



MONASH University

***Reinventing traditional games: A new materialist account towards
performative understanding of children's games***

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A thesis submitted for the degree of *Doctor of Philosophy* at
Monash University in 2019
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Abstract

Situated in the context of education for young children in Indonesia, this study explored how the reinvention of traditional games informs educational practices. Children's traditional games are commonly understood as an important part of a culture; such games have usually been established for a long period of time and passed down over generations. Fascinated by an encounter with the materials that supported games from my childhood, I was inspired to explore traditional games from the perspective of children, teachers and parents in a Javanese school. I wanted to know how traditional games can be explained and conceptualised from a new materialist perspective through a performative understanding of a new way of thinking about these games.

Conducted as a qualitative case study, the research was carried out in a multi-age classroom of twenty children aged six to seven years old in a primary school in Yogyakarta. Data were obtained from new narratives about traditional games. Through a diffractive analysis, the narratives meet stories from elsewhere and are stirred up using new materialist conceptual tools to illuminate different matter, materials and organisms in the games and to explore the way in which they mutually act and affect each other. This analysis created space for creative and innovative thinking for understanding children's traditional games. The findings of this study show that children's traditional games can be considered to be an aspect of intra-active pedagogy. That is, a pedagogy mutually constituted by different elements, particularly space, bodies, movements and things. The discussion brings forward the materiality of space as a performative agent in the games that continuously intra-acts with other elements. Similarly, through an ongoing intra-activity, different bodies and forces join in continuous movements in the games. These bodies are not only human but are also the non-human and more-than-human elements usually taken for granted and overlooked as agents in their own right. Different encounters in the games demonstrate the vitality and force of things that co-exist, act upon and share the world with other entities.

A key concept of this study is the notion of *pocung* as a way of understanding traditional games. This notion illustrates a complex learning process in the games and is inspired by the Javanese philosophy of *laku* combined with the new materialist concept of *intra-active pedagogy*. The pedagogical implications of this study can inform educators to be more aware of the material world and its contribution to the learning process. This awareness has an ethical implication for educational practices where playing traditional games becomes a space for different elements to engage in respectful relationships and to share the world in an equitable way.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signature:



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The plan for this research was approved by the Monash University Human Research Ethics Committee (Reference: CF15/3103 – 2015001321)

Dedication

I dedicate this thesis to my children, Ata and Awa
and my husband Annur

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Glossary of Javanese and Indonesian terms

among: to take care of or to engage in

among system: an educational approach with main principle of “serving by guidance”

anak: child

angkara: anger; greedy; selfish acts

bangku: short-legged bench or table; low bench used as a seat

bangsal: a large assembly hall

bangsal agung: a part of *keraton* or Sultan palace for a big meeting

bapak: father

batik: a technique of wax-resist dyeing applied to whole cloth

bawang kothong: an apprentice in a game

bekelan: jacks or knucklebones

beringin: banyan tree

betengan: a tag game

boso: language

boso Jowo: Javanese language

budaya: culture; civilization

buk: the home base in hide-and-seek game

bulik: aunt; little sister of mother or father

conglak: mancala game

cublak: a small container

cublak-cublak suweng: the game of “hunt the earrings”

dadi: to be *it*; to become

dakon: mancala game

debog: banana stem

dolanan: children’s games

dhelik or *ndhelik*: to hide

dhelikan: hide-and-seek game

dur: bad; evil

enem: six

engkleng: hopscotch

gajih: fat

gambar: picture; cards game

gambar umbul: a tossing game; tossing cards
gamelan: Javanese classical musical instruments
gangsing: spinning tops
gapura: gate; gateway; portal
gatheng: a game of resembling jacks, played with pebbles
gethok: pretending
giri: mountain or hill
gobag sodor: a catching game
hompimpa: a way to draw a winner
ibu: mother
ilmu or *ngelmu*: knowledge
indrya: the senses
jaga: to guard; watch over
jaran: horse
jaranan: a game of pretending horse
jamur: mushroom
jamuran: a circle and singing game
jélungan or *jépungan* or *jéthungan*: hide-and-seek game
kampung: Javanese traditional village
kancing: button
karawitan: Javanese orchestra
kas: treasure; money supply
kecik: sapodilla seeds; counts in *dakon* game
keluwak or *kluwak* or *kluwek*: mature seeds of the pocung tree
kembang: flower
kendhil borot: leaky-pitcher
keraton or *kraton*: the palace; the residence of Javanese king
keris: Javanese traditional weapon
kethek menek: climbing-monkey
ketupat: pocket in rhombus shape
krama inggil: the highest level of respect in the Javanese language
kriya: craft
kuda: horse
kulkas: refrigerator

kuping: ear
kursi: chair
laku: the act of moving; to walk; forward motion; behavior
lawan: to restrain the desire
lekas: to start; begin
lilin: candle
limo: five
lompat: to jump
lompatan: a game with skipping rope
loro: two
macapat: Javanese traditional poetry that commonly recited as a song
masak-masakan: the game of pretend cooking
mbah: grandparents
mbah kakung or *kakung*: grandfather
meja: desk
menjamur: mushrooming
memayu hayuning bawana: to embellish the world
mufakat: a consensus as a compromise or collective decision of all parties
musyawarah: a procedure of decision making in which all voices and opinions are heard
nèkér: marbles
nèkéran: marbles game
ngguyu: laughing
ngoko: low level of Javanese language
nyantosani: to strengthen; support
padu: to fight; dispute
payung: umbrella
pagelaran: an open hall where Sultan holds audience
pakdhe: uncle; older brother of mother or father
panah: archery made from bamboo
panahan: archery game
pancer: the center
papat: four
patung: statue

pasar-pasaran: the game of pretending market
peluit: whistle
pendopo or *pendhapa*: a large square pavilion in the front part of a traditional Javanese house
perak: silver craft
pitu: seven
pitutur: advice
plinthengan: catapult or wooden sling shot
priyayi: Javanese intellectual class or officials
pung: the shout in *jéthungan* game
raga: body
rukun: the state of harmony or the absence of conflict
sari-swara: a pedagogical approach combining songs, arts, and lore or stories
sawo: sapodilla tree
sedulur: family; relatives
sentosa: strong; firm
sepuluh: ten
seru: exciting
setya: faithful; loyal; obedient
sewu: thousand
siji: one
sila: sitting on the bottom and cross-legged
siswa: children; students; pupil
songo: nine
sudah manda: hopscotch
sultan: the Javanese king
sut/suten/pingsut: a way to choose a winner
suweng: ear stud; earring
taman: garden
tari: dance
tata karma: manners or etiquette
teges: meaning; the significance
tegese: to say
telu: three

tembang: Javanese traditional song
tembang dolanan: Javanese children's singing games
tiram: oyster
tulup: bamboo toy gun with mung beans as its bullets
umpetan: the act of hiding
unggah-ungguh: manner in interacting with others
urmat: respectful manner
wali: the saint
wali songo: Nine Saints, early Islamic missionaries in Java
wayang: Javanese traditional puppet
wi-: the perfecting of -
windu: a period of eight years in Javanese lunar system
wiraga: the perfecting of body
wolu: eight
wong: people
wong cilik: ordinary people
wono: forest

Chapter One: Introduction

Memory is not a record of a fixed past that can ever be fully or simply erased, written over, or recovered... And remembering is not a replay of a string of moments, but an enlivening and reconfiguring of past and future that is larger than any individual
(Barad, 2007, p.ix)

Childhood memory has a very special place in one's life journey. It stays with an individual, but is not static. Memory is not a passive archive of one's history in the past. Rather, memory is living and agentic in making meaning and producing power in shaping future life (Lenz Taguchi, 2010). A story of childhood memory, together with other stories, texts, records and artefacts, can become parts of pedagogical documentation through which new ways of knowing and understanding can be generated. Therefore, this thesis presents pedagogical documentation of traditional games to offer a performative understanding – as a new way of thinking about and conceptualising – of children's games.

Adopting the notion of intra-active pedagogy (Lenz Taguchi, 2010), pedagogical documentation can be understood as what matter or material of documentation “actively *does* and *performs* in relation to the pedagogical practice where it is produced” (p.64, original emphasis). The documentation can take different forms, such as spoken or written narratives, photographs, videos, drawings, sketches, scripts of interviews or discussions, notes of observations. Here, as informed by a new materialist perspective, matter is “not a thing, but a doing” (Barad, 2007, p.210), therefore rather than being a fixed entity, matter is an active agent in a doing or performance.

A performative understanding of traditional games highlights the matter of playing a game itself and seeking knowledge “from a *direct material engagement*

with the world" (Barad, 2007, p.49, original emphasis). As a theoretical framework, the new materialist perspective brings to the fore different matter, materials and materialities of traditional games. With the underpinning concepts of *intra-action* (Barad, 2007) and *performativity* (Barad, 2007; 2008), these different elements are analysed and interwoven to create a storyline in this thesis.

Fascinated by an encounter with games materials from my childhood when I visited my parents a few years ago, I was inspired to explore traditional games in the current context. I wanted to know how traditional games can be explained and conceptualised from a new materialist perspective through a performative understanding. Upon closely looking at the way children today play traditional games, I wished to explicate how different matter, materials, and materiality of the games are presented across space and time. This inspiration was strengthened through my encounters with traditional games in my multiple roles and identities – as a mother, an educator, while simultaneously being a Javanese Indonesian, a child, a daughter, a sister and a learner. So, I conducted research to critically investigate children's traditional games.

This research presents a case study of traditional games practices in a multi-age classroom in a primary school in Yogyakarta, Indonesia. Situated in the contemporary context of education for young children in Indonesia, the research highlights the importance of integrating local wisdom and culture into educational practice. In the case study, I conducted observations, visual recordings, group discussions, and interviews to generate multiple narratives about traditional games. These narratives were read through one another in diffractive analysis to generate a new way of thinking, conceptualising and understanding children's traditional games.

In this introductory chapter, I present a narrative of how the storyline began. It concerns my encounter with games materials from my childhood, which triggered my curiosity to study traditional games. I also introduce a journey of my encounters with literature about children, traditional games and education. This allows me to expose myself to new materialism. This perspective became a theoretical framework for working with research data and in writing the thesis. An introduction of Indonesia and Javanese culture is presented for mapping the context of narratives. A story about education for young children in Indonesia is also provided to give contextual understanding of the case study. Then I return to my childhood memories and revisit my understanding of traditional games.

These stories, as parts of a chapter, are not written in a structured-sequential order. The implication is that each part presents a specific section independently, separated from the other, and should be read in sequence. Rather, these parts diffractively flow as narratives from different encounters with traditional games and their materials and materialities. Being diffractive means that I give rigorous attention to substantial details of each narrative in order to generate ideas across boundaries (Barad, 2007). Furthermore, each narrative is read through one another, and together intra-actively constitute the wholeness of the chapter.

An encounter of ‘talking the past to the present’

It was a school holiday when my two children and I visited my parents in my hometown, Wonogiri. My oldest son, Ata, was four years old and he had just started kindergarten, whereas his little brother, Awa, was two years old. As we lived in Depok, a suburb in the southern border of Jakarta, the capital of Indonesia, a visit to my hometown was always exciting. As a place that is less-crowded with a more relaxed lifestyle, Wonogiri offers a different atmosphere compared to our daily life in

Depok. Staying in my parents' house, my sons became little adventurers in exploring the house and its surroundings. They could spend hours wandering around the backyard. Accompanied by my father, they were busy exploring different trees and plants, finding insects and other little creatures they could not find in Depok. For them, *mbah kakung* or *kakung* (grandfather) was a treasure who could be referred to for any question about the backyard and its existences.

One day, there was a moment when Ata asked my father, “*kakung*, what games did children use to play?” In an instant response, my father said “come along with me” and led my children to a bedroom. This was my brother’s bedroom before he got married and moved out of my parents' house. Enthusiastically, my two sons marched along behind their *kakung*. Filled with curiosity, I walked behind them to see what my father would show them. Entering the bedroom my father stopped in front of a wooden cupboard. It was a two-metre high cupboard made of mahogany wood. The door of the cupboard was painted black. It once held a big oval mirror frame in the centre covering almost two thirds of the door surface. Unfortunately, the mirror had broken and was replaced with a square mirror half the size of the door. But, the rounded metallic doorknob looked the same as years ago, back when the cupboard was used as a wardrobe that I shared with my little sister. When my father held the doorknob and opened the cupboard, all of sudden my childhood memories greeted me.

When my father opened the door, I heard a familiar creaky sound, but it was a little louder than I remembered. This reminded me that the cupboard was older. I knew from my father that it had been made in 1960 when he was still in primary school. It was brought from my grandfather’s house when my father moved to this home. This cupboard has definitely witnessed a long history of our family. As I was

mesmerised by the materiality of the cupboard, my father took out a big cardboard box from the lowest shelf of the cupboard. He said to my sons, “Here you are, these are games that your mother played with *pakdhe* (uncle) and *bulik* (aunt)”. The box was full of toys and games materials from my childhood. As excited as my two children, I burst with joy to inspect things inside the box. We instantly got busy checking them one by one.

Yes, I surely recognised most of the games, a few stacks of *gambar umbul* (tossing cards), a transparent jar full of *nèkér/kelereng* (marbles), a wooden yoyo and some *gangsing* (spinning tops) made from bamboo, a *plinthengan* (catapult or wooden sling shot), *tulup* (bamboo toy gun with mung beans as its bullets), and a set of *panah* (archery) made from bamboo. I suddenly felt that I went back to my childhood, a “re-turning (to) the past – a key moment” (Barad, 2014, p. 169) in my life journey to see these artefacts still nicely kept in a very old wooden cupboard that held historical significance for our family. At that moment, I greatly admired my father as a living archive who made it possible for ‘the past to talk to the present and the future’. It was a moment, as Barad (2007) described, of “an enlivening and reconfiguring of past and future that is larger than any individual” (p. ix) – a remembering.

While I was still overwhelmed to see the material objects of traditional games from my childhood, both my sons looked so thrilled to find some new toys and games they had not seen before. Maybe they knew some of them, like spinning tops and card games, but these were made of different materials. The spinning tops they had at home were made of plastic and manufactured in factories. They also had card games at home with different features and materials to ones we encountered. My sons took all objects from the box, one by one, and kept asking me or my father

questions, “what is this mama?” and “what is it *kakung*?” and “how to play this *kakung*?” and “should I hold it this way mama?”. They held each object in a wonder and looked at it closely, turning it up and down, moving it to the right and to the left, they shook it, rolled it, bounced it. They tried everything, in every possible way. They were absorbed in a series of movements and experimentations (Olsson, 2009), with which they experimented the possibilities of playing with the objects they just found. Thus, they engaged in material-discursive enactments (Barad, 2007) of accessing traditional games.

Apart from responding to questions from two excited boys, I also had a close look at different objects in the box. Then I noticed stacks of *gambar umbul* (cards), each stack tied with a rubber band. I took a stack and untied the rubber band. The stack comprised a mixture of different series of cards, including some figures of *wayang* (Javanese traditional puppet), superheroes of my childhood, animals and plants. I scanned each *gambar* carefully, a card of five by seven centimetres in size, made from thin cardboard with figure picture on one side and plain back. I held a worn and partly torn card which picture was faded. I rubbed its surface with my fingers and I could feel the texture of the cardboard. For a few moments, I was thrown back to the old days when I played *gambar umbul* with my siblings and friends. To toss *gambar umbul*, everyone picked a *gambar* and tweezed it with forefinger and middle finger. One of the players gave a command by counting one, two, three. Sometimes, I blew my *gambar* before tossed it, hoping it would land pictured-side up, which meant that I won. The winner was entitled to get one free *gambar* from each of the other players. This cycle of tossing was repeated for several rounds. My brother was a good player of *gambar umbul*, so he got many free cards. That was why we found a few stacks of *gambar* in the box.

In a corner of the box, a transparent jar full of *nèkér* (marbles) immediately attracted Awa. “*Kakung*, what ball is it?”, he asked my father while trying to open the jar. He took a marble and bounced it straight away. My father then explained that it was a marble and showed him how to hold and hit it. Awa then became busy with marbles after he practiced handling and hitting marbles. Fascinated by Awa’s excitement of marbles, I stopped scanning *gambar umbul* and put them back in the box. Then I looked at the jar and took some marbles that were left in it. There were at least thirty marbles, made of glass with different colours of leaflets inside it, mostly in small size, about one centimetre in diameter. A few marbles were bigger in size which instantly reminded me of an unforgettable memory, an accident while playing “stones marbles”. I write about this accident in a later chapter. Many marbles were still intact and in good condition, but some had cracked surfaces that marked repeated hits in the past. I took one of the cracked marbles, rubbed it, and felt its cracked surface. It was a small glass marble, with three red leaflets inside it that looked dull and unclear. This was one of the marbles I used to play with. Holding it again, made me smile as I remembered the moments I struggled to hold and hit it properly. It ended up hitting random things which made it crack and for the glass to become unclear.

In another corner of the room, I saw Ata busy with a yoyo and *gangsing* (spinning tops). It was a wooden yoyo, with an axle that connected two wooden disks, about five centimetres in diameter. Lengthy white thread spooled in the axle and a piece of black rubber looped in its edge for placing a finger. The surface of the wooden disks was unpainted, but had sketches on them. I remembered my brother drew these when he modified the yoyo. He made several holes around the disks’ sidelines and put a black stick – a material similar to a match tip - in each hole.

When he spun the yoyo and it touched hard surfaces like concrete or floor tiles, it lit sparks, which was exciting. I was not a yoyo player, but was always excited to see my brother play with it. I was also amazed to see Ata enthusiastically learning to spin the yoyo. He also enjoyed spinning *gangsing*, over and over again, after his *kakung* showed him how to do it. The *gangsing* was made of bamboo, with a stick in the middle as an axis. One end of the stick was sharpened so it became a tip as the spinning point. Using string or rope that was coiled along the axis, the player should pull the string as strongly as possible. This makes the *gangsing* spin as long as possible.

Discovering new objects thrilled the boys and they kept experimenting with different ways to play with them. Awa explored different ways of holding a marble, trying to shoot it from different angles. He changed marbles every now and then, perhaps expecting a different result. Similarly, Ata was busy trying different fingers to spin the yoyo and kept asking for help from my father when he found it hard to spin. He also enjoyed exploring different movements in pulling the string of *gangsing*.

As I looked back into the cardboard box, I saw a *plinthengan* (catapult or wooden slingshot), a *tulup* (bamboo toy gun with mung beans as bullets), and a set of *panah* (archery) made from bamboo. I still recognised these artefacts that my brother made himself. He was indeed the handiest person in the family who often creatively constructed items from unused materials. The *plinthengan*, for instance, was made of a broken tree branch with a y-letter shape. He cut it carefully, sanded it with sandpaper until the surface was smooth, and tied a rubber sling to both arms of *plinthengan*. With other friends who also made *plinthengan* by themselves, we had a kind of war game with *plinthengan* as a weapon. We used small stones, beans, nuts, or squeezed paper as bullets to shoot each other using *plinthengan*. Usually, we did

it secretly from our parents, because if they knew they would stop us as this game was obviously dangerous. Instead of shooting each other, sometimes we played *plinthengan* to shoot a target. Often an empty bottle was placed at a distance from where we stood, then we competed to make it fall by shooting it using *plinthengan*.

Similar to *plinthengan*, my brother also made *tulup* and *panah* himself. *Tulup* was made from a bamboo stick that was hollow inside and about two centimetres in diameter. He also needed a bamboo stick that was thin enough to fit into the hollow as a trigger, yet one that was long enough as a holder. To shoot a target using *tulup*, we put a mung bean in the hollow and pushed it with the trigger. *Tulup* war was equally dangerous as *plinthengan*, so we rarely played it. For *panah*, my brother made use of wasted or unused bamboo, which was then cut it into pieces of about 50 centimetres long and one centimetre in diameter for making arrows. Then he smoothed the stick using a knife and sandpaper. He made a sharp tip on one edge of the stick and slightly split another edge to tuck a piece of chicken feather in it. The feather, funnily, was taken from a duster that we used to clean up the house. This used to make my mother unhappy when she found out as the duster lost almost half of its feathers. To make a bow, my brother took a longer piece of bamboo and made it into a thin plate that was about one metre long. In the middle of the plate, he attached a wooden block to a very shallow hole at the centre. These two parts were tied up using string. As the final touch, a string was securely tied at both poles of the bow so it bent.

To play *panahan* (archery game), we used the stem of a banana tree as a target. The materiality of the stem, which consisted of layers of bark, allowed arrows to be stuck into it when they hit the target. When we thought the bark was too soft after getting shot repeatedly, we just peeled the outer layer to get a harder surface to

shoot. I remember my father was upset if we shot at a living banana tree because it could destroy the plant. So, after harvesting banana fruits, he cut the tree into long pieces for us to play *panahan*. It was so exciting yet not always easy to shoot the target when playing *panahan*. We had to handle the arrow carefully and hold the bow firmly when pulling an arrow to shoot a target. Also, we should focus our attention and have full concentration to avoid shooting a wrong target. It was the materiality of bamboo that made our hand perform in a certain way in doing *panahan* so that we would do well in shooting the target.

This special event of visiting my parents, with multiple encounters during the visit involving my two children, my father, myself, the wooden cupboard, the cardboard box, and games materials in it, was an early moment that left me with many questions about children's traditional games. Watching my children's excitement in finding the game materials was 'a wake-up call' for me to think about games. I was instantly asking myself a few questions. What about other children of my sons' generation? Do they get the opportunity to know and play the games? Do they have access to these materials? Also, when I thought about all of those game materials, I wondered how could my father keep them for so long? How could they – when I saw, touched, and felt them – bring back all of those memories from decades past? How could the memories, laid dormant for so long, be evoked by the presence of these artefacts? How could they still exist across time and space? All of these questions left me in awe.

A journey towards a new materialist perspective

Having so many burning questions in my mind in the early stage of my doctoral study, I was determined to conduct systematic qualitative research to explore the ways in which traditional games are reinvented, played and adopted by

children today. I was particularly interested in looking at the ethical aspect of traditional games. I imagined that during my study I would focus on how children interacted while playing the games. If any conflict or other ethical issue occurred, I would be paying attention to how they were addressed and resolved closely. In that way, I could analyse how traditional games became a space for ethical encounters among children. This straightforward way of thinking about children's games and ethics, to some extent, was informed by a general understanding of children, childhood and educational provision for children in Indonesia that was predominantly shaped by the convergence of developmentalism, religious faith, and human capital discourses (Formen & Nuttall, 2014). Being educated in a centralised and modern-oriented educational platform throughout my formal education, in the period of Indonesian *Orde Baru* (New Order) in 1980s and the first half of 1990s, these discourses were still influential in my pedagogical approach.

In the early stage of my study, I encountered a vast range of literature that offered different perspectives on education. I was particularly struck by a series of *Contesting Early Childhood*, edited by Gunilla Dahlberg and Peter Moss. My then established view of children, childhood, early childhood education, and education in general was shaken. Two particular books entitled *Beyond quality in early childhood education and care: Postmodern perspectives* (Dahlberg, Moss & Pence, 1999) and *Ethics and politics in early childhood education* (Dahlberg & Moss, 2005) had a significant impact so that I aligned myself with the postmodern perspective when I wrote my research proposal. Reflecting on my own experience in learning under a heavily modern-standardised educational system, I could totally relate to the questions prompted by the two books. I gained my spirit to do research that goes

beyond developmentalist and modernist views, ones that I was familiar with for so many years.

Methodologically, similar to my way of thinking and conceptualising children's games, I was directed by a prescriptive and standardised approach – a linear way of conducting educational research. In my research proposal, I designed my study in a frame of exploratory qualitative research, as an endeavour to make sense of particular experiences in their original location and focused on efforts to understand the meaning people attach to them (Denzin & Lincoln, 2011). Also, I wished to generate detailed and specific data with a focus on the ethical aspect of children's traditional games, as the qualitative approach allowed wide and deep examinations of lived experience (Johnson & Christensen, 2004). With a range of methods for generating data, including observations, group interviews with children, visual methods, and interviews with educators and parents, fieldwork was planned for this study to capture the representations of the phenomena being studied. This was a representationalist view focusing on how the descriptions reflecting reality, one that ontologically drew a distinctive separation of two different entities – the representation and what is being represented – that existed independently (Barad, 2008).

I acknowledged, however, while my research plan was aligning to a postmodern perspective, it was not guided by any particular theoretical framework. I was aware of other theories as conceptual tools with which my study could be developed further, especially after data was generated. I considered post-theories, particularly poststructural, posthuman and postcolonial perspectives, but I had not yet decided on or developed a definite framework. So, I entered field work with an open attitude to any possibility that might come. I tried to pay attention to all events,

with as thick and rich details as I could observe and made records of any occurrences.

Returning from fieldwork, I was overwhelmed by diverse array of data that I had in the forms of visuals, notes, scripts, and artefacts. In search of strategies to make sense of the data, an encounter with a book from the same series of contesting early childhood, titled *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy* by Hillevi Lenz Taguchi (2010) heralded a significant turn in my study. In the introduction of her book, Taguchi described how her encounter with a chair in the vice-chancellor's conference room at Stockholm University brought her back to her first day at preschool. This spoke to me so sharply when I was thinking about different objects, artefacts, and materials in my research findings. In general, her book has helped me find a language in addressing and working with "the intertwined discursive and material reality of pedagogical practices or events" (Lenz Taguchi, 2010, p.3). This language, the notion of intra-active pedagogy, helped me explain and address some questions that I had in the story of my encounter with materials of traditional games from childhood above.

From this turning point, I was then brought to different readings to further investigate related theoretical concepts and tools that I considered had potential in providing answers to my curiosity. This exploration led me to be familiar with some relevant perspectives of posthuman, relational materialist, material feminist, and new materialist, all of which seemed to overlap between one and another for me. When I explored further, however, I found the new materialist view very useful and relevant because it particularly put forward material factors (Coole & Frost, 2010). This view makes different matter, materials and materialities visible and provides multiple

connections amongst them. In the case of my study, this could incorporate the room, the wooden cupboard, the cardboard box, tossing cards, marbles, spinning tops, yoyo, wooden slingshot and bamboo archery in my story of a beginning encounter above.

The new materialist view was also able to bring to the fore the matter of different movements and experimentations (Olsson, 2009), such as the way my children tried different movements to play yoyo or experimenting different ways of handling and shooting marbles. Too often, these movements and experimentations were regarded as intermediate means to achieve predetermined learning objectives (Olsson, 2009). Although, as Olsson (2009) argued, learning occurs through actual movement, when different forces and bodies join and hence increase the bodily capacity of each partaker. To put it in the context of traditional games, as in the case of my son with the yoyo, he actually learned through his encounter with the yoyo. The particular body and materiality – the disk shape, the wood material, the spooling thread – made him try different movements to spin it and experiment with different fingers to increase his capacity to play with it. All of these movements, however, were often seen as preparatory steps to achieve the goal, to become a skilled yoyo player.

Similarly, in the practice of social and educational research, all matter, material factors, movements and experimentations, often do not receive adequate attention due to human-centeredness in producing knowledge and human superiority in relation to the entire world, known as *anthropocentrism* (Hultman & Lenz Taguchi, 2010). It was not an exception for research on children's games, that predominantly focused on children as the subject of playing games (Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2010; 2014). Educational research about games has been mostly

situated in relation to children's learning and development, in which playing games has been seen as a device to achieve pre-determined learning objectives. However, the importance of doing or performance of games itself has often been overshadowed or even remained unnoticed.

In addressing the absence of discussion about playing games as doing, a performative understanding (Barad, 2008) in a new materialist account is beneficial in filling the gap in educational research on traditional games. With a great attention to "matters of practices/doings/actions" (Barad, 2008, p.122), this understanding shed a light on the act of playing games, looked closely different movements, bodies, and matters in the games and considered all elements as performative agents (Lenz Taguchi, 2010). It focuses on the contingent performativity of traditional games as an ongoing intra-activity among different elements – the performative agents – in playing games. The performative agency of each element emerges through this intra-activity within which boundaries of each element are made blurry and are always in a state of not knowing what would come and happen.

Central to performative understanding are concepts of *intra-action* (Barad, 2007) and *performativity* (Barad, 2007; 2008). Intra-action, according to Barad (2007), is an entanglement of different agencies that mutually constitute each other. She added that unlike the commonly known 'interaction', in which the comprising elements are distinct individual agencies that come before the interaction, intra-action agencies do not exist separately before, rather emerge through the intra-action (Barad, 2007). It should be noted that the notion of agency here is not an attribute granted to an element or individual, rather it is "the ongoing reconfigurings of the world" (Barad, 2008, p.135). Also, the existence and distinction of individual elements in intra-actions are not in an absolute sense, rather it is more relational.

Barad (2007) emphasised that “*agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements*” (p. 33, original emphasis). In line to this notion of intra-action, performativity is understood as “*iterative intra-activity*” (Barad, 2007, p. 33, original emphasis). Not only taking into consideration how a subject or phenomenon is formed, it also considers how material bodies are produced (Barad, 2008). This consideration made it possible for matter and the material world to become actively involved in any becoming.

All of these interrelated concepts from Barad (2007; 2008), which are also vital in Lenz Taguchi’s (2010) notion of intra-active pedagogy, are used as conceptual tools to understand, think and conceptualise traditional games in my analysis and discussion in this thesis. These concepts also shifted my understanding of ethics. As I mentioned above, initially I planned my study to focus on an ethical aspect of traditional games. As my journey brought me to a new materialist perspective, I then realised that “ethics is not a concern we add to the questions of matter, but rather is the very nature of what it means to matter” (Barad, 2012a, p. 70). So, being engaged directly with matter and materials of traditional games means that I work with ethics that is inseparable from matter.

Besides significant conceptual contribution of the new materialist perspective to the journey of my study, it is also influential to my approach in writing this thesis. I found myself struggling to articulate the new thinking about traditional games developed throughout this research journey in a way that makes the material aspects of games visible for the reader and at the same time adhere to the requirements of academic writing. I particularly learned from Lenz Taguchi’s (2010) strategy of the *hybrid-writing process* (p.140, original emphasis) that goes beyond theory-practice divide and materialises the two into a written text. This process involved connecting

and interweaving different types of texts, including personal narrative, observation notes, children's documented activities, and artefacts, scripts of interviews and discussions, different readings and literature related to traditional games and education. The challenge with this process, according to Lenz Taguchi (2010), is to make visible the learning process that emerges through intra-active processes of becoming and simultaneously material and discursive and at the same time ensure the writing is academically adequate.

It took a lot of experimentation in writing this thesis and I found Barad's notion of diffraction (2007; 2012a; 2014) essential in formulating a performative understanding of traditional games. This notion highlights that "knowing is a direct material engagement" (Barad, 2012a, p.52). It is particularly instrumental in working with different materials of data, texts, and documentation. I read the materials diffractively, through one another, allowing illumination of their connections and interconnections. As Barad (2008) emphasises, entities that commonly seem to be separated with fixed boundaries, could actually be related and constitute each other. The diffractive process of reading materials and writing this thesis was another transition in my emergent learning in conducting this study. What is presented in this thesis, however, does not function as an absolute representation of a performative understanding of traditional games. Rather, it serves as a fragment with some material limitations, while at the same time confining unlimited possibilities of what the involved matter and organisms can do.

The matter of purpose and guiding questions

Throughout the journey of different encounters with traditional games – with matter, materials and materialities of games – as well as encounters with a range of perspectives and literature about games, children and education, I was inspired to investigate traditional games from a new materialist perspective. My focus was reinvention of traditional games in the contemporary context of education for young children in Indonesia.

Considering the significance of exploring traditional games from a new perspective as a reinvention and its expected contribution to education in Indonesia, the main question of the study was formulated as follows:

How does the reinvention of traditional games inform the education of young children in Indonesia?

With this question as the main guide for the research, some sub-questions also supported the study. The purpose was to investigate the reinvention of traditional games through this exploration from a new materialist perspective (Barad, 2007; 2008; Lenz Taguchi, 2010). The following sub-questions were formulated:

1. How can a new materialist view support new thinking about traditional games in the Indonesian classroom?
2. What can happen when all matter and organisms are considered as performative agents in traditional games?
3. How can traditional games be considered as an aspect of an intra-active pedagogy in the contemporary classroom?

Mapping the context

I was born in a small village in Wonogiri, a regency in southeastern part of Central Java province, Indonesia. It is uniquely located in the border of three

provinces, Central Java, East Java and Special Region of Yogyakarta. Figure 1.1 below is a map of Java which shows where Wonogiri is located.

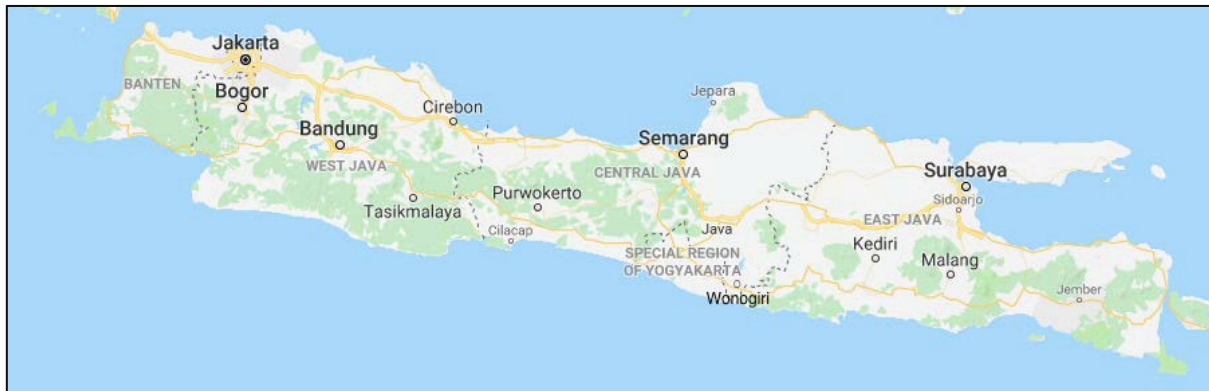


Figure 1.1. The island of Java

The name Wonogiri is rooted in Javanese language, *wono* means forest and *giri* means mountain or hill, which literally describes the topographic landscape of the area as hilly and rocky. This is due to the position of Wonogiri as a part of *Sewu* highlands (*sewu* means thousand), a line of karst plateaus on the southern coast of Java island. With such features, the land in Wonogiri is mostly barren as there is only a thin layer of soil and humus, with layers of limestone underneath. While not ideal for agriculture, this land structure makes Wonogiri rich with a variety of stones, including several types of gemstones. From a very young age, I used to play with different types of stones, from the small size of pebbles to bigger pieces of rock and limestone. Despite limited variation of vegetation, I could play with different parts of plants that commonly grew in my area, such as banana, cassava, coconut, papaya, bamboo and some wooden trees like acacia, tamarind, mahogany, and teak trees. Leaves, stems, branches, straws, flowers, fruits and seeds from those plants become materials for playing different games.

Wonogiri is located at the outer ring of Surakarta and Yogyakarta, two cities that are considered as “the heart of Javanese Culture” (Chaldun, 2009, p.34), as shown in figure 1.2 below.



Figure 1.2. The location of Wonogiri

Being a Wonogiri girl, therefore, I was raised and grew up with a strong influence of Javanese culture. From a sociological perspective, Javanese refers to people who live on Java island and speak the Javanese language (Magnis-Suseno, 1997). Java is one of the main islands among 17,504 islands of Indonesia with a population comprising more than half of the 258.7 million total national population (BPS-Statistics Indonesia, 2017). Figure 1.3 below shows a map of Indonesia and illustrates where Java is situated among other islands of Indonesia.



Figure 1.3. Map of Indonesia

Although the term Javanese covers one big group of people, Javanese culture is intrinsically heterogeneous. As reflected in various dialects in the spoken language, cultural practices in different parts of Java are also diverse. This diversity is possibly related to a long cultural history, claimed as one of the oldest in Asia, beyond two thousand years (Magnis-Suseno, 1997), within which Javanese culture continually evolves through encounters with different external influences. In the 4th century, after its pre-historic time, Javanese culture had early encounters with Hinduism and Buddhism (Koentjaraningrat, 1984), of which archaeological traces remain to date. As evidence, several buildings and temples still stand strongly, including the famous *Prambanan* (Hindu temple) and *Borobudur* (Buddhist temple) from the 8th and 9th centuries that are listed as world heritage.

A few centuries later, from the 16th to 17th centuries, Islamic influence was brought to Java by Muslim traders from Gujarat, Arabia and Persia who arrived at several ports of Java (Koentjaraningrat, 1984; Magnis-Suseno, 1997). Interestingly, instead of displacing the existing culture with Hindu and Buddhist influence, Islamic values were incorporated and added colour to Javanese culture. Early Islamic missionaries in Java, known as *Wali Songo* or Nine Saints, made use of literature,

arts and different cultural activities, including *tembang* (traditional song), *gamelan* (traditional musical instruments), *wayang* (traditional puppet play), *dolanan* (children's games) and *tembang/lagu dolanan* (children's singing games) in spreading Islamic values (Magnis-Suseno, 1997; Sunyoto, 2012). With the non-oppressive manner of delivering messages, Islamic values became more acceptable among Javanese people (Purwadi, Darubekti & Mulyani, 2005; Senja, 2015). About the same time, in the 16th century, waves of European traders, mainly from Portugal, Spain, England, and Netherlands, arrived at different ports in Indonesia including Java. They came for spice trading and brought a Christian influence to the culture, but eventually, in the late 19th century Indonesia as a whole, including Java, was colonialised by Netherlands (Koentjaraningrat, 1984; Magnis-Suseno, 1997).

Being colonialised for about 350 years, and 3.5 years additionally by Japan, definitely changed all elements in Javanese society. The wealth of Javanese culture as a result of acculturation with other external influences was overshadowed by political and economic pressure from the colonial government. Its social structure was divided into *priyayi* (Javanese intellectual class or officials) as an elite group who became the colonial government agent and *wong cilik* (small people) as ordinary people who became objects of economic exploitation for the cultivation system (Magnis-Suseno, 1997). This division created inequality in many sectors, including access to education, as only *priyayi* could attend colonial public education (Dewantara, 1977). Furthermore, provision of education was delivered in the Dutch language, whereas local language only used in the first three years of school, making education more inaccessible for non-*priyayi* (Koentjaraningrat, 1984). Even young children in kindergarten were not introduced to Javanese language, folklore,

stories and characters in *wayang*, or Javanese traditional songs, arts and games, so children were detached from their own cultural roots (Dewantara, 1959).

Being an oppressed state for so long, after Indonesia declared the nation's independence on 17 August 1945, according to Dewantara (1959; 1977; 1994), it became imperative for an educational institution to re-introduce local culture to young children. The effort to maintain local culture, while also establish a national culture, was prominent throughout different periods of political transformation of the nation. From *orde lama* (old order) shortly after independence, *orde baru* (new order) for about 32 years under the Suharto regime, until democratic Indonesia post-reform in 1998, the notion of culture has always been an integral part of the national education agenda.

Returning to my childhood, as a little Javanese girl, I was exposed to the Javanese way of living including customs, ethics, and values. One of the main values I learned early on was *unggah-ungguh* or *tata krama* (manners or etiquette) which was expressed through spoken language, gesture, and body posture. I was taught to show proper manners in all interpersonal encounters because in Javanese society "[t]he important lesson the child must learn as part of growing up is how and when to act respectfully" (Geertz, 1961, p.110). I still remember when I was in kindergarten, my parents always reminded me to bow my body when I was passing elders who were sitting on the chair. I also should speak in *krama inggil*, the highest level of respect in the Javanese language, to elders and respected persons, including parents, relatives, and teachers, whereas to friends and younger ones I could speak in *ngoko* as low-level language. These two levels of language were different, not only in pronouns and corresponding verbs, but also in vocabulary and grammatical structure (Magnis-Suseno, 1997), which reflect different expressions of

politeness. If I mistakenly chose improper words when saying something in *krama inggil*, my parents always corrected me straight away because it was considered impolite. So, from an early age I learned to speak both *krama inggil* and *ngoko* properly which simultaneously taught me about respect for others. This notion of respect was referred to as *urmat* in Javanese, which was a main ethical principal among Javanese (Geertz, 1961; Magnis-Suseno, 1984; 1997).

Apart from learning to respect others, another value highlighted in my family was *rukun*, understood as the state of harmony or the absence of conflict (Magnis-Suseno, 1997). As the middle child of three siblings, it was not rare that I was involved in a disagreement or quarrel with my brother or sister. This dispute, however, would not continue as soon as my parents, especially *ibu* (my mother), knew about it. I can still remember her warning “*karo sedulur ojo padu, sing rukun*” (do not fight or dispute with your sibling, be calm and peaceful), no matter what issue we had and who or what was right or wrong. Early on, I learned how to avoid conflict in any form. Not that I did not address any issue necessarily, but I should do it in an appropriate and respectful manner. The tendency of Javanese people to avoid frontal conflict as a consequence of this *rukun* principle, however, is often mistakenly perceived as insincerity of Javanese people. The two ethical principles of *rukun* and *urmat* are fundamental to guiding Javanese people in interpersonal relationships (Geertz, 1961; Magnis-Suseno, 1984; 1997).

The emphasis on Javanese ethics and values not only took place at home but also at school. My kindergarten and primary school teachers played a similar role as my parents in helping me understand the values and intervened if necessary. Not always said and explained, ethical and moral values were often delivered through *tembang* (traditional song), *tembang/lagu dolanan* (children's singing game), and

dolanan (children's games), which reflected Javanese kind and wise ways in sending messages (Achmad, 2016). Especially during kindergarten and the first three years of primary school, *tembang* and *dolanan* were used very often. I particularly liked *tembang macapat* I learned in those years, and I can still remember the song. *Macapat* was Javanese traditional poetry commonly recited as a song and contained important Javanese values and wisdom (Achmad, 2016).

A *macapat* which had a profound impact on me was *tembang pocung* about *ilmu* or *ngelmu* (knowledge). The lines of *tembang* were as follow:

Ngelmu iku kalakone kanthi laku
Lekase lawan kas
Tegese kas nyantosani
Setya budaya pangekese dur angkara

Below is free translation of the lines:

knowledge can only be attained through doing in practice
it is started with a will or desire
it means an encouraging will
the integrity of character and effort can overcome any trouble and wrongdoing

This particular *tembang* sent a strong message to me that learning and seeking knowledge is important for a meaningful life. The message became my early inspiration in pursuing education in later life. Living in a small town like my hometown, unfortunately, there were not many educational institutions – especially in higher education – available. Hence, since starting my secondary education, I aspired to move to a bigger city as an endeavour in realising my dreams. At that time, I was thinking of either Surakarta or Yogyakarta as my destination.

Finishing junior high school, at age of fifteen, I went to Yogyakarta to continue study at senior high school. It was a mixed feeling of excitement to start a new journey and sadness to be away from my family. Yogyakarta, besides being well

known as a centre of Javanese culture, was also named "Student City" (Chaldun, 2009, p.36) because it hosted many educational institutions. This attracted students from different parts of Indonesia to study in Yogyakarta, which made this city multicultural as a hub of people from different backgrounds. In addition, Yogyakarta played a significant role in the history of the national movement towards Indonesian independence. In 1922, *Taman Siswa* was established as the first school with "nationally orientated education" (Department of Information, n.d, para. 5), with a role to sow the spirit of freedom among its students. Further explanation about *Taman Siswa* and its significance in laying a foundation for national education system is presented in another section of this chapter.

With the establishment of Yogyakarta Sultanate, which leadership successively lasted since pre-colonial Indonesia, Yogyakarta was a monarchy within a country. The monarch, *Sultan Hamengku Buwono*, was not only a political leader, but also a spiritual and cultural main figure who was highly respected by the people. In the early period of Indonesian independence, from 4 January 1945 to 27 December 1949 (Departemen Pendidikan dan Kebudayaan, 1991), the Indonesian capital was relocated to Yogyakarta while Jakarta was in a state of emergency. This was due to the arrival of the Allies military force to take over Indonesia from Japan, which was boarded by Dutch military to recolonise the country. The decision to choose Yogyakarta was related to its sovereignty as a monarchy, which enabled the region to maintain a secure and peaceful condition when other parts of the country were under foreign attack. The first Indonesian president, Soekarno, claimed that "Yogyakarta is great because of its freedom-spirited soul, liven-up this soul!" (Kementerian Penerangan, 1953, p.325). Therefore, Yogyakarta was chosen as a temporary capital during the state of emergency.

