certain perceptions by thousands of little selves. In a house in Brunei, a pre-individual subject, through the thousands of little selves, contracts through repetition a certain sense of the house he/she lives in. Practising the space every day, a subject contracts the sense of the diagram of forces that composes the house. The head of family lives in the front. The migrant workers live at the back and are never seen in the house. The kitchen is for everybody, but is in the back. A subject has to be careful of all sorts of superstition that aim to make life healthy and lucky. There are lots of social obligations that entail bringing the larger community in the house, into the wide room to celebrate. But in these celebrations the position of every individual is linked to a certain social status. The behaviour and ideas on display express codified social content. Nothing is explained, but everything is expressed by the positions in the room, the locations of the room, the behaviour of people, the words that are said and that are performative. The silent continual encounter with all types of forces creates a certain Idea, a certain architectural subjectivity.

Now this research aims to expand Brott’s framework. She talks about architectural subjectivity because the subject is created in relation to architecture. But as just described, in the practice of everyday life, the concrete architecture is not the only encounter of forces. There are social obligations; there are social behaviours and beliefs. There are social forces shaping the composition of the space, but also its practice. Then also, in Brunei there is the obvious relations forming with the ecology of the place, notably the water. The water is everywhere in space and time. There is its colour changing, its smell, its feeling. There are the consequences of its presence: restricted outdoor spaces, the drop from the walking surface to the water, that distance is always changing in perception. The water and the subject are co-produced. The conclusion here is that the subject is architectural (and the city), but a subject is also social/political and ecological.65

This section describes the creation of habits and the creation of subjectivity because this research aims to relate to “how do we create and live our space?” To understand the process of subjectivity is to understand the production of space.

But how does the subject create? The subject creates within certain conditions, in a certain milieu, responding to the encounter of certain forces. The subject, in a pre-individual state senses the world around, senses the forces and evaluates passively what opportunities have

65 Brott mentions briefly the “social or other” aspect to subjectivity (Brott, 2013, p. 157).
been given to him/her. A subject passively evaluates how to empower him/herself, how to create.

**From Transcendental Empiricism to Assemblage Theory**

This concludes the explanation of Deleuze’s transcendental empiricism.

The decisiveness of the above discussion must be emphasised. With the elements built here, the dynamism of Deleuze’s transcendental empiricism is described. The appropriation of Simondon by Deleuze leads to the particular thinking of a theory of Idea that is dynamic and intense.

This philosophy is the grounds for an operationalisation of Deleuze’s theory that is developed in the next section. In a way, transcendental empiricism is used as ground to think about social systems in *Anti Oedipus* and *A Thousand Plateaus*.

**Assemblages Theory and Its Ontology**

*Introduction: A geology of moral*

This section proposes to complete Deleuze and Guattari’s assemblage theory diagram. It will show how an assemblage is constituted—how it develops, functions, creates relations, and dissolves. Assemblage theory is comprised in a certain ontology that is presented here.

*An ontology of Earth—Strata and assemblages*

The ontology described in the previous chapter is expanded here. The focus here is to think about change. As was written previously, Deleuze and Guattari consider the Earth as the whole reality, composed of two planes, two states: the plane of full free flow of forces, intensities, and the plane of actual, composed and captured energies, stratified forces. On the Earth, abstract machines—Social Ideas as is proposed in this thesis—are capturing the flows, creating assemblages. They capture and produce following two distinct machines.

Deleuze and Guattari develop their framework. Machines always connect. They connect to *a milieu* (Deleuze & Guattari, 1980, pp. 53-95). Connecting means entering in resonance with other machines, forces. For Deleuze, there is a correlation between the creation of machines, their function, what they produce, and their milieu.

But everything changes. Machines are not full finished elements. They are composed of flows of matter. They are composed of an infinite number of parts. There are an infinite number of orders of production. At one order, the flow is captured and stratified. But that part is now also at a different order a flow to capture another part of assemblage. The machine selects flow within a milieu and creates territory.

But Deleuze and Guattari explain that everything always becomes change. They see lines of flight everywhere. Lines of flight are forces, non-stratified flows that are always present;
but they must also be found. These forces have the potential to bring change (Ibid., 73). For Deleuze and Guattari, in the assemblage, in any given order, parts connect. These infinite series of collection offer potential for change. But the milieu is also existing as a series of forces connecting to an infinite number of series of forces (Williams, 2003).

Machines select flow and create territory. But when the milieu changes, a process of de-territorialisation occurs. This process means that other machines capture that free flow and re-territorialise it.

Within that ontology, there is the social strata, and social assemblages. As was written, social assemblages connect to the organic and material strata. Once again, in social assemblage, machines produce following a diagram of power. That machine captures flows of differences, and produce following the concrete technical machine forms of content, and following the semiotic machine forms of expressions that give sense to the form of content. The Deleuze and Guattari example for this theoretical part is the form of prison and the associated series of expressions linked to the term delinquency (Deleuze & Guattari, 1980, pp. 86-88).

**Social assemblage and subjectivity**

What is of interest in this section for this research is how Deleuze thinks social assemblages change.

In a homage to Foucault, “What is a dispositif?” (Deleuze, 2003b, pp. 316-329), Deleuze develops that proposal. This research contends that the Foucauldian dispositif, as Deleuze describes it in that particular commentary, is Deleuze and Guattari’s assemblage. Deleuze explains that the dispositif/assemblage has three components. The first is Knowledge. The assemblage contains contents and expressions. The second is related to the concept of Power. Power orders things. In the dispositif, power has a diagram, a function. This diagram cuts the lines of flight, imposes the body. It is a ruthless stratifying machine, which destratifies any difference, re-codes it and restratifies in the assemblage. Power looms in every reterritorialisation (Ibid., 115). It crosses every point of the assemblage (Ibid., 318).

But Deleuze notes that later in his life Foucault found a third element: subjectivity. The subject is the force that does not let itself be imprisoned; it folds in itself to go over insurmountable forces. The subject is the force that has potential to destabilise and bring

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66 For a short definition by Foucault refer to (Foucault & Gordon, 1980, pp. 194-195).
67 In a private note given to Foucault, Deleuze asserts that the dispositif is a machine of power with a strong political and repressive emphasis. Deleuze and Guattari’s assemblage is more ‘hopeful’ and is turned toward the productive notion of desire that was explained earlier in the thesis (Deleuze, 2003b, pp. 121-122). However, as Deleuze describes the dispositif in the two articles that will be referred to, Deleuze applies his concepts to Foucault’s. To relate these comments to Deleuzian assemblages, this research is interested in Deleuze’s work using assemblage denomination instead of dispositif.
68 This research understands the dispositif in way as an assemblage being composed mainly, if not only, of power – coercive, forces.
69 In this paragraph all concepts are Deleuzian and take over Foucault’s concepts.
change to the assemblage. For Deleuze, Foucault’s dispositif contains lines of sedimentations and lines of cracks/ripts. To understand it, Foucault untangles the different lines.

For Deleuze, a subject has no pre-existing form, individuals and groups constitute themselves as a process of subjectification (Deleuze, 1995, p. 176). We are a process. Not only that, we are a production of an assemblage (Deleuze, 2003b, p. 318). The subject is assembled, but there are two moments in that process.

In a first moment, a subject is formed, within a nexus of forces in an assemblage. In every assemblage runs a force of desire; desire wills to keep one’s power—puissance. But that desire is assembled, power and affect are formed within the assemblage. The dispositif of power—coercive, and its diagram—only one part of the assemblage, is the one shaping, running through all forces. It attempts to cut every lines of flight and to form knowledge and bodies.

But there is a second element to the assemblages; they are always emergent. A subject connects. We are effectively always connected to our surroundings, to our milieu. We are always affected constantly and passively. It all happens at the level of the forces. Our intensities are encountering others. Power affects and stratifies us, but our desires connect us to multiple affects, to the indeterminacies of power that are always existing. Each affect, in Deleuze’s words, is an emission of singularities, effecting the same series; it is a “throw of dice” (Deleuze, 1969). But in the throw only difference can come back. In that throw of the dice, the unpredictable can always happen. As Deleuze puts it: what counts in the process of subjectification is,

“the extent to which as [subject] take shape they elude both established forms of knowledge and dominant forms of power. Even if they in turn engender new forms of power or become assimilated into new forms of knowledge. For a while, though, they have a real rebellious spontaneity”. (Deleuze, 1995, p. 176, emphasis mine).

The subject is a process that brings changes in the (social) assemblage that forms them, to which it is connected.

To conclude, assemblages are composed of a wide typology of lines, lines of sedimentation, expression and content, line of subjectivity, splitting, breakage and fracture. Deleuze proposes that the lines of subjectivity are some of the most important lines of changes in the dispositif. Even more, they seem to connect to other dispositifs, to prepare the next configuration of it. These lines seem to form the edge of the social dispositif (Ibid., 318). The assemblage is always in movement. As Deleuze says, the social field “flees, flees from everywhere”, and the lines of flight are primary (Ibid., 116), the subject is the primary lines of flight (Ibid., 318).

Methodology—Microsociology

What Deleuze—and Guattari, proposes here is a new ontology of the social. But he also refers to a new methodology of study. Deleuze turns to the sociology of Gabriel Tarde who, for Deleuze, was forgotten when Durkheim’s ideas were imposed into the field. Durkheim
promotes the study of the great social ensemble, great institution, a social field that is structured. But Deleuze argues for a microsociology. The great structures are always fleeing; under them, there is a sub-representative matter, forces that cannot be attributed. For Tarde, what should be studied is the sociology of desire. *Desire is the quanta of the social.* In the social field there is always propagation of desire. For Tarde, what desire pushes for is imitation, and invention. So to understand the social, one has to do microsociology. To map the desires, how through imitation desire is stratified; how through capitation of diverse flows of desire, there is invention (Deleuze & Guattari, 1980, p. 267).

**DELEUZE AND ARCHITECTURE**

How do assemblage theory and microsociology allow one to talk about space differently? How can this new ontology that allows for changes in thinking can be applied to the study of space?

An example: on the day of 16 October 1973, the price of oil changed overnight. This is an Event: the redefinition of powers in the global economy. The economic assemblage is linked to a relation with the exploitation of natural resources. Social and ecological forces are linked. That Event leads to the transformation of many Social assemblages. Brunei Social Individual was greatly affected by the Event. It is connected to the world’s economy mainly through the selling of oil. The conditions, the milieu of production of Brunei Social Individual changed.

In the built environment, and the production of houses, each subject is affected by the increase of economic power. These are new conditions. With this, subjects are open to create new connections. What happened around that time is a change in the diagram, the Idea, predicing to the production of houses. Certainly, no one person is to be attributed for the new diagram. There was experiment on the ground. There was imitation, and invention. The following pictures show the creation of houses.

There was de-territorialisation of the territory of the houses, and re-territorialisation into a new one. One by one, the fabric of the water city has changed, and a new Social Diagram, a new Social Idea, has stratified. The houses and its contingent modes of lives are the actualisations of that process.
CONCLUSION

This part concluded the diagramming of Deleuze’s transcendental empiricism and Deleuze’s *A Thousand Plateaus* philosophy. It particularly focused on explaining the elements that allow us to understand, to think, and to talk about change, about life.

This chapter then provided answers to all the gaps found in the IPRAUS theoretical framework. For example, it gave theoretical elements to think about the relationship between architecture and the social, but also with the environment. It theorised how and why people produce and live space the way they do. This part talked about how to think about change. Finally, it gave the final elements of a new ontology and methodology of study.
CH 06 – A DELEUZIAN ONTOLOGY AND METHODOLOGY OF RESEARCH FOR ARCHITECTURE

METHODOLOGY OF STUDY

This thesis has established elements of Deleuze’s philosophical system. It has discussed briefly how they can be used to examine the research question and create a coherent ontology for architecture as investigated by IPRAUS. So far, that part was theoretical. This chapter now turns to practice and considers how to use Deleuze to carry out research. It asks how to establish a Deleuzian research design and a research methodology.

As presented in the introduction, the research methodology unfolds from the engagement with Deleuzian ontology. This chapter revisits the ontology that has been built and described in the previous chapters. From there it explains how it relates to the study of architecture. This leads to the proposition of a method of study.

ONTOGONY

The world

Earth, the Whole, is composed of two intertwined and interplaying planes, a plane of forces, the virtual, and a plane of actualisation. Forces always connect (Deleuze, 1968b). Thus the whole, is always becoming, forming, territorialising, deterritorialising, and thus following immanent processes. The whole is a cosmos, a chaos within which there are ‘moments’ of order; it is a ‘chaosmos’ (Deleuze & Guattari, 1980, 1991).

These ‘moments of order’ in chaos, are things, individuals; that is, assemblages. They are composed of the elements of the two planes, univocal being. On one plane there is what ‘appears’; the common sense world of things, what is actual. The actual is the product of the actualisation of forces, that which is apparent, and which is both produced by and also enters into a productive relation with the less apparent other plane, the virtual. The forces are in a relationship that is productive; a moment of space/time. That relation is a function, it is doing something (affects) (Deleuze & Guattari, 1972), it has a certain sense (Deleuze, 1968b; Deleuze & Guattari, 1980). The real and full sense of ‘doing’ something is not just affect, but affect-sense, a power and the inseparable significance of this power. Sense is not added to power, the sense is ‘in’ the power.

But these relations between forces have been created in certain circumstances, in connection to other forces. The established relations are solutions responding to certain problems. For assemblages, the outside folds into the inside. There is relation of exteriority, “it is the outside that explains the exteriority of forms” (Deleuze, 1988b, p. 113).
So, on a first instance, there are ‘moments of order’, assemblages. But forces always connect. Composed of forces, assemblages are in a constant state of desiring to connect (Deleuze, 1968b; Deleuze & Guattari, 1980). The desire to connect is to solve a problem: always seeking how to persevere, always sensing opportunities to increase power. This solving of a problem happens involuntarily or ‘passively’. This means a function that is performed, but only until it changes when new productive relations are created (Deleuze, 1969). So, in a second instance, there is the becoming of assemblages.

Assemblages are univocal beings: the one and the multiple. In integral thinking, they are composed of an infinite number of parts—made of forces. But these forces themselves connect to all sorts of forces, an infinite number of forces, transversally and immanently (Deleuze, 1968c). Three important considerations are to be made here.

1. Assemblages are product of differences: all the parts, all the forces are different.

2. What is important to understand is not the form of the actual but the productive relation that is established between the forces whose actualisation are the parts.

3. This relation is established and is the product of relation with the outside. And it is the outside forces that explains the exteriority of forms (Deleuze, 1988b, p. 113).

The establishment of relations between forces are problem resolutions. This is this resolution at that moment. These relations “are something substantive themselves, affect, not relations between two or more things” (Connolly, 2016). Under certain circumstances, the infinite number of parts come together because they agree. This association increases (or decreases) each power in relation to external forces. That association is a solution to its own problem. Assemblages come together, also connecting to other assemblages. There are other infinite series of connection. There is the inside, and there is the outside (Deleuze, 1978b).

This is why there is the continual question: what does an assemblage do? (Deleuze & Guattari, 1980) Why have these relations been established? What problem do they solve? There is no scale or hierarchy, there is no one time, there is no transcendence, only immanence in the relations. To ask “what does an assemblage, a body, do?” is to experiment with an assemblage to discover what it is capable of, as what it can do is the substantive, beyond any supposed identity.

In that ontology, on a first instance, there is the—already passing—now, assemblages. But in a second instance, there is also always potential and emergence. Assemblages produce and are defined by becoming.

The goal of the research is to understand ‘what is’ assemblages. It is to give expression to the relation of the forces that are at play, to know the circumstances of this relation, the forces of the outside. It is to understand how the production of relations have been established, what the assemblages are doing, what they are connecting to, and what problems they solve. Assemblages are potentials that have been realised. Relations are established with the outside,
with certain forces. But a research must also understand that assemblages, productive relation of forces, are also a potential; assemblages are already changing. A study is placed on the virtual, the plane of forces.

**The social**

This research looks at architecture: what is produced along social assemblages. This section proposes to frame how to think and study the social within the above ontology.

In this ontology, what is actual, what is produced, is the coming together of forces, in relation to other forces. In Deleuze’s social thinking these forces are of power and desire (Deleuze & Guattari, 1972). There is the perpetual dual intertwined relative movement of these forces. On one side there is stratification of powers; the coming together of forces. In the social, this is expressing that desires are stratified, captured and constructed.

In this ontology, subjects are and participate in assemblages of forces (Brott, 2013) (Deleuze, 1953). They are both stratified and becoming; they are molecular power and desires. Subjects exist through their connections; their inside is a folding, doubling of the outside (Deleuze, 1986).

There is a relation between subjects with their desires and powers, here understood as the molecular, and a society, a molar assemblage (Patton, 2000; Smith, 1997). A society, as a molar assemblage, is understood in differential thinking as a sum of molecular forces in relationships (Colebrook, 2009; Lazzarato, 2006): the sum of some of the subjects’ desires and powers. The research’s interest is in the singular; that is, life. *The sum of differences—in the forces, gives sense to the society as assemblage. Each life gives expression to it.* A society as molar assemblage, is integration of forces, is both stratified forces, powers—what is—and forces that change it—desires, becoming. On one side, the society as a molar assemblage has a diagram of power (Deleuze, 1986); a Social Idea (Deleuze, 1968a; Patton, 2000). It effects a certain function, produces following that function that pervades through all production of society (Deleuze, 1986). But the Social Idea is a multiplicity. It is composed of difference, of sum of forces. It is composed of molecular forces of desires; it will always break down (Deleuze & Guattari, 1972), transform. Subjects make connections, many of which are within the molar assemblage of a society. The outside folds, double in the inside. Subjects will ‘be’ the outside. But, subjects are also at the edge of assemblage. Pushed by desires, they are all forces of change (Deleuze, 2003d).

The questions for research are: what does a social assemblage do? In Foucault’s words: what is happening here? (Deleuze, 1986) What are the connections that are made? What do they enable? What problems do they solve? On one side, there are the connections that are stratified. It is the search for the powers at work. On the other side, there are those forces that bear the potential for change. It is the search for the desires at work. How to identify these
two different kinds of connections? Each life is different and cannot be expressed fully by looking solely at the molar stratum.

So, to research social assemblages, it is important to talk about lives. In differential thinking, lives compose and give sense to that molar ensemble. Each life will give sense to the molar. Also, only the specificity of each life will point toward the potential of the molar’s the becoming.

**Doing research with Deleuze**

This thesis proposes that doing research in architecture with Deleuze derives from the above ontology. This thesis proposes that people’s lives build architecture and spaces. This section looks at how to think and study the production of architecture and the diversity of urban areas in the social ontology proposed.

The proposed ontology conceptualises lives-as-parts-of-assemblages, not lives as a separate thing, brought to life through their part in assemblages. Lives connect to all sorts of forces, among them the architecture, the landscape, and environment that they inhabit and connect with. This leads to the creation of productive relations, where what is architecture and landscape is also transformed.

The above social ontology is expanded. Everything that is produced by social assemblages—the social strata,\(^70\) is done in connection to the organic and material strata (Deleuze & Guattari, 1980). The social now includes humans, nonhuman elements, ecologies, matter, organisms and all sorts of things. In that ontology, all is forces, and human systems, as forces, connect to all of sorts of forces (Deleuze & Guattari, 1980). Everything becomes social in a sense. Building on the water, the water becomes part of social assemblages. Building with trees in the nearby forest, the trees and the forest becomes part of the social assemblages. They enable certain connections, these relations solve problems. Architecture is social. It has to be thought of differently, as a way of looking at/engaging with life. To talk about architecture is to talk about the social, economic, political, organic, and non-organic. Architectures are expressions of these productive relations. A search into assemblage is a twofold act.

On one side, it is a work to understand the established power. It is to understand what is stratified. It is to look at connections of powers. These powers are stratified forces that subjugate all differences. Modes of life are expressing that stratification of powers (Deleuze, 1995). Moral values, the law, religions, traditions and norms, subjugate differences into commonness. Adrian Parr reminds us that Deleuze and Guattari’s work was a political work (Parr, 2013). To unmask the forces that are at play in the social, to reveal what often subjugates any act, will, or free thought, is a political act.

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\(^{70}\) Or alloplastic strata as defined by Deleuze and Guattari (Deleuze & Guattari, 1980)
To study this, this art has shown that Deleuze points towards Foucault’s method and lists of instances of power (Deleuze, 1986). To look at power in the social field this research proposes to use these methods. This will lead one to ask: what does the school do? (Ibid.) What does the house do? A researcher has to interpret how power works. He/she can be inspired with the list provided as example (Deleuze, 1986). For example the following words can be used: ‘this induces one to do this’ (Ibid.), ‘this custom makes these people do that’, ‘this religion brings subjects to do that’, ‘the Sultan induces his subject to live that way’. The hypothesis is that the extensive concrete spatial places and spaces that are produced are given expression by a series of expressions describing the social field. These places enable these forces. As Deleuze puts it: power organises time and space (Deleuze, 1986).

Then there is the more ‘hopeful’ work of Deleuze and Guattari, another side of the research. There is power, but there is also desire (Deleuze & Guattari, 1980). Desire is productive and positive (Colebrook, 2002; Patton, 2000). It is a force that wants more. It always pushes subjects—part of assemblages, to experiment, to increase their power (puissance). Always connecting, sensing the world around, subjects connect to all sorts of forces, human, non-human, organic, non-organic. Subjects as forces always seek to increase their power (puissance) (Deleuze, 1968c), always seek new opportunities. Subjects, within their particular circumstances establish productive relations. This is the singularity of life. They are also the actualisation of these desires’ forces. So to understand what is produced in social systems one must ask: how does what is happening here express an opportunity taking? How does it express an experimentation?

This implies that to look at a house, for example, is not to explain it as an extensive concrete form. A house is produced within social assemblages, answering social problems, life. To look at a house is to look at the various relevant (social) assemblages that will bring this concrete form to life, where the concrete form expresses such assemblages. Form is actual, and as actual is easy to identify as part of life, yet in itself it is cut off from life (Connolly, 2016). It is only when seen as form-as-being-part-of-assemblages that it comes to life.

How does it express an increase of power—puissance? How does it express an experiment with all sorts of forces, social, organic, cosmic, ecological? How does its express problem solving? An assemblage does something, and in doing so, solves a problem. A house is a concrete form-part-of-assemblages. It is composed of parts that are actualisations of productive relations that have been established because of certain conditions, to answer certain problems (social, economic, ecological ...). For example, a researcher has to pose the questions: how do these relations between what is happening (socially speaking) in the living room and what is happening (socially speaking) in the kitchen, assembled in a productive relation, express a gain in power? How does what is happening in the living room (socially speaking) and the life of a visitor from the mainland settlement, both part of an assemblage related to the house, expresses a productive relation? How do these spaces enable certain powers and
desires? These are the key questions. To give answer to all these questions gives expression to the different assemblages happening in association with the house, which the house enables. The continual discovery of assemblages’ expressions reveal what functioning the house is part of, what Idea is the house associated with. But the Idea is a limit Idea. It cannot be fully known (Deleuze, 1968a).

Another tool to describe assemblages is to name them: human-horse-stirrup (Deleuze & Parnet, 1996), 5-o’clock-the-animal-stalks (Deleuze & Guattari, 1980). What is important is not the animal, the human, but the relationships established, the human-horse-stirrup is a relationship, an assemblage that does something. So to read the name with hyphen, without a pause, expresses that this is whole, composed of parts in productive relationship. What is produced are affects. To name like this, is point to the assemblage-that-does-something… It is an expressive token that points to a more precise expression of what it is doing and the process that produces it (B. Buchanan, 2008). The name by itself, in itself is only an entry point: an encapsulation (Connolly, 2016). For architecture, the method of research is to name the assemblages that relate the form-as-part-of-assemblages.

The focus on the molecular and the social, the subject, also has the research turn to the subject’s affect. A subject, an assemblage of subjects, produces architecture. There is thus the necessity to turn to the study of the subject’s involuntary formation. Subjects connect involuntarily to all sorts of forces. They are formed by all the connections they make: for example, the continuous noise of the water and water taxi, the continual practice of the built environment, the repetition of listening, the calls from the mosque. There is the repetition of how to live in a room, in a house in a certain way. All these form immanently each singular subject that assemble with a given place, a given space. The subjects are those that, following habits, memory and creation, will produce and live in architecture. It is necessary to understand their formations.

Research on Site

The question now is how to study concretely the site within that proposed ontology, how to unmask the forces that are at play and that are playing. The previous sections already start to give answers. This section adds to this. It is a reflexion on the proposals made in Deleuze and research methodology (Coleman & Ringrose, 2013a).

F. Lorimer comments on Deleuze and methodology (Lorimer, 2013). He stresses that the new methods of study are complementary of the old. This research follows this statement. On one hand, this thesis proposes to gather data following the IPRAUS method, the ‘old method’. Ethnographers and architects, their method is well developed. There is the importance of the site, to go there and work with the reality of the built and social environment. As it was described in the introduction, their method entails interviews, the drawings of the space, but also of their way of living. Attention to furniture is important, and so is the study of space’s practice (Jaupitre & Yong-Hak, 2001).
But the focus of the research has changed. So on the other hand, the information to be registered look at more than in the previous framework of research. IPRAUS focus on the remarkable, with the sense of finding what commonly occurs (Ibid.). This research proposes to take note of that; but it also turns to the search for the singular, the different.

The new ontology also brings two new foci. First, attention must also be paid to how relations are made with the environment, not only the geographical and ecological, but also the built and the affective environment. This brings the second new focus: the need to register human affect. Focus on affect of sensation brings about another side of the formation of bodies. More subtle and sensitive, these are often imperceptible forces that are nonetheless important (A. Hickey-Moody, 2013).

I have to draw attention to the fact that the fieldwork for this research was done before developing a Deleuzian understanding of the world. The registering on the site of the affect of the population has not been registered. But following Tamboukou (2008), I consider that as I practiced slowly in the space at the time, as I lived on site, this thesis is able to recall these moments, and to describe some of them. Following St Pierre (1997), this research proposes the capture of affect to do a reflexive work on my own assembling with the site.

**HOW TO STUDY THE BUILT FORM**

How to study the built form? As architect, researcher and practitioner, my “ultimate goal of analysis is to explain the form, process of formation and diversity of urban areas” (Kropf, 1993, p. 3). This research follows the IPRAUS starting point: to start with the built form (Lancret, 2008). But it is situated within a new ontology: the built-form-part-of-assemblages and the built form as assemblages associated with what is seen as built form. Now, the research’s aim is to discover assemblages and what they do associated with the built form; to discover how the built form or parts of the built form play roles in such assemblages; to discover how the assemblages get expressed in the built form. For this, all sorts of expressive assemblages have to be found.

To the previous research methodology points made, two main methodological points are added: typological analysis, and genealogical work.

**Typological Analysis**

The main tool of IPRAUS, ‘coming’ into the built form, is typological analysis: to ‘isolate the remarkable’ as the representation of the whole system (Jaupitre & Yong-Hak, 2001). Typological analysis is a tool of classification (Lancret, 2008). As IPRAUS references infer, in an era, architects and people have agreed on common practice of producing space (Devillier, 1974a). For urban morphologists, typological categories are predefined (Moudon, 1994). Typological analysis does not fit Deleuze’ ontology. It is classification, a transcendental element that produce sameness. Typology does not account for the singularity of life.
Despite this, this research proposes to continue to use typological analysis, but it aims to contextualise typological thinking using the new ontology, to give it a new sense. The following sections present how this thesis proposes to reform typological thinking.

When one looks at the built environment, one sees all sorts of concrete differences: different houses, different villages, different streets, different practices of space. But in some moments in the built environment there is a sense of commonness. For example, many houses seem to be of the same type. But what one might perceive as common is in reality that one understands/feels the singular power of the assemblages (Connolly, 2016). These differences, the concrete differences and difference between, lead one to feel the functioning of things: the differences between forces. What these ‘differences of’ point to is that, within the chaos of differences, there is a sense of order, the singularity of life. Then, what is defined as commonness is in reality the sensing of the working of difference (between forces).

To relate this to assemblages, this thesis considers social thinking and the study of space. There are subjects’ thinking, feeling, and involuntary practices of producing space, done within certain conditions of time and space: environmental, economic, cultural, or social conditions for example. In differential thinking, the sum of different subjects’ productions in relation to forces gives expression to a certain Social Idea, a function that pervades through all production of the social (Deleuze, 1986). There is order in chaos.

So on one side, there are only differences produced, assemblages solving problems. Each assemblage is different—because the forces that compose them, that connect, are different. On the other side there are these Social Ideas. What is important to study are not the differences in forms, in extension, but the difference in relations between the forces, assemblages. Each of them express the singularity of life.

1. In the new ontology, the study of differences and of the forces is part of the ‘new’ typological analysis.
2. This study of differences gives sense to what this thesis defines as assemblage-type; order in the chaos.
3. Assemblage-typological analysis here does not define pre-existing and reproducible schemes. To explain the diversity of form and process of formation of the built environment, the typology concept is linked to the one of Idea and assemblages. There is order in chaos; assemblage-type must be found. One has to experiment to give expression to them.
4. To the concreteness of assemblage-type is associated an Idea, a structure. Idea is a limit. It cannot be determined completely. There is no finite definition, there is no

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71 See Part II Chapter 04 of this thesis.
72 Ideas are multiplicities (Deleuze, 1968a), so are assemblages (Deleuze & Guattari, 1980). The two concepts are related, assemblages being an exploration of the concept of Idea.
perfect example of what the assemblage-type is. To give expression to the Idea is to discover all sorts of assemblages. It is the patient description of a great number of expressions. The more assemblages are expressed, the more the Idea of that assemblage is expressed. To give sense to a house assemblage-type in the built environment, the study must give life to the differences that compose the Idea. And each differences will change its sense.

