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*A political ecology of urbanization*

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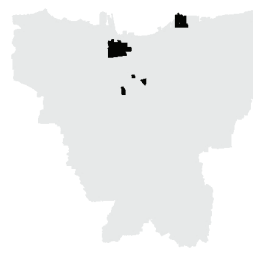
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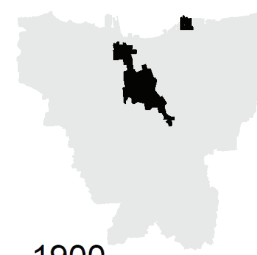
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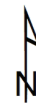
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1965

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Kilometers

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# Floods in (Post-) New Order Jakarta

## A Political Ecology of Urbanization

Bosman Batubara

# **Floods in (post-) New Order Jakarta**

## **A political ecology of urbanization**

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# Floods in (post-) New Order Jakarta

A political ecology of urbanization

ACADEMISCHPROEFSCHRIFT

ter verkrijging van de graad van doctor

aan de Universiteit van Amsterdam

op gezag van de Rector Magnificus

prof. dr. ir. K.I.J. Maex

ten overstaan van een door het College voor Promoties ingestelde commissie,

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To life



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If in whatsoever ways this work of mine, as well as me as a person, are not satisfying for whoever, it has nothing to do with all of those abovementioned people, here I am asking for forgiveness.



# SUMMARY

The capital city province of Indonesia, Jakarta, lies in an estuarine area with 13 rivers flowing from the southern mountains across the city into the sea. This geographical location means that part of the city has always been covered with water, as either rivers flood their banks and cover settled areas of the city, or tidal rhythms bring water back up from the sea through the rivers into the city. Combined with the continuous lowering of the city through land subsidence, this means the city is extremely vulnerable to floods.

This thesis aims to inform critical thinking of and acting on flood events and flood infrastructure development in Jakarta, to call attention to how they are deeply political. I set out to explain how both the increase in the frequency of flood events in Jakarta since the 1960s and infrastructural responses to it are intimately related to the ways in which society and the economy were organized and governed – since the New Order developmentalist regime. To do this, I articulate how flood events and flood infrastructures are part of a particular process of urbanization. Specifically, I trace how the occurrence of flooding and the development of flood infrastructure in contemporary Jakarta are partly the result of, and in turn help to create a particular trajectory of (post-) New Order regime (1965-1998 and 1998-now) urbanization. I document how this urbanization has, and continues to, proceed unevenly: benefiting some people and spaces of the city and non-city by sacrificing others.

I develop a ‘political ecology of urbanization’ (PEU) explanatory framework and mobilize an ‘ecologized dialectical method’. The latter is useful both to liberate my life-forms (spontaneity, creativity, imagination) from the cage of my own works/findings and, together with the former, to answer my overall research question: *How are flood events and interventions related to uneven urbanization of (post-) New Order Jakarta?* The two sub-questions I set out to answer are: (1) *How are flood events produced by and productive of uneven urbanization in Jakarta and beyond;* and (2) *How are infrastructural interventions for managing floods reproducing unevenness under the (post-) New Order?*

PEU helps to explain how Jakarta’s flooding involves beyond-the-city uneven processes of upland to lowland water flows, of city’s population density explosion related to rural-to-urban migration triggered by rural land dispossession, and of materials extraction in the non-city to develop flood infrastructures of the city. I refer to these more-than-city reconfigurations as sociospatial moment. PEU helps to explain how Jakarta’s flooding is intimately interrelated with the depletion of groundwater and land subsidence, provoked by uneven societal or human actions. I refer to these more-than-human transformations as socionatural moment. Therefore, PEU theoretically explores and makes sense Jakarta’s urbanization as simultaneously comprising a sociospatial and socionatural moment,

without losing sight of the moment of unevenness. With the help of PEU, this thesis repoliticizes, and opens possibilities on how to think through and confront, the uneven urbanization of (post-) New Order regime in its relation to the production of Jakarta's flood events and flood infrastructures development involving human and nonhuman in the city and beyond, above and below ground.