Considering special characteristics of the region and its historical role for the country, Yogyakarta became the only province in Indonesia administratively governed by a monarchy and was predicated as the Special Region of Yogyakarta. This was legalised in the Indonesian law number 13, in 2012 about Special Region of Yogyakarta (Presiden Republik Indonesia, 2012). The monarch, *Sri Sultan Hamengku Buwono*, resides in a palace named *Keraton Yogyakarta* as shown in figure 1.4 below.



Figure 1.4. Keraton Yogyakarta - Palace of Yogyakarta Sultanate

For Javanese people, *keraton* is not merely a residential building because it also symbolises particular cultural and philosophical values. Each element or sub-building of *keraton* and different trees planted in its surroundings has specific meaning and purpose (Sunjata, Tashadi & Astuti, 1995). For instance, two *beringin* (banyan trees) in front of *keraton*, as shown in the figure above. It is believed that *beringin* is a symbol of life and known as a *tree of life* which provides shelter and protection for people in its surroundings (Sunjata et al., 1995). Being planted at the front of *keraton*, *beringin* symbolises the Sultan's embracement and protection

towards the people of Yogyakarta (Sunjata et al., 1995). Similarly, each part of the building inside *keraton* is used for a particular purpose, with structure and design having a specific meaning. Like the front part of the building as shown in the figure above, called *bangsal agung* or *pagelaran*, functions as a court where people come seeking justice from the Sultan for any issue or dispute (Sunjata et al., 1995).

Politically, *keraton* also signifies the sovereignty of Yogyakarta Sultanate in providing peace and justice for the people, as well as the centre of magical power from which a fertility source is streamed to its surroundings (Magnis-Suseno, 1997).

The complexity of Yogyakarta specialness, as mentioned above, with entanglements in historical, social, cultural, administrative, and educational contexts, makes this region unique. Furthermore, in the context of education, the local government encourages schools to integrate this uniqueness into their pedagogical approach and practice. As stated in a local regulation, the provision of education should be based on cultural values and wisdom (Pemerintah Provinsi Daerah Istimewa Yogyakarta, 2011). This regulation is implemented through an integration of cultural-related matters specific to Yogyakarta or Javanese culture into local-content components in the curriculum (Gubernur Daerah Istimewa Yogyakarta, 2013a; 2013b; Pemerintah Kota Yogyakarta, 2008). This includes, but is not limited to, introduction to Javanese language with its alphabetical system, Javanese folklore and traditional games, and Javanese arts and crafts, such as *gamelan*, *karawitan* (Javanese orchestra), *batik* (textile design and colouring), *perak* (silver craft), *wayang*, and *tari* (Javanese dance). This context-specialised component in educational practice allows Yogyakarta to strengthen its local potentialities, while sharing the same national framework of education with other regions in Indonesia.

Considering the special characteristics of Yogyakarta in terms of its strong cultural heritage, contextual education and significant contributions to Indonesia, particularly from perspectives of history, culture and education, I chose this city as the setting for this study. Also, the personal connection and cultural bonding that I have with Yogyakarta made it relevant to conduct my research in this city because the study is motivated by my upbringing and cultural background. Concurrently, this study aims to explore the current context of traditional games in educational setting. Therefore, Yogyakarta is an appropriate setting for conducting this study.

Education for young children in Indonesia

Throughout the history of education in Indonesia, culture has been an integral part that intertwines with pedagogical practice that is highlighted in educational policy. In 2010, the Ministry of Education and Culture (MoEC) launched the national program of *Pengembangan Pendidikan Budaya dan Karakter Bangsa* (the development of nation's culture and character education), a program to strengthen character education as the core of educational practice and to promote the nation's cultures in school programs (Pusat Kurikulum, 2010). This is a national agenda that clearly gives priority to the entanglement of culture and education in educational practice. As follow ups, the MoEC issued a number of supporting regulations including the Minister Decree number 79, year 2014 about *Muatan Lokal Kurikulum 2013* (local content in curriculum 2013).

The local content policy urges schools to integrate and promote local wisdom and values in their practices. It should be noted that Indonesia is an intrinsically diverse nation, comprised of more than 1,300 ethnicities and 2,500 spoken local languages (BPS-Statistics Indonesia, 2011), along with specific customs and traditions, making Indonesia a rich tapestry of local culture. This local content in the

curriculum, therefore, is implemented by local government in accordance to uniqueness of local contexts. In Yogyakarta, for example, as I mention in the previous section, their local content is *boso Jowo* or Javanese language and its related cultural practice.

The historical background of the educational context in Indonesia makes building national culture as an identity very important. As informed in the section above, with a long history of being a colonised country, the necessity to build a sense of nationalism organically grew among Indonesians. For a country with hundreds of ethnicities who live on separate islands, to unite the spirit of freedom does not come easily. Java, and Yogyakarta in particular, has witnessed the growth of nationalism when organisations for national-movement, such as *Boedi Oetomo* and *Muhammadiyah* (Koentjaraningrat, 1984), established in this region. In education, the establishment of *Taman Siswa* marked the awakening of Indonesia's anti-colonial spirit to provide more access to education among Indonesian people. The name *Taman Siswa* literally means "garden of pupil" (Department of Information, n.d, para.8) reflecting an acknowledgement of the importance of environment in education.

Taman Siswa was founded by Ki Hadjar Dewantara, previously known as Suwardi Suryaningrat, a Javanese aristocrat who had privilege as *priyayi* to access advanced education under the Dutch colony, but refused to become a colonial government agent. Instead, he became an instigator of national movement through his journalistic activities. During his study, Ki Hadjar Dewantara was exposed to concepts and theories of education from a wide range of western educational theorists and philosophers, but at the same time he always kept the Indonesian context in mind. He argued that as a nation Indonesia is different from any other

country in terms of culture, so in formulating educational concepts it could not directly copy or implant systems and policies from other countries (Dewantara, 1977). Instead, it should be rooted in its own culture, but still be open to change in regards to social dynamics and knowledge development.

Ki Hadjar Dewantara formulated an educational philosophy that built a foundation for educational practice in *Taman Siswa*, named *among* system, which could be understood as “serving by guidance” (Mangoensarkoro, 1938, p.15). Rooted in Javanese language *among*, which meant to take care of or to engage in (Robson & Wibisono, 2002), the system was laid in a family and communal atmosphere. Ki Hadjar Dewantara also conceptualised children’s development into three different stages. Each stage lasted for a *windu*, a period of eight years in the Javanese lunar system, and each had a different approach in its pedagogical practice. The first *windu* is the *wiraga* stage, in which children are developing their senses and physical body (Mangoensarkoro, 1938). The term *wiraga* is rooted in Javanese *wi*, meaning the perfecting of, and *raga* meaning body (Mangoensarkoro, 1938, p.21).

Learning from this educational philosophy and practice, education for young children refers to provision of education for children in the first *windu*, which equals preschool and the first three years of primary school. This reference of young children is parallel to definition of early childhood by organisations under the United Nations, United Nations Educational, Scientific and Cultural Organization/UNESCO and United Nations International Children’s Emergency Fund/UNICEF. According to these organisations, early childhood is a stage from birth to eight years of age (UNESCO, n.d.; UNICEF, n.d.). Young children in the first *windu* or at *wiraga* stage are educated in *Taman-Indrya* for their preschool level and *Taman-Anak* for the first

three years of primary school (Dewantara, 1959). *Taman* is a Javanese term for garden, while *indrya* means senses and *anak* means children. Hence, *taman-indrya* basically serves children to develop their senses and *taman-anak* is considered a garden for children. During the *wiraga* stage, *sari-swara* method is implemented as a pedagogical approach, that combines songs, arts, and lore or stories from the long tradition of the nation (Dewantara, 1959). Within this method, traditional games have been an integral part of educational practice for young children. Further information about the educational philosophy of Ki Hadjar Dewantara, including the *among* system and his perspective on children's traditional games, is discussed in Chapter Two, Literature Review.

Re-turning childhood memories

Recalling my childhood memories, playing traditional games was one of the most profound experiences I can remember. Raised in the 1980s in a rural area of Wonogiri, getting together with friends and playing games became the main activity for most of my leisure time. As far as I can remember when I was in kindergarten, I just followed and observed my older brother playing different games with his friends. *Nèkér* or *nèkèran* (marbles), *sudah manda/engkleng* (hopscotch), *gambar umbul* (tossing game) and *gobag sodor* (catching game) were among early games that I knew. I sat on the sideline of the play area with other friends my age. Later, when I was a bit bigger I begged my brother to join the games he played. He reluctantly allowed me to join as a *bawang kothong*, literally meaning empty garlic which referred to an apprentice in a game, before I could play as a real player.

In my early years of schooling, almost every day after school some friends would come to my house and greet me with “*dolanan yuk*” (come on let's play), asking me to join them playing games. Then, we gathered in the front yard of my

house to play the game that was currently popular, such as *lompatan* (skipping rope), *betengan* (tag game), *dakon* (mancala), or *bekelan* (jacks). Some other times we just wandered around the backyard of my house and played with any material we found. We would busily weave young coconut leaves to make different shapes or crafts, such as *ketupat* pocket (rhombus), *keris* (Javanese traditional weapon) or *peluit* (whistle). We would also pick random leaves, flowers, and fruits we found in the garden and play *pasar-pasaran* (pretend market).

Remembering those memories, I feel the fun, happiness, and enjoyment is refreshed and enlivened. I enjoyed being with my friends and playing games, without knowing the long tradition of those games (Casbergue & Kieff, 1998; Opie & Opie, 1985; 1997). I was not aware the games I played were considered traditional. All I knew at that time was that most children in my neighbourhood and school played the games and I wanted to play too. So, I learned traditional games from older children, including my brother and his friends, both at school and in my neighbourhood. I thought it was a natural manner that games were passed down from one generation of children to the younger generation (Ajila & Olowu, 1992; Howard, 2005; Sierra & Kaminski, 1995; Sujarno, Galba, Larasati & Isyanti, 2013). I also thought that all of these happenings with traditional games organically formed my childhood and would be stored in my memories. It never crossed my mind that I would revisit all of these memories in later life. As Opie (1994) asserts, “games learned years ago at previous schools will lie at the back of their memory until some chance circumstance brings them to mind” (p.13). In my case, a visit to my parents’ house and engagements with literature and perspectives about games, children, and education gave me a chance to re-turn my childhood memories and re-configure them beyond the sequence of past, present and future.

Mapping the thesis: where to from here

After introducing the study background in this chapter, I present the remaining journey of producing pedagogical documentation of traditional games in the next seven chapters of this thesis. In the following chapter, I review literature that substantively and conceptually provides a fundamental basis for investigating traditional games in the context of education for young children. This review also navigates me to locate my investigation and identify gaps in the body of knowledge. However, I found the existing literature problematic because it does not adequately give explanation about the significance of material aspects of traditional games. Although they are acknowledged in the readings, most discussions predominantly position children or humans as the focus of analysis. Non-human aspects and the material world are still under-researched. With this gap in mind, my encounter with the perspective of new materialism provides some insightful ideas about how this under-researched factor of traditional games can be explored. Hence, I review a range of previous social and education research that apply this perspective. With analysis focalised in materiality of different aspects of education, I found some resources helpful in making sense some of my wonder about traditional games that I presented earlier in this chapter. Here, I sense potential of this perspective as a theoretical framework to illuminate material aspects of traditional games.

Following my exploration of educational studies with a new materialist account, in Chapter Three of this thesis I explain how this perspective provides theoretical concepts to frame this study. I particularly discuss the main concept of intra-active pedagogy (Lenz Taguchi, 2010) that is derived from notions of intra-action and performativity (Barad, 2007; 2008) as conceptual and analytical tools for

thinking and theorising traditional games. I also discuss the notion of diffraction (Barad, 2007; 2014) as the basis of diffractive analysis in this thesis.

In Chapter Four, I outline the methodological trajectory undertaken in this study. I describe how the study was initially designed as a qualitative case study, but then slightly shifted in later stages after my encounter with new materialist perspective. This perspective particularly guided me to go beyond an interpretive approach in working with data by employing a diffractive analysis. In the latter part of this chapter I explain how I conducted analysis, after describing the fieldwork process. I also explicate ethical (re-)considerations that occurred throughout the study.

Findings of this study are presented and discussed in Chapters Five, Six and Seven, with each chapter having a particular material aspect of traditional games as the focus of analysis. Chapter five focuses on the materiality of space in traditional games, Chapter Six looks at bodies and movements as performative forces in the games, whereas Chapter Seven examines the power of things or material objects in acting upon and influencing the games. I use the concepts of intra-active pedagogy and performative agency (Lenz Taguchi, 2010; 2014) as analytical tools to work with data through a diffractive analysis. In this analysis, a range of data is juxtaposed and read one to another to highlight connections among them. In establishing these connections, I follow affective moments that happen when I see, feel, or sense the data (Jones, 2013a) that bring me to other stories from different texts, readings or personal memories. Then, these diverse stories are read and re-read in the 're-turning' process of reading (Barad, 2014) to illuminate the way they are connected and interconnected to each other to generate insightful thoughts and ideas (Lenz

Taguchi, 2010). These insights are then analysed in the way they address the research questions of this study.

Finally, in the last chapter, I pull together the results of analysis from previous chapters and draw conclusions from the research findings. From these findings, I identify contributions this research makes to knowledge, educational practice and research practice. I also consider some pedagogical and ethical implications of this research. Reflecting on how this research was carried out, I summarise the strengths and limitations of this research to give direction and create a space for future investigations. Nonetheless, a review of literature is presented in the following chapter.

Chapter Two: Literature Review

This chapter reviews literature that contributes to my exploration of children's traditional games in an educational context. I draw on a range of literature that supports knowledge, methodology and framework of my research (Atkins & Wallace, 2012). Considering the focus of this research, I mainly use and refer to classical literature as basic conceptualisations and investigations of traditional games are mostly found in resources from the past. The relevance of these resources continues as even recent research refers to classical texts. Nevertheless, I also review the contemporary literature to gain insights on the current state of games and the application of traditional games in the present time.

This chapter is divided into three main parts. In the first part, I begin by presenting some conceptualisations of games from classical and contemporary literature, followed by the notion of traditional games. I am aware that the scope of discussions about games is very broad. Therefore, I focus only on those relevant to the purpose of this research. The following sections examine previous studies on traditional games to present the aspects of games that have been researched. Then I explore the way traditional games have been situated in educational contexts. I examine traditional games as a learning tool and a learning experience that goes beyond the classroom. In another section, focusing on education for young children in Indonesia, I present stories of traditional games from this particular context. I look at intertwined historical, cultural and political aspects that shape educational practices and influence the existence of traditional games in the contemporary classroom in Indonesia.

Based on the literature review, in the second part, I problematise traditional games in the existing literature and educational practices. I underline common

threads and prevailing discourses from previous studies about traditional games, then identify what is lacking or receiving less attention. I also consider how the literature review addresses burning questions that I had after encountering some games from my childhood, as described in Chapter One. These considerations give direction for investigation in this research. So, in the later part of this section, I shed light on the importance of looking at and understanding traditional games from a new viewpoint and propose a new materialist perspective to address identified issues in this research.

Finally, in the last part I examine recent studies in education using a new materialist perspective to draw on its potential use for this research. I look at how this view addresses complex relations in a learning event and generates new thinking about traditional games and involved learning processes. I put forward the importance of new story, and multiple stories, as an addition or alternative to the existent one(s) about traditional games. In the closing notes, I accentuate the intention of this thesis to offer a new story from a new materialist perspective in the context of education for young children in Indonesia.

Development of thinking about games

Studies of games continue to develop in a vast array of directions. As a subject matter, games are defined diversely among different approaches and disciplines. Classical literature about games indicates different usages and functions of games in different fields of study as main factors of this diversity (Avedon & Sutton-Smith, 1971; Culin, 1958; 1973; Roberts, Arth & Bush, 1959; Sutton-Smith, 1972). The very term “game” itself has various meaning and purpose which contributes to the complexity of games. As exemplified by Avedon and Sutton-Smith (1971), the word game is used for any activity with a recreational purpose; for a

strategy and implementation in the military and business; as an instrument for rehabilitation in healthcare; as a manifestation of culture in anthropology; as a technique for diagnostics in psychiatry; a research instrument in behavioural science; as a component of curriculum in education; and for materials in recreation programs. The complexity of its usage makes a precise definition of a game elusive (Ajila & Olowu, 1992; Avedon & Sutton-Smith, 1971). Avedon and Sutton-Smith (1971) indicate the difficulty of defining games as follow:

To define games with a degree of precision when the subject is just beginning to attract exacting research, has the ring of prematurity. Actually, it makes more sense to map the subject matter rather than to define it (p.5).

In mapping games, nevertheless, different systems of conceptual analysis can be applied due to the susceptibility of games as multidimensional phenomena (Avedon & Sutton-Smith, 1971). Here, I identify a potential of expanding study and knowledge about games. Despite the difficulty of not having a clear definition of games, I see the complexity and arbitrariness of games as an opportunity to explore them from different perspectives and different particularity of contexts.

On the other hand, contemporary literature of games perceives different philosophical frameworks as a major factor influences various approaches in exploring games (Malaby, 2007; Nguyen, 2017; Stenros, 2017). Particularly in the past few decades as more areas in the study of games have developed, such as video games, computer games and sporting games. This development coincides with “the accelerated development of new technologies, telecommunications portability, the proliferation of digital media and, especially, with the access of a broader audiences to all of this” (Casvean, 2016, p.50). Even though these areas are not within the scope of this research, I acknowledge their impacts in offering more definitions of games and new approaches to the study of games. A narrative or

fiction study approaches games as a form of text, while a study of authorship, ontology and performance considers games as artworks, and a philosophy of sport focuses on aspects of norms, such as sportsmanship, adherence to rules and competition (Nguyen, 2017). Another new approach to games is informed by “a pragmatic rethinking of games as social artefacts in their own right that are always in the process of becoming” (Malaby, 2007, p.95). These new approaches add to the polyphony of understanding games and confirm that the study of games is fertile ground that continuously generates new knowledge and understanding.

In conducting a study of games, still, a researcher needs a particular definition for a reference. In classical and contemporary literature, the purpose of research determines conceptualisation of games and provides a particular focus of investigation. For example, in exploring the origin and distribution of games in Korea, China and Japan, Culin (1958) considers games “not as conscious inventions, but as survivals from primitive conditions, under which they originated in magical rites, and chiefly as a means of divination” (p.xviii). In an anthropological study across fifty different societies, Roberts et al. (1959) conceive any activity with recreative intention as a game. Using this definition, they investigate ways in which games historically developed and spread across the globe, as well as important roles games play in communities. A more comprehensive definition of games is generated from a review of cross-disciplinary resources by Avedon and Sutton-Smith (1971), whose backgrounds are recreation and psychology. They describe a basic concept of a game as follows:

an exercise of voluntary control systems in which there is an opposition between forces, confined by a procedure and rules in order to produce a disequibrial outcome (Avedon & Sutton-Smith, 1971, p.7, original emphasis).

This concept is still relevant as a foundation for current studies of games (Casvean, 2016; Stenros, 2017), especially among researchers with a view that games are a special form of play. This view is discussed further in a later part of this section.

Recent studies define games more variously as they are guided by different views and purposes. A current review of definitions of games from more than sixty resources from the 1930s until recently identifies ten main themes of interest that diverge research direction (Stenros, 2017). These themes of rules, purpose and function, artefact or activity, separate yet connected, role of the player, (un)productive, competition and conflict, goals and end conditions, construction of the category and coherence provide considerations “not just about defining what games are, but what game studies are” (Stenros, 2017, p.515). Variations in discussing those themes generate different definitions of games and approaches of studying games that are essential in circumscribing the scope of research. In turn, this scope has an impact on knowledge and understanding generated from the research.

Among resources in Stenros’ review above, I was particularly interested in Malaby’s (2007) argument that games are characterised by process, fundamentally based on human practices and their everyday life. He proposes a new definition of a game as “a semibounded and socially legitimate domain of contrived contingency that generates interpretable outcomes” (Malaby, 2007, p.96). The semiboundedness and contingency of games in this definition imply a non-fixed boundary of what is possible in games as a process. This illuminates the openness of games for (re)configurations, which is relevant to this research. He suggests that research about games should unloose the close association of games and play to raise more

engaging questions about the social construction of games. Intrigued by his suggestion that resonates with my curiosity about games, I return to classical literature that explain games-play connections. I present my review in the sub-section below.

Games as a form of play

Games are often associated with play due to several factors. First, both games and play involve voluntary participation of the players. Basically, play is understood as a voluntary activity separated from real life and bound in time and space (Huizinga, 1970). In most instances, children play games of their own will (Mawere, 2012; Sierra & Kaminski, 1995; Sutton-Smith, 1972) and even find it disturbing when adults interfere in their games. For them, “the game itself is all that matters” (Opie & Opie, 1985, p.2) and there is an intrinsic attraction of games that invites children to voluntarily join in.

Games-play association is also related to the view that both happen in a magic circle (Huizinga, 1970; Nguyen, 2017). A magic circle is conceptualised as a bounded time and space that separates play from other experiences of everyday life (Huizinga, 1970). Unlike activities in daily life, such as fishing or hunting, people do not do a game but play it (Huizinga, 1970, p.57). Playing games is like entering a magic circle in which any action has no effect to the outside. Players “take up new roles and new rules for behaviour” (Nguyen, 2017, p.3) and whatever happens in the magic circle of a game only affects the game itself. Once the game is finished, the players move out from the circle and back to normal life. The magic circle of playing games thus provides a temporary space that frees players from their everyday roles and rules.

Affective elements of fun and enjoyment are another factor that connects games and play. People play games to have a good time and enjoy the activity. “It’s only a game, isn’t it? It’s just for fun” (Opie, 1994, p.15) is a common expression when children engage in a game. When some players find a game is no longer fun, they can discontinue their participation or sometimes stop the game entirely. However, what counts as fun in a game is situational and subject to individual judgement. Things that amuse children may look silly to adults and a game that is fun for boys can be too rough in girls’ opinion (Opie, 1994). Nevertheless, playing games is a favourable way of having fun and a good time in childhood.

The voluntary participation and fun aspect of games are relevant to my experience of playing traditional games during childhood, as I described in Chapter One. Finding an explanation of my experience from the literature above gives new meaning to memories from the past and allows reconfiguring of the present and future (Barad, 2007). Generally, I agree that playing games is fun and enjoyable so I always happily join games of my own will. However, I do not think games always happen in a magic circle with no consequence for everyday life. I remember during my childhood there were occasions when my friends and I were unsatisfied with the results of a game we played and were unhappy with each other for some time afterward. We did not talk or play together for a few days until we felt better to join in games together again. This literature explanation thus fuels my curiosity to know how voluntary participation, affective elements, and the notion of magic circle apply to children today.

Critics have pointed to these associations of games and play from a new approach that considers games a form of experience rather than activity (Malaby, 2007). Fundamentally, this approach challenges the common understanding of

games as a form of play and argues that the above-mentioned features are not intrinsic to games. Malaby (2007) accentuates, games can be “*separable* from everyday life, *safe* [or ‘consequence free’], and *pleasurable* or ‘fun’... [but these features] are always *cultural accomplishments* specific to a given context” (p.96, original emphasis). He adds that, in contrast, games can closely connect to everyday life, have various consequences and bring about different emotional states (Malaby, 2007). This critic resonates the reconfiguration of my childhood memories above. Games had significant effects on my social relations with friends and made me feel unhappy for days in normal life.

Apart from disagreement on games-play associations, it is commonly accepted that games are a special form of play due to their rules and outcomes (Avedon & Sutton-Smith, 1971; Sierra & Kaminski, 1995). Games have consistent patterns as rules and anticipated results as the outcomes, which make games repeatable and structured (Avedon & Sutton-Smith, 1971; Mawere, 2012; Sierra & Kaminski, 1995). The presence of rules turns play into games as “it becomes more serious and productive” (Edmiston, 2008, p.7). Another element specific to games is a reciprocal relationship between opponents, such as aggressor and defender (Arnold, 1975; Sutton-Smith, 1971). Different views in the literature about games and play show that these two notions have complex connections. I agree with Malaby (2007) that studies of games should move beyond these associations to generate more creative thinking about games. However, I am also critical of Malaby’s approach that focuses on human roles as the main agent in games, although he also acknowledges material and cultural aspects. In that regard, the following sub-section discusses cultural aspects of games.

Games and culture

Another common thread in the literature about games is a link between games as a patterned activity and culture. Researchers in anthropology and ethnology see games as providing important information on a culture, so exploring games is regarded as a cultural investigation (Chepyator-Thomson, 1990; McKenzie, 2011). In some communities, like Javanese, games also reflect ethics and worldview (Achmad, 2016) that are vital in shaping values and practices in a community, such as social relations and kinship, children's upbringing and spiritual beliefs. Therefore, an endeavour to obtain deeper and better cultural understanding of a community can be achieved by researching children's games.

Games also closely relate to the daily life of a community. Rules of games are often related to what exists in a society. For instance, the game of *dithwai* in South Africa is essential for looking after cattle as it involves visual memory skills (Sierra & Kaminski, 1995) and *mancala* is a game shared among African countries that closely relates to sowing and harvesting (Pérez-Latorre, 2012). Correspondingly, in hunter-gatherer communities, such as Aboriginal and Torres Strait Islander peoples, skills of survival and daily camp are reflected in activities like "string games, mock battles, tracking and collecting" (Edwards, 2009, p.34). Investigating games provides information about activities important for a community and what skills and attributes are needed in their practices. It has pedagogical implications for what abilities and values are highlighted in educational practices.

Another notion of the games-culture relationship views games as a precursor of culture. Games are not shaped by, or a part of, culture in which they exist. Rather, types of games played in a community inform culture. According to Edwards (2012), who conducted an exploration of play culture among children in Aboriginal and

Torres Strait Islander communities, games are “not just as a representative of a particular aspect of cultural heritage or cultural expressions but as a way in which particular cultures are, or were, defined” (p.9). Similarly, from an investigation of traditional games across 137 countries and cultures, Sierra and Kaminski (1995) reason that “games are typical human activities rather than typical of the culture in which they are played” (p.6). Researching games from this notion provides insights on how culture of a certain community has been developed and is continuously shaped.

Some scholars are interested in comparing games across cultures to identify similarities and differences and trace connections among cultures (Hall, 1995; Howards, 2005; Roberts et al., 1959; Sierra & Kaminski, 1995). Their comparative studies show that some similar games are found and played in different cultures, although known by different names with varied rules and adjustment to local conditions. These findings inform the origin of games and their spread to different places, such as *snakes and ladders* from India and *hopscotch* from Africa. This trace provides information about people’s movements across places and how cultures in those places are connected.

The spread of games is also related to trade routes, religious missionary, emigration and the effect of colonialisation or settlement in a particular community. The game *mancala* is believed to have travelled with slave-trade and Islam expansion in Africa, Asia and adjacent islands (de la Cruz, Cage & Lian, 2000), including Indonesia and other Southeast Asian countries. Known as *congklak* across Indonesia and *dakon* in Java, the game was brought by traders from Arabia (de la Cruz et al., 2000). For the Javanese community, this game is an early encounter with Islam which values influence its culture and spiritual belief among its people.

Similarly, Victorian British emigrants brought games like *British bulldog* and *conkers* to Australia which are known as *Australian dingo* and *quandongs*, respectively (Hall, 1995; Howard, 2005). In New Zealand, the meeting of European and Māori cultures wiped out some games that were previously specific to each culture, but also strengthened games of both cultures (Sutton-Smith, 1972). The contact with British and European culture through colonisation and missionary activity significantly changed the games children play in the Keiyo society of Kenya (Chepyator-Thomson, 1990). This is a major reason that some similar games are found in East Africa, New Guinea and Australia (Chepyator-Thomson, 1990). Different patterns and purposes of people's movements add layers of complexity to understanding games in particular contexts. Not only informing how games exist in a community, these movements identify cultural contacts among communities across time and place.

Games materials are often used as evidence to trace cultural connections. For example, bamboo arrows in ancient Korea are made from similar materials to arrows used in contemporary archery (Culin, 1958). The same material is also found in China and Japan, with variety in the ornaments on arrows (Culin, 1958). The *mancala* board origin can be traced, whether Roman or Syrian, based on the number of rows and holes on the board (Charpentier et al., 2014; de Voogt, 2010a; 2010b). Hence, games materials connect people from different times and places. Apart from serving as a tool for playing games, materials also tell a story about the complexity of games from their history and travelling that inform an understanding of a culture. Zooming in on a specific aspect of a culture, the following sub-section presents the notion of games in relation to spiritual and belief systems.

Games as a part of spiritual rites

In some communities across the world, games exist as a part of spiritual practices and rites in religious or belief systems. This notion has root in ancient times, when games were a part of survival of primitive conditions and magic rituals, and often used as a way to make future prediction (Culin, 1958). In these practices, the presence of artefacts or things was significant for marking moments. For example, arrows in Korean tradition were seen as representative of the owner in marking territory (Culin, 1958). Although games have a strong element of amusement, originally, they were rooted in serious survival practices.

The connection of games and spiritual practices in more recent times take different forms. Some games are “linked with traditional myths or gods” (Hall, 1995, p.17), such as the practice of making string-figures among women in the Yirrkala community in Northern Territory of Australia (McKenzie, 2011). Other games are part of religious festivals, ceremonies or special rituals (Edwards, 2009; 2012; Hall, 1995; Roberts et al., 1959), such as *ash-zhalaalo* in the Ramadan festival in Bahrain and *pinata* as part of Christmas or birthday celebrations in Central and South America (Hall, 1995). In Indonesia, the game *pe-sapean* is played as part of rain-inviting rituals in an agricultural community in Madura (Nurana, 1991). Traditional games in some places are also played at a certain time of year in relation to seasons or particular celebrations. For example, *the battle of the wagon* is played at harvest time in Korea (Hall, 1995) and *beadu perijak* is played for a similar occasion in East Borneo, Indonesia (Departemen Pendidikan dan Kebudayaan, 1984). These spiritual connections of certain games in some communities become a significant factor in maintaining existence of the games. As long as the society still practices their beliefs and rituals, the games will be alive.

This review of notions and aspects of games described above shaped my thinking about games to understand a particular type of games as a focus of this research, traditional games. What follows is an account of traditional games and their characteristics as described in the literature.

The notion of traditional games

Among games children play today, there are games that have existed for a long time and have been passed down over generations. These games are known as traditional games (Howard, 2005; Mawere, 2012; Purwaningsih, 2006; Sierra & Kaminski, 1995; Sujarno et al., 2013). In the literature, three main elements characterise traditional games. First, the existence of games that have lasted for long periods of time (Casbergue & Kieff, 1998; Sierra & Kaminski, 1995) and it is often difficult to trace their origin (Hall, 1995). Second, the transmission of games from one generation to another (Ajila & Olowu, 1992; Howard, 2005; Sierra & Kaminski, 1995) is mainly through oral tradition or word of mouth (Arnold, 1975; Hall, 1995; Sierra & Kaminski, 1995). The last element is the embeddedness of games in a particular social and cultural context of a community (Sujarno et al, 2013). Therefore, traditional games intimately connect with culture because the games “often reflect society’s priorities and needs” (Casbergue & Kieff, 1998, p.144). Apart from the main elements above, traditional games are also described by the way they are played and components involved in the games. From existing literature, I summarise their descriptions in the following themes.

Organisation of traditional games

Children organise traditional games among themselves with limited or even no intervention from adults. As Sutton-Smith (1972) describes, “[a]ll the games of the playground were managed entirely by the children themselves; there was no adult

organization of play and little playground supervision” (p.11). Children negotiate among themselves and then make decisions about the time, the place and the way they play games (Sierra & Kaminski, 1995). These negotiations make playing traditional games exciting because there is always a difference or a newness in the games from time to time.

Rules of traditional games

Despite reliance on oral tradition that means traditional games are not well documented, the games still have rules to follow. Ajila and Olowu (1992) state, “although the games are spontaneous and unsupervised, there are certain rigid rules, learned from elders or formulated by the children themselves to which they conscientiously adhere” (p.140). These rules are subject to negotiation among players. Although most traditional games have some basic rules, children often make some variation based on agreement during play (Sierra & Kaminski, 1995). Once the rules of a game are set, any violation of agreed-rules is seriously sanctioned by players (Ajila & Olowu, 1992; Opie, 1994). Changeability of rules also contributes to the dynamics of playing traditional games because the rules can change even in an ongoing game.

Objects and tools of traditional games

Objects and tools of traditional games are mostly simple and easily found in the environment. Generally, the games make use of everyday materials that are readily available and often seen as mundane or even taken for granted, such as leaves, stones, seeds, wood and clay. Interestingly, the same object or thing can be used differently for various games in different places. For example, stones used for the game of *seega* in Egypt and *hopscotch* in Nigeria, combined with shells for *bølge* game in Norway; leaves for the game of *muni-muni* in central Australia, or games of

tenar kaun, *bebidukan* and *liarau* in Indonesia; and seeds that are used for *bandilit* game in Kenya or *dhuk ter* or *guak ngalih taluh* in Indonesia (Chepyator-Thomson, 1990; Hall, 1995; Hamzuri & Siregar, 1998). This is one reason children can play traditional games spontaneously because they do not require complicated materials.

Some traditional games also use made artefacts or equipment. Nonetheless, technologies to make them are simple, duplicable in other parts of the world (Roberts et al., 1959) and usually children can make the artefacts by themselves (Sutton-Smith, 1972). For example, wooden or bamboo sticks for playing *pantak lele* or *polamba giri* in Indonesia (Hamzuri & Siregar, 1998), hollow reeds for making *takraw* ball in Thailand and wooden ball for *bilboque* game among Inuit children in northern Canada and Alaska (Hall, 1995). The simplicity of finding or making games materials makes traditional games easy to play.

Current research of traditional board games shows that the tangible nature of games materials gives better access for players to learn, understand and play the games (Fang, Chen & Huang, 2016). As compared to the digital version of games for computer and tablet, traditional board games are easier to understand and more satisfying due to providing stronger emotional reactions and social relations (Fang et al., 2016). The social aspect of traditional games is an aspect that cannot be replaced by technology-based games. Although some modern technology-based games are played in groups, they are not as intense and complex as traditional games.

Inclusiveness of traditional games

Traditional games are inclusive in the sense that most children can play them, particularly due to their simple rules and tools. Thus, the games are “accessible to almost any child with a desire to play” (Casbergue & Kieff, 1998, p.144). Observation

from the side line of a playing area is a common way to learn games (Sierra & Kaminski, 1995). For beginners or less-skilled players, they can still join the game although sometimes they are not reckoned as real players. In my childhood, it was called *bawang kothong* that literally meant empty garlic. Being *bawang kothong*, while involved in the game like other players, any point or lost-point does not count and affect the team's performance.

Traditional games are also inclusive in regards to the economic and social background of players. Unlike technology-based games, such as computer or video games, with specific equipment that might be unaffordable for less affluent children (Casbergue & Kieff, 1998), traditional games use simple objects or tools that every child can access or make. The games also use simple terms or words that children from a different cultural background can easily learn and practice. All of these less-complicated characteristics of traditional games are inclusive for every child to join in.

Environmental influence on traditional games

Traditional games are often influenced by the environment and surroundings in which they are played. Flora and fauna, for instance, often influence the way traditional games are played or even reflected in the name of games. Such as the Australian game of *quandongs*, named after an Australian native tree, and *kangaroo hop*, mimicking the behaviour of a native animal (Howard, 2005), also the games of *hyena race* in Somalia or *cattle stockade* in Botswana (Hall, 1995).

In Indonesia, some traditional games visualise plants or imitate animal behaviours as found in nature. For example, *jamuran* game, a name originated from *jamur* meaning mushroom, visualises mushrooms encircling a tree as seen in nature (Sujarno et al., 2013). Likewise, the game of *jaranan* or *kuda debog* imitate

behaviours of horses (Sujarno et al., 2013). The words *jaran* and *kuda* share the same meaning, that is horse, whereas *debog* is banana leaves as materials of the game. Apart from specific influence of a particular context, there are some shared environmental effects across cultures, such as in games of *rock-paper-scissor*, *cat and mouse*, *man-elephant-ant* and *leap-frog*.

Another environmental influence on traditional games is in providing game materials. As mentioned above, most traditional games make use of things available in the surroundings. Along with the ease of accessing these materials, it allows children to establish connections to the environment. Children become more aware of existences and other beings around them.

As society in different parts of the world continuously change, the tradition of children's games is inevitably affected. The presence of technology and recent innovations of children's toys and various tools for children's activities, along with global movement in children's education, have shifted the nature of children's games. This complex change and transformation in society made scholars from the fields of social and cultural studies, education and games studies pay attention to particular types of games and conduct research in different contexts, as presented in the next section.

Research on traditional games

Traditional games are a subject of research among scholars from different fields of studies. In early studies of games from the fields of anthropology, folklore and psychology in the late nineteenth century researchers emphasised that games were universal and similarly found across different parts of the world (Culin, 1958; Avedon & Sutton-Smith, 1971; Herron & Sutton-Smith, 1971; Roberts et al., 1959). Studies during this period were mainly directed by two main objectives; the first was

to explore the origin of games and the second to investigate their distribution (Culin, 1958). As explained in the previous section, studies of games inform flows of people's movements and cultural contacts they make.

The universal view of games is challenged by later research findings that games are in line with diversity of the human race (Sutton-Smith, 1989) and the premise that understanding the context where a culture functions is vital to understanding the culture itself (Avedon & Sutton-Smith, 1971). Researchers are more interested in exploring the uniqueness of games in their localities. They find some games only exist a certain place (Hall, 1995), and if they exist in different places, adjustment to locality of each place involves some changes to the games (Howard, 2005). On that account, the notion of continuity and change becomes salient in research of traditional games (Factor, 2005). The change of games often happens in a very subtle way, rather than drastically, and to understand it requires a close look to game practices.

To draw on continuity and change of traditional games, some researchers conducted ethnographic studies and provided rich details of games in particular contexts. Prominent scholars of these studies are Peter and Iona Opie in the British context (Opie & Opie, 1959; 1984; 1985; 1997), Dorothy Howard in the Australian context (Darian-Smith & Factor, 2005; Howard, 1960; 2005) and Brian Sutton-Smith in the context of New Zealand (Sutton-Smith, 1952; 1953a; 1953b; 1972; 1981; 1989). Considering connections of the three contexts due to British settlements in Australia and New Zealand, Howard and Sutton-Smith also explored how the connections are reflected in children games. Although both researchers acknowledge the existence of traditional games of the indigenous community and their contribution to present games culture in each country, unfortunately, limited

information has been gained from Aboriginal culture in Australia (Howard, 2005). In New Zealand, on the contrary, children of *pakeha* (or white/non-Māori) New Zealanders are closely associated with Māori children and both games cultures affect each other and fuse to some extent (Sutton-Smith, 1972). These findings, nevertheless, are highly influenced by the broader cultural politics of each country (Taylor, 2014) that affect settler and native relations in general. These also confirm, again, that traditional games are an important resource to understand the complexity of a society meaning research on these games is crucial.

Later studies of traditional games were conducted with an underlying assumption that these games may become extinct and need to be preserved. This concern is indicated by abovementioned ethnographers, as expressed by the Opies' (1959) "children no longer cherished their traditional lore" (p.5), but become more salient in recent times. Challenges to traditional games come from varied issues, including the presence of modern and technology-based games (Balci & Ahi, 2017), the arrival of television (Darian-Smith, 2005; Sutton-Smith, 1989), institutionalised young children in day-care or school (Eichberg & Nørgaard, 2009; Sutton-Smith, 1989), shortage of play areas (Bronikowska, 2011) and the replacement of traditional games with modern organised sport activities (Dubnewick, Hopper, Spence & McHugh, 2018). These concerns led to the initiative of introducing children to traditional games in a more formal and organised way, such as through learning activities at school. Further discussion of this initiative is explained in the following section.

Traditional games as a learning tool in education

In the context of education, traditional games function to support pedagogical processes to achieve certain, mostly predetermined, learning objectives. This

function is related to attributes attached to traditional games explained above. The main role of traditional games in education is as preparation for children to enter adult life (Ajila & Olowu, 1992; Balci, & Ahi, 2017; Edwards, 2012; Sierra & Kaminski, 1995). The consideration that children should be educated for adulthood underlies this function. Traditional games provide learning opportunities for children to practice essential roles and skills for entering adult life (Edwards, 2012, p.12). Different types of pretend games are examples of this function, such as pretend markets, schools, or houses, in which children imitate adult roles, such as traders, teachers or parents. In some communities, traditional games also involve essential skills related to their livelihoods, such as hunting, food-gathering and fishing. Playing games can expose children to learn, mimic and portray adult roles (Chepyator-Thomson, 1990). As most traditional games are played in groups, children are also expected to learn about social roles in their society.

Another educational role of traditional games is to preserve cultural values. The underlying presumption of this role is the view of traditional games as an integral part of a culture with particular embedded values (Ariani, 2011; Dewantara, 1994; Dubnewick et al., 2018; Iswinarti, 2015; Sierra & Kaminski, 1995). Thus, playing traditional games is seen as a pedagogical process to transfer cultural values to young children.

The function of traditional games in preserving cultural values is that playing these games is considered a way to maintain cultural identities of a community. These identities characterise the uniqueness of a particular culture in relation to others (Finnegan, 2014). Important elements of traditional games that support this function include language, music and song that accompany games (Wang, 2015; Winarti, 2016). Hence, various singing games are considered essential to enact this

function. In Javanese society, the games *cublak-cublak suweng* and *jamuran* are examples (Wang, 2015). Playing these games is believed to keep children attached to their cultural roots and identities.

The functions of traditional games to educate children about social roles and skills, cultural values and identities as preparation to enter adult life clearly reflect an image of children as knowledge, identity and culture reproducers (Dahlberg et al., 1999). With this image, education for young children has a particular role.

During early childhood, therefore, the young child needs to be filled with knowledge, skills and dominant cultural values which are already determined, socially sanctioned and ready to administer— a process of reproduction or transmission— and to be trained to conform to the fixed demands of compulsory schooling (Dahlberg et al., 1999, p.45)

As a part of knowledge, skills and culture transfer to young children, traditional games are included in some learning activities in educational institutions. Many educators think that children today do not have opportunities to play traditional games unless provided by adults, especially teachers in educational settings (Ariani, 2011; Dubnewick et al., 2018; Winarti, 2016). Therefore, the games are included in lesson plans to ensure their transmission to young children. Especially with the prevailing discourse of quality in the current context of education for young children, in which learning processes should be predictable and predetermined (Duhn & Grieshaber, 2016). A lesson plan is required for evidence of ensuring the learning process is controlled with predicted outcomes (Moss, 2014). Learning traditional games becomes more formalised as a learning process, mainly organised by educators or adults, which shifts the characteristic of the games that were previously arranged among children themselves.

The shift to a more formalised way of learning traditional games is shared in different contexts of education globally. Besides cultural-related functions mentioned above, many educators also consider benefits of playing traditional games for developing certain skills in children. Some scholars focus their studies on exploring the role of games in developing motoric skills (Akbari, et al., 2009), social skills (Sierra & Kaminski, 1995) and cognitive skills (Casbergue & Kieff, 1998). Educational scholars are particularly interested in potential use of traditional games for teaching particular subjects in the contemporary classroom. For example, the use of *mancala* for teaching mathematics (Brinkworth, 1998), *marbles* to teach basic concepts of physics (Casbergue & Kieff, 1998) and games with physical movement “are taught in physical education classes and in extra-curricular activities” (Chepyator-Thomson, 1990, p.23). With this shift in learning traditional games, there is a new character of the games as a learning tool in the current context of education. As a tool, traditional games are used to achieve certain goals. In classroom learning, the games are positioned as an intermediate threshold, where mastery of games is a way to achieve learning objectives as the final goal.

Traditional games are also used as a learning tool in regards to accomplishment of developmental stages. This is based on a perspective that children grow up through stages of development and each stage has different characteristics in the way children interact with the environment and people around them. This perspective is strongly influenced by Piaget’s theory of cognitive development that conceptualises children’s cognitive capacities as progressing through experiences that are taken in and understood differently in each stage (Piaget, 1952). Based on this view, some elements of traditional games are important in facilitating children to develop certain skills and accomplish a stage of

development. In marbles games for example, children learn to develop moral judgement as they receive and gradually apply the rules. Starting from purely motor and individually driven, children progress by receiving coded rules from outside in the egocentric period, then begin to have concern about winning in the stage of incipient cooperation, and finally they know and understand the whole set of rules in the stage of codification of rules (Piaget, 1965). Further, Piaget classifies children's games into three categories: practice games, symbolic games and games with rules, which respectively increase in complexity and application (Piaget, 1951). Piaget's perspective on games, until recently, was used as a theoretical foundation to provide games as a developmentally appropriate practice to enhance children's learning.