5. The assemblage-type is not fixed. It is the reflection of the production of a social function within a certain block of time and space. The diagram produces until the appearance of the next one, its transformation or its disappearance.

6. Each actualisation of an assemblage-typological diagram is different. Once again the difference is not relating to the representation, but is the difference in itself; the forces ‘behind’ the representation. What these differences exhibit is the singularity of life. But also, each difference represents a different kind of connection between productive forces. These differences might be the sign of the new to come. To dive into assemblage-typological analysis is twofold. First, it is the revealing of the forces that are present and in productive relation. But second, it is the discovery that the forces have the potential for change.

7. In the built fabric there are also forms that in a sense cannot be ‘classified’. This is the understanding of the built fabric actualisation of a chaos of forces. In some places there are stratification, territorialisation. In others, there are the de-territorialisations of what was. Somewhere else, something else is appearing; the territorialisation of new Ideas. But also, sometimes, there is the singular, something completely new. To study the built form is not only to understand the different stratum. It is a long and arduous engagement with the whole: what was, what is, and what already becomes.

8. This research proposes the naming of assemblages. Ethnological descriptions bring about forces that are at work, parts that are together. Naming assemblages allows one to start to identify their sense.

9. The description of assemblage-typology can relate to complex systems thinking. There are parts that are together, within a territory, within a given envelope. The inside system; the envelope is the limit of the system. But this assemblage is of parts that come together to answer problems. This assemblage connects to the other one that defines it. Assemblage-as-part-of-assemblages: human-horse-stirrup (Deleuze & Guattari, 1980). To give sense to what is in the envelope is to describe how what is there is in relation to the outside: why, how, when... It is to ask minor questions (Deleuze & Guattari, 1975). So for the house-as-part-of-assemblage, there is the envelope, the limits of a system. This thesis is interested in understanding why that form is the way it is, as such, all its parts are to be discovered. But these parts are
together because they connect, inside and outside. What is important is not the house as a concrete envelope, but the relationships that are realised, the problems solved, form-as-part-of-assemblages. Each relation indicates a moment of empowerment.

So to study the built form this research will use ‘typological analysis,’ but it will not describe a form. It proposes to enter the concreteness of everyday life. To study the built form, the thesis will give expression to it by describing the social and the formation of subjects. Form-as-part-of-assemblages. It will give expression to as many assemblages as possible; it will uncover the powers that capture the difference, and will reveal what is creative, singular, life. Two final thoughts: first, even if this research seems to describe a type, what it is describing are assemblages and Idea. The more assemblages are described, the more the sense to this Idea is given. Each description alters its sense. Second, this gives life to architecture. The form makes sense in relation to life. It is not a concrete passive extension; it is a living architecture.

**Genealogical Study**

The next methodological point considers historical analysis. The now can only take sense in relation to its historicity. To understand the now, the research has to give expression to the past.73

In Deleuze’s ontology this methodological step is explained in relation to Simondon’s and Foucault’s thinking. Deleuze considers the constant new, the now as the unfolding of a pre-individual field of singularities in metastable state (Sauvagnargues, 2009). Each actual state is the support of the next. The now is thus the unfolding of a singular individual. Each now is a different state of the same individual. With Foucault, Deleuze discusses also how each state only takes its sense in relation to its past expressions. In the now, there is the archive and there is the future (Deleuze, 2003d).

Anne Sauvagnargues describes how Deleuze reflects on the different social formation that existed in history which Foucault worked out. In his work on Foucault, Deleuze realised that Foucault showed the constant forming and dissolution of diagrams of powers (Sauvagnargues, 2009). Each new diagram represents a different *era*—as Deleuze talks about Foucault’s discoveries (Deleuze, 1986).

This research aims to apply these previous thoughts to the study of the built form in the now. First, historical formations are considered. In Deleuze’s ontology, these are reconceptualised as different plateaus of forces in relations (Deleuze & Guattari, 1980). They are composed on one side of a ‘sum’ of molecular forces of power that capture differences, a diagram of power, and on the other side forces of desire that always experiment. Second, to

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73 For Colebrook, in Deleuze’ work, there is no distinction between the theory of life – the above ontology, and historical narrative (Colebrook, 2009, p. 25).
understand the now is to understand also its historicity. Without the past, there is no present. So, to better express and study the now one has to study the different plateaus of forces that have existed.

This thesis proposes a genealogical approach. It proposes to find the different plateaus of forces. Each new era is an event, the coming together of forces, the stratification of particular powers that aim to capture and control difference and forces of desire. This is an establishment of new connections: social, ecological, economic, political. In each era, the sense of the forms of architecture that are produced is different. And without understanding the nature of these different senses, there is no understanding of the now.

**Elements to study the past**

What are the tools to study and talk about the past? IPRAUS propose a traditional archive work. They have one important tool: the gathering of historical plans. The reading of these plans aims to explain the evolution of the built form in time (Lancret, 2008).

But information on the past in Brunei is scarce. This research was able to gather some old photographs and illustrations. But the oldest only dates back to 150 years ago. There are very rare accounts of the past in documents over 150 years old. Only four maps from 1955 onward were retrieved.

The analysis of this historical documentary evidence follows what has been outlined in the previous section. It is a work to reveal the main forces of power and the singular, molecular forces of everyday life that are becoming.

Then there is the problem of talking about affect in the past. The thesis refers to Tamboukou’s work of using Deleuze (Tamboukou, 2008). By choosing to study Brunei, I entered Brunei’s assemblage. Brunei folded into my becoming. In some sense, I became Brunei. I experienced the site, I felt it and lived it. I read extensively about it and about the region. In my life, I lived and experienced many Southeast Asian cultures. So as Tamboukou did, I will talk of others. This research will attempt to describe past affect.

But as I enter the assemblage, I have to reflect on the forces that I bring with me (St. Pierre, 1997). This thesis will talk for others. But so, my narration and analysis reflect some of my own point of view. And I do not want to be neutral. It is on purpose that with as much description and proof I will make claims. This concerns notably this research’s position with regards to the Sultan’s acts and the religion that he chooses to impose on the inhabitants of Brunei.

**Data analysis and presentation**

The following format for the thesis is proposed. This research’s aim is to give expression to the built form that lay on the river of Brunei’s capital. In Deleuze spirit, this it is an experiment. A description of this research’s findings will be made. This will be put in perspective with
Deleuze’ philosophy. But as an architect, I have decided not to present a purely textural account of my site. This thesis will also be illustrated. There will be text but also visual and spatial descriptions. These will be, among others, photographs of the past and the present, series of illustrations/diagrams, succession of historical plans, series of 3D diagrams and plans of the houses and of villages.

My experimental enquiry unfolds quickly and densely in time. In Brunei, in this thesis, everything keeps moving and changing. This research is drawing a process unfolding rather than an artefact. These proposed illustrations are more thought as notes, diagrams, as the vehicles that illustrate various points. They are not thought as perfect description of a past/present—which in Deleuze’s ontology is cannot be done.

SITE—KAMPONG AYER

As was written in the introduction, this research aims to study the water city that lies on the waters of Brunei’s capital, Bandar Seri Begawan. The push for tourism has led to name the built environment on the water as Kampong Ayer, the water village.

I spent a total of five months on the site, from a first visit in 2009 for three months till a last visit in 2013 of two weeks. I stayed in a specific house and observed the life. All primary participants consented to my research. At no given time did I engage in political or religious discussion with them.

This research developed the theoretical framework to study architecture after the site visits were done. The research analysis that follows is certainly confronted with lack of data in some areas. I did my best to present a coherent account and test the framework I created.

This research chose to focus on the built form of the water city from the specific date of 1904 to 2013. 1904 is when the British colonial power decided not to dissolve the country into their wider Malaysia properties. It is an event that is remarkable and which shifted the whole history/sense of the site. There is the water city before, with its ancient ‘traditional’ social structures. And there is after 1904, when the British transformed the whole social field almost overnight. It is also from that time that information is available about the place. 2013 is the year of my last visit. I chose that moment to close the account of the built landscape.

CONCLUSION

In this chapter, two tasks have been carried out. First, Deleuze’s ontology, developed in Part II of this thesis, was presented. It focuses on philosophy. Second, this led to the presentation of how this research proposes to study Brunei’s architecture and how the results will be presented. The research’s focus is to describe social assemblages of power and desires, in different eras.
In the discussion of these two points, answers to some of this thesis research questions have been given. Deleuze’s philosophical system has been presented. It has been shown how it can frame the study of architecture. A different ontology for architecture studies has been devised. Finally, a specific research design in this ontology has been proposed.

This first part of this thesis was theoretical. The next part is the experiment of this research design on a site, practice.
PART III – ARCHITECTURE
THEORETICAL FRAMEWORK

This chapter sets the context of Brunei as a society before 1904. There is little knowledge of Brunei’s ancient history. Documentation and evidence is available after colonisation by the British in the late eighteenth century, though it is scant. The period which will be accounted for in this chapter spans from the first century A.D. It was during this period that the development of maritime Southeast Asia and the thousands of islands in the regions is thought to have started. This account concludes with an event that occurred in 1904.

In this chapter, the hypothesis is that the Southeast Asian maritime region is an assemblage, composed of assemblages, connecting to other assemblages. In Southeast Asia, there is a highly connected network of trade that occurs in an ecological milieu of extreme similarity. This research considers the Idea of that assemblage, a Social Diagram or a function. It is understood that this diagram predicates all social production in the Southeast Asian milieu. In time, because of changes in conditions, the assemblage responds to the changes and transforms. Each set of actualisations is an era. Each state is the support for the next.

Brunei is one of the actualisations of the Southeast Asian maritime Social Idea. This hypothesis is proposed because there is scant knowledge of Brunei, but there is knowledge about other societies of the region. So, by studying these, this research can relate and expand what is known about Brunei. That knowledge is important as it will inform all the subsequent chapters of this part.

SOUTHEAST ASIAN CONTEXT

Geographical, environmental and cultural settings

Before this chapter turns to the study of different eras, a description the Southeast Asian geographical settings is done. This is an important work since it allows us to understand how humans have assembled with their ecological and geographical milieu. These settings have an impact on every aspect of the study: economic system, societal structure, culture, interaction between populations and as, a consequence, the urban form and the built environment.

Evers is adamant that there is a cultural specificity of the Southeast Asian region. Even if it hosts a great diversity of cultures, these often share common features that create a distinctive cultural area different from the great Chinese and Indian civilisations (Evers & Korff, 2000).
The Southeast Asian borders can be seen as the vast area that spreads West-East from Burma to Papua New Guinea and North-South from the Chinese border of Vietnam to the Indonesian border with Australia (King & Wilder, 2003).

This area comprises different geographical settings: vast seas sparkled with thousands of small islands, a few grand islands containing a variety of landscape capable of sustaining the growth of civilization, and continental landscapes. Only the Cambodian lowland contains plains of significant size. Otherwise the land of the region is mainly covered by mountainous systems. The most important geographical feature for this research is the multiple river systems that deeply penetrate the land masses and create connections to the seas. These were the main means of communication until the development of the road system from the eighteenth century (Ibid.).

This thesis’ interest is this thin strips of land located at the mouths of rivers along the continent and islands’ shores. Brunei is situated in just this sort of environmental setting. It lies at the northern tip of Borneo Island. It faces a maritime road that links the Philippines to Malacca/Singapore and which then branches towards India/Europe or China. The wind is an essential environmental feature of the region. The monsoon wind for many centuries dictated
the life pattern of the inhabitants and the patterns of trade in time and in location. Along these trading routes ports or entrepôt would serve as resting and exchange points. 74

The region’s climate is primarily tropical and humid. The vegetation extensively covered the land and was bountiful. Jungle and vast marshlands were deep and impenetrable; they hosted very dangerous wildlife. In Southeast Asia there was very little fertile land but the vast seas hosted an abundant number of fish species and various sea fauna.

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1ST ERA – THE ORIGINS: 5th TO 8th AC

Southeast Asian history—Early Hindu States

For O’Connor, in the first stage of Southeast Asian settlement, the composition of the society was of similar segments that share the same principles (O’Connor, 1983). Sameness makes association possible. At this stage, there were groups of kinship with fluid composition. There were only small settlements.

Only in a later second stage, did the role of a leader of the community appear in Southeast Asian cultures. This leader acted symbolically, like a father figure or ‘strongman’. When this

74 An entrepôt is a warehouse where goods are stocked. In Southeast Asia entrepôt is a port city. The main reason for its existence is as a stopover or storing place on maritime trade routes.
second layer of hierarchy appeared there were then two layers of communities. This leader had to attract followers and retain them; followers had the possibility of residence. These processes of attraction became ritual, almost religious. The leader became the centre of small urban groups, the centre of a community. But such groups could not grow too much, since the choices for the followers were open. This was a very fluid process of belonging to groups. Also, these groups were competing for the same constituents (Ibid.).

From the first century A.D., maritime trading routes were established between the Roman and the Chinese Empires, passing through India and the Malay Peninsula. On the continental parts of the region, kingdoms of Hindu influence were established. The Funan Empire was established in the Cambodian/Thai region. On the island parts, there seem to be only small settlements, as described by O’Connor. When the Funan Empire collapsed around the sixth century, its nobles left and went to populate settlements around the islands of the region. It is said that some of them established themselves in Brunei (Saunders, 1994). These Hindu states are important for their social and cultural organisation that would be spread and influence all formations of states in the region.

**A sketch of Brunei history**

Many North Borneo legends relate how Alak Betatar became the founder of the Brunei monarchy. Nicholl (1983) estimated the year to be 692 A.D. Saunders (1994, p. 32) interpreted local legend and concluded that a group of people with superior power that was almost mystical had a coherent organisation, and they subjugated the indigenous inhabitants with a combination of power and offerings. Previous studies postulate that they were families of high rank escaping the collapse of the Indianised Funan empire (Brown, 1970). For this investigation, this implies that Brunei’s culture included Indic idioms from its beginning.

**Ecology, Culture, Social Organisation, and State formation**

As in many environments, before the appearance of modern technology, humans assembled their environment, responding to events and opportunities at hand. What was happening in Southeast Asia?

*Population.* In the islands of the regions, there are a great number of ethnicities that relate to different ecological settings (Tagliacozzo, 2007). For example, in the island’s jungle, a first group of humans harvested forest produce. A second group was located at the threshold of the water. They produced their livelihood from the water. But they feared the dangerous wildlife of the jungle. This is one reason why they settled on the water (Chou, 2003). This also led to the creation of many beliefs such as ghost stories about the forest (Endicott, 1953). Other groups thrived in the mountainous parts of the island. In this organisation there were clear cultural boundaries between the water, the land – and the jungle, and the mountains.

*Housing.* In relation to the environment, humans created particular forms of settlements responding to certain conditions. In the tropical climate, wood was abundant and thatch was
prevalent. Harrisson (1970, p. 291) was able to witness the building of Malay communities in Sarawak. The inhabitants would use all the materials in the surrounding environment. Environmental considerations pushed a first group to settle on a wetland. The communities harvested produce from the wetland as a secondary source of income. The second group settled on a mudflat setting. This location is on land that appears and disappears with the river’s tide. Considerations involved in choosing to settle on the water included protection against dangerous wild animals and the lack of accessible land. The deep mangroves impeded access to the land. However the mangrove was a rich ecosystem that provided many resources to the villages.

Social organisation. Some scholars have hypothesised that the environmental bountifulness of the region promoted the particular bilateral kinship system that is widespread in the region (Winzeler, 1976). Since there was no “cooperative big game hunting, large-scale pastoralism, and dry grain draft animal” (Winzeler, 1976, p. 631) then it was much easier for either sex to accomplish any task. This bilateral kinship is a key factor in the division of labour, the social organisation of the region, and the choice of association.

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Assemblages

In this section, this era will be interpreted in an assemblage theory framework. Assemblages were formed in response to certain events. What is happening on the ground in Southeast Asia?

View on the Sumbiling river near Brunei – Unknown date

This picture aims to illustrate the houses’ materials, their locations, and the environment – river, palm trees.

Source: Archib Negara Brunei Darussalam (ANBD).

Figure 10 Illustration of traditional river settlement late 19th C.

Use of this image to illustrate the pre-colonial period is based on the assumption that in 1800s the techniques and cultures of settlement had not greatly changed for hundreds of years.
It is thought that the particular Southeast Asian environment lead to the creation of particular human assemblages. First associations of humans in groups appeared. These assemblages are responses to social and geographical forces being put into productive relationships. The configuration was the answer to particular problems.

Always open to new opportunities, new social assemblages, new productive relations appeared when the flow of connections between groups increased. A more complex association was tried: groups of groups. These assemblages allowed each group’s powers to increase. It has been hinted at how these assemblages settled in different territories, as a response to different settings, different opportunities and problems.

Brunei was one of these assemblages. The first settlement of Brunei came from the territorialisation of some communities in that particular site, in a particular manner. But then there was the Event of the de-territorialisation of the Funan Empire. Through connections, new assemblages are formed. Ideas, forces of others came in relation with the existing Brunei pre-individual metastable state. Because of particular conditions, this metastable state entered in resonance with these external forces, and transformed. Ideas of others became folded into an existing one. As a consequence of the differen-tiacion in Brunei’s metastable state, at the level of force, on the ground, differen-tiacion occurs. A new social organisation actualised, and different forms of settlements appeared.

2\textsuperscript{nd} ERA – 9\textsuperscript{th} TO 14\textsuperscript{th} CENTURIES: ENCOUNTER WITH INDIC SOCIETIES

\textit{Srivijaya, coastal ports and entrepôt}

The next stage in the social evolution in Southeast Asian urbanism occurred when the society became even more complex, when the Indic principles of social organisation spread. The cause was the intensification and expansion of trade with Indic Empires. For O’Connor (1983), the society transformed into an organic society.\textsuperscript{76} Complex societies are tied together by the division of labour. The Indic principles of social organisation added another level at the top of the system hierarchy. O’Connor asserts that this added level had to be related to religion and a link to the cosmos to be accepted and to unify competing communities. The new leader, the Raja, brought together groups of communities. This new system created a symbolic centre that also translated into a centre for urbanisation. O’Connor stated that communities did not disappear under the influence of Indianisation, but became encompassed in this new system.

This era is thought to have started when the local trade network and that of the great empires of China and India intensified beyond a certain threshold. Javanese states were exposed to

\textsuperscript{76} Organic society: a “system of different organs each with a special role, and which are formed of differentiated parts” (Durkheim, 1964, p. 181).
ideas from the Indian subcontinent. In the seventh century, the Srivijayan maritime kingdom emerged on the island of Sumatra. It would be the preeminent force in the region until it collapsed in the fifteenth century.

In the region, many small states controlled small areas of influence in riverine systems and/or on maritime trade routes. These states would pay tributes to Srivijaya. Their political and sacred structure would match that of their dominating power. When the Srivijaya Empire collapsed, part of the elite joined an emerging maritime power: Brunei. This was the second major migration and influence on Brunei.

A sketch of Brunei history
The first Brunei thalassocracy was between 692 and 835. The capital’s name was known as Shrivajia in Arabic texts and its approximate location was in the mouth of the Lawas River near Brunei’s bay. The settlement had a great influence in the region but was of small size (Nicholl, 1983). Brunei’s power faded next to the rise of the Majapahit Empire but raised again when the latter was about to collapse. The second era of prosperity lasted between 1000 and 1350. Its capital, known as Po’ Li in the Chinese archives (Ibid.), was located in the Brunei bay on the mouth of the main river of that bay, north of Borneo Island.

Southeast Asian State form and formation
In Southeast Asia, states and cities are hard to differentiate, one being the representation of the other. The environmental and geographical features of the region allowed for the creation of two different and distinct economic systems (Wheatley, 1971). The land state presided over agricultural systems and the coastal/port states. They controlled the river system and the sea trade (Wertheim, 1980). Brunei’s water city was a port inscribed into the coastal trade system.

The political models that control the state and those that organise the territories are of the same nature. McGee (1967) hypothesized that the first states were located near the Indian civilisation and were influenced by it. A number of states grew out of them to become great maritime Empires in the fifteenth and sixteenth centuries—among them Brunei. Brunei adopted a more complex Hindu political organisation which facilitated a change in structure and allowed for growth (Manguin, 2002b).

Cosmological conceptual model of power—the Mandala
It is possible to draw a conceptual diagram of these states’ organisation. Heine-Geldern (1942) describes the religious and philosophical conceptions that were underlying and shaping the Southeast Asian states. For him, the states and kingship were influenced by Hindu religious principles. These can be understood as:

The belief in the parallelism between Macrocosm and Microcosm, between the universe and the world of man. According to this belief humanity is constantly under the influence of forces emanating from the

77 Thalassocracy is a dominion over the seas, as in exploration, trade, or colonisation.
direction of the compass and from stars and planets [...] Harmony between the Empire and the universe is achieved by organising the former as an image of the latter, as the universe on a smaller scale (Heine-Geldern, 1942, p. 15).

This organisation has an image: the “Mandala”. It is a concentric organisation (Tambiah, 1977, p. 69). It designs an arrangement around a centre of both simple and complex satellites, mirroring the structure of a pantheon of gods.

These fundamental beliefs and the need to mirror the celestial organisation on earth to create harmony had a profound effect on the organisation of the society, the state, the city, and the lower levels of association—such as the kampong and the special deployment of the capital region and its provinces (Ibid.).

The king was sacralised and represented either as a condition of the God or a descendant from a God. Around the king-divinity, the state organised itself as a mirror of the macrocosm. Spatially, the king was considered to be the centre of the world; his palace, and the sacred city organised itself around the same cosmic principles. His main ministers are around this centre. The organisation of their power mirrors that of the king. This organisation is thought to ripple throughout the society. The inscriptions of the seventh century describing the Srivijaya imperial organisation expresses the Mandala idea (Manguin, 2002b; Miksic, 1989) (previous figure).

In this inscription, the main area of power organises itself into Mandala principles. The empire’s secondary cities would also organize themselves following Mandala principles.
Upstream, downstream diagram

Manguin (2002a) proposes another diagram representing the spatialisation of the trade/coastal city (Figure 5). This model shows how these cities control trade networks. Environmental settings dictate the organisation of the collection and control of goods, and the location of the main city, power centre. Different types of settings could be described on the coastal landscape. First, the city state that controls a riparian landscape: its location is on the main collecting centre at the mouth of the river. The second setting is the city state on one river system controlling and attracting more coastal systems. Third, the city state at the mouth of the river controls sea trade. Finally, there are city states that have the three characteristics. With the advent of great maritime Empires the latter became the main setting.

In these systems of trade collection and distribution, different ethnic groups have different and given functions. There is no market. Individual exchange is the normal means of exchange. This point is important because one group cannot bypass another.

A riverine basin, a centre of trade A controls the mouth of the river. All the subsidiary centres in the basin are submissive to A. A controls the system controlled by A* – by subjugation. Also, A by its position along the sea trade, can control the passing sea trade traffic.

Source: Modified from Manguin (Manguin, 2002a)

Figure 12 Upstream Downstream exchange Model
Modified – Plans in Brunei Bay London published at the admiralty 27th May 1960 under the superintendence of Rear Admiral K.S.B. Collins

Modified: the top left hand corner windows was a detail of the bay’s entry around the island of Muara. That detail has been replaced by a detail of the Brunei river at the current location of Kampong Ayer.

1/ Current location Kampong Ayer. 2/ Mountains along the river. 3/ Location Kampong Ayer in the 16th C. As per archaeological work (Guillot, 2003)
The above maps show the topography of the Brunei River and the location of the water city. The setting resembles that proposed by Manguin (Manguin, 2002a). Deep in the bay, the settlement lies on the river that is framed by mountains. Archaeological findings showed that throughout its long history, the water settlement kept moving along that arm of the river (Guillot, 2003). Both access to open sea and control of the river downstream is easy.

**The Traditional Southeast Asian city**

This section focuses on what is known about the organisation of the city in Southeast Asia. Evers (2000, p. 30) identifies two main types of city: the sacred city and the trade city. These are two different types of urban centres and two different morphological representations.

The agrarian states developed a sacred function for their elite. The cosmological attributes and functions of these elites were exhibited through the architecture and the function of the capital. The city, centre of Earth, was the sacred centre of the state. It produced magnificent architecture. The sacred city modified its environment. The city was a representation of the cosmological universe on earth and organized itself following Mandala principles (Reed, 1976).

The coastal states were organized as centres of collection and control of an area with dependencies. In the marshland or thin strip of land where they would settle, the raja/king could not mobilize forces that did not belong to him. He was the leader of groups of people. He owed his power to these groups. Dependent on his followers, he could rarely engage in big works (Manguin, 2002a). The architecture of these states was built in perishable materials and did not leave any traces of its past.

But there existed cities that exhibited the two above characteristics (Miksic, 1998; Reed, 1976; Wheatley, 1983). In the fifteenth century, Brunei displayed these two. It was the sacred centre and an important regional trade centre (Saunders, 1994).

**Assemblages**

Assemblages were formed in response to certain events. What was happening in Southeast Asia?

This new era has the previous state as support. It arose because new potentials were available. Previous relationships changed, thus bringing a redefinition of the outcome of the relation. The intensification of trade with the outside and powerful empires, powerful forces, brought new opportunities. Southeast Asia and other empires were in productive relations, assemblages.

The first series of assemblages described regards the productive relationship established between the social and the environment. The trade system can be understood in assemblage theory; a result of opportunities taken. What is traded are the produce of the river, the sea, the land, and the earth. Humans connected productively with the landscape. The second
The use of the environment as the conveyor of trade. The river system and the oceans are used to transport produce, the wind is the material that pushes all the trades. Humans connected to the landscape. The third assemblage is the location of settlement within the environment to control and maximise the profits of trade. The settlements are at the mouths of rivers, or in bays. The system of trade is inscribed in the landscape, as the latest diagrams proposes.

The second series of assemblages concerns the social. The social assemblage invented in this era has two causes. First, the previous state is the support of the new one. The Mandala assemblage adopted includes the previous social organisation. There is the adoption of a leader to lead groups of groups. But that authority owes its power to these groups, and their productive relations. Second, that Mandala Idea came about because of the trade assemblage. That assemblage brought into contact the region’s Idea and the other’s Idea. The Mandala assemblage links the social and the Earth. It is also a strict stratification of power which induces bodies into certain roles. These roles have as justification that if they are not respected the whole social assemblage will collapse. The Earth will get revenge on the living. Adopting the Mandala’s Idea aimed to increase the power – coercive – of the assemblage.

3rd era – 14th to 17th C.: Encounter with Islam and the Age of Commerce

The age of commerce and expansion

Islam spread from the Middle East to India along trade routes. India was the gateway for Southeast Asian merchants.

For O’Connor (1983), this religion shares ‘some ground principles’ with the Indic culture it encountered. There is strong leadership by a spiritual figure but this figure is not involved in controlling the lower strata of society. The Mohammedan religion (Ibid.), like the pre-existing religion, also values family at the fundamental level of the social organisation. Conversion to Islam did not disrupt that order.

The rich Southeast Asian traders converted to Islam. In the ports of Southeast Asia, the kings, owing their power to these merchants and fearing loss of influence, also converted. Pires (Pires, 1515, p. 46 in ; Widodo, 2004) described the adoption of Islam by natives of Majapahit power in two ways: on one hand, the elites voluntarily did so to keep their high social status by matching that of the Muslim traders. On the other hand, there was the settling of Muslim foreigners of many races in settlements that usurped the power of local elites and influenced the native populations. The adoption of Islam did not dramatically affect the form of social practices and the production of space. Social organisation remained fundamentally the same.78

78 When first adopted in Southeast Asia, Islam was not the extreme form that is nowadays promoted in the region.

150
Reid calls the fourteenth to seventeenth centuries the age of commerce (Reid, 1988), a time of great economic expansion and prosperity throughout the region. Ports, entrepôt cities, which owned local produce and controlled vast areas, emerged as maritime powers. Malacca, with its strategic location on the Malaysian Peninsula and an ingenious tax system, grew powerful and controlled the international trade routes (Ibid.). Brunei was also at a strategic location on the north east trading routes. Traders would navigate through this network of cities bringing goods, sharing ideas and religion.

Notice Borneo Island called Burney and the trade route passing by the top of North of the island. (Wolters, 1986/1999)

Figure 14 The main parts of the Spice route of the late 17th C.

79 This thesis does not imply that the arrival of Islam caused the ‘age of commerce’.
Brunei trade

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Modified Brown diagram (1970). The diagram was modified to show differently how Brunei controlled both river and sea trade. It is proposed that Brunei traded with more than one trade centre. The diagram shows how these connect to important civilisations. Their raison d’être. The aim is emphasise connections and networks.

Figure 15 Conceptual model of trade organisation in the 17th C.
Brunei at its apex in the seventeenth century reigned over the seas of the Philippines and the north Borneo region. It controlled river systems and was a point of collection.

**Southeast Asian city between the 14th and 17th centuries**

The fourteenth to seventeenth centuries was the first era when there seems to have been a defined knowledge of the Southeast Asian cities’ social composition. This section presents a series of known facts about its layout and social composition.

**General layout.** Reid provides a description of the city. In coastal areas, cities are trade cities. The Sultan is the symbolic figure who holds all the parts of the society and thus the city together. The city is an aggregation of villages, each replicating the organisational pattern of the palace. A headman rules each village; his main duty is to protect his people. The headman is not monetarily wealthy. The economic system made manpower more important than money (Reid, 1980).

