Bokashi composting as a matrixal borderspace

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How would patterns of consumption change if we faced not litter, rubbish, trash or "recycling" but an accumulating pile of lively and potentially dangerous matter? (Jane Bennett, 2002)

INTRODUCTION

The European Union has set as its long-term goal to become a resource efficient "recycle society" by 2020. In a perfect recycle society the surplus materials are turned into resources, and they flow from production to consumer and back to production in an endless circular motion. The European Union is strongly guiding both production and waste management in this direction with its waste policies and legislation. This goal also affects the way people live their everyday lives in homes and offices. Waste has become a complicated matter, and new routines and treatment practices are constantly forming around waste. Waste has ceased to be an abject to be quickly flushed down the drain or dumped in the bin. Instead, people are struggling to find environmentally sound ways to treat their waste. The overriding ethos motivating current waste practices are feelings of guilt and duty (see Hawkins, 2006).

In line with Gay Hawkins (2006), I propose that instead of denying and debarring (outclosing) waste we should rather try to *recognise* and *learn to co-exist* with it. In order to co-exist peacefully with waste, we need to allow other emotional registers than guilt and disgust to define our relationship with it. In order to let that happen, we need to welcome waste into our lives. We need to care for waste.

In this article, I will draw on feminist thinkers such as Rosalyn Diprose (2002) and Bracha Ettinger (2006; 2010) to theorise the potential of corporeal encounters as the basis for a caring relationship with waste (as also suggested by Hawkins, 2006; see also Diprose, 2002). I will explore the ethico-political potential of one specific form of waste treatment: Bokashi composting. I argue that Bokashi practice forms a *matrixal borderspace* (Ettinger, 2006; 2010), a corporeal contact zone in which ethical relations with waste emerge.

The paper progresses as follows. First, I will introduce my own broad definition of waste and roughly outline the recent history of waste management in order to illustrate what an intrinsic part of human societies it is. Then I will dive further into a theoretical discussion on compassionate borderspaces as encounter-events in which corporeal ethics is enacted. I will also introduce the Bokashi composting as a practice and the data that I have analysed. In the concluding section, I will put theoretical concepts to use and analyse Bokashi practice as a matrixal borderspace and demonstrate how it enacts a compassionate, caring and even loving relationship with the usually abjected matter.

FROM WASTELESS ETHICS TO ETHICS OF WASTE

Waste is an intrinsic part of human collectives. Human ways of life always produce material leftovers which have to be managed and moved along. The daily mundane waste management is a cultural performance and material practice in which certain technologies, bodily techniques and cultural understandings are utilised. Within this performance, waste is both disposed of and defined. Thus, waste is not a rigid category but, instead, continually produced within practical doings and in relation to other objects and environment.² As Mary Douglas (2002: 2) famously puts it, where there is dirt there is a system: "Dirt is essentially disorder – matter out of place". However, unlike Douglas contends, waste is more than just a product of the cultural meaning-making. As an unavoidable byproduct of practical living waste is also *matter* which *demands* action. By urging for action, waste itself shapes societies (Hawkins, 2006: 2).

For the purpose of this article, I define waste broadly as the unavoidable material surplus of living that has to be taken care of in the course of everyday life. Understood this way, waste is not necessarily considered filthy and disgusting abject, it is merely material surplus that needs to be managed or otherwise it gets in the way. Thus, waste is not always equivalent to dirt.

In pre-industrial societies, the material surplus was mainly treated within households and re-utilised as thoroughly as possible. Manure was used as fertiliser, clothes were patched and remodelled, scrap metal was melted and remoulded. Hawkins (2006: 104; see also Strasser, 1999) calls this pre-industrial moral economy of waste *living prudently*. In an early industrial era, households were a valuable source of raw material for industry. In some countries (e.g. USA, Nazi Germany) households were obliged by law to collect their surplus bones, rags and scrap metal for the use of national industry. For instance, paper industry relied on households for the linen rags that were utilised as raw material, for example for bank notes. (Strasser, 1999.)

In industrialised societies waste was no longer utilised within households. Instead, it became a problem that was solved regionally by technological and institutional means. An effective, institutionally organised waste management is currently considered as one of the main characteristics of modern, urban societies. Forms of waste management and the level of its institutionalisation are even used as means to evaluate the level of "development" of societies (see e.g. Hoornweg & Bhada-Tata, 2012).

