



LUND UNIVERSITY

# All About the Money

*A Cultural Analysis of Financial Incentives as a Motivator  
for Improved Household Waste Separation*

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## Abstract

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In the Netherlands it is very common to separate household waste inside the home. In several Dutch municipalities a financial incentive system has been implemented that is intended to motivate residents to manage and separate household waste more efficiently. The system has shown to give good results when evaluated in terms of the amount of collected household waste. However, no research exists on how it works in everyday life; how does it affect people's attitudes and motivations to manage their waste. With this thesis, I aim to create an understanding of how financial incentives work as a motivator for improved household separation from an everyday perspective. Based on material from a four months long fieldwork project for a waste management and collection company in the summer of 2014 in the Netherlands, I investigate and analyse the effects of the so-called Pay-As-You-Throw (PAYT)-system that has been implemented in the municipality of Steenwijkerland. To gain a fuller understanding, a comparative study was also undertaken in the municipality of Zwolle, which does not have any financial incentives implemented. The study utilised ethnographic research methods such as semi-structured interviews with residents and observations of residents in their homes, to investigate their attitudes and practices regarding household waste in relation to financial incentives. Exploring these attitudes and practices, the thesis constructs a theoretical framework of labelling and categorisation systems to identify the primary factors involved in household waste separation in the two investigated field sites. The cultural categories of *monetary value* and *hygiene*, for example, turned out to be highly influential and I argue that these categories can work both as a motivator and a cultural barrier to improved household waste separation. Based on these arguments, suggestions are given on how to use these for the benefit of waste management companies and municipalities that wish to implement financial incentives in the future.

Keywords: waste; source separation; waste management; financial incentives; cultural categories; recycling; cultural barriers.

## Uittreksel

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### All About the Money: A Cultural Analysis of Financial Incentive as a Motivator for Improved Household Waste Separation

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In Nederland is het heel gewoon om afval in het huishouden te scheiden. In verscheidene gemeenten is een systeem met een financiële prikkel geïmplementeerd die bedoeld is om burgers te motiveren om efficiënter met het huishoudelijk afval om te gaan. Ook al heeft het systeem goede resultaten laten zien in de hoeveelheden ingezameld huishoudelijk afval, onderzoek naar hoe het de houding en motivaties van burgers beïnvloed bestaat niet. In deze scriptie streef ik om inzicht te creëren in hoe een financiële prikkel werkt als een stimulans voor betere afvalscheiding in een alledaags perspectief. Gebaseerd op materiaal dat is verzameld tijdens een veldonderzoek van 4 maanden voor een afvalinzamelingsbedrijf in de zomer van 2014 in Nederland, kijk ik naar de effecten van het diftar-systeem dat is geïmplementeerd in de gemeente Steenwijkerland. Het onderzoek vond ook plaats in de gemeente Zwolle, waar geen financiële prikkel is geïmplementeerd in het afvalbeleid, om op deze manier de effecten van een financieel systeem goed te kunnen achterhalen. Dit onderzoek maakt gebruik van etnografische onderzoeksmethoden zoals semigestructureerde interviews en het observeren van bewoners in hun huizen om de houdingen en handelingen te onderzoeken ten opzichte van huishoudelijk afval en de financiële prikkel. Na een verkenning van de gevonden houdingen en handelingen, wordt een theoretisch kader van labelen en categorisatie systemen ingezet om primaire factoren te onderscheiden die een rol spelen bij afval scheiden op beide onderzoek locaties. Culturele categorieën zoals *monetaire waarde* en *hygiëne* blijken van grote invloed te zijn en in deze scriptie betoog ik hoe deze categorieën zowel kunnen werken als een stimulans als een culturele barrière voor beter afval scheiden in huis. Gebaseerd op deze argumenten worden suggesties voor toekomstige handelsperspectieven uiteengezet die afvalbedrijven of gemeenten kunnen inzetten.

Trefwoorden: afval; bronscheiding; afval management; financiële prikkel; diftar; culturele categorieën; afvalscheiding; culturele barrières.

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Hardenberg, 2015-05-27

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## 1. Introduction

In the Netherlands it is very common to separate household waste inside the home. Most households have separate bins for vegetable, organic, and garden waste as well as plastic packaging. In some cases also bins for paper and for residual waste are provided. All these bins are collected and emptied through a kerbside pick-up system. Glass and textiles can be disposed of in public bins in areas for grocery shopping and in some cases the residual waste can be brought to underground collection systems that are placed centrally in the neighbourhood. Although provided with a solid system that promotes everyday recycling, Dutch households do not separate 100% of their waste.

Aiming for a 100% recycling rate, the waste collection company ROVA – my internship provider during the summer of 2014 – has implemented several systems to motivate the residents they service to improve source separation of household waste. One of these is the financial incentive system that they have implemented in most of the municipalities that they operate in. ROVA calls this the Pay-As-You-Throw (PAYT)-system. This basically means that you only pay for what you actually throw away as waste – based on frequency and volume – and this is intended to motivate residents to manage and separate household waste more efficiently. Even though the system has shown good results when looking at the amounts of collected household waste, no research exists on how it affects people's attitudes and motivations. My thesis attempts to fill this gap by using a cultural analytical approach. I aim to create an understanding of how financial incentives work as a motivator for improved household separation in an everyday perspective. In order to fulfil this aim the work of anthropologist Mary Douglas is utilised to form analytical tools to investigate how residents use categorisation systems when handling their waste.

### 1.1 From waste to resource

To understand the relevance of looking into the everyday cultural aspects of the PAYT-system it is necessary to understand the political and organisational context in which municipalities and waste management companies are working.

Recently, the Dutch government formulated a national goal within the program *Van Afval Naar Grondstof* [VANG – “From Waste to Resource”]. The goal is to reach a recycling rate of 60-65% in 2015 and a rate of 75% in 2020 to eventually reach 100% (Ministerie van Infrastructuur en Milieu, 2014). This political decision is formulated with an ideology of a



circular economy in mind. A circular economy is an economic system that takes the reusability of products and resources and the preservations of natural resources as a principle. In practice, this means citizens, companies, and authorities need to focus on sustainable production, sustainable consumption, and recycling, to reduce the use of natural resources and valuable materials are not wasted (Ministerie van Infrastructuur en Milieu, 2014). The orientation towards a circular economy is not only represented in these aspects of Dutch government, but is also central to the resource efficiency agenda established under the Europe 2020 strategy of the EU (“Moving towards”, 2015). International and national goals merge, and as a consequence they are being implemented in waste policies. Thus, national and international policies motivate waste collection companies and municipalities to work together to improve household separation of waste.

During the internship project I executed for ROVA I investigated waste management on a household level focusing on the “Reverse Collection System”. The Reverse Collection System aims to increase the flows of reusable waste by providing a higher level of service: organic and garden waste, plastics, and paper and cardboard are collected at kerbside. At the same time, less service is given to residual waste by transitioning from collecting this at kerbside to making households deliver this type of waste to drop-off facilities placed around the neighbourhood (Goorhuis et al., 2012). ROVA achieves high recycling rates with the reverse collection system, sometimes up to 70%. In several of the municipalities they service ROVA combine the Reverse Collection System with a financial incentive system and there they even reach the 2020 goal of 75% (ROVA, 2014). With the VANG program in mind, ROVA strives towards a 100% circular waste economy. However, ROVA is mainly operating outside the households and have little knowledge of what is going on *inside*. Wanting to reach an even higher recycling rate, they are nevertheless motivated to also understand the motivations and attitudes of the residents they serve, as ROVA suspects that waste prevention on a consumer level is most likely the key to the last 25%. This is what my internship project focused on and the main topic of this thesis focuses specifically on the *inside* perspective of the residents’ relation to the financial incentive system.

## **1.2 Research questions**

The initial research question was focused on the expected gap between the design of the financial incentive system and the experiences of household members to which this system is designed. This was guided by the empirical material gathered through fieldwork. I

found that the informants sometimes had very animated attitudes towards their handling of their waste and the financial aspect of it. In documents about the system I expected to find information on how the system was expected to influence recycling attitude and behaviour. From there on, the plan was to address how it was different from the experiences encountered in the field. However, this turned out differently than expected. When I looked for documentation on the intended effects it was first of all hard to find good documentation on the specifics of the system. Second, the documents I did find were mostly describing logistic aspects of implementation and cost indications, but nothing about expected behaviour changes. The aims of the system were only mentioned in one document and were listed as follows:

- Stimulate household waste separation
- Reduce the amount of waste
- Stimulate prevention
- Reward good recycling behaviour
- Lower the costs of municipal waste management

(Afval Overleg Orgaan, 2004, p. 11)

The first aim seemed the most interesting to look deeper into, because that was where I expected to read about how they anticipated the financial incentives to stimulate household waste separation. Unfortunately, this was not the case. It only showed results from the previous year on how much the amount of residual waste was reduced in kilograms per inhabitant. It assumed that inhabitants changed their behaviour, but they did not give any specific indications or speculations about how this would occur or what effects it would have on inhabitants' attitude towards waste. The document referred to a ministry report of a quantitative survey among inhabitants of municipalities that used this financial incentive system. This report presumably focuses on the topic of behavioural effects of financial incentives on waste collection; however, this report was nowhere to be found. Many documents and publication are accessible in a database on the website of the national government, but this specific report is not available anymore. A request through official means of communication did not change this result. As a consequence, this thesis does not describe the expected gap between the designed and the experienced effects of financial

incentives as a motivator, but rather focus on the experienced alone, because this is an aspect that has not been documented so far.

A colleague at ROVA confirms the validity of this perspective; they have never considered the waste management experiences from a user's perspective. Rather, the measuring and quantifying aspects were emphasised in the decision-making processes on the financial incentive system. She also states that there was a consensus that waste companies did not have any right to go over the threshold of the residents' homes, because that was considered not to be in line with privacy legislations. Therefore waste companies did not really know their residents, only the households they represent. My colleague thinks that this political taboo is now slowly being addressed and that this taboo is connected to the fear of municipalities of being too patronising towards their residents (Kim, March 10, 2015).

For this reason it is even more interesting to gain a residents perspective on financial incentives and considering this background the following research question is the focus of this thesis:

*How do financial incentives work on an everyday household level as a motivator (or not) for improved household waste separation?*

As I gathered enough empirical material to explore possible answers to this question, I separated it into two sub questions:

- How are financial incentives reflected in household members' attitudes towards handling and separating household waste?
- How are financial incentives affecting the way household members relate to waste on an everyday basis?

### **1.3. Thesis outline**

Having introduced the topic and the research questions, the thesis continues with chapter two, which addresses the design of the research. This chapter starts by introducing the project setting. This includes how the initial internship project was framed and a description of the field sites where my empirical material comes from. In this chapter I also reflect on the methodological tools that I utilised to gather the empirical material and argue for the methods chosen. The chapter concludes with some remarks on the limitations of my study.

The third chapter positions my study within the field of waste management research. It first gives an overview of previous academic research on the topic of recycling behaviour and financial incentives in waste management in various disciplines. The greatest emphasis is laid on the cultural analytical and anthropological work that has been done on the relations between people and waste. This chapter also describes the main analytical approach used in the analysis of the empirical material.

Chapter four explores the first sub question stated above and aims to create an understanding of how financial incentives are affecting people's attitudes and practices when it comes to handling and separating their household waste.

In chapter five the second sub question is explored by zooming in on three understandings formed in chapter four. Here is explored how people value and give meaning to their household waste by looking at how they label and categorise their household waste. A comparison between two field sites is made in order to deepen the analysis of the role financial incentives play in household waste separation attitudes and practices. In doing this, certain cultural categories and barriers are revealed.

The final chapter contains the conclusions of the study. It summarises the findings and analysis and I suggest answers to the questions that are posed in this thesis. This chapter also elaborates on the implications of these conclusions and gives some suggestions for further research.

Finally, a summary of the thesis in Dutch is added to enhance the applicability of my research; the study took place in the Netherlands and ought to have both general and local value for stakeholders that operate specifically within the field of waste management in the Netherlands.

## 2. Research design

Before going into the theoretical and analytical part of the thesis, I first introduce some aspects of the research design. This chapter informs the reader about where and how I conducted my study. The first section focuses on the internship project of which the fieldwork was a part of and it describes the field sites in detail. Then, the methodological tools are introduced that were used to gather the empirical data and explain why I used these specific methods. This chapter concludes with thoughts on ethical aspects and some limitations.

### 2.1 Project setting

During the summer of 2014 I did a four months long fieldwork study for the waste management and collection company ROVA, as part of an internship project for the master program of Applied Cultural Analysis at Lund University. ROVA is responsible for managing the collection of public waste in the area where this study took place. ROVA services 21 municipalities in the east of the Netherlands on the collection of public waste and is a non-profit company that not only collects waste, but is also a producer of sustainable energy and sustainable public area management (“ROVA”, 2015). In total, ROVA serves over 320.000 households and more than 780.000 inhabitants (ROVA, 2014).