However, as a debatable concept in education, learning has been understood and approached in many different ways. While Piaget's theory is a main reference for learning processes in the classroom, other educational scholars propose different forms of learning that potentially happen outside the classroom. Being outdoors was part of traditional heritage in some cultures, such as Scandinavian countries and Māori communities in New Zealand, that provides an opportunity for different forms of learning (Alcock & Ritchie, 2018). This cultural heritage becomes a foundation for outdoor-based education in those contexts and starts to be adopted in other contexts, such as the growing popularity of forest schools that spread from the Scandinavians to other European countries (Alcock & Ritchie, 2018). In other contexts, acknowledgement of the importance of out-of-classroom learning takes the form of providing playgrounds or open space at schools so children have other learning opportunities. Activities in the playground can vary across time and place, but one that has been a part of playground tradition is traditional games. The way learning takes place through traditional games in the playground is explained below.

Traditional games in the school playground: an uncovered classroom

An important contribution of research on traditional games to education is the idea that learning can take place beyond a covered classroom. Particularly in the school playground that allows children to engage in different forms of learning. Children can explore and learn many things they cannot do in the classroom, which makes the school playground equally important to classrooms as a learning space (Howard, 2005; Opie, 1994; Sutton-Smith, 1990). In this space, learning mostly involves non-verbal aspects, particularly body movements and experimentations. Reflecting on her ethnographic study of Australian children's folk tradition, Howard (2005) explains,

In the beginning my attention had been concentrated on verbal aspects of children's play. But as I spent more and more times on the playground, I became more and more aware that children's voices accompanied other body movements and that children moved in group pattern – not as chaotically as I had, at first, thought. Then I began to view the playground as an educational institution – as a school operating three feet below adult eye level and invisible to myopic adult (Howard as cited in Factor, 2005, p.5).

Howard's reflection shares an important point for this research to give more attention to non-verbal acts, especially body movements, in the school playground, regardless how chaotic and aimless such acts may seem. This provides a methodological guide about engaging with children in the school through observations.

Non-verbal aspects of children's engagement in the school playground can be made visible through rich description of the observation. In a study of people in the playground of a British school, Opie (1994) shares interesting findings below.

At first the playground seemed uncontrolled confusion. Balls whizzed by my head, bodies hurtled across my path, some boys were on the ground pummeling each

other, and a dense black mob rushed across, apparently taking no notice of anyone else...I soon realized that any child with a look of concentration on his face was likely to be part of a game, even though he might be leaning against a wall with his hand in his pockets...while other, apparently just 'mucking about' were conducting serious (if minor) experiments on themselves and their environment (Opie, 1994, p.2).

Similar to Howard, Opie (1994) makes it clear that seemingly passive and random bodies and movements are actually parts of a game. She adds a notion of experimenting taking place in the playground involving children and the environment. A closer look at this place can give insights about micro-politics of the school playground considering it has "smells, tastes, splinters, and accidents; areas that are forbidden and those that mustn't be trespassed into" (Sutton-Smith, 1990, p.5). Although the studies mentioned above mainly focus on children and their expressions, nevertheless, they indicate the significance of environmental factors in the learning process.

Traditional games in education for young children: stories from Indonesia

Traditional games have a special place in the history of education in Indonesia, despite similar educational roles the games have in other contexts. To understand this specialness, attention should be given to different influencing factors including distribution of population, history of colonisation and changes in educational policies (Thomas, 1992). Therefore, a review of these factors can illuminate the significance of investigating traditional games in the contemporary context of education in Indonesia. What follows is a review of the significant roles of traditional games throughout Indonesian history and how the roles evolved across time.

Traditional games for regaining national sovereignty

Being colonised for centuries, Indonesia experienced a long period of political, economic, social and cultural oppression. People were forced to detach from their cultural heritage and traditional ways of life (Dewantara, 1959) and instead adopt colonial policies and regulations that undermined Indonesian indigenous or national culture. Young children were prevented from learning cultural practices of their community, such as singing folk songs, listening to folk stories, playing traditional games or performing traditional arts (Dewantara, 1959; 1994). Consequently, Indonesian young children were not familiar with their own culture.

In later years of Dutch colonisation, a group of educated Indonesian youths were concerned about the absence of national culture under colonial government. They realised that culture could “provide the framework for a coherent way of life” (McVey, 1967, p.128) and should be nourished among Indonesians, especially young children. With a driving spirit to become an independent nation, this group of youths initiated a movement to reattach the national culture to its people. This initiative transformed into a national awakening movement towards Indonesia’s independence. This movement became an early formation of national education.

A significant step during the movement was reintroducing traditional culture to young children. This introduction was crucial to build children’s sense of pride as Indonesians. Instrumental to traditional culture was traditional games, along with other forms of cultural practices. A prominent figure in the movement, Ki Hadjar Dewantara (1977), suggested people in different parts of Indonesia should reinvent children’s games in their locality as an initial step for establishing a system of national education. Further he proposed, “children’s games are children’s arts, they

are simple in their forms and contents, but they have ethical and aesthetical implications” (Dewantara, 1977, p.264).

Through the national awakening movement, and particularly with introduction of traditional games to young children, Indonesian people started to be aware of their cultural heritage. They soon developed a sense of confidence and pride as Indonesians. This sense fuelled the spirit to regain the nation’s sovereignty and reclaim independence.

Traditional games as a part of national identity

After declaring independence, Indonesia started to develop the national education system. In the initial state, the system mainly adopted philosophy and educational concepts of Ki Hadjar Dewantara, who established the first national school of *Taman Siswa* in Yogyakarta. His major contribution to educational practice in Indonesia was the *among* system, within which traditional games played an important role.

The *among* system, as an educational practice, had roots in Indonesian national culture. This system aimed to facilitate children to develop their potentialities, physically and spiritually, without pressure of achieving a certain prescribed learning objective (Dewantara, 1977). In this system, the role of teachers was significant as *pamong*, closely translated into performing the act of care. Child-teacher relationships were developed based on three main principles of leadership and teacher responsibility in the *among* system. The trilogy consisted of (Dewantara, 1977; 1994):

1. *Ing ngarso sung tulodho*, at the front to provide example modelling
2. *Ing madya mangun karso*, in the middle to build motivation
3. *Tut wuri handayani*, at the back to encourage aspiration

Apart from conceptualising the teacher's role, educational practice in *Taman Siswa* was divided into three levels based on children's stage of development. Each stage lasted for a *windu*, a period of eight years in the Javanese lunar system. It had particular characteristics that influenced pedagogical practice. The three stages were as follows (Mangoensarkoro, 1938, pp.21-22):

1. *wiraga*, from the words *wi* meaning perfecting of and *raga* meaning body. It was the stage within which children were developing senses and physical body.
2. *witjipta*, from the words *wi* meaning perfecting of and *tjipta* meaning thought. It was the stage within which children were developing intellectual capacity. This development enabled children to think and generate ideas.
3. *wirama*, from *wi* meaning perfecting of and *rama* meaning harmony. It was the stage within which children were adjusting themselves to the wider world.

By the time an individual finished the three stages of development, at about twenty-three years old, the person was ready to embrace adulthood.

The provision of education in *Taman Siswa* was designed according to the three stages of development. There were five levels that covered different groups of children (Department of Information, n.d; Dewantara, 1959; Mangoensarkoro, 1938). Each level was conceptualised as *taman*, that literally means garden. It reflected the idea that an educational institution should serve as a fun, safe and comfortable environment, like a garden (Dewantara, 1977;1994). These different *taman* were:

1. *taman-indrya*, equal to kindergarten or preschool, for children under six years old.
2. *taman-anak*, served children in lower levels of primary school, from grade one to three, aged seven to nine years old.
3. *taman-muda*, served children in lower levels of primary school, from grade one to three, aged nine to twelve or thirteen years old.
4. *taman-dewasa*, equal to junior secondary school, served individuals in the third *windu*, from twelve to fifteen years old.

5. *taman-madia*, equal to junior secondary school, served individuals in the third *windu*, from twelve to fifteen years old.

Both *taman-anak* and *taman-muda* constituted primary education, whereas *taman-dewasa* and *taman-madia* constituted secondary education. Apart from that, *taman-indrya* was provided for preschool children (Dewantara, 1959).

In *taman-indrya*, teachers or *pamong* implemented the *sari-swara* method in their pedagogical approach. This method combined songs, arts, lore or stories from the nation's traditions (Dewantara, 1959, p.7). In practice of the *sari-swara* method, traditional games were an important element to create a communal atmosphere that helped children enjoy school (Mangoensarkoro, 1938). Traditional games, as Ki Hadjar Dewantara argued, "were the natural expressions of a child's normal learning processes, and the culturally rich agents of his induction into his own society" (Radcliffe, 1971, p.222). For that reason, traditional games became one of main sources in educational practice in *taman-indrya*.

It is noted that although the pedagogical approach of *Taman Siswa* was highly influenced by Javanese culture, ethics and worldview, it had potentiality to be adjusted to other cultural contexts within Indonesia. Ki Hadjar Dewantara acknowledged the importance of contesting custom and tradition across time and place (Mangoensarkoro, 1938). This was a call to keep exploring traditional games in different contexts. Games that are integrated with other forms of arts are essential to achieve *wirama* or harmonious life (Hadisukatno, 1952).

Traditional games in the contemporary classroom in Indonesia

The current educational policy in Indonesia clearly mandates the priority of character education. In 2010, the Ministry of National Education launched the national program of "*Pengembangan Pendidikan Budaya dan Karakter Bangsa*" (the

development of nation's culture and character education). This program was a response to public demand for educational strategies to address increasing social problems in society, including but not limited to corruption, violence, sexual harassment and mass-riot. The program aimed to provide a guideline for educational institutions to implement character education and to integrate cultural values in the school curriculum (Pusat Kurikulum, 2010).

A main strategy in implementing this program was integrating local wisdom in educational practices. It was expected to promote diversity in regards to local contexts and children's needs. Hence, instead of developing a standardised system of national education, the government preferred to open more spaces for dialogue among people (Baswedan, 2014). Baswedan highlighted the importance of considering geographical, social and cultural context of a school in developing programs and educational practices. He argued that "every school is a good school" (Baswedan, 2014, p.53). Bringing in traditional games was a good strategy to integrate local wisdom and culture.

Unfortunately, the implementation of integrating traditional games as a strategy of character education is not well-supported by adequate research. Not many educational scholars have given attention to this subject. A substantial study about the use of traditional games for children's character building was conducted in a village in Central Java by Sujarno et al. (2013). Their research, from an anthropology perspective, conducted functional analysis of twenty games existing in the village. Findings of this study show that only half of existing games are still played by children today. In the analysis, Sujarno et al. (2013) describe details of each game regarding the origin, time and place to play, the tools, players, procedures and functions of the game. They recommend further investigation of

traditional games in the school setting, particularly in early childhood and primary education. Another investigation conducted by Syamsudduha, Kamaruddin, Hanafi and Tang (2014) focused on the practice of *pappaseng Bugis* or Buginese message. Studying a document of cultural texts, they identify values in the practice that are important for character education. Until recently, however, limited research was available that focuses on traditional games as character education in educational settings.

Among social and educational scholars in Indonesia, an interest to investigate traditional games has been growing recently. Such researchers share an interest in preserving the games that generally viewed as under threat of vanishing due to waves of modern and technology-based games. In the context of education, studies of traditional games generally highlight the benefit of the games to support children's learning. Additionally, in relation to preserving culture, some studies focus on the peculiarity of traditional games as activities with embedded cultural values.

Purwaningsih (2006) reviewed different types of traditional games and classified them into different categories. She made general recommendations about the importance of preserving traditional games considering their educational and cultural benefits. Similarly, Ariani (2011) reviewed a number of Javanese traditional games and analysed their philosophical values. From this analysis, she recommended reintroduction of the games to younger children for their spiritual and cosmology values. Bertilla (2017) investigated a hamlet in rural Yogyakarta, in which a group of youths has been reviving traditional games, not only to make children familiar with the games, but to improve economic status of the traditional toy craftsmen who live there.

In an educational context, Iswinarti (2015) explored benefits of traditional games to improving social competence of school children. Through a method of experiential learning, she concluded that traditional games can improve children's social capacity, such as problem solving, self-control, cooperation and empathy (Iswinarti, 2015). In another study, Ardhanarespati (2017) investigated the potential of traditional games to increase children's capacity in facing natural disaster through experiential learning. Using a grounded theory method, he concluded that traditional games can improve children's resilience and psychosocial capacity in encountering disaster.

From the studies discussed above, it can be seen that research about traditional games in the Indonesian context mainly focuses on the content and function of games. With details of game descriptions and benefits gained from playing traditional games, the existing literature is still highly focused on what the games *are*. In educational settings, particularly, the main direction of previous research is on the use of traditional games as a tool for learning. Although the discussion about educational benefits of traditional games is always useful, further investigations are needed to go beyond the existing conversation about games.

Problematising traditional games in the existing literature and educational practices

Based on this review of literature on traditional games, both from international and Indonesian perspectives, I find great attention has been given to detailed descriptions of traditional games. Previous ethnographic studies provide detailed information about what games children play, how games are played, and what tools or objects are used in the games. Some studies analyse the roles of traditional

games in educating young children and their benefits for children's learning and development. However, the layers of complexity of learning in the context of traditional games still need further investigation. Mawere (2012), who proposes traditional games as part of an Indigenous Knowledge System in the context of Shona community in Zimbabwe, claims that there is "little or no analysis of the multi-dimensional role of these games" (Mawere, 2012, p.17). Although current literature providing detailed information of traditional games is and will be relevant for further research, a new approach is needed to expand established knowledge.

General discussion and analysis of traditional games is focused on human players. The gaze is focused on looking at what children do in games and how playing games impacts them. Players of games are only predicated to humans with a presumption that games can only happen with human intention. As a consequence, it tends to overlook other elements of traditional games, that if addressed adequately can generate a new knowing about games.

One neglected aspect of traditional games is materials of games. The material world, although acknowledged in the literature, is still not recognised in a game's performance. It is often positioned as peripheral or at the background of human action as a focus of attention. Educational research is no exception and clearly positions materials as a tool for children to gain certain skills. With dominant narratives of developmentalism and quality in education, traditional games are seen as a tool for learning, rather than as a learning event. Through playing traditional games, children are also expected to learn predetermined skills in accordance to a certain developmental stage. I do not argue the importance of giving attention to children's cognition, but it may overlook other important factors. As Alcock and Ritchie (2018) argue,

The complexities of play, culture, nature and learning are overlooked when play is understood narrowly as simply being about how children learn, with nature providing a passive learning context (p.84).

For that reason, I propose an alternative narrative about learning processes in the context of traditional games by attending to different aspects of the games.

In this new narrative, I underline the importance of doing/action/practice of traditional games to address the lack of discussion about what actually happens when traditional games are performed. Through an introduction to performative understanding (Barad, 2007; 2008), I aim to focus on the production of matter and material bodies in games. It shifts the common representational view that concentrates on games descriptions as a reflection of reality. It also positions traditional games as having active and dynamic existence, rather than fixed things that are passively passed across generations. Ultimately, it aims to explicate what games *do* in their performance? what elements involve in a performance of games? and what role is performed by each element? Here, games are positioned as an active entity that can tell stories. Pérez-Latorre (2012) shares an interesting argument about games,

Games have always been telling us something interesting about ourselves, about our world and our relationship with it; the problem is, simply, that until very recently we haven't bothered much to listen to them. Now is the time to learn the language in which games speak to us (p.128).

The language I use to share a new story about traditional games is through a new materialist approach. This perspective makes visible the material world, which becomes a new way of thinking and creates a new space for expanding knowledge about traditional games.

In the context of education for young children, particularly, the new materialist approach provides a new way of understanding learning through traditional games,

based on different concepts of knowing and relation of the knower and the known.

Fox and Alldred (2015) describe a new materialist approach in social inquiry as follows,

it shifts from conceptions of objects and bodies as occupying distinct and delimited spaces, and instead sees human bodies and all other material, social and abstract entities as *relational* (p.401, original emphasis).

This perspective is still new for educational research in Indonesia, although it has been growing in western academic culture. Nevertheless, I find a strong connection to different materials/objects/artefacts have been explored from this perspective. Some of those materials are also relevant to contemporary education for young children in Indonesia. Hence, applying a new materialist perspective in this study potentially expands its application in a new context, the Indonesian context.

Although some new materialist researchers explore different materials in the context of children's play, the explored materials are not directly related to children's games, especially traditional games. For this reason, using a new materialist perspective for approaching research on traditional games is relatively new and becomes a potential new way of reinventing traditional games. Simultaneously, it will extend the application of new materialism in educational practice for researching children's traditional games. The way in which the material world is explored in educational inquiry is discussed in the following section.

Exploring the material world in an educational setting

In educational research, and the fields of social sciences and humanities in general, the "material turn" (Alaimo & Hekman, 2008; Lenz Taguchi, 2014; Murris, 2016) has changed the landscape and research direction. It complicates the dominance of language and culture that have been granted power and agency in

understanding social and natural phenomena (Barad, 2007) and calls for attention to the material world in educational setting. Not only acknowledging the existence of material, the material turn appeals to bring back the material into discussion and position it as equally important to human subjects.

New materialism is an emerging perspective in response to the material turn and is attracting scholars in social science and education. Some researchers use different terms in their research, such as material feminism (Alaimo & Hekman, 2008; Taylor, 2013; Taylor & Ivinson, 2013), relational materialism (Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2011) and feminist materialism (Lenz Taguchi, 2013), which share some overlapping ideas with slightly different focus in their approaches. For the purpose of this research, I use a new materialist perspective that goes beyond categorisations or binaries in educational inquiry, such as theory/practice, human/nonhuman, animate/inanimate, nature/culture, matter/discourse, and so on. This perspective allows research analysis to bring to the fore matter and materiality (Coole & Frost, 2010) and simultaneously decentre humans as the focus of discussion. This is particularly relevant for this research because it gives different elements of traditional games due value and acknowledges their contribution to the learning process taking place in the games.

The new materialist perspective urges a shift in viewing materials, from seeing them as fixed and inactive (Barad, 2007) to becoming agentic (Alaimo & Hekman, 2008) and vibrant (Bennett, 2010). It calls educational researchers “to reappraise what counts as knowledge and to re-examine the purpose of education” (Taylor & Ivinson, 2013, p.665). This shift generates a new way of thinking and knowing about different aspects of education. It also facilitates re-adjustment of the focus in looking at learning processes, from merely centralised in children’s cognition to consider all

“change, flows, mobilities, multiplicities, assemblages, materialities and processes” (Taylor & Ivinson, 2013, p.665). These new materialist ideas speak to me and address some questions I had when encountering games materials from my childhood, as explained in Chapter One.

The emergence of new materialism also has impacts on the fields of childhood and early childhood studies. I review previous studies in these fields using new materialist perspective to explore the complexity of material-children relations in educational settings. Moreover, coming from an Indonesian context, I am concerned with the absence of materials from discussion about education for young children.

Given such concern, I give more attention to research on materials that are closely relevant to the Indonesian context. Nevertheless, I am also attentive to the literature that potentially contributes to concepts, substances and methodology for this research. I further explain how the new materialist perspective helped me with different conceptual and analytical tools to investigate traditional games in Chapter Three, Theoretical Framework. In the following sections, I examine studies that bring to the fore different materials and materialities in relation to young children. My aim is to build an understanding of how materials can come to matter (Barad, 2007). Materials in these studies are different objects/artefacts/things/bodies from everyday events and activities in educational settings that have been seen as ordinary and even taken for granted.

Investigating materials in educational research

Researchers in educational and childhood studies have explored different materials commonly available as everyday objects in educational settings. A sandpit, for instance, is a familiar material in early childhood institutions across Australia. Using a new material perspective to investigate a sandpit can make visible the

process of materialisation, that is “looking from the perspective of the material (e.g. object/s) and how the material (object/s) interacts with children” (Duhn & Grieshaber, 2016, p.55). It involves the use of common research tools, such as observation and description, in a different way to make it possible for alternatives in imagining pedagogical moments. A rich description provided from an observation of a child/pipe/sand event can make visible different nuances and affects that complicates the discussion about the event as a learning opportunity (Duhn & Grieshaber, 2016). From this study, it is clear that when we shift our gaze to give attention to different existences in the sandpit, not only to children, different understanding of learning can emerge.

The same material object, the sand – in a sandpit/sandbox or at the beach – has been researched in different contexts, such as in a Swedish preschool (Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2011; 2014) and in a course of childhood studies at a university in South Africa (Murriss, 2016). Revisiting a sandbox, in which a girl plays with sand and a bucket, Hultman and Lenz Taguchi (2010) use a relational materialist approach when looking at visual data and provide a different story about the child and the sand in the sandbox. They describe the visual as follow:

muscles lifting the arm and hand which slowly opens up and lets go of the sand, which by the force of gravity falls with specific speed into the bucket, where it lands – one grain upon the other with force causing it to roll over and down and simultaneously constructing a hill of sand in the middle of the bucket. The uneven foundation of the sandbox forces the body of the girl to adjust to find the perfect balance to be able to perform her task. She directs her whole body around the sand. The force of gravity, the uneven foundation, the bucket and the quality of the grains of sand are all active forces that intra-act with her body and mind and that she has to work with and against (Hultman & Lenz Taguchi, 2010, p.531).

Lenz Taguchi (2011) argues that “the playing is taking place *in-between* the girl and the sand” (p.38, original emphasis), in which they both co-constitute a relationship

(Lenz Taguchi, 2014). In the description above, greater attention is given to different materials and forces that come into play. It becomes visible that both human and non-human factors are equally active in the play.

The girl-sand relational image offers an alternative to the common image of the moment that is simply depicted as “a child playing with sand” (Lenz Taguchi, 2014, p.79). This later image positions the girl as the main actor in the event, reflecting an *anthropocentric* gaze (Hultman & Lenz Taguchi, 2010) with a consideration that human is the only owner and source of power and force. This gaze is remarkably widespread among social and educational research and is often taken for granted. Therefore, an alternative story from a new materialist approach is important to open up a new way of understanding pedagogical moments.

With this perspective, scholars in education and social sciences also offer alternative stories about different materials in the classroom. These include the furniture, such as chairs and tables (Bone, 2017; 2018; Jones, 2013b; Lenz Taguchi, 2010; 2012; Taylor, 2013), the clock (Pacini-Ketchabaw, 2012), the floor (Lenz Taguchi, 2010), and the carpet (Jones, 2013b). All of these materials are commonly described as complementary equipment in a classroom. Giving due to their materialities, however, disrupts the common image – and often becomes the only image – of materials. It makes visible the way materials affect other existences in the classroom, both human and non-human, in ways that were previously unnoticeable. Moreover, it becomes perceivable that these materials are actively involved and are not only passively used in the learning process.

In different studies, a credit to materials in educational settings has been extended to the materiality of space (Jones, 2013b; Lenz Taguchi, 2010; 2012; Lenz Taguchi & Palmer, 2013; Taylor, 2013) and the materiality of different bodies, human

and non-human, in the classroom (Pacini-Ketchabaw, 2012; Taylor, 2013). Here, space is no longer perceived as an inert area or “a physical container” (Taylor, 2013, p.688), but a component that actively enacts, works and performs in relation to other materials in the classroom. Likewise, body is not a passive organ that always needs the mind to make it move (Taylor, 2013), but actively constitutes a learning process. In the classroom, not only human bodies that exist and enact particular roles, but also non-human bodies, such as chair, desk and clock to name a few. The human and non-human bodies equally constitute, act upon, affect and are being affected by each other. All studies described above share the same interest about what the materials or materialities *do* or *act* or *perform*, and not what they *are*.

Similar capacity and power to act and perform – known as performative agency (Lenz Taguchi, 2010) – are also entitled to different things and artefacts in the classroom, such as picture books (Murriss, 2016), flipchart and pens (Taylor, 2013), dress/costume/clothes (Jones, 2013a; Taylor, 2013), soft toys (Jones, 2013b) and arts materials, such as clay, paints, ribbon, coloured papers, shiny papers (Lenz Taguchi, 2010). These materials have been considered as aids or support tools for children’s learning. The learning itself is believed to take place in “either internal cognitive process in the individual child, or emerging through an encounter with other human beings, and especially the teacher who knows what to learn” (Lenz Taguchi, 2010, p.65). The material world is always positioned at the periphery of human-centeredness of pedagogy. Approaching them from a new materialist perspective, however, can bring to fore their influential effect to their counterparts, as well as their centrality in the learning process.

Correspondingly, different objects and artefacts in the playground have capacity to play *with* children and make children act or play in certain ways. These

include climbing frame (Hultman & Lenz Taguchi, 2010), wooden sticks (Lenz Taguchi, 2010), stones (Rautio, 2013) and rocks (Davies, 2018). In any activity or play occurring in the playground these objects are equally active as human players. Hence, learning processes in those events – whether inside the classroom or in the playground – are located in the ongoing intra-active relations among different elements, human and non-human, in an educational setting. How these relations are conceptualised as ongoing intra-actions is discussed in the theoretical framework chapter.

Materials in different contexts of education

Studies about the material world in educational settings, as reviewed above, have been growing in western contexts. Many are established in Europe and Scandinavia, as well as in the United States, Australia and New Zealand, but is still very limited in other contexts, despite the enormous potential they have. In the contemporary Indonesian educational context particularly, the significance of materials remains unnoticed amidst the pervasiveness of prevailing discourses of quality and developmentalism. Nevertheless, the relevance of studies from other contexts can be drawn from the material aspect.

Beginning with and focusing on materials unsettles contextual boundaries in the practice of educational research. The same material object or thing can be relevant to different contexts, although each context has a particularity. For example, wooden sticks in a Swedish preschool playground (Lenz Taguchi, 2010) remind me of a broken tree branch I used for *plinthengan* or as a catapult in my childhood, as described in the introduction chapter. Similarly, stones in autotelic practices – children who pick up and carry stones in everyday life - in Finland (Rautio, 2013) instantly speak to me as a child who was born and raised in an area surrounded by

limestone. Rautio (2013) intelligently explicates complex relations between children and stones in that practice, which are inherently rewarding and have value for education. She argues that stones are not passively picked by children, but they are actively involved in making children pick them up, touch them, hold them in particular ways and keep them. The stones invite children to interact with them. She concludes that “*stones have (intra-)agency: stones do things to us and with us*” (Rautio, 2013, p.404, original emphasis).

Rautio’s explication makes me revisit my childhood and the connection I had with stones. Although it was not an autotelic practice in my experience, I can relate to her description about a stone’s capacity in *do* things to and *with* children. I still remember that only shiny, small and perfectly sphere-shaped pebbles attracted me to pick them up from the ground near my house. I washed them thoroughly, wiped them with cloth, kept them in a nice plastic container and carried them in my schoolbag. I played *gatheng*, the Javanese version of five stones game, *with* them when it was *in season* (Opie & Opie, 1997, Sutton-Smith, 1953a, my emphasis). At that time, I thought particular features of those pebbles brought a good luck charm in my game. The stones described in Rautio’s article definitely make me think about my childhood game differently.

Correspondingly, the same object or artefact in educational settings for young children can be pertinent in different contexts, apart from unique qualities of an object in each context. Looking at images of small chairs in a Scandinavian store (Bone, 2018) and descriptions of different kinds of chairs, such as the wooden chair in the vice-chancellor room at Stockholm University (Lenz Taguchi, 2010) and the throne of Queen Victoria in Dublin Castle (Bone, 2018), I immediately think about chairs I commonly see in preschools and schools in Indonesia. An instant

visualisation of my *bangku* or a connected chair-desk in primary school comes to my mind. Then, I google and find a picture of a chair that is exactly the same as the one I had at school. Figure 2.1 below shows *bangku* that commonly used at schools in the past.



Figure 2.1. *Bangku* or school desk from the past

Comparing features of *bangku* with small chairs in Bone's (2018) article, including their design and raw material, it is obvious that they *are* different. However, considering what they *do*, to children particularly, I confirm Bone's (2018) description of Australian and New Zealand contexts of education is very relatable to the Indonesian context. Both *bangku* and small chairs are "schooling and disciplining the body[ies]" (Jones, 2013b, p.605) of children "as they are prepared to enter the world of sitting" (Bone, 2018, p.11). I recall how often my teacher told me, and all my classmates, to sit down properly. It means that we should sit up straight, fold our arms and put them on the desk. The importance of proper gesture in sitting is highlighted and associated with positive attitudes, such as attentiveness and

obedience. It confirms the significance of materials as applicable across different contexts.

Illuminating the significance of materials is the major contribution of new materialism in educational research. It shows that boundaries among different contexts can be blurred by focusing on acts or works materials *do*. The focus on what they *do* and *not* what they *are* speaks to my problematised thought about traditional games after reviewing the literature, as I mention previously. This also speaks to my wonder in encountering games materials from childhood that I articulate in the introduction chapter. However, until recently, there was no literature on new materialism specifically investigating traditional games or children's games in general, although some researchers have explored children's play activities.

The material ethics

As discussed above, cultural values attached to the same material or object can be different from one context to another. This is possibly related to cultural meaning given to materials, such as "the cultural actions that brought that particular chair to the classroom for a particular purpose" (Jones, 2013b, p.606). I remember during my primary school years, I always shared textbooks and learning resources with a friend sitting next to me. Therefore, particular *bangku*, as illustrated in figure 2.1 above, fit the necessity of sharing in learning. That *bangku* allowed children to put a book in the middle and have shared access to it.

However, material objects can share a comparable ethical position regardless of cultural context. This is considered as material ethics (Alaimo & Hekman, 2008) that focuses on material consequences of a practice that takes place in particular time and context. Unlike cultural relativism of ethics which highlights equality of all ethical positions, material ethics allows a researcher to make a comparison of "the

very real material consequences of ethical positions” (Alaimo & Hekman, 2008, p.7) among different contexts. The case of a small chair and *bangku* above is an example of comparable material ethics. By looking from the perspective of materials, ethical implications of the sitting practice in educational settings across different contexts can be compared.

Strategies for investigating materials in education

Apart from substantial conceptual contributions to thinking about different materials in educational contexts, the new materialist approach also offers different strategies for conducting educational research. Davies (2018) identifies ways in which new materialist research practice is different from general practices of qualitative research that become “common-place and unremarkable” (p.115). These include moving away from a common practice that separates knowledge from the known and the knower, or representations from the represented and the one who representing, that often referred to as “a tripartite arrangement” (Barad, 20017, p.46) or a static triadic relationality (Davies, 2018, p.116). Rather, the new materialist approach views the three elements as an entanglement.

The data themselves are in familiar forms for qualitative research, such as visual data (Bone, 2018; Hultman & Lenz Taguchi, 2010; Lenz Taguchi & Palmer, 2013), interview (Lenz Taguchi, 2012), observation and description (Duhn & Grieshaber, 2016), stories (Lenz Taguchi & Palmer, 2013), ethnographic data (Taylor, 2013) and art works (Davies, 2014; Lenz Taguchi, 2010). However, new materialist approach uses these data in different way. Rather than views them as representation of reality being studied, the approach focuses on looking at the process of materialisation (Lenz Taguchi, 2010; 2014) by giving attention to complex relations among different components in the learning process.

An open space for a new story about traditional games

After reviewing literature on different aspects related to this research, problematising common threads in the existing literature and proposing a new perspective for investigating traditional games, I can identify an open space for situating this research. This space is for me to question things I had previously taken for granted and to disrupt sedimented knowledge and understanding that I have about traditional games and education for young children. It is also an opportunity for this research to generate a new story about games from an Indonesian context of education.

Reading literature on educational and childhood studies, especially the series of contesting childhood, provoked a new understanding about learning process and education in a broader sense. It raised my awareness that there is never one way of thinking about any particular thing, place or entity. This one way of thinking – as well as discourse, perspective or theory – creates one story that, in turn, becomes the only story.

There is a moving talk from a Nigerian story-teller, Chimamanda Ngozi Adichie, who reminds me – and everyone – about the danger of a single story. Some parts of her talk that really moved me are as follows:

So that is how to create a single story, show a people as one thing, as only one thing, over and over again, and that is what they become. ... But to insist on only these negative stories is to flatten my experience and to overlook the many other stories that formed me. ***The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are incomplete.*** They make one story become the only story... The consequence of the single story is this: It robs people of dignity. It makes our recognition of our equal humanity difficult. It emphasizes how we are different rather than how we are similar (Adichie, 2009, my emphasis).

Returning to my childhood and the way I was raised and educated, I now realise my journey was dominated by a single story which shaped the way I look and understand, beyond educational issues, the world. This is what Moss (2019) calls **‘positionality’** (p.27, original emphasis). Encountering new materialist readings troubles me and leaves me with many questions about things I previously believed were ‘true’ or ‘right’ because that was the only way I knew about them. These include my positionality about different things I explore in this study, such as games, traditional games, children, childhood, education, education for young children and education in Indonesia. I also question things that I have taken for granted related to those notions.

The troubled position and shifting paradigm I experience throughout different encounters in this research opened up a space for me to create a new story of children’s traditional games from the context of education for Indonesian young children. It also made me realise there are alternatives and I can explore them. As Moss (2019) persuades, “[w]hat matters is not so much the choice itself but realising that a choice exists and must be made” (p.3). To explore the alternative, the new materialist perspective helps me to make visible different potentialities and to do experimentations that make it possible for what Jones (2013b) considers as “something else” (p.604) to happen.

Revisiting traditional games in the context of education for young children from a new materialist account allows me to go beyond established cultural and developmental views that are unquestioningly accepted in prevailing educational practices in Indonesia. It makes me pay attention to different things that have been taken for granted or even unrecognised. With a focus on doing or performance of traditional games, it considers all elements as performative agents (Lenz Taguchi,

2010), that brings out together the expected and unexpected phenomena. Being aware of these open possibilities is the core of ethical practices in material ethics (Alaimo & Hekman, 2008). Material ethics entails “[a]wareness of that intra-activity, the capacity to affect and be affected” (Davies, 2018, p.120) among performative agents. This performative understanding is useful for thinking and conceptualising traditional games and enables me to move away from pervasive representationalism dominance in educational and social science research.

Methodologically, encountering new materialism allows me to expand my established understanding of doing a qualitative research. Particularly in working with different readings and texts through diffractive reading and analysis. Also, in making an active use of pedagogical documentation and seeing it as an ongoing process and not a final representation of reality. Further, I discuss how the new materialist perspective provides theoretical and conceptual tools for this study in Chapter Three, Theoretical Framework. The way this perspective contributes to the way this study was carried out is described in Chapter Four, Research Methodology.

Chapter Three: A New Materialist Theoretical Framework

...we need a language that encompasses more of these complexities [of teaching and learning in an increasingly complex and diverse world], and which can enable us to make use of them and thereby go beyond the prevailing binary divides that still haunt educational practices and theories
(Lenz Taguchi, 2010, p.4)

In this chapter, I explain some theoretical concepts from the new materialist perspective as a framework for this research. These concepts become conceptual and analytical tools for investigating traditional games in the context of education for young children in Indonesia. The framework is mainly built on the notions of intra-action and performativity from Karen Barad (2007; 2008) as a foundation. In thinking and conceptualising traditional games in this research, I use concepts of intra-active pedagogy and performative agency from Hillevi Lenz Taguchi (2010; 2014) derived from Barad's notions above. Another concept of diffraction from Barad (2007; 2012a; 2014) is used as an analytical tool and provides a basis for diffractive analysis in this research.

This chapter is divided into three main parts. I begin the first part with an explanation of new materialism as a theoretical framework and how it is relevant to provide a language to tell a new story about traditional games in this research. Then I introduce the basic concepts of intra-action and performativity, followed by the notion of intra-active pedagogy and performative agency. In the second part, I explicate the idea of diffraction and how it brings significant changes in the practice of social and educational research. Then I further explain how the idea of diffraction is applied in research practice as diffractive analysis. In the last part, I review several

concepts from previous studies using a new materialist perspective that is relevant to this research.

A new materialist perspective: a language to tell a new story

The saturation of common understanding of traditional games is evident in the existent literature. Across classical and contemporary readings, traditional games are defined by long existence, transmission over generations and embeddedness to culture. This familiar conceptualisation of traditional games has been established for a long time and remains unquestioned. Research about these games predominantly discusses cultural aspects of games and how they change or remain the same across time. In the context of education, the discussion mainly focuses on their function as a tool for children's learning. This prevailing conversation, as a consequence, results in common reproduction of what has been known about traditional games.

On the other hand, there is also a lack of alternatives in looking at aspects of children's learning and pedagogical practices with young children. There is a paucity of "language and concepts to use in order to make visible or actualise the intra-active processes in-between organisms (human and non-human), objects, matter and things" (Lenz Taguchi, 2010, p.65). This is partly due to the pervasiveness of anthropocentrism that positions the human subject as the centre of learning processes. This view is commonly shared among social and educational researchers, and becomes the dominant "*perceptual style* and... *habit of seeing*" (Hultman & Lenz Taguchi, 2010, p.525, original emphasis).

In order to open up a new conversation about traditional games in an educational context for young children, a language is needed to enable revelation of a new story. Rautio (2013) claims that "the evident inability of human language to

fully capture a perceived and felt relation to environment was proven relevant” (p.400). The new materialist perspective brings new hope because it offers a different way of thinking about social phenomena, including traditional games. The fundamental aspect of this perspective that makes it different to common practice of educational qualitative research is relations between the known and the knower. In reading the literature on new materialist research, I keep in mind the questions of how it supports my research and how it applies to my case study. I underline some important points from the review of literature and review these points in later sections of this chapter.

Intra-action

Fundamental to this research is the concept of intra-action (Barad, 2007) that denotes the entanglement of agencies that mutually constitute each other. This concept is easily explained in comparison to interaction commonly used in social and educational research. In interaction, related entities exist as separate things prior to connection (Barad, 2007). On the contrary, the notion of intra-action does not recognise pre-existing entities that precede connection and agencies of the elements emerge through their relations, rather than being individually owned (Barad, 2007).

In intra-action, boundaries and properties of its components are blurred as they cannot be identified separately. However, boundaries become determinate through specific agential intra-actions, in which each intra-action is different from the other as they emerge (Barad, 2007). It should be noted the boundary here is not in an absolute sense. It is an agential cut that creates boundaries in-between intra-actions, that is known as diffraction in intra-actions (Barad, 2007; 2014). It is “cutting together-apart (one move) in the (re)configuring of spacetimemattering” (Barad,

2014, p.168), in which particular material articulations of the world become meaningful. Further explanation of diffraction is presented in a later section.

The emergence of intra-action entails a significant conceptual shift in thinking about phenomena in social science and humanities. It flattens out the hierarchy among different components of phenomena, because they are equally important in constituting the phenomena and simultaneously constitute each other (Barad, 2007).

Performativity

A *performative* understanding toward what is believed as real is a contestation of great power and agency that has been granted to language as the trustworthy representation of the world (Barad, 2008, my emphasis). Barad (2008) proposes *performativity* as an alternative way in understanding reality to challenge dominance of the representationalist view in social science. She explains,

Performativity, properly construed, is not an invitation to turn everything (including material bodies) into words; on the contrary, performativity is precisely a contestation of the excessive power granted to language to determine what is real (Barad, 2008, p.121).

Shifting perspective from representationalism to performativity has a consequence for the focus of discussions. Unlike representationalist questions that focus on how descriptions reflect reality, a performative understanding focuses on the importance of practice/doings/actions (Barad, 2008). Related to her key concept of intra-action, performativity moves away from discursive practices of representing pre-existing entities. It is based on relational ontology of the production of the matter of bodies and advocates that “[a]ll bodies, not merely “human” bodies, come to matter through the world’s iterative intra-activity—its *performativity*” (p.141, my emphasis).

In adopting a performative approach, Barad (2007) points out, it should not be misunderstood as performance because performativity goes beyond performance. It

is advocating “*a causal relationship between specific exclusionary practices embodied as specific material configurations of the world and specific material phenomena*” (Barad, 2008, p.132, original emphasis). A performative understanding sheds light on the materialisation of bodies, human and non-human, animate and inanimate, and takes materiality into consideration without reinstalling it as a basis or a natural unquestioned foundation for a new materialist perspective (Barad, 2008). In the context of traditional games, adoption of a performative approach allows this study to focus on what the games *do* or *act* and goes beyond explaining what the games are. This understanding also brings forward the materiality of bodies of games and their emergent agencies in iterative intra-activity throughout the games.

Intra-active pedagogy

Adopting the notion of intra-action in the area of early childhood education, Lenz Taguchi (2010) introduces a concept of intra-active pedagogy. This concept, without negating the cognitive process in individual children, highlights the importance of paying attention to different material discursive aspects in the educational environment that potentially influence the learning process. She argues that “the learning event taking place in-between the child and the material in the space and event of learning” (Lenz Taguchi, 2010, p.35). This pedagogy gives attention not only to children’s intra-personal and inter-personal aspects, but also to “intra-active relationships between all living organisms and the material environment: things and artefacts, spaces and places that we occupy and use in our daily practices” (Lenz Taguchi, 2010, p.10). The expanded attention covers non-humans and non-living entities allowing this pedagogy to address the complexity of learning. It becomes visible that learning is a complex and multi-layered process involving different matter and organisms. Applying this concept to the context of traditional

games is the focus of this study. Further details of intra-active pedagogy particularly relevant to this research are explained below.

Ongoing intra-actions in materials-children relations

Lenz Taguchi (2010), in a chapter of her book, introduces the concept of intra-active pedagogy in the context of early childhood education. This concept offers a new way of looking at children's connection to materials and potential learning experiences can be gained from the connection. Lenz Taguchi (2010) gives an example of children-wooden stick relations in an everyday activity with a focus on material aspects and the process of materialisation. She explicates continuous shifts in these relations as an intra-active process and mutual constitutions of different elements in unpredictable ways.

It starts with some boys who pick up wooden sticks from the ground in a preschool yard and use them as guns in chasing and shooting games. One of the boys says his gun is alive and wants to kill his friend, then the student teacher asks him the gun's name and where it lives. The boy answers that Erik is the gun's name and it lives under a tree in the yard.

The following day, the student teacher invites the boy and other boys to return to the event and discuss it. The discussion became a space of imagination when the boys came up with different stories about their sticks with certain names, looks and traits assigned to the sticks. The boys-sticks engagement then shifts to an aesthetic work of decorating the sticks – using paints, coloured paper, ribbon, shiny paper and glue – and turning them into dolls. This aesthetic work attracted girls to join the activity. With various stick-dolls, the connection between children and wooden-sticks continues and becomes an exploration of the lives of stick-dolls, considering wooden sticks as parts of a tree. Then the exploration was expanded to a discussion about a

tree as a part of nature which needs water, soil and the sun to grow. This series of unparalleled events illustrate several aspects of intra-active pedagogy (Lenz Taguchi, 2010). The first aspect is that each event production is viewed as an incorporation of material-discursive factors, in which matter and meaning are always entangled, and neither element pre-exists individually nor is given priority (Barad, 2007; 2014).

Another aspect of intra-active pedagogy in the vignette above is continuous transformations of wooden sticks-children relations (Lenz Taguchi, 2010). In each event, the wooden sticks have different meaning for children. From being guns in chasing and shooting games, then becoming dolls with which they interact in aesthetic work, then becoming parts of a tree and nature they are curious to discuss. Shifting the gaze from children's perspective to the viewpoint of the material, according to Lenz Taguchi (2010), can expand and widen the view that the sticks as materials matter and intra-act with children in series of specific events. It should be noted that continuous transformations and displaced understandings of the sticks are made visible by the student teacher's active use of pedagogical documentation generated from the series of those special events (Lenz Taguchi, 2010). Her question to a boy about his wooden stick's name, when he shouts that it is alive, is a significant turning point that shifts the direction of children's learning. She also makes time to discuss with children about what happened in their relations to wooden sticks, and created a space for imagination that allowed intra-action of wooden sticks-children to keep going and open up *possibilities and potentialities* (Lenz Taguchi, 2010, p.161, original emphasis) of what children could do *with* the sticks, and not only *to* the sticks.