According to Hawkins (2006: 16), the moral economy of waste that was developed concurrently with the industrial mass production was based on the ethos of "distance, disposability

² As such, it is also not an exclusionary and finite category, even if a thing is defined (in and through practices) as waste, it will not necessarily always stay waste.

and denial". The institutionalised waste management effectively released the households from the mucky reality of waste treatment. Hence, from the physical, sensual matter that waste is, it was turned into an abstract problem – something that someone else took care of. For ordinary citizens waste ceased to exist as soon as it was flushed down the toilet or thrown in the bin. The citizens were encouraged to consume – and to lay waste. In an ideal consumer society, everything was to be disposable and replaceable, and the institutionalised waste management was to make disposed surplus matter almost magically vanish.

Since the 1960s the ethos of distance, disposability and denial were challenged by the green environmentalist movement, which criticised consumer society for using up the Earth and its natural resources. One of the most powerful imageries of the environmentalist movement was the ever-growing trash mountains that were swelling on the outskirts of every city. (Hawkins, 2006: 31.) Since then, wasting has become mainly a moral issue; laying waste was no longer understood as purifying self but as polluting the Earth.

Although the green environmentalist movement brought up the urgent ecological issues concerning the side effects of mass consumption, Hawkins (2006) among others argues that its own ethos of waste was inherently biased. The environmentalist ethos of waste was based on "a disenchantment story", which reproduced the cut between nature and culture. The disenchantment story understands waste-producing humans as morally corrupt beings. The environmentalist ethos denies waste its vibrancy and transformative nature and reproduces it as an abject to be closed out and avoided. Environmentalism aims for the world without waste (Hawkins, 2006: 8-9). According to Hawkins, the waste practices deriving from the environmentalist ethos of waste are mainly motivated by a feeling of guilt. Guilt has taken up room from all the other possible emotional registers of living with waste, such as disgust, wonder, joy, and curiosity.

Hawkins (2006) argues that current waste policies are still largely based on the environmental ethos of waste. The ultimate goal, as Dalessandro invites us to imagine, is to create a world without waste:

As you close your eyes tonight, imagine a world in which there truly is no waste. A world in which our everyday actions, from eating breakfast to driving to work, actually improve rather than harm the earth. It's a beautiful vision, and one we are certainly capable of achieving. (Dalessandro, 2016)

Needless to say, when scrutinised from the practical everyday level, this beautiful vision of a wasteless world is nothing but a fantasy. Even though it is possible, and even preferable, to aim for a society that utilises most of its waste as raw material, the waste itself (as surplus in the way) does not cease to be constantly produced and managed in the midst of people's mundane lives. The clumsy objects in all their materiality do not cease to be in the way unless they are properly taken care of. For example, fragments of a broken energy light bulb on the floor are definitely waste and seriously in the way until they are properly disposed of. Or a sick baby's vomit on newly changed sheets. A world without waste would be a world where everything is useful. No matter how much we tried, there will always be leftovers, outcasts and cumbersome things that have no instrumental value to us. There cannot be a world without the unstable, potentially dangerous "other" that refuses to be utilised and useful.

CORPOREAL ETHICS IN MATRIXAL BORDERSPACES

Although many feminist thinkers have developed the concept of corporeal ethics with human relations in mind, they have nevertheless been searching for the possibility of an ethical relationship with the fundamentally different other. In feminist thinking, the Other/different is feminine as opposed to the masculine norm³. As feminine sex, waste is also culturally othered as mysterious, volatile and potentially dangerous matter.

Philosopher Emmanuel Levinas has famously defined the face-to-face encounters as bedrocks of ethical relations (Kenny & Fotaki, 2014: 4). Rosalyn Diprose (2002; see also Pullen & Rhodes, 2013; 2014) has furthered Levinas's ideas by stating that the possibility for ethical encounters is rooted in the *bodily and sensual engagement* which precedes rational thought and intellect. According to Diprose, ethical encounters are disturbing moments in which "something gets under my skin and thus I am made to think" (Diprose, 2002). Hence, embodied encounters, as well as generosity and openness towards difference and other ways of being, are prerequisites for ethical encounters.