As I wrote in the introduction, ROVA was looking to gain a better understanding of what happens inside people’s homes when it comes to household waste, and this is where my internship project came into play. ROVA and I decided that my research should be done within the framework of the “Reversed Collection System”, to get a really good picture of what happens inside residents’ homes when the organisation has done its part on the outside to maximise waste separation. ROVA presented several focus points that they would like to see researched in a close perspective on residents’ attitudes and motivations on household recycling:

- handling of food waste;
- financial incentive;
- potential of separating beverage packaging;
- shopping and consumer behaviour.

The decision was made to incorporate all the topics in the interview questions, but, along the way, the focus was redirected and ended up mostly on the handling of food waste. As a consequence, this has also become the main subject discussed in the results for the internship project.

From the beginning, ROVA was keen on finding information on what the residents thought of the financial incentives, and in order to be able to say something about this we decided that I should do research in two different municipalities. The first field site was the area of “de Gagels” in Steenwijk, located in the municipality of Steenwijkerland, in which the previously mentioned PAYT-system is in place. The second field site was the area of “Stadshagen” in the municipality of Zwolle. Zwolle has not implemented the PAYT-system; instead inhabitants pay an annual fee for whatever household waste they dispose of. By dividing the fieldwork into these two field sites, I could focus my research and analysis on comparing the differences that appeared between motivations and attitudes of residents in the areas with and without financial incentives. The comparison was made possible because, guided by my internship provider, I had selected residential areas in the two municipalities which were comparable in size, types of housing, and residents. The main variable between field sites was thus the absence or presence of a financial incentive for waste management.

As said, while performing the internship project the focus was mainly on other aspects, but it became apparent that financial incentives had an effect on residents’ attitudes towards waste; for example, there was an obvious difference in how the residents of the different municipalities handled their food waste. This was partially addressed this in the presentation of the results of the internship project for ROVA, but I felt that the topic of financial incentives deserved a more thorough study and thus this thesis was born. The field material gathered for the internship project also constitutes the empirical material on which the analysis and discussions in this thesis are based upon.

## **2.2 Methodology**

This cultural analytical research study is based primarily on observations and semi-structured interviews with residents in Steenwijkerland and Zwolle. These interviews ranged between 45 minutes and two hours with an average of approximately one hour and 15 minutes. They were recorded both in field notes and on audiotape to facilitate the research process in a later phase. The interviews with the informants are supported by the observations conducted in the homes of the informants on how they have organised waste management in

their daily life. This was chosen to compliment the material that would be gathered in the interviews to fully understand how financial incentives play a role in the specific situations of the informants. These observations were recorded in field notes as well as in photographic material. The photographs and audio recordings were only taken after the interviewees and homeowners had given verbal informed consent. Please note that the names of the informants are made up in order to protect their anonymity and that in the references only those informants are listed that are used specifically in this thesis to convey the findings and results. However, before entering the field I needed to select informants and find a way to gain access to the field.

ROVA was able to provide me with the data they had on the residents in both field sites because residents use a key card to open the underground system used for the residual waste. This data provides information on how many waste bins are offered for collection per household and how many times residents have used the underground system to throw away their residual waste (see figure 1). This gives an indication of the waste behaviour of residents and I used it to select households randomly in different categories. These categories were based on how much waste they produce according to the provided data. I made a distinction between residents who threw out waste on a structural basis, average basis, or low basis in order to gather material that includes representatives from all categories. In total, I selected around 300 addresses to which I first sent a letter briefly stating what my research was about and kindly asking them if they were willing to participate. In this letter it was also specifically noted that if they did not wish to be part of this research in any way, they could contact me requesting to not be bothered any further. Then I waited about a week before I tried to contact them by telephone. I was hoping to enlarge the group of informants by calling the residents myself and not ask them to take the initiative to respond to me. In the phone conversations I referred to the letter that was sent and asked if it would be possible for me to come to their home and talk with them about the topic of household waste. With such an approach it is important to keep in mind that a low response rate is probable, because not all phone calls were answered and certainly not all residents were willing to participate. It should be noted that this particular phase was one in which I crossed off many households from my list and it required a fair bit of endurance on my part. However, my efforts paid off and I was able to make appointments with as many as 28 residents.



Figure 1: The underground collection system that residents use to dispose their residual waste. After scanning the key card it is possible to open the cover and put a bag of waste in the available space. When closing the cover the bag will fall into the underground container. Photographs by ROVA.

In a timespan of five weeks, I conducted 28 in-depth interviews with residents in their homes. Going to meet informants in their home had several benefits. First, it was crucial to the research to gain access to the homes of my informants, since I wanted to address attitudes and practices from an everyday cultural perspective. This way I had better access to understanding how waste management functioned in their everyday life and they could easily show me what they meant when talking about certain aspects of handling their household waste. Second, it was important that the informants felt comfortable enough to engage in an open and truthful conversation. Seeking out informants in their own homes and spaces, meeting them on their own turf and terms is usually beneficial to achieve such a goal (see Nairn, Munro & Smith, 2005, p. 235).

The in-depth interviews were semi-structured and divided into 15 interviews in Steenwijkerland (with financial incentive) and 13 in Zwolle (without financial incentive). The advantage of applying semi-structured interviews as a method to gather material is that the interviewer can adhere to a structure, which helps to keep focus on the topic(s) of research. At the same time the interviewer has the freedom to change the order of questions or encourage interviewees to expand on their response (Davies, 1998, p. 95). The advantage for this specific research is that interviews enable to fully understand how the informants think about handling their waste and how they relate this (or not) to the financial incentives.

Semi-structured interviewing was preferred over structured interviews in this study, because I did not wish to restrict my informants with any preconceived notions I might have. At the same time, I wanted to gain the trust of my informants and was concerned that they



would perceive me as a “spy” for the waste company, reporting on their waste and recycling behaviour. To try to avoid the risk that they would censor their opinions, I therefore decided not to broach them with a fixed number of interview questions, which could have been interpreted as a checklist from the waste management company. Instead I made sure that I started out with some general open questions about waste and I continually treated our meeting as a conversation instead of an interview. This helped building trust and seemed to enable people to share their views and perspectives with me.

### **2.3 Limitations**

Here I reflect on the study as a whole and address certain limitations of the study. The first regards the age of my informant group. Since my selection method was based on data on the amount of waste each household disposes of, I did not have the means to select target respondents in different age groups or other demographic characteristics. The informants are all above the age of 30 and therefore my study is limited to give insights on residents younger than 30. It is notable, however, that my informants did represent a variety of household compositions. Some represented single person households – male and female –, some were two-person households, and some consisted of families. Also pets were not uncommon to see in the homes of my informants.

There was another notable limitation in the empirical material utilised for this thesis, because it was executed with several focus points useful for the internship project and all these topics were addressed in the interviews. Therefore the fieldwork also focused on other aspects than the effect of financial incentives in peoples’ everyday lives. Naturally, a study focused on the financial aspect alone could have given a more thorough investigation. On the other hand, the design of the fieldwork proved to work very well for the purpose of this study anyway. Because of the decision to have two field sites and addressing different aspects of household waste, the empirical material turned out to be very rich.

As stated in the introduction and project setting above, this study was executed in municipalities in which the “Reversed Collection system” had been implemented. Therefore all the informants had to bring their residual waste to an underground collection system. I should hasten to add that this study addresses the attitudes and practices in relation to financial incentives in this specific context; in other municipalities where the PAYT-system is in place, but residents have a bin for the residual waste on their own property and not the “Reversed Collection system”, attitudes and practices might differ.

Another thing to consider when looking at the results is the season in which the fieldwork was done, that is, in July and August, which are the two warm summer months in the Netherlands. I suspect that this might have had an influence on how people talked about their waste handling. The aspect of dirtiness is in these warm months perhaps more present than it would have been if the fieldwork had been done in a cooler time of the year.

Last but not least I want to address the aspect of researcher bias. In this study I have not only been researcher but also a resident of one of the municipalities that are serviced by ROVA. This means that I know the rules and regulations from a resident's perspective and that I have had my own frame of reference in mind when discussing attitudes and practices in relation to household waste separation. It is often assumed that being an "insider" is an advantage that may improve understanding of a certain culture, but, at the same time, one has to be aware of the implications (Labaree, 2002). It is possible that a researcher who does not have any inside knowledge, would interpret statements and situations in a different way. Trying to limit potentially negative effects of this on my study, I have positioned myself as a curious student who wants to know everything. In conclusion, this meant asking the question "why?" many times and let silent pauses be present in the interviews to encourage the interviewee to expand or elaborate on the subject. I had the benefit of being able to interview my informants in my native language, and I could readily understand them when they were expressing their perspectives. It also allowed me to look for subtle nuances in how they talked, since I know how to interpret intonation. Unfortunately, it is possible that in the translation to English some of these nuances have been lost, since I am not a professional translator.

### 3. Position in previous research

Now that I have accounted for how the study was organised, the topic of household waste separation deserves a focus. Of course this is not the first study ever undertaken on this topic, and before addressing the empirical material, I thus make an overview of previous academic literature. Because my thesis addresses a specific organisation of household waste separation, including financial incentives, the chapter first addresses two fields of study in which this is a topic of research: social psychology and economy. This is intended to position the thesis within the field and to locate gaps in the research on this topic, which my thesis aims to fill. It then continues to give an overview of how waste is interpreted in anthropological studies and previous cultural analyses on the topic of household waste. Besides positioning the research, this latter part of the chapter also helps to form analytical tools to use when addressing the empirical material.

#### 3.1 Socio-psychological studies

From a psychological perspective there has been a focus on recycling attitudes in relation to environmental values. Various studies using a socio-psychological approach show that a positive attitude towards the environment and recycling behaviour can predict recycling behaviour (Manetti, Pierro & Livi, 2004; Tonglet, Philips & Read, 2004). Most of these studies use the Theory of Planned Behaviour (TPB) by Ajzen (2002) to come to conclusions on how to define the relation between environmental intentions and recycling behaviour. This is a commonly used theory and I do not want to criticise all these studies, but when it comes to environmental intentions and actual behaviour some other studies have found a gap (Kollmuss & Agyeman, 2002; Tudor, Barr & Gilg, 2006). People can have high environmental values and their intentions might favour pro-environmental behaviour, but they do not always act out on their intentions. When looking at TPB this could make sense, because TPB focuses on three different sorts of beliefs. These are the beliefs of the consequences of the behaviour, beliefs about expectations of others, and beliefs about how easy or difficult the performance of the behaviour would be. These combined lead to a behavioural *intention* and not necessarily to actual behaviour (Ajzen, 2002, p. 665). Ajzen says: “given a sufficient degree of actual control over the behavior, people are expected to carry out their intentions *when the opportunity arises*” (2002, p. 665, *my italics*). This implies

that not only personal values and motivations play a role in determining behaviour, but also external motivations such as a facilitating context.

Considering external motivators for recycling attitude and behaviour brings up the aspect of logistics and infrastructure for discussion. Several studies have concluded that the willingness to separate household waste rises when people feel that the ability to recycle is improved. For example, sociologists Linda Derksen and John Gartrell (1993) examine the role of *social context* in individual environmental attitudes and recycling behaviour. In this research *social context* is defined as the external organisation of household recycling. Individuals with better access to structured recycling facilities – in this case kerbside pick-up – have a higher level of recycling. Strong individual environmental values are enforcing this higher level of recycling, but without the social context of structured facilities these attitudes do not seem to work as strongly as a motivator to recycling behaviour (Derksen & Gartrell, 1993, p. 439).

Also in the field of sociology, Hage, Söderholm and Berglund (2009) discuss moral norms as determinants of recycling efforts. They come to a similar conclusion as Derksen and Gartrell above; they state that moral obligation is a factor that influences household recycling. However, in this study they make a distinction between areas with drop-off facilities and kerbside pick-up and they see that the significance of norms diminishes in the kerbside pick-up areas. This indicates that external facilitation of household waste is more significant in influencing household recycling than moral norms and values (Hage, Söderholm & Berglund, 2009, p. 163).

So far the situation studied in this thesis seems to tick all the boxes to promote improved recycling attitude and behaviour. Structured facilities are organised for households in both municipalities through kerbside pick-up schemes and close-property drop-off systems. However, my thesis is addressing financial incentives as a factor in recycling attitudes and motivations and therefore I need to understand what has already been researched on this topic. In my search on financial incentives I ended up entering the field of economics, in which they write about pricing systems and schemes.

### **3.2 Economic studies**

When reading literature on pricing systems and financial incentives, there is an obvious lack of qualitative research on how it functions as a motivator for recycling attitudes on a household level. Much of the research uses an economic perspective to come to

quantitative results, such as the work of economist Thomas Kinnaman. He researched the economics of household waste and recycling in the past 20 years and has specifically focused on different municipal policies that work with pricing schemes. He wrote about the use of user fees for waste collection in relation to illegal dumping (Kinnaman, 1995), analysed collection and recycling strategies implemented by municipalities (Fullerton & Kinnaman, 2003), made conclusions on the costs and benefits of varying recycling programs (Kinnaman, 2006), and connected these to the efficiency of kerbside collection taxes (Kinnaman, 2010). Unfortunately, his research mainly took place in the United States of America and his results are therefore not always applicable in the Netherlands. Since my thesis focuses on the experiences in two municipalities in the Netherlands, the work of Dutch economists Elbert Dijkgraaf and Raymond Gradus on unit-based pricing systems promised to give me better insights.

