A Photographic Essay on Solid Waste Recycling: Street Ethnography and Innovative Experiences in the Netherlands

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Abstract

This photographic essay explores solid waste management and recycling practices among residents of Zaandam and other towns in the Netherlands. The study was based on ethnographic research conducted in September 2019 and December 2021 that included street ethnography, landscape observation, and recorded interviews. The photo essay presents a narrative of the researcher's observations and experiences, highlighting the challenges and successes of waste management and recycling practices in the Netherlands.

Keywords: photographic essay, solid waste management, recycling practices, street ethnography, Zaandam, Netherlands.

Um ensaio fotográfico sobre reciclagem de resíduos sólidos: Etnografia de rua e experiências inovadoras na Holanda

Resumo

Este ensaio fotográfico explora as práticas de gestão e reciclagem de resíduos sólidos entre os moradores de Zaandam e outras cidades da Holanda. O estudo foi baseado em pesquisa etnográfica realizada em setembro de 2019 e dezembro de 2021, que incluiu etnografia de rua, observação do contexto paisagístico e entrevistas gravadas. O ensaio fotográfico apresenta uma narrativa das observações e experiências do pesquisador, destacando os desafios e sucessos da gestão de resíduos e práticas de reciclagem na Holanda.

Palavras-chave: ensaio fotográfico, gestão de resíduos sólidos, práticas de reciclagem, etnografia de rua, Zaandam, Holanda.

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"Oh, I know who you are. You're the ones going around taking pictures of trash cans," a young vendor at a newsstand in Zaandam [Netherlands, 2019] said to us while laughing. We hadn't been in the small municipality for a week, yet had already lost the protective invisibility of anonymity (Pétonnet, 1987), because we were not acting like the usual tourists in Zaandam who photograph the houses of the French painter Monet, located on the banks of the river Zaan, or that of Czar Peter the Great, who settled in the city to learn about the art of shipbuilding. Indeed, it is difficult to go unnoticed when taking pictures of simple trash cans, garbage trucks, and municipal waste collection carts, or of the garbage floating in the canals. But the laughter of the vendor made us think that unintentionally we were displaying a very weird image, bordering on mental disturbance.

Our photographic approach to Zaandam (more precisely to the Russischebuurt neighborhood) and the other locations visited did not involve "top-down" photos, such as aerial photographs, as suggested by Collier Jr. (1986). In the past this was difficult because the Netherlands is a flat country, and it would be challenging to find a hill or a building that would allow a comprehensive view of the city. But today we have mapping and aerial imaging resources with applications like Google Earth that more than adequately meet the need to see the whole of a place and its boundaries for a more focused approach to an object. This resource was extensively used, along with google.com/maps, and it is not an exaggeration to say that it was a central research aid, guiding us through roads and streets to the companies where we conducted interviews and produced images.

In Amsterdam, in 2019, we directed our exploration towards the central streets, following the canals, observing, and taking photographs, especially of trash bins, while trying to understand the local norms for collecting discarded materials. But we also had the opportunity to visit a house in Amsterdam and document the storage of recyclable and compostable waste. We were able to do the same in Groningen (a city in the northern Netherlands) in 2021, where a visit to a former hospital that now serves as housing allowed us to observe how the ORKZ occupation organized its recycling, a central concern of its inhabitants.

In Zaandam, all our movements were by foot. When leaving our accommodation, the most common route included the streets surrounding the canal, always starting from the main avenue, focusing more attentively on urban elements along the way. Strolling along the main canal in a street ethnography (Eckert, Rocha, 2016) was the methodology used there. However, we also conducted research in archives.

To prepare for the scheduled interview with the librarian Geke who provided us access to digital archives at the Zaandam municipality, we consulted the municipality website and downloaded photos and videos available on YouTube. The photographs include records from different eras, some showing how waste (especially dirty waters) was removed from houses. Photos document this waste from the 19th century until the mid-20th century, as Zaandam was one of the last municipality in the country to have a sewage system, which was installed around 1950.

¹ Zaandam was a major shipbuilding center, providing support to both the West India Company (which dominated Pernambuco Brazil) and the East India Company (responsible for establishing Dutch colonies in Asia).

