

Pests in Malmö,

a study of pest management structures in an urban environment

Dina Krivokapa

910525

ka.dina@hotmail.com

Urban Studies: Master's Thesis

Spring Semester 2019



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Abstract

This research is a study of pest management systems in Malmö. Malmö is, as many other cities, growing and a node of people's movement. Occurrences of pests have increased in the last decade; this increase is attributed to travel as well as construction and building. What this paper shows is that the structures of pest management must evolve to be more communicative and collaborative. The thesis also adds to the housing crisis debate, as pests in one's housing have a physical as well as psychological effect.

Key words: *Malmö, Pest control, Pest management, Housing, Societal development*

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Acknowledgements

Initial vision and product are lifetimes apart. A long journey rests here, a journey that seemingly never ends. Luckily, I got to travel in good company.

My parents, the biggest cheerleaders. Family and friends, listening to ideas.

Professor Carina Listerborn was my initial supervisor, inspiring and sharing her knowledge.

The respondents.

Thank you.

Introduction

The Swedish governmental elections were held September 2018. Approaching the elections, the Swedish people were growing frustrated since the politicians paid little attention to subject such as climate change, sustainability and the environment. The focus landed on healthcare and immigration, which are important subjects, but with the increasing climate changes we are witnessing the Swedish population felt that this was the most pressing topic.

As the climate changes have become harder to ignore policy makers have started to incorporate words like "sustainability" and "green x" into their plans (x ranging from food to housing). What these words actually mean might be harder to pin down, but what they attempt to paint is a stable future and environment. The general public has not let itself get fooled, demonstrations for reforms in climate policy have become frequent. Greta Thunberg became known all around the world when she 2018 sat outside of the Swedish government in a strike for the climate, with the recognizable plaster reading "Skolstrejk för klimatet" [School strike for the climate] (www1). At 15 years old, she became an international inspiration for the general public to demand change from policy makers.

Living in Malmö I am no stranger to the sustainability debate, a debate that incorporates our waste-management as well as our city planning. I am also no stranger to the scavenging rats that run around the squares, streets and courtyards. Sitting outside one of my local restaurants, filming a curious rat, I was suddenly wondering where the debate regarding urban pests is. This rat I was filming was certainly not the first one I saw, and it certainly was not the only pest that had entered my life during recent years. I also know plenty of other people that have experienced some form of unwanted creature in their everyday life, but I had never related pests in any urban debate.

In 2016 the newest Malmö University building Niagara was only a year old and already headlining the papers for housing bedbugs (www2). I was at that time, accompanied by 2500 others, a student at said building. Even though this news became talk of the town, it never got carried onto a stage of debate around sustainability, urbanity or development. It is quite demonstrative that a new building, housing people from all over the world that have gathered

to develop and connect, would fall victim to a pest invasion. The building itself represents a development for Malmö University, and for Malmö city itself. To then year one find out that it is bed bug infested is quite a blow, bearing in mind that it is a modern space. It seems clear to me that pests are a symptom of a society that is not sustainable, a matter that is highly connected to city planning and the built environment.

Nobody wants to talk about pests, it might be one of the least glamorous subjects. At the same time, everybody has had some sort of experience with some kind of pest. Facing the depleting resources due to our unsustainable way of living, bed bugs might seem like a minor detail that can be handled later. I argue that pests are a consequence of the same careless actions that have changed our planet, and that they are an important matter that needs to be looked at.

The subject of urban pests connects to all of this, to politics, governance, the environment, housing and information availability.

Problem and aim

As any city, especially one that is expanding, Malmö is facing growing pains. The population has grown at a pace with which the infrastructure could not keep up. Basic housing and city planning need to catch up, at the same time Malmö is busy developing an image of the creative city. The problem of pests, as I argue, is a symptom of unbalanced planning. A recent study done by Anticimex, the leading sanitation company in Sweden, shows that 80 % of people living in Stockholm have seen one or more rats (www3). Stockholm is the biggest city in Sweden, but Malmö comes in third making it safe to assume that the numbers echo that. Pests are a part of city life and they are a social problem.

The aim of this thesis was to research the pest control structures in Malmö in order to lay a base for understanding and development. This thesis also aims to give an addition to the housing debate with the perspective of pest infested dwellings, a point of view that is rarely spoken of.

What this thesis provides is collected information about the relevance of pests in regard to a sustainable city.

The aim of this thesis is to understand the scope of the pest situation in Malmö and how it is being handled by municipal, property owning and sanitation organs. The thesis sets out to create a clear layout of information regarding the knowledge about urban pests, the regulations on handling them and who actually works with pest management.

With this research the aim is to make a map of responsibilities and the way urban pests are handled in Malmö.

Who is responsible *when* and *where*?

The purpose of that is double: to clearly understand the situation in order to better manage it, to understand the correlation between urban pests and sustainable cities.

Urban pests pose different degrees of troubles to housing as well as the rest of the built environment. The Swedish housing market, like any other, has its own specific way of

working. By understanding how the situation of urban pests is in Malmö, another layer of understanding the housing market will be added. Urban pests are a symptom of something else, a changing environment that includes a globalization of the society. We move more freely, traveling and moving homes, made possible by globalization.

I argue that the subject of pests has a correlation to sustainability of our cities, if we fail to see that we might miss out on important tools towards developing long lasting mechanisms of sustainable cities.

Questions the thesis set out to answer:

How does the pest situation in Malmö look like?

Who is responsible when and where?

I seek to answer actual question of the correlation of sustainability, development and urban pests.

Previous research

This chapter will give a brief account of existing research and relevant articles on urban pests. The common subjects that are treated in existing research regarding pests are diseases, hygiene, management and control. Potential diseases transmitted by pests seem to be prioritized, understandably so since they have the possibility to affect us the most. This paper is intended to be a part of an existing debate, what it sets out to highlight is the situation of urban pest control in Malmö in an attempt to contribute to a structural understanding and development. What I would like to look more closely at is how the web of connecting decision makers affects the pest situation, meaning that the prime interest is not any of these subjects, but all of them. Therefore, news articles are as relevant as academic papers.

A news piece about any type of pest has the potential of attracting plenty of attention, easily becoming a sensational news. Usually the stories are grim and unpleasant, a news article about a family terrorized by bed bugs for years or a shocking piece about rats emerging from toilets. Not too long ago we were able to read about a worrying find relating to rats.

September 2018 CNN wrote about the first case of a rat disease found in a human (www4). A 56-year-old resident of Hong Kong was diagnosed with rat hepatitis E, previously it was not known that the disease can pass from rats to humans. The team responsible for the find points to the implications this has, namely that there might be more cases like this. Scientists need to especially look out for people whose immune systems are compromised. The researchers from the University of Hong Kong believe that limiting the rat population as well as limiting food sources, meaning litter and rubbish, is the most important control measure (ibid). This news is one of the more dramatic ones, the more common ones are about the simple fact that rat populations are growing. A common story is about the rats that win the battle of the waste room (www5). During the winter of 2018 one address in Stockholm had such a severe rat infestation that waste collectors refused to pick up waste until the problem was fixed. Apparently, the rats had overrun the garbage bins causing the risk of bites on waste managers to be too high. The unease, and sometimes outright fear, of rats is socially accepted and common.

Then there are the exceptions.

Recently the world was introduced to a story about a chubby rodent and they fell in love with it. Late February 2019 articles started to fill the news feeds about a rat that had got stuck in a manhole cover in Germany, accompanied by videos and pictures. The Swedish paper *Sydsvenskan* wrote “A somewhat tubby German rat underestimated its waist size while trying to escape through a manhole cover.”, relating the whole rescue mission that intrigued people (www6). We can read about the process in *The Guardian* as well, about the multi-agency rescue operation (www7). A rescue team of eight firefighters and an animal expert took part in freeing the rat from the manhole cover and released it into the wild (ibid).