**The sacred centre.** Wheatley suggests that analysing the city could be done through the understanding of its sacred symbolism (Wheatley, 1967). This builds on the Mandala thinking. The built representation of this system is the spatial layout of the Palace, the *kraton* (Behrend, 1989) and some features arranging the whole structure of the city. First, the kraton buildings are at the centre of the city. Second, on the *kraton* crosses the important *axis mundi* that connects and brings the three worlds together; heavenly, middle and nether (Wheatley, 1971). The axis is at the centre of the world and bridges to the cosmological world. It gives direction to the city’s composition.
The Nobles. The nobles, in the cosmological layout of cities, would be situated close to the centre in a concentric order. In the Javanese city, they would be located, radiating from the *kraton*, along the axis (Behrend, 1989). They would be in walled kampong (Miksic, 1998). Geertz drew the arrangement of the palace and the nobles’ settlements surrounding it. Their kampong replicate the layout of the Palace (Geertz, 1963; Reid, 1980).

The market. Wisseman-Christie (1991) recounts how the Southeast Asian market in the tenth century affected the type of urbanisation of Javanese states. It was a market that circulated every five days among groups of villages. She raises the probability that this organisation impeded the need for a market place at the heart of the city, as in European cities. Thus there was no need for an urban centre to be created. In Kampong Ayer the market did not exist as a building. Women in small boats called *padian* would buy produce in a centralized place and distribute it to houses (Abdul Latif Haji Ibrahim, 1970; Pigafetta & Cachey, 2007).

The merchant. The coastal cities hosted traders. These were wealthy men who generally were headmen of a kampong composed of relative kinsmen, followers, and slaves (Brown, 1970). In the port city, merchants would settle near the water, building jetties between warehouses and the water.

In Southeast Asia, trade was important for the development of states. Merchants and peddlers constantly interacted in its cities.

The craftsman. Powerful and wealthy empires have enough wealthy people to command the need for expensive artefacts (Bronson, 1977; Junker, 1994). High-quality items would be produced in villages ‘attached’ to the city. They resided in special quarters near the elite residences. These craftsmen would enjoy relatively high status (Abdul Latif Haji Ibrahim, 1985; Junker, 1994; Reid, 1988).

The slave. Slavery was an important part of the Southeast Asian economy in the seventeenth and eighteenth centuries. Manpower was the wealth in the economic system (Reid, 1988). Slaves were either obtained from raids on villages and sold in markets or they were people who would sell themselves to headmen because of debt problems or to find a secure position (Lockard, 1973, p. 58).

Fishermen. The Malay fishermen and the other ethnic groups that lived on the water, Moken, Bajau (Chou, 2003; Sather, 1997), controlled the sea. They were essential to the control of the trading routes and thus important for the power of those leading the state. They traditionally would settle on the river (McGee, 1967). In Malay fisherman villages, every house needs access to the water (Mahmud, 1970).

Settling on the water. McGee (1967, p. 33) suggested that the location of cities on shorelines or river banks and with only limited hinterlands often signified that there was no proper space for the expansion of the city. A large proportion of the population had to live on boats or on stilt houses built on the water.
Brunei society and city

The diagram of the Society

Brunei society is highly codified. The rank and affiliation of families is very important. The many ethnic groups that were linked together in a trade system by necessity or by force have well defined roles in terms of power and submission (King, 1994). The Sultan is at the head of the system, of the state, of the religious power. Within the local hybridized Hindu-Muslim values, he is a quasi-God figure. The nobility are clearly distinguished from non-nobles, each of these divided in subgroups.

Kampong Ayer, Brunei

In the fifteenth century Brunei adopted Islam as a religion. The capital moved many times to finally settle in Kampong Ayer around 1660 (Brown, 1970). Pigafetta (2007) made a succinct description of Brunei’s capital in 1525. There were two settlements on both sides of the river of 25,000 people each. In the first, the king was a Moor. Further upstream a larger settlement was led by a pagan king. Part of the city was on land and had a wall that protected the Sultan’s palace and the families of the nobles (Tom Harrison & Harrison, 1956). The city on the water was built on stilts and had four wards on which traders conducted business (Nicholl, 1983).

Kampong Ayer is a collection of villages that together form the area built on the water. The study of the village names is very important for the comprehension of the structure of the city. Traditionally villages would be named after the activities they hosted or after the name of a powerful figure (Brown, 1970; Abdul Latif Haji Ibrahim, 1971).

This shows that Brunei was a capital with a polity centre with elements of its organisation that correspond to the Southeast Asian city as described in the above sections.

Assemblages

What is happening in Southeast Asia?
There is again the event of intensification of trade: redefinition of the elements in relation, and then, as a consequence, new opportunities arising. One of the outcomes of the connection of Southeast Asia with other cultures is the coming of Islam. Adopting Islam was a means to avoid losing power. But the Islam of Southeast Asia is particular to the region. The form created has the existing customs as a support. So there is connection, but there is creation immanently.

Once again, in trade and in the social and religious, the previous era is the support of the coming of the current one. But what is created in not an evolution, it is an immanent creation.

In this era, it is hard to reflect on the changes in the form of the city as information is scant about the previous era. It seems that cities are more populous. However, the organisation can be commented upon. Here is a general sense of the Idea, Social Diagram that organises the social and the built form: religion and power organise the social but also the form of the city. It is possible to express this form by describing the social, religious and economic assemblages.

The above sections have shown how the form and organisation of Kampong Ayer at that time followed the principle of the Southeast Asian city. Brunei is an actualisation of a Social Diagram. But as actualisation, the forces that create it are different from the other cities. The landscape and the social are different. Thus, the form of content and its expression are different. This city is singular.


Southeast Asian History

The next era is colonialism. Europeans arrived in Malacca in 1511 with the intention of controlling commerce in the region (Wolters, 1986/1999). Over the subsequent five centuries they continued to disrupt the traditional forms of commerce. This encounter was not favourable to local empires. However, Europeans did not fully take over the commerce of the Southeast Asian states until the mid-eighteenth century.

It was not only military power that subdued indigenous states. The Europeans, Dutch and British, slowly smothered local trading states by establishing a more efficient trading network. It was the organisation at a larger economic scale and better shipping techniques that bypassed the small and competing kingdom (Sather, 1997). By introducing a market place, and promoting direct exchange between individuals, the Europeans created a whole new organisation between the individual, the clan and the community. The traditional nobility clung to its privileges over trade, but they were then bypassed, resulting in complete destruction of the traditional economic system. From the mid-eighteenth century through to the second half of the twentieth century, European powers ruled the economies of the region, leaving local Sultanates and kingdoms to preside over the religious, cultural and sacred parts
of the state’s life. A major change was the promotion of European laws of justice, administrative organisation, and land ownership.

Europeans also brought new patterns of cities. They created new settlements that would become today’s great Southeast Asian cities: Kuala Lumpur, Singapore and Jakarta (Evers & Korff, 2000).

**Brunei**

Brunei’s existence was only due to its capacity to control sea trade. The new system completely bypassed it. Most trade went directly to great ports such as Singapore. Also, a new British settlement nearby in Sarawak competed with Brunei, and was more turned toward the modern economy. It almost took away all Brunei’s power and land (Saunders, 1994). The new era established by the British during the sixteenth to the twentieth century almost caused Brunei’s death.

In Brunei, the noble class claims that by tradition they shall not be allowed to work. They shall live only on trade annuities. With the new economic regime, they lost everything. They also refused to enter the bureaucracy to become an elite in the new system that pervaded in Southeast Asia. A long period of decline occurred between 1660 and 1904. In the early twentieth century, the nobles were impoverished, living in poor conditions. In 1911, the census counted less than 10,000 souls living in a little more than 1,000 houses in Kampong Ayer (Chevallier, 1911).
This era arises with the Event that is the encounter with Europeans. In 1511, the whole Southeast Asian assemblage changes sense. New opportunities arose. Chinese, European adventurers and pirates seized many of them (McGee, 1967; Saunders, 1994; Warren, 1981). However, the Malay people, particularly the noble class missed out. Whole series of assemblages in Southeast Asia, productive relations, became undone while others arose. Brunei lost almost all its territory (Saunders, 1994). The water city declined from 25,000 people – in two settlements in its glorious time (Pigafetta & Cachey, 2007), to barely 10,000. There are descriptions of a decrepit built environment at that time (Blundel, 1923). Brunei’s assemblage was becoming undone.

V – FROM FIRST CENTURY TO 1904 IN BRUNEI

This thesis leaves this genealogical account of Southeast Asia and Brunei at the start of the twentieth century. In 1904 the British colonial power gives the decision to the Resident, Malcolm Mc Arthur, to either kill the dire remains of Brunei’s empire or somehow find a way for it to survive (Saunders, 1994). He decides to save the monarchy, ordering the remains of the empire to become a Residency of the British Empire. The evolution described above sets the conditions for the main object of the case study of this thesis, Kampong Ayer in the twentieth and twenty-first centuries.

This chapter, as history from the first century A.D. until 1904, was divided into four main periods. They correspond to the ebb and flow of the region’s maritime history of trade. Krauss (1983) summarises these in the following sketch.80 The series of diagrams show the

80 Krauss’ diagram references five eras with a historical scope different from mine.
transformation of the trade assemblages, involving relations with the environment—river and sea—and the economy, and the relationship to city size.

SEE PRINT VERSION
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Figure 20 Schematic model of Brunei Maritime Activities

CONCLUSION

This chapter has given expression to a series of assemblages in four different eras in Southeast Asia.

It has been shown how assemblages in each era were responses to events that brought new opportunities. Assemblages in each era were the support for the next one. But this research has not talked about evolution. Creation is done immanently, such as the adoption of Indic values and Islamic claims by Southeast Asian social assemblages.

With the assemblage’s theoretical framework, this thesis was able to talk about change. It was able to frame how the social, the built environment and nature assembled together. The built environment was given expression by talking about the social. The description of how social power was stratified was made, as was its effect on the production of architecture.

But this thesis proposes something is missing here. The description of the singular, the subject’s desires, the difference of the molecular forces, is missing. This chapter is only a spectator of history and grand Ideas. There was no access to the everyday life, there was no real information of the composition and life on the ground, in the villages.
This chapter sets a context. *It brings out important knowledge that will inform the next chapters.* Social assemblages, environmental assemblages, religious practices, dreams of prestigious history: all haunt each future era. The now connects transversally throughout the whole of history.
CH 02 – ASSEMBLAGES IN BRUNEI 1904 – 1955

ASSEMBLAGES IN BRUNEI

Section objective

This chapter gives expression to the Brunei Social Idea for the era from 1904 to 1955. The knowledge of the previous metastable states of the Social Idea are the support for that of this era.

As hypothesis, this chapter follows Deleuze’s comments in Foucault about the diagram of power of ‘traditional’ society (Deleuze, 1986). For him, major lines of kinship structure the society. But importantly, the reality on the ground means that it is the negotiation between parties that prevails over these structures when decisions are made.

Assemblage background – 1904 to 1950: An image of the past, a different sense

Why 1904? Why 1950?

The economic situation in the 1900’s was terrible due to the Event of colonisation described in the previous chapter. The country was ruined but held onto its identity. The monarchy clung to its pride. In 1904, some 10,000 people remained living on the water in a territorially small country with no real immediate economic future (Chevallier, 1911).

Brunei’s Resident, McArthur, was asked by the colonial power to decide if the country should be dissolved (Saunders, 1994). He determined against it. He proposed and applied a plan for the country’s survival. This plan changed the structures that had been in place for hundreds of years. The Sultan would receive a small stipend, keep the honorary title as head of state, and remain the head of religious matters. A new organisation of the state was put in place – European-style. The great noble families were no longer granted privileges over trade and were compensated for the loss. They no longer lead the country. However, and importantly, the structures of leadership of the water villages remained the same.

A swamp was drained on the north of the river, immediately adjacent to the water city. A land settlement was founded. But very few Bruneians migrated to the land. Only the Chinese did, sensing the opportunities for business (Ibid.). A market was built.

Social organisations and power relations remained the same in the water villages. But the seeds for change had been planted. In 1904, an Event changed the sense of Brunei’s assemblage.

This section explains why this research has selected 1950 as a significant date. The reading of the two plans of built form in 1955 and in 1965 is the support of this decision. The 1965 plan exhibit significant changes from the situation depicted in the 1955 plan. This means that
there are different kinds of actualisations of the Brunei Social Idea. An Event occurred within the decade.

1955 is the date this research is interested in. This thesis poses that in 1950, the water city was in a state similar to that described in the 1860s-80s (Saint John, 1863). It is hypothesised that even though Brunei had been colonised in the 1800s by the British, this invasion had little effect on the culture, the social structures of power in the villages, or the economy – since there was no economy to profit from. Accounts from the 1860s tell the story of a country blocked in the past, ruined, but holding onto its traditions.

This leads me back to the early 1950s. Following colonial records, the economy had not taken off significantly yet as a consequence of the 1904 reforms (Chevallier, 1911, Nicholls, Sauners, 1983). The country and its inhabitants were still very poor (Blundel, 1923). The economic system put in place by the colonial power had not yet flourished. Building-wise, the pictures and oral accounts suggest that houses in the 1950s remained small in size. Even if some of them were not built solely of thatch and bamboo, building methods and materials remained similar to 19th century practices. Excepting the late 1940's era white mosque and the circular lagoon that were built at the north edge of the water city’s shores, no major works had yet transformed the urbanism on the water. There were no schools, other than large mosques, no footpaths linking villages, and no electricity or drinking water in the villages.

However, between 1927 and 1950 the water village experienced a significant population growth. This is due to changes in the social and cultural values affecting a stigma around vaccinations that had been present up until that point. Every four or five years in the pre-1927 period an epidemic ravaged the population (Blundel, 1923; Saunders, 1994). With this sanitary revolution came a great increase in population. The generation of the 1950s was only one generation away from 1927. The new inhabitants were still housed in the houses of their parents, not yet of the age to settle in their own homes. However, there was a great pressure for room in the houses, with accounts of forty people living in one tiny house – sometimes only forty square metres (Chi, Cleary, & Kam, 1989). This evidence suggests that in the 1950’s the built form of the water village is composed of the same number, and same kind of houses as in 1904.

In a nutshell, this research finds that the form of the water city’s built environment was still essentially the same as one hundred years earlier. But the sense given to the assemblage had changed because of the 1904 Event. This thesis proposes that from 1904 until the mid-1950s there is similarity of – social – production. There is a Social Idea, with a Social Diagram. There is an era. The Social Idea of that era could be titled: “1900s – tradition-poverty-pride-in-dire-state”. It is within that context – social, economic, technical and environmental – that the description of the form of the water city commences.
THE HOUSE
What is happening in the house? What does the house do?

In the period considered, there were only three types of houses in Brunei’s villages to my knowledge:

- the commoner
- the noble
- the Chinese trader (see following illustrations).

The only other type that existed until 1912 was the palace of the Sultan – that moved on land at that time (Saunders, 1994).

Commoner’s house on the left – Noble’s house on the right. The roof’s shape indicates the social rank.

Source – Arkib National Brunei Darussalam [ANBD]

Figure 21 Brunei late 19th C.

Figure 22 Commoner’s house and noble’s house
This research has no real knowledge of the few Chinese traders’ houses. As for the noble’s house, what is known is that it is larger, has a different type of roof than the commoner’s house – hipped not pitched. The material of the walls is wood and not thatch. It sometimes has two storeys. It seems the use of space is similar to that of the commoners (Pengiran Adnan bin Pengiran Barudin, 1995).

This chapter focuses on the commoner’s house. The next illustrations aim to start painting the feeling of the Idea of a commoner house.
Figure 24 Series of photographs illustrating different commoners’ houses

Figure 25 Series of photographs illustrating Brunei’s modes of living

**Modes of life, social power and the ordering of space**

As the illustrations above show, there is the *feeling* of a commonality between all the houses, but all of these exhibit different forms. In each houses, there are different lives.

These houses are small in size. The materials come from the neighbouring forest: thatch, bamboo, wood. There is a small platform in front of the house, the pantaran, for activities and work. It is often shared with the neighbouring house belonging to the same family. \(^{81}\) There is a platform at the back for the ablutions. The roof’s shape is always double pitch for the commoner’s house. For all houses, there is the front and the back. The front is the entry, the back is for the kitchen and the ablutions. Scholars claim there is an orientation to the house. The entry faces the east because Bruneians are Muslim. But in reality, each house only opens to a channel where its inhabitants can launch their boat, whatever orientation it is.

The house inside is open plan with only two pillars traversing it. There are different uses of space during the daytime and the night. In the night, the location of sleeping space is determined by social hierarchy: head of family near the door, the families in the middle and the children and unmarried women at the back. \(^{82}\) The practice of space in the day is related to

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\(^{81}\) Discussion with informant.

\(^{82}\) Discussion with informant.
social conventions. Upon receiving a guest, the order of seating follows the hierarchy of the social rank. Work is done in the house or on the outside platform during daytime.

Many other details coloured daily life at the time. For example, to get drinking water, people went on little boats to nearby bamboo drains at the bottom of a hill (Blundel, 1923). There was no market in the city. Food was delivered house to house by women in boats – padians, as illustrated above (Abdul Latif Haji Ibrahim, 1970). They would bring food, but also news from all over the village.

Fishing was very important for many commoner families at the time. Life was linked to the rhythms of the tide and the moon. Harrisson described the life of Malay people in relation to these maritime times (1970). The water is part of the involuntary part of life: the sound, the smell, the rhythm of tides and moon, all are contracted rhythms that form an inhabitant’s body.

Families’ social time was ordered. From gathered information, in a lifetime the major celebrations that occurred were the first year after birth, each birthday, marriage, death, the first hundred days after death, and the first year after death. Regular religious events were the Friday prayer, at a minimum, and for the fervent believer, prayer five times a day. Social and religious obligations – socially constructed desires, are inscribed in the mind and body. The house is the theatre of all these moments forming these mind and bodies.

Construction of the house

An important aspect of a house is the process of its construction. In the water village in particular there are many beliefs predicating its erection. The house can only be built with the assistance of a shaman. It is built according to the dimensions of the head of the house’s wife: the windows and door sizes and the distance between pillars all depended on the measurement of her hands or legs. There is a calendar linked to the time of construction, connecting the time of Earth and the Celestial time with the life of the house’s builders. There are superstitions about a house’s two main pillars. There is a male and female pillar – tiang seri. The female pillar is erected with many items placed on top: rice, gold, fabrics. This is linked to beliefs of protection, health and wealth for the family (Arripin, 2004).

At the moment of consecration of the house, a spiritual fencing is erected against spirits not belonging to the family. To put it simply, Malay people believed—and some still believe—that they have an associated spirit with them all along their life (Endicott, 1953). An informant explained that for her a “kampong” (village) meant an area in space that had a spiritual fence. Inside it, she feels comfortable. Her uncle, who performed this type of ritual in the past, explained that to create that protection, he reads verses of the Koran and at the same time he pours salt. These have magical powers. There are two borders: one for the house, at the four

83 Discussion with informant.
corners of the walls; and one for the territory of the family, this includes the pantaran, and all the outside spaces.

![The two “invisible” boundaries, protection against outside evil spirits. In red, the house, in green the territory. The yellow and blue circles show where salt is disseminated while the rituals of consecration are done.]

Figure 26 The “kampong” “invisible” limits

**So far: the house is ordered in time and space by social powers and desires**

In the above sections, a series of statements illustrating modes of life have been presented. These showed that space and time of the house are ordered by powers and desires. Space is marked by the social hierarchy and by beliefs that come from a distant past – such as the superstitions about the spirits.

But the previous description only starts to reveal assemblages. So how to put the previous descriptions in assemblage thinking? In a way, how should the previous descriptions be understood? Here, we should ask the questions again. What is happening in the house? Assemblages were formed in response to certain events. The next sections will not explain everything again, only some examples are re-presented as illustration.

How should we think about the open living space of the house? What assemblages are there? Only one is the focus here. In many occasions, there are celebrations in the house. What kinds of celebrations? What is assembled? Here the open space enables the extended family to assemble. Linked to these are the kitchen, which also enables the celebration, as do the padians that deliver food. On the day of celebration, the house open space enables access and rides to certain social forces. These are social obligations, desires that are stratified. Kitchen, bathroom, pantaran, padian, water, participate to different assemblages and so do the inhabitants and outside relatives. There is not one place or one time in these assemblages. There are only connections, productive relationships. All of these start to give sense to the house.

What is assembled in the construction of a house? What are the relationships that produce the house? There are the following assemblages: couple -shaman-wife-time of earth-place in earth, materials from forest-people-harvest materials-couple. The construction of the house
enables access to a level of forces. Some of them here are superstitions. Superstitions are stratified power that mark the subject’s body. The construction connects to an Idea of a form, a series of forces. The construction also connects to the forces of earth, potential of forces of nature. For the construction, the family connects to all sorts of other groups, for material needed, for financial reasons, for manpower to erect the house. The construction of the house is a connection to all sorts of forces, it produces a space and produces feelings of empowerment.

Another assemblage related to the house are the fishermen’s houses. They are connected in the assemblages: the fishermen-prepare fishing-on the pantaran; the fisherman-takes his boat-at the right time of tide. The house, its inhabitants, some other spaces, the time of the Earth and the moon, the water, are all assembled. These assemblages enable access to all sorts of forces that then allow for provisions for living.

Another series of assemblages related to the space of the pantaran. Many house have brass workers. What does this platform do for them? There are the assemblages house’s inhabitant-work-on-the-pantaran, workers-sells-to-buyers from outside, on-the-pataran-brass-working-craft-is-taught. The house, the pantaran, enable the inhabitants to participate in the economy of the city, their social status links them to stratified social forces.

Here, this section showed how any assemblages of the house cut through time and space, fold the outside inside, fold the past into the present that is already passing into the future. The description of how the house works, the life in it, and what it connects to, give expressions to the Idea of the house.

But each house is different. The houses of the fishermen are different from the house of the brass workers. Each house has different lives in them. Each house relates to its environment. Each house gives a sense to a Social Idea of the house. Each house is a different actualisation of the Idea of the house. That Idea is a limit Idea and can never be fully known. But very importantly, each house is singular. Unfortunately, in this part it has not be possible to give exact account of the different lives of the people. Only the pictures and oral account have told the tales of different lives. In the assemblage framework, it would be necessary to tell individual stories of people in the houses.

Writing the end of this section, I realised that in typological analysis (of IPRAUS, urban morphology), I would determine that I had reached the conclusion of the description of the house at this point. But as I experimented in this thesis with Deleuze’s theoretical framework, I realise that there are more stories that this thesis will tell in the later sections that will give sense to the house. This research will continue to connect the house to more assemblages. And each new story and investigation will reveal more of the house’s Idea as the house connects to other circles of its inhabitants’ lives.
THE VILLAGE

When this research about Brunei started, as a city-bred Westerner, I did not fully comprehend the fabric of the water city.

It was Reid’s article (Reid, 1980) that gave a clue as to how to look at it. As explained in the previous chapter, he gives a very succinct description of the city in Southeast Asia in the seventeenth century. He explains the village as part of the city. The village is led by a strong man and contains his followers. Its organisation mirrors the palace’s organisation. This city’s composition of villages is confirmed by the description of the eighteenth century Banten (Guillot, 1989). The village is an important part of the city in Southeast Asia.

But this research is interested in more detail. Why is this house there? Why is this house there in relation to the other house? Inhabitants and experts were asked where my house would be built. This thesis asks how to explain the Brunei Malay village as assemblage: what is its form? How is it composed? How did it come to be? How does it function? What does it do?

The names of villages

The village’s name in Southeast Asia contains important information. It is either named after its headman, or after the name of a particular activity of production taking place in the village, or a nickname referring to something particular about the village. This is exactly what is happening in Brunei (Abdul Latif Haji Ibrahim, 1971; Reid, 1980). This chapter develops four examples of names from that era:

Kampong Sultan Lama means the village of the venerable Sultan. This is the village where the old Sultan lived before going to settle on the mainland in 1910. A novel by a British entrepreneur describes the palace of the Sultan on the water (Blundel, 1923). It was in a very poor state. The Sultan had very little money and the palace had no wealth to display. The Sultan left his central role in the water village in 1912. He settled on the mainland – though near the water. He wanted to set the example of leaving the past and building the future.
Kampong Pengiran Pemancha Lama means the village of the venerable noble Pemancha. The title of Pengiran is given to nobles. The headman of this village is an important noble. In the past this village would hold the right to trade overseas. The village is located near the village of the Sultan because of his rank.

Kampong bukit China means, loosely, the village of the island where Chinese people live. Bukit is a small island. Traditionally in Southeast Asia the Chinese were a great network of traders. In many states of the region they held the key economic powers (Widodo, 2004). The village is located right on the edge of the water city, on the deepest part of the river. This allows shipping boats to come nearby so that little boats can reach them to load and unload merchandise. Thus, the location is related to environment and economy.
Kampong Sabat Laut. Laut means ‘sea’ in Malay. The village’s inhabitants were fishermen who needed access to the sea. There are canals in the villages for houses far from the edge of the river to access the river easily. Fishermen in the past were also the warriors. They held knowledge of navigation and provided the power to control sea trade. As warriors, they also protected the water city. Their location, downstream, reflects these tasks – providers of food and protection from outside.

So, from the name of the villages specific functions and certain powers can be given expression. Also, the description shows that the village’s location is linked to its activity or its social role. For Kampong Sabat Laut and Kampong Bukit China, the location of the village is in relation to the ecology of the place. It takes its power from connecting to the ecology in a certain way.

All these descriptions are a first series of assemblages: village-function-ecology-economy, village-social rank-economy. But this thesis is interested in the detail: how the houses are located inside a village in relation to each other.

**Traditions of village settlement in Southeast Asia**

**Account**

This research now probes for details of the village’s composition. The investigation questioned Brunei academics about the matter. They explained that by tradition in the country, the youngest son would settle to the east of his parents – the east, as the location of sunrise, is important in Islam. Another academic said the first son’s house would be located in the direction from where enemies would come: he was the strongest physically, and should be in a position to defend. Both academics described how other members of the family would settle around their parents’ house. A group in the village would grow organically in this way.

So, there are groups of families. These groups work together for daily activities. Research and discussions show that families of fishermen shared fishing work. The families harvesting...
forest produce did the same. So did the families working with brass (Amit, 1989). My informant talked about taking care of children, doing daily duties for the groups. But also, as a group, they can unite for force and protection.

**Assemblages**

So, this thesis is talking about a group of houses that do things: groups of houses as assemblages – connected to other assemblages. One family’s group of houses is an assemblage of power and desire. As a whole it empowers this community of families. There are reasons why villagers settle in groups. They composed with the forces around, social and environmental. The house is settled when a group is economically sustainable – a married couple with two children at working age. It is part of a group because being in a group allows for more life empowerment.

This social organisation in groups of families and followers also relates to a description included in the previous chapter. O’Connor’s work describes this group organisation as the fundamental idiom of the Southeast Asian city (1983). Here this thesis has discovered how it territorialised and functioned.

For me, this was a discovery. The different lives in the built environment led this research to discover another assemblage-type in the fabric of the city. The different concrete actualisation of the group of villages and the lives contained in them gave sense to an Idea. Before this research started, this was not known. It is by experimenting, in the village, into the lives that inhabit architecture, that I discovered this.

The following diagrams illustrate the findings of this section.

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Comment on the picture: on the left is a commoner’s house with another house near it – in the background left side of the picture. Separated from them a noble’s house – on the right side of the picture, the roof is a hipped of noble house. This seems to correspond of the diagram just drawn

Source: ANBD

Figure 30 A group of houses in Kampong Ayer c. 1940

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84 Discussion with informant.
In the centre, the founder of the family branch (A). Each successive generation settles around their parents $B_n$, $C_n$, $D_n$. The elder son and his family settles in the direction intruders can come from.

Figure 31 Theoretical diagram of a house location in a village in relation bloodline

**Inter-Household Relations**

The previous sections explain *in general* the location of a house in a group. The next one explains in more detail how one house relates to another. Studies on Malay villages describe the anarchic character of the village without specifying the rules that predicated this production of space (Colombijn, 2003; Reid, 1980). This thesis contends that there is an order to the anarchy, according to the relations between the family and the spirits of the earth: an unseen order.

One of this research informants was a shaman. He explained a few rules of spatial production which are linked to animistic beliefs. In response to the question: “where should I build my house in relation to yours?” he explained that first, it would be necessary to get the agreement from the nearby households – as there are no property rights on the water. This agreement would depend on the family’s protective spirits. In a sense, there must be compatibility between the two families’ spirits.

The second rule was that no openings of a house could *directly* face another house’s openings. This is so because if a spirit brought sickness in one house, the spirit could not then jump into the other house. For this reason also, the front of a house cannot face the back of another house. The back of houses is where the ‘dirty rooms’ – toilets, are located. From the same rule, no house can be aligned with another one. In the south of Kampong Ayer there are

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85 To this researcher’s knowledge, the literature in English on the study of the built form of Southeast Asian traditional villages does not explain in detail this aspect of space production.
villages with houses in rows. Each and every house is slightly offset from the other and windows do not face one another.

This informant explained that in the 1970’s he was asked to perform rituals to broaden the perimeter of the village’s fences at the spirit level to protect against bad spirits. The village had expanded beyond its current ‘protective’ limits. New houses had been built because the new generation started to leave their parents’ homes. He visited by boat and spread sea salt around the area while reciting ‘magical’ orations – verses of the Koran.

**A brief description of the life of two villages in Brunei**

So far this chapter talked about the form, the composition, the functioning and the life in Brunei’s kampongs. It has started to give sense to the Idea of a village in that era. General concepts about the villages and few examples on the ground have been given. In Deleuze’s thinking, the Idea is the integration of molecular forces. Deleuze focuses on the singularity of life. On one side, each village is different because of the things it does, it answers certain problems, in a given time, space, and circumstances. This is an emphasis on difference not on form, but difference on the forces that are in a productive relationship. But on the other side, the sum of the singularity of villages gives expression to the Idea. The more examples on the ground are commented, the more the Idea is known.