We took all of the photographs in this essay and in some cases we appear in the images as they are records of encounters or inspections. The act of taking photographs is not simple because it often involves negotiations, especially when other subjects may appear. As unusual as it may have seemed to the young man at the newsstand, photographing trash in the street had the advantage of requiring few formal contacts (Rial, 1998) or informed consent. There is considerable freedom to photograph in public spaces, and we observed this while conducting street ethnography in Zaandam and Amsterdam. Our movements in the city were daily. We followed a planned route, such as walking through streets in the old industrial neighborhood, in neighborhoods with more recent housing, in condominiums, and on streets where commercial houses surround the main canal.

Although waste collection equipment was our main focus, as well as any visible trash on the ground, we sought to contextualize the shots by photographing the environment. These scenes were often composed of beautiful landscapes that converged with the imagery of a Dutch town, while at other times they featured old houses or a series of unremarkable warehouses. With a camera always in hand and occasionally an umbrella in the other, nothing prevented our access to waste collection devices found along the sidewalks, whether those of individual residences or stores, awaiting the Renewi truck or that of another company. The passage of the waste collection trucks, marked with the emblem "Trash", generally meant the end of our daily walk, after which we dedicated ourselves to writing the field diary and organizing the images produced on our laptops.

The same ease of recording was found at almost all the recycling companies we visited in 2021, and with individuals interviewed at street markets, cafes, or in their homes. Almost all our interlocutors agreed to be photographed and filmed. This included Geke, the librarian from Zaandam; Niko, a composter in Amsterdam; a young man generating energy with a bicycle at a street fair; the CEO of Soiltech; and Hans, the head of the recycling committee at the ORKZ occupation mentioned.

However, when it came to documenting the activities of those working with waste, we sought prior consent for ethical reasons, and not all those encountered agreed. This negotiation sometimes occurred without words as many workers did not speak English, and we resorted to mime or a simple inquisitive smile. In cases where distance did not allow close contact, we avoided capturing faces.

There was a certain flexibility, with initial refusals followed later by consent. Interlocutors who initially showed suspicion changed their position over time. For example, Spencer, the head of the garbage collectors who spoke Portuguese, initially asked not to have his face photographed—only permitting us to use his voice and images of his collection practice. But from the second contact onwards, he did not oppose being filmed. The most unusual case was that of the young owners of a company who not only prohibited images but even went so far as to hide their product, as detailed in our article published in this dossier entitled "Solid waste recycling in the Netherlands: ethnography of the circular economy."

The photos sought to address the same questions as the written text: What do we do with our waste? How do municipalities and the state handle waste? What and how do companies recycle in Netherlands? Therefore, the images in this essay intertwine with the article (as well as a previously published article [Eckert, Rial, 2020]), where these questions are more explicitly elaborated.

The photos are linked to these texts. It would be simplistic, however, to say that the photographs merely complement the written text. Grounded in Barthes' ideas (1988), we understand that photography, even when apparently serving an illustrative function, establishes a relationship with the observer in which meanings are diverse and independent of the image's intentions.

Street Ethnography in Zaandam, 2019



Picture 1: View of Zaandam, characterized by its industries. Zaandam is located in Greater Amsterdam-Noord. Our choice was influenced by its long history of industrial production, the presence of working families, and the ongoing processes of both revitalization and gentrification. Photo by Carmen Rial.



Picture 2: Sanitation worker. Zaandam. September 2019. Photo by Cornelia Eckert.



Picture 3: Classic windmills that have been transformed into a tourist site. Zaandam. September 2019. Photo by Carmen Rial.



Picture 4: Old factory on the banks of the Zaan River. September 2019. Photo by Cornelia Eckert.



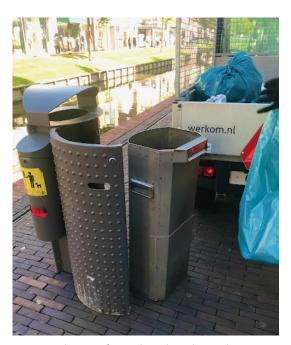
Picture 5: Traditional architecture, hotel in the center of Zaandam. September 2019. Photo by Cornelia Eckert.



Picture 6: Solid waste receptacles in a supermarket. September 2019. Photo by Cornelia Eckert.



Picture 7: The Gedempte Gracht canal in the center of Zaandam. At right, a worker cleans the trash cans and canal with special equipment. September 2019. Photo by Cornelia Eckert.