“Even animals that are hated by many people deserve respect,” said animal rescuer Michael Sehr that was part of the mission. This event attracted attention from all over the world. The *Guardian* piece on Facebook has over 1000 comments and 800 shares. Keep in mind that this is only one piece, from one media outlet, on one social media platform. There were people that questioned the rationality of putting such resources into saving a rodent that in other circumstances is not welcome in the city, but an overwhelming majority of the comments were positive towards the outcome,

Rats spread by their own accord, but some pests spread by our direct doing. One of these pests are bedbugs. They can be spread by us simply carrying them on our clothes or in bags. One big reason to their emergence is the increase in travel, and there is a company that is tackling this issue head on.

Whenever we travel the assumption is that we will stay in some sort of temporary housing, whether it be a hotel, hostel, bed and breakfast or any other option. It is also at precisely these locations we are most vulnerable to bed bugs. Valpas is a bed bug safety system that enables hotels to ensure rooms free of bed bugs (www8). The first hotel in Sweden to use the system is Hotel Duxiana, which is DUX’s flagship hotel in Malmö. The Valpas system is currently being used by hotels in four different countries (www9). The system is basically an add-on to bed legs, a chemical free trap that attracts and traps introduced bed bugs. The thought behind this is to give customers and visitors safety in their stay, to be able to guarantee that no unwanted pests will be taken back home. Nobody wants to think about bed bugs when they travel, but the message the hotels are sending is modern. It is a simple way of accepting a current problem and working towards ensuring customers that it is not existing within their rooms.

Hotel Duxiana did a collaboration with a Swedish blogger and influencer, Ebba Zingmark, which is pretty interesting considering the fact that pests are hardly part of the glamorous lifestyle shown by influencers. The collaboration is presented in a video and post where Zingmark talks about the system but also on her own thoughts about bed bugs (www10). In the video Zingmark states that this is an uneasy subject, but that it is something that she is forced to think about due to her constant travel. Influencers have a following, they are pretty much PR companies that have a direct line to a diverse crowd that listens to them. Choosing to collaborate with an influencer is a sure way of connecting to groups that one's business is not reaching, but this subject is especially a standout in the sea of collaborations. It goes to show that bed bugs are not something that only concerns things old and dingy.

We can probably agree that influencers travel more than the average person, but still people are traveling more today than ever before. Tillväxtverket did a comparative study that shows how the Swedish populations has, over time, traveled more and more to other countries (Tillväxtverket 2018). The study points to an internationalizing stance towards travel. It also shows that more people chose to spend at least one night at a hotel, during their travels (ibid). This means of course more exposure to environments that are prone to infestations. Hotels that implement preventive methods regarding pest control do stand out, are sustainable and show that they listen to the needs of their visitors. That Valpas systems are used in four different countries also goes to show that the question of urban pests is not just a problem in Sweden.

What becomes clear while reading existing research, as well as media coverage, is that pests connect many layers of society. They are in private and public areas, indoors and outdoors. They do not discriminate with regards of gender, ethnicity or social status.

To gather all existing research and information on pests seems like an impossible task. Luckily, for me, this thesis does not ask for that.

A study that focuses on pests and their relation to the urban is *Public Health Significance of Urban Pests* done by Xavier Bonnefoy, Helge Kampen and Kevin Sweeney, funded by the World Health Organization (2008). As we are seeing the changes in climate and human behaviour, we have to look at the direct and indirect effect they have on urban pests and health. The World Health Organization invited international experts in various fields such as

pests, pest related diseases and pest management, to provide a base upon which WHO sees possibility of developing strategies for managing and reducing exposure to pests. In the study we get to read about various pests, the public health risks they pose and appropriate management (Bonney, Kampen, Sweeney 2008).

The study is truly thorough, covering many types of pests as well as pest control. One of the important matters it lifts is that pests, and diseases that might come with them, are not a thing of the past. We collectively prefer to ignore the existence of pests and the hazards they may pose as long as we can, but this is not a sustainable stance. Another important key factor is the psychological strain pest occurrences can cause. This study, as it relates pests to growing cities, is a key study that is used as a reference in this paper. It sets both a factual basis as well as a theoretical, and that is exactly what this thesis as well aims to do. Pests and pest control are subject of a practical matter indeed, but there is also a lot of social, economic and psychological matters connected to this.

Anticimex is an international service company, started in Sweden, that works with pest control and management. In collaboration with Uppsala university they released a report that shows that the population of rodents is growing in Sweden, but that the biggest problem is lack of knowledge about what diseases they might be carrying (Anticimex 2015). The report aims to investigate the possible diseases rodents might carry due to the troubling fact that scientists have been able to find rats that carry antibodies for a form of *Leptospira*, a bacteria that can cause serious diseases, such as meningitis, in humans (ibid).

As I have previously stated, there is a plethora of research done on pests, collecting that data is not in the interest of this thesis. It is also obvious that we do not know yet all the risks that come with different pests. These things are a base to this thesis that looks at the pest management structure and provides it to an existing urban debate on housing.

Layout

The thesis is disposed as following.

Method

This chapter explains the method chosen for the research as well as the process behind the decision. It is divided into three segments: *Choosing the approach*, *The Path* and *The Interviews*.

Theory

This chapter explains the core theories that simultaneously advance and anchor this research. The concepts I use regard the effect of our built environment on the self-image, capital as a class marker and the relevance of housing in everyday life.

Presentation of object of study

This part of the paper gives an understanding of the thought process regarding the selected respondents, connecting this to the aim. Secondly it presents the organizations and the corresponding respondents.

Results and analysis

This chapter presents the outcome of the interviews. While analyzing the interviews I looked for common themes. This chapter is divided into these themes, used as subtitles, which are in turn divided in respective respondents area of work. The themes are: *Pests in Malmö*, *Responsibility*, *Process*, *Information*, *The trouble of pests* and *Development*.

Conclusion and Discussion

This chapter gives a brief summary of the results and analyses, as well as reminding us of the research questions and aim.

References

Collected references.

Method

This chapter explains the method chosen for this research as well as the process behind the decision. It is divided into three segments: Choosing the approach, The Path and The Interviews.

Choosing the approach

The first and most basic choice when deciding which path to take with one's research is the choice between qualitative and quantitative approaches. William Lawrence Neuman writes about the qualitative approach and how it adheres to cultural meanings, interactive processes and events (Neuman 2000:16). A qualitative approach will also admit to effects of values, a highly relevant distinction when working with structures between people (ibid). A qualitative approach was taken for this research. Hermeneutics used as a way of making the obscure plain, are also inspirational since this research leans on existing literature that relates to feelings and thoughts of others (Neuman 2000:70). This research uses existing literature and research as well as new information gathered from interviews to create the picture of aim, namely pest control in Malmö.

Critical social science offers an alternative to interpretive social science and positivist social science (Neuman 2000:75-81). This approach lends itself well for the research in this paper. CSS (Critical social science) is often linked with conflict theory, feminist analysis and radical psychotherapy (ibid). Pierre Bourdieu, among others, falls into the CSS approach, rejecting both the interpretive and the positivist approach. The first for its subjective, voluntarist approach, the second for its objective, lawlike approach (ibid). The argues Bourdieu has is that research has to be reflexive, criticizing and studying itself as well as the subject (ibid). Within the CSS movement the objective is to use social studies to empower people (ibid). This is something that speaks to the research conducted in this paper. CSS is often linked to social movements, but this paper is not. What this paper strives to provide is collected information, clarity and transparency and by doing so increasing understanding about pests and pest control.

As for collection of data mixed methods were used. Mixed methods give way to understanding of situations in multidimensional manners. With qualitative methods and

analyses, such as interviews, the project can bring forth the possibility of emotional understanding (Lantz 2007:34). Forms, that are complex, might more fairly be understood and the subject of urban pests is highly complex. While the quantitative part, collection of data and existing information, gives us an insight to “how much” of something in the situation there is (ibid). I use existing data and information about pest control and housing in Malmö, as well as drawing from interviews about housing in Carina Listerborns *Bostadsojämlikhet* (2019) and other existing literature on the subject. To broaden the understanding of the pest situation in Malmö I conducted interviews with municipality officials, real estate companies and sanitation companies.

To be able to conduct research and collect data that I can manage, I needed to limit the scope. Malmö is a growing city, but as a point of research I found it to be simultaneously substantial and narrow enough to work from. This research focuses on Malmö in particularly.