The next two sections will look at the stories of two villages. They will try to illustrate the forces that produced them, and the powers they express. They will continue to give expression to the Idea of a village.

**The Village Siraja Muda B**

*Account*

To my knowledge, there is no account in the literature that has explained how a Bruneian village was founded and worked in the past. But I was fortunate enough to meet the founder of a village in Kampong Ayer. Here is his story and the story of his village that starts in the 1940s.

The village was founded by a high ranked noble person. Importantly for the story, he was a relatively wealthy trader. He settled in this location where, at the time, there were no houses. He lived with his third wife and her family in the red house (#1). His wife’s family were commoners, not nobility. Because of this he did not allow them to settle near the head of the village’s house. The headman induced the localisation. This is the violet house (#2).

The 1940s were extremely difficult in Brunei and many families struggled for their livelihoods. The stories of his wife attest to this hardship. The struggle for work, the dire conditions in the villages. The years of the war were painful and stressful. Japanese planes regularly flew above the villages firing bullets. The thatch roofs and bamboo walls could not stop them. In the past, in the Brunei Malay culture, the head of the village must provide for
his followers, and also, out of social obligation, for his relatives. And this is what this particular headman did.

![Image of Kampong Siraja Muda maps](image)

Figure 32 Maps of Kampong Siraja Muda 1955-1989

There are three other family groups in the Siraja Muda B in addition to that of the founder/head of the village (#1) and the third wife’s family (#2). The blue group (#3) was founded by a first cousin of the head of the village. They came to the village to seek the headman’s support because of economic hardship. The cousin was also of high noble rank and his family had been close to the Sultan at the beginning of the century but had not managed to retain their influence with the next generation of sovereignty.

To the east and north of the first house, two of the sons built large houses. The latter is distinctive because of the curved roof that is like the traditional shape associated with nobility. Less is known about the last two groups. The green group (#4) was founded by a second cousin. He was also a high-ranked noble. He had no real direct link in social life with the head of the village prior to this, but the social bond obliged the headman to look after this family.
at that time. The grey group (#5), is a group of cousins to various degrees with the headman. They are not nobles.

**Assemblages**

In 1955, the era that is of interest in this chapter, the village was composed of groups of families all related by blood, more or less closely. There is a centre of the power, economic and social, represented by the headman. That man chose to look after certain groups, he **induced** the location of the houses. All the inhabitants – the original founder and the subsequent arrivals – are empowered by these relations they accepted.

What does the village do? What powers are accessible by the village assemblages? For the headman, the relation established to families close to the Sultan (group #3) brings some power – puissance: social and economic opportunities. The compliance to social demands to look after relatives leads him to social forces. These are desires, though stratified desires. Having followers also brings him economic powers. For the followers, each group accesses all sorts of economic powers.

This short demonstration is important for a few reasons. First, it aligns with the village assemblage-type proposed above: a headman, group of followers, with each group forming a clan. Secondly, it shows also how in the village’s formation the Diagram – of power, the function of the assemblage-type, produces along the great structural lines – the lines of power, nobility at the centre. But at a local level some more subtle alliances are concluded – particularly the location of the houses. Space/time are ordered by relationship of power and desires. The headman induced the location. Finally, it shows part of how the assemblage functions and what it does.
Social Structure in Kampong Pelahwan – 1960 Kampong

Mapping of social relations in Kampong Pelahwan

Simplified family tree

Village Location in Kampong Ayer Map 1955

Family related to mother of informant

Family related to father of informant
For this village, unfortunately at the time of my inquiry, this research was not preoccupied with assemblage theory. It was only trying to prove a link between the organisation of the space and the social relations between the inhabitants. Thus, this next story of life in a village focuses on the ‘social composition’ of part of the Kampong Pelahwan in the 1970s, the childhood village of my informant.

The informant was asked about the family link of the village’s inhabitants in relation to his house and family. He was able to describe that link. The previous diagrams show these links in relation to his father and mother’s families. There is also a very crude sketch of a family tree in parallel to the diagram of location to give a sense of the following: all the houses of the neighbourhood have a link to his family.

Information about which houses were built first was obtained. The above diagram links the information about the family relationships and draw three circles of growth around these houses. In the 1950s there were only two circles and no footpath between all the houses. The third circle of growth happened from the 1960s onward.

The aim of this section here is to show that, as with the previous village, the house’s location depends on the family link. There are groups of families. Similar to the previous village, the densification of the village happens around the family group. Space is ordered by powers.

**Village as assemblages – connected to assemblages**

The above sections have started to give expression to the village as an assemblage-type, typology. In a particular example, a few assemblages have been drawn: For example there are the assemblages, head-of-kampong-trade-to-overseas, head-of-kampong-fulfil-social-obligations. These assemblages allow each family of the village to access some powers, social and economic for the headman. In these assemblage, the local and the global are linked. Other
assemblages have been drawn: families-share-daily-life-duties, families-look-after-each-other children.

Once again, each village is different, defining an Idea. They are responding to the particular forces at hand. The differences in the lives in the villages give sense to the Idea. There are the assemblages of the fishermen. For example the assemblages families-prepare-fishing-net, families-shared-manpower, groups-of-boats-fish-on-the-river, families-share-profit.

They are different from the assemblages of the brass work villages: for example there are the assemblage families-share-manpower-to-build-brass-work, families-share-profit. The built environment reflects these different responses to the forces at hand. Each village’s form has a different sense. But all these assemblages are only some of the infinite number that give sense to the village’s Idea.

To return to the house assemblage, as it was explained in this village section, every family of a house is related by blood to its neighbour. There is a great sense of community in the villages. All the assemblages in this section continue to give sense to the assemblages of the house. Houses connect to these groups of houses. Lives of houses, people in them, are shaped and shape the lives of the next houses. The life in the village shape and are shaped by the lives in the house. In the practice of everyday life, of social life, the practice of space of the group of the house, the village are also contracted in the subject’s life. The built environment becomes part of the subject.

One last comment. This research started with IPRAUS typological thinking, with preconceived ideas about the form of the built environment. But by experimenting on the site, this research discovered different types. This again places emphasis on Deleuze’s framework: do not focus on representation, do not focus on predetermined categories. One has to experiment and form Ideas from the singularity of life.

THE WATER CITY

This chapter turns to the architectural scale of the city. The water city, Kampong Ayer86 is studied as form-part-of-assemblages. What does the city do? How is it composed? What are the relations that are productive? What problems are solved?

To give expression to the water city’s form-part-of-assemblages as it lays on the water in the era 1904-1955, this section exposes three sets of information. Then a discussion is made about the sense of this expression.

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86 The name Kampong Ayer means “water village”. It is a denomination that was given for touristic reasons. It is a collection of villages. This part refers to this water settlement as the water city. Until the 1950s, it was effectively the heart of Brunei society; it was a city, not a village.
1/ The 1955 map

First, a short reading of the 1955 map is made. What does the 1955 map tell about the form of the city?

As a general description, the 1955 map shows a small land settlement on a north shore of a wide river and its arm. On these waters are around 1,000 houses divided into groups on each side of the river. That river is bordered by high hills covered by wild vegetation. The land development only contains large structures: administrative buildings. There are few single houses. It is not well developed yet. One major modification of the landscape has been done: a round lagoon, north, that contains a new mosque. There is a great density in the village in the eastern part of the river.
All the maps of this thesis have been redrawn into the same format to enable comparisons.

Figure 34 Map Kampong Ayer 1955
The modifications show that forces have pushed changes in the society. The land settlement, the changes in the landscape, the construction of commercial and administrative buildings are evidences of the action of the colonial power.

2/ The study of the maps and the names of villages

This chapter’s sections about the villages already defined a link in their location of in relation to their functioning, their economic reason, or their social determination. Now, the water city’s village locations in relation to their names is placed on the 1955 map. The map below shows the general location of villages by category of social power or function.

A general diagram of power appears to order space. First, there is the main power – the Sultan’s village (#1 on the map, Kampong Pengiran Pemancha Lama). It is at the centre. Second, there are the Pengiran villages—nobles (including #2, Kampong Pengiran Pemancha Lama). In general these are located near and around the Sultan’s village. Third, on the northwest, along a river’s arm, four villages are situated that are known for their crafts (#4). They are situated near the noble’s villages. Brunei was famous for its cannons (Ibrahim, 1985) and craftwork in brass. As written in an earlier chapter, this corresponds to the traditional location of these villages (Junker, 1994). Fourth, along the edge of the deep water, on the other side of the river from the centre of power were the sea trader villages (including #5, Kampong bukit China), which were important centres of distribution for the water city. They are built near the deep part of the river where it is possible to make exchanges with boats coming in the water city. Fifth, along the shores of the river, on the south banks, were villages known for harvesting...
forest produce (#7), food and construction material. These were commoners’ villages. The locations of these two types of villages are linked to the activity they performed. Sixth, down river are populous fishermen’s villages (including #6, Kampong Sabat Laut). They are at the entry of the water city. They have access directly to the river. As it was explained earlier, they were controlling the seas and protecting the city.

The next diagram shows the location of these villages in relation to the rank they occupy in the hierarchy of the society. A series of circles of power are drawn. The resulting diagram demonstrates that the closer to the power-centre the more socially or economically powerful the villages are.
Concentric circles show levels of power according to proximity to centre

Figure 37 Diagram location of a village in the water city in relation to its power

Chart of relationship between classes of officials and the Strata from which they are drawn
(Brown, 1970)

Diagram of traditional social organisation of Malay polity—
(Kulke, 1991)

Figure 38 Two diagrams describing the hierarchical organisation of the society in the Malay world and Brunei

The diagram of concentric circles could be seen in the light of the form of organisation of space in Southeast Asia in the past, which was explained in the context chapter reproduced above. Brunei’s society has a very hierarchical social organisation. That organisation induced
the form of the city. A discussion with an expert in the field on Brunei’s diagram made him conclude that Brunei was organised following the Mandala concept (Widodo, 2004).

A first conclusion of this chapter so far is that in the words of Deleuze/Foucault, power orders space/time (1986). The social organisation, stratified desire, is actualised in the organisation of space. But as actualisation, it does not reproduce the form of the Idea. The organisation of the water city resembles the Mandala, but its ‘execution’ on the ground is negotiated with the landscape and other opportunities that were available during the construction of the city.

3/ Assemblages and the city

This section about the city so far has started to give expression to the form of the water city as form-as-part-of-assemblages. But there is a double thinking associated to that. First, this section also has given life in a different manner to the other assemblages defined earlier, the houses and their lives, and the villages and their lives. For example, Kampong Siraja Muda is assembled to the village around itself and to the functioning of the city. This is a village of traders; they assemble with the city and with overseas, its location is in relation to its function.

The second thinking is that these lives and functioning in the villages and the houses also are giving expression to the form of the city.

Giving life to the city gives life to the village, but also the other assemblages, the house and the group of houses. Giving life to the houses, group of houses, villages, gives life to the city. There is no scale, only assemblages that are in productive relations. Everything connects transversally, in space but also in time.

Brunei Kampong Ayer – A Southeast Asian city in the present

The previous three sections are discussed now. The 1955 map shows the figure ground, a form that lays on the water. The study of the naming of villages and the expert’s diagram explain how this form came together in the past. Powers and negotiations predicated the ordering of space. The city, as a concrete extension that lays on the water in the era 1904-1955 was built in the past. The past haunts the present.

But, as the third section discusses, there are lives in the city. The life of the people has changed, they are different from the past. As was written earlier, the nobles lost their means of living; they are poor and cling to their glorious past. The brass workers still build some artefacts. But they are no more producing goods sought out as prized possession like the famous Brunei bedil – a cannon (Abdul Latif Haji Ibrahim, 1985). The fishermen fish but sell directly to people, but they participate in an economy of survival. They are no longer warriors.

What this research proposes is that the form of the water city in the era of 1904-1955 could be interpreted as representing the traditional Southeast Asian city. The village of the Sultan is at the centre of the world, and the villages organised around his power. This is an idealised
vision of tradition. But with the working of assemblages theoretical framework it has been shown the importance of giving life to the form; it is important to give expression of the form-as-part-of-assemblages. The nobles, the Sultan and some traders are still part of the city. They still occupy in the social a certain rank. But the structure of power is different with the Commonwealth law, the economy of the city is no more driven by the same people. The life of the ‘commoners’ is now different from the past. There is a general sense of dire straits that comes from looking at the life of people and the functioning of the city.

One has to be careful when looking at the form without understanding and describing the lives happening in it. There is the form of content, and the form of expression.

As a conclusion, what is the sense of the form of the water city in the era of 1904-1955? All the descriptions—architectural, spatial, historical, ethnographical, diagrammatical, social, environmental—that have been made in this and the previous chapter, transversally, one after the other, one with the other, all together give sense to this form.

1955 – Conclusion – Evaluation of Framework

The thesis turns to evaluate this experiment through assemblage theory and the new proposed research’s method. If I compare this work with my previous experience as an urban morphologist, I would say that the framework leads me to attune differently to the gathered information and to present it in a different manner.

First of all, Deleuze and Guattari’s framework does not presume a relationship between the social and architecture. On the contrary, this relation is seminal.

Second, this description of the social within lines of power and desire makes a research more attuned to the forces that frame the production of architecture.

Third, the particular environment—aquatic and land vegetation—brought about the importance of considering the context in the formation of space, practice and production. The environment participates in the creation and functioning of assemblages.

Fourth, urban morphologies’ teaching tends to train one to focus on similarities, whereas Deleuze is interested in the singular, the differences between the forces that structure the actual. Despite best efforts, the outline above still appears to place more emphasis on similarities rather than singularities. This chapter has defined the common, the general, the shared and collective, a Social Idea. But it has also shown that singularity is always produced. All houses, all group of villages, and all villages are different. Once again, they are certainly differences in form, but what is important are the differences in the relationship between the forces and how these are actualised. This thesis seeks to emphasise the importance of gradually noticing and expressing singularities, the singular power of assemblages.

Fifth, it seemed this research had categories of built environment in mind. But when I came to this site I could not explain its composition. So, by not presuming, a priori, definite
categories and imposing them onto the research site, this thesis was able to create assemblage-
types for that particular site. Assemblages that initially were not thought about were
discovered. This happened by experiencing the site, getting a feeling of the differences on the
ground.

Sixth, the importance of studying the past has been proven. The present takes its sense from
the past, present and past are contiguous.
INTRODUCTION

This chapter covers three eras. The 1955, 1959, 1967, and 1988 maps and the pictures linked to these eras show significant series of changes in the built form in each illustration. In this thesis theoretical framework, this means that significant changes have happened three times in Brunei Social Ideas since 1955.

This chapter gathers the three eras in one chapter for two reasons. Firstly, it wasn’t possible to gather a great deal of information other than the maps and a few illustrations for the three periods. No much is known about the life of the inhabitants. Not much is known about the functioning of the land city that now contains many commercial or administrative activities. Certainly the inhabitants’ lives are linked to these. This thesis cannot give life to many assemblages. As a consequence, the inquiry that is made here is short. Secondly, these three eras have in common that they are periods of growth. This is contrary to the previous eras, and to the following.

Even if some precise moment in time can be identified as an Event, a date, an hour, the effect of the changes persist in time. The border is not strict and immediate, but blurred. The production of form of content and expression of two eras can overlap for a while. In the era covered in this chapter, it cannot be known for certain when they arose, but it is possible to note that they did.

FROM C.1940 TO C.1960s

Context

In the period from c.1940 until the mid-1960s, from the series of differences in the houses’ forms in the built environment, it is possible to identify a second era in the twentieth century. The hypothesis is that the following events had an impact on the city, in part produced by Brunei Social Individual’s function. First, implications of the McArthur plan, 87 introduced in 1904, began affecting changes to the economy including better administrative organisation, and some industrial and agricultural development. But, very importantly, the sale of oil began providing a small income by the 1940’s. To give a sense of the importance of oil, in 1964 Brunei’s export revenues totalled 187,383,007 BND, of which oil exports comprised 175,790,277 BND (Brown, 1970, p. 75). A second point is that the vaccination plan mentioned in the previous chapter also began having a noticeable effect on population growth. The population started to increase, and the following generation was ready to settle down.

87 This economic plan was devised by the British Resident to save the Sultanate from bankruptcy.
The increase in economic means gave the inhabitants the opportunity to improve their living conditions. They experimented. How did this translate in terms of production of space?

**The house**

What is happening in the house? What does the house do? In this era, there is a type of consolidation in the building of a house from the previous one. The walls are now made of wood. Many of the roofs become metal sheets. There are extensions added to the kitchen to almost every house. Inside the house rooms are built, dividing a space that was previously an open plan. The bedroom is for the elders. All this seems to express a modest elevation in the standard of living. That improvement is the result of new forms of power – pouvoir, a more comfortable life is available. These ‘subtle’ changes in the form of the house, the addition of rooms, are the result of experimentations.

### SEE PRINT VERSION FOR ACCESS TO THIS CONTENT

| A house and padian c.1960 – Source ANBD | Water village c.1950 – Source ANBD |
| Illustration of house with wooden walls and extensions for the kitchen at the back visible | All the houses have an extension for the kitchen at the back. |

**Figure 39** Photographs of houses in Brunei c.1960s

### SEE PRINT VERSION FOR ACCESS TO THIS CONTENT

<table>
<thead>
<tr>
<th>A house</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>In blue: kitchen and bathroom extension (and back entry). In light green: interior modification, bedroom. In light red: interior modification: living room and sleeping arrangement (main entry).</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 40** Illustration of a commoner house c.1950s
**Village**

Villages densified. More new homes were built to accommodate the new generation born in the aftermath of vaccinations. There are still no footpaths between different families’ groups of houses in the villages. The hierarchy of power still exists and orders space. The houses of the sons and daughters that form new families are situated around the main power figure of the family. Working together for economic support, living as a community for support in daily life activities empowers each participant. Each village still has its main activities.

![Diagram of house location in a village in relation to bloodline](image)

- In the centre, the founder of the family branch (A).
- Each successive generation settles around their parents Bn, Cn, Dn.
- The elder son and his family settle in the direction an intruder can come from.

**Figure 41** Theoretical diagram of house location in a village in relation to bloodline
There is densification of the built fabric. One can still distinguish clusters of houses, villages. There is expansion of the mainland settlement.

Source: (Hunting Aerosurveys LTD, 1959)

Figure 42—1955 Kampong Ayer Map
For the city, a great change occurs in the year 1953 with the completion of the mosque and the lagoon. A jetty is incorporated to the project. For the first time the water city has a direct link with the mainland (Hruby, 1985). Surveys show development of land settlements, as the government tried to promote life on land – without much success. Power still resides in life on the water.

The villages densify ‘from within’. They reproduce the social values continually, within the village borders. The link with the mainland settlement intensifies.

**Conclusion 1940s – 1960s**

The ‘subtle’ changes in the economic conditions have led to changes on the ground. This means that the conditions of life being different, new opportunities have arisen. Then the Social Idea also changed. The above discussion has shown that there is a common Idea that pervades through all productions of actuals. The content and form of expression of the house, village, and city and all assemblages produced. The Brunei Social Idea is in a new metastable state.
FROM C.1960S TO LATE 1970S

Context

The line is blurred between the 1940s to 1960s and 1960s to late 1970s. For a long time the two Social Ideas predicating the production of actuals coexisted.

What is happening in this era? This thesis asserts that historical social changes in the conditions in Brunei led to change in the form of power – coercive and desire. Brunei was assembling with British colonial power. Because of the Event of the Second World War aftermath, changes in the world’s conditions, the 1950s were the years of decolonisation. In 1959, Brunei was granted significant autonomy by the British. New forces were set in motion, this meant that new sets of power and desire would be composed.

Administrative and executive powers were given back to the country, more particularly to the Sultan. With a few exceptions, he was given the power to decide the appointment of every executive position. In the handover, provisions were made to introduce democracy within five years. The years 1962-1963 were important. In 1962, elections were held, and a pro-Sultan, pro-democratic party won. However, for unknown reasons, the party head declared a rebellion (Brown, 1970, p. 127). Rapidly crushed, with the help of Great Britain, this rebellion led the Sultan to declare a state of emergency and dissolve parliament. He then seized all power, and no national elections have been held since.88

In 1963, as the Sultan was about to sign the entry of his country into the Federation of Malaysia, he received a phone call assuring him that new oil fields had been discovered. His country could be independent for another six decades at least. This shows the importance of oil in the country’s economy – as power – puissance, but also in terms of power – coercive, for whoever controls its production.

Major changes have taken place in the society. The British changed the custom of nomination of the Sultan by influential families. Now the oldest son is automatically the heir. Not only that, but by giving the new administration to the Sultan, he now has power to claim revenue from the oil for himself. In 2000 revenue was shared roughly 50% for the oil company, 25% for the Sultan and 25% for the country.89 In the past, the Sultan’s power came from gifts given by the heads of powerful families, to whom he gave trading rights in return (Saunders, 1994). There was a continual play for power. Now, the Sultan is in sole charge, and holds the political, economic and religious power. Also, positions of power within the different structures of the British-established administration have been filled by nobility. As in ancient times, only by those close to the actual leader are rewarded. Despite this, there was still a relatively balanced relationship in the 1960s between the water villages and the new administration which did not yet have great control over them.

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88 As per 2010.
89 As per informant.
This section shows that there were changes in the world’s political and economic forces. This meant that opportunities that were at hand had to be seized. On one side, the Sultan and his followers profited from these. But on the other side, other opportunities had opened up for the villagers.

**The house**

**Account**

In this era, the house’s form consists of extensions added to existing houses. Most of the houses materials were upgraded to wood and metal roofs.

In the houses’ plan, new rooms appeared. This means that a change in the mode of life had occurred. There is a new sense to the Idea of the house. What do the rooms do? How does this assemblage show a new configuration of desires? In previous eras, the bedroom is for the elders. Now each family of the household has a room. There are now toilets, bigger kitchens and bathroom. Another important change is the appearance of a living room.

With changes in conditions, new opportunities have been seized, on the ground, villagers have experimented and the form, the relation between the parts of the form represents choices made that express empowerment.

I was told the story of a father and many children that wanted to expand their house. Upon discussion with the family the father said that the new house needed to have a large corridor and living room to be able to receive the extended family during celebrations. This shows the link between villagers’ socially assembled desires and the form of space. These two spaces are desired. What they do is they allow for the families to perform social duties that are really important in the Malay culture (Carsten, 2000). Similarly, having a bedroom for each family empowers each of them. My informant insisted that the father wanted to provide rooms for his children. These rooms gave them privacy, something they certainly desired. Finally, the arrangement of the bedrooms followed certain modes of life. Their location follows the hierarchy in the family with the family head’s bedroom being the nearest to the front entrance. These new rooms related to the use of space that existed in the past in the small house. Each subject had a particular space to occupy during the night. The social activities were performed in the house. Now they have their dedicated rooms. These social forces are now actualised in certain form. The habits, the past, certainly involuntarily contracted and became part of the decisions made to build the new forms. So, the arrangement of the parts of the house can be explained by understanding the social desires but also looking back at past desires.

**Assemblages**

A short look at assemblages indicates that the house is connected and given sense by the following assemblages. There are the assemblages families-of-the-house-help-watch-after-children, children-play-in-large-corridor. There is also the assemblage families-share-the-rice-in-the-kitchen. All the families together participate in one life. The bedrooms enable single
living, the whole house is where the shared lives are empowered. The assemblage extended-families-come-to-visit-for-celebration brings into one house inhabitants from other houses and sometimes the whole village. Connected to this assemblage are the getting- food-preparing-food-in-the-kitchen, party-in-the-living-room-and-large-corridor assemblages. In each assemblage different parts of the house are in a relationship with one another. The assemblages empower the inhabitants to connect to different forces. These are social forces in a certain relationship, stratified forces.

This picture illustrates the feeling that change occurred. Looking at this illustration there is a feeling of communality for all houses. But each house is different, lives in them are different, their forms are different. Compared to the previous era, the houses’ walls are in wood, there are lots of extensions on all sides of the houses. The roofs also have different shapes.

View of the Kampong Ayer c.1970—Most of the houses have extensions. Source: ANBD

Figure 44 Houses in the 1960s

<table>
<thead>
<tr>
<th>Neighbour's house as built in the 1970s</th>
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</table>

Figure 45 A House in 1960's
The villages

The 1967 plan, which appears in the following section ‘Cities,’ shows that footpaths were built in and between villages. On either side of the river one could now go from one end of the water city to the other. For the first time, all the villages were linked. But two other significant evolutions came with these wooden footpaths: water pipes and electricity. Another important fact emerged, a different relation of power between the villages and the state.

Kampong Setia A

An unpublished paper in Malay tells the story of the head of Kampong Setia A (Unknown, 2012). He asked the Royal Development Commission for electricity, running water, a school (there was no school in the water city’s plan in 1967), and a room for prayer. Between 1965 and the 1980s these arrived in the village. This shows the development in the village’s relations with the state: the Kampong is no longer fully independent. There is no more relationship of reciprocity between the villages and the Sultan.

Kampong Setia A was one of the villages established by people who had moved from a nearby island that had seceded to another country. The inhabitants were given a choice to remain where they were, but many claimed allegiance to the Sultan. Built in the late 1960s, the village is organised in rows, and houses of the same families are grouped in clusters. No houses are strictly facing each other, and no back faces a front – the entry doors are on the side, avoiding awkward situations. The father of my informant brought with him the tiang seri (main post) of their old house. When the new house was built, the tiang seri was not used for that house. But it was used on the structure of the pantaran where the family activities take place.

The development of this village showed that the inhabitants saw opportunities for empowerment to come back to Brunei. The layout of the houses show a reproduction of past practices even when given opportunities to create a new village. The relation with the larger family is kept. The relation between houses in relation to the fear of bad spirits is still a reason for the location of the house. The past haunts the present.
Kampong Siraja Muda B.

In Kampong Siraja Muda B, densification continues. Descendants build their homes around the house of the village founder. The 1967 map shows a footpath crossing the village, bringing water and electricity, but the houses in the south – the non-noble, are still not connected to the other groups.

How can these changes be understood? What are the opportunities taken?

The inhabitants have desires for a better and improved life. The new materiality of the houses, the extension with new rooms, shows these desires. In the village, these desires are requests for neighbourhood services and circulation improvement, as the story of Kampong Setia shows. The villagers might have come to the conclusion that they can ask and obtain these requests. They might have evaluated the new economic means that the country had and decided they were allowed to make these requests.

The footpath, the electricity and water pipes are probably results of experimentation as to how to provide services on a settlement, not on the mainland but on the water. This is something experimental. The network of passages goes through all the villages, but is not yet well-developed in that era. It allows for a better communication in the village. For most of the villagers, modest economic activities still take place within the house and the village.

Electricity and water are great improvements to the life of the people. One can only imagine the transformative power they had. Forty years later, the ‘modern’ house has the televisions, karaoke stations, phones, computers, washing machines and, very importantly, air...
conditioning units. All these transformed the lives in the house and in the villages. 1967 was a moment of transition, experimentation was ongoing.

A last point on the villages: I was told how Kampong Setia asked for all the equipment and would get them over time. Kampong Siraja Muda would also receive these over time. So both villages are different, but the differences give sense to a Social Idea. Houses of the same family group are close together. The arrangement of houses follow the belief in the spirits. But each village’s story is different. The form of the villages is different. There are differences in experimentation. Particular conditions have led to actualisation of singularity.
A tale of two cities


The land settlement is not developed passed the extension of the downtown – marked by the squares filled in black. The water city is at the bottom of the illustration on the main river. This map shows the water city in relation to the land.

The checker's scale is one square 1kmx1km. North up.

Figure 48 Brunei Town in 1967

SEE PRINT VERSION
FOR ACCESS TO THIS CONTENT
The map shows the new footpaths. There is great densification of the villages. There are also new villages in the East, south, and West.

Map redrawn by author from Map Brunei Town (Surveyor General 1967).

Figure 49—1967 Kampong Ayer Map
Figure 50 Aerial photograph of the Mosque and adjacent villages in 1967

Figure 51 Aerial photograph of the Mosque and adjacent villages in 1969
The 1967 map shows significant densification in all villages. At the entrance of the water city upstream (east), there is densification in the fishermen’s villages. There is also the creation of two new villages that have the same name as the villages they are adjacent to. In the south, there is the creation of new villages—extensions of the pre-existing one. The villages of Kampong Setia B and A also appear in the extreme south.

The other great change is the construction of a footpath. Now there is a continuity between all the villages. A state plan for relocation of the water’s inhabitants onto the existing land was promoted but not enforced. Life on the water was seen by some elites as ‘not modern’. But village inhabitants still preferred the traditional lifestyle.

As the above illustrations show, the mainland is now developed. There are administrative buildings in the north part of the centre and commercial buildings along the river. As previously written, this research does not know the exact relationships that exist between the water city and the land city. Certainly many inhabitants work for the government and will trade on the land. There are new relations land/water, new assemblages that cannot be explicated here.

But all this means that there is a new sense to the water city. It is still by far the largest settlement in the country. But it is no more the centre of the whole Brunei civilisation as it had been the past 1300 years. The power relationships were shifting, the whole sense of the water city’s assemblage was shifting.

**Conclusion 1960s – 1970s**

In this era, significant changes happen. There is the development of the economy, the Sultan getting all the power, the country is on the path to independence. Life is changing, the water city is connected to the land city. The footpath, electricity, running water, all change the life on the water. The houses, the villages, the water city form and function are transforming significantly. An attempt to name the Social Idea of this era could be: “we-are-our-country-again, let’s-experiment-and-carve-our-modern-identity-from-our-great-past”.