Picture 8: Cleaning of waste bins along the canal. September 2019. Photo by Cornelia Eckert.



Picture 9: Researcher Carmen Rial observing the receptacles organized by color, Zaandam, September 2019, Photo by Cornelia Eckert.



Picture 10: Sophisticated waste collection equipment in downtown Zaandam. Access is by magnetic cards, September 2019. Photo by Cornelia Eckert.



Picture 11: Carmen Rial interviewing an interlocutor in Amsterdam about the waste collection system. Amsterdam. September 2019. Photo by Cornelia Eckert.



Picture 12 Carmen Rial conducting and interview while generating the energy to blend juice, during the Cultural Festival in Zaandam. September 2019. Photo by Cornelia Eckert.



Picture 13: Cornelia Eckert photographing a Renewi truck. September 2019. Photo by Carmen Rial.



Picture 14: Zaandam City Hall with flags of different towns in the municipality on the facade. September 2019. Photo by Carmen Rial.

Picture 15: Our interlocutor Geke, a city employee responsible for the municipal archive. Geke provided us with historical information and showed us how to access the digital archive. She also gave us details on garbage policies and explained how citizens manage waste in their daily life. Regrettably, she had left her position in 2021 and we were unable to reconnect with her.

September 2019. Photo by Carmen Rial.





Picture 16: Collectors of wastewater with buckets. Zaandam was one of the last municipalities to have a sewage system, which was installed in 1950. Before that, dirty water was collected by boats, carts and later by trucks. Image from the municipal archive.

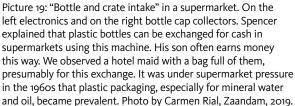


Picture 17: Renewi trucks with the slogan, "Waste no more", Renewi is the primary company for recycling waste collection in the country. We visited several of its warehouses in various municipalities and observed the work of its employees. September 2019. Photo by Cornelia Eckert.



Picture 18: Solid waste bins for collection by a Renewi truck at the back of a store. Renewi install bins in public spaces, particularly in proximity to stores and supermarkets. September 2019. Photo by Cornelia Eckert.







Picture 20: Plat at a waste collector. To motivate young people to dispose of items properly, collectors engage in a game; tossing the rubbish into the basket. Photo by Carmen Rial and from the municipality of Zaanstad image archive. Zaandam, 2019.



Picture 21: Tool and collector for cigarette butts. Garbage collectors draw attention as they provide separate containers for selective waste collection. On the streets, numerous garbage collection cans with attached devices are available for extinguishing cigarettes and disposing of butts. However, it's disheartening that despite these facilities, instances of cigarette remains being thrown on the ground are not uncommon, requiring city hall employees to address the issue. Photo by Carmen Rial, Zaandam, 2019.



Picture 22: Personal card for opening a bin, Zaandam."Containers must be placed on the street before 8 am and removed by 8 pm. On windy days, this can pose a problem. Failure to adhere to the schedule, such as placing the containers out too early, results in a fine, as they inspect the address. Plastic collection occurs once a month, and if, for any reason, you forget, you'll have to wait for the next month" told us Geke. Photo by Cornelia Eckert, 2019.

"Waste no more", Netherlands, 2021



Picture 23: Solid waste reception site. Carmen Rial (CR) negotiates our entry to the facilities. Lots of trucks, few employees. Abbenes, December 5, 2021. Photography by Cornelia Eckert.



Picture 24: Plastics Recycling Company, Duin. Plastic is the most sought-after material for recycling in the country. On the other hand, aluminum, despites its high value in Brazil, is poorly recycled. December 10, 2021. Photography by Cornelia Eckert.



Picture 25: Soiltech Company. Agricultural products recycling company. Specializing in manufacturing fertilizers and biostimulants that recycle organic waste, it has become a leading producer of soil improvers and raw materials for the potting soil industry. Biezenmortel, December 10, 2021. Photography by Cornelia Eckert.



Picture 26: Carmen Rial interviewing the CEO and owner of Soiltech. Mark told us he collects two types of "green waste" - twigs, which municipalities sell, and yard waste from household units. They also collect food products. *Soiltech*'s composting technology has resulted in a highly concentrated foliar fertilizer that Mark considers revolutionary in agriculture. Biezenmortel, December 10, 2021. Photography by Cornelia Eckert.