When choosing to write about pests in relation to housing I knew that I would not be able to cover all the relevant ground during this paper. Urban pests are a complex and intricate subject to write about, in any capacity. The matter is, as I try to show, a node consisting of environmental politics, ownership, city planning, social structures and economics. Pests affect us all in some way and no one has the sole responsibility of dealing with them in Sweden. With this paper I have chosen to dig deeper into the strategies and planning of the ones “in charge”, meaning landlords, the municipality and water and sewer systems. Carina Listerborns *Bostadsojämlikhet* (2019) collects powerful stories about people's housing experiences in Malmö, and these interviews serve as a pillar to this paper. I want to add yet another perspective to the understanding of housing, but I want to firstly look at how the officials work. It is after all those who *own*, the landlords/housing owners/municipality, that have the most power to be heard in the housing debate. They rarely speak about pests, in fear of creating panic or a bad reputation, which makes their thoughts regarding the subject quite interesting. The insight to the way officials handle the matter is yet another layer, another perspective, to the housing debate.

I do see the high value interviews with people directly affected by some sort of pest and this is something I think needs further research. Just as the interviews and stories in *Bostadsojämlikhet* give powerful insight to the modern housing in Malmö, I think that interviews with people affected by urban pests directly can give us important understanding.

That research has the potential to give a broader spectrum of the psychological consequences, specifically in relation to the built environment, and might benefit from a phenomenological approach. At the beginning of my research I did consider conducting these interviews but realized that the amount needed to gather representative results was bigger than the time and resources I had at hand.

The path

As I took this project on, I visualized a linear plan of action: collecting existing literature, collecting interviews, adding them up and completing the paper. It might come as no surprise that this is not the way this process worked. Neuman points out that some research has a linear path and some a nonlinear (2000:124-125). The path represents the sequence of things to do, it is a metaphor for what is finished first and what is done when. Neuman states that qualitative research tends to be more nonlinear (ibid). A nonlinear research path makes successive passes through steps, but these steps can be taken towards any given direction. This kind of a process creates a sort of upward movement, as in a spiral (ibid). Pests do connect to different professional, social and economic areas. To gather a fair map of how the pest situation is in Malmö, I had to keep all doors open at all time.

Interviews

Choosing between open or closed questions was an early internal debate. There are many advantages to closed ended questions: it is easier and quicker for respondents to answer, easier to code results, easier to replicate (Neuman 2000:260-261). The reason behind me gathering interviews was to get access to deeper knowledge that only the professionals have. Open ended questions made more sense since they permit an unlimited number of answers, the answers can be detailed, and unanticipated answers can be discovered (ibid). While choosing questions for the interview guide, I wanted to establish a basis from which I would be able to inquire into adjacent topics that might come up. As I was interviewing professionals within their fields, I wanted to create the opportunity for the respondents to be able to respond freely. One of the questions is whether the respondent thinks that there is something I should have asked that I did not. The people I spoke to have years of experience and knowledge that means that they can see things that I simply cannot. How the questions

are formulated is related to if the research is qualitative or quantitative (Starrin, Svensson 2011: 25). The type of questions and the type of analyze are connected, “What does it mean to have rats in your house?” is a more of a qualitative question, whereas “Does urban infestations occur more in area x then area y?” is more of a quantitative form (ibid). The questions in the interview touch on both approaches to gather as much information as I can.

Neuman raises the relevance of ethics in relation to research subjects (Neuman 2000:91-92). It is in the best interest of the research, and the researcher, to balance the value of noninterference in the lives of others against the value of advancing knowledge (ibid). This is something this research does take in consideration, especially in regard to the conducted interviews. The respondents were briefed and made to feel comfortable with their role in the research. To make sure they would feel comfortable answering, I also assured the respondents that they would have the chance to proofread the transcriptions to avoid any misunderstandings. The respondents were in their professional capacity, making the interview situation less personal and granting security in relation to their stature.

I created three different sheets with questions slightly modified to fit the respondent’s area of work.

To establish a contact, I simply started off by sending emails. In the emails I briefly described my subject for the thesis and that I wanted to come in contact with someone who could talk to me about pests in regard to their area of work/responsibility, stating that my interest is in housing from an environmental, economic and political perspective.

When in contact with the relevant people we booked meetings and before the meetings the respondents received the questions I was going to work from.

At the time of the interview, before recording, I again shortly described my purpose with the thesis and that I would record the interview and later transcribe it. I also offered to send the transcription to the corresponding respondents. This goes in line with a feminist approach, where it is preferred to interview the respondent several times in order to build a trusting relationship and gather a clear picture (Neuman 2000:282). I did not interview several times but kept in close correspondence with the respondents in an attempt to keep my process, and the process they became a part of, transparent. The recording was done on my phones voice memo app.

Theory

This chapter explains the core theories that simultaneously advance and anchor this research. The concepts I use regard the effect of our built environment on the self-image, capital as a class marker and the relevance of housing in everyday life.

“It’s the Malmö way of life, you know. Suddenly a rat can fall down on you.”

I laughed in agreement to this statement my hairdresser made, a statement that almost sounded like an old proverb. I was telling her about my research and she, like most others upon hearing my subject, shared some of her own stories about pests. Most of us have at least one story to share on the matter, and the ones that don’t usually want to hear more, fascinated by a creepy sensation. Theoretically we have accepted that pests are a part of city life, but we have a hard time looking at what this means.

In *The Architecture Of Happiness* Alain de Botton asks what makes a house beautiful and how do our surroundings affect us, questions that strike an important note in this research (2006). With a poetic voice de Botton reflects on the ideas that our surroundings can promote or deconstruct. He remembers a rainy day on Victoria Street in London where he took shelter in a fast food restaurant (2006:108.111). The atmosphere was harsh and dim, people seeming hard and disconnected.

“The setting served to render all kinds of ideas absurd: that human beings might sometimes be generous to one another without hope of reward; that relationships can on occasion be sincere; that life may be worth enduring... The restaurant’s true talent lay in the generation of anxiety.” Alain de Botton 2006:108

This description might resonate with many of us. The atmosphere of any fast food restaurant stands weak under scrutiny, the very essence is haste and heteronomy. At the same time, fast food restaurants are accessible to a lot more people than fancy diners. de Botton goes on to describe how he, from the fast food restaurant, walked over to the Westminster Cathedral. He describes the smell of incense and burning candle, dim corners and a ten-meter-high crucifix. Upon entering the impressive hall, a sense of awe came over him.

“Under the influence of the marble, the mosaics, the darkness and the incense, it seemed entirely probable that Jesus was the son of God and had walked across the sea of Galilee.” Alain de Botton 2006:111

An idea that would have seemed impossible in the surroundings of French fries and crying kids now seemed plausible. The critique I have for de Botton is that the texts show no reflection on class and heritage, using metaphors that are usually connected to working classes as an aid to describe suffering. What the reflection does aid this research in is the fact that it helps solidify how our surroundings affect us.

“But sensitivity to architecture also has its more problematic aspects. If one room can alter how we feel, if our happiness can hang on the colour of the walls or the shape of a door, what will happen to us in most of the places we are forced to look at and inhabit? What will we experience in a house with prison-like windows, stained carpet tiles and plastic curtains?” Alain de Botton 2006:13

de Botton asks how prison-like windows might affect us, and again this seems as a privileged question knowing that some people do not even have a roof over their heads, but the question can and is relative to everyone. This research is about our lived environment, and specifically about how pests affect it, so to ask how it might make us feel to have rats or bed bugs is relevant. Our surroundings embody our moods and ideas at the same time as they remind us of them (de Botton 2006:107). Our buildings are expected to hold us as a kind of psychological mold, we anchor ourselves in wallpaper, paintings and streets. The places that match and legitimate us we chose to call *home*. The space we choose to call home need simply to resonate with our inner selves (ibid.).