The research that Dijkgraaf and Gradus conducted specifically focuses on the situation of waste management in the Netherlands. In their study the main focus is on economic effects of pricing systems. They did a comparative analysis on weight-based, bag-based, and frequency-based pricing systems and concluded that in the Netherlands the weight-based and bag-based systems have the best potential (Dijkgraaf & Gradus, 2004). Since 2003 the amount of municipalities in the Netherlands that implemented a pricing system increased from 27% to 41% in 2014 (Rijkswaterstaat, 2014, p. 20). Studies on the effects of these systems have since then remained in the field of economics (Dijkgraaf & Gradus, 2009; Allers & Hoeben, 2010).

The lack of qualitative research on the effects of financial incentives gives me the opportunity to contribute new knowledge from a cultural perspective on this matter. Considering the results from earlier mentioned studies, it would be beneficial to understand how financial incentives as an external factor affect values and attitudes towards household waste separation in everyday life. In order to do this, I will need to engage with previous academic writing on the concept of waste from a cultural and anthropological perspective to find analytical tools to analyse my empirical material.

### **3.3 Anthropology and cultural analysis**

Looking at studies that discuss waste from an anthropological and cultural perspective I can see several synonyms that are used to refer to “waste”. Ethnographer Lynn Åkesson (2012) uses the terms *waste*, *trash*, *garbage*, *scrap*, *junk*, *the discarded*, and *leftover*

*materials*, in a chapter on the overflow of waste in a book on the management of overflow. This can be quite confusing, but also seems to imply that these terms are all pointing towards the same interpretation. The Oxford Dictionary states the following: “unwanted, or unusable material, substances, or by-products” (“Waste”). This interpretation seems to be quite similar as to the words that Åkesson is referring to above. In her writing, however, she also refers to geographer and sociologist Kevin Hetherington and how he looks at the concept of waste. He is, on the other hand, questioning the interpretation of waste in previous literature and states “waste suggests too final a singular act of closure” (Hetherington, 2004, p. 159). He therefore seems to prefer the term *disposal*, which opens up the “understanding of how something can be in a state of *abeyance* or ‘at your disposal’” (p. 159, *my italics*). He argues that disposal is a consumption practice and that things can be recharged and given new meaning, and as a result, not necessarily the end station. In his understanding of waste as disposal, he seems to address the temporality of waste; it can be interpreted as something unwanted or unusable, but not necessarily as having entered a definite or final state.

Hetherington's ideas have some similarities with how Michael Thompson addresses *rubbish* in his *Rubbish Theory* (1979). In this theory Thompson focuses on the *value* that is attributed to objects and submits that this value can change over time. When value increases over time, stuff can fall into the category that Thompson labels as *durable* and when value decreases it falls into the category *transient*. The third category he uses is *rubbish* and this would be where he places the *unvalued*. Interestingly, he describes this as an in-between category in which objects can be rediscovered and again increase in value (Thompson, 1979). Thompson acknowledges that unwanted or unusable objects do not have to stay fixed in one and the same interpretation.

This view on waste has been addressed in a previous thesis produced on the Masters Program of Applied Cultural Analysis by Christopher Martin (2013) who looked into the retention and disposal of everyday objects. In his thesis he seeks to find an understanding of how objects are determined to be usable or waste. In order to do this he investigates how objects are classified and systemised. In my thesis I use a similar approach to look at the influence of financial incentives of such classification processes. Martin (2013) has a focus on when objects are considered to be waste and addresses the ambiguity of the concept of waste. I, on the other hand, take a perhaps simpler interpretation of waste to work with throughout this thesis. Considering the focus on the financial incentives, it is important to address waste as the “stuff” on which these incentives specifically pertain to. For ROVA, it is very simple to

define. In their view, they collect the waste bins and either recycle materials – which are actually *not* seen as waste but as resources – or send them to incineration. For them, waste is what they collect from people's homes, and items become waste when discarded in a waste bin. That is why my focus lies on this interpretation of household waste.

When discussing waste from a cultural analytical perspective it is hard to overlook the work of anthropologist Mary Douglas (1984 [1966]) on the topic of waste and pollution. Her book *Purity and Danger* is frequently cited (Åkesson, 2012; Henriksson et al., 2010; Hetherington, 2004; Löfgren, 2015; Munro, 2013). In *Purity and Danger*, Douglas argues that notions of pollution and uncleanness are intertwined with societal structures of beliefs and dangers. In this sense, according to Douglas, these notions reveal an underlying order to society (1984, p. 4). In her work she describes how she believes society works as an ordering system of classifications that helps society striving to maintain a certain stability. Therefore society needs to deal with anomalies that do not fit within the boundaries of these classifications and these anomalies could be discarded as dirt or pollution. She famously wrote, “dirt is matter out of place” and “where there is dirt, there is a system” (p. 36). How we use a label as dirt or waste could be interpreted as a moral instrument to understand cultural conditioning. What we think is *the right place* is highly associated with time, space and social affiliations (Åkesson, 2012, p. 202). I find this a very useful approach to use in the analysis of household separation of waste and financial incentives, because I aim to create an understanding of how financial incentives can work to promote certain attitudes and practices related to household waste management. These attitudes and practices deal with sorting and placing waste and Douglas' ideas on classification and categorisation help to reveal underlying thoughts.

Even though Douglas' work has been widely renowned and used, there have also been some critiques. One is focused on the shortcoming of her interpretation of waste and disposal as something final. As written above, both Hetherington (2004) and Thompson (1979) address this aspect. Also Philosophy professor Rolland Munro agrees with Hetherington and Thompson that other interpretations of waste are often limited to the view of wasting as *getting rid of* as a final stage of disposal. Munro seeks to recover a wider range of meanings of disposal by focusing on the placing and arranging of things (Munro, 2013).

Another criticism comes from Gay Hawkins – a professor in critical and cultural studies at the University of Queensland – in her book *The Ethics of Waste* (2006). Her critique of Douglas is related to the materiality of waste. Hawkins agrees with Douglas that waste

“isn’t a fixed category of things; it is an effect of classification and relations” (2006, p. 13). Hawkins adds to this that waste tells us not only about the culture and society it functions in, but it also makes us who we are. At some point the materiality of waste also produces relations between humans and the discarded. The way that material objects can influence people is overlooked in the work of Douglas.

These critiques will be kept in mind, as I adopt Douglas’ conceptual approach of the classification system in relation to waste as one of my analytical tools. Since, as explained above, this thesis is not focussing on the decision process whether objects are considered as waste or not. The emphasis is laid on how residents label and categorise their household waste in order to understand how financial incentives are related to this categorisation process.



## 4. Saving costs

In the gathered empirical material it shows that financial incentives are playing a role in people's way of looking at household waste and how they handle it. In this chapter the attitudes towards financial aspects of household waste and the practices related to these attitudes are explored.

### 4.1 Expensive or not?

It turns out that there is a difference in households when it comes to attitudes, especially when focussing on financial aspects. In almost all the interviews with household members in the area with financial incentives in place, the informants brought up the topic of costs and financial aspects of waste themselves. This indicates that it is an aspect that plays a prominent role in their thinking about their household waste. To understand how financial incentives work as a motivator for household waste separation I firstly address how my informants from the area with these financial incentives in place (Steenwijk) talked about this aspect. By looking at how people talk about the financial aspect of their household waste it is possible to say something about the attitudes that play a role in their household waste separation practices.

There were some similarities and differences in the way people addressed the topic and they can be divided in two main groups. The first group is somewhat negative and refers to the costs as being "expensive"; the other group is rather content with the financial aspect and in some cases actually consider the costs to be relatively cheap. Even though the incentive does not deal with a lot of money – € 1,10 for every time the underground collection system for the residual waste is used – the effect it has on the residents is evident. The group that claims the costs are "expensive" could be divided in two subgroups again (see figure 2). A few of the informants have been expressing specifically their own opinion in that they think it is expensive and they do not want to pay, but more informants were phrasing it in a general way that *others might think it is expensive*. This makes me wonder if they are expressing the feelings that they believe others have, the feelings that they think they are expected by others to express, or if they are actually expressing their own feelings toward the issue. In the following part these groups are addressed in more detail and some examples of how the informants talked about the financial incentives are given.

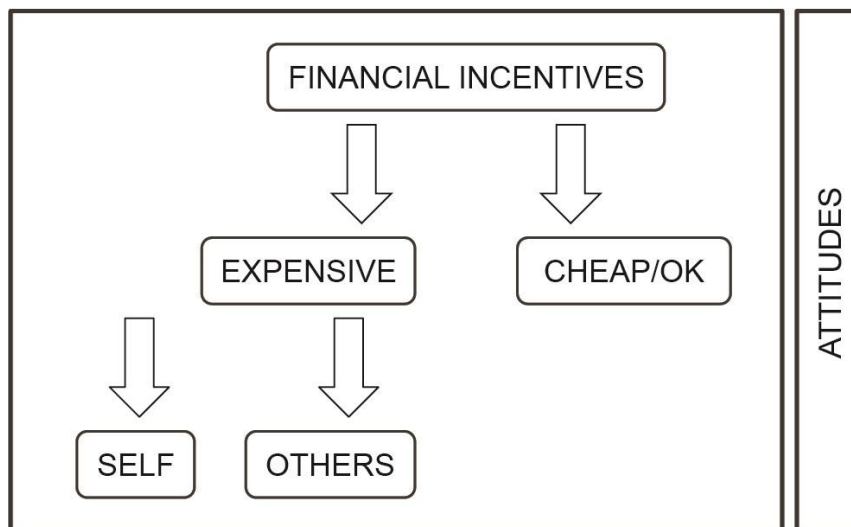


Figure 2: Model of attitudes

As mentioned above, there were a few informants who expressed their own negative attitudes very specifically. One informant who expressed his own concerns on the financial aspect was Ivan.

We have to walk there every time, but we don't do that every week, maybe once every month, if we really have to. Because then we don't have to scan every time 'cause I don't want that, then I have to pay more.

(Ivan, 5 August, 2014)

From this statement his attitude towards the financial aspect is evident and his reluctance to pay for his residual waste is clearly present. However, earlier in the interview he phrased it in a different manner, much more like how the other informants talked about the financial aspect. There he said:

I think that people separate a lot and what is left they might throw in the organic container. Then they think like 'then I have to walk there and scan and then it costs me a euro every time, never mind then', you see?

(Ivan, 5 August, 2014)

In this quote he says that other people probably think in this manner, but later it became evident that it is actually how he thinks *himself*. In this, there are two topics to consider. First is that the first part of the last quote by Ivan might also include himself. If it is true that he is addressing his own views then this could mean that he throws his leftover residual waste in the organic bin, which he can dispose of for free. This would be a practice related to the attitude Ivan is creating around his household waste as an effect of the financial incentive. The second topic to consider is that if Ivan is talking about himself in his generalising expressions then perhaps other informants could be doing the same thing and are actually talking about themselves as well.

Then, what about the other slightly negative expression about the financial incentive? In the interview with Hendrik, he mentioned that “Yeah, because it’s of course not cheap, I think that’s why a lot of people think like, well, whatever... (Hendrik, 29 July, 2015).

Hendrik seems to express his own attitude towards the financial aspect first, believing that it is not cheap to get rid of his waste. Then he continues to say that he thinks that this is a motivation for other people to neglect the issue of their household waste. Is he really talking about others? In this case I think he does, because he showed me how his household waste is organised and almost every possible waste flow was separately stored somewhere in his household. Then why does he think that others might have more difficulty with doing the same as he does? In this matter the ideas of anthropologists Patricia Sunderland and Rita Denny (2007) could hold an explanation. Sunderland and Denny address language and how people talk as culturally revealing (p. 179). Perhaps Hendrik is only expressing what he think is expected of him? Even though the money aspect is not influencing him in a negative manner at all.

Another example can be seen in how Willem addresses the financial aspect. He says: “I can imagine that other families would say ‘I think that is really expensive’” (Willem, 11 August, 2014). He specifically says *imagine* when talking about other people’s attitudes toward the costs. This indicates that he does not think it is expensive himself and that he is assuming how others might think about it. If more people do this then it could be that a lot of people think that others think it is expensive, but not many actually act on behalf of it because they themselves do not think it is expensive. From my interviews it seems that only a few people actually regard it as expensive and then perhaps one informant – Ivan – is changing his practices accordingly. For the other informants it is more as if they are expressing a socially

or culturally constructed opinion about costs, therefore there is not as much negativity towards the financial incentive as assumed when listening to the informants the first time.