CIRCULARITEIT GROENSTROMEN VRAAGT OM KWALITEIT, SCHAALGROOTTE EN INNOVATIE





Picture 27: Circulation of vegetable matter requires quality, scale, and innovation. The result of composting is sold to agrocompanies in Europe: in the Netherlands, Belgium and Germany. "What about France?", we asked Mark. "Too far, not worth it. A truck costs 8 euros per hour". Photo by Soiltech Company website.



Picture 30: I was here. In the scene, Carmen Rial checks the discard. Zaandam, December 13, 2021. Photography by Cornelia Eckert.



Picture 28: On the road in search of recycling companies. The list of companies and their addresses was compiled before the trip. We sent emails to the CEOs and received a few responses. However, upon our arrival, we discovered that in many cases, they were already aware of our research, facilitating the initial contact. December 2021. Photography by Cornelia Eckert.



Picture 29: Streetside residue bins in Amsterdam, classified by color for each material. The large bins are situated underground. December 11, 2021. Photography by Carmen Rial.



Picture 31: Residue bin found on a walk through. Zaandam, December 13, 2021. Photography by Carmen Rial.



Picture 32: Your bulk waste is reused. Zuiderhout. The Afvalbrengstation (waste disposal stations) are present in all municipalities, covering an area of one to several acres. They are financed by both public and private funds, and some, such as the one in Zaandam, employ individuals who are unemployed and receiving public aid. Residents can enter with their cars into the waste disposal station and deposit debris to be recycled in the corresponding bins. December 13, 2021. Photography by Cornelia Eckert.





Picture 34: Metal debris. Zaandam Zuiderhout. December 13, 2021. Photography by Cornelia Eckert.



Picture 35: Paper debris. Zaandam Zuiderhout. December 13, 2021. Photography by Cornelia Eckert.



Picture 36: Each bin in the "Afvalbrengstation" of Zaandam is numbered and has a flag indicating the specific type of debris to be deposited. There are more than 30 bins available for different types of waste. Zaandam Zuiderhout. December 13, 2021. Photography by Cornelia Eckert.



Picture 37: Waste collectors near a market. The number of available bins vary. East Amsterdam, December 14, 2021. Photography by Cornelia Eckert.



Picture 38: Waste collectors. East Amsterdam. December 14, 2021. Photography by Cornelia Eckert.





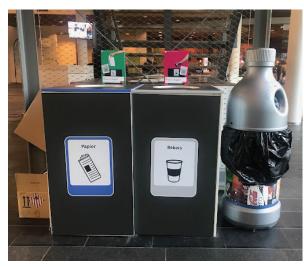
Picture 39: Visit at Amsterdam University College. The Amsterdam University College (AUC) is an independent institution of higher education located in Amsterdam, Netherlands. It is a liberal arts college that offers bachelor's degree programs in various disciplines. Amsterdam East. December 16, 2021. Photography by Cornelia Eckert.



Picture 40: Meeting with Prog. Barbara Arisi who invited us to participate in a Circular Economy class at the Amsterdam University College. East Amsterdam. December 16, 2021. Photography by Cornelia Eckert.

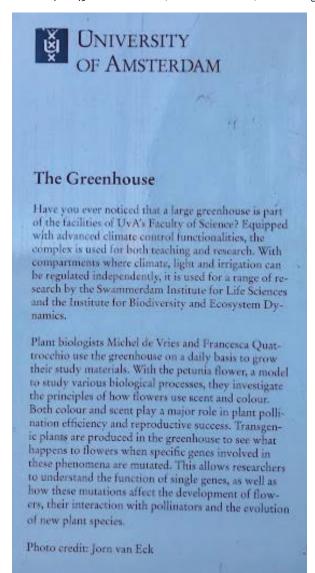


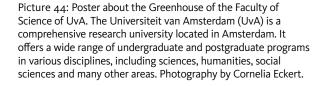
Picture 41: Prof. Barbara Arisi and students presenting research on Food Waste and Reciprocity. East Amsterdam. December 16, 2021. Photography by Cornelia Eckert.





Pictures 42 & 43: Waste collectors, UCA. December 16, 2021. Photography by Cornelia Eckert.