A more intersectional analysis of how our surroundings, specifically dwellings, affect us is done by Carina Listerborn in *Bostadsjämlighet: röster om bostadsnöden*, Housing inequality: voices on the housing crisis, (2018). Listerborn writes about how housing, dwelling, is at the core of our lives (Listerborn 2018). It is hard to take part in society if you do not have a home, it is essentially a human right. What is obvious on the housing market is that housing has become just another commodity. To deepen the understanding about the inequality the market is creating Listerborn uses theories of Danny Dorling. Listerborn writes

about how Dorling shows that there is a new approach and culture surrounding housing, where the wealthy are becoming greedier and more selfish. The selfishness does not only affect other housing applicants, it has environmental consequences, pricing of housing is no longer connected to any sort of user value (Listerborn 2018:27). The main point I take from this is that Listerborn wants to make it abundantly clear that the housing crisis is not a symptom of a sudden nature catastrophe, childbirth or war, but that it is a result of short sightedness and greed. Property owners and developers want to make money, fast money. They want high end residents, and they do not want to spend any extra money on the properties.

“Housing and the home are, to a great extent, a central part of everyday life. The political dimensions of everyday life have for a long time been claimed by feminist researchers, many cultural and urban researchers have tried to define and study everyday life. Everyday life is in many ways an obvious concept, but at the same time elusive. Is everyday life everything we do, or is it related to specific activities and events?” Carina Listerborn 2018:107

Everyday life as a term might be elusive, but the common meaning on an individual level is not. The aspects of everyday life that Listerborn chooses to highlight have democratic meaning, the attention is turned to the material, every day and routine. Everyday life envelops everyone and everything, but most importantly it envelops the things that are not spectacular (Listerborn 2018). This is where Listerborn's analysis shows a much more varied approach than that of de Botton, a thing does not need to be spectacular to be important and have an effect. Listerborn uses Rita Felski's theories about how everyday life can seem as a sort of a repetition, something that happens every day, as something that has a spatial dimension where the home is dominant, or something that is anchored in the known and familiar (ibid.). This means that different people have different everyday lives and repetition that is lived affects one's self image and perceived dignity.

As a reflection and theory, this is highly important for this research. As the aim in this research is to provide insight into the pest situation in Malmö, this theory connects to why it is important to do so. It might sound disconnected to research pests, but it is a factor that affects so many everyday lives. The housing and dwelling has such a strong impact on one's self-image. In Bostadsjämligheten we take part in several interviews where the respondents

have shared their housing stories. Quickly it becomes evident how important it is to have a space of one's own, to be able to close the door and be yourself without holding back (Listerborn 2018). Listerborn asked the respondents what their dream housing looks like and the answers were humble, most people want the simple things. A theme that runs through the answers is regarding cleanliness, a clean space. Everyone that has shared their housing knows the hardships of not being able to have the space the way you want it, but cleanliness is such a sore spot. Not only if one wants a spotless space, it can be a bit messy, but it needs to be one's own mess in that case.

How we see ourselves is affected by our surroundings, but how we see others is affected by theirs. Reading *Formations of Class and Gender: Becoming Respectable* by Beverley Skeggs (1997) I was intrigued by the way she used the term *capital* to describe movement in class. But even more than that I responded to the way *respectability*, as a term and description, was used. Throughout the book she follows and shares with us the study of 83 white, working class women from northwest of England (Skeggs 1997). Skeggs underlines how respectability is one of the characteristic signs of class and social standing. Respectability characterizes our way of speaking, who we talk to, how we classify others, what we study and how we know what we are and what we are not (ibid.). Usually, the ones concerned with respectability are the ones that do not have it, writes Skeggs. Respectability would never become an issue if the working class wasn't described as dangerous, polluting, threatening, revolutionary, pathological and disrespectful. The term wouldn't be relevant if it didn't correspond to the image of "the other", the other that has respectability which has value and legitimacy (ibid.). By the usage of respectability, one positions oneself as well as others in the social mapping.

As the intro to the book Skeggs uses a quote from a woman in the study that refers to housing and respectability.

"All my life I've wanted to say 'look I'm as good as you', well now I think this house says it. It says 'I've made it, I'm respectable and you can't put me down'. -Yvonne 1992"
Beverley Skeggs 1997:9

Skeggs uses Bourdieu's theory on class and taste, writing that the body and the bodily dispositions carry the markers of social class (Skeggs 1997:133). Indisputably, the body is the

clearest materialization of *taste* that corresponds with a social class (ibid.). Bodies are the physical places where factors like class, gender, race, sexuality and age converge. A respectable body is white, not sexualized, straight and usually middle class (ibid.). I read this as a normative description, an able body that is the desired image. The body is the always present marker of class, and for women this body image requires changes that most women are doomed to fail at attaining (ibid.). These images affect all genders, of course, but in different ways.

Essentially the theories that are relevant to this research are about how our surroundings affect us, what role our housing has in our lives and how these things can be seen as a form of capital.

This research leans on the study Public Health Significance of Urban Pests for the effect of pests on people (Bonney, Kampen, Sweeney 2008). The study is thorough, done by specialists, connecting issues that pests can bring with them. One of these issues is that pests may help cause poor living conditions, not just be typical of them. Another is that pests cause economical damage, in increased laundry expense, replacement of bedding and furniture, lost revenue from negative publicity and such (ibid.). This in extension is environmentally bad as well. The effects of pest to the psyche are many, which is why this study is most relevant to this research.

Presentation of object of study

For this research there are three areas of interest: municipal organizations, real estate companies and sanitation companies. As the aim of this paper is to grasp the processes of pest sanitation in Malmö, these three areas are highly relevant to look at. In this part of the paper I will go through the thought process regarding the selected respondents, connecting this to the aim. Secondly, I will present the organizations and the corresponding respondents.

The process of choosing who

To be able to understand the importance of interviewing a municipal organization, for example Miljöförvaltningen, it is important to understand the basic structure of Swedish politics. In Sweden, as in other countries, there are many layers to the political and governing system. I will share some official words, or concepts, that might make understanding easier and then give a brief description of the political system in Malmö.

Swedish to English:

Kommunfullmäktige - city council

Kommunalråd - municipal commissioners

Kommunstyrelsen - municipal executive board

Nämnder - municipal committees

Förvaltningar - municipal administration

The Municipal Act - Kommunallagen

(riksdagens flerspråkiga ordlista, [www11](#))

The city council has been the highest decision-making organ in Malmö since 1863 ([www12](#)). City council makes decisions regarding questions of principal and in matters of major importance to the municipality. It is chosen by the registered habitants of the city and receives matters from the municipal committees through the municipal executive board. How the city council works is strictly directed by the Municipal Act, which is the law that directs

the municipal areas of responsibility. Municipal commissioners and the municipal executive board are selected by the city council (ibid). The municipal commissioners are responsible for their scope of practice, areas like school and education, finance, housing and the labor market. The municipal executive board leads and coordinates the work of the municipality and have a say in all the decisions the town council is making. The executive board also has supervision of the communal activity and communal companies (ibid).

The municipal committees regulate the municipal administration with directives received from the city council. The city council decides how the organization of the municipality will be and which members will be part of the municipal committees (ibid).

The municipal committees consist of elected representatives, and they regulate a municipal administration that consists of staff members. The municipal administration is the one that will set a certain plan in action, the plan that was created by the municipal committee. My first area of interest being Miljöförvaltningen, the environmental municipal administration, and Fastighets- & Gatukontoret (FGK for short), the office that acts on their plans regarding property- and street plans. VA Syd also works with Miljöförvaltningen regarding piping and handling water as well as waste. These actors, as well as the other respondents, are described in more detail below in “The respondents and their field of work”.

My intent was to interview politicians as well, one of the people of interest was Andreas Schönström who is a social democrat that has the responsibility of technic areas and service, where FGK is active. I was not successful in developing contact with politicians, and this is something that future research in the area might benefit from. This research has instead relied on existing statements found on political websites.

As one of the aims of the paper is to relate urban pests to the debate on housing, it seemed evident that I needed to interview housing companies in order to get their perspective on the matter. As I previously have explained, I had no gateways, all contacts were established from a sort of ground level by myself. I contacted six of the larger real estate companies in Malmö, some declined involvement due to lack of time others did not answer. The two interviews conducted with real estate companies are done with MKB and HSB. HSB is interesting in that the company handles both tenancies and condominiums, as well as having approximately 2 million Swedish crowns in turnover 2017 (www13). A condominium is a tenancy form of

residence, as well, since the people living there are members of a housing association (<http://www.boupplysningen.se/bo/bostadsratt>). The members own a share in the association, the share is an apartment (ibid). MKB is highly interesting since it is one of the largest council owned housing companies in Sweden (<https://mkbfastighet.se/om-mkb/>). Owned by the city of Malmö, MKB is also the largest property owner in the city (ibid). These two companies have years of experience, I was satisfied with interviewing them to get a broad spectrum of how they work with pests in relation to their property. The larger real estate companies all have webpages, so I turned to information there to answer some of my questions as well.