In fact, many informants were actually quite positive to the financial incentive. For some of my informants it made them more focused on how they separated their household waste and by doing this they even thought that they were saving money. It seems that saving money could be an attractive motivator for separating household waste. As Willem is saying, “the better you separate, the cheaper it gets” (Willem, 11 August, 2014). Others recognised this as well. One informant even mentioned the amount of money she saved three times in the interview. She received €60 in her bank account at the beginning of the year. In the municipality of Steenwijkerland inhabitants pay in advance for their waste, based on an average use of the underground collection system. If people use it less than this average, they will get a refund. On the other hand, if they use it more, they have to pay extra. However, I have not come across an informant who claimed to have paid more afterwards. In the case of Margreet this really is motivating her to keep separating her household waste, as she says: “You have to pay in advance and then I got €60 back and I thought ‘wow, that was easy money’, right? I think that helps” (Margreet, 12 August, 2014).

This way of organizing the payment is very clever, because it makes people aware of what the costs really are. My informants in Zwolle, on the other hand, pay one annual fee, but they could not tell how much money this was. Using this system in which money will be returned to the inhabitant if they produced less residual waste seems to give two major benefits. The first is that the inhabitants are more aware of the costs of managing their waste, which helps them to at least think about what they are doing with their waste inside their homes. Second, by giving them money back when they produce less residual waste is actually a way of rewarding them for good behaviour. As Margreet phrases it perfectly “when I got €60 back last year, well, then you see that you are actually doing it for a reason” (Margreet, 12 August, 2014). From this could be understood that people value monetary benefits very highly and in this way it is used in a positive way to motivate people to improve household waste separation.

#### **4.2 What to do?**

The attitudes that are present in relation to the financial aspect lead to certain practices. Research on the concept of *practice* (or the German *Praxis*) has been done for several decades now and many different social theorists have written about practice theory

(VandenBroek, 2010). To define the interpretation of practice utilised in this thesis, I focus on agency-related theories. The work of sociologist Andreas Reckwitz (2002) is found to be resourceful when he addresses the agent in practice theory from a social and cultural theoretical perspective. He creates a clear understanding of the differences between the term to address the whole of human action (practice or *Praxis*), the term to refer to routinized behaviour (a “practice” or *Praktik*), and the term to refer to a way of , for example, cooking, consuming, or working (a practice) (Reckwitz, 2002, p. 249). In this thesis I investigate practices such as the latter description when investigating the way of handling household waste. By doing this I aim to create understandings of a “practice” (*Praktik*) as described by Reckwitz as the following:

A ‘practice’ (*Praktik*) is a routinized type of behaviour which consist of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, ‘things’ and their use, a background knowledge in the form of understanding, know-how, states of emotion and motivational knowledge. (Reckwitz, 2002, p. 249)

The practices that are described and investigated in this chapter are specifically mentioned and observed in Steenwijk (with financial incentive) and not at all in Zwolle (without financial incentive). These practices are not only observed, but are also derived from what informants talked about. In this way it is possible to understand the interconnectedness that Reckwitz is referring to in the excerpt above.

The practices addressed in this section were continuously connected to peoples’ thoughts on the monetary aspects of their household waste. Therefore these practices could be noted as consequential practices from financial incentives. Some of these practices are wanted, others are not. I could clearly distinguish two practices that seem to be directly related to the financial incentives. One is that most of my informants in Steenwijk (the area with financial incentives) try to use the maximum volume that can be disposed in the underground collection system.

We also save bags that are not quite full yet, then you can throw up to 3 in one time if there is not too much in it. Because, well.. You would like to have it bit full when you put something in it, of course. That's logical, because what do we pay for it, €1,10 I think?

(Gerda, 31 July, 2014)

I do think when I take it away that I use the maximum that fits. To use the volume to its maximum capacity, to get away with the lowest price.

(Hendrik, 29 July, 2015)

I think it's stupid to walk three times if I can do it in 1 time and of course the costs play a role in this as well, because you pay every time you use it. You would steal from yourself if you would think 'oh, well, I don't care'

(Linda, 14 August, 2014)

But the bag has to be quite full, you are paying for it, if you take two half bags you have to pay two times. So it's better to dispose a full bag.

(Willem, 11 August, 2014)

Otherwise you have to pay for half a bag, you don't do that, I'll wait until the big grey bag is full [...] full enough that it just fits in there exactly.

(Herman & Bea, 31 July, 2014)

These are all expression of how informants in Steenwijk deal with their residual waste and it is interesting how similar they are. They mention using the maximum space of the underground collection system themselves, without any guidance from the questions I posed to them. I was curious to know where they keep the bags until they are thrown away and during my interview with Gerda I was guided into her garden behind her house. There, not too far from the house, she pointed at a small metal bin and explained that she keeps the bags inside that bin. She even opened it for me and I could see a small bag of residual waste at the bottom.

In the quotes above they all relate this specific practice to the financial incentives and the financial incentive helps the informants to think more about how they handle their residual waste, because they are motivated to easily save costs. This could again be linked to the socially constructed way of thinking about money. Saving money is perhaps considered to be something “good”.

Some informants relate using the maximum space to walking to the underground collection system, as Linda for example above. She says that walking less also has her preference, even though she was living the closest to a collection system of all the informants. Since no other informant specifically mentions the walking in relation to the practice of maximising the volume, I state that the financial incentive is causing the practice of saving the residual waste until the maximum volume of the underground system can be used. Also, I found no evidence of informants in Zwolle that do this. If it is related to the financial incentives this makes sense, because they do not apply in Zwolle. If this practice was related to the walking distance it should have come up in the interviews with the informants there as well. Of course the aspect of walking in order to be able to get rid of residual waste has been a topic of discussion in several interviews, but it was never related to this specific practice of disposing only full bags.

The practice of using the maximum volume is not necessarily a negative or unwanted practice. In the findings above I state that this practice is related to the financial incentive and this practice applies most of the time to informants that were quite positive towards the financial aspect. This could be related to how they believe they can save costs by changing their practices slightly. They value *saving costs* very highly and as a result they find a way to actually save costs within the given system of the financial incentives. However, it is impossible to say if this practice is always related to improved separation of their household waste. In some cases the informants that are focused on using the maximum volume also state that by separating the plastic packaging from the residual waste is reducing their amount of residual waste tremendously. This would indicate that they improved separating their household waste, which as a consequence leaves them with little amounts of residual waste and an extra motivation to consider when to throw this in the collection system. But as said, I cannot say for sure that using the maximum volume is directly related to improved household waste separation.

The second practice that is related to the financial incentives, is not a practice that I observed in my fieldwork. This is solely based on what informants shared with me in our

interviews. This practice is slightly less wanted, because people claim to find alternative ways to get rid of their residual waste instead of using the appointed underground collection system. In the very beginning of this chapter I express my concerns about Ivan possibly putting his residual waste in the organic waste bin. If people are very determined not to pay for their residual waste, this could be an alternative way to dispose the residual waste. The organic waste bin is, after all, free of costs. Other informants have given me reason to believe that other alternative practices are more frequently exercised. The following quote is giving an example of what informants shared about this.

We take our little bag of residual waste with us and then dump it, not in nature, but somewhere on a parking lot in a public waste bin. Because we have so little and it's quite annoying to just have 1 little bag, because you have to pay €1,11 every time you throw away. And it doesn't matter if you have a small bag or a big one, you open the container so you have to pay the amount of money.

(Henk & Wilma, 31 July, 2014)

In the situation described above the relation between the financial incentives, their attitudes and practices are clearly present. They separate their household waste and very little residual waste is left, which is of course a good thing. In this case the financial incentive has an unwanted effect. Because they have to pay for their residual waste, they feel it is annoying that they have to pay for the little amount of waste and act accordingly by finding an alternative. Again the financial incentive triggers how people value costs and in this case it is not only about saving costs, but also about what the costs are for. From Henk and Wilma's perspective they are paying for nothing instead of waste, because they cannot fill the whole space in the residual collection system with residual waste. There is a saying in Dutch "waar voor je geld krijgen", which could be translated as "getting your money's worth". If you pay for something, you want it to be worth the money you spend. In this case Henk and Wilma do not believe that the money they need to spend to dispose their little bag of residual waste is in balance with what it is worth. Even though their practice is unwanted, they only do this because they have very little residual waste. The reason why they have so little residual waste, is that they separate their household waste and in this case the financial incentive is thus doing what it is supposed to do. The financial incentive motivates them to improve separation of their household waste.



The informants that claim to find an alternative way to get rid of their residual waste do not only dispose of it in public waste bins. Other informants spoke about how they take it to their work place to put it in the residual waste bin provided there.

Or I sometimes take it with me to my job.

(Bart & Annemiek, August 5, 2014)

If we have something then I'll take it with me, because I breed horses and at the company they have a big container and then I'll put it in there.

(Joop & Berdien, August 1, 2014)

From the interviews it becomes clear that they have the same motivations as Henk and Wilma above, but found a different alternative to not have to pay for their residual waste. Why would they pay if they can easily get rid of their residual waste for free?

So far I found two main attitudes towards financial incentives among my informants from Steenwijk, the more negative one that it is expensive and the more positive one that it is fine or even cheap. It does not really matter if residents have the more positive or negative attitude, the way that they value the idea of saving costs results in certain consequences. Both attitudes are specifically “feeding” two main practices (see figure 3). First, almost all the informants in Steenwijk are saving residual waste until they believe to have enough to use the maximum space available in the underground collection system, because they do not want to pay for something they are not using. Second, some of my informants claim to find alternative ways to get rid of their residual waste. Some dump it in public waste bins, others take it with them to their workplace and leave it in the bins provided there.

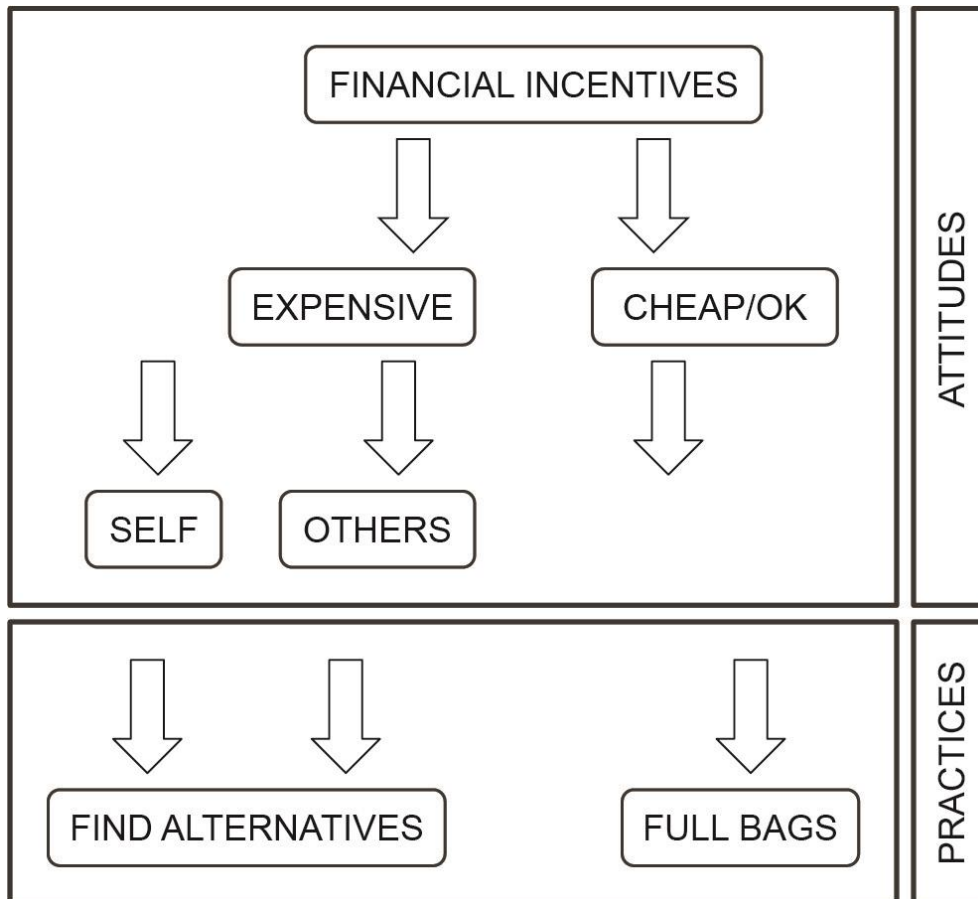


Figure 3: Model of attitudes and practices

In the exploration of these attitudes and practices I have formed some social and cultural understandings that could play a role in how people think about the financial incentives and how it can have an influence on everyday household waste practices. First, there exists a socially or culturally constructed opinion about costs. Second, people value monetary benefits very highly. Third and last, people express their opinions in a generalising manner as if expressing how they believe they are expected to express their thoughts on certain issues. In the next chapter I will take this to a next level and focus on the three understandings to create a deeper understanding of the role of financial incentives in everyday household waste separation.

## 5. Cultural understanding of money

Now as the findings have been accounted for and I know how the attitudes of financial incentives are guiding certain practices, it is time to go deeper into the socially and culturally constructed meanings and interpretations in the daily handling of household waste. This chapter firstly addresses categorisation systems to understand how financial incentives – or the lack thereof – are intertwined with understandings of monetary value. The chapter continues to show that this understanding of money is beneficial to remove certain cultural barriers to improved household waste separation. Then the chapter ends with a deeper analysis of the concept of *othering* and how cultural understandings of monetary value and morality have an effect on how people regard themselves and others.