Finally, the wooden stick-children story above frames the main aspect of intra-active pedagogy, that is, transgression of theory/practice and discourse/material binaries in a pedagogical approach (Lenz Taguchi, 2010). Lenz Taguchi (2010) argues that understanding of multiple relations of the materials, children and the student teacher in a more complex way makes visible the agency of materials that emerges in continuous intra-active processes of material-discursive events. This understanding can be gained by shifting the gaze to the perspective of the materials. The agency of materials is known as *performative agency* (Lenz Taguchi, p.65, my emphasis). With shifting gaze, looking at an event and having a different view on agency, consequently, intra-active pedagogy has a different view of learning processes. Lenz Taguchi (2010) asserts that learning is no longer focused on the individual child's cognition, although an intra-active approach still considers it as important. Rather, learning is "taking place in-between the child and the material in the space and event of learning" (Lenz Taguchi, 2010, p.35). Further she explains:

It is the material-discursive forces and intensities that emerge in the intra-actions in-between the child and the materials in the room that together constitute the learning that can take place (Lenz Taguchi, 2010, p.36, original emphasis).

Apart from the ability of the story above to help me understand some key aspects of intra-active pedagogy, I am particularly intrigued by the implication of this approach in creating a space for unpredictability about what might come next in any material-discursive encounter. It offers me new insight of understanding a learning process as open to possibilities that are never singular, but always multiple. This new understanding of learning equips me with a new way of approaching traditional games in this research.

Difference as material consequences

Another investigation of ordinary objects in educational settings for young children that I find really fascinating is research about chairs. In most, or possibly all, educational environment contexts, chairs or any object for sitting inherently exist without question. This is really a taken-for-granted matter. Being investigated from a new materialist perspective, a chair becomes a significant entity with complex roles and power (Bone, 2018; Jones, 2013b; Lenz Taguchi, 2010). The chair can be a signifier of certain place and position. Like a small chair in preschool, as Bone (2018) claims, is “a potent marker of the early childhood educational environment” (p.11) that makes an individual aware that s/he is in “an educational space for young children” (p.11). Similarly, a teacher’s chair in primary school can denote authority of a teacher and has “the *capacity* to unseat [a child], where [the child] has to accommodate and respond to both it’s lure and it’s r(ejection)” (Jones, 2013b, p.606, original emphasis). An authoritarian feeling is also exerted by a wooden chair in the vice-chancellor’s conference room at a university (Lenz Taguchi, 2010), with its materiality – tall backrest, wide leather seat, generous armrests – and the way it embraces the one who sits on it.

Powerful qualities of a small chair in educational contexts can be performed in multiple ways. It keeps the child’s body to sit still on it, not moving, that is considered as good listening and behaving (Bone, 2018). Similar work is performed by a glued-dot (Lenz Taguchi, 2010) and a carpeted space (Jones, 2013b) on a classroom floor. All of these material objects - the chair, a glued-dot and the carpet - show their power and capacity to make children remain still in their sitting position and give a command not to move. They perform the function of “schooling and disciplining the [child’s] body” (Jones, 2013b, p.5) and of preparing the body “to enter the world of

sitting” (Bone, 2018, p.11), that pervasively dominates activities in educational settings, as well as in work places and public spaces.

On the other hand, the small chair does different work to the body of adults. Bone (2018) asserts, with its ill-suited size for an adult’s bottom, the chair makes the adult’s body perform in certain ways when sitting on it. She describes, as evidenced in her anecdotes of adults’ experiences of sitting in a small, child-sized chair at kindergarten, the adult should be “perched on it” or “stoop or crunch up”, which makes them “feel a bit odd sometimes, infantilised, disempowered” (Bone, 2018, p.7). All of these descriptions implicate negative affections attached to the act of sitting in a small chair. The implication of these negative affections is that adults tend to avoid to sitting on small chairs, which makes them sit less that fortunately helps them by lowering the risk of having health issue with their back (Bone, 2018). Interestingly, the small chair can also generate positive feelings when some adults convey that they ‘quite like it’ (Bone, 2018, p.7) because it reminds them of childhood and brings about an affective moment of liking it. Here, the small chair shows its power for remembering, an enlivening and reconfiguring of time – of past and future – that goes beyond individual (Barad, 2008), “transporting [someone] back to a different time and state” (Bone, 2018, p.8).

Bone (2018) highlights the materiality of a chair commonly used in early childhood institutions, especially for being *small* and ‘child-sized’ (p.6, original emphasis). She argues that it becomes ubiquitous to find small chairs in any educational environment for young children across the globe, which also mean it is taken for granted. This is especially true when the chair is viewed from a familiar and uncontested way of thinking. This view, according to Jones (2013b), “is a form of thinking that we are comfortable with” (p.606), where the chair is considered as

stable and solid. Moving away from this comfortable view of the chair and troubling its unquestioned existence in any educational environment, as Bone, Lenz Taguchi, and Jones have done, opens up a space to look at complexity of the chair as a matter that matters (Barad, 2007). This space becomes an opportunity to look at multiple and complex relations of the materials with other entities in any form, human and non-human.

Learning from different research practices that encapsulate complex relations of children with materials/objects, such as wooden sticks and chairs, makes me look at the material world differently. It instates my awareness of being part of the material world and of the abundance and inevitability of material encounters. As Coole and Frost (2010) describe, “we inhabit an ineluctably material world. We live our everyday lives surrounded by, immersed in, matter... At every turn we encounter physical objects ...” (p.1). Additionally, as I gain new knowledge and new ways of looking at materials by reviewing the literature, my own childhood memory is (re)configured again. Inevitably, when I read about a material object or thing in a particular text, I look back on my encounter with a similar material in my childhood. This recalling moment allows me to re-turn to my childhood and rework my past in the present.

Pedagogical documentation

Pedagogical documentation is essential in the practice of intra-active pedagogy. Unlike common practice of documentation in representation-oriented pedagogy that uses documentation to record learning events and view it as representations of recorded moments, pedagogical documentation goes beyond this prevailing dominant practice. Documentation is not seen as a passive record of an event. “It can act, therefore, as a way not only of understanding these discourses

[the common practices] better but also of helping loosen the grasp they have over us” (Moss, 2015a, p.232).

Pedagogical documentation is an active process that makes active use of any documentation in learning processes. It is “a *material-discursive apparatus*” (Lenz Taguchi, 2010, p. 63, original emphasis) which role is not only as a tool for documenting the process of learning but also contributes to the learning process. Lenz Taguchi (2010) describes pedagogical documentation “is *in itself* an active agent in generating discursive knowledge” (p. 63, original emphasis). It is an ongoing process of documentation as intra-actions, rather than passive documentation.

Agency

Agency in the context of traditional games, adopting Barad’s (2007) notion of intra-action, is formed in complex relations between human and non-human. The notion of (intra-)agency emerges through interconnection and interdependency among things, organisms and entities of any kind (Rautio, 2013). In a new materialist perspective, agency “is not something that someone or something *has* to varying degrees” (Barad, 2012a, p.54, original emphasis). This fundamental view of agency is very different to commonly known theories of poststructuralism and postmodernism. Agency in these perspectives is understood as one’s capacity “to make choices, control events, and be powerful” (Blaise, 2005, p.18). The main difference of the new materialist view about agency is that it emerges through relations, rather than being owned or possessed by an individual or an entity.

This fundamental shift in understanding agency, consequently, affects the way in which agency is analysed in a particular event, such as in the context of traditional games in this research. As the emergence of agency takes place through intra-connection among different elements, it is also open to possibilities. Instead of

being attached as a fixed attribute or possession, it flows and is subject to change and transformation. As Barad (2012a) explains,

“First of all, agency is about response-ability, about the possibilities of mutual response, which is not to deny, but to attend to power imbalances. Agency is about possibilities for worldly re-configurings. So agency is not something possessed by humans, or non-humans for that matter. **It is an enactment**” (p.55, my emphasis).

Following this notion of agency, there are some important aspects of agency to consider in the context of traditional games. First, “agency is *distributive* or *confederate*” (Bennett, 2010, p.32, my emphasis) which means that different elements contribute to the emergence of agency in their intra-action. However, this distribution is not necessarily equal with all elements having balanced power. Rather, as the second aspect, it acknowledges power imbalance in each entanglement, so the basic question to ask is “the *how* of agency, and in a sense, the *how* is precisely in the specificity of the particular practices” (Barad, 2012a, p.54, original emphasis). The specificity of each practice is related to the openness of agency to possibilities for re-configuration. Agency can be defined as “becomings” that are “experienced through movement” (Ivinson & Renold, 2013, p.705). This is the third aspect of new materialists’ notion of agency, that it is constantly in motion with specific configurations in each move.

Finally, the new materialist perspective views agency as an enactment rather than an attribute or possession (Barad, 2007, 2012a). Agency is dynamic as it is about being responsive to flows and changes in an ongoing intra-activity. As intra-action does not recognise pre-existing elements, agency also works as a mutual response among different elements. This is fundamental to understand the notion of objectivity in conducting research with a new materialist perspective. Unlike common understandings in scientific research that being objective requires the researcher to

be distant from the investigated subject, new materialist researchers should be constantly responsive to the subject in maintaining their objectivity (Barad, 2012a). In investigating traditional games, this study considers all aspects of agency above and focuses on performative agency as explained in the following section.

Performative agency

Considering new materialist understanding of agency, this research particularly adopts Lenz Taguchi's (2010) notion of *performative agency* as she applies it in the concept of intra-active pedagogy. Acknowledging all living organisms and the material environment as important in the learning process, she considers those elements have agency. In the classroom context for young children, intra-active pedagogy views all existences, things and artefacts, spaces and places, along with children and educators, as *performative agents*. That is, all matters and organisms that intra-actively interconnect and have power and agency to act upon others and the world (Lenz Taguchi, 2010). All elements, as performative agents, can affect and be affected by each other in a continuous intra-active process of learning.

Adopting this concept in this research allows me to take full account of different matter and organisms at play in the context of traditional games. Not only paying attention to what they are and how they emerge in games, I can also look at what they do and how they connect intra-actively with other elements of games. This concept of performative agency significantly shifts my understanding of agency. It does not pre-exist nor is it pre-owned by humans, but agency is "emergent within moving assemblages in which bodies and other elements are intra-actively entangled" (Ivinson & Renold, 2013, p.717). In this study, viewing all elements as

performative agents allows me to draw on how agency emerges in the intra-action of bodies, places and all forms of matter in traditional games.

Diffraction

Diffraction is a key concept of knowledge production described by Karen Barad (2007; 2014). This concept originated from a study of classical optics in physical science, with essential principles relevant and applicable in social science. For this reason, Barad (2007) argues that physical/social science binary is no longer valid, and nor are other binaries, such as nature/culture, subject/object, researcher/researched, theory/practice, and the list keeps going. Instead, she respects the entanglement of those notions and articulates this in the concept of diffraction.

A basic understanding of diffraction can be gained through comparison to reflection, particularly in the context of methodological approach. Reflection, simply put, is a process of mirroring an object that results in a similar object with a focus on sameness (Bozalek & Zembylas, 2017). Diffraction can also be characterised as waves of the sea, lights or sound, continuously rolling, pushing and transforming (Lenz Taguchi, 2010). As waves proceed, they overlap in their spread and combination, and this what diffraction is about (Barad, 2007). Figure 3.1 below is taken from Barad's (2007, p.55) book, it illustrates an experiment of light waves to

describe a diffraction process with overlapping sequences of bright and dark.

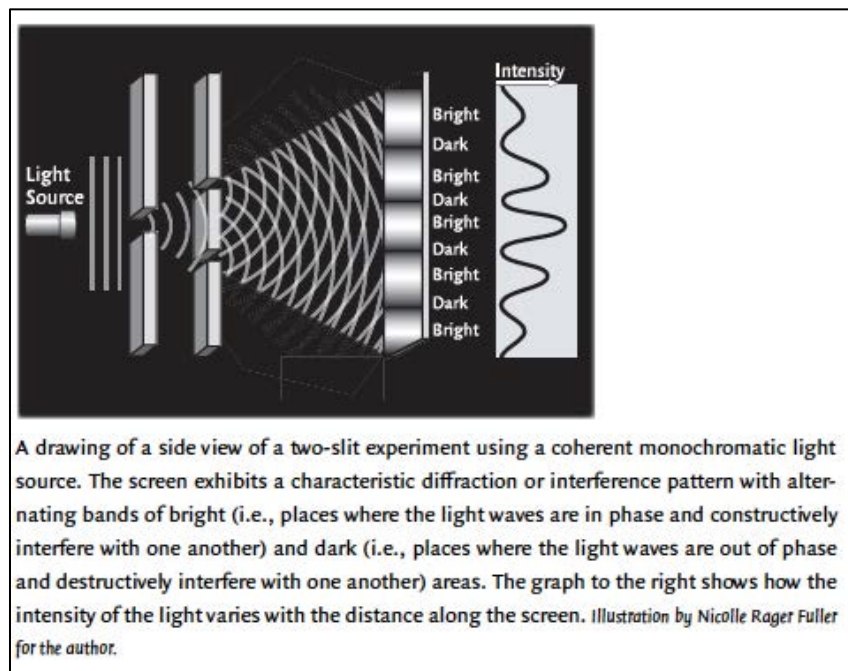


Figure 3.1. Diffraction of the light waves (Barad, 2007, p.55)

Applying such conceptualisation of diffraction in research practice, focuses on illuminating the overlapping patterns, rather than mirroring the sameness of an object and considering it as a representation of reality. These patterns are a series of differences in the ongoing process of intra-actions, as illustrated by waves of light in the figure above. The difference is not in comparison with others nor in negative ways, but adopting Deleuze's (2004) philosophy, it is a "difference in itself" (p.28). In this way, diffractive research practice is not working from a distance, but experiencing from within (Barad, 2007; Bozalek & Zembylas, 2017). "Diffraction is an iterative practice of intra-actively reworking and being reworked by patterns of mattering" (Barad, 2014, p.187) that is conceptualised as diffractive methodology in conducting research.

In this research, the concept of diffraction is not adopted as a whole methodological approach because the transition towards a new materialist view occurs as the research is progressing. Rather, this concept is used as a basis for

working with data as a diffractive analysis. Barad (2014) describes *diffract* as “to break apart, in different directions” (p.168), so diffractive analysis means “to open up data, to *diffract* it, and to imagine what newness might be incited from it” (Lenz Taguchi, 2012, p.270, original emphasis). This newness is generated from illuminating the overlap, as visualised in figure 3.1 above, of things or entities being studied. The case of this study is narratives, artefacts and other materials of traditional games. Therefore, diffractive analysis involves a process of connecting seemingly unconnected, random and multilayered subjects and entities (Bone, 2017; Fox & Alldred, 2015). From this process, new insights and ideas are expected to emerge.

New materialist concepts for exploring traditional games

As mentioned earlier, a new materialist perspective provides some important points that shape the way this research is conducted. I identify some major concepts for the research in general, as well as some operational concepts relevant to particular stages of the research. Three major concepts are intra-active pedagogy, performative agency and diffraction in the context of diffractive analysis. First, from the view of intra-active pedagogy, traditional games as an event have different constitutive elements, matter and living organisms, and all elements actively engage in ongoing intra-actions during the event. How these elements intra-act among each other is something to explore in this research. Examples of thick description about a child in a sandbox (Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2011; 2014) and child/pipe/sand interconnections (Duhn & Grieshaber, 2016) give insights of how to take a materials perspective in an event. These examples also help me to understand how the process of materialisation can be made visible and ready for further analysis.

The second point is related to performative agency of all elements of traditional games. As a performative agent, each element of the game has a capacity and power to act upon and influence other elements, and at the same time be acted upon and influenced by others. In these mutual interconnections, performative agencies of the elements emerge throughout the event. Examples of complex relations between children and wooden sticks in the playground of a preschool (Lenz Taguchi, 2010) and between the body/ies of children/adults and chair in an early childhood educational environment (Bone, 2018) are particularly useful to gain an understanding of this concepts. As I return to my childhood memories, I can relate to this concept that makes me reconfigure the event of playing with stones in different games. In this research, this concept is particularly relevant to see what change can happen when elements in traditional games are seen as performative agents and how this influences conceptualisation of the games.

Finally, the notion of diffraction is very salient in establishing connections between different stories, texts, visuals, artefacts and other potential data as generated in this research. With rich details of description in stories formed by the data, the process of materialisation in traditional games can be brought forward. Reading the stories diffractively allows affective moments to happen and open a space to connect with stories from elsewhere (Bone, 2017). This connection is not a single, clear-cut story independent from others, but overlaps like the light waves illustrated in figure 3.1 above. From this overlapping, stories are stirred up and new ideas emerge as new creative thinking about traditional games.

From a range of literature about new materialist research in education and childhood studies, I also note some operational concepts potentially relevant to investigate traditional games. Some of these concepts are commonly used in

educational qualitative research, but from a new materialist account they are understood and used differently. I consider the relevance of the concepts based on similarities between material objects in the literature and ones commonly found in Javanese traditional games, such as those I encounter in my parents' house and others that I recall from my memories. Nevertheless, I am aware that I also need to be open to concepts from elsewhere (Bone, 2018), whether from different fields of study or different perspectives, as this research starts to unfold. The following sub-sections detail potential concepts for this research.

Space

In the new materialist perspective literature, space is no longer viewed as a background setting of an event, but is actively involved in the event (Davies, 2009). To complicate the discussion about space in the context of traditional games, I add a conceptualisation of space from a geographical perspective offered by Thrift (2006) who argues that an investigation of space should consider four main principles. First, "everything, but everything, is spatially distributed, down to the smallest monad" (Thrift, 2006, p.140). As explored in previous studies, whether a large area of a classroom or a school playground, or a small carpeted area in the classroom or small dot glued on the classroom floor, all spaces are equally complex. This complexity is not only in mapping territory, but also in constituting elements of a game.

The second principle is that "there is no such thing as a boundary. All spaces are porous to a greater or lesser degree" (Thrift, 2006, p. 140). Although space may look as a closure, in fact, it is "constantly leaving traces – effluent, memories, messages – through moments of good or bad encounter" (p.141). Like a memory of

the first day in preschool for Lenz Taguchi (2010). While the 'real' experience happened in the past, its trace can be accessed at any time.

Third, Thrift (2006) asserts that "every space is in constant motion" (p.141). While it may look fixed and static, space actually keeps moving and changing. Finally, Thrift (2006) argues that "there is no one kind of space" (p.141) because it manifests in different forms. In the case of children and wooden sticks in the playground described above, different forms of space are created throughout their ongoing relations. Space can be orderly or chaotic, can be cooperative or competitive. It manifests in many different ways. It is not singular, but plural and appears as a multiplicity.

Bodies

In the context of education for young children, bodies are a vital materiality that do performative work in the classroom, although often unnoticed (Taylor, 2013). Bodies are not only about human bodies, but also non-human and more-than-human bodies. An example of relations between the body of a chair and human bodies (Bone, 2018; Lenz Taguchi, 2010) exemplifies the way in which bodies in the classroom influence each other. Drawing intra-connections among bodies in educational practices is important to understanding learning as a complex process.

In an example of a young child learning to write on paper using different materials, learning takes place "through increasing one's body's capacity to act and through joining one's own body with the body of the crayon/ink/paper, through becoming one with [these] materials through engaging in writing in an affective way" (Olsson, 2013, p.250). In the context of traditional games, as I experienced in my childhood, different bodies play and constitute games. Not only children's bodies, all existences in the playground, such as trees, fence, walls, the ground and stones,

can be actively involved in games. These different bodies and their active contribution as performative agents in traditional games are drawn on in this research.

Movements

Movement is essential in the concept of intra-active pedagogy. Connections among elements in intra-action are not a fixed, once and for all interlocking enmeshment. Rather, they are always in motion in the pedagogical process. As Barad (2012b) argues, “[m]atter is never a settled matter. It is always already radically open” (p.214) Therefore, connections are always on the move. Movement in this sense is not about moving from a particular position to another, as Olsson (2009) considers this as “just shadow movement” (p.6). It is movement as the moment of joining forces which increases the body’s capacity to act upon and influence others (Olsson, 2009). Movement can happen in one’s thinking and is possibly imperceptible.

This consideration is important to understand learning processes that take place in movement. As Olsson (2009) argues, learning is commonly understood as the process of “transmission and reproductive imitation” (p.7) which focuses so much on position as a targeted goal. An alternative, new materialist perspective proposes understanding of learning as a trajectory. It is in the movement where learning processes take place (Olsson, 2009). In the context of traditional games, learning can be explained through body-movement repertoires (Ivinson & Renold, 2013). The way different bodies and theory forces meet in a movement is an important moment for understanding a learning event.

Things-power

Material objects or things have shared interest among educational scholars who adopt a new materialist perspective. Some examples of different objects and artefacts in educational environments of young children show things-power (Bennett, 2010) that affects the surroundings, including humans. Explaining things-power, Rautio (2013) discusses stones in the practice of autotelic children. "The fact that we are different from pebbles and stones on the ground does not change depending on our attitude or age...in our encounter we are generated by the stones whether we think about it or not" (Rautio, 2013, p.400). The new materialist perspective, with this concept of things-power, makes it possible for the force and intensities that things have to be brought forward in their relations to other existences.

Affect

Another concept from the new materialist perspective used in this research is affect to describe "a body's potential to transform and act" (Olsson, 2013, p.245, original emphasis). Affect makes visible the way a body reacts to a particular moment or event. This reaction is often experienced unconsciously, "because affect goes through bodies and not only through minds" (Ivinson & Renold, 2013, p.717). As Olsson (2009) argues, "[c]onsciousness is incapable of registering affect, it only registers the *effects* of affect, that is, our feelings" (p.152, original emphasis). She exemplifies, an individual feels sad, passive or dissatisfied in experiencing restriction of the body's capacity to act (Olsson, 2013). In contrast, the feeling of joy, active or satisfied is experienced when the body's capacity to act is expanded (Olsson, 2013). This is the reason why "positive experiences are often felt rather than understood as cognitive or rational" (Ivinson & Renold, 2013, p.717). Being aware of bodily responses in the concept of affect is crucial for analysis in this research. Particularly,

to draw the performative agency of different matter and organisms in traditional games, as emerging through intra-connections among those elements.

Focusing on material aspects of traditional games, the notion of affect allows the analysis to bring to the fore what materials can *do* to other bodies, including human bodies. In the opening narrative of her book, Lenz Taguchi (2010) describes the way she experienced an affective moment when she sat on a chair in the vice-chancellor's conference room at Stockholm University. The affective moment threw her back to her childhood memory of sitting on a glued dot on her preschool-classroom floor. In her description, Lenz Taguchi makes perceivable her bodily response to the materiality of the chair and the dot on the floor. Adopting this notion, therefore, I hope to be more aware of affective moments that take place in playing traditional games and to be open to different connections that may lead to stories about the games. With different concepts from the new materialist perspective used in this study, new thinking about traditional games is expected to emerge. The newness in this context is not necessarily a brand-new invention from non-existence. Rather, it is a new take on some familiar concepts in the practice of social and educational research. The way these concepts are used differently in this research is explained in the next chapter that presents research methodology.

Chapter Four: Research Methodology

This chapter examines the methodology used in this research. I present and justify the research design and strategy, process of generating data, analysis and writing process for this thesis. The chapter is divided into seven sections. In the first three sections I explain how this research was conceived and designed as qualitative research with a case study approach and new materialist perspective as a theoretical framework. The use of this framework has consequences for research methods, where the common tools in social and educational research are used differently (Duhn & Grieshaber, 2016; Fox & Alldred, 2015).

In the next two sections, I explain research participants and describe the fieldwork with processes of generating data. In the following section, the data is analysed through a diffractive analysis, which marks another transition in this research. The process of diffraction instead of reflection, and performative instead of representational account (Bozalek & Zembylas, 2017; Lenz Taguchi, 2010; 2012) is described in this section. Finally, in the last section, I address ethical issues that occur as ongoing (re-)considerations throughout this research. I conclude this chapter with some notes on different process of conducting research with a new materialist perspective and its ethical implication.

Qualitative research

This study was designed as qualitative research to delineate traditional games in the contemporary context of education for young children in Indonesia. Framed in a new materialist perspective, it particularly aimed to make visible material aspects of the games. The main reason for this design was the potential for qualitative research to undertake various forms of inquiry while remaining under the umbrella

notion of qualitative research (Denzin & Lincoln, 2011; Merriam, 2009). Therefore, in preparing the structure and procedure for this study I pondered particularity of the context, rather than following a general pattern of research approach. In addition, qualitative research design has a space for change and transition during the research process, because it is “*emergent and flexible*, responsive to changing conditions of the study in progress” (Merriam, 2009, p. 16, original emphasis). With transition of theoretical framework in this study, as explained in the introduction chapter, could be accommodated by this research design. A more detailed account of qualitative research and its relevance to this study is given in the following paragraphs.

Qualitative research is generally understood as “a situated activity that locates the observer in the world” (Denzin & Lincoln, 2011, p.3). As an act of inquiry, it attempts to make visible phenomena within the boundary of its frame. This allows the observer to perceive and gain in-depth understanding about the phenomena being presented. Hence, qualitative researchers focus on understanding the process of making sense of the world and describing the process in detail (Merriam, 2009). This general character of qualitative research fits well with the purpose of this study. With new materialist perspective as its frame, this study limited its scope in looking at traditional games as the matter of study.

An important aspect of qualitative research is its setting located in the natural context or everyday life of the matter being studied. Within this natural setting, the research process is not controlled or manipulated by the researcher (Merriam, 2009), “and whatever was being observed and studied was allowed to happen ‘naturally’” (p.7). This non-intrusive nature allows qualitative research to generate a trustworthy portrayal of the observed or studied phenomena. This aspect was applied in this

study by conducting investigation in a primary school as a natural setting of education for young children. With a substantial amount of time spent in this particular setting, as a researcher, I wished to gain in-depth understanding of day to day events and existence.

The open-endedness of qualitative research was another aspect that makes it possible for researchers to approach phenomena of interest from different perspectives and research paradigms. This open-ended nature allowed this study to have discovery orientation without being dictated by predetermined results (Denzin & Lincoln, 2011; Merriam, 2009). With an underlying assumption that “reality is socially constructed...[and] there is no single, observable reality” (Merriam, 2009, p.8), qualitative research entails multiple ways of generating data which allow researchers to look at phenomena from different angles. While the wholeness of understanding about a matter is unlikely to be gained, this multi-angle view enables a qualitative inquiry to generate richly descriptive data (Merriam, 2009). Therefore, this study employed multiple methods of generating data to gain detailed and specific data from wide and deep examination of lived experience (Johnson & Christensen, 2004).

The practice of qualitative research is never static. Particularly, in the fields of social science and education, the contemporary state of qualitative research has been transforming dynamically. The growth of different perspectives, multiple discourses, new ways and alternatives in research strategies characterised the global community of qualitative inquiry in the twenty-first century (Denzin & Lincoln, 2018). Greater attention has been given to social justice (Denzin & Lincoln, 2018), micropolitics of social inquiry (Fox & Alldred, 2015), productive capacity of data (MacLure, 2013) and ethical implications of research practice (Davies, 2018). Many social and educational researchers moved away from fixed standards and guidelines

in conducting research and sought alternatives in their practices. As Denzin and Lincoln (2018) described, “[t]he field of qualitative research is on the move and moving in several directions at the same time” (p.1). One of these directions is the rise of new materialism that moved beyond interpretivist and representational orientation and disrupted common practices of qualitative research.

A new materialist educational inquiry

The emergence of new materialist inquiry as a theoretical framework in qualitative research changed the landscape of social and educational research. Not only offering different terms and conceptual tools to think about certain phenomena, this perspective also had an impact on research methodology. Denzin and Lincoln (2018) acknowledged new spaces in qualitative research created through applications of this approach. These include a careful and different use of common terms in qualitative research such as agency, voice, subject, experience, narrative, data, and analysis. Methodologically, this approach introduced non-fixed ways of conducting research, that could go anywhere without rigid boundaries and predictable certainty (Denzin & Lincoln, 2018).

The openness to possibilities that characterised a new materialist approach was of benefit to this research. Although it was planned as typical qualitative educational research, with common strategies and methods of generating data, the research shifted in its data analysis and consequently changed knowledge production. The use of diffractive analysis marked this transition that influenced the way I worked *with* data. This analysis was performed from a different positionality of the researcher. Unlike common practice of interpretive reading of qualitative data, where the researcher was interpreting from a distance, diffractive reading was performed through immediate contact with data materials (Barad, 2007; Lenz

Taguchi, 2010). Hence, it was “a way of understanding the world from *within* and as *part of it*” (Barad, 2007, p.88). Further discussion about how this diffractive analysis was applied in this research is presented in the later section of this chapter.

Through diffractive analysis, the process of meaning-making in qualitative research is extended to include perspective of materials, while the common practice of this research focus is on perspectives of people in a situated activity. As Merriam (2009) described, “[q]ualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (p.5). Challenging this taken-for-granted view about the dominance of human capacity in producing knowledge, new materialists viewed this capacity was performed in interrelations of “researcher, data, methods and contexts” (Fox & Alldred, 2015, p. 399). Without resisting the importance of social construction, it focuses on “the generativity and resilience of the material forms with which social actors interact, forms which circumscribe, encourage, and test their discourses” (Coole & Frost, 2010, p.26).

Although every new materialist qualitative inquiry has specific objectives to achieve, there is a common thread shared among researchers using this approach. Fox and Alldred (2015) reviewed a range of social and educational inquiries using new materialist perspective, and illuminated the objectives as follow,

to reveal relations, affects and affect economies in assemblages, the capacities (and limits to capacities) produced in bodies, collectivities and social formations, and the micropolitics of these capacities and limits. Its orientation must be towards *what things do*, rather than *what they ‘are’*; towards *processes* and *flows* rather than structures and stable forms; to matters of power and resistance; and to interactions that draw small and large relations into assemblage (pp.406-407, my emphasis).

The common orientation of new materialist approach in qualitative inquiry above is relevant to the objective of this research that focuses on what traditional games do and perform in educational environment for young children.

A case study approach: A classroom as a bounded system

This research used qualitative case study as a research strategy. Using this strategy allowed an investigation of “a contemporary phenomenon in depth and within its real-life context” (Yin, 2009, p.18). This was relevant to objectives of this research in investigating children’s traditional games in the contemporary context of education in Indonesia. The strategy made it possible to have a close look at the lived experience in playing traditional games because a case study gives attention to the whole aspects relevant to the case being studied (Johnson & Christensen, 2004).

A case study is simply defined as “an in-depth description and analysis of a bounded system” (Merriam, 2010, p.456). It is mainly characterised by an individual entity with clear boundaries as a unit being studied (Flyvbjerg, 2011; Merriam, 2010). A primary school classroom as a case in this research was considered as a bounded system with clear boundaries that distinguished it from its externals. As a bounded system, the classroom had a particular context that was connected to a broader environment with its sociohistorical conditions (Flyvbjerg, 2011; Merriam, 2010). This connectivity allowed case study findings to inform the broader context within which it was situated. Therefore, findings about traditional games in this case study could be used as a reference for the broader context of education for young children in Indonesia.

The case for this research was a classroom of a primary school in Yogyakarta. This was a class of multi-age preparatory and year one children, with twenty children in the class, six girls and fourteen boys, aged six to seven years old.

The process of determining the case of this research was purposive or purposeful (Merriam, 2009; 2010), non-random and with a small number of participants. Considerations in selecting the case were guided by research objectives and also informed by background questions that led me to conduct the research. I was seeking a classroom of young children, aged under eight years old, in a school with a basis of Javanese culture that still had a component of traditional games in the learning program. For those considerations, the classroom was well suited for the case study in this research.

The integration of traditional games was part of the educational philosophy of the school which was rooted in Yogyakarta culture where it was situated. Besides traditional games, the school also included different components of Yogyakarta cultural practices, such as *gamelan* or Javanese traditional music, traditional dance, *batik* or Javanese traditional textile dyeing, and *kriya* or Javanese traditional craft. These components were programmed in accordance with curriculum structures for different year levels in this school, so each class had different cultural activities. The cultural components in school programs and curriculum, at a national level, is regulated in MoEC policy about *muatan lokal kurikulum* or local content in curriculum (Menteri Pendidikan dan Kebudayaan, 2014a). This policy mandates schools to integrate local or cultural wisdom in the learning process.

The arrangement of a multi-age classroom, unique to this school, was another consideration to choose this classroom as a case study. Generally, classrooms in Indonesian schools are comprised of children at the same year level. Also, primary school commonly starts from year one, whereas preparatory class is usually administered in preschool or kindergarten. These two different levels of education have a significant difference in the provision of learning activities. In kindergarten,

although there is a national framework of early childhood education or *Pendidikan Anak Usia Dini/PAUD* (Menteri Pendidikan dan Kebudayaan, 2014b), the implementation of this framework is very flexible based on the capacity of educational providers. Learning activities in preschool, according to the framework, are mainly delivered through play-based pedagogy. In primary school, on the other hand, the provision of education is bound to the National Standard of Education with detailed guidelines for curriculum content, learning processes and evaluation. These guidelines are mainly informed by the notion of quality and accountability of education. Considering these differences, therefore, combining two age groups of children was an effort to ensure a smooth transition from preschool to primary school.

Within a case, according to Merriam (2010), “there exist numerous sites that could be visited..., events or activities that could be observed, people who could be interviewed, and documents that could be read” (p.459). In this case study, I visited different sites beyond the physical classroom where this class usually resided. Within the school environment, these include different play areas, school hall, canteen, administration office and parking areas. I also joined the class for a fieldtrip to a public library. With multiple features to attend within a case allowed a complex description about the issue being researched. This was the benefit of the boundedness of a case study, allowing this strategy to generate rich details of the phenomena in a specific context (Flyvbjerg, 2011). In this research, rich detailed descriptions of children’s traditional games in the context of a contemporary classroom in Indonesia was generated as data materials to produce context-related knowledge about the games. The richness of detailed materials was a result of multiple methods used in this research.

Methods of generating data

As mentioned above, this study used different methods of generating data in investigating traditional games in a contemporary Indonesian educational setting. These methods are commonly used in qualitative research, including observations, visuals, artefacts, group discussions and interviews. With a new materialist framework, however, these common methods were used differently in this study. According to Duhn and Grieshaber (2016), this approach aimed “to use what is familiar...and make the familiar less familiar in order to create niches for variations” (p.54) and made visible processes of materialisation. Therefore, the data reading was “focusing on what becomes perceptible, detectable, recognisable, salient or significant as matter” (Taylor & Iverson, 2013, p.668).

A different view about data itself is the main difference in the use of data from a new materialist perspective. Generated data – such as fieldnotes, photographs, video recordings, interview and group discussion transcripts – was not seen as a representation of “the world” being investigated (Duhn & Grieshaber, 2016; Lenz Taguchi, 2010). Rather, the data was viewed as pedagogical documentation, as Lenz Taguchi (2010) explained,

pedagogical documentation is *not* about documenting the practice as a representation of what the practice *was* at the moment of documenting it. Rather, pedagogical documentation becomes what it actively *does* and *performs* in relation to the pedagogical practice where it is produced (pp.63-64, original emphasis).

The explanation above highlights data as a meaning making device (Duhn & Grieshaber, 2016) or a *material-discursive apparatus* (Lenz Taguchi, 2010, p.63, original emphasis). Data is actively involved in the process of experimentation and materialisation in producing new thinking.

The view of data as *matter/material* (Lenz Taguchi, 2010, p. 63, original emphasis) is another key view in new materialism. Based on Barad's (2007) notion that meaning is inseparable from matter, data as matter inherently produces meaning and meaning is not something attached or given to matter. As Lenz Taguchi (2010) described,

Written notes and photographs as materialised and actualised events and the discursive connections of meaning that we make are intertwined in the production of knowing by means of the pedagogical documentation. There are no observations that can be objective or 'free' from the material-discursive interconnections made in the intertwined process by the observer and the observational apparatus together (pp.68-69).

The process of meaning making, therefore, did not rely on interpretation or reflection of human subjects as researchers. Instead, it emerged through materialising process of intertwining matter and meaning. In the sub-sections that follow, I present further details of methods used in this study.

Observation

Observation was the main method of generating data in this research. This method provided the opportunity to have a firsthand encounter or direct access to the people and situation being studied (Angrosino & Rosenberg, 2011; Merriam, 2010). Particularly in investigating children's traditional games in an educational setting, careful observation was a great source with so much learning potential (Ajila & Olowu, 1992). Being careful, according to Ajila and Olowu (1992), means a researcher should "set down carefully and in full detail all that he sees and hears from beginning to the end of the game" (p.140-141). To support the effort to gain details of observations, I used a multi-function camera for video recording and taking

photographs so I could visit the visual records later to add details to observational data.

Following the notion of pedagogical documentation (Lenz Taguchi, 2010), observation in this research did not aim to capture moments during fieldwork and consider the captured moments as a representation of the practice being observed. Instead, the act of observing itself was important as an apparatus, which intra-actively worked with myself as the observer and my camera as an observation device. Observations, as intra-actions, “include the larger material arrangement that effects an *agential cut* between ‘subject’ and ‘object’” (Barad, 2007, pp.139-140, original emphasis). So, although direct observations only occurred during performance of games, the process of pedagogical documentation was to keep continuing as on-going intra-actions with other elements of this research.

Observations in this research generated rich details about different moments and events of traditional games during fieldwork. These details not only described what the games were and what children - as players - did during the games, but also explained what action or performance occurred in the games, what elements were involved in the performance and what each element did or performed during the games. Then, these descriptions were combined with data from other methods to generate narratives for analysis.

Visual methods: video recording and photograph

As mentioned above, this research also used visual methods for generating data which involved video recording and photography. Visual methods focusing on “what can be seen” (Prosser, 2011, p.479) is instrumental for research with the new materialist perspective that highlights the importance of perceptible, detectable, and recognisable matter (Taylor & Iverson, 2013). The use of visual methods in

qualitative research is not focused on producing images or videos, but is more concerned with the way they are perceived and given meaning (Prosser, 2011). In this research, visual methods and generated data became parts of on-going processes of pedagogical documentation. Images and videos from these methods provided details of experience that substantially supported the observational method. These visuals are also important as materials for group discussion with children.

In educational research, the use of visual methods from a new materialist approach is significant to make visible the process of materialisation of studied phenomena. This approach challenges the common practice of qualitative research in reading visual data that relies on binaries of subject/object, active/passive, human/nonhuman, as well as unequal values and agencies (Hultman & Lenz Taguchi, 2010). Instead, it proposes a non-hierarchical way of looking at different bodies and different kinds of matter in visual data and focus on their active and ongoing relations (Barad, 2007). Similar to observations in the notion of pedagogical documentation above, visuals in a new materialist inquiry move away from their familiar representational to performative function of data. Images or video recordings are not passive data that need to be interpreted, but rather an active agent or a constitutive force that works with the researcher in producing knowledge (Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2010).

Carrying out visual methods in this research, I was aware of ethical issues that might occur before, during, and after undertaking video recording and photography. I ensured that I obtained consent from children and their parents prior to data collection. As a number of children stated that they did not want to be photographed and video recorded, I was very mindful about not capturing these non-consenting children. However, in some circumstances this consideration was difficult

to practice and capturing them was inevitable. In this case, I was very careful in choosing images to be included in this thesis and other related publications.

Artefacts: children's drawings

Another method of generating data used in this research was artefacts in the form of children's drawings. I was inspired by projects with children drawing maps of "the way to the preschool" (Lenz Taguchi, 2010, p.105) and illustrating rhythms of the heart and various sounds into drawings (Olsson, 2009). Here, I considered potential of children's drawing as artefacts to elicit different thoughts and feelings of children that are possibly difficult to generate using other methods.

In this case study, after children played different kinds of traditional games, I asked them to make drawings about the games. I let them choose games that they found interesting to draw, for any reason they might have, such as whether the games were fun or disappointing, hard or easy to play, or having an interesting object to play with. I kept the drawings but I gave them opportunities to revisit their drawings at any time if they wanted to add or change their drawings. The drawings were created during in-between lesson time, when some children had finished with their worksheets or assignments, I invited them to draw. These drawings, together with other visuals, were used as materials for group discussions with children.

Group discussions

Group discussions were used in this case study to complement data generated from observations and visual methods. The discussions aimed to invite children to express their opinions, feelings and impressions related to their experiences of playing traditional games. For young children, group discussions were less-intimidating than interviews, with the presence of their peers which might

also stimulate their willingness to express and share their ideas. However, I was aware that conducting group discussions with children highly depends on the skills and flexibility of the moderator, which became one of its limitations. In moderating group discussions, therefore, I tried to be adaptable in interacting and raising questions to children so the group did not feel intimidated while generating valuable data (Vaughn, Schumm, & Sinagub, 1996).

Similar to artefact creation, group discussion in this case study was conducted during the time in-between lessons. The discussion was informal and “in circumstances that are much closer to ‘naturally occurring’” (Peräkylä & Ruusuvuori, 2011, p.529), rather than formal focus groups discussions. With permission from teachers, I invited off-task children to join me in the discussions. The length of discussion varied from ten to fifteen minutes depending on available time. I used visuals, images and videos from observations when children played traditional games as materials for discussion.

However, there were times when I was given more time for discussion with children, such as morning carpet time and after-break carpet time. For about twenty-five minutes I had whole-class discussions and had more chance to explore children’s experience with traditional games. I started with a question to stimulate children to tell a story, then flow with the conversation as other children started to respond and give opinions. Most group discussions were audio-taped with permission from children. However, there were times when the discussion was not recorded because it was spontaneous, but then I made notes afterwards.

Interviews

To complement data gained from observations, visual methods and exploration of children’s perspectives through group discussions, this research also

investigated perspectives from parents and educators through interviews. The use of interviews in qualitative research allowed the researcher to access information that was distant in terms of space and time (Peräkylä & Ruusuvuori, 2011). In this research, interviews helped me access information about traditional games in a family context. It also allowed me to access retrospective information about backgrounds and considerations of school programs that integrated traditional games.

Another benefit of interviews was access to “people’s subjective experiences and attitudes” (Peräkylä & Ruusuvuori, 2011, p.529). With parents, interviews focused on exploring their viewpoints about traditional games and how the games existed in the context of children’s home and neighbourhood. With educators, on the other hand, interviews aimed to gain information related pedagogical practices that involve traditional games.

Data generated from methods described above, was written as a description with rigorous and specific details. This rich or thick description (Duhn & Grieshaber, 2016; Merriam, 2009) aimed to make visible “complexities in data, including nuances and affects... to open up new ways of seeing/perceiving” (Duhn & Grieshaber, 2016, p.56)

Research participants

The main participants of this research were children in the multi-age preparatory and year one classroom in a primary school in Yogyakarta. There were twenty children in the class, fourteen boys and six girls, who were aged six to seven years old. This particular age group was able to express their ideas clearly (Vaughn et al., 1996). Therefore, apart from active participation in this research, children also expressed their agreement or disagreement to join any part of this case study.

Other groups of participants for this case study were parents of children participants and educators. Parents were invited for interviews to share their perspectives about traditional games. The invitation was distributed during a parent meeting prior to the beginning of semester. With help from the school to arrange a time and venue, interviewed parents were selected based on their availability.

For educators, I established good communication with the school principal from the beginning of the research, before fieldwork. As the research progressed, I asked the principal's opinion about other educators that might be appropriate and relevant to be interviewed. Apart from two classroom teachers, who became my main collaborators in my involvement with the class during fieldwork, the principal recommended for me to interview the head of school and the curriculum coordinator. Similar to interviews with parents, the school arranged all interviews with educators. All interviews were audiotaped. In the sections below, I describe how fieldwork was conducted and the way data was generated using different methods explained above.

The fieldwork

Fieldwork for this study was carried out in semester two of the academic year in Indonesia over a period of about three months. It started at the beginning of semester two, when children returned from their semester break. This timing gave me some benefit in terms of smoothness to enter the field of this case study. There was a good level of familiarity among educators, parents and children that was developed in the first semester. This included children's familiarity with school environment, class arrangements, and most importantly among themselves. This helped me make a smooth transition to join the class and get involved in different activities. I also found it easy to get connected to parents through school mediation.

This was because school-parent communication was well-established using several platforms, including a closed-forum in social media apart from regular parent meetings and direct communication through letter or telephone.

At the beginning of my fieldwork, a week before the semester began which was a preparatory week for educators, I had initial discussions with the school principal and two classroom teachers. With the school principal, I explained the whole research plan and discussed some arrangements for data collection. We had initial conversations via email, but this meeting allowed us to discuss an actual plan with a timeline. He also made himself available for me to discuss issues at any stage of the fieldwork, which was a great support for my study.