This leads to the next era on the next page.
FROM C. 1970S TO 1990S

*A living community*

In 1968, the beloved reigning Sultan abdicated in favour of his son, the current Sultan. As Brown describes in the conclusion of his thesis:

> the Sultan was coronated in a series of rites and ceremonies which are believed to have the same roots in the ancient past. But in 1968 the lavishness of the coronation may well have surpassed anything in Brunei’s rich history [...] In Brunei a prosperous present has not obliterated the usages, sentiments and forms of so great an antiquity (Brown, 1970, p. 164).

Two points have to be emphasised here. First, the present and the past are linked. Contrary to official discourses that set the present as Islamic, the reigning power sets its legitimacy on Indic tradition. Second, academic writings from that period indicate that owing to new economic prosperity, there was a certain pride and euphoria in Brunei toward the present and the future. There is a sense of “we are back” – “we are a glorious country again”. Brunei’s mentality is still connected to a certain past. This is what is contained in the sense of that era’s Idea.

Brown’s thesis was printed in 1970, two years before what was a major Event for Brunei: 16 October 1973 and the dramatic rise in oil prices. Brunei’s economy is reliant on oil – see graphs below, and the increase in the price of oil due to distant events was a bonanza for the country. With new economic power, Brunei’s assemblage is once again assembling to global political and economic games as in the sixteenth century.

In Deleuze’s flat ontology, events far away affect, through a series of connections, forces that have a given configuration. These connections are due to trading via the water, of produce and oil, an element taken out of the environment. Brunei’s assemblage re-enters in resonance with the world economy. As a consequence, a new configuration of forces arise; new connections can be made; new opportunities can be seized. There is the emergence of a new signification of the Brunei Social Idea.
This graph shows the extreme reliance of Brunei's economy on oil revenues.

Source: (DeVienne, 2012, p. 148)

Figure 52 Brunei – GDP structure by economic sector, 1963 – 1983

Note the sharp change in oil price in 1972.


Figure 53 Crude Oil Prices 1947-2011

Note the link between Brunei's GDP (PIB) and the variations in global oil prices in the above graph.

These three diagrams aims to show that Brunei's economy is reliant on oil. In 1970s the oil price rose sharply, and then the GDP since then rose also. This means that in Brunei money was available from that date.

Source: (DeVienne, 2012, p. 146)

Figure 54 Brunei – GDP 1965-2009 (US $ constant)
In this era, there is a new technological diagram associated with the production of a concrete assemblage. The engine of the water taxi replaces rowing; the car enables people to travel the mainland where American inspired urbanism has developed. The technology associated with the concrete material enables new forms of house and a further conquest of the water environment. Electricity, telephone and water bring potential for new house equipment, a new kind of life: washing machines, television, air conditioning and the like.

**The house**

What is happening in the house? How does the house function?

A construction boom began in the mid-1970s. Factually, thousands of new houses are built. Associated with this production arose a new assemblage-type of house. Hruby witnesses the construction of houses in the years 1983-4 (see next illustrations).

![New house 1979](Image)

Note the structure on top of an existing house.

![New house 1979](Image)

![New house 1979](Image)

Source: (Hruby, 1985)

Figure 55 New houses in construction in Kampong Ayer – 1979

The following sections aim to give sense to the assemblage-type of the house at that time. But I have not lived in that era. To my knowledge there are no specific studies in English that
describe the life in a house at that time. Unfortunately, at the time of my field study, I was not concerned with the problem of difference and life. Thus I did not ask my informants about their lives in the past.\footnote{Hurby’s study is entitled “Brunei Kampong Ayer, a living community” (Hruby, 1985). Her study does not enter in the life of the inhabitants and the house though. It comprises a series of house surveys that do not explain the composition and the life within them.} However, these houses were still standing during my fieldwork. I have been able to understand the main forces that led to the production and functioning of these houses. In what follows, the sense of the Social Idea that predicates the production of the actual houses’ form starts to be described. This thesis cannot enter into detail about the lives behind the construction and functioning of these houses. What was accessed via the fieldwork was: the actual-form; concrete/real events; power relations to some degree where these have spatial components, desire to a certain degree; lines of flight to a lesser degree. This section emphasises the commonalities rather than the differences.

Next, a series of illustrations that diagram building envelopes and plans, and a series of pictures of interiors are presented. The houses depicted were built in the 1980s. The aim here is to introduce a certain feeling of an assemblage-type. Looking at the concreteness of the built environment, embracing the differences in the form, layout and occupancy, there is the feeling of an Idea.
Approx. 0 2 5

L1


L2

Figure 56 Houses in Kampong Ayer – Axonometry and plan
Figure 57 A house interior

Notice the hole goes directly into the water

House interior — kitchen

House interior — toilet

House interior entry living room

House interior — corridor

All picture source: author (2012)
First, the new technology associated with all the constructions is to be noted. The concrete allows for a larger span, and to go deeper into the river. But this new technology had not affected the beliefs that framed the house’s construction. The first male and female posts are still present and erected first. Second, the dimensions of the house still refer to the measurement of the wife of the head of family (Amit, 1989).

An informant explained how her uncle performed shamanic rituals at the moment of creation of the houses.

![Diagram showing the "kampong" invisible limits](image)

The two “invisible” boundaries – protections against outside evil spirits. In red, the house; in green the territory. The yellow and blue circles show where salt has been disseminated with prayers.

All the houses have a similar diagram in their organisation and form despite having forms that are completely different from those in the previous eras. In a sense these new forms are the confirmation of the plans that have been experimented upon. In the previous era, on the core of the old house, extensions were assembled. New rooms were added that fulfilled social and daily needs. The current houses confirm all this. The account here does not enter into the details as they were discussed in the previous era and will be elaborated in the next one, where lives in the forms have actually been witnessed.

Within one structure – contrary to the previous era where rooms were added onto a core structure, the diagram of the layout unfolds as follows. There is a veranda at the front of the house. Then at the entry are located a very large living room and a formal reception room. These rooms are responses to socially coded desires. They answer the problem that Carsten describes: where to receive guests and make celebrations for the numerous social obligations a family has to fulfil (Carsten, 2000).

Then, after a threshold, there is a large corridor, along which, on one side or both, are large bedrooms. The large corridor is also for the celebrations. The bedrooms are for individual
families, or for groups of people who belong to the extended family. The location of the rooms follow the social hierarchy. The head of the family lives near the door, as in the past where he/she was sleeping.

After another threshold, a large kitchen and the bathroom are situated in the very back. The large kitchen is to “share the rice”, as Carsten enlighten us (Ibid.). Family living entails eating together.

Conclusion on the form of the house

This section started to give expression to a certain assemblage-type, whose forces are composed of power and desire types. *The form was not described*. A general diagram of organisation between parts of the house was described. How this diagram shows productive relations between the parts was sketched. To do this, a short account of the lives in the house was given. It was described how social, technological, environmental forces were in relationship to one another. It has been shown how forces of power and desire organise space, the bedroom of the head of family is in the front, the kitchen is in the back. In other chapters, it was explained how living together allows for a better life. The relationship established between the rooms is productive, and its aim is to increase power.

Once again, here the diagram of the assemblage-type was drawn. This section started to give life to the assemblage-type. It is important to note that this diagram arises because each house has been built following different lives, each house is lived differently. Each house is different; reflecting the differences in the relationships between the forces. In this chapter, this thesis cannot account for these lives as it was not lived and no account has been collected. This will be different in the next era.

*The village – kampong Siraja Muda*

What is happening in the villages?
Notice on the left the two slopes of the roof. The second slope is the extension with 4 bedrooms and a very large corridor.

Notice the shape of the roof like a traditional noble’s roof. An eccentric uncle my informant tells me.

House of head of village in 2009

House group 02 in 2009

All pictures source: Author

Figure 59: Series of photographs illustrating Kampong Siraja Muda

Figure 60—1988 Kampong Siraja Muda B map

Circles indicate the different groups of extended families – in red the head of village group.

Account

My informant gave an account about village scenes from his childhood in the 1990s when he would visit his numerous “water” cousins from his house on the land. He would spend days in the village going from aunt to aunt and would run through the houses chasing his cousins – the footpaths enabled this. He went to numerous marriages that were held in the
houses – lavish parties to which all the village was invited. Traditional rites were used, and new traditional clothes worn.

In the village, the houses have grown. Except one, all houses have concrete stilts; this means that they all have been completely rebuilt. One informant pointed out to me the different extensions of his father’s house. It went from a simple house to a giant two-storey house with six bedrooms on the second floor, and the household head’s room on the ground. For its part, the head of the village's house has tripled in size, with extensions. Contrary to the just mentioned house, there was no house at its back so the house developed in its length, not by adding storeys. There are eleven bedrooms. This man had three wives and ten children. My informant recalled the active life in the house. This continual extension of the houses also shows here the continual experimentation of the villagers.

In this era, the economic opportunities that in the past were distributed by the head man is no longer the reason why all the groups of families are together in the same place. Each family now works on the mainland and is independent of the village head. The social rank of the families counts in their new employment. The nobler village head’s family seems to be better placed than other families. Some have positions of responsibility in banks. The lower ranked family have not secured what are considered ‘good jobs’. This has significance for the next era.

Despite this, there is still a strong link between families for support. There is still exchange between groups and a sense of community. Also, social hierarchy still predicates certain behaviour when encountering other subjects.

Assemblages

In this section, a series of assemblages have been described. The village-assemblage connects, functions and produces through its parts. For example there are at the very least the children-play-with-extended-family, the new-path-in-the-village-ease-of-social, or the land-employment-for-water-villagers assemblages operating. But it has been shown also that stratification of powers, with certain past modes of life, are still operating. All this gives sense to the emerging assemblage-type of village in that era. The sense of that Idea contains this euphoric feeling that seems to be all around the country.
Two cities

Each house now is considerably bigger. From 40sqm in the past to 300sqm minimum. The large rectangles are the schools. There are now footpaths that link every single house. There are numerous jetties that are portals to take water taxi to go in the city (the needle shaped path pointing in the water). The large building on the south shore is a school. On the mainland the buildings are a great size. There is extreme densification of the built fabric.


Figure 61—1987 Kampong Ayer Map
These pictures show the “modern life” adapted to the water. There are police stations, schools, a petrol station, footpaths and electricity.

Figure 62 Series of photographs illustrating the built form in Kampong Ayer

What is happening in the city?
The year 1990 was in a way the apex of the water city. With almost 80,000 people and more than 4,000 houses, never before in history had it been so large and populous (Chi et al., 1989). Hruby (1985) describes the water villages as a living community. But the life on the water is no longer exclusively an aquatic life. The large water communities are no longer the centre of life of the whole city. The relationship with the mainland has intensified. This reflects a change in the forces in the society. But it also allowed for opportunities to be seized.

Hruby exposes how in the mid-1970s the Sultan decreed it was better for all craftspeople to move into one building outside the water city (Ibid.). There was then no more industry left on the water except (minimal) boat building for water taxis (see above picture, boat on a pantaran). Now, a majority of the inhabitants worked on the mainland, and most were state employees. In 2000, 65% of the population was employed by the government, with jobs available depending on education, which depended on the family’s social rank. Another major change to notice are the water taxis that commute from the water city to the land city. These taxis have had motor engines since the late 1960s and are one of the main causes of the disappearance of the padian. This is another significant change: all shopping is now done on land, in malls. Hruby defines the modern-day water city as a dormitory city (Ibid.). Most inhabitants commute to the mainland to get an income, for shopping, and for recreation.

Many inhabitants have accepted that they should move onto the land. Relocation schemes provided by the state are increasingly successful – life on the water has changed. Some people have found more opportunities and practicalities living on the land. However, the birth rate is so great – sometimes more than eight children per family – that the water city is still growing.

Conceding to the desires of this large water population, the government built numerous bridges and footpaths that also brought water and electricity. Large schools provided for education – large rectangles on the map. Other amenities were also built: one police station, a clinic, and three fire stations. At this time and now, there are no other villages like this in the world.

As the comparison between the different maps presented in this chapter shows, major densification occurred. New technology allowed for settlement deeper in the river. It also allowed for a significant change in house size. Not all houses had a boat, not all of them had direct access to the water. So the footpath is used to walk to the quays where water taxis take people to the mainland and back. The inhabitants wait at wooden structures that have been built specifically for waiting for taxis. There were also fishing activities and children playing on the footpath.

In 1990, the water city is still comprised of the assemblage of villages. Each are independent units but not like in the past. Each does not have a particular economic function. The city is a dormitory city. Each village is a community of families which history has brought together, and social rank is still important – social links are still strong. The village is a place to live. Each has its own history that shapes today’s sense of place. I have stories of people marrying from
different villages, contrary to what seems customary. The villages are now connecting to each other.

The water city became an assemblage of lives, affects, houses, rooms, villages, different environments that connected and that produced a sense of togetherness.

But in this era, the water city as assemblage was connected to another one: the land city that offered a great gravity field pulling the water people’s lives toward it. A certain form of life developed on the land, pulling energies towards it – in some sense, pushed by the Sultan and the state that he now leads. But the social life of individuals, social obligations and housing needs pulled the inhabitants back towards the water.

**Conclusion 1970—1990**

In that era, there were all sorts of changes to the inhabitants’ lives. There was an incredible amount of work done to improve these lives, by themselves, or by the state. The descriptions of the different assemblages give a sense of a Social Idea that would be named “1972-‘Gimmie-the-money’/’Let’s-be-the-great-country-we-were’”. It is a succession of euphoric growths: densification, rising birth rate, house size increases, and the arrival of ‘modern’ amenities. New forces of desire and power emerged and entered into new productive relations.

But also, there was more to the sense of the Idea. There were still relationships between community and kinship’s social forces. The noble villages still contained nobles. The fishermen’s villages at the entry of the river still contained fishermen. Life was different, but power still ordered space.

These two elements gave sense to Brunei’s Social Idea at the time. There was a sense of euphoria, and there were social forces of the past.

**CONCLUSION**

This chapter aimed to show that major transformations were occurring in Brunei in the 1940’s – 1990’s. These changes encompassed the social, economic, political, and built environments. The houses, the villages and the city, were transforming.

But there was also a major change that occurred in the balance of power through giving the Sultan full power over the country. The change in the forces, powers and intensities in that period were accompanied by a change in the forms of content and form of expression of the water city’s assemblages. Once again, there was diagram of production in all assemblages of each era. But it was also showed that each and every production on the ground was linked to individual experimentation. The houses are all different, the villages are all different because of the lives and circumstances of their productions. These are actualisation of differences.
INTRODUCTION

It is difficult to determine exactly when this next era started. While analysing my data, I noticed that Brunei’s assemblage changed sense in the mid-1990s. But this did not appear to me immediately.

When this research on Brunei’s architecture started, many signs were dismissed that since then have become important—when this research turned to Deleuze’s theoretical framework. In the past, I was only interested in understanding the forms as they were visible. The findings for this research at this pre-Deleuzian time, were that these forms of architecture were an evolution of traditional forms. The information gathered was the layout of houses, and villages were a transformation of the traditional layout; the lives in them were understood similarly. The conclusion was that the architecture standing on the water was a sort of built form which I named as “a modern vernacular architecture”.

But as the Deleuzian philosophy was developed, it became a necessity to be attentive to relations of power and desire. The lives are what is giving sense to the form of architecture. I needed to change my approach. In short, there is more than the form, architecture is living. This next era was found.

Important note: the understanding of the Sultan and his role in this era is one I developed. This is not a topic discussed at any point with any informants in this research.

1990 – 2013 Era’s Social Idea; Diagram of Power

Fire

The 1988 map of Kampong Ayer in the previous chapter shows a large white spot on the water right near the mosque in the circular lagoon. In 1981, 100 houses in a village burned; 1000 people were displaced (Spefen, 1990). The inhabitants have not been allowed back on the water and have been allocated houses on the land. A part of the village had been wiped out. It will not grow again – by decision of the state. This is a precursor of subsequent events.

Since 1904, the successive Sultans have wanted a modern Brunei. For them, the water village with its anarchic settings and poorly built houses, represent the shame of a poor and antiquated life. They have set different resettlement plans for the population on the land. For a long time, these plans never really brought anybody off the water. But another major fire occurred in the early 1990s and wiped out 300 houses, also near the mosque (next figure: #1) (Ibid.). Inhabitants were likewise relocated onto the land. This time, the place emptied by the fire was reclaimed with land. A new modern commercial centre was built. This was a big change. These villages were at the centre of the diagram of power proposed in the previous
chapter of this thesis – the kampong of the old Sultan and kampong of important families. Two other major fires broke out later in the decade in the centre of the village on the other side of the river (next figure #2; #3). These pushed a great number of people out of the water all at once, living a great scar in the built fabric.

Context in the city

Two important facts have to be added to this. First, a law supposedly prohibiting the construction of new houses on the water was enforced.\textsuperscript{91} Second, inhabitants reported that financial institutions refused to insure houses on the water. These are two examples of coercive powers behind this interdiction to build on the water. Many inhabitants confirmed that they would not invest much money to restore or improve their home if they could lose everything. This leads to an incremental degradation of the built form.

These terrible accidental events were the pretext that emboldened a certain discourse against living on the water. Kampong Ayer is now perceived as old and hazardous (Jones, 1997). The

\textsuperscript{91} This is hearsay. The head of kampong would not confirm or deny this law. I tried for three years to learn more about it, but the inhabitants would not discuss it with me.

Map redrawn by author from Kampong Ayer (I.C. Hamilton, 1982) and Google Earth, 2008, Kampong Ayer, 4°52'57.32"N 114°57'136.30"W, elevation 60M [Viewed 31 August 2011]
perception of Bruneians about the life on the water has changed. The new generation wants modernity. From then on there is a great migration to the land. A piece of land and a house is provided to those that choose to move to the land.92

During this period, there are inhabitants who continue to reside on the water despite these coercive powers urging them to resettle on the land. The people who remained in the Kampong are the older generation who prefer life on the water and the fishermen whose livelihood is dependent on the water. Until the mid-1990s fishing was still a viable means of income. Now these people seem to have missed any opportunity to resettle on land. The Brunei Malay people who remain on the water are the poorest in Brunei. The land is no longer financially accessible to those whose houses did not burn.93 But the migration of the 1990’s gave opportunities for foreign workers to access cheap housing. Many of the houses have been sold to migrants. The social fabric of the water city has changed completely.

The following series of illustrations of the life on the water city are presented with the aim of providing a feeling of the space.

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92 With a loan at 0% interest.
93 A house on the water is as cheap as $20,000 USD and land houses now start at $300,000 USD.
224

Fire in the water village (Valdirmasson, 2002)

Two freshly burned houses – 2009.

Fire clearing in the water city at low tide – 2011.


Stilt House Collapse (Omar, 2014)

House in poor condition.

Figure 64 Illustrations of the poor state of the water city
House given to inhabitants moved by fires. They are resettling from the water to the land. First generation model

House given for resettlement. It is transformed by its inhabitants.

The vast majority of the houses have been changed by the new inhabitants to fit the traditional life as described on the water.

Social housing and house for resettlement – new kind of model – 2010.

Social housing and house for resettlement – appropriation by inhabitants – 2013.

Source: author

These pictures show a derelict water city and suggest newness and a feel of opportunity on the land. This gives a general sense of what is happening in the built environment and the social life.

**Power and the city**

Actualisations, among them concrete architectures, are results of the production of events that happen at the level of forces. So it is necessary to describe what occurred that led to this event. It will help to frame the understanding of the water city’s form of architecture and the modes of life that give expression to it.

This era is still related to events that took place in the late 1960s: the economic changes due to the world economy’s addiction to oil and the handover to the Sultan of all political and religious powers after decolonisation. These have opened new sets of opportunities. In the

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94 All pictures in this chapter, unless notified otherwise, are by the author.
previous metastable state of Brunei’s Social Assemblage, it was determined that there was a change in the patterns of relationships in the relations of power in the society. In the past, the inhabitants/groups of inhabitants were the powerful assemblage; there was a play of relations with the Sultan. In the last era, the relationship between the two ‘sides’ was balanced. But this thesis poses that in the era studied in this chapter, the balance is now completely tilted in favour of the Sultan. He is head of state. Initially he was also prime minister, accountable to no democratic institutions, and he was also head of the religious establishment, and by proxy, has control of the local media and the political discourses.

To fully understand this era an understanding of the construction of the Sultan’s motivations is required. Facts and observations described here reveal how the Sultan takes new opportunities for power – puissance, and how he intends to keep this power – coercive.

This research posits that the Sultan started with a desire to hold onto power – coercive, as established by his father in 1968. Now he uses all institutions – religious, police, education, and information, to create subjects who are submissive to his power – which shall not be contested. The imposition of sharia law in 2014 is just one indication (AFP, 2014). Since this contributes to the description of the Social Idea, a stratification of forces of power, and the understanding that Idea is important to understand the life and the form of the water city, I explain my position.

A portrait of the Sultan’s desire and social transformations

This section describes what has been happening in the social. It aims to illustrate the Sultan’s role in social transformation.

Since the early 1970s the authorities – essentially under the Sultan’s command, have promoted a state ideology, hereby named MIB: Melayu Islam Beraja—Malay Islamic Monarchy. It defines what is ‘Brunei-ness’: the essence of what Brunei is and what it is to be Bruneian. It demonstrates the definition of an identity and creation of nationhood. MIB revolves around three points. First, MIB claims to define what it is to be Brunei Malay. Second, it aims to explain what the monarchy and the Sultan mean to Brunei – the ground, the guardian, and the leader of this Brunei-ness. And third, it aims to demonstrate that Islam is an integral part of this identity (Rasidah, 2011)

History has been rewritten in a light that glorifies the monarchy and the Sultan. The Brunei History Centre has been created to enhance that ideology (DeVienne, 2012). The official genealogical tree certified by Brunei academics establishes a clear descent between all the Sultans – which cannot be proven according to non-Brunei academics (Saunders, 1994). The tree in this last iteration now goes back to Adam and Eve, with a stop along the way, of course, showing a direct lineage to the self-proclaimed prophet Mohammad.

This ideology seems to have transformed religion into another tool of control by the Sultan. Since the 1980s, the content of the religion has shifted with the import, again, ordered by the
Sultan, of imams from Saudi Arabia. They come to profess a ‘truer, purer’ form of Islam. The Sultan is the head of religion, second to God.

The state and media discourse has changed: new attitudes are promoted, new virtues extolled; and new obligatory attire for women. The society has changed completely since 1985, when alcohol was banned and headscarves and particular kinds of dresses became mandatory for women.

In 2014, the Sultan decreed the phasing in of sharia law to judge crimes (AFP, 2014). No public or media debate prepared the public for this announcement.

MIB is now a course and is taught throughout all school years. In 2012, it was even imposed on the University curriculum (Waqiuddin, 2014).

Why do the Sultan and the state aim to control all powers? Why do they aim to construct bodies and minds? This thesis proposes an array of reasons.

After two hundred years of humiliation, the Brunei Malay lack confidence. The end of colonisation all over Southeast Asia saw countries looking to build an identity and regain a certain pride.

Another reason for building identity relates to questions of power relations in Brunei’s society. In this part of the world, a country is not composed of one culture. Historically, many ethnic groups compose the social fabric of a country (King & Wilder, 2003). There are historical power relationships between them – for example, the Chinese have always held power in the economy. There is also a relation of humiliation and retaliation between many of the ethnic groups of Brunei. These relationships still exist today. In Brunei, the Brunei Malay are not the majority of the population. DeVienne produced a study showing that they are at most 40% (DeVienne, 2012). Why promote MIB ideology since the majority Bruneians do not share this imposed culture? They do not recognise the Sultan as their leader because he has never been their leader. They do not follow the religion he claims to lead and that he uses to promote and legitimise his power over a country.

MIB, the State ideology negates the diversity of cultures, and places Malay – and Islam, at the centre of all policies. Many are left out of the Malay system: out of the working of state structures; government jobs, university jobs, access to bank loans and so on.

A further factor impelling the current drive for increased control is the fact that the oil money is projected to run out within fifteen to thirty years. What will happen when the masses can no longer be bought with subsidies from the oil? They will have no motivation to follow. What will happen when the King is naked?

95 Discussion with informant.
96 In brief, to be Malay has been defined as to be a Muslim in a Southeast Asian country of Malay culture. And one can become Malay overnight (Reid, 1988).
One of the fallouts from these power struggles is the transformation of social relationships. The current relationships can be seen in a way as a return to pre-colonisation relationships of power—coercive. Old family alliances and nobility ranks are back.\(^{97}\) This is especially important since access to education and positions of responsibility are in large part related to this family link. In the previous three eras, there was a general equality in redistribution of wealth. Now individuals have access to jobs that correspond to their position in the complex social structures of the past.\(^ {98}\) Many commoners are barred from going to university due to their social rank. They are given lower jobs or wait to be given jobs in the public service.\(^ {99}\) This public service now employs 80% of the Brunei Malay population (Chi et al., 1989).

**1990 Social Idea**

The fires of the 1990s are signs of the beginning of the new composition of Brunei Social Ideas forces. A new sense is emerging. It might be named: “1990 – Fire, Fire, burning bright in the forest of the night, there is an immortal hand that is to be feared”. From then on, the production and functioning of forms of content express these new relations of power. Inhabitants lost their say in the destiny of the village. From the array of factors listed above, this research proposes that there is a great pressure to form bodies and minds.

But, in Deleuze and Guattari’s framework, there is power and desire in assemblages. So on one side powers aim to manage desire, to form minds and bodies. But on the other side, each and every life is singular. Each subject, ‘on the ground’, connects to opportunities at hand. Each subject seeks to seize and create their own opportunities, an idea that this chapter has not yet explored.

So, how do all these assemblages of power and desire affect the form of the water city? What are the senses that are related to the production and functioning of the forms and the life in them?

**THE HOUSES**

*What is happening in the house? What does the house do?*

I have lived in this era. The beginning of this research’s inquiry is the built environment. When this study first started with the IPRAUS framework, it was suggested that there was only one type of house. But then the proposed new framework informed by Deleuze’s philosophy was implemented. Having appreciated the lives in the houses, a series of differences in lives in the architectures was found. This led this research to identify a series of assemblage-types. Something is fundamentally remarkable compared to this thesis’ previous

\(^{97}\) After the colonisation period’s interlude.

\(^{98}\) See Brown for these structures (1970).

\(^{99}\) Discussion with many informants.
approach. In the houses, the lives are different, they function differently and express different abilities. The architecture is living.

The following sections describe four assemblage-types.

1/ Assemblage-type: The displaced

The yellow house

Figure 66 Studied house perspective and plan
Approaching the house from land.

Leaving the house, waiting for a boat to go to the mainland settlement.

Entering the house, the veranda.

Indonesian inhabitants’ building a new door. Entering the house for them.

First room entered. Living room 1. Here watching television as a family – Main television content is Indonesian soap operas and premier league football.

Formal living room.
The first fact about this house: as a group of families, they did not build it. These families are one of the many that were displaced by the burning of their adjacent village in 2004. They have adapted their lives to this particular house, they have adapted the house to their lives. They decided to stay on the water for several reasons. First, as the result of a divorce of the head of family, it was financially easier to buy a house on the water. Second, the head of the family’s mother needed care. She lived in the house that was on a bare concrete platform that stands nearby. That mother’s house also burned down.

The family. The household is led by a divorced woman. She works as a clerk for the Ministry of Justice on the mainland nearby. She loves wild animals that she has in cages in front of the house. She chose the bright colours of the house. She often leaves at night to sing karaoke with her friends.

Three of her daughters and one son live with her. The oldest daughter is divorced, with a daughter of her own, and is about to be remarried (they live in room #7). She works as a
manager in a bank on the other side of the river. Her daughter goes to school on the mainland. She is often looked after by the other families living in the same house.

The second daughter got married at the mosque after three years of common living with her partner. She had a son four months later. She is an engineer but now works as a security agent in the museum opposite the house. She didn’t like to work ten hours a day in an office. Her husband is a policeman and works thirty minutes away on the land. He likes to play soccer for leisure and loves going fishing (they live in room #6).

The youngest daughter of the household, to the shame of the family, had a lovely son without being married (they live in room #5). Some neighbours are quite judgemental about this. She is often absent, and the whole family looks after the child. He does not go to school on the water but on the mainland where it is thought education is best suited for his ‘volatile’ temperament.

The last son lives at home. When I first visited the house, he was fourteen, playing video games, watching television and sharing a room with three other people.

In the house, each family has their own air-conditioned bedroom with large dressing table and television. All families pool resources to take care of the house and the meals.

_Social life._ I witnessed the use of the main rooms of the house, the two living rooms. I have seen numerous birthdays for the adult children and the grandchildren. These happened under the front veranda and inside the living rooms. The extended family from the mainland come to visit. They come to “share the rice”. The family has duties toward the larger family (Carsten, 2000). I have also been to a restaurant on the mainland to celebrate these anniversaries.

I have witnessed ceremonies for the death of the grandmother – whose bedroom was given to me to occupy. These were done in the living room. There were traditions performed. Extended family came into the house. Everybody was dressed in traditional clothes. The women were in a separate space to the men. The prayer was held in the living rooms, with an imam leading.

I have seen the use of the formal living room for the reception of important members of the extended family. In other houses I have seen weddings occur. However the two weddings that happened in the family while I was staying did not take place in the house. Large function rooms were booked on the land.