### 5.1 Categorisation systems

According to Sunderland and Denny (2007) the *how of talk* is something to take into consideration, for it can shed a light on how speech negotiates cultural understandings (p. 179). They explain that conversation is socially and collectively produced, and by focusing on how my informants talk about waste it should be possible to reveal some social and collective attitudes. Åkesson states that waste is very much related to *cultural order* and *disorder*. She claims that everyday classification is a natural expression of such an order (Åkesson, 2006). To understand how people relate to their waste this section focuses on how my informants label and categorise their household waste and if there are any further connections to the way they handle their waste. In doing this, I create an understanding of the cultural categories that are involved in giving meaning and valuing the concept of waste. By doing this for both groups of informants – with financial incentives and without financial incentives – it helps to get a better understanding of how financial incentives play a role in household waste separation.

Let me take a look at the situation of Karin. Karin is 33 years old and lives with her husband and two children in a family house in Steenwijk. She has two separate bins in her garden; one for plastic packaging and one for vegetable, organic, and garden waste. These bins are designed for kerbside pick-up every two weeks. She brings her residual waste to an underground collection system and she pays a small fee every time she uses it. In her household she thus separates these flows of waste, before discarding it in a bin. This way of handling household waste has become normal for her and most of the time one of her children

brings the residual waste to the underground system. Karin says she does not think much about her household waste. When talking to her about the way she separates her household waste she says the following:

The plastics are free of cost, the organic waste is free and the residual waste you have to pay for of course, but I think it matters. Many people will say ‘anything we can do for free, we’ll do for free’, that helps to separate.

(Karin, July 28, 2014)

When mentioning this, Karin uses the categories *free of cost* and *not free of cost* to make a distinction in her household waste. Of course she also uses the distinction between the different materials, but money is the main motivator for her to separate these flows. As she mentions later:

I think that if we would have that here, that we would pay an annual fee, that many people would say like ‘that’s all great, but then I’ll keep the organic bin empty and then I would throw everything in the underground container’, that’s what I would do!

(Karin, July 28, 2014)

The bin for vegetable, organic, and garden waste is for Karin an element that she labels as *unclean*. She mentions it several times and this indicates that *hygiene* is an important value to her. In her case, however, the fact that it is free of cost is a stronger motivator for her to separate even this *unclean* waste flow from her household waste, because a cost is attached to the other option; the residual waste.

In Zwolle, where inhabitants pay an annual fee for all their waste, residents do not see the plastic packaging and the vegetable, organic, and garden waste as being for free, because they have already paid for all their waste and they feel free to throw stuff away whenever they need to. This can be seen in the way Frank – an inhabitant of Zwolle – talks about handling his waste: “Sometimes it starts to smell [...] so even if the bag isn’t full, you just walk any way” (Frank, July 29, 2014). This is in sharp contrast with how my informants in Steenwijk handle their waste. Frank, however, is not interested in the financial aspects of his waste, because he is not able to influence it - it is fixed. Hence he does not include financial categories in his rhetoric, even though household waste is not free of costs for him.

The financial incentives used in Steenwijk make it thus possible to add new categories to the perception of household waste, which has an effect on how residents think about handling their waste. Without this financial incentive, as is the case with Frank, other categories play a role in how residents perceive household waste. The interview I had with him indicated that he was much more focused on hygiene and cleanness, and he mostly used categories and labels such as *clean* and *unclean* when talking about his household waste.

Mary Douglas's theories of dirt, uncleanness and pollution from *Purity and Danger* (1984 [1966]) can be engaged here. As mentioned in the section on previous research, Douglas views society as an ordering system of classifications. She relates the concepts of dirt, uncleanness and pollution to human beings' capability and urge to order and classify everything we perceive. It is generally agreed that we make a selection of all the stimuli that come in through our senses, based on interest and importance. Basically this can be understood as a system of labels that we have ready to apply to what we perceive.

This is what is described in the cases of Karin and Frank, they both apply certain labels to their household waste and that is how they give meaning to it in certain situations. Douglas talks about dirt and pollution as by-products of this systematic ordering and classification; it consists of those elements that are rejected by the ordering system because it contradicts the favoured classifications (Douglas, 1984, p. 37). As an example she takes a pair of shoes and states that they are not dirty in themselves. However, when placed on the dining table we tend to label them as dirty. Shoes have certain labels or fall into certain categories, but 'dining table' is not one of them. When an element falls outside categorisation, it enters the realm of dirt and uncleanness. To repeat: "dirt is matter out of place" and "where there is dirt there is a system" (Douglas, 1984 [1966], p. 36). This makes dirt above all a spatial category and the act of getting rid of dirt is much related to questions of the social order.

If we look at how Frank labels his household waste and consider this from Douglas' perspective, would this indicate that Frank's household waste falls outside categorisation? He categorises his household waste as something dirty, so would this then fall outside categorisation? Or should it be disposed of in order to maintain a certain classification? I would like to argue that household waste is part of a specific ordering system. Even though Frank labels his household waste in general as *dirty*, he still uses other categories as well when he separates it in different waste flow bins. He is ordering his waste and giving it a place in his household, by sorting out most of the plastic packaging and his garden waste. What is left after this separation is something that he still has a place for: the residual waste

bin. By giving all these different aspects of his household waste a place, he includes it in an ordering system and this is why I want to refrain from stating that his *dirt* is falling outside categorisation.

Looking at how Frank and Karin use categories regarding their waste, makes me consider the work of Henriksson et. al. (2010) on cultural categories. They draw on the work of Douglas as well, but are focused on waste management in particular. Henriksson et. al. address in their work how cultural categories can affect source separation in households and they found that uncertainty about how to act can establish barriers to improved waste separation. In turn, their focus is on this specific kind of barrier and they identify four causes for uncertainty regarding household separation of waste.

1. Professional categories not matching cultural categories
2. Challenged habits of source separation
3. Lacking flows of waste
4. Missing or contradictory principles

(Henriksson et. al., 2010)

Even though some of these uncertainties are visible in some of the informants' responses, it is not directly related to the financial incentive system that is the topic of this study. However, Henriksson et. al. also say that "people act and create their perceptions of waste in a cultural context" (p. 2807) and thus from how they think and talk about waste, cultural categories can be detected. Henriksson et. al. use Figure 4 to illustrate their interpretation of cultural categories.

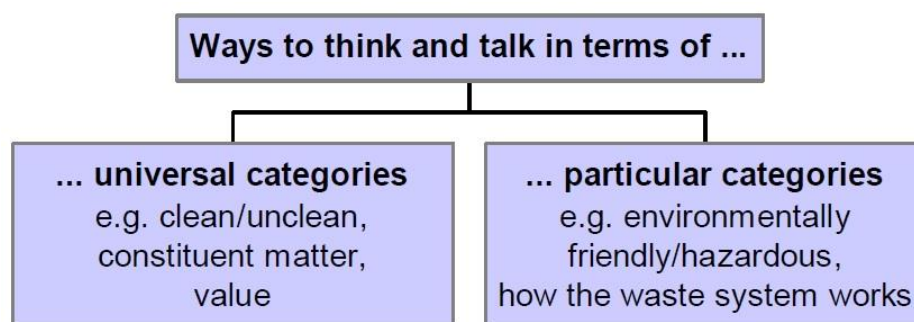


Figure 4: Cultural categories of waste in everyday life (Henriksson et. al., 2010, p. 2807)

In the figure above Henriksson et. al. make a distinction between universal categories and particular categories. The particular categories are specifically focused on organisational aspects of waste management, but Henriksson et. al. add other categories that are associated with waste in other societies and times as well and therefore name these categories universal. From the findings and analysis above I can see mostly universal categories related to the financial incentives or the lack thereof. Karin and Frank relate to their household waste differently, because they apply different categories. These categories do not fall under the particular categories as Henriksson et. al. describe them. Frank is very much focused on the categories of *clean* and *unclean*, whereas Karin – although aware of these categories – perceives the category of *free of cost* as more important in her everyday handling of her household waste.

The categories they use to address their household waste is connected to how they both handle the separation of their household waste. Frank uses his organic bin only for his garden waste and not for his food waste, because in his perception the latter is an *unclean* flow of waste that he does not want to keep separated. Also, this *unclean* category is easily spread to other flows of waste in his situation. For example, Frank showed me the content of his residual waste bin and pointed at the plastic packaging of a meat product. He explained that he thinks that this packaging is too *unclean* to separate, because then his waste bin for plastic packaging starts to smell and attract small insects. Consider the fact that the bin for plastic packaging is collected once every four weeks, but he can dispose his residual waste every day for free. Karin also claims to think that some aspects of separating her waste are *unclean*. She definitely labels her bin for the organic waste as *unclean*, but she still throws all her organic waste – including food waste – in this bin because it is free of cost. To her – and to many other informants in Steenwijk – the cultural category of *monetary value* is a leading category in handling and separating her household waste in her everyday life.

## 5.2 Cultural barrier

What is also interesting about the study of Henriksson et. al. (2010) is the idea to look at cultural categories to uncover barriers to household waste separation. From the previous section it can be concluded that in Zwolle – the municipality without financial incentives – the cultural category of *hygiene* can be seen as a barrier to improved household waste recycling. In the writing of Douglas (1985 [1966]) and Henriksson et. al. (2010) it does not become clear if categories can have a ranking order or hierarchy, but from my empirical

material I can argue that when implementing financial incentives the cultural categories that people use regarding their waste shifts in focus. In the previous chapter is stated that *monetary value* is a leading category in Steenwijk (financial incentives in place) and that this is more in focus than *hygiene*. The informants in Zwolle (no financial incentives), on the other hand, were much more focused on hygiene when they talked about managing their waste.

Meat is always packaged in plastic containers when you get them in a grocery shop and I usually discard them in the residual waste because you don't want pests

(Erna, August 11, 2014)

It still is something dirty, yeah, we actually think it's dirty

(Frank, July 29, 2014)

I have to admit that we put, for example, food waste not in the green bin, because I think it's horrible when animals get in there [...] I really don't like it when a bin smells

(Marjan, August 19, 2014)

Compared to the interviewees in Steenwijk, it stands out how much the concept of hygiene comes up in interviews in Zwolle of which the quotes above are examples. In the interviews in Steenwijk it would sometimes come up as well, but not before a financial aspect was addressed. When financial incentives are implemented the cultural category of *monetary value* becomes the first focus of thinking and handling their waste. Financial incentives therefore have the capacity to lower or remove the cultural barrier of *hygiene*. From an optimal waste management perspective this would be perfect, because that means that people separate their household waste even though they may consider it *unclean*. However, financial incentives are able to create a new barrier and this is elaborated on when describing the experiences of Linda.

Linda is a 50-year old woman, living most of the time alone and sometimes with her 18-year old son in the weekends in Steenwijk. She claims to be very focused on how to handle her waste, because she thinks separating and recycling are good things to do. She mentions that it is good for the environment and that she is happy to be able to contribute to a better environment in this way. In our interview, very soon after making these *environmental*



statements she started talking about the costs of the underground collection system for the residual waste. In the following quote is illustrated how this relates to her handling her waste.

At the moment when you really look at like ‘what is plastic, what is paper’, if you separate this very carefully, you are left with very little to put in the residual waste. I try to use the underground system with a maximum of once a week. This saves me a lot of money, so this makes sure that I am constantly focussing on this.

(Linda, August 14, 2014)

Talking in terms of categories, Linda seems to label the handling and separation of her waste as *environmentally good*. This could be seen as a particular cultural category. However, the motivations on *how* to specifically handle her household waste is governed by the *monetary value* category. According to her own words, she is influenced and motivated by the financial incentives to think about how she separates her waste, because she says that saving money is an argument to separate her waste very carefully. If compared to the situation of Karin, some comparisons and differences can be noticed. Both have a financial focus when considering how to dispose their waste. Karin wants to dispose as much waste as possible for free and Linda tries to minimise the amount of money spend for the residual waste. A notable difference is that in the interview Linda did not seem to label her waste in categories as *clean* or *unclean*. This could indicate that she is focused less on the aspect of hygiene or not at all. This can be perceived as an example of removing the cultural barrier of *hygiene* to improved household separation of waste. However, when I take a closer look at her practices, I can see that this removal is creating the possibility for a new barrier to arise.

As stated in the quote above, Linda is very specific with her household waste and separates the plastics and the paper carefully. When I asked her what sort of waste was left to put in the residual waste she was quiet for a moment, she was clearly thinking and considering what she usually does with her waste. She had difficulties answering the question, which is a bit strange because she said she disposes of a bag full of residual waste every week. According to estimate weights of residual waste in Steenwijkerland by ROVA, this would be a bag with a volume of approximately 50 liters and a weight of 6 to 7 kilograms. After an interview I often asked to see how my informants organised their waste inside their home and in this case Linda had a full bag of residual waste ready to be discarded in the underground system. I asked for her permission to look inside the bag and I saw different sorts of plastic

packaging in there. When I asked her about this, it became clear that she was unsure about the material: “That’s not plastic, right? That’s foil?” (Linda, August 14, 2014). In my turn, I was unsure how respond to this, because I did not want to judge or correct her way of handling her waste. I therefore expressed my personal opinion and explained that I always place these sort of plastic packaging in the bin for plastics. She then replied that she would look into the specific instruction of the collection company again.