With classroom teachers, I discussed the plan for class participation. They informed me about class programs for the semester and subjects that included traditional games in their lesson plans. These subjects were *boso Jowo* or Javanese language and physical education. The teachers mentioned that they sometimes used traditional games as an opening activity for carpet time in the morning or in-between lessons to get children energised. So, they recommended me to do observations on days when the class had those related subjects. For group discussion with children, they suggested for me to use free time in-between lessons and recess, both snack and lunch breaks. The teachers also welcomed me to join out-of-class programs, such as a field trip to public library and local market, class performance, school events, and parent meetings. Basically, they allowed me to participate in any class activity, but informed me that in some lessons, such as religion, computer and library, children learned with specialist teachers. From this meeting, I planned a schedule for fieldwork.

Meeting parents

Later in that preparatory week, I was invited to join a whole-class parent meeting. During this meeting, the school principal and classroom teachers explained class and school programs for the semester and discussed with parents any concern about the programs. After this discussion, I was introduced to parents by the school principal and given an opportunity to explain my research. I informed parents of the fieldwork plan, particularly interactions I would have with children during fieldwork, and participation I sought from them in parent interviews. I also took this opportunity to distribute explanatory statements and gain consent. Finishing my explanation, I welcomed parents to raise any question or concern regarding the research.

Some parents raised interesting questions about the research and fieldwork plan. One questioned the use of photographs I would take during fieldwork and whether I would post these on social media like *Facebook*. Responding to this question, I informed parents that all visuals generated from this fieldwork would only be used for research-related publications, including thesis and possibly for journal articles and presentations in conferences. Another parent asked a similar question regarding whether I would forward any data from interviews and visual recordings to other researchers. Then, I reassured all parents that only myself and my supervisors would have access to raw materials generated from fieldwork, and only analysed results would be published. In that way other researchers may have access to published data, but definitely no data-forwarding from this research. I got one more question from parents concerned that their child might not be willing to get photographed, although actually they did not mind. This question reminded me to highlight my respect towards children's feelings and opinions during fieldwork. I informed parents that in addition to consent from them I needed to obtain consent

from children too, to which I would adhere if, for example, they did not want to be photographed or video recorded. I showed parents the consent form for children because they might need to help their children read it and respond to it.

In general, I got positive responses from parents. Of fifteen parents that attended the meeting, ten gave consent and agreed to be interviewed. Two parents gave consent, but did not agree to be interviewed, while the other three took the form home and returned it later to classroom teachers. The school also sent explanatory statements and informed-consent forms to parents who did not attend the meeting. Within two weeks, of twenty forms sent to parents, seventeen were returned. Thirteen parents gave permission for their children to be included in my research, but four disagreed to be interviewed. I gave the list of agreeing parents to the school administrator, who had parents contact details, to help me with interview arrangements.

Connecting with the class

I attended the classroom on the first day of school. During the morning carpet time, after welcoming children back to school and some conversations about semester break, the classroom teacher introduced me to the class. She then gave me time to have a little conversation with children. I introduced myself as a student – just like them – of a university, which I described as a school for grown-ups. I said to them that I joined their class for the purpose of conducting research, which interestingly made a child spontaneously ask me what I would do in my research. I explained that I would do a lot of reading and writing about the subject of my research, that was traditional games. I said that I wished to share experiences about playing traditional games with them.

Then, children gave me more questions about where my school was, where I lived and whether I would teach them. I explained that I would come to the class and do activities with them, but not teach them like their classroom teachers. I would observe them when they play traditional games and sometimes discuss the games with them. I mentioned that in some observations I might take photographs and video-record the games they play, but to do that I must have permission from their parents and most importantly from them. Here, I told them that it was totally okay to say no whenever they did not want to join my research. When they did not want me to join their games or to take picture or answer my questions, they just needed to let me know. I was really impressed with the way children welcomed me. They showed curiosity about who I was and what I would do in their classroom. They were inquirers in nature who raised many questions without hesitation, even to someone new to them.

Receiving children's informed consent

After introducing myself on the first day of school, I attended the class regularly based on the schedule I planned with the teachers, but I did not start to generate data until I obtained consent from parents and children. Nevertheless, I started to write fieldnotes each time I came to the class. In the second week, there was free-time after a lesson when the teacher allowed me to discuss informed-consent with the children. I distributed the forms and informed children that they could take it home if they needed to discuss with parents. Otherwise, they could do it in the class with assistance from the teachers and me.

Most children said they wanted to respond to it straight away, but one child raised his hand and asked if it was okay to not respond. It was interesting that he expressed his unwillingness to participate in research – his dissent – in an earlier

stage of the research. This was a good sign, however, that “[i]f a child can provide dissent during the research, the process of informed consent is strengthened” (Bourke & Loveridge, 2014). So, not only responding to the dissenting child, I took the chance to assure all children that it was totally okay to say no at any stage of the research and also to any statement in the informed consent. Then I gave children time to look at the forms and give their responses. Along with the teachers, I went around to see if anyone needed help with the form. Many children were able to read and completed the consent form independently, while others needed some help and clarification of statements in the form. When all children finished their responses, I collected their forms and let the teacher continue class activities.

Sorting children’s informed consent forms, I found their various responses fascinating. Among twenty children in the class, other than one child who gave informed dissent, eleven agreed to participate in the research entirely; three children agreed to participate except for sharing story or group discussion; three children agreed to participate but did not give permission to be photographed or video recorded; one child agreed to participate but did not want to be published; and one child only agreed to be observed when playing games. Based on these diverse conditions of consent, I made small notes of non-consenting children for certain parts of research, such as who did not want to be photographed or join group discussion.

The process of generating data

After obtaining consent from parents and children, I started to use different methods in my class participation. Observations, that were initiated earlier, started to involve visual methods by taking photographs and video recording. I was very cautious about not capturing non-consenting children. However, there were some

occasions when capturing random children was unavoidable, such as during recess or free-play.

Observations in this research were conducted during most of my attendance at school. The classroom teachers indicated which activities included traditional games based on their lesson plans. Observations of these activities were planned and scheduled, so I had my camera ready for video recording and photography. I also had a little notepad with me so I could write important occurrences during observations. The sites of observations were varied, depending on spaces used to play the games with children. These included the classroom, the *pendopo* (school hall), and different play areas around the school.

Along with planned observations, I also did a number of spontaneous observations during fieldwork. These mainly occurred during breaks, either snack or lunch break. Usually, after finishing their snack or lunch, one of children started with “let’s play *jethungan* (hide-and-seek)” to which some other children agreed and started to play. In the first few weeks, I always asked permission to observe them play. As children became more familiar with me in the later weeks, they asked me to join their game. With these spontaneous games, I did not get much chance to record using visual methods. Rather, I wrote fieldnotes straight away when children finished the break and went back to the classroom.

As the class got more familiar and comfortable with my presence, some children started to volunteer in providing information and materials for this research. There was a moment when I asked permission to take picture in an observation during free-time, in a spontaneous response, a child came to me and offered to take a picture for me. I gave my camera to her then she went around taking pictures of her friends playing games. With a better level of comfort and familiarity that I built

with the children, I started group discussions after about a month of fieldwork. I always kept checking with the classroom teachers every time I found free time in-between lessons to use it for discussions with children.

In the last few weeks of fieldwork, learning from children's responses to my permission requests during observations, I noticed some children who initially did not give consent to join group discussion or to be photographed involved in those activities. To make sure that they did it voluntarily, I always re-checked with them whether they really wanted to join and assured them that they should not feel obliged to do so. Some children confirmed their participation was voluntary and informed me that they were not sure what would happen when responding to the consent form and chose not to join earlier. I welcomed some of them who wanted to change their responses, including the child who refused the form entirely. He came to me and asked me if he was still allowed to fill in the form, to which I responded positively. By the end of fieldwork, eighteen children gave consent, one child did not give permission to be photographed or video recorded and another child agreed to be observed. However, I also considered three children whose parents did not give permission and made sure these children were not included in my data analysis.

Diffraction analysis

As mentioned in the previous section, diffractive analysis was a component that had a significant impact in this research process. This analysis, nonetheless, was a challenging learning process for me because I needed to unlearn familiar ways of doing research. Exposing myself to different readings about conducting research with a new materialist perspective helped me "to disclose and disrupt the belief systems underpinning the discourses [of conducting educational qualitative research], and the forms in which they materialise as practices and learning

activities” (Lenz Taguchi, 2010, p.143). I also engaged in a series of experimentations regarding how to work *with* data diffractively. It took a lot of turns, over and over again – as re-turning (Barad, 2014), when eventually I got better at understanding of how the diffractive process worked.

As an initial step of doing diffractive analysis, I juxtaposed different types of data, traversed one to another, to see connections among them and then create a narrative about a particular event from fieldwork. I applied a similar process to different events of traditional games to collect a range of different stories from fieldwork. In creating narratives, I made use of visuals and artefacts combined with transcripts of group discussions to gain a rich and detailed description of each event. The details aimed to ensure the event was perceived and accessed materially (Taylor & Ivinson, 2013), and to make visible the materialisation process (Duhn & Grieshaber, 2016; Lenz Taguchi, 2010).

In this initial step, I learned to practice *active use* of pedagogical documentation (Lenz Taguchi, 2010, my emphasis). The documentation was not a passive record or representation of events being studied. Rather, it was an active agent *with* which I worked in creating stories. It becomes a *performative* material that is always in connection with other materials and has “a capacity to animate further thought” (MacLure, 2013, p. 228). Through visual images, video, artefacts and transcripts of group discussions and interviews, documented events were re-enacted and embodied as material-discursive knowing (Lenz Taguchi, 2010), and opened up ways of understanding traditional games that were previously unimaginable.

Reading narratives: Being open to affective moments

Once different narratives were generated from different events during fieldwork, I read and re-read the narratives, over and over again – as another re-

turning (Barad, 2007). I needed to rework some narratives by revisiting fieldnotes from observations, visuals, transcripts of group discussions and interviews. I made sure that matter and materials in the event were made visible in a thick and detailed description.

In re-turning reading narratives, I let myself to be vulnerable to affective moments. These were moments when I sensed or felt of being enmeshed in the materiality (Hickey-Moody, 2016) of different elements of traditional games. The affective moment “is not produced in relation to another person...but rather, in relation to the material product, the work” (Hickey-Moody, 2016, p.261). In attempts to be open to affective moments, I made an active use and work with my own subjectivity, perspective and experience (Lenz Taguchi, 2010) in playing traditional games.

An example of affective moments in the analysis process was when I looked at an image of children picking up stones from the school yard. Instantly, I could feel my fingers react to the image, my thumb and forefinger repeatedly rubbed each other, making a movement of the way I would pick a small stone from the ground. I felt as if I was one of children in the image. From bodily reactions to the image, I returned to my childhood memories of playing with stones. Here, I worked with the data performatively as I continuously saw, felt and sensed visual data (Jones, 2013a) that intermingled with my own feelings and senses as I recalled my memories. Different moments became alive, re-enlivened and reconfigured in remembering (Barad, 2007). Details of remembered memories with stones are described in Chapter Seven, the intra-activity of tradition in playing games with stones. Those memories became very visual and corporeal and I felt that I re-experienced them, but not in the same way I had in the past.

Different narratives led to different affective moments. I had other affective moments with a drawing of children hiding in a tree, an image of children hiding in a particular hiding space, observation notes of *dakon* game, and recorded stories during group discussions about *jamuran* game. Those affective moments were different to one another. Each of affective moment brought me to another story, in another space and time. As Hickey-Moody (2016) asserted, “the way an affect is experienced, and the way(s) in which an affect works, will always be specific to the body in question” (p.262). Like the way the image of children and stones above brought me to my childhood memory, different materials had different affects and the way they triggered different stories.

The moment of diffraction: Being connected to other stories

In reading narratives, when I became entangled in relation to particular material of traditional games and being brought and connected to (an)other story(ies), that was what I considered as a moment of diffraction. Adopting Barad’s (2014) notion of diffraction, as “cutting together-apart (one move) in the (re)configuring of spacetime mattering” (p.168), I visualised myself as being hit by stones in the image above and from there came different related stories about games, children and stones in unlimited possible ways. This is how diffractive analysis can be more productive and explorative, rather than merely reflective (Bozalek & Zembylas, 2017). Diffraction generated stories. Being in the moment of diffraction, from my relation with materials in the re-turning of reading narratives, I was connected to other stories. These stories were not always personal stories, but from different texts or readings, such as theories, text books, journals, school programs, classroom lesson plans, children’s stories from group discussions, stories from parents or educators during interviews and other stories.

In establishing connections among different stories, I followed an affective process that opened up possibility for “the development of creative practices that allow affects to be re-routed, relations to be re-worked, and bodies to be undone and re-composed” (Todd, Jones & O'Donnell, 2016, p.188). Then, these different stories and texts were stirred up (Bone, 2017), interwoven and analyses were made (Lenz Taguchi, 2010). This was another productive stage of diffractive analysis. The process of interweaving stories made visible by “how they connect and inter-connect, and how they intra-act with each other to produce new theoretical thinking or implication and consequences for practice” (Lenz Taguchi, 2010, p.143). This diffractive process brought together elements that were seemingly disconnected and concurrently created a space for new ideas and insights to emerge. In this case study, the insights provided new ways of conceptualising traditional games, which could be a way for reinventing the games.

Ethical considerations

Conducting this research was an important exercise for me to put into practice my understanding of ethical considerations in a research project. At each stage of this research, before, during and after fieldwork, different ethical issues were highlighted and required me to be cognisant of my position in each situation. A high-risk ethics application detailing this study was approved by Monash University Human Research Ethics Committee (MUHREC) prior to fieldwork. This research was considered high-risk because it involved children under eighteen years old, who were regarded as vulnerable. The MUHREC strict guidelines highlighted the importance of obtaining consent from parents or guardians of children before I proceeded with the research. Also, special care was needed with visual methods, both with photography and video recording. I had to anticipate non-consenting

children in the research and ensure they would not be captured. Thorough questions in the ethics application guided me to pay attention to any potential harm and power relations that would affect participant involvements in the research.

Entering fieldwork, I was cautious about any sign of discomfort while participating in this research. Especially with child participants, although I always assured them that it was okay to say “no”, I was aware that for some children it was hard to say it or express their dissent (Bourke & Loveridge, 2014). This awareness led me to discuss informed consent with children in the second week of fieldwork, rather than on the first day I met them. I needed time to feel comfortable with the class, and conversely, to allow participants – especially children – to feel comfortable with my presence in the class. I tried to apply what Clark and Moss (2017) conceived as “slowing down of the adult journey” (p.153), because I understood that “[l]istening to young children’s views and experiences cannot be rushed” (p.154). So, I learned to be sensitive with verbal and non-verbal expressions from children and any sign of mood or emotional change, even after they gave permission.

My cautiousness to any signs of dissent from children was also informed by my position as an insider of the case study as a Javanese girl. Reflecting on my own childhood, I was aware that the values of *urmat* (respect) and *rukun* (conflict-avoidance) as underlying principles of Javanese ethics (Geertz, 1961; Magnis-Suseno, 1997), potentially raising an ethical dilemma in this research. Following these values could prevent children from expressing disagreement to adults, because they were expected to show respect to and not confront or disagree with adults. In this research, adults could be educators, parents and myself as a researcher. Here, I reckoned a discrepancy between practicing research that

acknowledged children's rights to (or not to) participate (Bourke & Loveridge, 2014), on the one hand, and being aware of underlying cultural values on the other.

However, in Javanese culture, there is a role of adults interacting with children that was often mistakenly skipped, so as in superior-subordinate relations (Magnis-Suseno, 1997). The role was "engaging in a genuine dialogue and having been assured of freely given consent" (Magnis-Suseno, 1997, p.71). Interestingly, this role was actually relevant to the notion of slowing down to listen (Clark & Moss, 2017) or circular movement (Lenz Taguchi, 2010) in working with young children. Realising this role helped me to be cognisant of every situation that called for ethical (re-) considerations.

Throughout fieldwork, certain moments allowed me to reflect on my actions. Although I gained consent from parents, teachers and most children, I kept asking permission from children, especially when taking photographs. Also, through group discussions I took the opportunity to revisit materials gathered during observations. I thought it was important "to find out more about what children think of the process" (Clark & Moss, 2017, p.156). I did it by reviewing with children different images and videos from observations and discussing the drawings they made. I also discussed with children confidentiality of their identities and informed them that they would have pseudonyms in my research report so they would not be identifiable. Interestingly, they responded positively and asked me whether they could choose their pseudonyms. So, some names of children in this thesis were chosen by children themselves while others were happy for me to choose their pseudonym for them. Here, I learned that conducting research "involve considering, and constantly re-negotiating, various forms of expanded consent" (Loveridge & Cornforth, 2013, p.469). I also learned that children have agency when discussing and deciding any

issue related to them. As a researcher, I must respect children's capacity to contribute to the research by giving them opportunities to give opinions and make decisions for themselves.

With a new materialist perspective, the notion of ethics was extended to include the perspective of materials. Ethics, from a relational materialist approach, is not a separate entity attached to particular matter. According to Barad (2012a), "ethics is not a concern we add to the questions of matter, but rather is the very nature of what it means to matter" (p. 70). Here, research as matter, inherently had an ethical nature. Being ethical in conducting research was not about giving "right responses... but about responsibility and accountability for the lively relationalities of becoming, of which we are a part" (Barad, 2012a, p. 69).

(In)concluding notes

Conducting research was an on-going learning process, within which different components intra-actively constituted each other. This was not a once for all plan, which the designed research would progress as anticipated. Throughout the journey of this research, I have experienced transitions not only in my way of thinking about traditional games as the subject matter, but also about doing research – the methodology. Focusing on the *re*-part of researching, which I find equal to re-turning in the notion of diffraction (Barad, 2014), this journey is about searching over and over again. This researching involves reading and re-reading, not only written texts but also reading non-written lines and non-text materials. As a researcher, I become an individual "who again and again searches for what matters, what is useful and what is interesting" (Rhedding-Jones, 2005, p.18).

Chapter Five: Playing with space intra-actively in *Jéthungan* (hide-and-seek)

Chapters Five, Six and Seven in this thesis are discussion chapters that present findings of the study as analysed from a new materialist perspective. This perspective gives attention to not only humans, but also non-humans and more-than-human elements of traditional games. It particularly puts material factors at the front (Coole & Frost, 2010) and looks at all elements as performative agents (Lenz Taguchi, 2010). The focus of discussion is on the assemblage of these elements (Fox & Alldred, 2015) and their entanglements in a continuous intra-activity (Barad, 2007; 2008) of traditional games. These three discussion chapters, therefore, explore traditional games as a space of encounter among different elements by bringing forward materials and materialities of the games, including space, bodies, movements and things.

The chapters employ concepts of *performative agency* (Lenz Taguchi, 2014) and *intra-actions* (Barad, 2007; 2008; 2014) to analyse different elements that influence the reinvention of traditional games. Although sharing main conceptual tools in analysis, each chapter highlights different element(s) of the games. In Chapter Five, space becomes the focal point of discussion that is particularly situated in *jéthungan* game (hide-and-seek), whereas bodies and movements in circle and singing games, such as *jamuran* and *cublak-cublak suweng*, are central to discussion in Chapter Six. Lastly, Chapter Seven addresses the significance of things, stone(s) in particular, as in the games of *dakon* and *cublak-cublak suweng*. Each element of traditional games is understood in relation to other elements of the games as well as “elements from elsewhere” (Bone, 2018, p.4), as suggested by a new materialist perspective. Through diffractive analysis these chapters bring

together seemingly random, unrelated and multi-layered subjects and ideas (Bone, 2017; Fox & Alldred, 2015). Following affective moments (Hickey-Moody, 2016), intra-connections among these ideas are established to generate new insights in conceptualising and understanding traditional games.

In this chapter, I present the dynamic of *jéthungan*, the Javanese game of hide-and-seek. The chapter highlights space as a performative agent in the game which has capacity and power “to act, to learn, and to transform” (Lenz Taguchi, 2014, p.80) in a continuous intra-activity (Barad, 2007; 2008). Space, in the context of traditional games, is not seen as a static and passive background of events. Rather, it is an active agent which contributes in any exploration, creation and negotiation during the game.

Starting with a brief introduction about *jéthungan*, I begin the discussion of this chapter by presenting a narrative about the way *jéthungan* is brought to the classroom and introduced to children. Later in fieldwork, this game becomes very popular among children. Then I explore different stories of *jéthungan* in different places and times at school. Being enmeshed and affected by the game during my observation, I was brought to my own story playing hide-and-seek in my childhood. These stories focus on the way in which each place and time becomes a different space when *jéthungan* is played.

As the stories unfold, different notions of space are emergent as other materials and materialities are added diffractively. The very idea of space is unsettled, then flows as varied forms of movements that are different one from another. The notion of space itself is diffracted. From a pedagogical space with a mixture of order and chaos and continuous shifts between smooth and striated, to a

space of encounters with political and ethical consequences, *jéthungan* becomes a space for difference and uncertainty.

The discussion continues with a focus on space as a performative agent and what can happen when attention is given to performative agency of different matter and organisms in the game. In the context of the contemporary Indonesian classroom, *jéthungan* is analysed as an aspect of intra-active pedagogy that informs education for young children in Indonesia. The chapter concludes with highlights of emerging ideas as intra-connections among different elements of the game are established in diffractive analysis. Now, I start with introduction of the game *jéthungan*.

The game of *jéthungan* (hide-and-seek)

Jéthungan is a common name for hide-and-seek among children in this case study. It is rooted in the word *jéthung* which means home or on base in children's games, so *jéthungan* literally means to play base or home or free place (Robson & Wibisono, 2002). In Yogyakarta, this game is pronounced in a variety of ways, such as *jélungan* or *jépungan*. Among the Javanese community, this game is also called *umpetan* or *jekong umper* (Sujarno et al., 2013) or *dhelikan*, rooted in the word *dhelik* or *ndhelik* which means to hide (Robson & Wibisono, 2002). Generally, across Indonesia the game is known as *petak umpet*, although it has various local names in different places, such as *bepukungan* in East Kalimantan (Departemen Pendidikan dan Kebudayaan, 1984), *jlumpritan* or *jumprit singit* in East Java, *ucing sumput* or *susumputan* among Sundanese in West Java, *sumputan* in Jambi, *pet-pet* or *pet som* in Aceh, *yangoyango* in Papua and *mopepeku* or *pepeku* in North Sulawesi (Hamzuri & Siregar, 1998). Historically, it is believed that *jéthungan* was introduced by some *wali* (the saints) in early propagation of Islamic faith in Java (Sujarno et al.,

2013). In its spreading, the game brought philosophical value of persistence in following God's guidance, symbolised by the firm pillar or stem as the centre of the game.

Hide-and-seek is widely played and shared by children all over the world, not only in Indonesia. The game is known differently in different countries, such as *taupunipuni* among the Maori in New Zealand, *kumu-kumu* in Papua New Guinea, *el esconder* in Spain, *taguán* in the Philippines, *santakukadi* or *thappo* in India, and *achgabook* in Armenia (Sierra & Kaminski, 1995, p.22). The game is also known as *bojú bojú* among Yoruba children in Nigeria (Ajila & Olowu, 1992), *apodidraskinda* in Greece, *hospy* in Scotland (Hall, 1995), and *de-a vati ascuns* in Romania (Brewster, 1949). There is no clear information on when and where the game was first played, but it is believed that the earliest version was described by the Roman author Julius Pollux (Sierra & Kaminski, 1995) and was also mentioned by Shakespeare (Hall, 1995). Hide-and-seek has numerous versions, each of which is played in different places and has some similarity in the rules (Hall, 1995). These variations, Opie and Opie (1984) argue, are related to flexibility of the game which makes it possible that each hide-and-seek game is played differently depending on agreement among players. It can be one player seeks all other hiding players or, conversely, all players look for one hiding player, or in groups with various modifications (Opie & Opie, 1984).

The common version *jéthungan* among Javanese children, and similar across Indonesia, is one seeker and the rest of players hiding. The seeker is often called *dadi* (means to become) or *jaga* (means on duty) or "on it" (Opie & Opie, 1984, p.163). Before starting a game, all players make a draw to decide who becomes the seeker. The draw is done through *hompimpa* and *sut/suten/pingsut* (Dinas

Kebudayaan Provinsi DIY, 2014a; Hamzuri & Siregar, 1998; Purwaningsih, 2006). In *hompimpa*, players use two sides of hand palms to decide who wins, and out from the next draws until they get the last two players. These two players then do *pingsut* using fingers like in the game of *man, elephant and ant* to decide who is the seeker.

To start a round of *jéthungan*, the seeker stays in a central point as a base or 'home' or 'the starting-place' of the game (Opie & Opie, 1984). This base can be a pillar, a tree or a wall, that is called *buk* in Javanese. Literally, *buk* has no specific meaning but it's role in *jéthungan* is vital. The seeker has to lean on the *buk*, eyes closed and count up to a certain number, usually ten or twenty, when all other players try to find a hiding space. After finishing the count, the seeker opens his/her eyes and starts to seek out hiding players. When the seeker finds a hiding player, he/she should shout the name of the found person and quickly run back to the base. At the same time, once found, the hiding player should run faster to the base and race the seeker. Whoever arrives first at the base should touch the *buk* and shout *pung*. Usually, a round is finished when all hiding players are found and the seeker for the next round is decided through *hompimpa* and *pingsut* again. Depending on agreement among players, this rule can be negotiated in each game.

During fieldwork in this research, the game *jéthungan* was played in different locations around the school, mostly in open areas, such as school yard or a space near the parking area. Sometimes the game was played inside a building, such as at *pendopo* or a large hall at the front of the school, school corridor, and even in the classroom. The game was also played at different times of the school day, mostly at recess time, sometimes in the morning before class or after school in the afternoon, and occasionally *jéthungan* was integrated into the classroom program or learning activity.

Bringing *jéthungan* to the class, creating a pedagogical space

In the first week of fieldwork, I joined the class during the lesson of *boso Jowo* (Javanese language), as the local language of Yogyakarta is a component of local content in the school curriculum. During carpet time at the beginning of the lesson, Viona, one of the classroom teachers, introduced the game *jéthungan* to the class. She said, “*today, we will learn one of Javanese traditional games, that is jéthungan*”, while sitting on a chair in front of the class and holding the textbook of *Sinau Boso Jowo* (learning Javanese language). She faced the children who sat on a square green carpet, as illustrated in figure 5.1 below.



Figure 5.1. Introducing *jéthungan* in the classroom

As shown in the figure above, children are sitting in rows, looking to the front, and focusing their attention on the teacher who is sitting on a chair in front of them. Some children are sitting on their bottoms, cross-legged, known as *sila* in Javanese (Robson & Wibisono, 2002). The in-rows positioning, however, makes it difficult for children sitting in the back row to see the teacher. The child in the blue-and-green-

striped top with white short pants in the figure above tilts his head to one side so he can see the teacher. It makes his *sila* position imbalanced, so he needs to hold one of his legs to prevent him from falling. Similarly, another child in the blue top in front of him has to get up from *sila* position and sit on his legs to see the teacher. Also, the child in the white and red t-shirt was kneeling so he is higher than rows in front of him.

This arrangement of the class for this lesson, in an area of the classroom, with furniture and materials, including chair, carpet, whiteboard, textbook, wall, floor, together with ways of sitting, talking and body-positioning creates a particular pedagogical space (Lenz Taguchi, 2010). This pedagogical space makes different elements mentioned above entangled, affect and being affected among each other throughout the lesson. As Lenz Taguchi (2010) argues, intra-actions among these elements open up unpredictable possibilities of what might happen next, which is unfolded in the following sections.

Starting the introduction of *jéthungan*, Viona asked the children whether they know the game and have played the game before. Some children raised their hands, confirming they knew the game and played it at home or in their neighbourhood. They said they learned it from older siblings or playmates in the neighbourhood. Then Viona invited children who knew the game to come to the front of the class and explain how to play *jéthungan*. As shown in figure 5.1 above, the class engaged in a dynamic discussion about the game when Reno came up and shared his experience. During his explanation, there was some disagreement from other children about the way the game is played. For instance, the shout when a player touches the base, while Reno said *pung*, other children said *jépung* or *jélung*.

Similarly, for the name of the base, some children called it *buk*, while others named it *pung*.

Disagreements continued regarding the count that a seeker should do, whether up to ten, twenty or even more, and whether the count was forward or backward. Addressing these differences, Viona acknowledged each variation the class shared, and as a moderation, she referred to the textbook of *Sinau Boso Jowo* and facilitated the class discussion to reach agreement on how they would play *jéthungan*. Eventually, the class decided to say *pung* when someone touched the *buk*, and the seeker should count forward up to ten when other players were hiding. To wrap up the discussion, Viona ensured all children understood how to play the game and let them practice counting in Javanese language. She asked the children to pronounce *siji* (one), *loro* (two), *telu* (three), *papat* (four), *limo* (five), *enem* (six), *pitu* (seven), *wolu* (eight), *songo* (nine), and *sepuluh* (ten) repeatedly. Then, she escorted children to play *jéthungan* outside in the play area.

Observing this introduction to the game, I was intrigued by the idea of including a children's traditional game, like *jéthungan*, as learning material so that children need to *learn* the game before playing it. Learning in this context was structured as a process of acquiring pre-determined knowledge as prepared in the lesson plan. In an interview with Viona and Salma, both classroom teachers, I explored the idea of integrating a traditional game in the learning process. Viona argued that traditional games have a special characteristic which is important to be introduced to children. She argued, "*traditional game has unique characteristics, we need to preserve it and children now should know about the game*", which motivated her to *teach* children about the game. She highlighted physical activity, such as running, in a traditional game as an important element which she enjoyed in teaching

it. This enjoyment nostalgically recalled her childhood memory of playing the game, which she described as “*a lot of running around*”.

Embedded cultural value in traditional games was another consideration to include games in learning material, as acknowledged by Salma. She claimed, “*the game has value of Javanese culture, because this school is in Java*”, while she also pointed out benefits of the game to build positive mood and help children focus on learning. Salma added that including traditional games in the learning materials of *boso Jowo*, as a component of local content in the school program, was also indicated in the curriculum guidelines. Although this inclusion was imperative, both teachers confirmed they had flexibility in determining what games to include, and when and how to deliver game learning to children. So, they chose some games that were easy to play, in terms of rules and tools of the game, and most importantly which could be played in the space available at school. They also considered games which are possibly familiar to children, as they believed some children in the class were still exposed to traditional games – especially those who lived in *kampung* (Javanese traditional village) – who could become a resource of information about the games. Therefore, they chose *jéthungan* as the game met all those considerations, as well as *jamuran*, *cublak-cublak suweng* and *dakon*, which are discussed in the next chapters. Regarding timeline, they decided to introduce traditional games at the beginning of semester to get children more motivated to learn *boso Jowo*, and later on the games could be used in any class activity, not necessarily attached only to *boso Jowo*, such as morning carpet time or during free time or recess.

From class observations and interviews with teachers, it is interesting the way introduction of traditional games, *jéthungan* in particular, to the class can create

dynamic pedagogical spaces. Starting from the teachers' initiative, with reference to curriculum guidelines and the textbook, the game is treated as "permanent and stable knowledge" (Olsson, 2012, p.88) to be transferred to children. Cultural preservation is the main underlying reason for teachers to include the game as learning materials, which conforms dominant narrative and public concern that children are less-exposed to their own culture amid fears they may disengage with cultural values of the community. Traditional games, hence, are seen as a means to preserve cultural values, as well as a technique to develop particular skills and abilities, including physical, sensory and motoric skills. Referring to teachers' statement in the interview and as stated in the lesson plan, teaching traditional games aims to facilitate language acquisition, the Javanese language as local language in Yogyakarta, and numeric ability.

On the other hand, in this structured learning, children are treated as "*knowledge, identity, and culture reproducer*" (Dahlberg et al., 1999, p.44, original emphasis), who need to be provided with "knowledge, skills and dominant cultural values which are already determined, socially sanctioned and ready to administer" (p.45). With pre-determined goals to achieve, as dictated in the curriculum guidelines and textbook, learning *jéthungan* is planned as "a predictable, certain and calculated approach to quality" (Duhn & Grieshaber, 2016, p.61). The notion of quality itself, as Duhn and Grieshaber (2016) argue, pervasively dominates early childhood education and is often tightly connected to strategies of "control and calculation, technology and measurement" (Moss, 2014, p.17), which is prominent in the context of Indonesia. Preparing *jéthungan* in the lesson plan, as Viona and Salma have done, is a part of "imposition of a desirable order" (Davies, 2009, p.1) in a quality-oriented pedagogy. This order, Davies (2009) notes, focuses on "the already known"

(p.1) and serves as a basis and safe pedagogical space to avoid unpredictability and “unbearable chaos” (p.1) often associated with good teaching.

The delivery process of planned-order in teaching *jéthungan*, interestingly, inevitably involves chaos that brings out “multiple bodies, multiple ways of knowing, diverse trajectories, opposing wills” (Davies, 2009, p.1) during class discussion as described above. When Reno shared his experience in playing *jéthungan*, the class responded with disagreements and different opinions about the game. The learning process is no longer one-way – based on the teacher’s prepared materials – but is multi-directional when different experiences and ideas from children are included. Here, by inviting their experience and opinions, children are positioned as a resource and co-constructors of knowledge, identity and culture (Dahlberg et al., 1999), shifting from initially passive receivers. Also, this exemplifies the second principle of teachers’ responsibility in *among* system, *Ing madya mangun karso* (Dewantara, 1977; 1994), where the teacher in the middle of children builds motivation and invites contribution to their own learning. In moderating the class, however, at one-point Viona brings another order by referring to the text book that is mixed with the chaos of engaging discussion. Eventually, agreement is achieved by the whole class which shows the teacher’s capacity of being *Tut wuri handayani*, meaning at the back of children to support their aspiration (Dewantara, 1977; 1994), the last and the most emphasised principle in *among* system.

Dynamic process and relations in bringing *jéthungan* to the classroom, from the class seating arrangement, well-planned lesson plan, vigorous class discussion, and participative decision-making, create a pedagogical space that is complex and multi-layered. This space emerges as different elements meet and influence each other in an intra-active pedagogy (Lenz Taguchi, 2010), within which different

images of children are represented (Dahlberg et al., 1999), multiple roles and responsibilities of teachers are demonstrated (Dewantara, 1977; 1994), and a coexistence of order and chaos is drawn (Davies, 2009). This notion of pedagogical space disrupts the settled and long-established approach to pedagogy as an orderly planned and structured learning activity. Instead, it promotes intra-activity that involves continuous transformations and changes among all participating bodies and matters in their mutual engagements and relations (Barad, 2012, Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2010; 2011). Hence, in the context of *jéthungan*, space itself keeps changing as the game progresses.

Exploring spaces in playing *jéthungan*

As mentioned above, after introducing *jéthungan* and doing some simulation in the classroom, Viona led the children outside to play the game at a play area in the school. It was an open space with a very big *beringin* (banyan tree) in the middle, as pictured in figure 5.2 below.



Figure 5.2. Play area around *beringin*

The *beringin* stood strongly with a very wide trunk diameter stem, which took about fifteen children holding hands together to circle it, and the contour of its trunk surface was shaped like room partitions, which indicated that the *beringin* was very old. The tree was surrounded by thick and tight hanging roots, as the main feature of a *beringin*, and was covered by exuberant green leaves. The features of *beringin* philosophically matter as they materialise Javanese belief of *beringin* as a *tree of life* which gives shelter and protection to people - and others - in its surroundings (Sunjata et al., 1995). At the edge of the play area, a high contoured wall-fence marked its boundary from a building next to it. The building had a *gapura* (gate) with red wooden door and four concrete pillars facing the *beringin*. The gate was closed most of time and the building was not accessible for children as it was part of a museum in adjacent to the school. In between *beringin* and *gapura*, there was a concrete drain which mainly functioned to carry rainwater surplus during the rainy season.

The ground of the play area was mostly covered with concrete and blocks, while some of the area remained as uncovered soil, especially around *beringin*. This area looked very shady, calm and quiet, with *beringin* and *gapura* that stayed there and appeared to be inactive and functionless. As nature, this area looked stable, orderly and remained unchanged, but intrinsically it held arrays of what might come, which Meillassoux (2012) called potentialities. Here, as new materialists suggest, nature is not static but agentic, since “it acts, and those actions have consequences for both human and nonhuman world” (Alaimo & Hekman, 2008, p.5). The agency and potentialities of this area as a space became salient when *jéthungan* took place, which transformed a seemingly quiet and passive space into a lively and vibrant space.

Escorted by the teacher, the children walked from their classroom to this play area. Gathering around *gapura*, Viona once again reviewed the rules of the game discussed in class and made sure all children understood them. One pillar of *gapura* was chosen for a *buk* of *jéthungan*, as presented in figure 5.3 below.



Figure 5.3. The seeker

Then, *jéthungan* started when Viona joined in to play with the class. After doing *hompimpa* and *pingsut*, Ahmad was chosen as the seeker. As seen in figure 5.3 above, he leant against the *buk*, closed his eyes and counted to ten, in Javanese language, while the rest of the class was hiding. Finishing the count, Ahmad opened his eyes and started to find his friends. He walked away from the *buk* and looked around *beringin*, then to his surprise, someone quickly ran from hiding place to the *buk*, touched it and shouted “*pung*”. It was Rafi who returned home to the *buk* without Ahmad noticing him, so Rafi was safe. Ahmad returned to the *buk*, this time he did not walk too far from it while trying to find hiding players. Then he saw someone move behind the contoured wall-fence, and he shouted “*Jojo pung*” and

quickly touched the *buk* on the spot of the pillar where he leaned earlier. Right after that he shouted again “Sandi *pung*” and touched the *buk* at the same time when he saw Sandi run from *pendopo*. In figure 5.4 below, most hiding players were found and gathered around the *buk*.



Figure 5.4. Playing *jéthungan* around *beringin*

The first round of the game was a bit chaotic and some children complained about the game rules. One said that if a hiding player successfully touched the *buk*, the round was finished and another round should start over with the same seeker. But another child said that everyone should touch the *buk* or should be found by the seeker to get one round finished. Viona intervened and decided that the seeker should find everyone before starting another round. The game continued for several rounds, with some interruptions from Viona, until all children could play *jéthungan* without teacher supervision.

The change and transformation of the play area, from quiet and inactive to a lively and vibrant space during *jéthungan* shows the capacity and power of the game as a performative agent (Lenz Taguchi, 2010) which with other elements of the game intra-actively affect and are affected among each other. Initially, the play area as a place has a signifying identity (Davies, 2009), with its features and existence, such

as the *gapura*, *beringin*, ground and contoured fence, that give an impression of being fixed and static. But when it comes to playing *jéthungan*, the area becomes a different space which opens up different possibilities, thereby Davies (2009) claims that “space signals a place that is not fixed, and that is open to multiplicity” (p.5). Multiplicity, in this context, is related to what might happen during the play of *jéthungan* that is unpredictable, diverse and wide-ranging. Children used every feature of the play area for the game, similar to as Opie (1994) described “the corners and walls of the buildings; the fences...; the ledge outside [the classrooms] ...; the flat drain covers and slotted drain covers...” (p.11). The *beringin*, with its hanging roots and stem surface became a favourite hiding space. Even the concrete drain, which is unlikely space to hide, can be used in *jéthungan*. All spatial elements in this area shows its performative agency actively involved in playing the game, and equally having contributions as children play.

Later during fieldwork, children started to play *jéthungan* on their own initiative without teacher supervision, especially during recess after snack or lunch time. They explored different places, such as *pendopo*, near the parking area, the building corridor, and even the classroom, to play *jéthungan*. Usually two or three children raised the idea by saying “*dolanan jéthungan yuk*” (let’s play *jéthungan*), to which other children responded with ideas about where and how to play the game. One of their most favourite places to play was at *pendopo*, as shown in figure 5.5 below.



Figure 5.5. *Pendopo* at school

Pendopo, can also be written as *pendhapa*, was a component of a Javanese house separated from other parts of the house, like a pavilion, and located at the front of the building. Traditionally, it had outward orientation and functioned as a reception to connect with the outside (Said, 2008; Wismantara, 2011). Thus, *pendopo* are usually located at the front area, are fully roofed but not fully walled off. This signified *pendopo* as a public space that was open, welcoming and at the same time a shelter which gave protection to everyone in it (Cahyono, Setioko & Murtini, 2017; Said, 2008; Wismantara, 2011). The floor of *pendopo* was raised from its surroundings, with five-level stairs from each side of the building. This design functioned as an anticipation of flood and humid climate, and concomitantly marked *pendopo* as the central orientation of the house (Cahyono et al., 2017). As compared to another part of the house, called *krobongan*, that was located at the rear area and characterised as enclosed, private and inward-oriented (Wismantara, 2011), *pendopo* was accessible for everyone as a venue for social interaction. This spatial distribution of the house reflected the Javanese worldview of keeping a balance between material world (symbolised as *pendopo*) and spiritual world (symbolised as

krobongan), which was a part of the microcosmic-dualities principle as applied in Javanese architecture (Wismantara, 2011).

In the past, most Javanese houses had *pendopo* as a place to welcome and interact with others. Nowadays, as limited space is available to build a house, *pendopo* is no longer built in many Javanese modern houses and its function was replaced with a living room as part of the house. However, *pendopo* is still commonly available in public or community building, such as government office, community centre and school. The function of *pendopo* extended as a space for public gatherings. At the school of this study, for instance, *pendopo* was used for general assembly, whole-school events - such as celebration of National big days or religious festivals – or could be a space for out-of-classroom activities and for children to play during recess.

The structure of *pendopo*, with spacious, partial concrete wall, and raised floor level, together with a few trees in its surrounding, made it an exciting space for playing *jéthungan*. As shown in figure 5.6 below, Jojo – the child who was only partly captured in the picture – was hiding behind a side of *pendopo* corner-wall, while others stood around the seeker who leaned on the wall with closed eyes.



Figure 5.6. Playing *jéthungan* at *pendopo*

In playing *jéthungan*, as Opie (1994) argued, any feature of an area, like *pendopo*, could be an exciting space for children to play. Whether its corners, different sides of its wall, or its stairs, as presented in figure 5.7 below.



Figure 5.7. Hiding space nearby *pendopo* stairs

Two children in figure 5.7 above were trying to hide nearby the stairs of *pendopo* which height was slightly lower than their bodies. Hence, they needed to bend their bodies when hiding from the seeker. This feature of *pendopo* became a performative agent (Lenz Taguchi, 2010) in *jéthungan*, since it affected children – human players – to perform their bodies in certain way when hiding. This capacity was also showed by a corner-wall at which Jojo hid in figure 5.6 above. He patched his body to the wall as he stepped on a very narrow ledge of *pendopo*, so he would not fall to the ground. The two figures above show the way in which children's body/ies and space entangled and mutually constituted the game of *jéthungan*, through their continuous intra-actions (Barad, 2007).

This body/ies-space entanglement in *jéthungan*, Barad (2007) argued, was distinctive in relation to the emergence of agencies – the performative agencies (Lenz Taguchi, 2010; 2014) – of each element. In other words, performative agency

of a corner-wall in figure 5.6 emerged in mutual constitution with Jojo's body when they were in contact. Similarly, the capacity of the *pendopo* stairs as a performative agent emerged when its force joined another force of children's bodies. This joining of forces and bodies could give a feeling of joy when the bodily movement capacity increased, which according to Olsson (2009) is what learning is about. Here, both space and children's bodies made themselves mutually intelligible (Barad, 2007; Lenz Taguchi, 2010), in which learning and knowing happened. *Pendopo*, as a space, was not only a passive background at which *jéthungan* took place. Rather, it plays intra-actively *with* children and other elements of the game – the count, the shout, the ground, the tree, the air, the weather – where they were influencing and being influenced by each other, all equally constitutive in playing *jéthungan*. In this intra-activity, the distinctive binary of humans and non-humans becomes blurry (Lenz Taguchi, 2014), when different bodies and matters are all seen as constitutive performative agents.

Another interesting scene is presented in figure 5.8 below, when Queen was running nearby the *pendopo*, passing a tree, and trying to find a place to hide.



Figure 5.8. Running to find a hiding space

Queen ran in the race with the count voiced by the seeker, so she had to settle in a hiding space before the count was finished. Her action in *jéthungan* above challenged the common gender stereotype in playing traditional games. As commonly shared in a Western perspective, boys engaged in games with physical power, strategy, and arbitrary commands more than girls (Sutton-smith, 1989). On the other hand, girls often concerned more in deliberating games rules rather than boys who focused on action of the games (Sutton-smith, 1989). In the figure 5.8 above, the child showed agency in negotiating gender role and acted in ways that went beyond cultural gender stereotype. She showed her performative agency in relation to other existences in the play area, including the tree. Here, everything available in the play area could be counterparts in *jéthungan* to play with, because “every bush and tree may be a mask of a pair of eyes” (Opie & Opie, 1984, p.149). This particular scene led a recall of my own childhood memory playing *jéthungan*. This game was called *dhelikan* in my hometown and it was one of the most played games in my neighbourhood. I have so many unforgettable memories of playing *dhelikan*, some of which are described in the following section.