# SAMENVATTING

Yves Van Leynseele translated summary into samenvatting.

## **Overstromingen in (post-) Suharto-regime Jakarta: Een politiek-ecologische analyse van urbanisatie**

De hoofdstad van Indonesië, Jakarta, ligt in een estuariene gebied met 13 rivieren die stromen vanuit de zuidelijke bergen naar de stad. Door deze ligging bevinden grote delen van de stad zich onderwater als gevolg van overstromingen, eb en tij bewegingen en landverzakkingen.

Dit proefschrift ontwikkelt een kritische benadering om overstromingen en gerelateerde infrastructurele interventies in Jakarta te onderzoeken en collectieve actie tegen de negatieve effecten ervan te initiëren. Het analyseert de wijze waarop de toename van overstromingen sinds de jaren 1960 tezamen met de infrastructurele interventies om deze tegen te gaan, zich verhouden tot de organisatie van de maatschappij en de economie vanaf de start van het Suharto-regime. Het illustreert hoe overstromingen en overstromings-infrastructureel deel uitmaken van een proces van urbanisatie. Dit proces is zichtbaar in hedendaags Jakarta, en is zowel gevormd door als vormend geweest voor de specifieke urbanisatie dat zich ontvouwde in de periodes van 1965 tot 1998 en 1998 tot nu. Een gedetailleerde analyse van deze urbanisatie toont aan hoe het ongelijkheid produceert: bepaalde bevolkingsgroepen en plekken in stad en platteland worden bevoorrecht door anderen op te offeren.

In theoretische zin, bouwt het proefschrift voort en ontwikkelt een politieke ecologie van urbanisatie (PEU) met gebruik van een zogenaamde ecologisch-dialectische methodologie. Deze theoretische en methodologische insteek maakten het voor de auteur mogelijk persoonlijke levensfuncties (spontaniteit, creativiteit en verbeelding) te kunnen bevrijden van zelfopgelegde kaders, ten einde de volgende hoofdvraag te beantwoorden: Hoe verhouden overstromingen en gerelateerde interventies zich tot de ongelijkmatige urbanisatie in het (post) Suharto tijdperk? Daarbij werden de volgende sub-vragen beantwoord: (1) Op welke wijze worden overstromingen geproduceerd door en/of resulteren ze uit ongelijkmatige processen van urbanisatie?; en (2) Op welke wijze reproduceren infrastructurele overstromings-interventies ongelijkmatige processen van urbanisatie?

De toepassing van PEU laat zien hoe de ongelijkheid in Jakarta een verbinding tussen stad en platteland impliceert door middel van laagland-hoogland rivier stromen, stedelijke bevolkingsexplosie als gevolg van rurale landonteigening en het aanwenden van (natuurlijke) hulpbronnen uit rurale gebieden voor stedelijke overstromings-infrastructureel. Deze ‘voorbij-de-stad’ (‘more-than-city’) configuraties worden in dit proefschrift gedefinieerd als sociaalruimtelijk moment. Een tweede relationeel aspect dat door de PEU lens bekeken werd is het verband tussen overstromingen enerzijds en

uitputting van grondwater en bodemdaling anderzijds. Deze laatste ‘voorbij-de-stad’ transformatie wordt gedefinieerd als sociaalnatuurlijk moment. De urbanisatie in Jakarta ontvouwt zich dusdanig als een simultaan sociaalruimtelijk- en sociaalnatuurlijk moment. PEU laat dusdanig zien hoe natuurlijke en menselijke processen verstrengeld zijn, boven en ondergronds, en her-politiseert de ongelijke stedelijke urbanisatie op een originele en confronterende wijze.