Linda’s categorisation system of her household waste is dominated by the financial aspect. She knows everything about the costs, and even contacted the municipality to ask about this. She organises her household waste based on the information she gathered on the financial aspect, but fails to pay attention to the core aspect of what could benefit her system to reach its full potential: what should be discarded in the recyclable bins?

In this example of Linda is it clear that financial aspects can climb to the top of the categorisation system and make the *hygiene* category completely disappear from focus. On the other hand, it can also create a new barrier to improved waste separation. The financial incentive makes Linda more focused on what she actually does with her household waste and how she separates it, but it “distracts” her from the perhaps more important focus of how to categorise her household separation according to the categories defined by the waste collector. The category of *monetary value* can become dominant when financial incentives are in place and it might serve to remove the barrier of *hygiene*, but could also make way for a new barrier.

### 5.3 Othering

This last section addresses the concept of *othering*. In the previous chapter I described that many of the informants addressed certain opinions and attitudes in a generalising manner. They talked about the topic often using “others” in expressing attitudes regarding household waste management and the financial incentives, instead of speaking in first person. In this thesis, the term *othering* is used to describe the above mentioned phenomenon and this interpretation is much in line with the concept of the “generalised other” as theorised by sociologist George Herbert Mead (1972 [1934]). According to Mead, the generalised other refers to “the organised community or social group which gives the individual his unity of self” (1972 [1934], p. 154). When describing the generalised other, Mead focuses on the need to understand the attitudes of others to certain aspects of social activity in order to fully develop ones individual self to the fullest (1972 [1934], p. 154). The

way Mead addresses the generalised other is used here as an inspiration to theorise further on *othering*. However, it needs to be said that other usage of the concept of *othering* in academic literature is not overlooked. Other interpretations of *othering* are often focused on deviance and outsidersness as used in the work of sociologist Howard Becker (1997 [1963]). This kind of interpretation has been employed in studies on for example racism or gender issues, in which the aspect of exclusion or exoticising is common, and in postcolonial studies like Edward Said's classic *Orientalism* (1978). Here, I find the term *othering* useful to better understand my informants' distancing of themselves or setting themselves apart from others in the empirical material, although not based on their identifying themselves or others in terms of class, gender, or race, but on their relation to waste.

Interestingly, when asking the informants if they knew how other people – e.g. friends, neighbours or family – think about waste or how they handle their waste, they answered evasively; sometimes they saw neighbours walking by with a bag of waste, but otherwise they would not know. Most of the informants agreed that waste is not a topic to discuss with others. At the same time, in other parts of the interviews they talked about the topic often referring to “others” which gives *the other* a very strong voice. Then the question remains: Who is this *other* in this context?

There is, of course, no direct answer to this question, but there are two possible lines of thought to follow in this matter. First, *the other* refers to actual other people, or at least not to the self. Then what does this say about the informants self? Second, the informants are actually talking about themselves. In this case I wonder why they would do this?

So, what if the informants are not talking about themselves when addressing *the other*? Let me bring back something that Hendrik said in our interview.

Yeah, because it's of course not cheap, I think that's why a lot of people think like, well, whatever..

(Hendrik, 29 July, 2015)

Hendrik was talking here about the costs that are related to the disposal of residual waste. He honestly expresses that he believes the costs are not cheap, but then he assumes that *others* might be influenced by this aspect and do not care to bring their waste to the underground system. I observed how he separates his waste inside his house and saw that he had all possible waste flows separated in his household. Even batteries, lightbulbs and small

electronic devices were kept to dispose of separately. Obviously, the costs were not affecting him in the manner that he is describing above. Why then does Hendrik think *others* might be influenced differently by the costs of the residual waste? In this way he creates this *other* as a bad recycler, even though it is not sure if this *other* exists.

Perhaps some insights can be found in thinking in terms of *morality*. The definition of morality is stated in the Oxford Dictionary as follows: “Principles concerning the distinction between right and wrong or good and bad behaviour” (“Morality”). In terms of morality, Hendrik is making a distinction between what is considered to be good and bad. In a way, he is making a judgement of what is good recycling behaviour, his own behaviour, and what is bad recycling behaviour, *other* people’s behaviour. When it comes to morality, the philosopher of ethics Jennifer Trusted acknowledges that “each individual realises that she is expected to follow certain moral rules and conform to certain codes of behaviour” (2002 [1987], p. viii). She also states that moral values are very diverse and can also conflict with each other (Trusted, 2002 [1987], p. 114). Is it possible that Hendrik was facing two different sets of moral rules to abide to? On the one hand he was trying to show that he is doing the right thing in separating his household waste. Doing this, however, could be in conflict with other moral rules of society. Focusing on himself as doing the right thing could be seen as an egocentric or self-centred act. This could be why he chose to focus on behaviour of *others* instead of his own. One thing that remains unclear is why he diminishes his judgement of *other* people’s behaviour by stating that he thinks the costs are “not cheap”, as if he wants to justify the actions of this “other bad recycler”. Is this only a sign of his moral values, that is, not wanting to speak poorly of *others*? Or is he secretly exoticising the *other*?

The second line of thought is that my informants actually did talk about themselves when they addressed the *other* in their speech. I use the example of Ivan from the previous chapter, let me bring that back again.

I think that people separate a lot and what is left they might throw in the organic container. Then they think like ‘then I have to walk there and scan and then it costs me a euro every time, never mind then’, you see?

(Ivan, 5 August, 2014)

In the previous chapter is shown that he talked about himself when saying the above, because later in the interview he actually addressed the same topic but spoke in the first person. The question remains: why did he not speak in first person to begin with? My impression is that he was *othering* as a defense mechanism. Ivan is also an individual who realises there are certain moral rules to follow and he has the ability to distinguish between right and wrong. Ivan probably wants to be good and has a sense of who the “good recycler” is and who is not. He can realise that his view on the financial incentives might not be considered as the *right* view and therefore used *others* to express his own thoughts on the financial incentives. Maybe he did not want to be exposed as the *other* bad recycler.

In a way, waste becomes an identifier, it can become something that identifies someone as a person. However, waste is something that people do *not* want to identify themselves with, as can be seen in the example of Ivan above. He distances himself from being the “bad recycler” by referring to *other* and by doing this he is avoiding to let this aspect of waste identify him as this “bad recycler”.

According to Andrew Scerri (2012), researcher in social and environmental politics, a “greening” trend is visible in most societies. It is visible in consumer practices as well as in political debates. Considering this trend, in which being green is receiving more and more attention, it can be a moral struggle to admit not being part of it and let something like *waste* identify someone as “not being green”. The way Ivan and Hendrik are distancing themselves from the “other bad recycler” perhaps shows that on an everyday practical level most people are only “light” green or “greenish” but wish to be identified as “being green” and a “good recycler”.

## 6. Conclusions

This chapter serves to finalise this thesis by tying everything together in conclusions. It starts with a summary of the main findings and the results from the analysis. In this section, the aim is to answer the research questions posed at the beginning of the thesis of how financial incentives work in everyday household practices as a motivator for improved household waste separation. The chapter continues to address the applicability of understanding how financial incentives work on a household level. I provide suggestions on how the insights presented in this thesis can be used in waste management policy considering the aim towards a 100% circular economy. Then, I give suggestions for further academic research on the topic and finally a concluding remark.

### 6.1 Summary

In order to understand how financial incentives work in everyday household practices as a motivator for improved household waste separation, I first addressed how financial incentives are reflected in household members' attitudes towards handling and separating waste. From the empirical material it is clear that the costs attached to the handling of residual waste is affecting attitudes a great deal. The attitudes from my informants in Steenwijk were very much focused on the financial aspects, as oppose to the attitudes and expression of my informants in Zwolle. This makes sense of course, for in Zwolle they do not have any financial trigger to consider the costs.

Focusing on the respondents with financial incentives – in Steenwijk – I discern two main attitudes; either they believe the costs are expensive, or they believe it is acceptable or even cheap. The attitude of the costs being expensive was then expressed in two different manners; either they expressed that they themselves thought of the costs being expensive, or they expressed that *others* would find it expensive. Even though this specific finding was valuable further on in the thesis, it was not an influence on the practices that I found to be related to the financial incentives. In fact, these practices seem to be influenced by the financial incentives themselves, regardless of residents' attitudes towards them.

Two practices were distinguished that specifically relate to the financial incentives; the practice of saving bags of residual waste to be able to use the maximum volume of the underground collection system, and, the practice of finding an alternative way to dispose of the residual waste, either in public waste bins or at the workplace. These practices are directly related to the financial incentives and how people value monetary aspects in general. Both

practices come forth from a urge to save costs, it makes the residents only want to use the underground collection system if they can fully use the space that is available. They feel that they pay for the whole space, therefore they want to use the whole space as well. This indicates that the financial incentives are working to motivate residents to improve household waste separation. They have so little residual waste left that they either save it or find alternative way for disposal, to avoid paying for “empty space”.

From the empirical material I synthesise three main social and cultural understandings that seem to play a role in how financial incentives affect people’s waste management. These understandings are dissected further below, but first a short recapitulation. First, there exists a socially or culturally constructed opinion about costs. Second, people value monetary benefits very highly. Third and last, people express their opinions in a generalising manner as if expressing how they believe they are expected to express their thoughts on certain issues. These three understandings were used to guide the analysis to understand how financial incentives are affecting household waste separation.

In order to understand the culturally constructed opinions about monetary aspects I chose to look at how the informants label and categorise their household waste. By doing this for both field sites, the influence of financial incentives on how the informants relate to their household waste is clearly visible. In Steenwijk, the informants use labels as *free of cost* and *not free of cost* to refer to their household waste. While in Zwolle the informants would use labels as *clean* and *unclean*. In some cases the cleanliness of the household waste was addressed by informants in Steenwijk as well, but never before the costs were mentioned. The financial incentives trigger the cultural category of *monetary value* to play a role in the handling and separating of household waste. In fact, *monetary value* has the capability to overrule the cultural category of *hygiene*. This is because people have a tendency of not wanting to be identified with waste. As said earlier in this thesis, the informants state that waste is not a topic to discuss with others. Money on the other hand is perceived differently, residents have addressed financial aspects continuously throughout the interviews. They do not seem to have any problem with being identified in terms of money and they can easily relate to it. The *monetary value* therefore helps residents to improve household waste separation, because now they would even separate the waste flows that are highly associated with uncleanliness: organic waste and packaging of food products. Basically, it means that money talks louder than dirt.

The second understanding – people value monetary benefits very highly – is supporting *monetary value* as the main category applied by informants in Steenwijk when regarding their household waste. The cultural category *hygiene* is more visible with the informants in Zwolle, which as a result makes them not separate all of their household waste. From the empirical material I conclude that the cultural category of *hygiene* could be seen as a cultural barrier to improved household waste separation and the *monetary value* has the ability to lower or even remove this barrier, because people rather identify themselves with money than with waste. However, *monetary value* also has the ability to create a new barrier, because it can make people focus too much on the costs, instead of focusing on how to categorise household waste separation according to the categories defined by the waste collector.

The last understanding focuses on how the informants were generalising their expressions and opinions by referring to *others*, which inspired me to look further into the concept of *othering*. Two lines of thought are interesting here; informants refer to *others* and are not talking about themselves as waste-managing subjects in first person, and, it can also be concluded that when informants refer to *others* they are actually referring to themselves. Both these interpretations become significant when also considering the issue of *morality* as a factor. According to the interpretation addressed earlier in the analysis, *Morality* is very much related to being able to differ between right and wrong and good and bad behaviour. It is closely related to moral and social values. In this thesis I suggest that *othering* is influenced by certain moral and social values, which makes it work as a defence mechanism. Residents are *othering* to create their own identity as being the “good recycler” and not the “bad recycler”. They do not want waste to identify who they are, but in *othering* waste is exactly doing what they want to avoid. In expressing opinions of *others* about waste, residents are letting waste influence them to participate in this *othering* and let waste identify them.

This process is actually contributing to how financial incentives work as a motivator for improved household waste separation. As stated above, money talks louder than dirt. As a consequence, the financial incentives make the cultural category of *monetary value* play an important role in how residents handle and separate their waste in everyday life. When *othering*, residents are focused on identity creation and by trying to avoid waste as an identifier and preferring money, the cultural category of *monetary value* claims an even stronger position.



## 6.2 Implications

Before starting this research, it was already proven that the financial incentive system has a positive effect on increasing the amount of collected recyclable waste flows and decreasing the collected amount of residual waste. In this study I have given insights and understandings of *how* financial incentives work as a motivator for improved household waste separation on a household level. This ought to be interpreted as a complimentary research on the effectiveness of the financial incentive system. In this section a few topics are addressed that arise from this study and that can be interesting to develop further for future waste policy.