Picture 45: Banner in a corridor at UCA. Amsterdam University College. East Amsterdam. December 16, 2021. Photography by Cornelia Eckert.



Picture 46





Pictures 47 & 48: The ORKZ (Oude Rooms Katholieke Ziekenhuis) is a former Catholic hospital in Groningen, Netherlands. It was transformed into a cultural and residential complex known for its alternative and creative community. The ORKZ provides spaces for artists, musicians and various cultural activities. It has become a unique and vibrant hub for alternative culture in Groningen. The ORKZ is a squatters site that the state legalized in 1985. There, we interviewed Hans, the coordinator of the recycling sector of the residence which has 350 people. The recycling location is in the basement. Prog. Arisi translated, Prof. Rial filmed. Groningen, December 17, 2021. Photographies by Cornelia Eckert.



Picture 49: Sign at the entrance to the basement of ORKZ. Groningen, December 17, 2021. Photography by Cornelia Eckert.



Picture 50: Hans explains the monetary value of each type of solid waste, how they are collected by residents and how income from sales pays for improvements and repairs to the residence, as well as social actions. Groningen, December 17, 2021. Photography by Cornelia Eckert.



Picture 51: Electronic waste ready for recycling in ORKZ. Groningen, December 17, 2021. Photography by Cornelia Eckert.



Picture 52: Hans, Carmen and Barbara in the main recycling room. Groningen, December 17, 2021. Photography by Cornelia Eckert.





Pictures 53 & 54: Prof. Arisi explains the composing process in the courtyard of ORKZ filmed by Prof Rial. On the right, a compost bin at ORKZ located in the common garden. Groningen, December 17, 2021. Photography by Cornelia Eckert.





Pictures 55 & 56: A resident entering the waste station of Hemmen, with debris to be disposed of. Hemmen "Afvalbrengstation" is a small municipal solid waste collector compared with the Zaandam. It is located near a Renewi collection site. The poster indicates the types of materials that can be deposited in the tanks indicated by number and color. Hemmen, December 19, 2021. Photography by Cornelia Eckert.



Picture 57: Waste bins on the road to Drachten towards Leeuwarden. It reads "Place clothes, shoes and textiles in sealed bags". December 20, 2021. Photography by Cornelia Eckert.



Picture 58: Renewi werehouse. Leeuwarden, December 21, 2021. Photography by Cornelia Eckert.



Picture 59: Cardboard in front of a store in Amsterdam Street, to be collected by a Renewi truck. Amsterdam, December 22, 2021. Photography by Cornelia Eckert.



Picture 60: PET bottle collector at the Schiphol International Airport, southwest of Amsterdam. December 22, 2021, Photography by Carmen Rial.





Pictures 61 & 62: Time to go home. Metro and Schiphol airport photos. Professors Carmen Rial and Cornelia Eckert. Holland, Amsterdam, December 23, 2021. Photos by Carmen Rial.



Picture 63: Common scene in contemporary Dutch cities: choosing food from the food wall which has small drawers containing small portions of snacks. Schiphol airport, Amsterdam, December 23, 2021. Photo by Carmen Rial.





Pictures 64 & 65: On the left, green trash cans being transported. On the right, vacuum cleaner for garbage in action. Schipol airport photos. Amsterdam, December 23, 2021. Photos by Carmen Rial.



Picture 66: To conclude, an image of traditional bicycles in Amsterdam that symbolize its sustainable policy. Amsterdam, 22 December, 2021. Photography by Cornelia Eckert.

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² Zaandam is the main city in the municipality of Zaanstad. It is located along the Zaan river, just north of Amsterdam. The district of Zaandam, which includes the city and the surrounding countryside, has a population of around 76,800. It has traditionally been a working-class town that now has a subaltern and multicultural population.

public and domestic infrastructure for solid waste collection. The second part presents an ethnography conducted in several cities in the Netherlands in 2021 and focuses on companies and residences that collect and recycle solid waste. Over the past decade, the European Union has been pressuring member countries to transition to a circular economy, which involves creating, developing, and using products and materials that can be transformed to avoid disposal. The Netherlands has been working to meet requirements and develop a circular economy (Savini, 2019).

The article "Solid waste recycling in the Netherlands: ethnography of the circular economy", is included in this dossier and provides a detailed account of the ethnographic experience related to circular economy and solid waste recycling.

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