The third area of interest for this paper is sanitation companies that work with pest control. A quick search for sanitation companies in Malmö reveals that there are at least over 70 companies within the field, but not all work with pest control. For this paper I needed to collect a broader image and I chose to focus on the two biggest companies, namely Nomor and Anticimex. Nomor employs around 230 people and was started in 1995 (https://www.nomor.se/om-nomor__47), they are the contracted company of the municipality of Malmö, making their perspective highly relevant. Anticimex is a bigger company, started in 1934 it employs 4000 people across 17 countries (www14). Not being able to interview both of the companies would set the paper back, they have different perspectives: one is working for the municipality one has the advantage of experience through years.

The respondents and their field of work

I conducted 7 interviews, 4 were recorded and then transcribed. I took notes during the other 3, and then transcribed them as well right after the interviews. This was done because 2 of the respondents did not want to be recorded and one interview was done by phone due to geographical distance. After the interviews were transcribed all the respondents were able to read their answers and correct any misunderstandings and add additional information. As I have stated in Method, I wanted the respondents to feel safe in answering so as to not hold back in fear of misunderstandings being used against them. As they all are professionals within their fields it was important to get their answers right, only then could they be used in a legitimate capacity. All the interviews are numbered, and it is by this labeling they will be referenced to in the paper. I also previously mentioned that the

interviews were conducted in Swedish, as that is the native language, and the translations were done by me.

Respondent 1

Pontus Sterner,

Environmental inspector

Miljöförvaltningen - The environmental municipal administration

Miljöförvaltningens mission is to lead environmental processes in Malmö (www15). The administration works with the upkeep of a safe environment using the Swedish environmental and food legislation. The administration safeguards the environmental interests within city planning, coordinates Malmö's environmental program and works towards a sustainable development in the municipality. Miljöförvaltningen is run politically by the environmental municipal committee, the administrative manager oversees operative responsibility of the organization.

With this paper I wanted to examine how decision-making organs strategize and work around the subject of pests. Subject of pests has several important perspectives, the decision-making perspective is of the essence, so to be granted insight into Miljöförvaltningens work was crucial.

My contact person was Pontus Sterner, an environmental inspector at Miljöförvaltningen. He works with housing supervision, inspecting the indoor environment. Amongst other things, an environmental inspector checks for good ventilation, dampness, mold and pests. Though findings of pests by environmental inspectors are extremely rare, according to Pontus Sterner, he is the one responsible for pest related issues at Miljöförvaltningen.

Respondent 2

Mattias Thelander

Landscaping engineer & contractor

Fastighets- och gatukontoret (FGK) - The property and street office

Fastighets- och gatukontoret, FGK for short, directly translates to the property- and street office. FGK is essentially in charge of building the city (www16). The office owns, develops and manages the city's land. A goal FGK works towards is enabling a good urban life for the residents of Malmö as well as the business community of the city.

FGK puts in action the plans that are developed at Miljöförvaltningen (environmental administration). As a contracting office they hire and administrate work for the city.

It was important to get the perspective of the organizations that puts plans in action, regarding the built environment in general, but pest control specifically.

Mattias Thelander, my contact at the office, is a landscape engineer. His role at FGK includes contracting responsibility which means a direct responsibility for contracting a part of Malmö's property and streets. The subject of pests, their management and control, is also a part of his workload now. As he is not the contractor for the whole city, he is not the sole one responsible for pest control. He is only responsible for pest control in his own area. Mattias Thelander is the one keeping the dialogue with the sanitation company that the municipality has a contract with, the company being Nomor, he is the one in charge of the communication.

Respondent 3

Kenneth Nilsson

Operational engineer

VA Syd

VA Syd is a regional water and sewage-system company that acts in the southwest of Skåne, a county in the south of Sweden (www17). VA Syd delivers fresh drinking water, manages stormwater, cleans sewage water and handles household waste in a responsible way. As it is a municipal organization VA Syd is politically run and consists of the member municipalities Malmö, Lund, Lomma, Burlöv and Eslöv.

VA Syd handles four main processes:

- Providing fresh drinking water, securing the quality of the water but also the quality of the piping and wiring.

- Managing the sewage water, purifying it in an environmentally safe way.
- Managing the stormwater, averting it to protect people and the environment at the same time using it as a resource in the built environment.
- Managing the household waste, working towards decreasing waste and increasing sorting and sustainability.

Big parts of the water and sewage system infrastructure was built more than 50 years ago, and in many cities the population has doubled in the same time period. The infrastructure did not keep up, many smaller municipalities are having a harder time handling these challenges, and the solutions is in cooperation across municipalities according to VA Syd.

My contact person was Kenneth Nilsson, one of the lead engineers at VA Syd. He also has the pest control responsibility, but they only handle rats. VA Syd works with Nomor for the poison, and Anticimex för the traps.

Respondent 4

Davud Popal

Pest control coordinator

MKB

MKB Property AB is, as previously stated, one of the leading council owned housing associations in Sweden (www18). The company is the owner of 32 percent of the rental market, which is 15 percent of the total real estate market in Malmö (MKB Fastighets AB Affärsplan 2019). Owned by the city of Malmö, with its 23 000 apartments and 1000 commercial properties, it is the largest real estate company in the city (ibid). Due to the size of MKB and the ownership, the company has a special kind of responsibility within the housing market in Malmö. The company sets out to strengthen the pull of the city as well as working on evolving it through a balance of new buildings and responsible rent levels. MKB manages their properties with economic, social and ecological sustainability in mind. 2017 the market values were estimated to 32,9 milliard Swedish crowns, while the turnover the same year was at 2,1 milliard Swedish crowns. The company employs around 300 people. MKB offers rentals with the motto of “Hem för var och en”, meaning “Homes for each and one”, aiming to provide varied housing for different types of people. The goal for 2019 is to

build 2 250 apartments at the same time reduce the direct climate influence by 40 percent compared to 2015 (ibid).

My contact and respondent is Davud Popal, who works as a pest control coordinator at MKB. He is responsible for the pest control and works with Miljöbalken, the Swedish Environmental Code. He is specialized in pest control and works as an internal expert, he is also a trained pest control technician. This is quite a special roll that not many housing companies have, so Davud Popal usually is in contact with different housing companies sharing his knowledge. He is the one in charge of the communication with the tenants, he also organizes processes and routines regarding contracting with sanitation companies.

Respondent 5

Lennart Eckerholm

Contractor

HSB

HSB is one of Sweden's largest cooperative housing companies. HSB plans, finances, builds and manages housing throughout the country with 25 000 rental apartments and 340 000 cooperative apartments (www19). The company is a combination of member activity, management and new construction.

Sustainability is a key factor for HSB that works with sustainable services and products that are resource effective, have a low climate impact and are produced under good conditions (ibid). The website paints a member-oriented picture that is current, modern and evolving. Since it is so contingent on its members, it is in the company's interest to keep the said members happy and content. The core values of HSB are: Involvement, safety, sustainability, care and cooperation.

My contact at HSB is Lennart Eckerholm, he manages contracting and is responsible for a fourth of the property portfolio. HSB owns about 2200 apartments in Malmö, Trelleborg and Svedala.

Respondent 6

Pontus Gillfelt

Regional director

Nomor

Nomor AB is a Swedish public joint-stock company, the second biggest pest control- and food safety company (www20). They have seven regional offices and 25 local offices across the country. Main customers include insurance companies, food companies, stores, hotels, industries, farmers and municipalities.

Nomors business idea is to provide environmentally friendly services within pest control, food safety and House & Home. The organization employs around 230 people who are qualified food-engineers and technicians.

Nomor is the company that is in contract with Malmö municipality, making their perspective highly relevant for the paper.