Each family has a car parked on the other side of the river, on the road, on the land. The water people complained for years that there was no parking for them. A parking building had just been created, on reclaimed land by the state. To get there and come back, one has to call a water taxi – yell or whistle, and cross the river: to go to work, to play soccer, to go shopping or to sing karaoke. Each trip costs one dollar each way, for one or five people.
The following illustrations summarise the lives of the household’s inhabitants, their connections with the land, and lives near the house. All these contribute to show how the lives of the extended family in this house are connected to the wider urban environment.

<table>
<thead>
<tr>
<th>House location</th>
<th>Work places</th>
<th>Shopping</th>
<th>Schools</th>
<th>Family on the land</th>
<th>Recreation</th>
</tr>
</thead>
<tbody>
<tr>
<td>House and Kampong Ayer, city on the water</td>
<td>Approximate location, bank, tribunal, police station, museum, construction site</td>
<td>Approximate location</td>
<td>Approximate location, middle school, high school, university</td>
<td>Approximate location spread in new residential compound</td>
<td>Approximate location, karaoke, restaurants, national celebrations, fishing</td>
</tr>
</tbody>
</table>

Legend

Life now connects to many activities on the land

Source: Google Earth—2014, Kampong Ayer, 4°52’57.32”N 114°57’136.30”W, elevation 16.567KM [Viewed 31 August 2014]

Figure 68 Sample of the household connections with land

Recreation—On the mainland – One week fun fair downtown for the end of Ramadan.

Recreation – On the mainland – One week celebration of the Sultan’s birthday downtown.

Figure 69 Photographs illustrating recreational times
Other inhabitants. There were other inhabitants and social dynamics in the house. First, there was the head of the house’s ‘sister’ – it is not known if she was a ‘true’ sister. This woman did everything in the house, with status only a little higher than the maid. She stayed at home all-day and did almost everything that the maid would do. When idle, she would be on the veranda or watch television. She is clearly less educated than her sister or her nieces. She seems induced to undertake all these tasks.

There were also two friends of the family, one homosexual and one whose gender I am still unsure of. They were part of the family’s life. They were sharing a room with the ‘sister’ and the younger brother. This family was continuing the Brunei Malay society’s tradition of being liberal and tolerant (all living in room #2) (Reid, 1988).

The Indonesian workers. Seven Indonesian workers (living in room #9) and a maid and her husband (living in room #8) were also living in the house. They were sharing two small rooms at the back of the house. The men were construction labourers. Bruneians do not do these jobs. One other worker was the new partner of the head of the house. Fifteen years younger than her, he did not share rooms with the other workers.

These people were renting the rooms at the back of the house. They spent time on the side veranda where they would hide. They played guitar, smoked, and played cards. They were not allowed in the main rooms of the house. They would enter their rooms through the window. They also contributed towards food. Their origin is specified because their presence brings politics and power struggles that go beyond the confines of this house. Indonesia, with a population of 237.8 million inhabitants, provides an abundant cheap labour pool for Brunei.

When the food was prepared, it was for all the inhabitants of the house. Members of the family ate with the workers. The Indonesians were not allowed in any other rooms of the house except their bedrooms, the kitchen and a secondary toilet they shared. They did not enter the house through the doors, but through a window in their room. They were often asked to conduct maintenance on the house. It is unsure if they were compensated for this work.

Everyday life experiment

I went to Brunei over the span of four years. During this period, micro changes were observed. When I arrived for my third stay, a new room had been built. Two rooms had been separated into three. The new room was given to the head of the house’s son when he became seventeen. He used to stay in his room all day watching television and playing games. Following the move, he began to play videogames and watch television with half a dozen boys of the village until very, very late at night, everyday (next illustration, new room #9) (I was living in room #3). He refused to go to university, to find a job, or to do anything productive. The dynamic of the relationship is that, as the last son, he is destined to take care of his mother in old age – she therefore cannot upset him.
During that stay, the Indonesians built a door to replace the window that they had been jumping in and out of to their quarters. Since gaining direct access to the room (#8) they spend a lot more time on the adjacent veranda.

The policeman and his wife, the museum guard, had a second baby. She had stopped working. Faced with the inconvenience of her brother’s late night noise, I was invited to reside, during my stay, in a house nearby which the family owned. The house was empty but was being renovated for the couple to move into, once their children were old enough to not need constant surveillance. This marked a change in the composition of the family. The family insisted I come every day to continue to share meals with them, which I did although I did not share their particular local culinary taste. These two details are highlighted as they show two social dynamics. First, a person is part of the family when he/she eats with the family (Carsten, 2000). Second, it shows the traditional approach of leaving to establish a new family home. This happens when a couple is fully autonomous – economically and independent from other daily support. However, the wife told me she did not want to move because living in the main house allowed them to get the precious family support to look after the children.

The other sister, with the unplanned baby, had recently married (she lives in room #4). Once she had married, she was adamant she would leave the house to move in with her new husband. Another change in the house.

One last change occurred in the sense of the house. With the promulgation of the sharia, the sense of the living of the two inhabitants that had a ‘different life style’ changed. This also brought changes in the act of housing them in the house. The progressive family was faced with some new forces.
**Assemblages**

This short anthropological account starts to show the functioning of that house. To do this, a series of assemblages have been drawn. Following, some of them are succinctly described: what problems they resolve, what opportunities at hand have been grabbed, what desires they answer to.

*Inside the house.* First, the daily routine has not been talked about: sleeping, eating, toileting, watching television that occurs for all inhabitants. That routine is practiced in a given space which daily life’s repetition territorialises. There are the assemblages in the house of inhabitants-sleeps-in-their-room, inhabitants-wash-in-the-morning-in-the-bathroom, inhabitants-eat-in-the-kitchen, inhabitants-watch-TV-together-in-the-living-room. In these rooms, life’s necessities are fulfilled: shelter, cleaning, eating, and also sharing time together.

There is also the assembling of all the inhabitants themselves. There are different ways to look at this assemblage. Together they connect. The assemblage families-children-maid that takes place in the house allows for looking after the children. One daughter did not want to look after her child; for the other daughter, this frees her to do other important things. For the daughter with very young children it helps her considerably. Three angles, one assemblage, all this gives sense to the forces that compose that assemblage. In space, the family bedroom-kitchen-living-room are connected.

Then there is the assemblage inhabitants-share-the-rice in the house. The cooking is sometimes done by families, the maid or the other people who were living in the house. First, this assemblage addresses the problem: living, eating. Second, it allows the fulfilment of an important social duty in Malay society: to share the rice (Carsten, 2000). Part of the sense of this assemblage allows the fulfilment, to ride stratified desires. These assemblages connect every life to the house inhabitants-bedroom, inhabitants-kitchen. It also connects to the time and space outside the house to collect food: kitchen-land-shopping.

Then between all the groups, their assembling answers desires. The relationships established follow a set of relationships between forces that have been socially stratified, social codes to follow, and modes of life. These are the same as those explained in earlier chapters. There is a hierarchy in the group. The head of the family leads, there are the daughters and son, the sister and the invited people, the Indonesians and maid. The relationships are also reflected in the composition of space. The head of the family in the front of the house, the Indonesians in the back, the family in between. The Indonesians are not allowed to enter the main door of the house.

But these relationships are constantly negotiated. Changes in relationships reveal previous assemblages. The assemblage mother-son has been described above. It is a mutually beneficial relationship. She helps her son, her son will help her as per social custom, a set of stratified forces, desires. When it was time for her son to have a room, for him to fulfil all sorts of desires, a room was built. The relationship, the micro politics in the house, produced changes.
in the built form. Then there is the assemblage Indonesian-mother/family. The Indonesians need a bedroom to live in; a base to access the city, this is a problem to answer. The family needs income for the house; help for the house, this is a problem to answer. Being together solves problems, there are opportunities here. But the Indonesians cannot enter the house, they are lower ranked: social forces are at play. Except that, as explained, at one point in the relationship there was the creation of a door in the house, a modification of the space. This indicates that the relationship has changed. The change in relationship, an answer to a problem for the Indonesians, practicality, and another problem for the mother, maybe a rise in discontentment. All this was resolved in a change in the space. But, importantly, at the same time, these two changes changed the sense of the house Idea.

Connections with the outside. But living in the house answers other problems of daily life. Changes in the economy, in the work available to the inhabitants to get money and live; that work is now on the mainland. The lives of the house connects to these spaces where works are. There are the assemblages, in-the-morning-house inhabitants-go-to-work. This connects to the concrete spaces house, footpath, water, land, work. The assemblage inhabitants-water taxi, inhabitants-car is connected to this assemblage. But also there is the need for recreation. The assemblages to solve that problem are at-night-house inhabitants-go-have-fun. The related concrete spaces, territories of this assemblage is house, footpath, water, land, recreation space. Or the shopping assemblages, house inhabitants-go-shopping, and the concrete spaces house, footpath, water taxi, water, land, car, shopping mall/market. For the grandchildren, to answer the problem of better education there is the necessity to go onto the land. There is the assemblage in-the-morning-parents-take-children-to-school. The territory of this assemblage is: house, water, land, school. The assemblages, people-water-taxi, people-car enables are connected to this assemblage. All these assemblage are repeated in time, and the repetition creates territories; the house is comprised in them.

One final comment on the assemblages. Again, this house has not been built by the family living in at the time of this research. They appropriated that space. This holds reference to the greater forces that loom over the whole society: the Social Diagram “fire, fire”. As a consequence, people cannot rebuild their houses. Also this has led to price of the land becoming inaccessible. Staying, living on the water, living in this house expresses how this family has dealt with these. But these forces have also given opportunities to immigrants to have cheap places to live and connect to the mainland and water cities among other opportunities.

Conclusion

This first section on the house of the displaced has given life to a series of assemblages. The sense to the Idea of that house has started to be given. Not only that, the sense to an Idea that predicates the production and functioning of some houses in Brunei’s built environment has started to be given. It is important to note that this research is experimenting with a theoretical framework. This entails understanding that what was described here are only some of the
assemblages that connect to the house/the houses and give sense to the Idea of it/them. In the next sections, more assemblages will be described. These will continue to give life to architecture/s.

Fishermen’s life

Figure 71 Photographs illustrating activities of the fishermen

Figure 72 Fisherman’s house plan and 3D perspective

**Account**

This house is located in the same village. It has a different form, but a sense of familiarity in the layout. At the entry, there is an open living room and a formal, closed living room – in the previous house the formal living room was delimited by a threshold. Then there is a large corridor with bedrooms on each side. The head of family is in the room closest to the front. In the back there is a kitchen and family table, then the bathroom.

The lives of the people in the house have similarities and differences to the family in the first case study. First, this family are fishermen, or they used to live off this trade. It is no longer possible to make any profit from this activity. Second, they also did not build this house. Third, they had also been displaced by fire. They chose to stay on the water because twenty years ago it was still great to live on the water and live off fishing. Now they are on the water but the mainland is no longer accessible for them.

The son I talked to had been working for the German Embassy. However, the work was too much for him and it was preventing him from pursuing his passion for fishing. So he had decided to stop working.

These lives bring different needs to the house. First, on the back, they had built a shed for all the fishing gear. Second, they had appropriated the remains of a small house on their side which had burned, as a place to store their boats. Third, they had built a small shop on the front of the house to sell daily life essentials. When I first came to the village, these kinds of shops did not exist. I was curious because during my stays in Southeast Asia I had seen these kinds of economies of survival everywhere. I thought that Brunei was a wealthy enough place not to need this. But during the four years of the research I witnessed the rapid decaying of the water city and the growth of the economy of survival.

This house was becoming really run down. The interior was not as well maintained as than the one I had stayed in. Some windows were broken, the cladding was open in many places, and the roof was partially patched.

**Assemblages**

This house reflected how living on the water was an economic and a lifestyle choice. At the beginning it was a certain means of empowerment. Life and water are connected: assemblage family-house-water. Now the assemblage shows a different means of empowerment. The family still had a house that was allowing them to live, have shelter, and access the city; family-house-water-city.

The family’s forces were responding to the general Social Diagram. Because of fire, because of the forbidding task of rebuilding their house, they resettled in another house. At the time of the fieldwork they could no longer afford to move onto the land. Then in the house they still live following the social customs, a set of assembled desires. The (re)-use of space reveals

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100 I lived and worked in Vietnam for four years, and travelled extensively in the region.
this. The layout is how social desires, modes of life, have been stratified and accepted. The life is this layout represent the solving of their problems at hand. Then, their dire economic state, as for other poor Brunei Malays, their lack of a relationship with power is clear. This prevents them from accessing worthwhile work in the government. But they have looked at other opportunities for living. They have built a shop at the front of house, an answer to a problem, an opportunity taken.

I just sketched *this* family’s life. The form, the layout of this house are different from all others. Its history, the present life in it are different from all others. But they participate to give a sense to an Idea, the displaced assemblage-type.

**Conclusion – Displaced Bruneians’ house**

These sections on the house of the displaced have shown how the two houses’ stories featured a sense of commonalities. Their extensive forms shared a sense of common layout reflecting stratified desires. They also shared a lack of the economic means; a reason to be on the water, given they were unable to afford moving onto the land. But the sense of commonality in reality comes from the aggregation of the stories, of differences between. Two stories were told; multiplicity then gives sense to a commonality. The sense of commonality *comes from the repetition of differences*, what is felt is difference.

But this discussion has also shown how each house reflects the singularity of each life of which the form of the house is part. Each extensive form is singular, actualisation of different forces, in different conditions: economic, social, political, environmental, and each family history at that time.

The house hosts a continual experiment with the forces around it: the continual involuntary search to increase one’s power. That continual experiment translates into continual micro changes, in the life but also in the form of the house: construction of door, addition of room, extension of house, storage for fishing, and shop for selling items. The form expresses life, lives are shaped by the form. The form express choices made, opportunities taken, empowerment.
2/ Assemblage-type: The poor people’s house

Houses in poor condition.

In the four years that I went to the water city I noticed a significant degrading of many houses. The two-storey derelict house presented above is inhabited by fishermen in its most dense and populous village. In another, an inhabitant told me that he would not invest in his house. He was afraid of fire. This lack of investment has another impact as the concrete stilts of more and more houses shift and the houses start to collapse (see illustration above). These stilts don’t have deep foundations. They have just been planted by force of hammer barely a few metres into the mud.101 It is a reminder that the water city assemblage is built in connection to the material and organic stratum.

There are enough of these derelict houses in the water city for me to have noticed them. But then, there is the question: what kind of problems do these houses in precarious state pose? It is indisputable that having a house, a shelter, is one of the fundamental necessities of life. So even if they have no work, these houses allow their inhabitants to connect and be part of the city life, attuned to other opportunities.

101 New constructions on the water target the good ground at a depth of 60 metres.
Assemblage-type: The Brunei house inhabited by foreigners

Account
This section present another fact that this research would also have dismissed as unimportant if I had kept my previous attitudes toward studying architecture; if only the form of the house were described and not understood as an expression of life.

The houses I am talking about now were produced following the same Social Diagram as those in the previous era, in the 1970s-1990s. Certain Brunei Malay lives, responding to certain events in these years, produced these extensive forms and lived in them. Different inhabitants were now living in these houses. They were not Brunei Malay like the first two case studies. They were immigrants that had come to Brunei for economic opportunities. They had bought houses available for them. They were from Malaysia, from Indonesia. They were Malay, Bajau, Chinese, and Kadayans.

Assemblages
This means that the life in these houses at the time of the fieldwork were really different to the lives of the previous inhabitants. The form of the houses had not changed as far as it could be observed. But now, they were inhabited by subjects with different practices of space, different lives. They were inhabiting these spaces with a different relationship and practice of the layout.

For many Bruneians, living on the water is now no longer a source of pride. They prefer to avoid it. But the immigrants, in a sense, were playing with the powers that were expressed in the introduction of this chapter. This play or subversion was working against the water city from the perspective of the Bruneians. But the immigrants were using them to answer their problems, they seized opportunities.
The assemblages of daily life are inside the house. But for these houses, the assemblage house-water-land-work that the immigrant participate to has a different sense than that of the Bruneians. Work is low-status, and is not well regarded by the locals. But for the immigrant this is work; they could not find good opportunities in their countries of origin. Also the house is of course connected in some way with the country of origin. There are assemblages, inhabitants-phone-their-country, of the immigrant-watch-TV-Indonesia. These assemblages are taken place in the house. They bring politics and external/foreign cultures into Brunei.

4/ Assemblage-type: The Brunei house inhabited by Bruneians

The long house

Account

This next house was being lived in by its original inhabitants. It was situated in one of the villages that had been created from the migration of people when the island of Laban was given back to the British. It was touched upon in the previous chapter. This section returns and adds to the description. This house was in fact composed of an original house in the back, where there were bedrooms on each side of the corridor (rooms #1, #2, #3, #4). The bedroom at the front was for one of the grandparents (#2), at the time the head of family. As was already described, the father decided to extend the house to provide room for his ten children. He stated that he needed a large corridor. This would be a place for reception of the extended family when there were birthdays and other social parties to organise. Other features of the house were the formal living in the front and the kitchen at the back with the family’s dinner table. Behind it were situated the bathrooms. These last two rooms were also extensions.
The formal living room was not luxurious by any standard; sofas and frames were of lower quality. In the corridor there were pictures of the family, each picture’s frame was a plastic plate. Old linoleum covered the floors. I witnessed a celebration for the first year of one of the children. Numerous families that had established their life on the mainland came to visit. Dressed in new traditional clothes, they still came to fulfil a social obligation within their community. My informant was working on the mainland as a religious teacher in a high school. She was thirty-five, unmarried and probably will not marry because of her age. She was still living in the house with most of her siblings, as per custom but also probably for practical reasons. Her youngest brother was ten at the time of the fieldwork.

**Assemblages**

The house represents the continual negotiation with the forces at hand. The different extensions had come about as solutions for (life’s) problems. These solutions were connections to certain forces, the social desires of a certain life. But here they were connected to the life of that family. They are the forces that they were able to mobilise, how they could connect with the site, and the circumstances of their lives at that time. The house was different because of the differences in forces. The layout seemed similar to many other houses. But it was different, expressing the life of this family.

The description of this house starts to give life to this house. But the description of this house continues to give life to the Idea of the house for Brunei Malay on the water.

**The house lived in by original inhabitants**

This chapter will not dwell much more on these houses lived by original inhabitants. I have surveys that I am not allowed to share. But I can talk in general about the lives I have seen. These houses were still being lived in by their original owners. But there are less and less of these scenarios occurring in the water city (Sani, 2015). For these houses of these families, the form of the house had not changed dramatically since the last era. As it was shown, only small and often invisible incremental changes had been made that show adaptation to daily problems. But the sense of the Idea of these houses had changed. Many of the children for whom the houses had spaces had left. They were now adults. The original inhabitants were now retired (Ibid.). The people had turned to the mainland for their main activities. There were new assemblages that connected them to all sorts of new forces. But also, the lives on the water connect to, and are part of the composition of, the social forces, the Brunei Social Idea.

The houses’ forms were the same, but the sense of the house was different, in a way. There was the assemblage-type of the house built in the 1980s. But this Idea emerged from each and every life, it emerged from all the existing differences. The fishermen are still fishermen, the nobles are still noble, some inhabitants are still brass workers; and each life is different.

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102 I observed and drew the lives in these houses but did not receive consent to use the information.
Conclusion: The singularity of life and the Social Idea

The houses as concrete form had all been produced in the last era. But it has been have shown that they were all different. There were different lives in them, they connected to all sorts of assemblages that function differently than in the previous era. But by giving expressions to the differences that were found, this chapter described four assemblage-types. In the first set of stories, the households appropriated a house, and stayed on the water for economic reasons. The second set of stories shows the dire state of many houses reflecting the dire economic state. The third set of stories shows how foreigners had used the house as a means of empowerment. The fourth set of stories was based on the original owners that still lived in their house but whose lives had changed. All these lives, all the assemblages, start to give sense to the Brunei Social Idea and a diagram of power associated to it.

A final point to add. In all the stories, the lives, the houses, have started to be connected to the outside. The (water) lives have been linked to the land. But there are other connections that exist and that will participate in continuing to give sense to the Ideas of each house, of each assemblage-type.

THE VILLAGES –ASSEMBLAGES?

Since the houses are increasingly inhabited by displaced people – because of fires, and an increasing numbers of foreigners, what has become of the life in the village? Is it still a relevant entity to study the built form? What is happening in the village? What does it do? What problems does it solve?

The village of Siraja Muda B

This section is a succinct account of who remained in the village this thesis followed through the twentieth century. Because of sickness the founder of the village had lost his legs several years ago but categorically refused to leave his life on the water. He had to be carried in and out of water taxis each time he left his house, notably to go to the doctor. An invaluable informant, he unfortunately died during this research at the advanced age of ninety-two in 2011. Nowadays, his house is empty. The house on its west was empty four years prior to this research commencing and in my last visit there were immigrants inhabiting it.

For the noble family group #3, there were three houses remaining in the village. One was empty and in the other lived a son and his sister. In the main house were two daughters. The
rest of the very large family had immigrated to the mainland and had also secured good jobs. In group #4, two houses had burned, one house had been sold to a group of Bajau immigrants, and another was requisitioned by the state. Only two houses remained, inhabited by their original occupants. In group #5, five out of seven houses had burned, one was empty.

So, who remained in the village? Many of the inhabitants had left, having found a better quality of life on the land. The remaining original inhabitants were mainly people who had not been able to secure good jobs and could not afford to move to the land. Relating this back to the stories of my informant, these people were not of noble rank. Thus they were not wealthy, and their possessions were invaluable to them. They had spent their life under the threat of fire.

Some houses had been sold. I met a group of Bajaus in a house. They purchased an eight bedroom house for 40,000 USD. They were working in construction. One of the large houses of the founder of group #4, that was abandoned when I started my research, had been requisitioned to host Pakistanis and Sri Lankans who were building a new estate. The house looked quite derelict. There were voices and sounds of music – signs of life foreign to the water city’s previous life. This changed the feel of the place. These people and the Bajau bring to the villages from the outside their own considerations, economic, and political relations and concerns.

A few days before I left during one of my visits, two houses were being emptied of furniture. The walls were being repainted in preparation for a wedding celebration. All the family remaining on the water and all the family living on the mainland were expected to participate in this social event.

In this village, the assemblage of groups of families has barely survived. None of the original family groups who had founded the village remained there. A new village head was in place.

Assemblages

In this era, the form of the village was different from the previous one. Many houses had burnt and the houses looked derelict. As for the lives in it, they were different and connected differently. There were immigrants, there remained very little of the original social fabric. There was very little remaining of the group of houses. An aspect that the inhabitants had in common was that they were not wealthy. A different sense to the village had arisen, to the Idea of it.

This description shows that alongside contemporary social issues, the tenuous remains of the traditional rhythm of life had survived. The village had a life, but different than that of the past. The assemblage house-house neighbour had a different sense, it had become house-house foreigner, or house-house family who is as poor as me. The assemblage daily-life-in-the-village had taken on a different sense since the life was no longer shared. The assemblage inhabitant-work had also changed.
What has been described here so far about the village, its form and life, starts to give sense to the Idea of that assemblage. What this investigation noticed again is that these assemblages relate to one another, and participate to give sense to the Brunei Social Idea and its diagram of power described in the beginning of this chapter. Again, this Social Diagram that pervades all the produced assemblages’ functioning.

**Village Lurang Sikuna**

View of kampong Lurang Sikuna.  
Wandering in kampong Lurang Sikuna.  
Small shop 01.  
Small shop 02.  
Building a structure for the wedding.  
Kids jumping in the water.

Figure 78 Series of photographs illustrating life – 2009—2012
Account

This is the village I stayed in during my fieldwork. First, the houses that were still standing were only half of the original number. Part of the village had burned down in 2004. What follows is a quick description of the origins of the 19 houses surrounding the house I stayed in – see previous diagram. Three houses were inhabited by displaced families. The head of village had lost his house, the only hotel on the water. He did not want to leave the water, he purchased the old prayer house to become his house. There was the fishermen’s house, whose lives have been described previously. This family had been displaced by the fire and wanted to remain on the water. There is the family that hosted me, who stayed on the water for family and financial reasons. There were two houses that had been purchased by young married couples, for whom the mainland was prohibitively expensive and living on the water represented freedom from their parents: a modern family – they were two young people who lived in two different villages. Thus they had no historical link to the nearby house. There were three houses that had been purchased by foreigners: one by Malaysians, and I don’t know who purchased the others. These also have no links to neighbours. So eight houses out of nineteen were occupied by outsiders.

Another eight houses were inhabited by original families. One was a fisherman still trying to live off his trade. Another house was the family of a water taxi operator. The engine of his boat had broken a few years earlier and he could not pay to repair it. Since then his family had
been having difficulties with living costs. The stories of the other six original houses from this village are not known. There were three houses about which information could not be found.

In this village too, the group of houses as extended family barely existed any longer. The displaced people and immigrants had no links to their neighbours.

In this village, during my field trips, I noticed the appearance of four small corner shops and the degradation of the built environment. This concurred with the sense that the living standards in Kampong Ayer had changed over the four years that I visited it.

On my last trip, a traditional wedding was organised in the Kampong I was staying in. For twenty-eight days, that family put out large speakers and played music every night, sometimes until 2am in the morning. From 6-8pm everyday they would organise a lottery where a person on the veranda of the house would call out numbers, and many of the surrounding houses would buy a number of grids and play from their own verandas. Houses up to eighty meters away would yell when they had a number. These were activities typical of traditional weddings and which were meant to bring luck to the future couple – they were not Islamic but Indic traditions. The remarkable thing was that foreigners and displaced inhabitants all joined in. This was a very singular event. It was the only time I saw this village function as a community together. In all my stays I rarely saw people outside their house. I did not have the feel of a living community that Hruby described in the previous era (Hruby, 1985). But as I have shown, there seemed to be some events that could still bring the collection of subjects together.

Assemblages

The description of the form and the lives of Lurang Sikuna seems to have the same sense as the one as Siraja Muda. The form affected by fires was different from the previous era; there were migrants, there was no longer a relationship between the groups of houses, families were struggling financially. The two villages’ Ideas were comparable; the story of their differences gives sense to the Brunei Social Idea.

Is a village still an assemblage?

If there is no longer a tight community composed of families of the same blood as in the previous era, is the village still an assemblage as this research had assumed it to be? It has been described that the assemblage of groups of houses has disappeared in most cases.\(^{103}\) So what is the function of the village? What does it do? Is it still an assemblage, a connection of parts in a productive relationship? How does it empower the parts to be in a relationship?

At first, in this era, I thought of the village as assemblage as just an administrative unit. I thought that was its current power. But a problem arose with the analysis of the whole water city as an assemblage. As was established in the previous chapter, until recently the water city

\(^{103}\) In kampong Siraja Muda, there is still two groups of houses, but there are few inhabitants left in these houses.
was a collective multiplicity functioning with the villages as ‘unit’ parts. But in this current era, all the villages have lost these functions and their communities. The production and functioning of the two villages that have just been described no longer comprise a tight community that enacts a common social and economic aim. So what is the functioning and the composition of today’s water city as assemblage? What is the functioning of a village as assemblage?

This research proposes an answer that was found when I reflected on my practice of the space. I reflected on my continual and involuntary affection of the place. I have tried to relate the feeling associated with my walks in all the villages with the Deleuzian philosophy of affect. I felt that the village existed. So, it came to my attention that even if most of the original inhabitants, those who built the place, were gone, these villages as places still remained as forms that have the power of affect, they are expressive. The forms’ expression has changed from a ‘living community’, as I have identified it earlier to a different feel. Each village in its tangible form has retained a certain ‘character’. As I walked through each different village, there was a sense that each had a different feeling of space; I was able to perceive the differences between each of them. The administrative borders endorsed the old borders. So the past characters that created the form haunt the present. They are subjects and form subjects (Brott, 2013).

How are subjects and subjectivity constructed by the affect of a place? Even if subjects do not participate in the community as they did in the past, particular events such as the wedding and death ceremonies exist and are contracted. They become part of a subject and the collective memory of the village/rs. But there is also the contraction of every day and every hour of the surroundings. Every day, going to work and coming home from work, there is a repetition of involuntary encounters with the place, with the surrounding houses, with a glance of a neighbour. That involuntary repetition of encounter creates an involuntary feeling of belonging. I experienced this on all my trips. These new communities of disparate people practice a space that has been built in the past. Now there are remnant events of the past: a ceremony, an old person. However, practicing it rather than simply walking through it observing, subjects become part of assemblages, affects, sense, events. All of these are contracted, and become folded into them. In some way, they become it with their own involuntary memories and feelings. A village has a history, a memory. Some inhabitants remain. The extensive forms of the past are still standing, the built form affects. All this past involuntarily affects the mind of the newcomers.

So these villages have been built in the past, they have stratified concrete forms, but now they are inhabited differently – have different expressions, different powers – puissance. The houses, the footpath, the wild cats, unknown neighbours, the foreigners, their lives and memories, become part of the subjects’ assemblages, just as the village becomes part of the
newcomer’s and foreigner’s assemblages. The village, as a place, is real, and in its own way it empowers the life of its inhabitants. It is one of the assemblages of the water city.

**Villages – Houses – Assemblages**

The previous section began to give expression to the sense of the village as assemblage; however this sense of giving also came from describing the singularity of the lives that are in it. In particular these lives are related to houses. So giving life to the village’s life is continuing to give life to the house. The house’s assemblage I lived with is more fully expressed after I describe all the lives that connect to it. Walking to the house, looking outside the windows, hearing the yelling of the wedding or the happiness of the children jumping in the water; the village’s life, the others’ lives became folded within me. I connected to all sorts of assemblages that connected to the village. So, this must happen to all the inhabitants, of this house, and to others’ houses.