I suggest that ethical relationship with waste – the ultimate rejected other – could (or even should) be built on corporeal affective generosity (see Diprose, 2002; Hawkins, 2006; Pullen & Rhodes, 2013; 2014). In the following section, I will experiment whether the concept of matrixal borderspace can be useful in understanding the ethical engagement with waste. To make my case, I will explore one specific practice of living with waste: Bokashi composting⁴. I argue that as a practice, Bokashi forms a "matrixal sphere of encounter-events" (Ettinger, 2006), which enhances corporeal ethics of waste. Since Bokashi is still a relatively little-known technique, I will shortly explain what it is before getting to my main point.

Bokashi is a Japanese word which means 'fermented organic matter'. It is a fermenting method in which leftover food is peeled and placed in a bucket and sprinkled with a handful of special Bokashi bran. The bucket is then sealed for two weeks, and the decaying mass is only stirred once in a while. After two weeks, the product is mixed with layers of soil and left again to stay for two weeks: "After another two weeks, the food is fully decomposed and incorporated into the soil." (My Squarefoot Garden, 2012.)

This arguably ancient Japanese fermenting technique is becoming increasingly popular because it is a simple and cheap method which can be applied even indoors in urban environments. During the last decade, Bokashi composting has expanded from a technique experimented only by few dedicated enthusiasts to a worldwide common practice. It is practised everywhere in the world from Canada to Philippines and Dubai.

Karen from Dubai describes her new "addiction":

...you layer your food waste – peelings, leftovers, egg shells, bones, the lot – in your bin and sprinkle it with Bokashi bran, an organic mix of good bacteria and microbes that 'pickles' your food waste at home rather than letting it rot in a landfill. From the start, I saw a dramatic reduction in our kitchen rubbish and, after just four days, my half-full Bokashi bin was producing lovely juice that can be drained off in a tap. (Iley, 2013:105)

³ However, feminists have greatly contributed to the environmental ethico-political discussion. See e.g. Alaimo & Hekman 2008.

⁴ This analysis could apply to any other composting method as well.

According to Kenny and Fotaki (2014), the ethical potential of matrixal lies in its potential to offer a space for encounters that take place in shared borders where subjects are only partially known to each other. It is a coexistent meeting place in which dichotomical oppositions such as us/them, culture/nature, living/dead, human/non-human do not exist (or at least are not relevant). It gives space for a compassionate recognition of the Other despite its fundamental otherness. Similarly Bokashi composting offers a site for entering into an affectionate, reciprocal and caring relationship with the formerly and ultimately othered matter. In Bokashi composting, waste as the unknown other becomes a *specific other* (as the fetus within the uterus), and "the subject is compelled to do what it can to care for it" (Kenny & Fotaki, 2014: 6). Bokashi is nurtured with curious affection:

When a new Bokashi practitioner gets started, the first cries of enthusiasm are bound to be heard when the very first juices are drained from the fermentation bucket. (Takalaiska, 2016; translated from Finnish to English by V.K.)

For the Bokashi practitioners, the bucket with its contents is a vibrant meshwork (Ingold, 2010) of all sorts of micro-organisms – microbes, yeasts, bacteria – of which well-being they are responsible for (yet can never have full control over it). Leftovers in the Bokashi bucket are not dead matter but throbbing with life. The human practitioner engages into a sensory and affectionate correspondence with the vibrant Bokashi collective and sensitises him/herself to its subtle means of communication, such as the consistency, colour or odour of the mass, the smell or the viscosity of the liquid it produces:

A healthy bokashi bucket smells more strongly of vinegar, often with undertones of the foods in the bucket – that scent is not perceptible outside the bucket, assuming the bucket is airtight and drained often, and it should not be overpowering when the bucket is open if you've drained the reservoir frequently and refrained from adding spoiled (slimy, moldy) foods to the mix. (Bokashislope, 2009)