Pontus Gillfelt is the regional director for the south part of Nomors organization. The main office is in Malmö. His role is on the business side, in contact with customers, guiding and helping them when needed. He attends contracting as well as presentations for new customers.

Respondent 7

Håkan Kjellberg

Pest control expert, National pest control manager

Anticimex

Anticimex has evolved from the Swedish family owned company in 1934 to an international company with about 4000 employees across 17 countries (www21). At its start, the company had a different idea than the existing approach, Anticimex wanted to work towards a pest free environment instead of charging for every sanitation. This is a business idea that they still apply and has led the company towards preventive initiatives. Preventive approaches are both more resource effective and sustainable.

The business has developed into creating healthy and sustainable environments for companies and private customers. Anticimex secures industrial food production, protects restaurants against bacteria, works with fire safety and better work environments, prevents water damage in all kinds of housing and helps property owners save energy (ibid)

At Anticimex I got in contact with Håkan Kjellberg, the pest control expert. He is now the leader of an expert group within a larger department, that is focusing on development within fire and food safety as well as pest control. The group looks to current events and new developments to find the newest and most sustainable solutions for their customers. Håkan Kjellbergs role is strategic as a support to the experts.

Results and analysis

This chapter presents the outcome of the interviews. As previously stated in the chapter *Method*, the interviews were conducted in Swedish and then translated to English. While analyzing the interviews I looked for common themes. This chapter is divided into these themes, used as subtitles, which are in turn divided in respective respondents' area of work. The themes are: *Pests in Malmö*, *Responsibility*, *Process*, *Information*, *The trouble of pests* and *Development*.

Pests in Malmö

This segment accounts for the responses about how the respective respondent answers to the question of the pest situation in Malmö.

Municipal

Respondent 1 highlights the growing problem of rats in Malmö and relates this to, among other things, the high level of construction work. He also says that pharaoh ants are becoming a problem, as well as bed bugs that are increasing. Miljöförvaltningen mainly handles rats.

Respondent 2 sees that reports on pests have become more frequent. The reason for this is two folded, as he sees it. On one hand, the residents of Malmö have become more aware of their surroundings and rightly demand action when they see a problem. On the other hand, there is a lot of construction being done in Malmö, both new buildings but also supportive diggings for fiber optics, gas or district heating. This affects the habitat of rats, for example, making them come from the underground.

Malmö is a growing city that is open towards events, wanting to invite happenings and people. This is great, but this also means a growth in waste. Waste and rats go together. There is more take away, and more littering, these are all things that affect the occurrence of rats, according to Respondent 2.

“Malmö is at the same time growing quickly. We have the ambition of the vibrant city, I almost want to say “we are inviting to a dance”. But we want to host a lot of arrangements, that is the way we want the city to be. With that comes the other, like a letter in the mail. More littering and more pressure. Things break and need to be fixed and freshened up, you get it. It all ties in together.” Mattias Thelander, Respondent 2, FGK

Respondent 3 claims that the pest situation has been consistent for a while, but that the problems have been increasing. He also says that weather plays a major role, this year has been pretty dry, there has been no snow and not much rain.

Real estate

Respondent 1, MKB, is experiencing that more property owners and property companies are having problems with pests. Rats, as an example, are becoming a bigger problem in Malmö. Again, it is important to work with preventive methods, to work with the outside environment and make it uninhabitable for rats. Waste management plays a big part in pest occurrence, acts as both a food source and shelter. This is supported by Bonnefoy, Kampen, Sweeney that write about how changes in construction of housing in Hungary influenced occurrence of cockroaches (Bonnefoy, Kampen, Sweeney 2008:66). Things like false ceilings, wall coverings and heating pipes contributed to German cockroaches becoming the main pest in the structures (ibid).

Another aspect to consider is that not everybody defines the same pests as actually pests. In some parts of the world cockroaches are common, so a tenant that might be used to seeing them might not react and report this. They might not consider it worthy of reporting, but at the same time where there is one in sight there are many more in hiding. This is also something that might cause the problem to have time to grow.

Respondent 5, HSB, claims that bed bugs are not a huge problem for HSB since that is something that is associated with student housing. Though they do occur in ordinary apartments as well, this year HSB had a case so severe that they had to use a bed bug hound. The dogs are specially trained to find and mark bed bugs. After the sanitation at this specific location they used the hound and found that there were no bed bugs left. Respondent 5 has attended a seminar with Anticimex a few years ago and knows that bed bugs are hard to get

rid of. Respondent 5 also refers to the media and how it is showing the growing problem of bed bugs. He believes that student housing is at risk, but also that people traveling more, and recycling stations contribute.

Rats are a problem, and the state of the property might certainly put it at risk, according to Respondent 5. Respondent 5 does highlight though that the main problem is waste management, and if it is not properly managed either by the tenants or the property owners, the problem quickly evolves.

Sanitation

Respondent 6 echoes the previous statements and sees that pest infestations have increased, mainly rodents and insects. Building and construction are major causes for the increase in rodents. That Malmö is growing is great, but it needs to happen in a pace where we can keep up.

Respondent 7 states that Malmö is like any other city with areas that have more issues than others. Sometimes the issues are connected to the building constructions and sometimes there are property owner that are not as active as others in pest management. Regarding pest control, the main responsibility falls by law on the property owner. The law does not, on the other hand, say how the pest control must look. Preventive methods are key, according to Respondent 7.

Reflection

As Malmö is a city that wants to grow and is looking towards the future, there needs to be a more conscious approach towards the development as well. Preventive methods need to be used during constructions; sustainability needs to be kept in mind. Respondent 4 highlights a very important part about how not everybody considers the same pests as actual pests. This can cause huge misunderstandings, and also big infestations, and has solely to do with correct information being distributed to residents. The respondents are in agreement

about the fact that most pests are becoming more common, this is supported by several reports. For example, Anticimex wrote about the numbers of increasing sanitations regarding bed bugs (www22). An article in Hem & Hyra relates that an increase in pests has been shown the last ten years, especially regarding bed bugs (www23).

Responsibility

Who is responsible, when and where? These questions are highly relevant when trying to piece together a picture, but also when wanting to develop and better a situation. In *Responsibility* I present the respondents own answers regarding their respective area of work.

Municipal

Miljöförvaltningen is divided into five departments, and Respondent 1 works within the housing group department. The different departments handle different areas of the built social environment, like schools or parks, and supervise different aspects of their fields. The housing group is responsible for the supervision of the indoor environment in the city. If a sighting of any kind of pest in a public area is reported to Miljöförvaltningen, the demand for solution will be passed on to FGK, the street and property office.

Miljöförvaltningen is an independent regulator that acts in the interest of the city of Malmö, handling supervision of different operations, as well as property owners, making sure that the Swedish law is followed.

FGK is a contracting office that orders entrepreneurial work. They answer directly to Miljöförvaltningen, the environmental municipal administration, and put in action the plans of Miljöförvaltningen. If Miljöförvaltningen, as an example, says that rats need to be exterminated in a certain part of Malmö, FGK are responsible for the way in which this is done, meaning FGK is responsible for contracting corresponding actors. FGK have jurisdiction on public areas and spaces.

VA Syd is responsible for everything that has to do with sewers, meaning that everything above ground is in the care of Miljöförvaltningen and FGK.

One of the questions I asked was why people turn to the respective office, and the answer I got from Miljöförvaltningen is worth to note.

“One problem with Miljöförvaltningen is that not everybody knows about us. It is usually the more challenged and vulnerable areas that need help the most, but the people living there might not contact us because they don’t know we exist. Or they are scared of contacting us, fearing they might get evicted, fearing the landlord or something similar.”

Pontus Sterner, Respondent 1, Miljöförvaltningen

With this statement Respondent 1 touches on two important facts. Firstly, the access to information; not everyone knows about Miljöförvaltningen. What Respondent 1 means here is that not everyone knows what work Miljöförvaltningen does and in extension they do not know what kind of help or service they might be able to get there. Secondly the statement touches on a layered issue; the ones that might need the most assistance might be unable to ask for it. Respondent 1 refers to challenged and vulnerable areas, this usually goes in hand with areas where living conditions are lesser, and tenancies are not as secure. Areas where secondhand renting is a trend. This is something that resonates with Listerborn interviews, where the secondhand leases made for a very insecure sensation (2018). The residents that have a contract that is not secure, sometimes even illegal, might hesitate to ask for help in fear of losing their tenancies all together. They might also not report pests reasoning it with the fact that the tenancy is not actually theirs. This means that potential pests have the opportunity to grow and spread.