In this thesis I show that money is valued very highly in my informants' lives. At least when addressing the topic of household waste management, the money aspect was never far away. The informants in Steenwijk addressed the costs on their own initiative and fairly immediately in our interviews. This indicates that it plays an important role in their thinking of their waste management. More specifically, this study shows that the informants seem to prefer to identify themselves with money rather than with waste. Then, if communication about the costs is needed, why not bring it in the most positive way and focus on what residents can gain if they do it right? The informants in Steenwijk demonstrate that this contributes to their positive attitude towards financial incentives and this then contributes to improved household waste separation. Considering that people also want to identify themselves as being a "good recycler" I suggest combining these two. A focus on rewarding residents for good behaviour should be central to waste management policy. The system used in Steenwijk – of paying an average fee in advance and receiving money in return when residents dispose of less residual waste – is working stimulating for the residents. But what if such a financial rewarding system is not possible? Then consider to reward the residents in other ways. For example by giving them positive feedback on the fact that they are doing it right, perhaps address how their good separation behaviour is contributing to the environment by saving natural resources. In such a case it is important to be specific and find concepts that makes sense to the residents. Another option is to find rewards not for individual households, but for a street or neighbourhood. This then also has the potential to create a community feeling, that "we are doing this together", this could then help to break or give new input to certain socially constructed ideas about handling and separating household waste.

Another aspect that was highlighted in this thesis, is related to the practices that are influenced by the financial incentives. The two practices that were focused on here, both stressed the motivating capacity of the financial incentives to improve household waste

separation. Their improved separation practices resulted in having little residual waste left to dispose of in the underground collection system. This in turn made residents save their waste until they have enough to put into the collection system or they find other alternatives to dispose of this little waste. The empty space that they would need to pay for is holding them back. Then why not make this space smaller and cheaper? I addressed that it is not the walking to the underground collection system is the reason for residents to save their waste or find other ways to dispose, but the idea of paying for “nothing”. It could be beneficial to see if a smaller space and lowering of the cost can have a positive effect on people’s attitudes and practices.

### **6.3 Further research**

First of all I would recommend further qualitative research on waste separation on a household level. There is much to learn from peoples’ everyday life and habits when it comes to disposing of waste. If understood *why* people act in certain ways or what hindrances they see, waste management companies can anticipate and adapt their processes. Also, ROVA is convinced that they have done everything possible on the “outside” to promote source separation of waste, but still they have not reached their goal of a 100% recycling rate. That is why more research on waste management from a household or resident perspective is needed.

Besides this general request to use more cultural analysis, I have some specific suggestions to use in research on financial incentives in relation to waste management. In creating the theoretical framework to use in this study I chose to not use several theoretical perspectives, because on the topic of financial incentives I needed to make a first exploration. Now that this first exploration is executed and understandings of attitudes and practices towards the financial incentives for the household waste are created, it could be interesting to have a closer look utilising other perspectives.

Since ROVA is a governmental body and is working closely with municipal policies on waste management, looking at the field of power relations could be an interesting approach to take. In the relation between residents and the local municipality, a certain division of power is to be found. This relation deserves attention for it can influence the perception of waste management that residents have. On the other hand, waste management is also up for political discussions and many different interests are playing a role in decision making. It could be useful to incorporate this aspect of power relations between waste management

companies and municipalities in further research as well and address topics such as governance and accountability.

A study utilising the Actor-Network Theory (ANT) as a theoretical tool could also be of value in understanding the full implications of the financial incentives. With ANT it is possible to map all relevant actors and actants in the field. When utilizing this theoretical tool it is possible to account for not only the residents' perspective, but also explore the role of waste itself or social-technical factors (e.g. the underground disposal system).

#### **6.4 Concluding remark**

Before this thesis comes to an end, I feel the need to address the big question still lingering: Is it really “all about the money”? I hope to have clearly communicated that the financial incentives have a big influence on handling and separating household waste, but to give a straight answer: no, it is not all about the money. In order for the financial incentive system to work in this stimulating manner, people need to be *able* to separate recyclable flows of waste. This means that municipalities and waste collection companies should work together to make it as easy as possible for residents to separate their household waste. In this case much effort has already been put into the organisation of kerbside pick-up schemes and underground collection systems. To conclude, motivating people to improve household waste separation is not all about the money. This thesis, however, is (almost) all about the money.

## 7. Dutch Summary

### 7.1 Introductie

In Nederland is het heel gewoon om afval in het huishouden te scheiden. In verscheidene gemeenten is een systeem met een financiële prikkel geïmplementeerd die bedoeld is om burgers te motiveren om efficiënter met het huishoudelijk afval om te gaan. Ook al heeft het systeem goede resultaten laten zien in de hoeveelheden ingezameld huishoudelijk afval, onderzoek naar hoe het de houding en motivaties van burgers beïnvloedt bestaat niet. In deze scriptie streef ik om inzicht te creëren in hoe een financiële prikkel werkt als een stimulans voor betere afvalscheiding in een alledaags perspectief. Gebaseerd op materiaal dat is verzameld tijdens een veldonderzoek van 4 maanden voor een afvalinzamelingsbedrijf in Nederland in de zomer van 2014, kijk ik naar de effecten van het Diftar-systeem dat is geïmplementeerd in de gemeente Steenwijkerland. Het onderzoek vond ook plaats in de gemeente Zwolle, waar geen financiële prikkel is geïmplementeerd in het afvalbeleid, om op deze manier de effecten van een financieel systeem goed te kunnen achterhalen. Dit onderzoek maakt gebruik van etnografische onderzoeksmethoden zoals semigestructureerde interviews en het observeren van bewoners in hun huizen om de houdingen en handelingen te onderzoeken ten opzichte van huishoudelijk afval en de financiële prikkel.

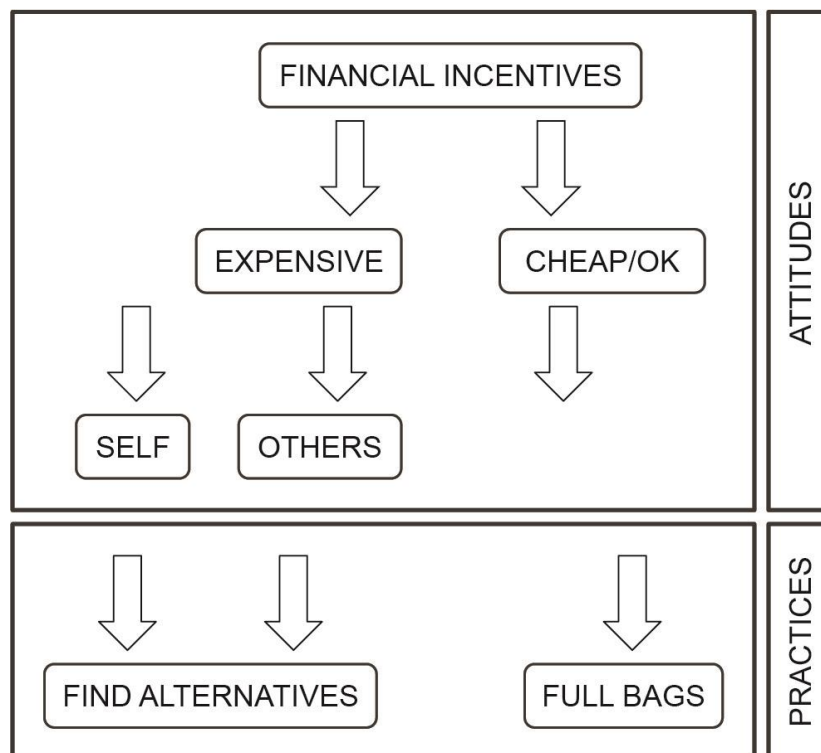
### 7.2 Bevindingen

Om te kunnen begrijpen hoe een financiële prikkel in dagelijkse huishoudelijke handelingen functioneert als een stimulans tot het beter scheiden van huishoudelijk afval, richtte ik mij eerst op hoe deze financiële prikkel zichtbaar is in de houding van bewoners tegenover het scheiden van afval. Vanuit het empirisch materiaal is duidelijk geworden dat de kosten die gerelateerd zijn aan het restafval een groot effect hebben op deze houding. In vergelijking met de informanten in Zwolle, waren de houdingen van mijn informanten in Steenwijk waren erg gefocust op het financiële aspect. Dit is niet vreemd, aangezien in Steenwijk een financiële prikkel aanwezig is en in Zwolle niet.

Met de focus op de informanten in Steenwijk kunnen twee houdingen onderscheiden worden; of ze vinden de kosten “duur”, of ze vinden het acceptabel of zelfs goedkoop. De houding van informanten die het duur vinden worden vervolgens op twee verschillende manieren geuit; of ze uiten dat ze het zelf duur vinden, of ze zeggen dat *anderen* het duur

zouden vinden. Ondanks dat deze specifieke bevinding waardevol is geweest in mijn onderzoek, beïnvloedt het niet de handelingen die ik aan de financiële prikkel relateer. In werkelijkheid worden deze handelingen beïnvloed door de financiële prikkel, ongeacht de *houding* van bewoners tegenover de financiële prikkel.

In deze scriptie worden twee handelingen onderscheiden; de handeling van het opsparen van zakken restafval om het maximale volume van de ondergrondse container te kunnen gebruiken, en de handeling van het vinden van een alternatieve manier om het restafval weg te gooien. Dit is of in openbare afvalbakken of het wordt meegenomen naar het werk. Deze handelingen kunnen direct worden gerelateerd aan de financiële prikkel en hoeveel waarde mensen aan monetaire aspecten hechten in het algemeen. Beide handelingen komen voort uit de aandrang om kosten te besparen, het zorgt ervoor dat bewoners de ondergrondse verzamel container alleen willen gebruiken wanneer zij de gehele beschikbare ruimte kunnen vullen en gebruiken. In de ervaring van de bewoners betalen zij voor deze hele ruimte en daarom willen zij deze ook in zijn geheel gebruiken. Dit duidt aan dat de financiële prikkel werkt om afval scheiden in huis te verbeteren. Bewoners hebben nog maar zo weinig restafval over dat zij dit bewaren en opsparen of een alternatieve manier vinden om het weg te gooien, zodat zij kunnen voorkomen om voor de lege ruimte te betalen.



Met behulp van het empirisch materiaal worden drie culturele aannames gedaan die een rol spelen in hoe een financiële prikkel bewoners beïnvloeden. Ten eerste heerst er een sociaal of cultureel construct met betrekking tot hoe mensen denken over kosten. Ten tweede hechten mensen grote waarde aan financieel voordeel. En ten derde uiten mensen hun mening veelal in een generaliserende manier alsof ze dit uiten op een manier waarvan ze denken dat ze op bepaalde dingen zouden moeten reageren. Deze aannames spelen vervolgens een leidende rol in de analyse om te begrijpen hoe een financiële prikkel afval scheiden in huis beïnvloed.

In deze scriptie is gekozen om vanuit een theoretisch kader te kijken dat inspeelt op hoe informanten het huishoudelijk afval labelen en categoriseren, om op deze manier inzicht te creëren in dit cultureel construct. Door dit te doen voor beide onderzoek locaties – Steenwijk en Zwolle – is de invloed van de financiële prikkel op de relatie van de informanten met hun afval duidelijk zichtbaar. In Steenwijk gebruiken informanten labels als *gratis* en *niet gratis* om aan hun huishoudelijk afval te refereren. In Zwolle daarentegen, gebruiken ze eerder labels als *vies* en *niet vies*. In sommige gevallen wordt de reinheid van het huishoudelijk afval ook genoemd door de informanten in Steenwijk, maar nooit voordat de kosten zijn genoemd. De financiële prikkel prikkelt als het ware de culturele categorie van *monetaire waarde* om een rol te spelen in het omgaan met en het scheiden van huishoudelijk afval. Sterker nog, de *monetaire waarde* heeft de capaciteit om de culturele categorie van *hygiëne* te overwinnen. Dit helpt bewoners om hun afvalscheidingsgedrag te verbeteren, omdat ze nu zelfs die fracties scheiden die anders voornamelijk geassocieerd worden met onreinheid: groente, fruit en tuinafval en de verpakkingen van verse voedsel producten.

De tweede aanname die uit het empirisch materiaal naar voren kwam – mensen hechten grote waarde aan financieel voordeel – ondersteunt *monetaire waarde* als hoofdcategorie die wordt gebruikt door informanten uit Steenwijk als zij refereren aan hun huishoudelijk afval. De culturele categorie *hygiëne* is juist meer aanwezig bij de informanten in Zwolle, waardoor zij niet altijd hun afval goed gescheiden aanbieden. Deze categorie *hygiëne* kan dus worden gezien als een culturele barrière tot beter afval scheiden in huis en de categorie *monetaire waarde* die aan de financiële prikkel is gerelateerd, heeft de capaciteit om deze barrière te verlagen of zelfs te verwijderen. Tegelijkertijd moet wel in acht worden genomen dat de financiële prikkel ook de *monetaire waarde* te veel focus kan geven waardoor mensen minder aandacht geven aan hoe het huishoudelijk afval het beste gescheiden kan worden volgens de richtlijnen van de afvalverwerker.