Playing *dhelikan*: my childhood story

In early 1980s, during my childhood, playing with friends was the main way to spend my leisure time. I often joined my older brother with his peers too, from who I learned traditional games by observing them playing. So, my understanding of traditional games was simply games which I learned from older children and most were played in groups.

Among the many games we played together, *dhelikan* was the most favourite one. Unlike other games that are often seasonal, as game could come and go in particular time like a *season* (Opie & Opie, 1997), *dhelikan* was played at any time of

the year. While the game was often played during day time, “at night [was] the best time to play” (Opie & Opie, 1984. p.149), since the dark nature of the night made *dhelikan* more exciting. Under the moonlight, known as *padhang mbulan* in Javanese language, I got together with my friends in my grandparents’ front yard. The few big trees and vegetation in the yard could become tricky hiding spots, apart from walls, corners and the fence of the house. Climbing trees was the best hiding strategy as one could conceal her/himself among leaves and branches of the tree and be difficult to find.

Remembering all these memories, as Barad (2007) argued, was not just a recall of moments in the past. Rather, it was “an enlivening and reconfiguring of past and future that is larger than any individual” (Barad, 2007, p.ix). In this remembering, I became more aware of the importance of space *with* which I played *dhelikan*. The front yard of my grandparents’ house, along with all of its features, not only functioned as a place for *dhelikan*, but also took part in the game. I realised now that it was not only me who actively used the wall or corner of the house to hide. Conversely, both the wall and corner also invited me to play with the space they offered. Furthermore, the materiality of night time – its darkness, its quietness, its covering, its unpredictability – entailed performative agency which acted in a particular way (Lenz Taguchi, 2014) so I could enjoy *dhelikan* even more at night. Trees in the yard, similarly, provided a space to hide in their materialities – exuberant leaves, strong trunk and branches, supporting roots – which gave a different feeling of excitement.

The story I had with trees in playing *dhelikan*, however, was not always fun. I remember once I had a really bad accident with a *sawo* (sapodilla) tree in my grandparents’ backyard. It was an old tree with a big trunk and many branches, but

instead of growing straight up, it leaned at a thirty-degree angle. This sloping position of the *sawo* tree made it easy to climb, and its branches were like holding arms that helped me climb. It was really fun to play in this tree. Sometimes my friends and I treated it as a vehicle, so one of us climbed up to the very top branch, the one sitting up there became the driver, while the rest of us climbed to different branches as passengers. At other times, we rode it as if we were on the back of giant horse. We all stood in a row on the stem holding the closest branch, then together we stomped on the stem and gave it a rock, and cheered so loudly as the tree swung us, up and down. This *sawo* tree made us play with its potentialities (Meillassoux, 2012), that was “within itself this set of possibles” (p.81). In Lenz Taguchi’s (2010) view, the tree was “in a state of ‘pregnancy’, if you will, as in holding within itself a potentiality of new invention, being in a state of duration but also of inventiveness and new becoming” (p.92).

One day, I played *dhelikan* in this backyard with my siblings, cousins and some other children in my neighbourhood. At one point, I decided to hide *with* the *sawo* tree, so I climbed up to sit on a branch, and hid behind the leaves. I did not realise that my younger sister, who was about four years old at that time, had followed me. Then suddenly I heard something bump on the ground, I looked down and saw her on the ground, holding her head and crying. Fortunately, she was not seriously injured although her head was a bit swollen, and not long after she re-joined the game.

This memory of playing *dhelikan* was very profound as I could still remember it so vividly, each moment of it. However, the recall of this memory was precipitated by observations and discussions with children of this case study during fieldwork. As Haughton (2014) argued, “[c]hildhood memory looks to be a solitary business—*my*

memory of *my* childhood—but in fact, like other forms of memory, it is a social construction...and we are clearly dependent on other people to evoke our pasts” (p.47). The memory that seemed at rest in my storage space became alive when I observed children playing *jéthungan*, particularly when it involved tree(s) as captured in figure 5.8 above. Also, in a group discussion where children shared their experience of playing games, Gadis showed her drawing of playing *jéthungan* – as in figure 5.9 below – which astonished me that it resonated with my childhood memory.



Figure 5.9. Gadis' drawing of playing *jéthungan*

Although it was not a *sawo* tree in the picture, the figure of the tree, with its sloping position and within-reach branches, and a human figure who climbed the tree and said “*diya pasti tidak menemukan aku*” (surely, he would not find me) made a perfect picture of my act of hiding as described above. Working with this drawing as a pedagogical documentation (Lenz Taguchi, 2010) made it possible to cross a linear

concept of time and actualise the event – the act of hiding in the tree – and make it “material” (p.93).

Climbing a tree, as Gadis claimed, was the best way to hide as it is hard to be found by the seeker. She said that the tree protected and covered her. In her story, Gadis acknowledged the tree’s capacity to act upon her, which made her perform in a certain way in her act of hiding. This capacity, as a performative agency (Lenz Taguchi, 2010; 2014), was not in a sense of the tree’s attribute. Rather, “it is ‘doing’/‘being’ in its intra-activity” (Barad, 2003, p.827), which took place in *jéthungan*.

Children-tree(s) intra-actions in *jéthungan*, interestingly, was also revealed by other children during discussions, including Queen who shared her drawing, as shown in figure 5.10 below.



Figure 5.10. Queen's drawing of playing *jéthungan*

Queen said that hiding in the tree was fun and she was hard to find. *Seru*, which meant exciting, was her utterance in expressing her experience. Rafi also shared a similar view, although he did not make a drawing. He exclaimed that climbing a tree for hiding was fun and secretive, so he would potentially win the game. In this way, Rafi thought the tree helped him to hide and be unfound by the seeker.

Finding a space to hide

The act of hiding was obviously the crucial part of the game *jéthungan*.

Finding a space to hide, however, was not a simple matter. It was not random space in which children chose to hide, because particular space may have specific meaning for a child (Massey, 1994) and make the child to perform in a particular way. This human-space relation was explored in my discussions with children. In a group discussion, I invited children to walk around the school and show me their favourite spaces to hide. I offered them my documentation tools, the camera and the *ipad*, if they wanted to take picture of those spots.

Some children were very enthusiastic, taking me to different places where they liked to hide, and even showing me how they hide in a particular space. One of these children, Aisya, took me to *beringin* and explained how the contour of its trunk and roots helped her to hide. At one spot she stopped and said, “*I like to be here (in between hanging roots of banyan tree) being not seen, I feel safe here, covered*”, as shown in figure 5.11 below. She admitted, however, when hiding in between *beringin*’s hanging roots, she was actually scared of the ants around the tree. I wondered whether she was worried that the ants may bite her, which she denied and clarified that she was scared of stepping on them.

The *beringin* tree as a hiding space for Aisya was a safe space, as it gave coverage so that she was unseen by the seeker of *jéthungan*. The hanging roots and contoured trunk of *beringin* did something to her, acted upon her, showed its power and force that gave a secure feeling for her. Finding a hiding space became an encounter of multiple bodies and forces – humans, non-humans, materials, things, beings – each of which showed capacity as a performative agent (Lenz Taguchi, 2010; 2014). These forces all came into play (Hultman & Lenz Taguchi, 2010) and

were “co-productive in activities of play and learning where children intra-act with other humans and the more-than-human material world” (Lenz Taguchi, 2014, p.83).

Similar to Aisya, Reno enthusiastically showed me his favourite hiding space. He brought me to a smaller tree next to *beringin*. He said, “*I like to be around the leaves, I like them to cover me like this (while reaching a branch with leaves to cover his face), so I will not be noticed*”. He also showed me that he liked to hide inside a concrete drain, as seen in figure 5.12 below. When I asked him how he hid in the drain he said, “*Just jump into it, bending my body inside it, if the seeker moving away from the buk, I just run and I will not be noticed*”. Reno’s utterance clearly drew on the capacity of the tree and the concrete drain in making his body perform in a certain way.



Figure 5.11. Aisya: *I feel safe here*



Figure 5.12. Reno: *I bend my body in it*

In his acts of hiding, either behind a tree or inside the concrete drain, Reno’s body continuously experimented with his movements by trying to fit in a space. In hiding *with* the concrete drain, his body moved, bent, squeezed in his experimentation to join with the body of the concrete drain as a hiding space. Reno adapted his body into the space within the drain. Here, in this ongoing movement

and experimentation, Reno's body was a force joined with the body of the concrete drain, with its specific materiality, width, depth and shape; this combined with the count voiced by the seeker, the distance from the *buk*, altogether became other forces that met and joined in the act of hiding for *jéthungan*. With all the joy he felt as he increased his body's capacity through movements and joining forces, there was actually a learning process taking place (Olsson, 2009). This was the learning process referred to as intra-active pedagogy (Lenz Taguchi, 2010), with great attention given to "an intra-active relationship between all living organisms and the material environment such as things and artefacts, spaces and places that we occupy and use in our daily practices" (p.xiv).

Another salient encounter of joining bodies and forces in an intra-active learning process is illustrated in the series of figures from figure 5.13 to figure 5.16 below. These figures were generated when children played *jéthungan* during recess time. When I took these images while observing them play, I was thinking that Keyla (child in flower-pattern top) and Sandi (child in red top) were fighting over the space for hiding behind the contoured wall. But in another group discussion with the children, I asked Keyla and Sandi about what has happened when I showed them the images. Sandi stated that they tried to fit in the same space because they both wanted to hide in the same spot. Keyla endorsed Sandi's statement and said, "*we are not fighting for the space, but we want to hide at the same spot*". I was startled. I relied on an assumption about an event, only based on my own experience. When I probed further into what made them choose that certain space to hide, they claimed that the space was "*secure*", which gave a sense of "*covered – being not known*", "*giving comfort*", and "*giving access to the buk*".



Figure 5.13. *Let's find a hiding space*



Figure 5.14. *It's a good space to hide*



Figure 5.15. *I want to hide here too*



Figure 5.16. *Let's hide together here*

This was what Christensen, Mygind and Bentsen (2015) referred to as “place as negotiated” (p.592), in which social connections and negotiations are influential in creating locality and its uniqueness (Massey, 1994). This encounter of viewing an event in from the children's view, for me as an adult and a researcher, added an

understanding of another layer of complexity in children's learning processes. As Olsson (2009) stated, when children learn "everything becomes movement and experimentation" (p.5).

Playing *jéthungan*: continuous shifts of smooth-striated spaces

From stories about the way children re-invented *jéthungan*, based on my observations, interviews with teachers, as well as discussions with children, I can see the game as a pedagogical space continuously shifting between smooth space and striated space. Concepts of these two spaces are rooted in the ideas of Deleuze and Guattari (1987), which then were interpreted and applied by Lenz Taguchi (2010) in the context of early childhood education.

A pedagogical space is considered as a striated space, according to Lenz Taguchi (2010), when it is specifically planned and organised with certain structure, including materials, activities, place, tools involved in the game. A smooth space, on the other hand, is a space that is "totally unstructured and unplanned" (Lenz Taguchi, 2010, p. 78). Lenz Taguchi (2010) reminds us, however, that it is important to keep in mind that when using these concepts, we should understand that one space is not necessarily better than the other. Rather, concepts of these two spaces help us understand the structure of pedagogical space in our daily lives and practices. Also, Deleuze and Guattari (1987) state that there are no distinctive forms between the two spaces, as both smooth and striated spaces often simultaneously occur or are presented as a mixture.

The way the teacher in the case study introduced *jéthungan* to the class, as described above, the learning process begins as a striated space as the teacher structures the activity based on a pre-determined lesson plan and uses the text book as a reference. These protocols, including lesson plan, textbook, presence of

teachers and other students as well as matters and things which take place during the event – the classroom, the carpet, the whiteboard, the desks and their arrangement – all are playing role as performative agents (Barad, 2007; Lenz Taguchi, 2010; 2011) in the way children re-invent *jéthungan*. But this striated space easily shifted into smooth space when the teacher invites and involves children - with their varied previous experience in playing games – to share with the class.

This shift continuously takes place as the teacher brings the class to play *jéthungan* outside. While the teacher gives opportunity for children to freely express themselves during playing of the game, she sometimes took control of the game, especially when she considered the game ‘off the track’ as she says in the interview that children “*are orderly with the presence of the teacher*”. This is what Deleuze and Guattari (1987) mention as a striated space which puts stress on the points rather than the trajectory so the space became more structured and controlled. The points here are objectives of the game and that children can play the game according to the rules as explained by the teacher.

On the contrary, as seen in figure 5.17 below, the play of *jéthungan* looks loose and less-centred, which makes it more open-ended and multiple directional. This space is considered a smooth space, where the trajectory is more important than the points so that the space opens more possibilities for unexpected and non-planned things to happen (Deleuze & Guattari, 1987).



Figure 5.17. A comparison of playing *jéthungan* around *beringin* with teacher and at *pendopo* without teacher

Children did not really set up agreement on how to play the game, as negotiations took place along the way. But once they agreed upon a certain way, the game became more striated in that it followed a certain structure. However, these two spaces were easily transforming from one to another.

The lesson plan itself – learning from Dorothy Howard’s experience in exploring children’s playlore - bringing stories from play area to the classroom can build a bridge between “the children’s home culture, oral literature and traditional games of the playground” and “formal school subjects such as reading, composition and social studies” (Factor, 2005, p.2). In a particular play context – especially in a playground, according to Howard, a small group of playing children “behaves as a society in microcosm, establishing its own system of law and order, and acting together against outside interference from adults and other gangs or playgroups” (Factor, 2005, p.4).

The *buk*, the touch and the shout: space of encounters

In each location of *jéthungan* play, a particular spot is chosen as *buk*, which can be one side of a pillar in a school building, a tree in the school yard, or one side of the wall at *pendopo*. The *buk* was the base, the starting point of the game to which

the seeker player leans their body with both hands folded to cover their eyes. It also became the targeted point on which all hiding players would touch – by racing with the seeker player to see who got to touch it first - to signalling the winner of one round and determining who was going to be the seeker in the next round. It should be noted that the *buk* is not the whole side of the wall, but a centred area on which the seeker encounters the wall to lean the body when closing the eyes with folded hands.

In this event, the *buk* can be understood as force that constantly encounters children – both the seeker player and hiding players – in different ways. In this sense, both children and the *buk* were intelligible to each other and intra-actively connected in a continuous performativity (Barad, 2007; Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2010; 2011). With the presence of the *buk*, children's bodies performing in certain ways, including the way they lean their bodies, the way their feet stand, the way they fold their hands, all were emergent in body matter relations (Lenz Taguchi, 2010).

In addition to the *buk*, the notion of touch was another significant part in *jéthungan* game. All playing children perform the 'touch', as shown in figure 5.18 at *pendopo*. Along with the notion of touch, all players were supposed to shout "*pung*" when they touched the *buk*. Similar to *buk*, the word *pung* itself actually has no literal meaning, but in this performativity, the shout *pung* brought meaning to the game. The multiplicity of bodies and forces involved in *jéthungan*, according to Olsson (2009), as a learning process was actually taking place through continuous encounters among them. With the enjoyment that players felt during the play, Olsson added, the capacity of bodies to perform increased.



Figure 5.18. Touching the *buk* at *pendopo*

Playing *with* space intra-actively in *jéthungan*

Jéthungan as a game not only takes place in a space, but also creates a space within which different elements, including the materiality of space of the games, intra-actively play, affect and being affected among each other. Addressing the main research question of this study, about the way in which games can be reinvented and played, discussion in this chapter explicates that performative understanding of traditional games can be a way “to see familiar landscape differently” (Evans, 2016, p.66).

With a new materialist approach, the focus of discussion is not merely directed toward individual children or interaction among them as human players. Rather, it also considers “the learning event taking place in-between the child and the material in the space and event of learning” (Lenz Taguchi, 2010, p.35). This focus shift, as Lenz Taguchi suggests, intra-active pedagogy expands our attention to the materiality of the space with its potentialities that regulate the way children

behave and perform in *jéthungan*, and the way the game is played more generally. In Lenz Taguchi words:

It is the material-discursive forces and intensities that emerge in the intra-actions in-between the child and the materials in the room that together constitute the learning that can take place. (Lenz Taguchi, 2010, p.36, original emphasis)

Here, looking at *jéthungan* as an intra-active pedagogy has an implication for educational practice to give more attention to performative agency of space in the context of traditional games as a potential learning space. Learning, in this context, is not an internal process within individual children, but is a result of continuous intra-actions between children and all material-discursive forces around them (Lenz Taguchi, 2010; 2014), of encounters between different bodies and forces (Olsson, 2009).

In exploring the way in which *jéthungan* as a traditional game is played today, discussion in the previous sections illuminates both its similarities and differences, as compared to the past. This aligns with Howard's (2005) strong belief of *continuity* and *change* as inherent attributes of traditional games as a part of children's lore. Performative understanding of *jéthungan*, also, clearly depicts different elements of the game as a performative agent. Through thick description of the events, it can be seen the way space does performative work (Taylor, 2013) in the context of *jéthungan*.

The notion of space is being complicated with extended meanings and functions. Space is plural, complex, multilayered – and it also dynamic, never static – it keeps moving and changing. Materiality is plural, open, complex, uneven and contingent (Coole & Frost, 2010, pp.27-28); new materialist ontologies 'understand materiality in a relational, emergent sense' (p.29).

Jéthungan can be a space of continuous order and chaos or a co-existence of both. It can be an ethical space where ethical encounters among co-existent beings take place. It is a continuous shift of smooth and striated space...multi-directional, not fixed, unanticipated. Space is an active agent in *jéthungan*, it is neither about a place at which *jéthungan* takes place, nor a spot at which a player can hide. Rather, it is also about a space that actively engages with other elements of the *jéthungan* game.

Chapter Six: Ongoing intra-activity of bodies and movements in circle and singing games

This chapter aims to explicate the significance of materiality of bodies and movements in circle and singing games, as emerged in the games of *jamuran* and *cublak-cublak suweng*, and the way in which their performative agencies are entangled in an ongoing intra-activity of these games. The premise is that giving attention to different materialities in traditional games – as suggested by a new materialist perspective – can open new insights in examining and understanding such games, which can be a way to reinventing traditional games.

The chapter begins with an introduction of children's circle and singing games, then I present different stories of circle and singing games from observational field notes, personal narratives and memories, interview transcripts, history of the games, stories about similar games in other contexts and literature. Detailed descriptions in the stories bring forward the materiality of bodies and movements in the games. Reading these descriptions diffractively opens up a possibility for new insights about learning in the context of traditional games. Then, in latter parts of this chapter, I highlight the significance of different matter and materiality in the games as emergent insights from diffractive reading of the stories. These insights shed a new light on understanding learning as a complex process in a contemporary classroom for young children. In the next section, I introduce circle and singing games.

Circle and singing games

A circle game is a form of children's game found across the globe. It is the most classical configuration of a game (Choksy & Brummit, 1987). Children are

excited to be in the circle because they “simply love circle games” (Theusch, 2000, p.46) and the games are “full of wonder, magic, and make-believe” (Feierabend, 2004, p.4). Being in the circle itself allows players to experience differences – being in a different space, becoming different characters, doing different actions, enacting different existences – with unpredictable possibilities, which feels like magic. Actions in the game, as a common view from different philosophical stances (Nguyen, 2017), take place in a “magic circle” (p.2) from which multiple possibilities of becoming(s) emerge. The magical force of the circle is strengthened in some types of circle games by a song and the act of singing, along with particular movements involved in the games. These games are commonly known as circle and singing games.

A substantial body of literature on children’s games have widely discussed circle and singing games and the significance of these games in children’s lives and for societal culture (Bogdanoff & Dolch, 1979; Opie & Opie, 1985; Sutton-Smith, 1953b). However, the focus of discussion is mainly on the way games are played and what can be learned from the games, particularly cultural values and educational benefit of these games. Although coverage of the discussion is significant for research in education, there are elements excluded in analysis, particularly non-human and more-than-human elements. Also, the games are generally explored from different points as fixed positions – from one point to another point – but not as the movement between points.

This chapter, therefore, aims to address material elements often left out in educational research discussion by highlighting the materiality of bodies and movements involved in circle and singing games. The analysis presented in this chapter emphasises an account for performative understanding of traditional games, particularly circle and singing games, by focusing on the importance of

practice/doing/action (Barad, 2008) and ways in which different bodies and movements are continuously entangled in a constant intra-activity throughout the games. Giving specific attention to movements allows the chapter to “*open up possibilities for collective and intense experimentation*” (Olsson, 2009, p.48, original emphasis). In the following section, I present a story of circle and singing games from observational field notes.

***Jamuran* and *cublak-cublak suweng*: Javanese circle and singing games**

Jamuran and *cublak-cublak suweng* are Javanese traditional games that involve singing in their play and are played in a circle. In both games, one player is in the middle of a circle, standing or sitting, and is known as *it* (Gump & Sutton-Smith, 1971; Sierra & Kaminski, 1995; Wang, 2015). In Javanese language, *it* generally is considered the one who is *dadi*, but in *jamuran* is particularly known as *pancer*, which means the centre (Dinas Kebudayaan Provinsi DIY, 2014b), while in *cublak-cublak suweng*, *it* is called *pak empong* (Dinas Kebudayaan Provinsi DIY, 2014a; Wang, 2015) or *pak empo* (Senja, 2015). These two games, however, are different in the way they form a circle. In *jamuran*, the circle is formed through movements and configuration of players while they are singing the accompanying song in performing the game, as shown in figure 6.1 below.



Figure 6.1. Forming a circle in *jamuran*

This type of circle and singing game, which involves bodily movement, rhythm and a song or a chant, is known as ring game (Opie & Opie, 1985) or traveling circle (Feierabend, 2004). In *cublak-cublak suweng*, on the other hand, the game is played in a static or fixed circle (Opie & Opie, 1985), where players kneel in a circle around *it*, or *pak empong*, who is face down with closed eyes, and players pass an item from one hand to another on the back of *it* as a table top while singing the song, as shown in figure 6.2 below.



Figure 6.2. Forming a circle in *cublak-cublak suweng*

For *jamuran*, the game's name is rooted in the word *jamur*, which means mushroom in Javanese language. The suffix *-an* after the word *jamur* indicates multiple numbers of *jamur*, hence *jamuran* means many mushrooms, but can be also understood as mushroom-shaped (Robson & Wibisono, 2002). To play *jamuran*, like any other Javanese game, children usually do *hompimpa* and *pingsut* to draw who becomes *it* or *pancer*. The game starts when *pancer* takes position in the middle and other players hold hands with each other and walk sideways in a circle while singing the *jamuran* song. This song has various versions across different places in Java, but the common version is as follows (Achmad, 2016, p.204; Wang, 2015, p.7; Winarti, 2010, p.8):

jamuran yo ge gethok
jamur opo yo ge gethok
jamur gajih mbejijih sakara-ara
semprat-semprit jamur opo?

Below is a translation of the song lyrics above, as adapted from Winarti (2010) and Wang (2015):

there are many mushrooms, it is just pretending
what kinds of mushrooms are in the bag, it is just pretending
fat mushrooms in the empty garden area
what kinds of mushrooms out there?

When finishing the last line of the song all players stop moving and point at *pancer* while asking *it*, *Jamur opo?* (what kind of mushroom?), to which *pancer* responds by mentioning a kind of mushroom for all players to perform, such as *jamur patung* (statue mushroom) or *jamur kursi* (chair mushroom). Then all players, as mushrooms, mimic characteristics of statue, by standing still without any movement, or chair, by sitting in a way that their bodies enact chairs. After all mushrooms perform as statue or chair, *pancer* will attempt to sabotage their performance by teasing each statue mushroom to make it move or laugh or sitting on each chair to

make it fall. A failed mushroom becomes *pancer* for the next round of *jamuran*.

According to Opie and Opie (1985), this game can be considered a mimicry game as it involves imitating activities or characteristics of particular subjects. The Opies assert that “the changes that have taken place in the subjects of the mimicry” (p.286) make the game timelessly exciting and fun which also shows that children are “being creative in their pretences” (p.286). These changes, as well as continuity of *jamuran*, are discussed further in the next sections, along with an account of performative understanding of the game.

Cublak-cublak suweng, similarly, is named after the song that accompanies the game. Rooted in its composite words, *cublak* is the Javanese term for a small perfume container, but can also mean hollowed out, while *suweng* is the Javanese term for ear stud (Robson & Wibisono, 2002). Therefore, *cublak-cublak suweng* literally means “hunt the earrings” (Robson & Wibisono, 2002, p.167), although it can also refer to an activity that involves tapping *suweng* from one player’s hand to another (Dinas Kebudayaan Provinsi DIY, 2014a). In playing the game, however, instead of using a real ear stud, a stone, small shell or fruit seed is commonly used as *suweng*. Lines of the song for this game, in Javanese language, are as follow (Dinas Kebudayaan Provinsi DIY, 2014a; Haryono, 2011, p.34; Wang, 2015, p.9):

*cublak-cublak suweng,
suwenge ting gelenter
mambu ketundhung gudel
pak empong lera-lera
sapa ngguyu ndhelikake
sir-sir pong dhele gosong
sir-sir pong dhele gosong*

Below is the English translation of the lines above, as adapted from Wang (2015):

guess, where is the earring?
the earring is everywhere

a buffalo calf can smell it
pak empong is also looking for it with his eyes rolling left and right
whoever laughing must be hiding it
Sir, sir, pong! Empty soybean shells
Sir, sir, pong! Empty soybean shells

Choosing *pak empong* is the first step of playing *cublak-cublak suweng*, which is usually done by *hompimpa* and *pingsut*. *Pak empong* then bends his body, with his face down while other players kneel around him and start to tap *suweng* with their hands while singing the song. When they finish the line of *sapa ngguyu ndhelikake*, the *suweng* is quickly put in one hand and everyone close their hands with both forefingers out. Then they sing the line *sir-sir pong dhele gosong* repeatedly while tapping their two forefingers. At the same time, *pak empong* gets up and opens his eyes, then looking around at the other players and trying to guess the *suweng* holder. If he guesses correctly, the *suweng* holder becomes *pak empong* for the next round, but if it is incorrect, he will stay in the middle.

As this game involves players handing over an item in a circle secretly from *it*, who needs to guess the item holder at the end of the song, *cublak-cublak suweng* can be categorised as a passing game (Choksy & Brummit, 1987) or guessing game (Brewster, 1949). In playing *jamuran* and *cublak-cublak suweng*, a range of “bodily movements and hand gestures” (Wang, 2015, p.6) are involved in conjunction with song-singing, for which details are explored in the following sections.

Emerging bodies in the game of *Jamuran*

jamuran yo ge gethok,
jamur opo yo ge gethok
semprat semprit, jamur opo?

The lines above are words of a song that accompany the *jamuran* game as sung by Duhita in front of the class, which is shorter than the common version of the song. In

a morning session of Javanese language, Viona introduced the game of *jamuran* and asked if anyone in the class knew the song for the game. A number of children raised their hands and Viona gave them the opportunity to sing the song, which interestingly was slightly different from one to another. However, most children could not finish their lines and eventually Duhita was the one who could sing the whole song completely.

Viona also tried to sing a version of the song from the text book of *Sinau Basa Jawa*. Interestingly, this version had longer lines than Duhita's version, as written below (Haryono, 2011, p.92):

jamuran jamuran yo ge gethok
semprat-semprit jamur opo
jamur gendhing nding nding nding
rowang rawing wing wing wing
saara-ara, jamur opo?

When Viona recited the lines above she had difficulty finding the right tune for some lines and some children protested claiming her version was not right. Ahmad, for example, retorted "*ngga gitu, yang bener kaya Duhita*" (that is not *it*, Duhita's version is *the one*). For a few minutes, the class engaged in a discussion regarding which version was accurate and finally agreed to use Duhita's version. Later, Duhita led the class to sing the song together.

After learning the *jamuran* song with some repetition, the class discussed different kinds of mushrooms to perform in the game. Viona asked children who know *jamuran* game about types of mushrooms they use to play at home. Children came up with various names of mushrooms, such as *jamur kursi* (chair mushroom), *jamur meja* (desk mushroom), *jamur kulkas* (refrigerator mushroom), *jamur lilin* (candle mushroom) and *jamur kembang* (flower mushroom). Viona then asked two

volunteers from the class to demonstrate different kinds of mushrooms they had mentioned.

In figure 6.3 below, Rafi and Reno, who volunteered for simulation of *jamuran* in the classroom, showed the class how to perform *jamur kursi* or chair mushroom.



Figure 6.3. Enacting *jamur kursi*

Reno, as a mushroom, embodies a chair through his body positioning. He sits in a way that his lap functions as a chair seat, his upper body becomes a back support, his arms are arm-rests and his legs become chair legs. Enacting a chair, Reno should sit as firm as possible, so that when *pancer* is sitting on his lap, he would not fall or shake. Rafi, on the other hand, as *pancer*, attempts to sabotage Reno's enactment of a chair mushroom. He sits on the chair for few seconds, put his weight on his lower body and tries to make the chair shake or fall. In this simulation, the chair mushroom successfully sits still without shaking when the *pancer* is sitting on it.

Similarly, in figure 6.4 below, Rafi and Reno show to the class how to perform *jamur kulkas* or a refrigerator mushroom. This time, Rafi becomes a mushroom whereas Reno becomes the *pancer*.



Figure 6.4. Enacting *jamur kulkas*

In enacting a refrigerator mushroom, Rafi puts his hands in front of his chest where both palms meet and close like a gesture of praying hands. This gesture mimics tightly closed doors of a refrigerator. As the *pancer*, Reno attempts to open the closed door. During this attempt, the embodied refrigerator mushroom tries really hard to keep the doors closed, as illustrated in figure 6.4 above. At this moment, bodies and forces of the embodied mushroom and *pancer* join, affect and are affected by each other. These joining bodies and forces, along with the joyful feeling of their enactment, according to Olsson (2009), increase the body's capacity to move and become a space where learning processes take place. In the context of traditional games, the learning process evolves through unpredictable moments as the game is progressing.

During simulation of various mushrooms in *jamuran*, similar to discussion about 'the right' song, children had different opinions about the types of mushrooms and their embodiments. In *jamur meja* or table mushroom, for example, a child stated that the mushroom should be face up with its stomach as a table top while both legs and arms become table legs. Another child, in contrast, argued that the

mushroom should face down and use its back as the table top. In facilitating the discussion, Viona tried to give everyone equal opportunity to voice their ideas, and returned to the class to make decision on how they would enact each type of mushroom and to play *jamuran* in general. After achieving agreement, Viona then escorted the class to the play area and played *jamuran* outside.

From discussion of the song and types of mushrooms in *jamuran*, children passionately defended their version against adults and other children's opinions because they believed their own version was the most accurate (Opie & Opie, 1985). Children attempt to insist others and make their version is chosen for playing the game. When adults interrupt the game and ask questions about the song, as Opie and Opie (1985) argue, children may feel annoyed and defend "It's *like* that. That's what it says" (p.2, original emphasis). This is similar to the way Ahmad protested to Viona when she sang *jamuran* song according to the textbook.

Playing *jamuran*: Ongoing intra-active movements in circle and singing game

In the previous section, it was explained that the name *jamuran* originates from Javanese word *jamur* which means mushroom. In Java, with its tropical climate of two seasons in a year, mushrooms commonly grow in the wet or rainy season. During this season, mushrooms are generally found in clumps around the stump of a tree. As illustrated in figure 6.5 below, mushrooms usually grow in a group and encircle the tree. Therefore, the configuration of players in *jamuran* game, where *it* or *pancer* stays in the middle while other players hold hands in a circle around it, visualises the way mushrooms encircle a tree (Sujarno et al., 2013), as seen and found in nature. Figure 6.6 below shows this configuration, which can be seen in comparison to growing mushrooms in nature, pictured in figure 6.5.



Figure 6.5. Growing mushroom in nature



Figure 6.6. Configuration of *jamuran*

Looking at the figures above, configuration of players in *jamuran* can be considered as “embodied practices of mattering” (Taylor, 2013, p.689) mushrooms. The game becomes a space for bodies of mushrooms, as they are embodied by children players, to show their performative agencies to make children perform, act and move in a certain way.

In *jamuran*, each player becomes a mushroom and connects with other mushrooms by holding hands together to form a circle. This circle reflects a clump of mushrooms, whereas *it* or *pancer*, sitting or standing still in the middle of the circle becomes a tree encircled by mushrooms in nature, as portrayed in figure 6.5 above. When the game is started by singing the *jamuran* song, embodied mushrooms walk sideways in the circle instead of stepping forward as in regular walking. This particular physical movement, along with repetition of the song, allow the bodies to hear and to feel the rhythm which eventually maintains a regular shape of the circle (Forrai, 1988). However, rhythm of movement is dynamic in pace and intensity as the bodies’ capacity increases. Barad (2007) argues, “bodies in the making are never separate from their apparatuses of bodily production” (p.159) and this applies to *jamuran*. As noted previously, emerging chair, table, refrigerator and other bodies

in the games are entangled as intra-active forces. They cannot be separated from human bodies as apparatuses to produce those emerging bodies.

Giving particular attention to enactment of embodied materiality in becoming mushrooms with/in *jamuran* is crucial for performative understanding of the game. This account focuses on the importance of practice, doing and action (Barad, 2003; 2007; 2008) and brings forward particular actions including the act of becoming mushrooms or a tree, walking in a circle while holding hands, singing the song and proceeding with a short dialogue at the end of the song when *pancer* decides what mushroom to perform. Through these continuous and intermingling actions, agency of different elements of the game emerge and are iteratively reconfigured during the game. Agency, according to Barad (2012), is not a possession of human or non-human, but rather an enactment itself, which entails “response-ability” (p.55), that is “about the possibilities of mutual response” (p.55) among entangled elements. The game is an assemblage that provides “the space of possibilities for agency” (Barad, 2012a, p.54), with/in which this response-ability takes place. It is particularly prominent in closing each round of the game through dialogue between embodied mushrooms and *pancer*. Figure 6.7 below shows a moment in *jamuran* game where players sing the last line of the song. As soon as they finish the line, they shout the words “jamur opo?”, meaning what mushroom? and all players stop their movement in the circle and point at *pancer* in the middle.



Figure 6.7. Players sing "*jamur opo?*", while pointing at *pancer*

Being pointed at when the last two words are shouted, *pancer* should respond to the line by mentioning a name of mushroom he wants all players to perform. This response is determinant for enactment of “becoming mushrooms”. This final part of the *jamuran* game becomes the most exciting part of the game where all players enact a type of mushroom as requested by *pancer*. It should be noted that in nature, while there are a wide variety across Indonesia, several kinds of mushrooms are more commonly found in Java. These are usually named in Javanese language in accordance to their appearance, such as *jamur payung*. In Javanese, *payung* means umbrella so *jamur payung* is the name of mushrooms that look like an umbrella. Similarly, *jamur kancing* (button mushrooms), *jamur tiram* (oyster mushrooms) and *jamur kuping* (ear mushrooms) are all named based on appearance. These name-appearance connections in naming mushrooms inspire the enactment of ‘becoming mushroom’ in the *jamuran* game.

As a *pancer*, besides stating what mushroom to perform, this game player also has ‘authority’ (Opie & Opie, 1985) to test each mushroom against certain criteria. Each kind of mushroom has different criteria for the test. In *jamur kursi*, the

pancer tests the strength of the chair by sitting on it, as shown in figure 6.8 below, where Rafi sat on Reno's lap as a chair.



Figure 6.8. Embodied *jamur kursi*

For a few seconds *pancer* sat on the chair, then if the chair stays in position the *pancer* moves to another chair. But if the chair falls down, the player replaces the *pancer* for the next round of *jamuran*. A similar test applies to other types of mushrooms. As shown in figure 6.9 below, Rafi as *pancer* tests the strength of the desk in *jamur meja* by tickling one's stomach which became table top. If the player can stay still, the *pancer* will move to another *meja*, but if the player falls, a new round of *jamuran* is played with a new *pancer*.



Figure 6.9. Enacting *jamur meja*

For *jamur kulkas*, the refrigerator should keep its doors closed, that was enacted by putting both hands meeting and closed to each other, and *pancer* tries to open the doors by trying to separate the two hands. In *jamur lilin*, one should keep the flame of the candle by keeping eyes open, and *pancer* would tests this by blowing air. If the candle (child) blinks, this child becomes *pancer* for the next round.

Figure 6.10 below shows an enactment of *jamur lilin*.



Figure 6.10. Enacting *jamur lilin*

Children played *jamuran* and sang cycles of the song over and over again, for each of which different *jamur* performed by becoming mushrooms as requested by *pancer*. It should be noted that although repeating the same body of *jamuran* song, each round of the game was performed differently, even in enacting the same *jamur* such as in *jamur kursi*. Here, the singularity of each round of *jamuran* game stands out as Deleuze (2004) argues that “to repeat is to behave in a certain manner, but in relation to something unique or singular which has no equal or equivalent” (p.1). Enacting the same *jamur* does not necessarily imply repeating exactly the same configuration, because “repetition is always difference” (Jones, 2013a, p.292), and “the singularity of each becoming” (Lenz Taguchi, 2011, p.47) matters. This difference, according to Barad (2014), is not fixed but relational, that is understood in its materiality, as “a relation of *difference within*” (p.175, original emphasis) that is formed through intra-activity. Repetitions of embodied configuration in playing the game, therefore, can be considered as practices that produce “a specific materialization of bodies” (Barad, 2007, p.63). The bodies produced here, according to a performative account, are not only human but also non-human. These include but are not limited to bodies of mushrooms, body of *pancer*, body *jamuran* song and its lyrics.

Ethical dimension of Javanese circle and singing games

Apart from the fun and enjoyment of playing circle and singing games, there are deep philosophical values inherent in play which manifest uniquely in Javanese ethics and worldview. Deploying a new materialist perspective in examining games makes it possible to shed light on ethical responsibility of practices or actions. With this perspective, the notion of ethics is viewed in relation to mattering, which gives particular attention to materiality of entangled elements, and at the same time

acknowledges conceptualisation of ethics in Javanese society as the setting of this study.

As explained earlier, in the introduction chapter, *rukun* (the principle of conflict avoidance) and respect are two main principles of Javanese social life that are underlying values of Javanese ethics of social harmony (Geertz, 1961; Magnis-Suseno, 1984; 1997). How are these Javanese ethics and values enacted in traditional games? Playing children's traditional games is a venue in which these values can be enacted, as Opie (1994) convincingly argues, "[a] game is a microcosm" (p.15) of a community where it is situated and children who are playing a game in a play area behave "as a society in microcosm" (Howard, 2005, p.4). From the way in which different bodies emerge in the *jamuran* game, as explained in the previous section, it is clear that Javanese values and worldview are tightly embedded in the game. Bodies of *jamuran* song and types of mushrooms emerge from discussion and negotiation in the class which maintain *rukun* and show respect among counterparts. In discussing and negotiating versions of the *jamuran* song, apparent social harmony is put forward in deciding the final version for use in play of the game. Through *musyawarah*, "a procedure in which all voices and opinions are heard" (Magnis-Suseno, 1997, p.54), the class address all versions shared in discussion. The class tries to reach *mufakat* - a consensus as a compromise or collective decision of all parties (Magnis-Suseno, 1984; 1997) - about which version to use in the game.

In conducting a *musyawarah*, as Magnis-Suseno (1984; 1997) explains, all versions are deliberately considered to finally achieve unity of thought to which no one will have objection. This was what Viona achieved, as described earlier in this section, by inviting all children to share their experience playing *jamuran*, which

exemplifies the principle of *ing madya mangun karso* in *among* system where the teacher encouraged children to express their ideas (Dewantara, 1977; 1994). When the class finally decided to choose Duhita's version, it was not the main priority whether the version is the 'right' one, but the most important thing was that everyone in the class agreed with the decision and was willing to perform accordingly. This clearly illuminates a fundamental worldview among Javanese people who value social harmony by avoiding conflict so that everything runs harmoniously (Geertz, 1961; Magnis-Suseno, 1984; 1997), as a top priority in addressing any ethical encounter.

The above example is unlike universalistic ethics in modern perspective that is guided by universal principles where right and wrong can be distinctly distinguished (Dahlberg & Moss, 2005). Rather, Javanese ethics do not set normative categories as criteria for reference in conflicting ideas or interests. Instead, it expects that individual act out of various ideas, rights or interest "only as far as social harmony is preserved" (Magnis-Suseno, 1997, p.73) and "the integrity and unity of the community is well maintained" (Endraswara, 2003, p.16). The absence of absolute norms in Javanese ethics, however, does not necessarily mean that it conforms ethical relativism in a sense that all opinions are seen as equal. Relativism in Javanese ethics, instead, while acknowledging validity of moral conscience in any decision, practically is tied with "absolute demand to maintain social harmony" (Magnis-Suseno, 1997, p.228). The uniqueness of Javanese ethics, is expected to be exposed to young generations through practice of Javanese culture, including *dolanan anak*, the Javanese term for children's traditional games. This expectation was overtly expressed by educators in interviews, like Viona who stated that "traditional games mark the uniqueness [of Javanese culture] which

needs to be preserved and conserved, therefore, we need to introduce them to children". Similarly, Maya, the head of school, confirmed that the provision of traditional games in school programs is relevant to its mission to promote Javanese culture as school educational spirit, which goes hand in hand with the school's ideology as an inclusive school.

Although literature on Javanese ethics, principles and worldview are mainly situated in its social life which focuses on interactions among the people (Geertz, 1961; Magnis-Suseno, 1984; 1997; Magnis-Suseno & Reksosusilo, 1983), a new materialist approach in examining practices of traditional games potentially extends its application beyond social contexts. As the very core of this approach tries to move away from dichotomies of social/natural, human/non-human, subject/object, material/discursive, and many more on the list, it instead acknowledges entanglements of these presumed opposites. Further, acknowledging that both the social and natural simultaneously matter, Barad (2007) suggests that illuminating "*how both factors matter*" (p.30, original emphasis) is also vital in this perspective, which can be done through diffraction. In this chapter, diffractive analysis of different stories about mushrooms in the previous sections can draw new insights for theorising ethics from mattering practices of "becoming mushrooms" in the *jamuran* game. These stories are read through one another to bring forward things that hidden, excluded, left out or taken for granted and highlight entanglements among different elements in the stories.

The stories about the way mushrooms have special meaning for children, both in Indonesia and England, illustrate the way children are connected to nature. Mushrooms in nature have significant roles, by giving hope of beautiful days to come in Java or marking the trace of fairy dance in England, and each needs to be

respected. The Javanese proverb of *memayu hayuning bawana* means “to embellish the world” (Magnis-Suseno, 1997, p.290); this sends a message to treat the earth and natural world respectfully, which is part of the Javanese worldview.

Acknowledgement to materiality of non-human bodies is embedded in the Javanese worldview which is expressed through traditional games, such as *jamuran*.

Jamuran: recalling my childhood

I clearly remember when I had to do *jamur kethek menek* (climbing-monkey mushroom) that required me to climb a tree, which I could barely do. In another round of the *jamuran* game, I did *jamur patung* (statue mushroom), where I stood still without talking or blinking like a statue. The funniest mushroom I did, yet now I find embarrassing, was *jamur kendhil borot* (leaky-pitcher mushroom), where I should find a space on the ground to urinate as if I was a leaky pitcher. This enlivening memory allows me “to confront experience as questionable, as problematic, and as incomplete...as an event that needs to be constantly reinterpreted again and again” (Jackson & Mazzei, 2008, p.304).

I am particularly intrigued by the way children bring up different versions of the song to the class and insist on their own version, which makes me realise that the *jamuran* game has evolved over time with changes in the way it is played currently as compared to my own experience decades ago. This evolution confirms *continuity* and *change* that characterise traditional games as a part of folklore (Howard, 2005, my emphasis).

In the vignette above, evidently the game is a powerful entity that has capacity to intervene and change the way a performance or practice is produced or carried out. This capacity can be considered as agency which emerges through relations among “performative agents” (Lenz Taguchi, 2010, p.4) of the game.