Respondent 1 states that contact is made usually by the residents, rarely by the property owners. It is by law within the responsibility of the property owner to get rid of pests. If the property owner, then does not do enough to ensure a pest free environment the residents have the option of turning to Miljöförvaltningen. Miljöförvaltningen can make demands on action from the property owners, demand that they work preventive or fix an existing problem, but actually Miljöförvaltningen is quite restricted in these demands. Basically, as long as the property owners claim that they are taking action on the matter Miljöförvaltningen is tied, an issue that is questioned by other studies as well. In *Bed Bugs, Public Health and Social Justice* the authors write about how local jurisdictions in the US hesitate to respond to bed

bug complaints due to both a shortage in manpower, but also in the lack of regulatory authority (2001:8).

Real estate

MKB as a property owner and real estate company has to follow the Environmental code and actively handle pests within their property. Their contracted sanitation company is Nomor. Many real estate companies do not know what they must or need to do regarding a pest infestation. Respondent 4 states that it is very important to have someone in the office that has knowledge about pest management and knows what procedures need to be followed. Real estate companies have, according to the Environmental code, the main control and responsibility regarding pest control within their properties. Respondent 4, MKB, states that preventive methods and structured routines make the management of the property as well as the surrounding environment easier and more secure. The actual and practical sanitations are done by sanitation companies, and not directly by the real estate company, which leads many real estate companies to think that having an insurance contract with a sanitation company is enough. Respondent 4 makes it clear that the sanitation contract is just half of the battle, the other half is how much supervision the real estate company has regarding the problem.

HSB has an insurance contract with Anticimex when it comes to all forms of pest control in their properties, apartments, public areas or yards. When it comes to yards and public areas, HSB are the ones that contact Anticimex. If the problem is in an apartment, the tenants are the ones that contact and set up appointments with Anticimex.

Sanitation

Nomor is the contracted sanitation company of the city of Malmö and acts in public areas that belong to the city. If someone sees a rat, they might call a municipal office, and then the office calls Nomor. Their biggest clients, according to Respondent 6, are insurance companies but they have private clients as well.

Every city Anticimex is active in has their own office that serves clients within that geographical area. Every office has their own experts, technicians and sight manager.

Both Nomor and Anticimex are private companies that provide services, amongst them sanitation of pests.

Reflection

The main responsibility of pest control within housing falls on the property owner. Municipal organs are supervisory and sanitation companies are the ones performing sanitations. It seems logical and clear, but there is an obvious gray area where there is room for development. Even though Miljöförvaltningen is supervisory, they still cannot see to every property owner and have at the same time regulatory restrictions on how much they can do. Pest control management would benefit from a municipal organ whose prime focus is pest control and that has a larger jurisdiction.

The residents have the responsibility of reporting pests, but as Respondent 1 says, some might not feel secure enough to do so. This is yet another reason to have more active municipal supervision.

Process

What does the process of an incoming complaint look like? The management of pests has so many different layers and involves different actors, it seems that the process of handling complaint needs to be watertight. In this segment we will look at respective processes of handling complaints about pests, based on the respondent's respective answers.

Municipal

Residents of Malmö can report a problem, loud noise or bad ventilation, but then Miljöförvaltningen must make the judgement whether this is a disturbance or not. When it comes to reports of pests Miljöförvaltningen has the option of contacting the property owner.

If the property owner then says that they know about the problem and are trying to solve it, Miljöförvaltningen will not pursue the matter. If the property owner says that there is no pest problem, Miljöförvaltningen can themselves control the property to determine if that is the case. Miljöförvaltningen also has the option to put some pressure on the property owner regarding the pest control or demand that the property owner reports the pest control plan and action, but they are at the same time quite limited in how much they can do.

Every property owner must by law have an insurance with a sanitation company. As long as they have the insurance, Miljöförvaltningen is limited in how much they can do. By law, it is hard for Miljöförvaltningen to interfere as long as a sanitation company gets involved in management of a pest situation, even if the involvement is not directly giving results. Some properties demand larger sanitations, or maybe the property owner needs to work with preventive methods, but as long as an insurance exists the property owner is technically doing their part. There are different types of insurances, and Miljöförvaltningen is looking in to if there is a way to demand more coverage so that property owners are not able to have the form with the least coverage. All that Miljöförvaltningen actually can demand, now, is that the property owner communicates with their sanitation company and starts the process of sanitizing.

But there are other areas that Miljöförvaltningen can supervise. When it comes to rats, for example, waste management plays a huge roll. So, if Miljöförvaltningen assesses that a property has poor waste management, they can demand that the property owner contracts for more frequent waste pickups by VA Syd, for example.

As the last step, Miljöförvaltningen can put a fine on a property owner if they continuously ignore directives. This is an extreme measure and is hardly ever done according to Respondent 1. The threshold for what counts as “following the law” is so low for property owners regarding pests, making it extremely difficult for Miljöförvaltningen to act.

Residents of Malmö can of course also turn directly to FGK. The difference is that Miljöförvaltningen has more power to affect a property owner while FGK are contractors that will organize a solution.

The residents have several options when they wish to file a complaint to FGK, or just leave an opinion. They can call customer services or write on the city’s webpage, Facebook or Twitter. There are several channels in, and the information is sorted out according to what department handles what question. Since Respondent 2 is clearly stated as the responsible one

for pest control, the complaints are directly forwarded to him. From there he has to decide how to handle the matter, decision making that requires experience and time. Complaints that come to FGK only regard public spaces and never housing.

For reports or complaints to VA Syd residents usually call customer service but get redirected to a form on the webpage. If a resident puts in a complaint and VA Syd assures them that they will act on it, usually the resident is content. Nine times out of ten VA Syd never hears from them again. The goal is to handle every errand within one week.

In *Public Health Significance of Urban Pests* this issue is raised, namely how strategies are limited to responding to complaints (Bonnefoy, Kampen, Sweeney 2008:401). The assumption is that lack of complaints and contact indicates an absence of pests, but this cannot be assumed (ibid). This can correspond with some pests seemingly being sanitized to just a few weeks later reappearing, or it can be that the complainant just does not want to handle the issue anymore. When responsibility for management of a disturbance falls on the individual, we are basically forcing the individual to act as a supervisor.

Real estate

MKB is a bit different than most real estate companies and property owners in their process of handling complaints and reports about pests. Most other real estate companies have a system where the tenant has contact with the contracted sanitation company, and there is little to no involvement by the real estate company itself. MKB handles reports on pests like any other reports and want to have full insight according to Respondent 4. The tenant calls customer services where an errand is made in MKBs system. From there MKB contacts their sanitation company that then contacts the tenant and sets up a date for the first inspection. Everything is reported in the system, and MKB has full insight. MKB can go back to different errands to see what the progress looks like. They do not need to contact the sanitation company to get the information about the sanitation process, everything is in their system already. Respondent 4 states that leaving the responsibility of contact with the sanitation company to the tenant leaves too much room for uncertainty. Suddenly MKB would not have full knowledge about what is happening in their own properties. This system, according to Respondent 4, also puts tenants at ease since it shows that the property owners is with them in the process.

Tenants of HSB either call customer services or file a complaint through the web page. Complaints sent by mail are not accepted. The complaints are then distributed to corresponding customer hosts that contact the tenant and let them know that they have to contact Anticimex on their own. If the tenants know what insurance company HSB has, they technically do not even need to contact HSB at all. They can just contact Anticimex straight away. HSB does usually not check in or follow up on cases, if tenants call back with recurrent pest issues, they get directed to call Anticimex again. HSB will support all sanitations, as long as they are needed. Usually, respondent 5 says, after the first time Anticimex has been at a sight they are not contacted again which Respondent 5 reads as the problem being solved. There are different types of pests that HSB has been dealing with, but respondent 5 sees that the problem with bed bugs has been growing. Rats are also common, but a bit more common in the court yards. The stance HSB has in this matter is that Anticimex are the experts and they can be left to handle the matter.