# CONTENTS

<b>Acknowledgments</b> .....	<b>vii</b>
<b>Summary</b> .....	<b>xi</b>
<b>Samenvatting</b> .....	<b>xiii</b>
<b>Contents</b> .....	<b>xv</b>
<b>1 Questioning floods in Jakarta's uneven urbanization</b> .....	<b>1</b>
1.1 What is your solution to flooding?.....	1
1.1.1 Flood-society interactions .....	2
1.1.2 Types of floods .....	3
1.1.3 Managing floods .....	3
1.1.4 Floods are political .....	4
1.2 Floods and urbanization in Jakarta .....	7
1.3 New Order: political economic context of Jakarta's urbanization and its unevenness.....	10
1.4 How have the Jakarta's floods been studied? .....	13
1.5 Main research questions.....	14
1.6 Existential and personal underground question .....	15
1.7 Organization of this thesis .....	19
<b>2 Explanatory framework and method</b> .....	<b>23</b>
2.1 Explanatory framework: political ecology of urbanization .....	23
2.1.1 How to make sense of urbanization as consisting of sociospatial and socionatural moments that produce unevenness? .....	23
2.1.2 Moment of unevenness.....	26
2.1.3 Sociospatial moment .....	30
2.1.4 Society-nature moment.....	32
2.1.5 Dialectics of uneven and situated more-than-human and more-than-city .....	36
2.2 Ecologized dialectical method .....	37
<b>3 Extended agrarian question in concessionary capitalism: Jakarta's <i>Kaum Miskin Kota</i></b> .....	<b>45</b>
3.1 Explosion of urbanization theory and openings to recalibrate agrarian question .....	46
3.2 Theoretical conversation: concessionary capitalism for agrarian question of land and labour .....	48
3.3 Agrarian question of land: large scale concessions through primitive accumulation.....	51

3.4	Agrarian question of labour: rural-to-urban migration .....	55
3.5	Extended agrarian question: the explosion and eviction of <i>KMK</i> .....	56
3.6	Political project: opens possibilities for alliance-building.....	58
<b>4</b>	<b>Urbanization in (post-) New Order Indonesia: connecting unevenness in the city with that in the countryside .....</b>	<b>61</b>
4.1	Connecting unevenness in the city with that in the country .....	62
4.2	Connecting the city with the countryside: insights from urbanization studies and critical agrarian studies .....	64
4.3	Methodology: reconstructing and tracing urban marginalization to the countryside.....	67
4.4	Sociospatial reconfigurations under/through New Order .....	69
4.5	Socionatural transformations under/through New Order.....	72
4.6	Connecting country to city: sociospatial and socionatural differentiation.....	74
4.7	Conclusion: connecting rural and urban struggles.....	76
<b>5</b>	<b>Politicising land subsidence in Jakarta: how land subsidence is the outcome of uneven sociospatial and socionatural processes of capitalist urbanization.....</b>	<b>79</b>
5.1	The sinking city: politicising Jakarta's land subsidence.....	80
5.2	Methodology: operationalizing socionatures.....	84
5.3	Weight of the built environment: concentrated capitalist urbanization .....	87
5.4	Extraction of groundwater: extended capitalist urbanization .....	89
5.5	Conclusion/discussion: re-imagining a more sustainable and just .....	93
<b>6</b>	<b>Uneven urbanisation: connecting flows of water to flows of labour and capital through Jakarta's flood infrastructure .....</b>	<b>95</b>
6.1	Preventing whose city from flooding?.....	96
6.2	Methodology .....	98
6.3	Dialogue between uneven development and the political ecology of urbanisation 100	
6.4	Uneven urbanisation: the production of flood events and the development of flood infrastructures.....	103
6.4.1	The production of flood events: New Order urbanisation and flooding.	103
6.4.2	The development of flood infrastructure: CRN to reduce river flooding	105
6.4.3	The development of flood infrastructure: NCICD to reduce coastal flooding 107	
6.5	Conclusion: emancipatory promise of uneven urbanisation.....	111
<b>7</b>	<b>Collective actions.....</b>	<b>115</b>
	<b>References .....</b>	<b>123</b>
	<b>Annexes.....</b>	<b>155</b>
	<b>List of Tables.....</b>	<b>175</b>

<b>List of Figures .....</b>	<b>177</b>
<b>About the author.....</b>	<b>179</b>
<b>Journals publications .....</b>	<b>181</b>
<b>Sense Certificate .....</b>	<b>182</b>