When reading enthusiastic blog texts about Bokashi, it is evident that for the Bokashi practitioners a Bokashi bucket cannot be compared to the usual trash bin. Or would you share pictures of your garbage bin in your Facebook newsfeed? Unlike trash bins, the Bokashi buckets are not excluded from the everyday lives. Instead, they are treated as companions that share the homely everyday life of people. The buckets are not hidden behinds cupboard doors, quite the opposite, they are often placed on top of the kitchen sink where they are visible and easily at hand. Thus, the lived space is very concretely shared with Bokashi buckets. (See Kinnunen, 2016.) As Pia Pale, one of the Finnish Bokashi-bloggers, describes, she doesn't want to hide her Bokashi bucket in a cupboard because it would be difficult to fill the bucket and drain its liquids (which, as it happens, are not useless surplus but long-awaited "juice", "Bokashi-pee" or "tea" with almost miraculous qualities). As the buckets are placed in visible places, they are taken care of routinely in the flow of everyday life. In her blog post, Pia Pale has attached a photo of her children making Christmas decorations on the window with Bokashi buckets next to them (see Figure 1). The atmosphere in the picture is very peaceful and festive, and it almost seems that Bokashi buckets are taking part in the action as family members. The affectionate and caring correspondence with Bokashi makes it clear that waste (Bokashi) is a co-habiting companion in homes, not a rejected "other" despite its difference.



Figure 1. Family members enjoying festive Christmas atmosphere. From "Takalaiska," by P. Pale, 2016, http://takalaiska.blogspot.fi/2016/01/bokashi-paivakirjani-osa-4-talvi-ja.html. Copyright 2016 by Pia Pale. Reprinted with permission.

Takalaiska describes vividly her feelings of curiosity and awe which force her to take a peek in the soil factory and test the soil with her hands, although she knows that she might disrupt the fermenting process:

Maybe I'll go and have a peek in the soil factory tomorrow. Just to get into the vibe. By the previous experience I would expect the temperature to have reached lukewarmth. (Yeah, I'll just boldly stick in my bare hand to feel the temperature... even though I am slightly repulsed;)) (Takalaiska, 2016; translated from Finnish to English by V.K.)

As Takalaiska puts her hand in the bucket, she willfully launches into an intimate contact with the Bokashi mass in the middle of its transformation process. According to Donna Haraway (2008: 36), the physical touch itself has ethical consequences because it ramifies and shapes accountability. Haraway stresses that accountability, caring for, being affected, and entering into responsibility are not ethical abstractions but "these mundane, prosaic things are the result of having truck with each other."

According to Ettinger, the matrixal borderspace fosters affects that act to counterbalance violent impulses such as aggression and exclusion. The Bokashi composting practice stirs myriads of emotions, which are mostly laden with curiosity, excitedness and fascinance. The negative affects, such as nausea (of, e.g. sliminess or odour of the mass) or fear (of vermin or "bad bacteria") are also present in the encounters, but these feelings are overcome by curiosity and excitement. As Bokashi composting allures to corporeal and affectionate/sensual engagement with matter, it nurtures other sensory registers than disgust, which is often connected with rotting leftovers. As Kenny and Fotaki (2014) put it, the emergence of fascinance and awe counteract the destructive affects and thus they engender "proto-ethical paths to freedom-with-resistance."

ENCHANTMENT OF WASTE

The resistance impregnated by compassion, awe and fascinance is fundamentally different to one that is impregnated by fear, disgust and rage. (Ettinger, 2010: 19)

In Bokashi composting, the waste treatment practices are no longer motivated by guilt, but curious, corresponding and even loving attachment with matter. Curiosity, interest, excitement, and wonder are affects that are described when talking about Bokashi. Jane Bennett (2010) identifies the moment of transformation as the moment of ethical potential. It is in these enchanted moments of metamorphosis that matter shows its full potential and "thing-power". These enchanted moments are encounters in the matrixal threshold, which reveal that humans are not separate from "nature" or "non-humans" but always intermeshed with the more-than-human world (see Alaimo, 2010: 2). For the Bokashi practitioners, matter is not a static entity but ever-changing and full of potential. The Bokashi practice is most of all an on-going sensuous, creative experiment in co-operation with waste matter. The participants correspond and change each other in a mutually transformative "co-poiesis" (Ettinger, 2006).

Bokashi practice as a craft is a creative and experimental venture into the terrain of the unknown, launching into a relationship with something that is not fully controlled and which has unpredictable outcomes. Bokashi-meshwork is a life-throbbing mystery that cannot be fully grasped or owned. As Ettinger puts it, in the matrixal borderspace the subject's relation with the Other does not turn it into a known object (Kenny & Fotaki, 2014: 13). Generosity means being open to the otherness of the other without trying to gain control over it. Bokashi has its own thing-power which is outside human control. One can only join in the flux and enjoy "the vibe" (as Takalaiska puts it).