Agency of the *jamuran* game, its song and lyrics, as illustrated earlier, gives direction for the way the game is played. However, this agency is not an absolute possession of the *jamuran* song as a component of the game. Rather, it emerges through its relations to other components that mutually contribute to performance of *jamuran*, as Barad (2007) argues that “*agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements*” (p 33, original emphasis). The *jamuran* game itself is an assemblage of different performative agents that are entangled and continuously encounter intra-activity amongst each other during game-playing. This assemblage is not a passive composite of several elements. Rather, it is an active assemblage that keeps creating different movements and performance as its performative agents meet and affect amongst each other. *Jamuran* game creates complex connections of multiplicities derived from constituted agents which makes “thought itself nomadic” (Deleuze & Guattari, 1987, p.24). In the following sections, the creative assemblage and its performative agents are explored. In this exploration, I focus on what can change if these agents are given more attention and are taken into consideration in playing of the game.

The significance of everyday life materials

During three months of fieldwork for this study, a range of data resulted from observations, group discussions with children, images and recording, as well as children’s drawings, I was particularly fascinated by the significance of everyday life materials - such as chair, desk, candle, refrigerator – which stand out and become prominent in playing the *jamuran* game. Working with performative data, I noticed that material objects in children’s daily activity play significant and active roles in creating embodied practices in playing the *jamuran* game. This confirms strong connections children have with everyday life objects, such as dress or costume

(Jones, 2013a), chair (Bone, 2018; Lenz Taguchi, 2010; Taylor, 2013), clock (Pacini-Ketchabaw, 2012), stone (Rautio, 2013) and objects children bring from home to school (Jones, MacLure, Holmes & MacRae, 2012), that are often taken for granted but are actually powerful and instrumental.

From instances of children playing *jamuran*, whether in early simulation as a part of planned lessons or free play during recess, before and after school, *jamur kursi* (chair-mushroom) and *jamur meja* (desk-mushroom) are two mushroom games that were enacted most often. While the enactment of becoming chair or desk in *jamuran* itself seems fun for children, it also shows the significance of chair and desk in the children's world. Here, I support an argument that chairs are powerful material objects in educating young children, yet are often neglected (Bone, 2018; Lenz Taguchi, 2010). As a material object, the chair is often seen as passive and incapable to act upon its surrounding, including humans who are granted so much power and capability. In fact, the chair becomes an apparatus for "schooling and disciplining the body" (Jones, 2013b, p.605) and "both a support mechanism and a trap" (Bone, 2018, p.10) which positions and makes the body in contact with it to perform in particular way. In the game *jamuran*, when *jamur kursi* is requested by *pancer* at the end of *jamuran* song, it becomes a command to follow other children players – that is becoming a chair. In this enactment, children's bodies act in certain ways to reflect different parts of a chair, laps as sitting area, upper body as backrest, head as headrest, arms as armrest and legs as chair legs.

Body part reflection between children and chair in *jamuran*, according to Melander (2012), "embodied actions ... in a dynamic relation with the material environment" (p.1436). These embodied actions involve various "bodily movements and hand gestures" (Wang, 2015, p.6) in conjunction with singing the *jamuran* song.

In enacting a cycle of *jamuran*, body movements, hands gestures and lyrics of the song, together create an assemblage with/in which all elements intra-actively affect and are affected among each other.

By playing a circle game, like *jamuran*, particular body positions are required in performing each sequence of the game. As Forrai (1988) asserts, “walking in a circle requires a particular body position” (p.49) because it is not a regular - stepping forward - walk but moving sideways that should be done carefully to avoid stepping on others’ feet. This particular position, according to Forrai (1988), makes “the circle [to] have a regular shape” (p.50). The act of walking in *jamuran* is entangled with the act of singing the *jamuran* song, with which the rhythm of the game is created. From the perspective of developing rhythm, “[w]alking is particularly useful for feeling the beat” (Forrai, 1988, p.50) and “the continuity of the beat is reinforced by the movement” (p.49) involved in the game.

Significance of *jamur*

In Java, the growth of mushrooms signifies arrival of the rainy season. It happens quickly after the first rain of the season which feels like magic. It drastically changes the colour of the landscape, after a long dry season with a series of hot and humid days, which makes plants shrivelled with withered leaves, then all of a sudden, the wet season brings fresh and flourishing growth. A well-known and widely used metaphor “*bagai jamur di musim hujan*” (like mushroom in rainy season) is an expression that illustrates this sudden change and fast-growing condition. Similarly, the word *menjamur* (mushroom-as a verb) symbolises the condition of developing or spreading rapidly (Kamus Besar Bahasa Indonesia, n.d.). I remember as a child finding the first clump of mushrooms in the backyard was so special as it gave a sign of more rain to come which meant that plants would start to grow and flowers would

bloom which was lovely. For me, the presence of mushrooms symbolised hope and beautiful things to come. Interestingly, in other cultures mushrooms tell different stories, with equally important and special meaning for children. A friend of mine, who grew up in England, recalled her memory and shared her story of mushrooms from her childhood:

In England we would go out looking for mushrooms in the early morning, autumn is best when there is dew on the fields. For children mushrooms have a special meaning. They often grow in circles, these are known as fairy rings. The mushrooms mark the fairy rings and show where the fairies danced in a circle at midnight and left the mushrooms to show us where they had been (J. Bone, personal communication, March 26, 2018).

It is interesting that children in two different parts of the world, England and Indonesia – particularly Java – share similar stories about the significance of mushrooms, despite difference in seasons, time of year and geographical area – across “spacetime-matter” (Barad, 2007, p.362) – of which they grow. Reading these stories diffractively allows the materiality of mushrooms to be brought to the fore, which illuminates the significance of mushrooms although often abandoned and taken for granted in nature and everyday life. This not only opens up insights of mattering mushrooms, in a sense that mattering is “simultaneously a matter of substance and significance” (Barad, 2007, p.4), but also brings to the front ethical attention to “material engagement with the world” (Barad, 2007, p.49) in enacting research about traditional games within educational setting as “practices of knowledge production” (Taylor, 2013, p.689).

The significance of circle shape

I feel the wonder and magic of being in a circle, as I have visceral reactions when I recall memories of playing *jamuran* as a child. As soon as I join the circle, I

instantly transform myself into a mushroom as part of a clump of singing mushrooms that walk in a circle and encircle a *pancer* in the middle of the circle. It allows me to become anyone or anything, as I became a climbing monkey in *jamur kethek menek*, or a statue in *jamur patung*, or a pitcher in *jamur kendhil borot*. I then realise that by being in the circle, the game provides me and other elements of the game “the freedom...to make up spontaneous variations or imagine themselves in magical role” (Theusch, 2000, p.47). I feel a powerful force, a performative agency, of the circle that keeps me moving in the circle with a particular rhythm as I sing the song over and over again. I am amazed at the unlimited possibilities of looking at and thinking about *jamuran* which are ignited as I focus on performativity of the game.

Working with performative data of the *jamuran* game, as discussed in previous sections, I encounter some unexpected thoughts and insights as I read different narratives diffractively. When I start to connect data with “elements from elsewhere” (Bone, 2018, p.4) that are seemingly not relevant, new ideas come up that allow me to think about the game differently. This performative process of engaging with data opens up new layers of complexity and richness of the *jamuran* game, which I previously considered a fun and developmentally useful activity, or “a strange opening” (MacLure, 2011, p.1004) to the wonder and excitement in exploring the game. Just like an infinity of the circle itself, with no end and beginning point, everything is in between, and everything is connected.

As a geometric shape, from a mathematical point of view, a circle refers to a figure that is “the locus of points an equal distance from a fixed point (the centre)” (Oxford University Press, 2014). A circle game, therefore, generally refers to any game which players form or are in a circle, sitting or standing with holding hands, during play. *Cat and mouse* game is an example of a circle game played across

cultures, and named differently in different places, such as *wolf and lamb* in Italy and *el gato y el raton* (cat and mouse) in Costa Rica (Sierra & Kaminski, 1995), *fox and rabbit* in The United States (Arnold, 1975) and *kucing dan tikus* (cat and mouse) in Indonesia. Some circle games are accompanied by particular songs in their performance, so they are considered as rounding and singing games. *Ring a ring o' roses* is a kind of circle and singing game that has existed for centuries and is still commonly played in nurseries or kindergartens today. As investigated by Opie and Opie (1985), various versions of this game have been played across European countries since the late eighteenth century, with great variants in language, lyrics and tone of the song, as well as slight differences in the way games are played. These include *jan huygen in de ton* in Netherland, *ringel, ringel rosenkranz* in Austria, *giro, giro tondo* in Tuscany region of Italy, and *j'ai un rosier* in France, besides a range of variety within the United Kingdom (Opie & Opie, 1985).

In *jamuran*, movements and configuration of players embody a circle figure during game performance. The circle is created when the game is performed. When the game begins, players hold hands and move around which embodies the boundary of a circle with *it* or *pancer* as the central point. Therefore, playing *jamuran* can be considered as an *embodied practice* in which participating elements are “active, participatory and collective” (Hickey-Moody, Palmer & Sayers, 2016, p.222). These elements are all bodies, human and non-human, which enact iteratively in a continuous intra-activity to create and re-create the circle. In a new materialist perspective, these elements are considered as “performative agents” (Lenz Taguchi, 2010, p.4) which have power and force to transform and act upon each other in an intra-active performance, such as in the play of *jamuran*. In the process of ongoing intra-activity, according to Barad (2007), “[b]oundaries, properties, and meanings”

(p.392) of bodies are differentiated and negotiated along the way, which she refers to as performativity. Hence, *jamuran* can be considered as performative assemblages of intermingling bodies, through which multiplicities are continuously created and re-created in their intra-activity.

Through continuous intra-active performance of intermingling bodies in *jamuran* game the notion of circle as a geometric shape – which is often perceived as static and inanimate – is unsettled. In *jamuran*, the circle is “lively and enlivened” (Barad, 2007, p.393) and moves vibrantly as the game starts to play with its accompanying song. The movement is lively with full of energy and becomes more intense as the rhythm of the song gets faster. When the song comes to the last line, in *jamuran*, the moving circle suddenly stops. It pauses, waiting for *pancer* to request what mushroom to perform. This request determines the enactment of becoming mushrooms by all remaining players.

The dynamic and vibrant movements in *jamuran* also show the circle as a mathematical concept, which is often deemed as exact and definite, can be reconsidered as “combinatorial multiplicities” (de Freitas, 2017, p.159) that are volatile and unpredictably keep mingling. There is a wide range of possible movements and configurations in the performance of *jamuran* through which the concept of a circle is created and re-created. Even in performing a mushroom-form in *jamuran*, *jamur kursi* (chair mushroom) for instance, each performance has its own combination in the way a circle of mushrooms is configured. Here, the game can be seen as experiments by which concepts are mutated and the world is reassembled (de Freitas, 2017). As an experiment, as de Freitas (2017) claims, the game is considered “risky creative events” (p.157) within which “the concept of circle is generated using motion” (p.168) in dynamic and indeterminate ways.

From a new materialist understanding, the notion of concept is not seen as an abstract idea with well-defined meaning and fixed attributes (Barad, 2007). Rather, concepts are “physical arrangements” (Barad, 2007, p.54) of specific entanglements among intra-acting agencies. Consequently, as asserted by de Freitas (2017), circle as a mathematical concept is “inextricably material” (p.167) as there is no distinct dichotomy between matter and meaning. This author concludes that “concepts are material, and matter is conceptual” (p.100), in a sense that matter itself is “amenable to some new conceptions” (Coole & Frost, 2010, p.11) that are different to what we usually are certain about. One different conception of the circle was generated in a group discussion I had with children during fieldwork, when Kenzie shared his impression of playing *jamuran*, as shown in figure 6.11 below.

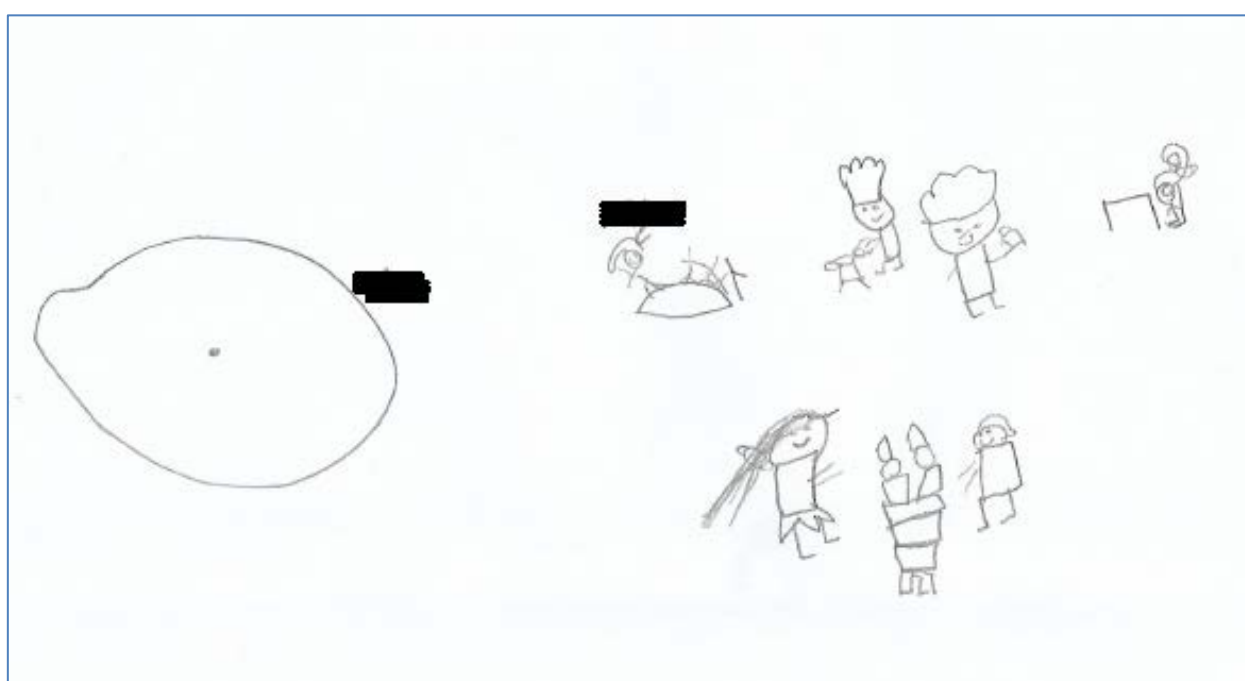


Figure 6.11. Kenzie's drawing of games he played

When Kenzie was asked to share the story in his drawing, he mentioned that the circle on the left was a picture of the class playing *jamuran*, with him as the *pancer* in the middle. He added that he felt excited to be in the middle of the circle as he could choose what *jamur* to perform, which was *jamur kursi*, and then test to

check the strength of each chair to find a weak chair to become *pancer* in the following round of the game. It is fascinating to know that being in the centre of a circle in a game can be an exciting and meaningful experience for children. This particular becoming, as experienced by Kenzie, allowed him to have “the *game-determined power* (Gump & Sutton-Smith, 1971, p.391, original emphasis) and “authority” (Opie & Opie, 1985, p.32) in deciding what *jamur* would be performed by children in the circle around him.

Thinking diffractively with different stories about circle in *jamuran* makes it possible to illuminate the significance of circles in children’s life and in educating young children. Circle configurations can be seen in different activities of educational practices. Circle time, with its wide variations, is a routine that is broadly practiced in different parts of the world. Educational studies have investigated the role of circle time, which can be a strategy to promote empowerment, equality of voice, confidence and social skills of children (Collins, 2013), as well as to improve peer relations (Mary, 2014). Especially for young children, circle time is believed as effective for providing learning opportunities (Zaghlawan & Ostrosky, 2011) and giving a feeling of joy, safe and ease for communication (Collins, 2013). Considering these important roles, a circle shape can be seen as a performative agent in the learning process for young children.

***Dolanan* and *tembang*: Javanese philosophy in children’s games and song**

Looking closer at songs accompanying *jamuran* and *cublak-cublak suweng*, besides their role as discursive elements inscribing movements in the games, they also deliver messages of Javanese philosophy. Both songs were composed by Sunan Giri, one of the *Wali Songo* or Nine Saints, the early Islamic missionaries in

Java (Sunyoto, 2012), so lines of the songs have a strong Islamic-Javanese philosophical and spiritual message. Especially in *cublak-cublak suweng*, with words from ancient Java that are no longer used in daily conversation, the song lines deliver beautiful yet important advice. The section below explains the meaning of the lines, as adapted from Senja (2015).

The first line, *cublak-cublak suweng*, means a place for precious things. *Cublak* means a place to store *suweng*, a Javanese term for earrings or studs that symbolise a precious thing. The second line, *suwenge teng gelenter*, means that the *suweng* is scattered around. Metaphorically, it suggests that the essence of the precious thing can be found around us. The next line, *mambu ketundhung gudel*, literally means a buffalo calf moves following a smell. In Javanese culture, a buffalo calf symbolises naiveness and unintelligent state. This line illustrates people's greediness in seeking precious things, especially money, that often leads to unethical acts. *Pak empo lera-leru*, the following line, literally means an old man who keeps rolling his eyes, peeping and wandering around. This line describes greedy people who gain money in unethical ways who will experience confusion and lose their way and always feel insufficient although they have a lot of things. The line *sopo ngguyu ndhelikake* means anyone who is laughing is actually hiding something. It implies that the ones who own the real precious things usually keep calm and smile. The last line, *sir-sir pong dele kopong*, literally means seed-less soy bean. It suggests that the core of precious things or real happiness can be attained by pure heart, free from greediness and unethical manner in gaining materials. In conclusion, the whole song of *cublak-cublak suweng* reminds Javanese people to avoid greediness and always consider ethical manners in earning money to ultimately find real happiness.

In Javanese society, *dolanan* (children's games) and *tembang/lagu dolanan* (children's singing games) play important roles as a way to understand the Javanese worldview. Along with other traditions, such as folklore, myths and legends, *dolanan* and *tembang* are cultural practices through which Javanese philosophical values, ethics and worldview are passed across generations (Achmad, 2016; Wang, 2015; Winarti, 2016).

Further, *tembang/lagu* or song is essential to build aesthetical awareness and simultaneously to learn about Javanese literature (Muljono, 2013). More importantly, Muljono (2013) adds, *tembang/lagu* can develop a strong sense of identity as Javanese people with softness and politeness attributes. *Tembang* familiar among the community, such as *macapat*, usually has a simple and easy-to-understand language with various rhythms. In contrast, some *tembang* are only circulated within Sultanate palace and use a special language. *Pocung* is a part of *macapat*, Javanese poetry commonly recited as *tembang* or a song (Muljono, 2013; Saddhono & Pramestuti, 2018). *Macapat* contains Javanese philosophical and spiritual values, delivered as *pitutur* or advice through songs. There are eleven different songs in *macapat*. Each song illustrates a different stage of life's journey from birth to life after death (Achmad, 2016; Mardimin, 1991). *Pocung* is the last song in *macapat*, which reflects the final journey of human life and relates to its lexical meaning.

The word *pocung*, also written as *pucung*, originates in *pocong* which means a dead body wrapped in a white shroud (Saddhono & Pramestuti, 2018). Considering this literal meaning, messages in the *pocung* song are mainly a reminder about preparing for life after death. With the influence of Islamic values, it is believed among Javanese that all actions people take in their lives cease when they die, except useful knowledge, good deeds and prayers from righteous children

(Saddhono & Pramestuti, 2018). This belief becomes the main content of *pitutur* in the *pocung* song. The song I learned in my childhood, as mentioned in the introduction chapter, is an example of advice for seeking knowledge, while other versions of *pocung* advise people to do good deeds and to raise children well.

Pocung also has another meaning, as the name for the seed of *keluwak*/*kluwak*/*keluwek* tree that is commonly used as seasoning in Javanese cuisine (Mardimin, 1991). *Keluwak* tree is a native plant of Indonesia, which fruit seeds have unique characteristics. Seeds of unripe *keluwak* are deadly poisonous and were once used as toxin attached to arrows in the past (Chodjim, 2016). In contrast, seeds of ripe *keluwak*, with proper pre-cooking preparation, become food seasoning with a delicious taste and rich nutrition, particularly vitamin C and iron (Chodjim, 2016). The unique characteristic of *keluwak* becomes a metaphor for advice delivered through the *pocung* song. In seeking knowledge, for example, learning at a superficial level can be dangerous, like consuming unripe *keluwak*, but going deeper into the content of a learning subject results in good understanding, like the good taste of ripe *keluwak*. Also, an effort to gain useful knowledge often involves a complex process of learning, like preparing *keluwak* before cooking to remove poison and gain nutrition. The name *pocung* is used to give taste in a conversation or advice and make it more engaging or less boring (Chodjim, 2016). Musically, despite deep meaning of its message about the summit of a life journey, *pocung* is characterised as relaxed, less-serious fun and enjoyable, like tasty food with seasoning (Mardimin, 1991; Saddhono & Pramestuti, 2018). I remember in my kindergarten and primary school, I learned different riddles and jokes as *pocung* song, but I also learned many life lessons through this song.

Continuous movements and experimentations as learning processes in circle and singing games

From different stories of playing *jamuran* and *cublak-cublak suweng* above, the materiality of bodies and movements is brought to the fore. It becomes clear in both games the force and power of different bodies emerge through a series of movements in the games. Starting with players, except *it* or *pancer*, walking slowly in a circle while holding each other's hand, then the walk gets faster and faster before finally the circle stops moving. The lines of accompanying songs become a discursive power which rhythm determines the pace and intensity of movements of the circle. Through intense experimenting of different movements, the games allow forces and powers of different bodies to meet and be put in motion. This experimentation entails unpredictable flow of force and intensities (Lenz Taguchi, 2010) as a result of ongoing intra-actions among performative agencies of the games.

The Javanese circle and singing games become an entanglement of different bodies that continuously increase their capacity through ongoing movements. The moment of increasing body's capacity of different elements of the games is considered a learning process (Olsson, 2009) in the context of traditional games. Unlike common understanding of learning that focuses on individual children's thinking, this new thinking about learning acknowledges active participation of different elements. These include things or objects and places of everyday life, with their contingent agencies, which should not be viewed as a background of human supremacy (Gunn, 2018). Rather, they should be construed as equally important in contributing to the learning stories. Concentrating on how things show power in traditional games is further discussed in Chapter Seven.

Chapter Seven: The intra-activity of tradition in playing games with stones

In the context of traditional games, stones have a long tradition of being an important part of games. Stones are commonly used as a material or object for playing games. A traditional view of games positioned stones at the peripheral, as opposed to the central position of human in games. In this chapter, this long tradition is unsettled in diffractive analysis of different stories about playing games with stones. The intra-activity of tradition emerges through this process of unsettling to develop a new thinking of traditional games introduced in this chapter. Being intra-active, tradition is “open to the flows between human and non-human, agency and matter” (Bone, 2017, p.2). In the context of traditional games, flows of stories from different encounters with stones create a space to examine tradition in a creative and innovative way that goes beyond traditional/modern, human/non-human, material/immaterial, nature/culture divides. These stories are not only about “our entanglement with nonhuman things... [but also about] both the being of and our studying of those things” (Bennett, 2016, pp.70-71). With these flows of stories, tradition travels through an unpredictable journey of non-linear space/time. It involves exploring the unknown, the impossible, the unseen and the hidden that make it possible for discovery and reinvention. Approaching tradition as an intra-activity, as Rautio and Winston (2015) suggest, provides “spaces for producing and contesting *as well as* acquiring knowledge” (p.15, original emphasis).

This chapter begins with a story of my encounter with stones in the school yard during fieldwork. This story illustrates transformation of stones to my thinking as I observe them resting on the ground, but then start to play with children. Then, through moments of diffraction, the stones connect me to different stories of children-

stones relations. There is a story about the way stones create a space of being in nature, which connects me to childhood memories playing with stones. I become entangled in my relation to the stones as they bring more stories and make more connections in the context of traditional games. These include stories of stones as pedagogy, the way stones bring tradition and how they travel across time, place and culture. In these stories, the intra-activity of tradition emerges and brings to the fore the notion of intra-active tradition that concludes this chapter. The next section is the story of an encounter with stones as a beginning moment.

The stones are there...

On one cool morning, during fieldwork of this study, I was mesmerised by the tranquillity of the school environment, the air was fresh after pouring rain the night before. I walked from the parking area to the classroom and found the school yard was very quiet. The smell of damp ground after heavy rain enthralled me, it felt nourishing and refreshing. I looked at the ground, the dark brown soil looked so wet with stones scattered on its surface. The stones looked fresh as they had been washed thoroughly by the rain. Some spots on the ground held small puddles clumped together by water dropping from leaves above. Each drop of water created circled waves on the puddle, centred from the dropping point, then getting bigger and bigger until the waves disappeared at the edge of the puddle. But before the waves got to the edge, another drop came, making another circled wave sequence, overlapping previous waves. Then, the next drops keep coming, repeatedly, and they all formed continuous, overlapping beautiful waves of water - they were *diffracted*. It was fascinating.

Despite a strong feeling I had in a moment of my short walk that morning, with the whole entanglement of the environment and its elements, I was not really aware

of either “the scent” (Bennett, 2010, p.xiii) or “the vitality” (Jones & Hoskins, 2016, p.84) of things and beings I encountered. I was completely inattentive to individual existences of the air, ground, stones, puddles, trees, leaves, weaves, and even ignored them as an assemblage (Bennett, 2010; Taylor & Hughes, 2016). While I was fascinated by the scenery of the school yard that morning, my senses and my whole body could not access the call from these seemingly rested and inactive objects and creatures. This call was an invitation for me to follow, in a sense of “always to be in response” to it (Taylor, 2016, p.18). The inaccessibility of this call, therefore, did not move me “towards accessing how to notice the things around [me]...” then “work out how to share [the] world equitably with them” (Bennett, 2016, p.65). My human centred-ness caused me to fail to notice that I was also “nature in relation to and constituted by all other animate or non-animate co-existing entities” (Rautio, 2013, p.394). So, I was just passing them by, and kept walking to the classroom.

As I entered the classroom, the class has just begun. The classroom teacher, Viona, opened the class and welcomed children in Javanese language. She told the children that she would introduce them to *dakon* game at the beginning of the *Boso Jowo* lesson that day. She had with her two sets of *dakon* boards, one was a wooden board and the other was made of plastic, along with their game pieces or counters. These counters are known as *kecik*, a Javanese term for seed of fruit from a small tree used for children’s games (Robson & Wibisono, 2002). Viona explained that the number of *kecik* was not enough to play *dakon* so she asked children to collect some stones from the school yard. The children then went out to collect stones from the yard. I followed them to the school yard to see how they collected the stones and took some pictures, as presented in figure 7.1 and figure 7.2 below.



Figure 7.1. Collecting kecik



Figure 7.2. Picking up stones

As shown in both figures, children are in the school yard with their sandals on, squatting down to pick up stones from the ground. Looking at this moment closely, I realised that the stones I saw earlier when I passed by on my way to the class did something with children. They started to play, as described in the story in the section below.

The stones start to play...

Figure 7.1 and figure 7.2 above show children's encounter with stones in the school yard. The stones were carefully picked from the ground and was not random picking. The stones were picked with care, one by one, wiped clean and rested on children's palms. Here, I realised that something happened during this children-stones encounter. I noticed that the stones I saw a few minutes before were scattered around the school yard, looking inactive and rested, suddenly transformed into counterparts with which children played and had a joyful encounter.

"[S]tones do things" *to* children and *with* children, they had children "pick them up, feel them... or hold them between our thumb and forefinger" (Rautio, 2013, p.404, my emphasis). They showed thing-power (Bennett, 2010) that enabled them "to shift or vibrate between different states of being, to go from

trash/inanimate/resting to treasure/animate/alert” (p.354). This power not only changed stones themselves, but also could have performative effect on surroundings, including humans. As seen in the figures above, children played with stones in the encounter and stones played back with children. The stones became significant players in pre-activity of the *dakon* game, as performative agents (Lenz Taguchi, 2010), without which the game could not be performed. The stones and children were found and found by each other, in a relational existence that emerged through intra-actions – *the mutual constitution of entangled agencies*” (Barad, 2007, p.33, original emphasis) – that continuously took place in different stages of the game. Together, they involved in “play(ful) encounters” (Rautio & Winston, 2015, p.15).

From these multiple child-stone encounters, five stones made children pick them up, keep them in their fists, then bring to them the classroom. All stones collected by children were gathered on the carpet, next to the *dakon* boards. Viona asked four children from the class to be volunteers for demonstrating the game while she explained the rules of *dakon*. She told children to put seven *kecik* in each hole of the *dakon* board, as illustrated in figure 7.3 below. She highlighted the use of Javanese language in counting *kecik* - *siji, loro, telu, papat, limo, enem, pitu* (one, two, three, four, five, six, seven), which confirmed that *dakon* as a traditional game had a function to develop numeric and language skills (Purwaningsih, 2006). Children enthusiastically counted *kecik* and at the same time practised Javanese language. Salma, the other classroom teacher, closely observed children counting *kecik* and made sure children said Javanese words accurately.

Gadis and Aimee, who volunteered to help the teacher demonstrate the *dakon* game, as shown in figure 7.3 below, carefully counted stones as *kecik* for the

dakon game. These small stones made the two girls hold them with their thumbs and forefingers (Rautio, 2013), then place the stones into holes of a *dakon* board.



Figure 7.3. Counting stones as *kecik*

They - the stones and girls – did it repeatedly, over and over again, but were never the same in each moment. They were differentiating in each moment of multiple entanglements (Barad, 2014), in a continuous intra-active cooperation in getting *kecik* to the *dakon* board. Moments of stones called the girls to follow them, pick them up, and put them in the holes, as series of mutual constitution of performative production (Lenz Taguchi, 2010). This looked like a dance performance that became a flow of movements (Ivinson & Renold, 2016). This was another intra-active play involving stones and children, within which both stones and children were mutually affected and affected by each other. Not only the children played with stones, but stones played with children, so that “the playing is taking place **in-between** [children and stones]” (Lenz Taguchi, 2011, p.38, originally highlighted). In this playing, both of children and stones – human and non-human – were equally important parts without hierarchy in their active and ongoing relations (Barad, 2007), as proposed by

a relational materialist approach (Hultman & Lenz Taguchi, 2010; Lenz Taguchi, 2011).

From the story above, it was evident that stones were an essential part of the game, that which got the game started, without which *dakon* could not be performed. In the case of *kecik* from the stones, this is what Bennett (2004; 2010) called “thing-power”, which referred to the vivacity of things that may have a valiant impact on surroundings, including humans. This power could transform stones that seemed inert, motionless and lifeless to become active, moving and alive. As Bennett (2004) described, the thing-power is “the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle” (p.351). The stones as *kecik*, which initially looked inert, passively laid on the ground of the school yard, when activated with thing-power could transform and act as main players in the *dakon* game.

The moment when stones called children to lift them up from the ground, as seen in figure 7.1 and figure 7.2 above, showed a power and force that made children perform in certain ways in picking them from the school yard. Here, stones can be seen as *performative agents* (Lenz Taguchi, 2010, my emphasis) which actively took part in performative production of the *dakon* game. Together with other elements of the game – the *dakon* board upon which stones were put, the ground from which they were taken, the children’s fingers with which attached dust was wiped, the children’s hands with which were counted and placed in the holes of the board – the stones showed their performative agency, that was “the possibility of intervening and acting upon others and the world” (Lenz Taguchi, 2010, p.4). This performative agency of stones was not manifest independently and separated from other elements of the game. Rather, it emerged in assemblage and interrelations with other things, organisms and matters. Here, assemblage could be understood as

a configuration of bodies in continuous relationships (Pacini-Ketchabaw, 2012).

These relationships, according to Pacini-Ketchabaw (2012), involved “a multiplicity of materialities constantly engaged in a network of relations that shift over time and through space” (p.156). As Barad (2012a) argued, agency is not a possession of individuals or things, but it is about “response-ability” (p.55); that is, possibilities for both human and non-human, organism and matter to mutually respond to each other and reconfigure their entanglements.

Entanglements of all elements at each moment in the *dakon* game were never static, but a series of specific assemblages formed by intra-acted performative agents. Lenz Taguchi (2010) stated that performative agency of all parts of a performative production were continuously intertwined and acted upon each other in intra-active relationships. In the play of *dakon*, intra-active relationships were established among the stones as *kecik*, *dakon* board, green carpet, concrete floor, children’s hands, and free-activity time after children finishing their worksheets. Here, the thing-power of things in the *dakon* game were situated in an assemblage, within which each element was emerged in relations with others. As Bennett (2004) argued, “[a] thing has power by virtue of its operating *in conjunction* with other things” (p.354, original emphasis).

The stones create a space for being nature

On a sunny afternoon, I was about to go home from school. I walked from the classroom to the parking area. On my way, I saw two children from the class, Aimee and Queen, sat on a big, table-shaped rock under the stairs of a building next to the parking area. This building was part of a museum located in conjunction with the school where I conducted this study. I saw them engaged in conversation and they had some leaves, small stones and sands on a rock. I stopped and greeted them

and asked “Hi, what are you doing? Why don’t you go home?”. Both replied to my greeting with “Hello *bu Ririn*”, then Queen said, “We are waiting for our parents”. They meant that they were waiting for their parents who have not arrived to pick them up from school. I decided to stay with them until their parents came, but then I realised they were engaged in an interesting activity.

Interested in what they were doing, I came closer to them. I asked their permission to join in and take some pictures, as shown in figures 7.4, 7.5 and 7.6 below. I looked at the big rock on which they sat, and I found some leaves, small stones and sand there, as seen in figure 7.4 below. I wondered what these things were or and I asked them “What are those things?”, Aimee and Queen replied with smiles and said “yeah, we’re just playing”.



Figure 7.4. Being in nature with stones

Queen said that they did *masak-masakan* (pretend cooking), then explained that the leaves were vegetables, the sand was seasonings and the small stones became grinders. While responding to my questions, both Aimee and Queen kept enjoying what they did without being bothered by my presence, as seen in figure 7.5 below. I

stepped back to let them continue their conversation and activity with the different things they had on the table-shaped rock.



Figure 7.5. Being in nature with stones

I saw Aimee take a leaf and cut it into small pieces, as shown in figure 7.6 below. She did the same thing with other leaves, then Queen took some pieces and ground them using a small stone. Aimee then took some uncut leaves, picked some pieces of cut-leaves and ground the leaves, then put them on the uncut leaves and wrapped them in. Looking at these two girls playing with leaves and stones, I had an affective moment, remembering my childhood when I played *masak-masakan* with my friends in the backyard of my house. I had similar things to cook, such as leaves, soil and small stones, but I also used water to mix with the soil and made some sauce or ketchup. I was smiling to have all these memories enlivened and bringing me back to fun moments of my childhood. However, at this time, the memories came with a different thinking about my relations with stones, leaves, sand and all materials I had to play *masak-masakan* with.



Figure 7.6. Being in nature with stones

Looking at the figures above, I see Aimee and Queen immersed in nature and being with rocks, stones, leaves and sand, along with a space available under the building stairs, with ample sunlight and breeze on that afternoon. Together, all elements of this natural environment intra-actively influenced and acted upon each other to create a space for creative play. In this place, stones and the rock together with children and their surrounding showed “impulse toward finding or constructing a quiet, uninterrupted and private ‘own place’ for play (Moore, 2015, p.213). The stones, as performative agents, simultaneously acted as “found objects” and “significant others” for children to play in that particular space (Moore, 2015, p.213). Both stones and children, along with other parts of nature in that space, continuously constituted intra-active entanglements with blurry boundaries among parts, but kept changing in their multiple relations. Within this multiplicity of relational entanglements, according Barad (2007; 2014), agencies of constituted parts emerge and keep changing in their continuous intra-active processes.

From the conversation I had with Aimee and Queen while playing, and looking at figures above, I came to a new awareness that children – we, as humans – were “nature already” (Rautio, 2013, p.394). They were not separated from each other, neither as a subject-object relation, nor human-nonhuman, nor nature-culture, nor binary-dualism categorisation that may be commonly used in examining children’s play. They – children, stones, leaves, the big, table-shaped rock, sands, the stairs, the space – were co-existences which together were nature already. Ki Hadjar Dewantara (1977) suggested that children have a strong desire to mingle with nature. For children, nature is rich, ample and beautiful in providing resources for them to do activities and to play (Dewantara, 1977).

It was depressing that in contemporary discourses of education, especially in the context of Indonesia, while awareness about environment has been indicated in national policy, practices at the classroom level still focus on “knowing *about* nature, rather knowing-in-being *with* nature” (Higgins, 2016, p.192, original emphasis). Interestingly, from an interview with one parent in this study, a view was revealed that traditional games could be a way to maintain children’s connection with nature. Heru, the parent, said that “traditional games allow children to make contact and respond to stones, woods, the earth, leaves, trees”. With this view, despite acknowledgements to some constraints, such as limited time and space to play and safety issues of letting children play freely outside, he encouraged his children to be in nature, play with stones, mud, sands, whatever was available to them. In this case, the school could be a site in which children are exposed to knowing-in-being *with* nature, as shown in intra-active entanglements of stones-children-surrounding above, as a loud call for us to learn “how to notice the things around us, and work out how to share our world equitably with them” (Bennett, 2016, p.63).

The stones make me recall childhood memories

Observing children engaged in playful encounters with stones, I was not only witnessing how stones do things to children, but I also experienced the effect of ‘thing-power’ of stones. This effect was not in the same sense of the way these vibrant stones encountered and played with children. Rather, the stones hit me in a way that suddenly all my childhood memories of playing with stones came alive. This act of remembering memories, as Barad (2007) suggests, did not mean to replay piles of passed moments. Rather, this was “an enlivening and reconfiguring of past and future that is larger than any individual” (Barad, 2007, p.ix). Moreover, as a research student who was learning and still grappling with new and challenging concepts of new materialism, I attempted to shift my focus of attention towards materials, objects and things, the non-human and more-than-human elements of the game. I also looked at those memories in relation with something else from elsewhere, as intra-active (Bone, 2017; Lenz Taguchi, 2010; Rautio, 2013). The reconfiguration of space/time/mattering (Barad, 2014) of my memories was a diffractive process with which all related parts were cut in one move.

A profound memory I had with stones, as introduced in Chapter Four when I discussed an affective moment of looking at an image of children picking up stones from the ground, was when I played marbles with my older brother and our neighbours. We started with ordinary marbles with common rules we usually had, aiming the marble into a hole in the ground. After several rounds playing regular marbles, we agreed to interchange ordinary marbles with stones. Then, we looked around for stones to play this new version of the marble game. We started with pebbles of a slightly bigger size to ordinary marbles. We found new excitement of hitting “stone marbles” to the hole. As the game progressed, one of us had an idea to

use bigger stones, so we dug a bigger hole in the ground as a target. I searched for stones with ball-like shape, the size of a tennis ball. The game became more exciting as we rolled stones into the target hole, until there was an incident when my little finger was hit by two big stones when I tried to take my 'marble' out from the hole. My finger was bleeding so badly, it was a little shock for all of us, but it was just temporary. After I came to my mother for first aid care, and once it was done, I came back to the playing area, joining in play of stone marbles.

Remembering that memory and reconfiguring it through a new materialist approach (Hultzman & Lenz Taguchi, 2010; Lenz Taguchi, 2010), I can understand that the ball-shaped stone played with me (Rautio, 2013) and showed me its thing-power (Bennett, 2010). Among different stones available on the ground, that particular stone made me pick it up, feel it, hold it and play with it. This particular stone called me to follow and give response to it (Taylor, 2016). The accident of my finger injury happened as I failed to co-operate with the stone (Rautio, 2013) and despite the pain I felt, I kept coming back to the stone and engaged in our playful encounters (Rautio & Winston, 2015).

The stones create games in different places

Literature and research on traditional games show ample evidence of children's games that involve stones in their performance. Multiple studies on these games from different perspectives – anthropology, archaeology, history, socio-culture and education – confirm stones as integral parts of children's games across countries and cultures. In the context of Indonesia, stones have been recognised in the long history of traditional games and have been widely researched among scholars, particularly in the area of anthropology, language, literature, culture and education. The government of Indonesia pays specific attention to traditional games

and includes them in public policies (Menteri Pendidikan dan Kebudayaan, 2014a; Pusat Kurikulum, 2010). There are a lot of traditional games using stones, such as *bor val* and *tuniro sekolah batu* in Maluku, *maggunreco* and *massantok* in South Sulawesi, *kadende sarong* in Central Sulawesi, *tundu-tundu kapu* in North Sulawesi, *sembunyi-sembyunian* in East Kalimantan, *penyu mataloh*, *macingklak* and *masemplar* in Bali, and *ber-beran* and *bincilan* in Central Java (Hamzuri & Siregar, 1998).

In Yogyakarta, which is known as the centre of Javanese culture, stones play an important role in a number of children's games. Like in the game of *cublak-cublak suweng*, observed in the classroom during my fieldwork, a stone becomes the central playing piece of the game, called *suweng*. Literally, *suweng* is the Javanese term for studs or earrings, but in the game *cublak-cublak suweng*, it was the small piece passed among players. In playing this game, children sit in a circle, with one child – called *pak empo* - faced down and forming her back as a table top, on which other child players put their hands and sing the song '*cublak-cublak suweng*'. One player holds a stone/*suweng* and moves it from one hand to another during the song-singing. When it comes to one line of the song "*sopo ngguyu ndelikake*", in a very quick movement *suweng* lands in one hand of the players. All players then immediately clench their fists and sing the last line of the song "*sir sir pong dele gosong*". At this point, *pak empo* guesses the holder of the *suweng* among all players. Figure 7.7 below shows a group of children playing *cublak-cublak suweng* at school.



Figure 7.7. Playing *cublak-cublak suweng*

During playing of this game, performative agency of elements of the game - the stone as *suweng*, children's hands, table-top body of *pak empo*, and the song - emerges through movement of *suweng* and its relations with anything else. At the same time the stone's movement reveals the way "in which human being and thinghood overlap" (Bennett, 2004, p.349). This overlapping movement uncovers the way in which humans and the stone - the non-human - are intelligible amongst each other, affected and being affected by each other. Playing of *cublak-cublak suweng* can be seen as a "performative production" (Lenz Taguchi, 2010, p.4) within which each performative agent constantly influences and acts-upon each other. In this production, all elements are equally important in constituting performance of the game. The relation of stone and children is flattened and non-hierarchical (Barad, 2007) and always on the move, in ongoing intra-activity.

The end of each round in *cublak-cublak suweng* is unpredictable. It is always intra-active in a sense that it is open to any possibility. The stone as *suweng*

chooses the fist in which it wants to hide. *Suweng* has (intra-)agency (Rautio, 2013) that allows it to take control of children's hand movements, to get central attention of all eyes of players, to attract *pak empo*'s concentration in guessing its holder, and keep the game going. All of these elements engage "in a relationship in which they mutually will change and alter in their on-going intra actions" (Lenz Taguchi, 2010, p.4). The stone as *suweng* plays a key role in establishing the game, without which the game cannot be performed and becomes an act of singing instead. It ignites the continuous performativity (Barad, 2008) in the game.

The stones as pedagogy

As introduced in previous sections, some traditional games – such as *dakon* and *cublak-cublak suweng* - were intentionally taught by teachers in the classroom. Through well-designed lesson plans, this teaching mainly aimed to let children know about the games and at the same time introduce cultural values of the games. Viona, a classroom teacher, in the interview said that "traditional games possess unique characteristic that we need to preserve, and children should know that". The uniqueness that she mentioned was related to cultural values attached to games. These cultural values include the spirit of togetherness, willingness to help each other and leadership (Purwaningsih, 2006). Ki Hadjar Dewantara (1977) suggests that children's games should be integrated in school programs for cultural considerations, as through playing traditional games, children are exposed to "cultural elements of their society" (Wang, 2015, p.2).

Salma, another classroom teacher, added that "Javanese culture is embedded in children's traditional games, because this school is in Java". She especially highlighted the use of Javanese language in games. Salma believed that introducing Javanese language through games was more motivating for children to

learn language. Here, traditional games can be a good exercise for children to learn language (Purwaningsih, 2006) and engage with verbal communication (Winarti, 2010). In introducing numbers in Javanese language, for instance, Salma argued that children could practice the language better through games, such as *dakon* and *jethungan*. Therefore, integrating traditional games is a good strategy to develop good attitudes of children for the lesson, as Salma believed that children would pay better attention to the learning activity. Here, incorporating games in the learning process can help create a supportive environment or a good 'atmosphere' (Avedon & Sutton-Smith, 1971, p.318).

Apart from whether the way traditional games are passed down across generations is intentional or unintentional, it is evident that traditional games can be a space where children learn to make sense of their environment and surroundings – of their world. As Opie (1994) asserts, these games allow children to make “first encounters with words, and first experiments in the physical world” (p.12). She adds that it is rare for children to discover new games, rather they “slightly alter the established ones or amalgamate several traditional elements” (Opie, 1994, p.12). The newness of children’s games, according to Opie (1994), is located in countless smart amusing ideas and restless experiments they do with games. This sense of newness in children’s games inspires the way I approach a component of this study in exploring the idea of ‘reinventing’ traditional games. Moreover, in re-inventing these games, “children learn as much by watching and listening as by being taught” (Opie & Opie, 1985, p.30).