Some additional reflection is required, with particular emphasis on the research method. First, maybe I arrived at this era planning with a defined category of study such as ‘village’ and ‘group of houses’. But by experimenting and by being willing to question these categories, I realised that there was a different sense to the village. I also discovered that the assemblage of group of houses in this era does not exist anymore. This means that one cannot assume the composition of assemblage in time.

Second, I turned to affect and assemblages to give expression to the ‘architectural subject’ (Brott, 2013). And this has been important to reveal the forces, an aspect of the assemblages.
The water city is only a small part of Bandar Seri Begawan, Brunei's capital. In the North of the river, the green areas are hills. The South of the river is not developed. It is green because there is no bridge yet to access that part easily.

Figure 80 – Kampong Ayer built area in Bandar Seri Begawan
There are now large empty spaces in the built fabric. These are areas affected by fires, spaces that have not been rebuilt. South of the round lagoon, the villages have been replaced by a commercial centre. On the east, at the threshold of that water and the mainland another large mosque is built – inside the apparent circle. Another one is also built in the south.

Map redrawn from Kampong Ayer (I.C. Hamilton, 1982) and Kampong Ayer (Google Earth, 2008).

Figure 81 – 2008 Map Kampong Ayer
As a prologue to this section, the context of Brunei is sketched again with the information gleaned in the above discussions. As it was written, many fires have marred the water settlement. There has been a great exodus towards the mainland (Sani, 2015). There was an influx of foreigners and low-income people at the same time but this was insufficient to compensate for the loss. There is a general degradation of housing material. Inequality is rising and the composition of the population has changed. From the outside, the discourse seems – from stories heard and newspaper commentaries, that Kampong Ayer is dirty and dangerous – a place of prostitution and drugs (Times, 2015a, 2015b). Most events of daily life are now happening on the mainland: working, shopping, recreation, high school and university, and the imperative social duty of visiting family. All state and government institutions, all factories and industries, all major companies, all are on the mainland. The land area presented above is the district of Brunei Muara and has a population of 280,000 in 2011 (Department of Economic Planning and Development, 2014). The water city was estimated to have a population of 28,000 in 1981, compared to about 13,000 people in 2011 (Sani, 2015).

**Assemblages thinking**

To give a sense of the water city as a whole, the assemblage framework defined by Deleuze and Guattari in *A Thousand Plateaus*, in the chapter a “A genealogy of moral” (Deleuze & Guattari, 1980) is tested here. The water city is considered as a form-part-of-assemblage composed of assemblages connected to other assemblages. It is a system of systems within a membrane, on a territory, connected to their milieu: the water, the landscape as environment and the urban landscape.

The water city is composed of an infinite number of parts. In a sense, all the villages are ‘individual systems’ within their own milieu, of the water city.
The milieus

For Deleuze, assemblages connect to a milieu. And that connection is important in defining what the assemblage can do. Here, the whole form of the water city has a territory that connects to certain milieus. The following sections describe the milieus, the connections made with the outside, and how it affects the assemblage(s).

The waters

| Embarking on a water taxi from the mainland in front of the commercial centre – a lesson in balance | Going to the mainland settlement from the water settlement. |
| Source: (Kurun, 2009) | |

| Water taxis at peak hour, racing their course. | A water taxi on a small canal. |
| Notice the land city in the background. | |

SEE PRINT VERSION FOR ACCESS TO THIS CONTENT
The water is of course a very important part of the creation of the water city assemblages, their production and their functioning. Houses on stilts, large living rooms, footpaths, water taxis, quays and their shelters are all answers to the problems of living on the water. They belong to the assemblages of the inhabitants’ lives: inhabitants-go-to-work, inhabitants-go-shopping, inhabitants-go-have fun, linked to the assemblage inhabitants-water-taxi. These assemblages take place in the water as milieu, the water shapes the form of these assemblages and their functioning. This living on the water also relates to the past. Living on the water was previously a means of protection, and an advantageous location for fishing or trading.

The water is also important in the creation of the subjects belonging to the water city. The water separates life on land and life at home. There is the daily routine, the continual repetition of a path to connect life on the water and life on the land: walking the footpaths and all the sensations that go with that – a very limited passage with the threat of the fall, and losing one’s phone or car keys. There is the sensation of walking on the wood – very slippery after the rain; the continual breeze; and the odour. There is the perilous climb and descent to the water, the moving of the boat, the acceleration, the speed, the waves that shake the boat, and the noise of the engine; the habitual leaving behind, in the morning, the life on water, and leaving behind, in the evening, the life on land. They are affects that form particular subjects: those who are born there, those that came to live there, or those that came to study there. These are ‘water subjects’.
The South and East bank of the river: The landscapes

Figure 84 Looking from the mainland at many villages of the water city with the green landscape in the background – 2009

On the South and East banks of the river are hills covered with vegetation. The river is large, and it is not yet economical to build a bridge and settle the mainland on this side. Similarly, high hills are hard to develop. This vegetation is an important part of the feel of the place, on the continual involuntary affect that creates bodies and minds. The water subjects involuntarily connect to this presence.

The land city's landscapes
On the north river bank the water city connects to the land city. From the 1990s, this land settlement changed dramatically. A major fire wiped out several villages near the lagoon and a commercial centre replaced them. Also, the adjacent buildings grew in size and height. These are commercial buildings. In the past there was no market, but now all purchases are made there. This investigation is interested in the presence of the mainland settlement, now seen and felt everywhere from the water city. It is an urban landscape counterpart to the green hills. It is a façade, the extensive limit, where behind is located major parts of the water subjects’ life. The water subjects see, connect and sense the urban landscape. Behind that façade are the territories of assemblage with which they connect.

The religious presence
One of the sunsets from the veranda.

A mosque and prayer time at sunset.

Figure 86 Series of photographs illustrating sunset on the water city

Another connection that is made with the urban landscape is the collection of mosques and prayer rooms that have been built on the outskirts of the water city. They belong to certain assemblages. For me seeing and living with the population, these could be expressed as: life- whatever I am doing- wherever I am-I know/feel it’s time-again and again-time to pray, I have to go-footpath-mosque-pray-until the next one.

All these mosques are not only visible but they are also audible. The evening prayer at sunset is quite an experience. It occurs at the tail end of peak hour on the water. Speed boats rush around, with the corollary noise of engines and waves. Wind inevitably picks up because of the change in temperature between the water and the land. The air is always cool at this time. The light is dimmer and sunset unfailingly spectacular. All at once, all the mosques from different angles sing the same prayer. All the senses contract the scene and again involuntarily form the ‘water subjects’.
The water, a kampong, a mosque, and the green hills. Mosque, the Kampong, and the Sultan’s portrait on a building (to the right hand side).

Sultan’s palace and the private mosque’s golden dome—They are visible from the water city in everyday life. A kampong and a mosque.

Figure 87 Series of photographs illustrating the omnipresence of the Mosque in the landscape

This omnipresent religious aspect of life certainly leads to involuntary affect. This is an important to describe in detail because it entails a certain expression of intensities that (aims to) shape the bodies and minds of Brunei’s inhabitants as was explained earlier. Behind this romantic evening scene, there is that built form which represents, as I interpret it, powers that aim to cut lines of creativity, that aim to absorb differences, and control desires. The hidden hand of the Sultan is everywhere. The mosques’ forms are defined by the Sultan, the Imams’ preaching is defined by the Sultan and led by the Sultan. They produce a soundtrack that gives rhythm to everyday life with calls for prayer and religious celebrations, five times a day, 365 days a year – except the last day of Ramadan when there is a strange moment of silence when the sun sets on that day. All these forces mark the bodies, participate in the creation of the water subjects.
The water subjects

So, the different milieus presented here connect to all the assemblages of everyday life. They participate in the functioning and sense giving of the water city’s assemblage, by forming ‘water subjects’. The ‘water subjects’ are those whose life tales give expression to the built landscape. They are formed by the built environment on one side, but they also form it. An analysis of the forces to which they connect reveal this co-formation.

Traditionally, the hills and the water and all associated affects have always been present. The life, the memories of the ‘water subjects’ have been shaped by these. But new milieus have emerged: the mainland settlement that in a sense represents capitalism and consumerism, and the prayer rooms and their sounds that now represent a certain idea of religion. By giving expression to them, this thesis aims to reveal some of the powers and desires that are now shaping the lives in the water city. But these lives are also the ones that participate in giving sense to the water city’s current assemblage.

The water city assemblage: Transversality

So far, these sections about the water city have talked little about the city’s form. There are multiple reasons.

First, in this proposed theoretical framework, to talk about the form is to give life to it; it is to explain its functioning and how it is lived.

Second, in the series of descriptions of the relation between the milieu and the life of the water city, this chapter continues to draw assemblages that give life to the functioning of the city, and doing so, explain the diversity of urban areas. The spaces described have been created and function to answer problems in the lives related to the water city. The water taxis connect the lives on the water to the lives on the land. Every day, multiple temporary assemblages are effected, water-people-boat. Similarly, the footpaths resolve particular problems: going to the mosque, going to the family next door, going to the water taxi to go to work/recreation/school.

Third, this section about the city is complemented by all the other sections of this chapter. To explain in more detail the functioning of the water city, all the stories about the house, the group of houses and the villages give sense to the functioning of the water city. These stories should not only be read and understood as the story of a house or all the houses. These must be understood as the aggregation of the description of a multiplicity of assemblages that cross space and time. In a bedroom of a house, the young adult brings his friends from houses in the village. That space connects to the village in one series of assemblages, but with Internet, this space connects to the world while the friends plays video games. In another series of assemblages, some families work together in a number of houses of a village. These connect through trade to other families and trading companies overseas.
Finally, not only assemblages drawn in this whole chapter give sense to the water city as it is now, but the whole series of assemblages drawn in this architecture part give sense to the now. The stories of the fishing villages of the past explains why the houses in these villages now are situated in this location. It also gives a hint as to why these houses are now mostly derelict. The changing relations between the water inhabitants and the Sultan explains in part the form of the water city. This city exists because in the past, trade in forest and sea products was important. The location of the city is related to that and to the necessity of control of trade and protection against outside enemies.

There is not the past and the now, there is not the house, the village, or the city. There are only a multiplicity of assemblages that cut across what is perceived as architectural scale, a linear time.

**CONCLUSION – ASSEMBLAGE STUDIES**

The description of this era is longer than all the previous one because I actually lived it. I was on the ground, connecting to the forces. This research was able to report on life and the feel of it – albeit from a certain personal perspective. As this section was written and rewritten, giving life to it, I felt my practice as a researcher changing.

The first difference was the focus on describing carefully both the concepts of desire and power that exist in an assemblage. In the past I would have neglected some of their aspects in one form or another. Admittedly, it was difficult to reflect on the ‘positive’ side of the assemblage, desire. I am accustomed to reflect on power – coercive, and not think that there is power – puissance: lines of flight, creativity, opportunities that are to be taken to become empowered, to resolve problems. This shift in the understanding of what is happening opens a new comprehension of how things function.

A second great difference from my past practice is that I started to actively look for a Social Idea, a Social Desiring Machine that produces following a Social Diagram of power. This could be understood as searching types, and ur-elements predetermined. This investigation looked at how forces of power capture difference, stratify desires; produce modes of life. It has looked at how this Social Idea pervades all orders of production and functioning. But as my practice continued to evolve, I tried to refer more to the fact that an Idea exists because of the multiplicity of differences that exist. A study is a study of differences – of forces.

Third, this research tried to give a sense to the water life, to describe the singularity of life. It attempted to unveil the involuntary affects of the milieu that shape those who live and produce the place and its expression. By giving sense to these lives and their affects, this thesis aimed to give a better account of the form.

Fourth, the investigation has been attentive to what is happening on the ground. It tried to account for experimentation of the everyday to highlight the singularity of life. This focus on
difference then brought this research back to express the collective and the common. The thesis turned to the perspective of the subject, the micro, to account for the diversity of life. The houses, the villages, the cities or whatever assemblages of interest, take their expression through the multiplicity of lives that are part of it, that connect productively. Assemblage typological analysis opened the research to the stratified desire. But it then led to the study of life, the singular, to the assemblages of lives.

What this thesis takes from these descriptions, is that the city is no more an aggregation of concrete form. As I wrote, there is not the past and the now, there is not the house, the village, the city. There are only a multiplicity of assemblages that cut across what is perceived as architecture scale, a linear time.
CH 05 – CONCLUSIONS IN ARCHITECTURAL ASSEMBLAGES

INTRODUCTION

This short chapter concludes this thesis’s architecture part. First, a recapitulative diagram of the events and the transformations of the built environment that have occurred in the period 1904-2013 is proposed. Second, this chapter comes after the framework of research proposed in the second part of this thesis has been put the work on a site. A general discussion on the method and work of this architecture part is provided.

A DIAGRAMMATIC TIMELINE OF EVENTS AND TRANSFORMATIONS 1904-2013

The following diagrams propose to summarise visually the process of individuation of Brunei’s architecture from 1904 to 2013. The timeline includes information about the social, the economic, and events related to Brunei’s history – forces in action. These are about the neighbourhoods, the local, the collective, the world affairs scale. In parallel is shown the (trans) formation of the built form on the water – the transformation of actuals.
## Transformation of the Village in Time

<table>
<thead>
<tr>
<th>Event</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sultan moves on Land</td>
<td>until 1950s</td>
</tr>
<tr>
<td>Oil Field Discovery</td>
<td>From 1940s to mid-1960s</td>
</tr>
<tr>
<td>English Protectorat</td>
<td>From 1960s to late 1970s</td>
</tr>
<tr>
<td>Land Settlement</td>
<td>From mid 1960s</td>
</tr>
<tr>
<td>Vitamin Ajections</td>
<td>From mid-2000s</td>
</tr>
<tr>
<td>Shift to boat engine</td>
<td></td>
</tr>
<tr>
<td>Change of house size</td>
<td></td>
</tr>
<tr>
<td>Concrete slab adoption</td>
<td></td>
</tr>
<tr>
<td>New house type adoption</td>
<td></td>
</tr>
<tr>
<td>First 5 year dev Plan</td>
<td></td>
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<tr>
<td>First Suburb</td>
<td></td>
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<tr>
<td>New Oil Field discovery</td>
<td></td>
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<tr>
<td>Refusal to enter Malaysia</td>
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<tr>
<td>Malaysia</td>
<td></td>
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<tr>
<td>Kurdistan</td>
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<tr>
<td>Independence</td>
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<tr>
<td>Adoption of House insurance</td>
<td></td>
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<tr>
<td>Oil Crisis</td>
<td></td>
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<tr>
<td>Overall Population</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
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<tr>
<td>Malay population</td>
<td></td>
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<td>Population in KA</td>
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### Figure 88 Diagram’s Summary of Events and forms of architecture

<table>
<thead>
<tr>
<th>Date</th>
<th>Summary</th>
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<tbody>
<tr>
<td>c.1860</td>
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</tr>
<tr>
<td>1955</td>
<td></td>
</tr>
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<td>1967</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
</tbody>
</table>


**REFLECTIONS ON A METHOD**

This study is an experiment in Deleuze’s thinking. This section reflects on this experiment.

In this architecture part, throughout the different chapters, this thesis aimed to understand the forms and the diversity of urban areas as they are standing in the present on the Brunei water. This research did not follow the traditional urban morphological tools. It did not focus on describing the concrete elements composing concrete extensive forms, on creating classifications, on finding generalities. It was not assumed that architecture was simply lived in.

The main focus of this work has been to justify and then situate the research at the level of forces. To talk about architecture is to talk about forces and life. This thesis defined these forces as related to what we tend to think as social, political, economic and ecological. Then the method devised to discuss architecture was to draw maps of the **productive relationships between the forces** that predicated the production and functioning of the forms of content and forms of expression. These relationships are this research’s primary interest.

**Moving away from typological analysis**

As I was working through this architecture part, my method noticeably evolved. The language and focus from the first chapter ‘Assemblages in Southeast Asia and Brunei in history’ to the previous chapter changed. It might seem that in the former chapter I relate to categories and focus on the common, like typological analysis.

But this research aims to move beyond that. It has not been easy to understand that assemblages connect, that they produce, they have a sense. It has not been simple to focus on the ground, life, the singularity of life, on differences — of. It was hard to start with the difference, and then think of integration of differences. That way of researching goes against the finding and/or the direct defining of a priori classification, transcendental elements that constrain everything.

I think it was not easy also, because despite everything that Deleuze and many Deleuze commentators have said, he/they often call upon the following concept: Desiring Machines, Abstract Machines, Ideas, diagrams, functions. As Deleuze/commentators define these, they are effectively thought and talked about as concepts transcendent to the production of the actual. But these relate to transcendental empiricism philosophy. These concepts and reports about these concepts to me resembled categories, typology. Deleuze and Guattari talk about the Socius (Deleuze & Guattari, 1972), Deleuze talks about a diagram that predicates all productions in the social field (Deleuze, 1986). So what he often talks about is not the molecular, the differences, the multiple. This is also a reason it has been a struggle during this research to turn to this molecular thinking. This is why this thesis held for a long time to transcendental general concepts.
House, village as assemblages for architects

This next section discusses an issue this research was confronted with during this study in assemblages. The thesis has defined the house, the village, and also the water city as form-as-part-of-assemblages. These were the three ways this thesis entered the description of the built environment. Two problems follow from this.

First, this seems to be typological analysis again. Second, for some Deleuzian experts, this is not how a study in Deleuze’s assemblages should proceed. Assemblages emerge from studies, from the ground. They cannot be known or defined beforehand. Assemblages cut across the walls of the house and connect to the whole cosmos (Payne, 2012). A study should discover relevant assemblages, one by one, without a preconceived idea where to start (Connolly, 2014a, 2014c, 2016).

The struggle for me is that, as an architect, I start with the built form. I am interested in understanding a particular given urban area that stands in front of me: why does it have this particular form? In the urban area, the house seems to be of importance. Why does that house have that particular form? Then there is the reality that villages exist, and these have a given form, a given territory. I want to explain their form. This is the fundamental question of urban morphology: morphos – the knowledge of the form. Certainly, there are verandas where people meet, there are back door entrances for women, there are guests living in the bedroom. But all these rooms and architectural elements compose a house.

I want to discuss an answer. I talk here about the house, a defined form, in a defined territory. This thesis proposes to define the envelope of the house as the membrane of Deleuze’s thinking. It is the limit of the forest (Deleuze, 1980-81), the limit of the processes that are ‘inside’. And this limit relates to the exterior, where the ‘outside’ and the ‘inside’ communicate (Deleuze, 1986). This is the surface, and there is the depth (Deleuze, 1969). What happens at the surface depends, is the symptom of what happens in the depths. But again, the outside is folded on the inside.

I see the house, I know it exists; it is there in front of me. I understand it has been produced. I see the house as a form-part-of-assemblages, composed of an infinite number of assemblages. All these assemblages connect.

But secondly and importantly, I understand these assemblages as forces that are in productive relationships, power with a certain sense. These forces are, again, what we tend to think as social, economic, political, and ecological nature.

Thirdly, I know these forces are answers to problems, that they are opportunity taken, they reflect the grabbing of forces at hand. These forces in relationships produce form of content (architectures) (Deleuze, 1986) and forms of expressions. To describe the form of architecture-as-part-of-assemblages, is to give a series of expressions. In a sense, the description of the form of architecture, to describe the concreteness of space, is done by
describing the forces at play in the social: space produced by social forces. It is to describe what is happening in the social field. Celebrations are social problems: the necessity for a family to bring all the extended families together in one place in the house. On the water there is no open space. The large living rooms, concrete spaces, are answers to these problems. In these large rooms, the families inside the house assemble with the families outside the house. The land comes in relation with the water. But this is one space of the house, in the envelope there are a series of spaces that are answer to social or living problems. The description of the house I lived in in the previous chapter illustrates that point.

So in assemblage thinking, the more lives are drawn, the more assemblages of forces and what they produce are discovered, the more the house-as-form-part-of-assemblage is given sense: new thinking in typology.

These previous sections were this thesis’s justification for how to look at the houses with assemblage thinking. But there is reflection to be done on the fact that this research also aimed to create assemblage-types. This may seem again to go against assemblage thinking and remain in typological thinking. But this research justifies this typological thinking with Deleuze’s words: there are functions, diagrams – what this research named here as Social Ideas, that predicates the production of actual in the social (Deleuze, 1986). But this is a thinking that begins from the level of forces. I looked at the built environment like a morphologist and architect. As I wrote, when I looked, I observed a sense of similarity in this built environment. Now, this has to be phrased in differential thinking. The sum of differences I sensed, gives the sense of an Idea. When I looked at the built environment, from difference, a sense of an Idea emerged. In Brunei, I felt an assemblage-type for the houses, the village.

So I started by looking at the built environment, I started with the form. But the form is not the only aspect that interests me. The form here orientates me toward something. I then turn to the forces, to life. In a way, the form here is an event that guides my research. I then described as many lives and as many assemblages related to one house as possible: the-form-part-of-assemblages. I then described as many houses and lives as I can. Together, all the differences I drew gave sense to the assemblage-type. This is what I did in the last chapter about the house or the village. I had different stories; together they started to give sense to certain Ideas.

Very importantly this research does not assume these assemblage-types. It does not assume either that they are existing, or that they are existing forever. This thesis has discovered assemblage-types I was not anticipating: the village, or the group of houses in villages. But also, the investigation has shown that the sense of the assemblage-type changes. For example, the commoner’s house sense changed in all the era. But it has been demonstrated that assemblage-type can also disappear. For example the ‘group of houses’ assemblage did not exist from the 1990s onward.
**Assemblage-type and type**

This section reflects on the difference between type and assemblage-type as it is proposed in this research.

Put simply, the type thinking tends to be restricted to the study of form. Typology focuses on a given space, and does not really connect to the diversity of urban areas. Typology also looks at the commonality of things, where differences are not accounted for. Typological thinking is not attuned to the functioning of things, it is restrictive in its interest; it does not account for the singularity of life.

As it is proposed in this research, assemblage-type cuts across what is thought as a dichotomy between form and life. As the example illustrated above inquires, assemblage-type also goes beyond the territory of the house; it cuts across time and space. Assemblage-type connects to life and the functioning of things. There is not the village, the footpath, and the life on/in it. The village and footpath are given sense by accounting to the life that make them functions.

**Assemblages, assemblage-type, and the study of urban areas’ diversity**

Assemblage-type thinking seems to also go beyond past typological thinking in a second manner. Typological analysis thinks of the diversity of urban areas as an aggregation of elements, in different (concrete) scales. There is the house, the village and the city.

But in the Deleuzian framework proposed by this research, the city is considered a heterogeneous system. How to account for it? This thesis takes on Deleuze and Guattari’s calls to start a study of a multiplicity through the middle (Deleuze & Guattari, 1980). There is no one entry point into giving an account of a rhizome. This research proposes that to enter the heterogeneity of the city, determining assemblage-type is one entry point. But also, there is no thinking of aggregation. Assemblages connect transversally through what is thought as scale by architects.

There is one more point to draw in assemblage thinking. The city is thought as an infinite series of assemblages connected transversally. In this thinking, there are no primary and secondary elements (Rossi, 1982), there is no aggregation of elements of different scale (Devillier, 1974a; Lancret, 2008; Moudon, 1997) like traditional morphologist theories. There are just assemblages. Some are related to the assemblage-types, others are connected to them, others cut through them. Assemblage-type is an entry in the heterogeneity of the city and its functioning. But it is not the end of it. The previous chapter has connected to the house assemblage-type, but to describe the functioning of the city, other and more subtle assemblages have been drawn. The relationships between the landscape – urban and ecological, and the functioning of the city have been shown. Assemblages between inhabitants the water taxi and the footpaths have been shown. These show different aspects of the functioning of the city, they happen within territories related to the city.
This thesis has proposed to structure the analysis of Brunei’s water city along great lines of forces: assemblage-type. The house, the group of houses, the village and the city have been defined as assemblage-type. By proposing to enter the study on the built environment through these, this may seem like a traditional typological analysis. But each of these are thought of as a different entry point into the study of the heterogeneity of the city, which might cause confusion for this thesis.¹⁰⁴

But with each description that has been made, this thesis has attempted to cross the traditional lines drawn by typological analysis. With assemblage, this research has attempted to go further than describing the form, focusing on the space of the village or the house, or focusing on commonalities. Assemblage-types are entry to the study of the city.

CONCLUSIONS

The main aim of this chapter was to give final comments on the experiment of the Deleuzian method of study that this thesis has proposed. In the discussion, it was apparent that this proposed method and theoretical framework is noticeably different from IPRAUS and urban morphology.

¹⁰⁴ The conclusion will propose a different perspective on how to enter the study of the diversity of urban areas.
INTRODUCTION

This conclusion has two parts. The first discusses how this thesis offers a different approach to the study of urban and architectural forms than IPRAUS and urban morphology. The second describes this thesis’ findings and proposes how this research could lead to future work.

REFLECTIONS ON A DELEUZIAN PRACTICE OF SPACE STUDY

From introduction to conclusion, and back

This conclusion comes back to the introductory problems. Great findings could be made in urban morphology studies using the existing theoretical and methodological tools. But problems were discovered: the thesis argued that the theoretical background of urban morphology and IPRAUS was only assumed. It was difficult to theoretically frame the questions:

- In relation to the wider field of urban morphology:
  
  How “do we explain the form, process of formation and diversity of urban areas [?]” (Kropf, 1993, 3, emphasis mine)

- In relation to IPRAUS and urban morphology’s main assertion:
  
  How do we understand and theorise the relationship between the social and the architectural in urban morphology?

Resolving this issue of unfounded assertions is the impetus of this research.

This conclusion aims to discuss how the theoretical and experimental findings of this research might open a different approach to discussing and studying architecture. This research has addressed the same problem as urban morphology and IPRAUS, but in a different manner. The aim here is to show how this thesis has provided, or at least started to open up, a different account of the relationship between architecture and the social.

The conclusion unfolds as follows. Firstly, it will be shown how urban morphology and IPRAUS framed the problem of the relationship between architecture and the social, and the resulting challenges that can be found in their approach. The limitations and main points of their thinking and practices will be revisited. Secondly, this conclusion will propose how Deleuzian notions could allow these limitations to be transcended.

The support for this conclusion’s discussion is the urban morphology research question: how do we “explain the form, process of formation and diversity of urban areas [?]” (Kropf, 1993, p. 3). In this sentence, there is an ecology of problems, concepts and presumptions associated with the pre-existing research problem of how to theorise the relationship between
the social and the architectural in urban morphology. This conclusion explores this key sentence. Through this work, it investigates the mains sets of interests determined in the introduction, the list of IPRAUS conceptual tools:

1- For IPRAUS, architecture “reveals the fundamental laws that regulate and organise the social relations of a group” (Lancret, 2008, p. 42). For them there is the assumption that there is a relationship between architecture and the social.

2- The fundamental element of the IPRAUS method of study is typological analysis (Jaupitre & Yong-Hak, 2001).

3- In the IPRAUS method, there is an implicit or implied complex system assumption (Ibid.).

4- IPRAUS conceives and uses the concept of the vernacular to understand form and the change of form (Lancret, 2008).

This list comprises the three fundamental components of urban morphology study: form, resolution, and time.

The aim of this conclusion is to show how this thesis has put forward a different perspective on urban morphology and its conceptual tools. This research proposes that the main tool to open up the discussion with IPRAUS is Deleuze and Guattari’s philosophical thinking.

**Ultimate goal of urban analysis**

This conclusion turns now to urban morphology and the following statement: “the ultimate goal of analysis is to explain the form, process of formation and diversity of urban areas” (Kropf, 1993, p. 3).

“[...] To explain the form [...] of urban areas”

**Inquiry for urban morphology**—what does it mean to explain the form of urban areas? For urban morphologists this involves searching for the meaning of the form. What does the form or concrete space, ‘that is visible in reality’, mean? Their idea is that to explain means to use typology as a tool of study. They ask how concrete things are configured. This search for meaning with typology brings them to a search for the essence of things.

This first set of sub-problems is linked to another framework of thinking. Urban morphologists explicitly argue that space is not considered a background object. They argue that space “reveals the fundamental laws that regulate and organise the social relations of a group” (Lancret, 2008, p. 42) or that space is the “the outcomes of ideas and intentions as they take shape on the ground and mould our cities” (Moudon, 1997). Spatial and social thinking are intended to be thought of together.

One of the tools developed to link the architecture and the social is what IPRAUS defines as the type ‘to live in’. There is the type and the living in it; they want to link both social and spatial research. By naming type as type ‘to live in’, they assert they want to go beyond the division. But they do not seem to be able to resolve this distinction. They realise it is
problematic and want to go beyond this separation. The social and the form cannot be separated. This reflects a recognition of this problem.

_Assemblage shifts_—now this conclusion exposes how this thesis proposes to re-orient this thinking. This is done by using the concepts linked to assemblage thinking in Deleuze’s philosophy: assemblage, affect, sense and the actual. An assemblage is an univocal being, it is both forces—as intensities, a certain power, affects, and the actualisation associated with these forces, the actual, ‘form’. It is the interaction of actual relations that produces not only the certain power, but the sense associated with this power. In Spinozian/Deleuzian thinking, there is a form of content (the interaction of relations that produces power) and a form of expression (sense) expressing a significance associated with this power. An assemblage functions because of the interaction of human and non-human spatial and temporal relations.

The power/affect is produced by these relations: “the assemblage, which is not what is normally understood as form, yet involving various dimensions of what we understand as form and space, and where affects are indiscernible from, yet cut across, what we tend to know as form and space” (Connolly, 2016). Form and space may be better understood as forms-and-spaces-that-produce-affects-and-a-sense-associated-with-it.