De derde en laatste aanname gaat over hoe de informanten hun uitingen generaliseren door te refereren naar *anderen*. Deze aanname heeft geleid tot het verder theoretiseren van het concept “*othering*”. Twee denkrichtingen krijgen hierin aandacht: informanten refereren naar *anderen* en praten niet over zichzelf, en informanten refereren naar *anderen* en praten eigenlijk over zichzelf. Beiden richtingen kunnen een belangrijke impact hebben als *moraliteit* in overweging wordt genomen als een factor. *Moraliteit* is gerelateerd aan het in staat zijn om recht en onrecht van elkaar te scheiden en daarmee ook goed en slecht gedrag. Het is nauw verwant aan morele en sociale waarden en in deze scriptie redeneer ik dat “*othering*” wordt beïnvloed door bepaalde morele en sociale waarden. “Groen” zijn en “het juiste doen” zijn voorbeelden van zulke waarden die hier een rol spelen. Als het aspect van “*othering*” aan de financiële prikkel worden gekoppeld, lijkt de financiële prikkel niet bij te dragen aan de gevoel van “het juiste doen”. De meeste mensen scheiden hun huishoudelijk afval op de manier die door de afvalinzamelaar wordt aangeraden, maar op dit gebied kan nog terrein worden gewonnen als bewoners ook het gevoel hebben dat ze het goed doen.

### 7.3 Suggesties

In deze scriptie wordt aangetoond dat aan geld en kosten grote waarde gehecht wordt door de informanten. Wanneer het onderwerp van huishoudelijk afval werd aangehaald, was in de interviews in Steenwijk het financiële aspect nooit ver weg. De informanten haalden het onderwerp vrij snel in de interviews op eigen initiatief aan. Dit geeft al aan dat het een grote rol speelt in hun denken over hoe zij met hun huishoudelijk afval om gaan. Sterker nog, dit onderzoek geeft aan dat de informanten erg gevoelig waren voor financiële voordelen. Als communicatie dan toch nodig is over de kosten, waarom kunnen we dit dan niet in de meest positieve manier doen en een focus leggen op het voordeel voor de bewoners? De informanten in Steenwijk laten zien dat dit bijdraagt aan een positieve houding tegenover de financiële prikkel en dit draagt vervolgens weer bij aan beter afval scheiden in huis. In acht genomen dat mensen ook graag willen weten dat ze het goed doen, geef ik al suggestie om deze te combineren. Een focus op het belonen van goed gedrag zou belangrijk moeten zijn binnen de kaders van het afvalbeleid. Het systeem dat in Steenwijk wordt gebruikt – waarbij bewoners vooraf een gemiddeld tarief betalen en geld terug krijgen als ze vervolgens minder restafval aanbieden bij de ondergrondse verzamelcontainer – werkt stimuleren voor de bewoners. Maar wat als een financieel beloningssysteem niet haalbaar is? Overweeg dan om bewoners te belonen op een andere manier. Geef bijvoorbeeld positieve feedback waardoor ze

weten dat het goed doen. Laat hen weten dat hun goede afvalscheidingsgedrag bijdraagt aan een beter milieu door het sparen van natuurlijke grondstoffen. In deze situatie is het wel belangrijk om specifiek te zijn en concepten te gebruiken die logisch zijn voor de bewoners. Een andere optie is om niet alleen individuele huishoudens te belonen, maar bijvoorbeeld een hele straat of wijk. Dit heeft de potentie om een soort gemeenschapszin te creëren en zou tegelijkertijd de sociaal geconstrueerde ideeën over het omgaan en scheiden van afval kunnen doorbreken en van nieuwe input kunnen voorzien.

Een ander aspect dat in deze scriptie naar voren is gekomen, is gerelateerd aan de handelingen die beïnvloed worden door de financiële prikkel. De twee handelingen die hierbij aandacht krijgen, benadrukken allebei de stimulerende capaciteit van de financiële prikkel tot beter afval scheiden in huis. Het verbeterde afvalscheidingsgedrag van bewoners zorgt ervoor dat bewoner nog maar erg weinig restafval over hebben om in de ondergrondse container te deponeren. Dit resulteert vervolgens in dat bewoners hun restafval opsparen tot ze genoeg hebben om de gehele ruimte van het ondergrondse system te kunnen vullen of ze zoeken naar een andere manier om van dit kleine beetje restafval af te komen. De lege ruimte waar ze voor moeten betalen bij een klein zakje in de ondergrondse container is de reden waarom ze deze handelingen vertonen. Waarom dan niet deze ruimte kleiner en goedkoper maken? In het onderzoek komt aan bod dat lopen naar de ondergrondse container niet de reden is voor dit gedrag, maar het idee dat ze betalen voor “niets”. Het kan interessant zijn om te kijken of een kleinere ruimte en lagere kosten een positief effect kunnen hebben op de houding en het gedrag van bewoners.



## 8. References

- Afval Overleg Orgaan (2004). *Eerste hulp bij discussie over diftar*. Utrecht: AOO.
- Ajzen, J. (2002). Perceived behavioral control, self-efficacy, locus of control, and theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665-683. doi: 10.1111/j.1559-1816.2002.tb00236.x
- Becker, H. S. (1997). *Outsiders: Studies in the sociology of deviance*. New York: Free Press. (Original work first published in 1963)
- Davies, C. (1998). *Reflexive Ethnography*. New York: Routledge.
- Derksen, L. & Gartrell, J. (1993). The social context of recycling. *American Sociological Review* 58(3), 434-442. Retrieved from <http://www.jstor.org.ludwig.lub.lu.se/stable/2095910>
- Dijkgraaf, E. & Gradus, R. H. J. M. (2004). Cost savings in unit-based pricing of household waste: the case of the Netherlands. *Resource and Energy Economics* 26(4), 353-371. doi: 10.1016/j.reseneeco.2004.01.001
- Dijkgraaf, E. & Gradus, R. H. J. M. (2009). Environmental activism and dynamics of unit-based pricing systems. *Resource and Energy Economics* 31(1), 13-23. doi: 10.1016/j.reseneeco.2008.10.003
- Douglas, M. (1984). *Purity and danger: an analysis of concepts of pollution and taboo*. London: Routledge. (Original work published in 1966)
- Fullerton, D. & Kinnaman, T.C. (eds.) (2003). *The economics of household garbage and recycling behavior*. MA, USA: Edward Elgar Publishing.

- Goorhuis, M., Reus, P., Nieuwenhuis, E., Spanbroek, N., Sol, M. & van Rijn, J. (2012). New developments in waste management in the Netherlands. *Waste Management & Research* 30(9 suppl), 67-77. doi:10.1177/0734242X12455089
- Hage, O., Söderholm, P. & Berglund, C. (2009). Norms and economic motivation in household recycling: empirical evidence from Sweden. *Resources, Conservation and Recycling* 53(3), 155-165. doi: 10.1016/j.resconrec.2008.11.003
- Henriksson, G., Åkesson, L., & Ewert, S. (2010). Uncertainty regarding waste handling in everyday life. *Sustainability*, 2(9), 2799-2813. doi:10.3390/su2092799
- Hetherington, K. (2004). Secondhandedness: consumption, disposal, and absent presence. *Environment and Planning D: Society and Space* 22(1), 157-173. doi: 10.1068/d315t
- Kinnaman, T.C. (1995). Garbage, recycling, and economic incentives: three related essays. *Proceedings of the annual conference on taxation held under the auspices of the National Tax Association-Tax Institute America*, 33, 169-174. Retrieved from <http://www.jstor.org/stable/42910880>
- Kinnaman, T. C. (2006). Policy watch: Examining the justification for residential recycling. *The Journal of Economic Perspectives* 20(4), 219-232. doi: 10.2307/41791010
- Kinnaman, T. C. (2010). Optimal solid waste tax policy with centralized recycling. *National Tax Journal* 63(2), 237-252. doi: 10.2307/41791010
- Kollmuss, A. & Agyeman, J. (2002) Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260. doi:10.1080/13504620220145401
- Labaree, R. V. (2002). The Risk of 'Going Observationalist': Negotiating the Hidden Dilemmas of Being an Insider Participant Observer. *Qualitative Research* 2(1), 97-122. doi: 10.1177/1468794102002001641

- Löfgren, O. (2015). Recycling the home: the constant flow of domestic stuff, emotions and routines. In K. M. Ekström (Ed.), *Waste management and sustainable consumption: reflections on consumer waste* (pp. 13-28). London, Routledge.
- Mannetti, L., Pierro, A., & Livi, S. (2004). Recycling: planned and self-expressive behavior. *Journal of Environmental Psychology*, 24(2), 227-236. doi: 10.1016/j.jenvp.2004.01.002
- Martin, C. (2013). Trash of treasure? A cultural analysis of the retention and disposal of everyday objects. Master thesis, Lund University. Retrieved from <https://lup.lub.lu.se>.
- Mead, G. H. (1972). *Mind, self, and society: from the standpoint of a social behaviourist*. Chicago: University of Chicago Press. (Original work published in 1934)
- Ministerie van Infrastructuur en Milieu (2014). *Invulling programma Van Afval Naar Grondstof*. Den Haag: Ministerie van Infrastructuur en Milieu.
- Morality. (n.d.). In *Oxford Dictionaries*. Retrieved from <http://www.oxforddictionaries.com/definition/english/morality>
- Moving towards a circular economy – Environment – European Commission. (2015). Retrieved February 5, 2015, from [http://ec.europa.eu/environment/circular-economy/index\\_en.htm](http://ec.europa.eu/environment/circular-economy/index_en.htm)
- Munro, R. (2013). The disposal of place: facing modernity in the kitchen-diner. *The Sociological Review* 60(2), 212-231. doi: 10.1111/1467-954X.12046
- Nairn, K., Munro, J., & Smith, A. B. (2005). A Counter-narrative of a 'Failed' Interview. *Qualitative Research* 5(4), 395-416. doi: 10.1177/1468794105050836
- Reckwitz, A. (2002). Toward a theory of social practices: A development in culturalist theorizing. *European Journal of Social Theory*, 5(2), 243-263.

Rijkswaterstaat (2014). *Afvalstoffenheffing 2014*. Utrecht: Rijkswaterstaat Water, Verkeer en Leefomgeving. Retrieved from

<http://www.rwsleefomgeving.nl/onderwerpen/afval/publicaties/>

ROVA (2014). *Jaarverslag 2013, Bewust Kiezen*. Zwolle: ROVA. Retrieved from

<http://jaarverslag2013.rova.nl/>

ROVA. (2015). Retrieved February 6, 2015, from <http://www.rova.nl/rova>

Said, E. W. (1978). *Orientalism*. London: Routledge & Kegan Paul.

Scerri, A. J. (2012). *Greening Citizenship: sustainable development, the state and ideology*.

Basingstoke, Palgrave Macmillan. Retrieved from

<http://www.palgraveconnect.com.ludwig.lub.lu.se/pc/doi/10.1057/9781137010315>

Sunderland, P. L., & Denny, R.M (2007). *Doing anthropology in consumer research*. Walnut Creek: Left Coast Press, Inc.

Thompson, M. (1979). Rubbish theory. *Encounter*, 52(6), 12-24. Retrieved from

<http://www.unz.org/Pub/Encounter-1979jun-00012>

Tonglet, M., Phillips, P. S., & Read, A. D. (2004). Using the theory of planned behaviour to investigate the determinants of recycling behavior: A case study from Brixworth, UK. *Resource, Conservation and Recycling*, 41, 191-214.

doi:10.1016/j.resconrec.2003.11.001

Trusted, J. (2002). *Moral Principles and Social Values*. London: Routledge & Kegan Paul Ltd. (Original work published in 1987)

Tudor, T. L., Barr, S. W., & Gilg, A. W. (2006). Linking intended behavior and actions: a case study of healthcare waste management in the Cornwall NHS. *Resource, Conservation and Recycling*, 51(1), 1-23. doi:10.1016/j.resconrec.2006.06.009

VandenBroek, A. (2010). Agency and Practice theory. In H. Birx (Ed.), *21<sup>st</sup> century anthropology: A reference handbook*. (pp. 480-488). Thousand Oaks, CA: Sage Publications, Inc. doi: <http://dx.doi.org.ludwig.lub.lu.se/10.4135/9781412979283.n49>

Waste. (n.d.). In *Oxford Dictionaries*. Retrieved from <http://www.oxforddictionaries.com/definition/english/waste>

Åkesson, L. (2006). Wasting. *Ethnologia Europea*, 35(1), 39-47.

Åkesson, L. (2012). Waste in overflow. In B. Czarniawska & O. Löfgren (Eds.), *Managing overflow in affluent societies* (pp. 194-212). London, Routledge.

### **Empirical material**

Erna (August 11, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Frank (July 29, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Gerda (July 31, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Hendrik (July 29, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Henk & Wilma (July 31, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Herman & Bea (July 31, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Ivan (August 5, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Karin (July 28, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Kim (March 10, 2015). Personal Conversation.

Linda (August 14, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Margreet (August 12, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Marjan (August 19, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.

Willem (August 11, 2014). Personal Interview. Oosterwijk, A. E. Interviewer.