The stones bring cultural tradition

A feature that characterised traditional games across cultures is the simplicity of games in terms of rules and tools or materials used in games (Opie & Opie, 1984;

Sierra & Kaminski, 1995). Among traditional games in Indonesia, most are simple and use simple tools or materials or are even played without any tool at all (Hamzuri & Siregar, 1998; Sujarno et al., 2013; Yunus, 1982). These games often make use of what is available in nature and the surroundings, such as seeds of various fruits, bamboo, coconut leaves and shells, banana stem, leaves, grass and pomelo skin (Hamzuri & Siregar, 1998). Due to various geographical characteristics among different regions in Indonesia, each area has particular natural resources available for playing games, such as sea shells being common in coastal areas, while wood and seeds are more available in highland areas. This factor contributes to great variation in the types of traditional games played across Indonesia.

In spite of this variation, one material that is easily found in any place in Indonesia is stone, known as *kerikil* or *batu* in Indonesian language. Historically, stone has participated actively in Indonesian games. For example, one game introduced in the class, *dakon*, was globally known as *mancala*. The origin of this game is debatable, although archaeological evidence suggests it has roots in Africa (de la Cruz et al., 2000), especially Egypt (Brinkworth, 1998), while the name *mancala* comes from Arabic word “manqala” which means ‘to move’ or ‘to transfer’ (Brinkworth, 1998, p.13). Anthropology studies show that the spread of this game was related to slave-trading and expansion of Islam (de la Cruz et al., 2000) and was brought to Indonesia and other Southeast Asian countries by Arabic traders with names of *congklak*, *sungka*, *sunca*, *chonka* or *chongkak*. Although nationally known as *congklak*, this game was called differently at different places in Indonesia, such as *congkak* in Riau, West Sumatera, Bengkulu, West Kalimantan and West Java, *gunung* in Jambi, *menciwa* in West Nusa Tenggara, *daku* in Central Kalimantan, *makaota* in North Sulawesi, *nogaratama* in Central Sulawesi, and *maggalenceng* in

South Sulawesi, and *dakon* or *dakonan* in Central Java, East Java and Yogyakarta (Hamzuri & Siregar, 1998).

In Javanese society, despite the fun nature of the *dakon* game, there are noble wisdom and values attached to the game. Hidayat (2015) discussed values embedded in *dakon* both from materials or objects used in the game and performance of the game. Seven holes in the *dakon* board signify seven days in a week, in each of which seven *kecik*/stones are placed. These stones/*kecik* symbolise our resources, such as food, money or materials. The way stones move and are distributed, one by one in each hole, has a message that we need to be wise and not be excessive in using resources. In each cycle of stone distribution, we ought to save one stone in a big-storage hole and if there is any extra, the rest of the stones can be distributed in the opponent's holes. This exemplifies that in using resources we need to think about the future by saving some or sharing with others.

All messages sent through the *dakon* game, both with material entities (Rautio, 2013) or things (Bennett, 2010) – the stones - and performance (Jackson & Mazzei, 2016) or movement (Olsson, 2009) in the play of *dakon*, closely relate to central principles of Javanese ethics and world-view. These principles were *rukun* (a state of harmony) and respect, which guided Javanese people in all situations (Magnis-Suseno, 1997). Although these principles are generally discussed in the context of social environment or interpersonal relations among humans, through a new materialist view these Javanese ethics and world-view could be extended towards the “material world” (Barad, 2008; Bennett, 2016; Lenz Taguchi, 2010). This opportunity can be reached through an understanding that as humans we were not external-observants of the world. Rather, “we are part of the world in its ongoing

intra-activity” (Barad, 2007, p.184, original emphasis), therefore, “it becomes an ethical obligation to engage intra-actively with materials” (Bone, 2017, p.2).

Unlike *dakon*, which is brought to Indonesia from a different culture, the game *cublak-cublak suweng* is believed to be rooted in Indonesian culture. This is one of games that is culturally specific to Javanese, as there are no comparable games in other cultures. The game is named after the song accompanying the play, called *cublak-cublak suweng*. This song was composed by Sunan Giri in 1442 (Kusuma, 2015; Senja, 2015; Sunyoto, 2015), one of the *Wali Songo* or Nine Saints who lead the early spread of Islamic values among Javanese society. In spreading Islamic values, known as *dakwah*, *Wali Songo* used cultural activities, including *tembang* (folk song), *gamelan* (traditional musical instruments) and other traditional arts, and *dolanan* (children’s games), because these activities are considered non-oppressive and people could absorb the delivered messages (Purwadi et al., 2005; Senja, 2015).

The stones travel across time, place and culture

Observing at the way Viona and Salma, the classroom teachers, introduced children to *dakon*, instantly I recalled a memory of learning this game from *bapak*. This remembering allowed me to re-enliven and reconfigure (Barad, 2007) the memory like a fresh moment. I can still remember, one day *bapak* brought home a set of the *dakon* game. It was a blue plastic *dakon* board, with two rows of seven parallel holes and one bigger hole at each end of the board. Along with the board was a set of *kecik*, shell-shape, made of plastic and grey in colour. *Bapak* showed me how to play *dakon*. Having family as the source from which children learn about games (Opie, 1994), like my own experience, is similar to some children in my case study. Aisya’s mom, for example, confirmed that her daughter learned some

traditional games, such as *dakon*, *jamuran* and *cublak-cublak suweng* from her sister. Similarly, Duhita learned *jamuran* and *dakon* from her cousin. But for Sandy, who was an only child, neighbours and peers were sources from which he learned the games. Family and neighbourhood, “older brothers and sisters...neighbours...cousins... also from parents...” (Opie, 1994, p.13), become primary resources for children to have a first encounter with a game.

The tradition to learn games from immediate family or neighbours, however, did not happen for my children. Instead, they jumped across generations and learned games from my parents. It was not an intentional process. Rather, it happened unexpectedly when my sons and I visited my parents’ house. My youngest son asked my father, “*Kakung*, do you have any toy for us to play?”. My father then brought a *dakon* set from a drawer of a cupboard in my mother’s work room. She used to be a tailor and at home we have a room where my mother has her sewing machines and a cupboard to store sewing materials, such as buttons, yarns, zips, and piles of cloth. This cupboard has drawers where we put some of our toys and games materials from childhood, such as *halma*, snakes and ladders, chess, and *dakon*. I remember in my primary school years, I often played those games with my brother and sister when my mother was busy sewing clothes. Usually, after school we picked one game to play and sat on the floor of this room. It was another surprising encounter when my father brought the *dakon* set from the cupboard.

Another performativity (Barad, 2008) had taken place. The question my son asked his *kakung* ignited a series of material-human encounters. The question and act of asking in their materialities, became performative agents (Lenz Taguchi, 2010) that contributed to continuous intra-activity of play(ful) encounters (Rautio & Winston, 2015). Performative agency of the question activated thing-power (Bennett, 2010) of

toys and game materials that had been rested and passive, dormant for about thirty years. These materials became active and called my sons to follow and give response to them (Taylor, 2016), to play with them. My sons were particularly attracted to *dakon*. They enjoyed their encounters with *kecik* in the *dakon* game. The *kecik* made my sons pick them up, hold them, then drop them one by one, repeatedly in on going performativity. My children even asked me to buy a *dakon* set for our home, so children-material encounters keep continuing, intra-actively.

Now, although we live in a different country, Australia, the stones-children encounters still continue. These encounters not only involve my sons, but also children from other cultures. I have casual and voluntary work that connects me with children in Australia through a program that introduces Indonesian culture. Traditional games, especially *dakon* and *gangsing*, are common activities conducted in this program. Through this program, stones in the *dakon* game extend their force and capacity (Olsson, 2009) to reach children that previously seemed out of their territorial boundaries, geographically and culturally.

Stones, as *kecik* in the *dakon* game, show the way intra-activity can take place across boundaries. They travel across time, place and culture. They are diffracted, go to different directions in one move (Barad, 2014). The idea of passing games across generations is no longer linear. It opens up multiple possibilities of ways in which stones-children encounters happen, interactively.

Intra-active tradition: a diffractive analysis of different encounters with stones

In previous sections, focused attention toward stones, as materials in traditional games, generated multiple stories of different encounters with stones. The stories were read diffractively with different texts from classic and contemporary

literature on traditional games, education in the context of Indonesia, and Javanese ethics and culture. Theoretical concepts of a new materialist perspective were “plugged into” (Jackson & Mazzei, 2012, p.1) the data – stories, visuals, figures - to “stir things up” (Bone, 2017, p.2) and stretch the thinking with the data. Through diffractive analysis, these readings traversed and intersected each other to open up a space for creative thinking and to understand things differently, in this case traditional games.

As the stories unfolded, different insights emerged through re-turning readings and stories by “turning it over and over again” (Barad, 2014, p.168), that allowed me to re-visit my understanding about the notion of tradition attached to traditional games. Previously, my understanding of tradition was related to long-lasting existence of a practice or an activity – such as children’s games – that closely linked to a particular culture. This view is supported by literature that defines traditional games as games that have existed for a long time and have been passed down over generations (Howard, 2005; Sierra & Kaminski, 1995; Sujarno et al., 2013). These games play an important role in preserving culture because they “often reflect society’s priorities and needs” (Casbergue & Kieff, 1998, p.144). From these games, children learn essential skills and imitate cultural roles to prepare for adulthood (Chepyator-Thomson, 1990). While attributes of traditional games from this view are still evident in this study, there was also a new yet unpredictable discovery of the notion of tradition in relation to children’s games.

As I learned the way traditional games have been passed across generations, I noticed that such passing did not happen in similar patterns. Rather, it involved unpredictability in a way that both games and children found and were found by each other. In the moments of the teacher in my case study introducing *dakon* to the

class, of my father bringing home a *dakon* board, and of my oldest son asking my father about toys which then connected him with a *dakon* game set, games-children encounters were all different in their space/time/mattering. These differences, as Barad (2014) argued, were not in a sense of absolute separateness or as an opposite of sameness. Rather, these differences were understood as a relational, “in-the-(re) making” and were “formed through intra-activity” (Barad, 2014, p.175). In reading these insights diffractively, I have been taken by the stones to different times and places, giving me a space for “enlivening and reconfiguring of past and future” (Barad, 2007, p.ix). The notion of tradition was also diffracted across space, time and matter. It was shaken and no longer firm. It became intra-active, to enable complex relations of social-material, human-nonhuman, nature-culture to take place, and make it possible to uncover a space that disrupts an uncontested notion of tradition. In this space, a new understanding of traditional games emerged through these continuous intra-active relations.

The notion of intra-active tradition creates an account for understanding that tradition is “never static” and always in “continuity and change” (Factor, 2005, p.9). This dynamic view of tradition in the context of traditional games, however, was previously situated in the process of passing games across generations. In this process, traditional games are often changed, adapted, or modified in accordance to the time and circumstance (Factor, 2005). Far from rejecting this view, a new materialist perspective extends its horizon by giving attention to non-human and more-than-human elements and their intra-active encounters in games. This view allowed me to focus on particularity of relations and interconnections among participating subjects in each encounter (Davies & Gannon, 2009; Gannon, 2011). Rather than seeking a general view or pattern of playing traditional games, now I

tend to look at each play as a specific space of encounter. According to Gannon (2011), “[it] is particularity rather than generalization that contributes to an ethical encounter, an encounter that has the possibility of transcendence, that calls forth an inexorable responsibility for the other...” (p.74). Different human-nonhuman encounters in traditional games situated in intra-active tradition allow ethical practices to unfold. These practices are embodied and situated in a particular time and place, within which each ethical position has material consequences (Alaimo & Hekman, 2008).

In addition, it is noted that the notion of intra-active tradition in Javanese society, as the setting of this study, is relevant to the spirit of Javanese culture that is substantially open to any encounters. This open characteristic of Javanese culture has been indicated by Magnis-Suseno (1984) who claims that the culture is not built and progressing in isolation. Conversely, he adds, continuous encounters with others – including other cultures and perspectives – keep enriching Javanese culture without losing its core values and spirit. The notion of intra-active tradition, therefore, offers an alternative to mainstream public opinion that preserving tradition is imperative to avoid external influences and contamination to retain its purity. In the context of traditional games, this notion can be a new possible way for young children reinventing games amidst common anxiety that they no longer have access to traditional games and that the existence of traditional games will soon fade away.

Concluding notes

In the context of traditional games, the notion of tradition has been firmly established and remains uncontested in research and literature, which positions the games as a way through which tradition and cultural values are passed across generations. Through diffractive analysis of stories about different encounters with

stones in traditional games and the use of new materialist concepts in this chapter, this firm notion of tradition is challenged and disrupted to create a space for a new way of understanding games. As different stories of encounters with stones traverse each other, the image of passive inanimate stones shifts to active and powerful elements of games where performative agency emerges through intra-actions with other elements. This performative agency of stones has activated capacity of other elements to respond through continuous intra-active relations in unpredictable ways. The notion of tradition is reconfigured across “spacetime mattering” (Barad, 2014, p.168), through continuous, non-linear performativity of stones in the games. This performative understanding of games allow tradition to become intra-active, open to flows of complex and unpredictable entanglements. Tradition, in the context of traditional games, has shifted from a fixed and stable feature of games to become a dynamic and vibrant space for games. This space makes it possible for stones and other elements of traditional games to responsively engage in lively relationalities in their encounters, which in a new materialist view is considered ethical encounters. Intra-active tradition offers an alternative understanding of what it means of being and becoming traditional in children’s games. This understanding allows traditional games to be reinvented in a new way as a space for ethical encounters among their elements.

Chapter Eight: Conclusion

This final chapter brings the thesis to a conclusion. It is divided into three main parts. In the first part, I provide a synthesis of the research by highlighting the main points of my research journey. Then I present key findings, results of analysis and a model of *pocung* as a means of bringing together findings from the discussion chapters. I draw on the emergent ideas and insights in the three discussion chapters and discuss the common thread that connects them.

In the second part, I articulate the contributions of this research to knowledge and discuss how it addresses gaps in existing literature about traditional games. The contribution of this research is mainly in the context of education for young children in Indonesia, although findings may also be relevant to other contexts. I also present the contribution of this research to methodology and the practice of educational research from the application of a new materialist perspective in the Indonesian context. The pedagogical and ethical implications of this research are also identified. Finally, in the last part of this chapter, I acknowledge some limitations of this research and identify a space for further research before presenting some closing notes.

Synthesising the thesis

This research was initiated following a personal experience in encountering materials of traditional games from my childhood. This led to a journey of reviewing literature and theoretical perspectives to explore the reinvention of traditional games in the current context, particularly, in educational practices for young children in Indonesia. The main research question guiding this research was: How does the reinvention of traditional games inform the education of young children in Indonesia?

I reviewed classical and contemporary literature of games and traditional games to understand basic conceptualisation of key terms in this research. The essential groundwork for studies of games (Avedon & Sutton Smith, 1971; Culin, 1958; Huizinga, 1970; Roberts et al., 1959) provided a basic understanding of games as a form of play, as well as contributing to culture and spiritual rites. While some aspects from these studies are relevant to my study, I also sought input from contemporary literature that contends research on games should move beyond games-play associations to generate more creative thinking about games (Malaby, 2007; Stenros, 2017). Focusing on the notion of traditional games, the existing literature highlighted the characteristics of lasting for a long period of time, transmission across generations, and embeddedness in a particular social and cultural context (Casbergue & Kieff, 1998; Hall, 1995; Howard, 2005; Mawere, 2012; Purwaningsih, 2006; Sierra & Kaminski, 1995; Sujarno et al., 2013). Substantial studies in the literature provided details of traditional games, including types and procedures of games, objects and tools used in games, and cultural values attached to games. However, knowledge generated from these studies mainly focused on what games *are* and overlooked what games *do*. The literature also conceived only humans have an active role in games, while other aspects (materials, animals or environmental factors) remain passive or are unnoticed.

In the context of education for young children, traditional games have been positioned as preparation for entering adulthood, preserving cultural values and maintaining cultural identities (Ajila & Olowu, 1992; Balci, & Ahi, 2017; Chepyator-Thomson, 1990; Dubnewick et al., 2018; Edwards, 2012; Sierra & Kaminski, 1995; Winarti, 2016). With the prevailing dominance of quality discourse in education (Moss, 2014; Duhn & Grishaber, 2016), traditional games have been integrated into

classroom activities through lesson plans as part of quality assurance (Ariani, 2011; Dubnewick et al., 2018; Winarti, 2016). The gaze of discussion about learning processes in traditional games has been directed at individual children and development of skills. This sets a limitation for understanding learning only from children's cognition. It also positions traditional games as a means to achieve certain learning goals, rather than considering games as a learning event.

Addressing some identified limitations in the current literature, this research aimed to investigate traditional games as learning events with a focus on different materials and materialities of games. A new materialist perspective as the theoretical framework of this research provided a language to make visible performative aspects of what traditional games *do* from the process of materialisation (Lenz Taguchi, 2010; 2014). This perspective also influenced the methodology of this research, as a qualitative case study (Merriam, 2009; 2010), by using common research methods differently (Fox & Alldred, 2015). Analysis of data in this research was a diffractive process of illuminating connections between different components of traditional games (Barad, 2007; 2008; Lenz Taguchi, 2010; 2014). This process generated new thinking and conceptualisation of traditional games. In the following section, key findings of this research are presented.

Key findings of the research

In drawing together findings of this research, I mainly adopted the notions of intra-active pedagogy and performative agency from Lenz Taguchi (2010). As Lenz Taguchi developed these concepts from the thinking of feminist physicist Karen Barad (2007; 2008) and the philosophy of Gilles Deleuze and Félix Guattari (1987), I also made connections to some of their concepts in the analysis. From fieldwork, I found different kinds of traditional games have different significant aspects of

material or materiality. The materiality of space, for example, although relevant to all games, is more salient in *jéthungan* (hide-and-seek game). In illuminating what the material aspect *does* or *performs* in a game, its narrative from fieldwork is connected with other narratives and elements from elsewhere (Bone, 2018), and together are read through one another in diffractive reading and analysis. In this way the notion of traditional games was reconfigured and reinvented to develop new ideas about games. Different material aspects and key findings resulting from analysis are presented in the following sections.

The materiality of space: a performative agent of traditional games

In chapter five I analysed the materiality of space as a performative agent in traditional games. Starting from inside the classroom, children were introduced to *jéthungan* (hide-and-seek game), a space near a carpeted area of the classroom became an important part of a learning event. An entanglement of different materials and materialities in this space, including the carpet, the chair, the whiteboard, the wall, the floor, the seating arrangement and position of different bodies constituted ongoing intra-actions in this event. A series of learning events took place throughout the intra-activity between these materials, children and teachers as they continuously affect and were being affected by each other. When the classroom teacher started a lesson, multiple material-discursive practices occurred when children gave responses and engaged in a dynamic discussion about the game. The agency of space emerged through ongoing interconnections with other elements of the events.

Moving outside the classroom, a performance of *jéthungan* activated the potential energies of a place, turning a seemingly quiet and passive play area into a vibrant space. The area with a fixed identity based on its features became a different space with potentialities (Meillassoux, 2012) when playing the game. Figure 8.1

below returns to visuals from chapter five to show how spaces act as performative agents (Lenz Taguchi, 2010) in the game and how their actions affect other matter and organisms.



Figure 8.1. Space as a performative agent in *jéthungan*

As shown in figure 8.1 above, the commonly taken-for-granted inanimate existences in the area, such as trees including a big *beringin* (banyan tree), a high contoured wall, a gate with concrete pillars, concrete drain crossing the ground, paved ground surface and uncovered ground, became active players of the game. Hanging roots of *beringin* covered hiding children, the concrete drain let children squeeze in to hide, and the contoured wall concealed children standing next to it. These spatial elements were involved in hiding children from the sight of the seeker. Performative agencies of the spatial elements in this context were enacted through actions or doings (Barad, 2012a; 2014), in entanglement with children, discursive elements, such as shouts and conversations in the game, movements and other elements of the game.

Space, together with other elements, intra-actively constitute the *jéthungan* game. Space is not merely a location where the game takes place or a background of human activity. Rather, it is an essential part without which a game cannot be performed or played. Space, in the context of traditional games, is also permeable with no fixed boundaries. It allows the space to always be in motion and shift from

one space to another. Different spaces are created during the games. From an orderly space in the beginning of a game, when the description and basic rules of the game is explained and agreed upon, to a chaotic space when the game starts to play and some agreed rules are negotiated. The game also creates a striated space when it is structured and unidirectional, but can quickly change into a smooth space when it runs in multiple directions and is less-structured.

A key finding of this thesis is the materiality of space as a performative agent in traditional games. As a performative agent, space acts and performs in an ongoing intra-activity throughout the game, in which its action and performance continuously affects and is being affected by other matter, materials and living organisms. Giving attention to the materiality of space as a performative agent changes the established conceptualisation of the game and common understanding of learning processes in it.

Traditional games are not only characterised by what they *are*, as depicted in existing literature, but also what they *do*. The games perform as intra-actions between different entities in space, rather than relying on human intentions. This performative understanding of games creates new thinking about learning processes involved in the games. Rather than only focuses on children's cognition, learning can take place in ongoing intra-activity between different matter, materials and organisms in traditional games. It is a complex process involving different materials, living organisms and the environment, apart from learning children themselves (Lenz Taguchi, 2010). In the contemporary classroom of education for young children, traditional games become an aspect of intra-active pedagogy when attention is given to all human and non-human as well as the material environment.

Bodies and movements: joining forces in continuous experimentations

Another key finding in this research, presented in chapter six, relates to the materiality of bodies and movements in traditional games. With a focus on circle and singing games, *jamuran* and *cublak-cublak suweng*, from the case study, different bodies and movements were found to be forces that keep the games in continuous experimentations. Bodies in these games are not only human bodies, but also embodied non-human bodies and the body of a material object.

In *jamuran*, bodies of different everyday materials, such as chairs, tables, candles and refrigerators, as well as non-human bodies, such as flowers and monkeys, are enacted through the embodiment of different types of mushrooms. Some visuals from chapter six, presented in figure 8.2 below, show the enactment of different bodies and movements in the game.



Figure 8.2. Bodies and movements in *jamuran*

These embodied mushrooms are performed in intra-actions with the materiality of the song accompanying the game. Lines of the song become discursive inscriptions that intra-actively play with bodies of embodied mushrooms through different movements in the game. Each round of *jamuran* becomes a material-discursive practice in which different bodies meet and constitute each other in an ongoing intra-activity (Lenz Taguchi, 2010). These bodies are forces that join in different movements as unpredictable experimentations (Olsson, 2009) in the game. The material-discursive practices and joining of forces and movements in this circle and

singing game become a space for learning as intra-actions between different elements.

In *cublak-cublak suweng*, similarly, children's bodies and the body of *suweng*, as a material object, meet as joining forces that constantly move as ongoing intra-actions throughout the game. The movement of these joining forces is always different in each round of the game. With discursive force of an accompanying song, it becomes an unpredictable experimentation of what will happen next. Especially in the last part when a guess should be made of who is the *suweng* holder. Different manoeuvres are made as experimenting movements to trick the guesser.

Analysis presented in this thesis shows that traditional games become a space where different bodies and forces meet to increase their capacity through different movements, and this what learning is about (Olsson, 2009). Essential in this learning process is a joyful feeling associated with the joining bodies and forces (Olsson, 2009). Viewing traditional games as a learning space addresses the complexity of learning as an ongoing process, rather than transmission of knowledge.

Thing-power: the agency of material objects in traditional games

In the last discussion chapter, the agency of material objects or things in traditional games was the focus of analysis. Using the games of *dakon* and *cublak-cublak suweng* as cases to analyse, stones are central material objects and significant to the games. In *dakon*, stones initiate the game from the very beginning by making children pick them up from the ground, clean them, hold and carry them to class. Then, stones start to play *dakon* with children as they move from one hole to another and even determine who is the winner of the game with their counts. In

figure 8.3 below, visuals from chapter seven show stones as an active player in different games and activities with children.



Figure 8.3. Stones play intra-actively with children

Giving great attention to stones in this game can make visible the way things are transformed, from seemingly inert and inactive existences on the school playground to active and alive through playing traditional games. Stones also hit me in such a way that made me recall my childhood memory of playing stone ‘marbles’. It was an affective moment when I sensed being enmeshed in the materiality (Hickey-Moody, 2016) of stones. I had a visceral response in remembering the game as a re-turn to a key moment in the past (Barad, 2014), that allowed me to enliven and reconfigure the memory and made it possible for ‘the past to talk to the present and the future’. Through a process of materialisation (Lenz Taguchi, 2010; Rautio, 2013) by taking the perspective of the material in understanding an event, I added new meaning to my experience and understood that not only was I playing games with stones, but the stones also played back (Gunn, 2017; 2018) with me. The stones invited me and made me play with them in a certain way in stone marbles.

Analysing traditional games as a process of materialisation makes visible the thing-power (Bennett, 2010), a capacity that enables an object to transform from inactive to active. Further, thing-power also allows material object(s) to have performative effect on surroundings, including humans.

Traditional games as an aspect of intra-active pedagogy

From key findings resulting from analysis of different materials and materialities in traditional games, I pulled together common threads and drew on new thinking about traditional games in the context of contemporary education for young children. Across different traditional games young children play today, a feature they have in common is that the games become a space where children can express themselves in their connections with other children and with the environment. As shown in visual data, children's actions in traditional games move beyond cultural stereotypes of gendered bodies from a Western perspective. They challenge these stereotypes as they play the games together regardless of gender, ability, social, economy and religious associations attached to them. Children show their agency in determining the direction of their learning through (re)negotiations and varied decision-making during the games. In traditional games, children are active "co-creator[s] of knowledge, identity and culture" (Dahlberg et al., 1999, p.48), rather than only receivers and reproducers. Unlike formal learning that takes in a single direction towards predetermined objectives, the pedagogical process in this space takes multiple, unpredictable directions. This agency, however, is not owned but emerges through entanglements with other aspects of games in ongoing intra-activity.

In general, traditional games are considered an aspect of intra-active pedagogy (Lenz Taguchi; 2010) that takes account different elements, human, nonhuman, matter and organism, as constitutive in the learning process. Being intra-active means the games are constituted by different elements, including space, bodies, movements and things, that act upon and affect and are simultaneously being acted upon and affected by each other. The learning process in traditional

games takes different forms and does not focus on and start from individual children (Lenz Taguchi, 2010; Olsson, 2009). It is situated in entangled connections between children, language or discourse, and materials in the environment. It happens at the moment hanging roots of a banyan tree cover a hiding child, or a concrete drain squeezes the body of a child in it, and along with any utterance or verbal expression such as '*pung*' and any name being called. All of those details are intelligible among each other, and together are constitutive of the learning moment.

The learning process also happens when different forces and bodies are joining and increasing their bodies' capacity (Olsson, 2009). Like in the *jamuran* game, when the discursive force of lines of the *jamuran* song meet the force of children's body movements in a circle, together they create a learning moment of becoming mushrooms. Adopting an intra-active pedagogy in educational practice can make the learning process become messy and go to different directions (Olsson, 2009). It also acknowledges learning as a complex process (Lenz Taguchi, 2010) with multi-layered connections among different aspects in the event. In the messiness and multi-directionality, however, the learning process opens up with unpredictability and the unknown, so knowing in this process is closer to knowledge production, rather than knowing re-production. It takes continuous movements and experimentations for new knowing to emerge.

The notion of intra-active tradition

Stories about traditional games from a new materialist perspective generate a new understanding of what the games *do* and *act*, rather than circling in the established understanding of what the games are. These stories unsettle and disrupt the notion of tradition in the context of traditional games that has been firmly established and remained unquestioned. The common understanding focuses on the

long existence of the games, the way in which the games are passed across generations, and the cultural values attached to the games.

In this research, with greater attention given to materialisation processes in traditional games, this familiar understanding of tradition is shaken. It becomes visible that traditional games change in subtle ways, whether in the space they are played, involving bodies and movements, and material objects they use. The transformation of different elements of traditional games takes place in the intra-activity of games. It is also evident that the materials of traditional games drives the change in the games as a reinvention of traditional games. It activates an affective moment when bodies connect to material and increase their capacity to transform and act (Hickey-Moody, 2016; Olsson, 2013). Starting from the material, the transformation in the games becomes visible and flows as a diffractive process. It opens up new possibilities in looking at traditional games.

Findings and analysis of traditional games generates a notion of intra-active tradition, where the very idea of tradition becomes open to possibilities and flows in its materiality to connect with other materials in unexpected ways. Tradition is not a fixed entity to be transferred or passed to younger generations. Rather, tradition is a dynamic entity with unpredictable moments of what might come. It moves in different directions and its transmission is not always linear, but can be circular or other patterns. This disrupted view of tradition is a new account of continuity and change as intrinsic characters of tradition (Howard, 2005). In this way, the concept of intra-active tradition enables any practices of tradition, including traditional games, to cope with the contemporary context of children, childhood and education.

Re-invention of traditional games as *laku* in seeking knowledge

During the journey of this research, I came to a new understanding and new way of thinking about learning in the context traditional games, that affects my knowledge about learning in general. This new thinking as a reinvention of traditional games brings me back to my early inspiration for learning and seeking knowledge, as mentioned in the introduction chapter, a particular version of the *pocung* song about seeking *ilmu/ngelmu* or knowledge. The song was composed by *Mangkunegara IV*, an aristocrat from Surakarta, and written in *Serat Wedhatama*, classic literature about Javanese philosophy and worldview. Revisiting the lines of this *pocung* song after this research journey, I come to a new realisation of its philosophical wisdom that resonates nicely with the complex learning process of traditional games as viewed from the concept of intra-active pedagogy. The resonance of lines in the *pocung* song and intra-active pedagogy is explained below.

First, *pocung* suggests practice or doing as an effort to gain knowledge. The word *laku*, which literally means an act of walking, essentially refers to movements as an active process of continuous experimentation of possibilities and not only changing position from one point to another (Olsson, 2009). Among Javanese people, *laku* is not always about physical movement, but can be related to thinking or spiritual movement. Any effort towards change, improvement or moving forward can also be considered *laku*. As I reflect on the journey of this research, with shifts in my understanding about theoretical concepts, methodology and positionality, I have been going through *laku* in my learning process as a researcher. *Pocung's* advice, from a new materialist account, can be understood as a performative process of learning because what matters is the doing in seeking knowledge.

Further, *pocung* indicates that to keep moving forward, learning involves motivation or desire to act, an *affect* that goes through a body (Ivinson & Renold, 2013, my emphasis) and increases its capacity and potential to perform (Olsson, 2013). Finally, the closing line of the song illustrates the importance of an integrity of character and effort to face and overcome challenges to gain knowledge. Integrity is not an attitude, but an enactment that closely relates to new materialist concepts of agency that are “about the possibilities of mutual response” (Barad, 2012a, p.55) and ethics that is “taking account of the entangled materializations of which we are part, including new configurations, new subjectivities, new possibilities” (Barad, 2012a, p.55). Reading lines of the *pocung* song with new thinking about traditional games as informed by new materialism brings me to a different space. I have a whole new understanding of *pocung*’s message, like what I get through traditional games from my childhood as I enlivened and reconfigured childhood memories throughout the journey of this research. While this journey allowed me to expand my horizon by gaining new perspectives, mainly from Western contexts as it was conducted in Australia, I find this journey also deepened and strengthened my roots as a Javanese person. I am sure that from now on I will recite the *pocung* song differently. I consider it a reinvention of traditional games as *laku*, a complex learning process, is inspired by Javanese philosophy and informed by the new materialist perspective.

Contributions of the research

The main contribution of this research is the application of new concepts to traditional games. Using a new materialist perspective as a theoretical framework, this thesis has worked beyond categorisations commonly applied to the games. This research also moves away from a familiar account of representationalism in educational research, with its triadic separation of “the one represented, the

representer, and the verbal representation itself” (Davies, 2018, p.125). It presumes the researcher’s dominant capacity, as the representer, for representing reality in verbal representation (Davies, 2018). Following this account, the represented reality in this research includes both the observed traditional games and the researcher’s reflexive thoughts about the games.

With a new materialist approach, this research offers a performative understanding of traditional games by giving attention to different components and intra-connections among them in an ongoing intra-activity of the games. Like multiple-dots constitute a circle, these components are flattened out, non-hierarchical, and equally important in constituting the games. As intra-actions, the games do not recognise pre-existing entities preceding intra-connections of constituting components. Being intra-active, traditional games are “*events of an intertwined material-discursive and embodied reality* in the intra-actions between different kinds of matter and discourse” (Lenz Taguchi, 2010, p.90, original emphasis). All components, human-nonhuman, animate-inanimate, nature-culture, are considered performative agents which have power and agency to act upon others and the world. These performative agencies are not owned separately by each component, but emerge through their entanglements. I visualise this new thinking as a circle in figure 8.4 below and I call it the *pocung* way of understanding traditional games.

2013; Saddhono & Pramestuti, 2018). *Macapat* contains Javanese philosophical and spiritual values, delivered as *pitutur* or advice through songs. There are eleven different songs in *macapat*. Each song illustrates a different stage of the life journey from birth to life after death (Achmad, 2016; Mardimin, 1991). *Pocung* is the last song in *macapat*, which reflects the final journey of human life and relates to its lexical meaning.

The word *pocung*, also written as *pucung*, originates in *pocong* which means a dead body wrapped in a white shroud (Saddhono & Pramestuti, 2018).

Considering this literal meaning, messages in the *pocung* song mainly are a reminder about preparing for life after death. With an influence of Islamic values, it is believed among Javanese that all deeds people make in their lives cease when they die, except useful knowledge, good deeds and prayers from righteous children (Saddhono & Pramestuti, 2018). This belief is the main content of *pitutur* in the *pocung* song. The song I learned in childhood is an example of advice for seeking knowledge, while other versions of *pocung* advise people to do good deeds and to raise children well.

Pocung also has another meaning, as the name for *keluwak/kluwak/keluwek* tree seed, commonly used as seasoning in Javanese cuisine (Mardimin, 1991). *Keluwak* tree is a native plant of Indonesia which seeds have unique characteristics. Seeds of unripe *keluwak* are deadly poisonous and were once used as toxin attached to arrows in the past (Chodjim, 2016). In contrast, seeds of ripe *keluwak*, with proper pre-cooking preparation, become food seasoning with delicious taste and rich in nutrition, particularly vitamin C and iron (Chodjim, 2016). The unique characteristic of *keluwak* becomes a metaphor for advice delivered through the *pocung* song. In seeking knowledge, for example, learning at a superficial level can

be dangerous, like consuming unripe *keluwak*, but going deeper into the content of learning results in good understanding, like good tasting ripe *keluwak*. Also, the effort to gain useful knowledge is often a complex process of learning, like preparing *keluwak* before for cooking to remove poison and gain nutrition. The name *pocung* is used to give a taste in a conversation or advice and make it more engaging or less-boring (Chodjim, 2016). Musically, despite the deep meaning of its message about the summit of a life journey, *pocung* is characterised as relaxed, less-serious fun and enjoyable, like tasty food with seasoning (Mardimin, 1991; Saddhono & Pramestuti, 2018). I remember in kindergarten and primary school, I learned different riddles and jokes as *pocung* song, but I also learned many life lessons through this song.

With complex and multi-layered of meanings of the word *pocung*, which also reflects the complexity of learning process in traditional games, I find it appropriate to use *pocung* for the new thinking about traditional games in this research. It becomes the main conceptual contribution to knowledge, because the *pocung* way of understanding traditional games is a new way of reinventing the games. It opens up possibility, not only for children to re-invent traditional games, but also for the games to re-invent children. As shown in the narratives and visual data of this research, the games initiatives do not merely come from children as commonly believed about children's games. Material and materiality of traditional games, which vibrant and powerful entity is agentic, can also initiate the games and influence surroundings, including children, to act and perform in the games. The material opens the way to new thinking as a reinvention of traditional games. Performative agency of materials means traditional games re-invent children and continue to evolve across time and place.

As a contribution to educational practice in Indonesia, findings of this research show the continuous existence and significance of traditional games in contemporary education for young children in Indonesia. A performative understanding generated from findings shifts the position of traditional games, from previously being used as a learning tool to become an aspect of intra-active pedagogy. Games that formerly were positioned as an intermediate goal, where the mastery of doing the game is a means to achieve “real” learning objectives that are usually standardised and pre-determined, are now viewed as a complex learning process. The notion of learning is no longer centralised in individual children’s cognition, but in intra-connections of children, language, materials and the environment. It is in the ongoing intra-actions of *material discursive* forces and intensities (Lenz Taguchi, 2010) and micro-politics (Olsson, 2009) that occur in the classroom and make a difference in the pedagogical process.

This research also contributes to the practice and methodology of educational research, with application of the new materialist perspective to investigate traditional games. It allowed the research to use common research tools differently and generate a new way of thinking. The use of visual methods is particularly significant in this research because they make visible details of materiality of space, bodies, movements and objects in different games activities. The use of diffractive analysis was also important to look at visuals, and other data of this research, beyond common practice of representationalism in qualitative research. Concentrating on the materialisation process in the games, this analysis establishes new connections of ideas or concepts that are seemingly disconnected and brings forward new ideas. This research also exemplifies an ongoing process of conducting educational research. It involves transitions throughout the process and challenges a “common-

place” of conducting qualitative research in social sciences that is often controlled since in a planning stage and practically “is entrapped in its preconceptions” (Davies, 2018, p.115).

Contextually, this research makes a contribution by bringing the Indonesian perspective into conversations about traditional games at a broader level. It also draws a new and particular connection of Javanese philosophy with theoretical concepts in new materialism. This connection opens up a new direction for further research in exploring other potential intertwining thinking of Western and non-Western contexts. Particular to the educational context of Indonesia, this research also contributes by introducing a new theoretical perspective to studying traditional games and goes beyond the dominance of cultural and developmental discourse. Findings of this research add new colour to educational practice in Indonesia. This research may also encourage use of the new materialist perspective for educational inquiry in Indonesia, considering its potential to uncover different aspects of education. In the next section, I present implications of this research and recommendations for key stakeholders in education for young children.

Implications and recommendations of the research

Based on key findings of this research, I present a number of implications and recommendations, particularly for educators, policy makers and educational researchers. This is relevant to the purpose of this research in exploring the way in which reinvention of traditional games informs education for young children in Indonesia.

Findings of this research show traditional games as an aspect of intra-active pedagogy that informs pedagogical practice in the contemporary classroom for young children. Educators of young children can apply these findings and use

traditional games as a site for creative and productive learning. Engaging children in traditional games gives them opportunity to explore and respond to different materials and materiality of traditional games. This engagement, however, should not be restricted by structuring games in an organised and well-planned lesson plan. Rather, allowing children to encounter different materials of games is important for the learning process as each encounter in traditional games is a learning moment.

Apart from the context of traditional games, the *pocung* way of understanding the complex learning process in the games as an intra-active pedagogy can be implemented in a broader context of children's activities at school. It provides a new thinking tool and a way of looking at layers of entangled components in learning activities. It allows educators to give equal attention to human and non-human aspects, especially the material aspects and the environment, in providing learning activities. In this way, educators can develop new approaches in preparing curriculum and learning programs that are informed by intra-active pedagogy. Also, a careful consideration of materials as active agents in the children's learning shifts the focus from the individual child's thinking to different contributing components of a learning event. This shifting focus challenges the taken for granted learning stories and at the same time creates new stories about learning. These stories enrich paradigms, theories, and practices for the education-of young children.

The educational implication of this research is not only applied to an Indonesian educational setting. The international contexts of education can also benefit from the *pocung* way of understanding the complex process that takes place during and through children activities. With considerations of multi-layered constituting components of learning, this new understanding informs the pedagogical practice to move away from the dominating view of learning and relationship

between human and non-human in learning contexts. It also opens up space for emerging dialogues about intra-active pedagogies across different contexts of education for young children.

Direct engagement with the material world is intrinsically ethical (Barad, 2012a). Foregrounding material aspects of traditional games in this research, consequently, has some ethical implications in educational practices for young children. Ethical relations in traditional games extend beyond human interrelation and include human–nonhuman complex relations. With a focus on material aspects of games, this research moves from ethical principles to ethical practice. This ethical implication informs educators to revisit and expand the existing understanding of ethical dimensions of traditional games. In addition, similar to its educational implication, the ethical implications of this research can be expanded beyond the context of children's games. Performative understanding of different components in learning activities allows a reposition of ethics as central in pedagogical practice.

For policy makers, this research offers an opportunity to revisit current educational policy using new thinking about children's games in education and about learning processes in general. I do not suggest a drastic change at a higher level of regulation, such as national framework of education, but rather focus on micro-politics in the classroom and policy at the school level. Policy makers at schools need to re-consider their educational program and start to include material aspects as an important element. While prepared lesson plans are still important, the school program also needs to give a space for unpredictability and uncertainty in the learning process. Thus, learning objectives are not always pre-determined, but are also open to different possibilities. Nevertheless, a support from a macro level of education, such as the national policy of guidelines for developing school curriculum,

is needed to induce a change to happen. Especially in revisiting the notion of quality and accountability of education, untying the tight control and certain approach to the notion can be a starting point of opening up new possibilities for future changes in educational practice.

For educational researchers, especially in the context of Indonesia, this research opens up a new direction of conducting educational inquiry using a new materialist perspective. This new practice of research challenges and disrupts the established practice that focuses on individual children as learners and positions human as the centre of discussion. Addressing material aspects of children's games and other learning events will open up possibilities to create new connections of ideas or concepts, and generate new thinking and understanding.

A closing note: a space for further research

Looking back on my research journey, from the beginning of my wonder in encountering games materials from my childhood and followed by a series of other encounters with traditional games in many different forms, I realise the great breadth of knowledge about the games as subject matter. It takes so many stories to draw different sides or aspects of traditional games, and my story is only one among numerous others. With my story, not only the story produced through an analytical process from thinking and working with theory, data, stories and other texts in this research, but also about myself as a becoming researcher throughout the process (Jackson & Mazzei, 2012). Engaging with different concepts from a new materialist perspective changed the way I look at traditional games and influenced the way I look at the world generally. I am sure if I visit my parents' house and open the same cupboard where my childhood games materials are stored, I will perceive them differently. The same childhood memories attached to those materials have travelled

along the journey of this research which has added new meaning in their continuous re-configurations.

In this research, threading some abstract conceptual tools from a new materialist approach made it possible to open up a new way of knowing space, bodies, movements and things as they constitute traditional games. Put it in the context of education for young children in Indonesia, this approach provides a performative understanding of children's games as a learning event. This new understanding is a way of reinventing traditional games, which informs pedagogical practice for young children in this context.

"The world articulates itself differently" (Barad, 2007, p.335), so that taking a perspective of the world through its materiality is a way to open up its potentialities. In the context of traditional games, different material aspects of the games become potential articulations of more stories about the games. I remember an intriguing statement of a parent in my case study. In the interview he shared an enlightening view about what traditional games might mean and an understanding of tradition in general. He said,

Being traditional means to immerse with nature. For children, to let them inter-act with the environment and give response to the earth, the ground, the trees, the plants, or the stones, in essence will grow them...children will have a direct engagement with materials in their surroundings and that is a pedagogy (Heru, personal communication, February 17, 2016).

Now, after working with different materials of traditional games, I look back on what this parent said and understand it differently. I have come to a new realisation and understanding of what he explained in the interview was actually about an intra-active pedagogy, a growing educational concept from the Western perspective. Interestingly, he gave this perspective as a Javanese person whose view about the world is influenced by Javanese ethics and worldview. I carefully think that

perspectives of two contexts from different parts of the globe can be connected through materials of traditional games. This connection, I believe, can be strengthened if more stories are revealed.

I would like to conclude this thesis with a quote from Chimamanda Ngozi Adichie in her eye-opening talk about the danger of a single story. The talk is my inspiration to keep seeking different stories.

Stories matter. Many stories matter...when we reject the single story, when we realize that there is never a single story about any place [and any entity of any kind], we regain a kind of paradise (Adichie, 2009, para.15).

In today's ever changing society, more stories are needed in education in regards to paradigmatic, theoretical and contextual diversity (Moss, 2015b). If a story about traditional games from a particular context of education for young children in Indonesia can make a difference, more stories about children's games definitely can create a better understanding of this aspect of children's lives.

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