Deleuze distinguishes sense from signification, where signification involves a concept linked to an object. To perceive a form is to link it to that which it signifies. Sense is instead an ‘incorporeal transformation’ associated with an assemblage and related to what we understand as form. An incorporeal transformation is ‘attributed to bodies’. The first includes the significations of culture, which tend to cliché. This signifies that in a direct and easy correspondence. The second, comes with assemblages, and draws on all of history and space, and is directed by whatever orientation or problem is involved and the potential associated with this (Connolly, 2016). The second is experimental, can only be felt (Deleuze, 1968c; Deleuze & Guattari, 1980).

Assemblage thinking allows architecture to go beyond urban morphology thinking. So, there is no distinction between form and the social. In the process, the conception of form needs to transform to be more appropriate to what form is or, really what form does.

Assemblages connect to and involve all sorts of things; whatever gets them to function and increases their power, in time and space, and which are always extended in time and space. The relation between the production of a form and the environment is the relation between the relevant assemblages and whatever relations are relevant to them, extended in time and space, environmental, ecological, topographic, geographical etc. So, certain relations of the environment are involved in assemblages associated with what we tend to think of as form. These environmental relations, being part of assemblages-associated-with-form, are involved in what forms do, and expressed in what forms-as-parts-of-assemblages express.
Third, to return to the question of how to “explain the form”. The form, as we tend to know it, is what Deleuze calls the actual; it is the actualisation of forces that are in a given relationship: form-as-part-of-assemblages.

To ‘explain’ the form is to see it as part of life itself, expressing life. To explain form is to identify the assemblage or assemblages associated with it, the various interaction of relations in time and space that make up the assemblage and the affects produced by the assemblage/s, or form-as-part-of-assemblages. And it is “to give expression to that which these assemblages express through these forms-as-part-of-assemblages, the sense of the form-as-part-of-the-relevant assemblages” (Connolly, 2016). In this sense, like the notion of form, the idea of ‘explain’ has to be newly understood.

So, the question is no longer “what is the meaning or the essence of form?” “but what is the sense of the assemblage, the significance associated with what the assemblage is doing, which what we understand as the form participates in?” Certain aspects of the sense are expressed through descriptions of social and ecological relations. The sense is never fully given, it is part of a continual experimentation.

With this Deleuzian framework, the form, the functioning of the form-as-part-of-assemblages is thought, and comes to life. This work brings the form to life or gives expression to the life of the forms, the life-associated-with-what-we-understand-as-form. There is no dichotomy between form and the ‘lived in;’ the form is living, this is the living form. A study starts with the form, ends with the form, but it brings it to life, and form-as-we-know-it is transformed.

Methodology shifts—Like IPRAUS, this thesis proposes that an urban morphology analysis starts with the concreteness of the built form. But this concrete access, this entry point, is the groundwork. It is the access to the functioning of things, the problem they resolve, the outcomes of the opportunities taken and continually new source of opportunity.

With this framework, how can we explain the form of urban areas in Brunei’s water city? As examples, this section looks at the assemblages described in this thesis linked to the lives of the fisherman’s family in the house, and the village described.

Examples of assemblages in the fieldwork—this research has described the use of the pantaran, the platform adjacent to the family house. For fishermen, this platform is a space, which exists to enable their work on the water. Two assemblages can be drawn, the fishermen-go-to-fish, fishermen-work-on-the-pantaran. The pantaran links the life of its inhabitants and the environment, it enables them to live and participate in the economy of the city, fishermen-and-the-city, the inhabitants-connected-to-the-life-of-the-city-through-the-pantaran, where their relationship to the life of the city is expressed through the pantaran.

Another space in their lives is the large living room of their houses. From the late 1960’s, in Brunei, it seems these were produced to enable the desire for a certain culture. This research
showed the many social events this room enables. This room allows a link between the inhabitants, their family and with the wider village; Family-celebrate-birthdays, family-celebrate-weddings. The families assemble for a short period of time with the other families and houses of the village, or families on the land, and house-land relations are facilitated through the lounge-room. Another space linked to the lives of these fishermen is the shop they built in front of their house, opening onto the footpath. The shop and the footpath are in relation. Sensing opportunities to increase revenue, the families opened that shop. They added a space to their living areas. Through the window they connect with other inhabitants of the village; they increase their powers.

Differently from the thesis, these descriptions above bring life to different spaces. The relations that are described cut across space and time. They link a family with the village, with the land, and with the water. These assemblages describe the lives painted as part of the functioning of the city. These spaces described here are part of the city. But one other perspective on these descriptions is that, one at a time, assemblage after assemblage, the territory of the house can be explored. The description of a house is not constrained by four walls. A house appears: pantaran, living room, shop, through a series of descriptions that cross far beyond its concrete territory. The form is part of daily life, expressing life. The series of descriptions, and series of expressions, give sense to this. But also, with each one, the sense changes.

“[...] process of formation [...] of urban areas [...]”

This next section focuses on a second series of sub-problems of the ultimate goal of analysis: understanding the process of the formation of urban areas. For urban morphologists, this series of problems is influenced by structuralist thinking focused on diachronic and synchronic processes (Lancret, 2008; Moudon, 1997). Put simply, synchronic refers to what is happening in a given period of time; diachronic is the evolution in time that leads to that period.

1/ Urban morphology and synchronic study—How do we explain the production of the forms of architecture in a given period of time? Working within typological thinking, IPRAUS took the stance that within a period of time, this society agreed on a way of building (Devillier, 1974a). This agreement is a commonality which is produced within the built fabric of urban areas. What they aim to understand is the ‘remarkable’, as a sample for a wider process (Jaupitre & Yong-Hak, 2001). This is where they identify the concept of type as the primary element of analysis.

In Southeast Asia, traditional forms of architecture were still an important part of the urban fabric and its fabrication and until a few years ago. IPRAUS was preoccupied with vernacular practices. They determined that the vernacular type was the foundation of an urban fabric in the past, and that this directly related to why people create their space the way that they do. The proposed answer is linked to Rossi’s idea of collective memory (Rossi, 1982). A certain
type exists and is reproduced as the product of a shared and accepted knowledge at a time in a culture (Lancret, 2008). All the different houses reproduce this shared agreement, and together they form the bulk of the built fabric of a place.

This framework brings about two problems. The first relates to the assertion that there is shared and accepted knowledge. This theory results from years of research experience. IPRAUS have determined that traditional shared practices existed based on more than sixty years of fieldwork. But this thesis contends that they do not explain their assertions. They do not address the fundamental question of why people create their space the way they do; why people proceed to create that form. The second problem relates to the IPRAUS aim to isolate the remarkable—in the sense of the word ‘what is common’ in the forms of urban areas, but also to understand why certain forms are local and unique to a place (Jaupitre & Yong-Hak, 2001). This thesis found that the IPRAUS work lacks justification for focusing on the remarkable, and why there is the common, the cliché, and the singular.

**Assemblage shifts**—this thesis proposes to shift IPRAUS’s seminal thinking on urban form to Deleuze’s philosophy. It is a philosophy of life, a philosophy of difference. If the aim of life was sameness there would not be creation, there would not be life. In that Deleuzian thinking, what is actual is singular. Each thing, individual, assemblage is unique, has singular power. It is *that* actual, at that place, at that moment in time, in certain particular and always unique conditions with certain power. For this thesis, actual is a form brought to life. Actuals are answers to certain problems, they are result of opportunities taken. Actuals are a result of empowerments for better or worse, and what has been extracted. *They are signs that the most has been made of given circumstances.*

In Brunei, all the pantarans and all the large lounges are different. However, for this research the difference is not the difference in form. Difference is not diversity for Deleuze; difference is power (Deleuze, 1968a). An assemblage study is placed at the level of forces; it aims to give life to each particular form. If morphologists are interested in giving sense to areas of an urban fabric, they must look at the singularity of assemblage, what relationships have been established, and the differences of, differences at the level of forces. The pantarans and lounges are accounted for through the stories of the lives that will give sense to them. The family I lived with use this place for casual parties and birthdays. They also have plants in pots and cages with wild animals such as monkeys and parrots. The fishermen use that space to prepare their fishing nets and baits. My neighbours were repairing the engine of their water taxi. Not one life is the same. What is revealed is the singularity of each life, the powers that are enabled, the opportunities that have been taken.

The question of understanding the process of formation of urban areas—in a given era as this research has defined it, is linked to asking why people produce their spaces the way they do. On one side there is an impression of a general common way of producing space; on the other, actually, all the spaces are different, in form and in life. For example, the question is
why there is a sense of commonality in the houses on the water, but also what generated that house, with that form, with that life. This thesis proposes a set of answers.

First, this research recognises that an investigation in the built form leads to the perception of shared practices, and shared conceptions of space within a culture. But these commonalities are in fact a misrecognition of the power of difference. The feeling of ‘common’ is the feeling of the difference in forces. Put simply, the sum of the perception of differences leads to a misrecognised sense of perception of commonality.

Second, why do subjects produce spaces following a certain way? Why is there a sense of commonality while there is always production of difference? This thesis proposes the following answers. As this research conceptualised, a group of subjects—understood as assemblages, in a given environment, at a certain time, can be considered through an integration of their powers and desires. This leads to the conceptualisation of a social individual with a certain diagram. In that social group, there are powers that cut lines of creativity (Deleuze, 1986). The diagram stirs this social assemblage in a certain direction. Within the group, in certain conditions, a subject—thought of as an assemblage, connects to all sorts of forces and functions following the three passive syntheses of time. A subject is formed by habits, memories, but also immanent creation. Habits and memories mostly are processes that refer to and are formed in connection with these power forces linked to the diagram of the power of a group. They have been contracted, the outside folding into the inside. But when subjects produce, what is always actualised is differences. The three processes are always at play to a different degree. First of all, memories and habits are always replayed actions. That is, the conditions of actualisation are always different. There is always creation and production of difference. A subtle link emerges between what is perceived as common, despite this being a singular actualisation. There is repetition of differences, repetition here of habits and memories that leads to creation of difference that is misrecognised as a production of similarity. But creation always occurs. To this process is also contiguous with the process of pure creation. By thinking of immanent production, Deleuze makes sure that pure creation can always be produced. Pure creation is the taking of line of flight (Deleuze & Guattari, 1980), the production of an Event, and the complete shift of the sense of things (Deleuze, 1969).

This theoretical framework starts to propose answers to the three questions raised about urban morphology. First there is explanation for why people produce their spaces in the way they do; why that they create that form as developed above. Second, there is a new perspective on the question of what is the framework for thinking about the relationship between what is common and what is singular in the urban fabric? This thesis proposes that there is no commonality, there is only the misrecognition of difference for commonality. What this means is that research on the production of form must be attentive to the diagram of forces and to

105 See Part II – chapter 03 of this thesis.
the singular creation. The two processes, the two forces are always at play. Research investigates the powers that exists in the social assemblages. But it should also be attentive to molecular experimentation, or the everyday experimenting with the forces that are available. The research must be open to life. This leads to the third question of how we conceptualise change, a question linked to how to explain the process of formation of urban areas. Focusing the research on the attention to the power of difference is to be attentive to continual shift of forces that exists. It is to be open to the possibility of finding new forces that have the power to change the sense of things. How therefore to escape the powers at play.

_Assemblages-types and Types_-this thesis is concerned with accounting for the perceived similarity in the production of the built environment. This conclusion draws attention to the limits of using the typological to study the process of the formation of an urban area in an era. For urban morphologists, a type is a sort of ur-model, imposed and transcendent to all social productions. The type is predetermined category of analysis. It is reductive in its concern in space and time. It does not account for the functioning of things, the connectedness of life. The thesis proposed the concept of assemblage-type. The theoretical framework developed herein is the support of the proposal. This research conceptualised that social Ideas exist, and they are diagrams that steer the production of space. But there is no social imposition, there is only experimentation. The research of assemblage-types is a two-sided work. On one side, it reveals the powers that exist in a considered social group. But on the other side, it is the attentive to the research of the experimentations on the ground. Assemblage-types reveal that there are only differences in the urban areas.

1. They reveal the clichés but also the spaces/moments of creation.
2. Assemblage-types are discovered and not predetermined categories. They emerged for the discovery of experimentation on the ground.
3. Assemblages-types are not ‘stable’ entities, they are always emerging.
4. *Assemblage-types are only an entry* in the heterogeneity and functioning of the urban area concerned, as discussed in the previous chapter.

_Shifts in the Fieldwork_-In Brunei, at first, working with an urban morphology framework, this research proposed that in the 2000’s, there was only one type of house. The modern vernacular type was defined: it was a modern house type, which was an evolution of a vernacular type. But then this research experimented with Deleuze’s framework. A diversity in the forms and the lives in the houses appeared. This thesis described the ‘long house’, the ‘yellow house’, the ‘fisherman’s house’ etc... The descriptions accounted for large living rooms in each of them but also that celebrations were happening. Each celebration is different, linking different families, different subjects to different places, different times, and different lives. Then this research also discovered that some lives have built these houses, but others have appropriated them. This brought about two different senses of the houses and their practices. But then, the investigation noticed that in the three years of this research, many
houses became appropriated by immigrants. They kept the original forms, but the lives in them became foreign to the culture that had produced them. This conclusion argues these inquiries on the ground described here give life to three different assemblage-types. This study started with the form, but the study of lives gave sense to it.

Assemblages and the Vernacular, the traditional—In the IPRAUS process of formation’s thinking, in Southeast Asia, there exists a kind of vernacular type that is the support of the formation of modern types (Lancret, 2008).

With assemblages thinking and the concept of sense, this thesis asks what is vernacular. When is vernacular? When is the traditional? In Brunei, in the past, there were the practices of building one’s home with the materials at hand. The people were assembling dwellings using the ecology of the place. But if research, instead of focusing solely on the form, turns to the lives in Brunei in history, what kind of thinking emerges? As this thesis wrote, in the first century A.D. the inhabitants believed in local gods and superstitions. Then later, came Indic beliefs that displaced the sense of the inhabitants’ lives. Then Islam was adopted. This brought a different sense of relation with others, with a certain god. With it also emerged a new sense of space. Another perspective on the study of lives in Brunei is the account of the ebb and flow of the country. In the fifteenth century subjects were participating in a society that controlled the seas and lands for thousands miles around. One can assume there existed the passive sensation of pride, power, and wealth. But by the eighteenth and nineteenth centuries the Sultanate is in ruins. The country is poverty-stricken and ruled by a foreign culture through foreign rules. In the villages, the sense of life is certainly different in these two periods of time. The sense of the spaces that are created and lived in are different. All these are stories of the past and tradition that is diverse and ever changing: so when does the term vernacular or traditional apply?

Urban morphology and diachronic studies—This is the second series of questions linked to the question of understanding “[...] the process of formation of urban area [...]”. One of urban morphology’s aims is to understand how change occurs between periods of time (Levy, 2005). But the theoretical framework of this change is only assumed. Put simply, changes in the society bring along changes in the urban fabric (Whitehand, 1987). This is one of the six problems in the IPRAUS framework: what is the theoretical framework to conceptualise change in the form of urban areas?

Assemblages and change—How does change impact assemblages? This conclusion proposes the following framework. Assemblages and forces always connect. For Deleuze, assemblages produced in the social strata are produced in relation to the organic and material strata (Deleuze & Guattari, 1980). So, in social assemblages, there are forces of power and desire, linked to what is perceived as the material and organic forces. All is always connected and in
relationship. *In a way, all these forces bring change, at the level of forces and at the level of the actual.* First, power forces capture the forces of difference; by doing so, they change themselves. Second, desire forces always look to new connections, sensing the world for a new means of empowerment. When they connect they bring change. Third, what is perceived as material and organic forces are always in movement and the earth moves (Cache, 1995). Social assemblages are linked to certain milieus (Deleuze & Guattari, 1980). Milieus change, the ecology has its own rhythm. Social assemblages are relationships that happen in relation to an infinite series of forces (Williams, 2003, p. 13). Deleuze’s philosophy frames the thinking of a world understood as chaosmos. Always in movement and transforming.

There seem to be two sorts of changes for Deleuze. On one side, there is the imperceptible change, simmering underneath the surface, the minute perceptions (Deleuze, 1988c). On the other side, but contiguous, there is the Event, the ‘radical’ change in intensities and the coming of a new plateau of forces. This thesis proposed that for social thinking, there is the coming of a new era. Changes occur in response to shifts of sense (events) associated with shifts in relations in the world. But importantly in Deleuze’s thinking, change is immanent. Only creation occurs. There is no evolution. Change occurs by itself, within itself and for itself (Deleuze, 1968c).

Fieldwork—this thesis presented an Event of changes in 1973. At that date, the Brunei-petrol assemblages was modified. The price of gas on the world market arose dramatically offering new economic opportunities for the country and its inhabitants. On the ground, the inhabitants’ lives changed, and new forms of living appeared. The process of change cannot be explained for certain—this was an immanent process. But this research proposes here a succinct interpretation. Before their rise in income, inhabitants had certain past practices that they contracted passively through their everyday lives. But with new means of living, new conditions of life, they experimented with the new forces at hand, in the context of their past experiences. They sensed the world around: new technologies—concrete and electricity, new possibilities—images, desires of forms from the West, and modern Asia. When they produced their spaces, new assemblages emerged from experimentation and new forms of living appeared. They called upon habits and memory, and they used new models they passively contracted.

Change comes also from power forces. The Sultan has the power to influence the whole urban form. This thesis has shown that laws impeded the development urban renewal by the inhabitants. Fires crippled the urban areas, footpaths crumbled, houses became derelict. The whole sense of the place shifted.

The change also can come from shifts in material and organic conditions. Brunei’s oil reserves are close to an end. This thesis has described how this has led the Sultan to take certain actions to affirm his power on the citizens of Brunei, the Malay and the non-Malay.
Among the actions, the manipulation of his religious and political power has brought new forms of architecture, new forms of clothing, and new senses of space.

*Assemblages vs. typologies.* To return to the critique of typological thinking, before using Deleuze’s philosophical thinking this research postulated that there was a 1970’s type of house in Brunei. That type was an evolution of a traditional type that was uncovered in the period 1904. This follows IPRAUS thinking that there is a transcendent model, the outcome of a traditional and pure practice, of a pristine culture. That model is the support of transformation observed in Asia.

This thesis proposes immanent thinking. Habit, memory, pure creation; the three passive syntheses of time, are the processes underlying assemblages’ production and experimentation. In that thinking, the past is the support for the present, the past is contiguous with the present. But creation is not controlled or evolutionary. For example, the thesis has described that sense of the assemblages, the forms-part-of-assemblages of the 1970’s houses are not an evolution of the forms-part-of-assemblages of 1904’s houses. In between the different era, there was only immanent creation. Inhabitants experimented with the forces at hand. But also, to give sense to the forms-part-of-assemblages of the 1970’s houses, it was also necessary to give sense to assemblages that cut across time, to 1904 or to an earlier time. The past is contiguous with the present.

*Assemblages vs. synchronic and diachronic*—this thesis proposes that with assemblages thinking there is no dichotomy between diachronic and synchronic studies. Certainly, this research has been organised and has advocated for the existence of different era, different assemblages-types in time. But this presentation reflects a genealogical method. In that thinking, there is not the past and the present. But the past gives sense to the present. The past is contiguous with the present. The (future) present that is always about to come, cannot be predicted. The actual is the actualisation of successive metastable states. But at the level of forces, there is no evolution, there is no linearity in time. There is heterogeneity and multiplicity. Assemblages cut across time and space.

“[…] Diversity of urban areas […]”

*Urban morphology*—the next sub-series of problems is linked to the problem of conceptualising in the field of urban morphology: why there is a diversity of urban areas; what they are; and how to think about these diversities working and existing together. This thesis poses a series of four sub problems and solutions.

The first series of sub-problems that this research looks at is how to account for, in the diversity of urban areas, those built forms that have been produced in the past and are still standing in the present. Urban morphology will just account for them as forms built in the
past that are there in the present. But in Deleuze’s philosophical thinking, as this research has shown, these architectures have been produced by certain conditions and forces, responding to the sense of certain events. Thus, they had a certain sense at the time. But these are now inhabited differently. There is a new sense in the functioning of things. Assemblages thinking will give a sense to these architectures, where the past and present work together.

This thesis has described such examples in Brunei. In the built fabric of the present there are pantaran, lounges, verandas, villages, and footpaths that were built in the 1970’s. As this research posed, these carried the sense of a certain diagram of the time: a sense of euphoria, a sense of we-are-back, a sense of new great opportunities to grab. But as they are standing on the water in the 2010’s, many of these spaces are now inhabited and lived in by immigrants, poor people, and displaced people. This reflects new opportunities that have arisen for immigrants, but also from a different perspective that a certain power lurks above the water city with no good intent.

The second series of sub-problems in the diversity of urban areas relates to the question: how do we account for the fact that in the different urban areas there is a commonness in forms but also that each element of that commonness in form is different?

This was already touched upon. To briefly revisit the matter, IPRAUS looks at the remarkable as key examples of the functioning of a wider system. They use typological analysis to define these. But they are also interested in what are the local creations in a particular place. The problem this research posed is that they provide no explanation of how these two perspectives work in their theoretical framework. This thesis proposes an answer. With assemblages, there are only remarkable productions, with the sense of remarkable meaning singular. In the urban area, there are only singular assemblages. Assemblages produce only differences. On one side, in assemblages, the difference relates to a certain diagram being actualised. Difference is actualised but can be misrecognised as commonness or cliché. One the other hand, assemblages experiment with all the forces at hand and actualise difference and creation. The yellow house is different in both form and in life from the fisherman’s house. Siraja Muda village is different in form and life from the Luran Sikuna village. Similarly the trip from the in-laws of the extended family of the yellow house to this house for a birthday is different from the trip of the in-laws of the extended family of the fishermen’s house. In assemblages, there are only differences (in the force); and to ‘explain’ the diversity of forms in the urban area is to see them as part of life itself, expressing life.

The third and fourth series of problems relates to complexity thinking and what are the ways to think of the scales of architecture working together. The above section just described how IPRAUS asserts that the form of the city relates to complex thinking. But they also look for the remarkable to understand the whole system. They proposed that this whole system is an aggregation of a series of defined typological categories that then are just aggregations from
one scale to the next. The diversity of urban areas are just aggregations and juxtapositions of different forms, at different scales.

Assemblage thinking offers a different take. Assemblages know no scale. Assemblages connect to whatever is at hand. Assemblages cross what architects think as scale. The thesis gave multiple examples of such assemblages. The lives that are happening in the large living room I lived in connect the living room to the nearby spaces that are lived by the extended family. There, children are looked after and play and meals are taken together. When wedding celebration occurs, that living room connects to the wider villages and its families, and to the mainland with the extended family and work colleagues. In another visited spaces, brass workers used the pantaran for their work. That space, through its life, connects the lives of the inhabitants to foreign countries and foreign cultures. The products they created there are sold overseas. As the previous chapter discussed, the city and the diversity of urban areas are thought of as an infinite series of assemblages connected transversally. There are just assemblages. Some of them are related to the assemblage-types that this thesis proposed, other are connected to them, others cut through them. The assemblage-type is an entry to the heterogeneity of the city and its functioning. And to ‘explain’ the diversity of forms in the urban areas or the city is to see them as part of life itself, expressing life.

Deleuze writes that the aim of his philosophical system is to provide the thinking for an heterogenetic system (Deleuze, 2003c). This thesis has explored that system and attempted to put it into practice.

**The relationship between the social and the architectural**

The above discussion looked at a series of problems raised by questioning the fundamental goals of urban morphology. It used Deleuze’s philosophy and concrete examples drawn from this research on Brunei water village. A dialogue has been open with the theoretical framework of IPRAUS and urban morphology.

It is apparent that with Deleuze’s philosophy it is possible to think about the relationship between the social and the architectural. As this conclusion poses: with assemblage thinking there is no dichotomy between form and the ‘lived in’. Assemblage brings the form to life, or gives expression to the life of the forms or the life-associated-with-what-we-understand-as-form.

This research recognises that with the existing theoretical framework in urban morphology useful findings can be produced. Urban morphologists have tackled the problem of change, the notion of a social, complex system and a common singular, relation environment. But this research argues that with Deleuze, the analysis produced is done in a more powerful way, or opens up the discussion in a stronger way.
THESIS FINDINGS AND FUTURE RESEARCH

This section summarises the findings of this thesis. Two types of findings are presented in the following paragraphs. The first relates to the aim of this thesis, the dialogue with the IPRAUS and urban morphology theoretical framework. As they have been discussed above, only a list is proposed. The second type of findings relate to other areas of knowledge. As the goal of this thesis is not to reform these other fields of academia, what is presented in this section is not a discussion. Rather, it is a proposal of what the philosophical and architectural experiment done in this thesis created and could relate to these. This is a proposal to open possible future research and experiments.

Findings in urban morphology / IPRAUS

With Deleuzian theories, and notably the concept of assemblage, the above discussion about how to reform studies in urban morphology has brought findings to the following questions:

- **How do we think typological analysis differently?** The thesis proposed the concept of assemblage-type. That concept is just an entry to architectural studies.

- **How do we think about change?** This research proposed the concept of immanence to give sense to creation in architecture. It has also used the concept of forces always connecting and looking for opportunities.

- **How do we go beyond structuralist thinking of synchronic and diachronic studies?** With the concept of assemblages and forces, the thesis propose to understand that study in architecture is transversal, to time and space.

- **Why people create their space the way they do?** This thesis used the concept of immanence, and subject as assemblages that are part of assemblages.

- **How do we understand how people build within a particular ecological environment?** The research refers to the concept of assemblages as forces that connects to all sorts of forces.

- **How do we go beyond the architectural thinking of space as an aggregation of built form at different scale?** This investigation referred to the concept of architecture-part-of-assemblage, where assemblages connect transversally to other assemblages in time and space.

- **How do we think the vernacular principle differently?** This thesis implies the use of the concept of assemblages that connect transversally to other assemblages in time and space.

- **How do we think the link between architecture and the social in urban morphology studies?** The thesis articulated the concept of architecture-part-of-assemblage, where to ‘talk about architecture’ is to give sense to it. To give sense is to give a series of expression that relates to the social and ecological field. Sense comes with this power and is an ‘incorporeal transformation’ associated with an assemblage.
What are a different theoretical framework and a methodology to study the form, process of formation, and diversity of urban area? This is similar as the above proposition.

**Findings in other fields and future research proposal**

The first sets of findings with other field relates to the wider field of architecture. In its work on architecture, this thesis seems to have certainly participated in the debate on the definition of what is ‘architecture’. As stated, at the beginning of the thesis, architecture was considered as solid bounded space, a passive container. IPRAUS ‘instinctively’ changed that definition adding the need to consider the life in it. But Grosz called upon experiment to think and study space differently as dynamic, sensual and duration following Deleuze and Guattari’s exploration. The two philosophers defined architecture as the art of framing the chaos of forces where bodies are constituted and live in. The above discussion about how to consider the form-as-part-of-assemblages places this thesis within this experimental framework. There are two findings here. First, with this definition of form-as-part-of-assemblages, form-as-part-of-life, architecture cannot be disconnected from life, the social life, but also from the organic and material realm. Architecture is dynamic, changing, emotive and affective, affected and affecting. The second finding that the thesis has actually attempted is to describe architecture within this ontology. This was a concrete work, an experiment with Deleuze on something different from what Deleuze work touched upon. This is new. This thesis went further than just theory. Further research would be necessary to discuss what this thesis could bring to the definition of what is architecture.

The second set of findings of this thesis relate to works that are done relating Deleuze and the social field. In the introduction, this research discussed a series of works that have been done by researchers in the fields related to the social, politics, and power (Fuglsang and Sorensen, 2006; Buchanan and Thorburn, 2008; Coleman and Ringrose, 2013). The findings of this thesis are as follows. Firstly, the literature discusses how Deleuze only worked on the subject and the state (Fuglsang and Sorensen, 2006; DeLanda, 2006). This thesis has experimented beyond these two ‘social scales’ and proposed a practical method to talk and describe the social. Secondly, this research has experimented to describe the social forces that existed and composed the social field, thus participating in the experiment of using Deleuze to talk about power and politics. One of the findings of this investigation was that this thesis went beyond the work that existed in the field with the concept of desire to analyse a site. This thesis has proposed going beyond the thinking that there are forces that act upon the subject, power upon subject and bodies. The point of view described was that subject, as assemblages, always look for opportunities. The aim was to show ‘action’ beyond submission. This has helped talk about change, or why people do what they do. This concept of opportunities is also a finding. It has been elaborated when the thesis started to experiment with describing the site. Like the previous set of findings, these could open more discussion with the fields of social, politics, and power explored in the introduction.
The final set of findings relate to studies in the urban and space field. In effect, this thesis has developed the beginning of a new ontology and epistemology for space studies. One finding is the establishment of the many elements of the ground of Deleuze’s philosophy, notably the assemblage concepts. With this, further discussion with ‘assemblage theorists’ presented in the introduction (Farias and Bender, 2011, McFarlane, 2011b, McFarlane, 2011d, McFarlane, 2011c) could be done in the future. By re-working Deleuze ‘from the beginning’ and what Deleuze writes about the social and political, future discussion with the work of DeLanda (DeLanda, 1997, DeLanda 2006) could be made. Third, with the experimentation of this ontology, elements of a new epistemology for urban and critical urban studies have been found. Further discussion on how the work done in this thesis can bring new knowledge to these fields could be done (Brenner, Madden et al., 2011). Finally, the proposed ontology brings a dynamic and complex thinking of the relation between subject, bodies, and ecological forces. Future research with work on that are concerned with these field can be done (Rawes, 2013).


PIRES, T. (1515) *Portuguese Relacion*.