In Bokashi composting, waste matter is something that is not merely taken care of out of duty, but something to be thoroughly and joyfully engaged with. It is treated as a living organism – an interconnected meshwork of many becomings – which communicates and cooperates with the composter. As a result of this corresponding, compassionate engagement waste is no longer an unwanted, abject thing, but becomes a cohabiting companion.

REFERENCES

- **Alaimo, S.** (2010). *Bodily Natures: Science, Environment, and the Material Self.* Bloomington, IN: Indiana University Press.
- **Bennett, J.** (2010). *Vibrant Matter: a political ecology of things*. Durham & London: Duke University Press.
- **Bokashi The Fermentation of Organic Wastes.** (n.d.). In *Compost Guy*. Retrieved from www.compostguy.com/bokashi-resource-page/
- **D. S. Foxx.** (2009, August 21). Can you smell that? [Blog post]. Retrieved from http://bo-kashislope.blogspot.fi/2009/08/can-you-smell-that.html
- **Dalessandro, N.** (2016, June 27). Beyond 'Reduce, Reuse, Recycle' to a World Without Waste. Retrieved from https://www.ecowatch.com/beyond-reduce-reuse-recycle-to-a-world-without-waste-1881887019.html
- **Diprose, R.** (2002). *Corporeal Generosity: On Giving with Nietzsche, Merleau-Ponty, and Levinas*. Albany, NY: SUNY Press.
- **Douglas, M.** (2002/1966). *Purity and Danger: An analysis of the Concepts of Pollution and Taboo*. London: Routledge.
- Ettinger, B. (2006). Matrixal Trans-subjectivity. Theory, Culture & Society 23:2-3, 218-222.
- Ettinger, B. (2009). Yhdessätuotanto. Helsinki: Tutkijaliitto.
- Haraway, D. (2008). When Species Meet. Minneapolis, London: University of Minnesota Press.
- **Hawkins, G.** (2006). *The Ethics of Waste: How We Relate to Rubbish.* Lanham, MD: Rowman & Littlefield.
- **Hoornweg, D. & Bhada-Tata, P.** (2012). What a Waste: A Global Review of Solid Waste Management. *Urban Development Series; Knowledge Papers no. 15*. Washington, DC: World Bank.
- **Iley, K.** (2013). A craving for compost. *Good Taste Magazine* 2013, 104-107.
- Ingold, T. (2010). Being Alive. New York, NY: Routledge.
- **Iovino, S. & Opperman, S.** (2012). Material Ecocriticism: Materiality, Agency, and Models of Narrativity. *Ecozon* 3:1, 75-91.
- **Kenny, K. & Fotaki, M.** (2014). From Gendered Organizations to compassionate borderspaces: Reading corporeal ethics with Bracha Ettinger. *Organization*, 1-17.
- Kinnunen, V. (2016). Jakaisimmeko elämämme jätteen kanssa? Sosiologia 53:3, 310-317.
- **Pala, P.** (2016, February 22). Bokashi-Päiväkirjani, Osa 4: Talvi Ja Bokashi, Puolivuotiskatsaus. [Blog post]. Retrieved from takalaiska.blogspot.fi/2016/01/bokashi-paivakirjani-osa-4-talvi-ja.html
- **Pala, P.** (Photographer). (2016, February 22). *IMG_5994.JPG*. [Digital image]. Retrieved from takalaiska.blogspot.fi/2016/01/bokashi-paivakirjani-osa-4-talvi-ja.html
- **Pullen, A. & Rhodes, C.** (2013). Corporeal Ethics and the politics of resistance in organizations. *Organization*, 1-15.
- Pullen, A. & Rhodes, C. (2014). Ethics, embodiment and organizations. Organization, 1-7.
- Strasser, S. (2014). Waste and Want: A Social History of Trash. New York, NY: Holt Paperbacks.
- **The Great Bokashi Composting Experiment.** (2012, December 27). In *My Square Foot Garden*, Retrieved from www.mysquarefootgarden.net/bokashi-composting-part-1/