Again, I would like to refer to Bonnefoy, Kampen and Sweeney regarding the risk of assuming that lack of complaints equals absence of pests (Bonnefoy, Kampen, Sweeney 2008:401). I looked at other big real estate companies and their process of handling a pest complaint, and the routine HSB has seems to be the general one.

“If you discover pests - for example mice, flour beetles or ants - you are by law required to report this. Contact Anticimex directly. The phone number can be found on the pinboard in staircase or here. [with a link to Anticimex numer in Malmö]” - Akelius (www24)

“If you find pests in the appartement it is important that you report this to your local Anticimex office straight away. Contact information is available in you starwell. If the pests are in common rooms or in the outdoor area you can make a service report to us at Willhem through My pages on the web or the ap. You can also contact out customer service through telephone.” Willhem (www25)

“If you are living in a condominium they might have an external contract with Anticimex and this information can be found in you staircase or by contacting us via the phone number 0771-860 860.

If you are living in a tenancy, we as property owners might be the ones that handle this and in that case you are able to put in a report through the phone or our webpage.” Riksbyggen (www26)

“If you are having problems with pests in your apartment contact Anticimex at 075-245 10 00. State that you are a tenant at Heimstaden and that we are connected to Länsförsäkringar Skåne. [Länsförsäkringar Skåne is an insurance company]” Heimstaden (www27)

These are just some examples, but of the real estate companies that I looked at they all had similar instructions. The most interesting here is Heimstaden, that even states what insurance company they are contracted with, making it even less likely that the tenant will contact them. This is a high risk to take as a property owner.

Sanitation

The clients that Nomor has through insurance companies usually call the insurance company at which point they get referred to Nomor. The number that is provided goes to Nomors customer service, and that is the channel where all reports go through. Customer service office is stationed in the city of Falun, the errands are distributed throughout the country from there.

“The client has a lot of responsibility. We have demands for preparations before we come to a sight, but also for routines afterwards. Some think that we will just come in with a magic wand and solve the problem, but it is all about collaboration.” Pontus Gillfelt, Respondent 6, Nomor

What Respondent 6 says here is similar to what the other respondents have said so far, a sanitation can only be successful if the tenant does their part as well. Respondent 6 also says that it is important to remember that if we are building, we are invading the living space of rats, and this means they will emerge and be more visible. This is not something the

individual can affect, but it is important to understand why one might be seeing more rats for example near a construction site. Since a sanitation is so contingent on the actions of the residents it, I would argue that the information about this needs to be crystal clear.

There are great preventive methods that can be used before the construction starts, says Respondent 6. Nomor could sit down with the contractor and make an action plan on what needs to be done and how to ensure that all precautions are taken beforehand. This would also be a good selling point for the contractors, to be able to say “here we have taken all the precautions and are working preventively”. This would also mean less use of pesticide; it is more environmentally friendly and sustainable.

“This subject is like many others; people think that it will not happen to them. Before the problem actually occurs, most do not even want to think about it.” Pontus Gillfelt, Respondent 6, Nomor

Anticimex has two main customers. One is the contracted customer where the contract looks similar to an insurance. The customer pays in advance for a continuous protection, just like an insurance. The advantage is that there is a possibility to work preventively, Anticimex has the chance to make an analysis and say which risk factors a property might have. Like bettering waste management, sealing of tiles, cutting bushes, food storage, things that can actively be done beforehand. Those are the possibilities when there is a contract in place, and it is the big difference to the other customer type that does not have a contract and contacts Anticimex only when they run into trouble. Insurance companies are usually the direct customer and it is through them most go for help, just like the case is for Nomor.

What is needed for a successful sanitation, according to Respondent 7, is collaboration between all of the involved people. Usually apartment buildings pose the biggest challenges, some infestations involve several apartments in which case the number of involved parties required is multiplied. Property owners need to be active in announcing an existing pest problem and making sure that sanitation companies can have access to all the apartments they need. At the same time, tenants need to open their apartments and make them available while also following the given advice and routines surrounding sanitations. As a sanitation company, says Respondent 7, we need to look at the whole picture and act according to the risks that might be present.

Reflection

The biggest area of development here should be in how property owners handle complaints about pests. Since pest control is by law done by the property owners, they should have more control in the process. MKB is the company that seems to be working in this way, and it is also something that is sustainable and long term. The key for a successful sanitation is every actor doing their part, but the main actor in charge is still the property owner.

Information

How do people know what a pest is? How can they find out where they can get help and where to turn to first? As we have seen by the answer of Respondent 1, not many people know about Miljöförvaltningen and what kind of help they can get there. This becomes a democratic question; in this segment we will look at the information and communication of the respective respondents work area based on their respective answers.

Municipal

Miljöförvaltningens main existing communication regarding pests with the residents of Malmö is the information that exists on the Malmö webpage. This information is quite basic and scattered on the site, making it hard to navigate. It will be especially hard if you are not sure what you are looking for. There is not a lot of directed communication regarding pests created by Miljöförvaltningen since, according to Respondent 1, pest control and management is by law the responsibility of property owners. Regarding tenancies, the residents can contact Miljöförvaltningen if the property owners do not have a contract with a sanitation company. People living in villas, houses or condominiums are themselves responsible for the contact with a sanitation company. Miljöförvaltningen works with a program that uses outreach, that work centers around the indoor environment and things like ventilations, microbial growth, loud noises and in some rare cases pests.

Similar approach is taken by FGK and VA Syd with standard information on the webpage. Respondent 2, FGK, does highlight that it would be beneficial to do a sort of initiative or campaign. Last year FGK developed a campaign about the importance of not littering and keeping the city clean. An advertising agency was hired to develop a concept of how to reach the residents of Malmö. Respondent 2 says that it would be beneficial to do something similar with pests, information is important to share and make available.

Real estate

MKB does not communicate with all of their tenants about pests but has a continuing contact with the ones that report pests. MKB has had newsletters before summer holidays with tips on how to avoid bringing back pests, but respondent 4 states that it is extremely important to not create panic with the wrong type of information.

What MKB has found to be a challenge is language barriers. It is extremely hard to ensure a successful sanitation if there is no way of communicating with the tenant due to language differences. This is something that the communications team at MKB have been looking in to, to maybe develop communication using pictures.

2012 was the year, says respondent 4, when there was a clear increase of pest occurrences. 2010 had very few cases, but by 2012 bedbugs were showing up more frequently. Then, like now, there was no exact science about how to get rid of them. There are still no quick fixes.

Respondent 4 states that there are top 3 pests that are harder to get rid of than others. The toughest one to get rid of is the bedbug, then the pharaoh ant and lastly the cockroach. It is essential for tenants to be informed about what is required from them for a successful sanitation, especially when it comes to one of the mentioned three pests. The most common thing people do when they get bed bugs, for example, is to stop sleeping in their beds and move to the sofa. The problem is that bed bugs just follow along, and then they infest the sofa as well. Some people throw out their mattresses or some other piece of furniture in an attempt to get rid of the pest. Soon enough, though, they notice that the bedbugs are still there. In the meantime, someone else might have seen the piece of furniture and picked it up for themselves, and that is one of the ways bedbugs spread. They spread with us, people, because we are their food. Ants get around on their own, they eat anything, but our blood is what bed bugs feed on. If the tenants do not know what routines need to be followed, they might wait

too long before making a complaint about an infestation, and then the problem has more time to spread. In these cases, everyday counts. It is extremely important that the tenants are accountable, but it is equally important that property owners or landlords communicate the right information and routines to them.

The sanitation company and the sanitation technician also needs to have the right information, but they have to communicate this to both the tenants and the landlords. In some cases, the whole property needs to undergo a sanitation process, and it is important that all parts understand this.

HSB does sometimes send out information about where tenants can turn for help if they discover pests. The tenants don't need to call HSB, they can go straight to Anticimex and just say that they are tenants at HSB. This information is also available on the pinboards in every stairwell, as previously stated. Other than that, there is not much information about pests. According to Respondent 5 HSB has not had that much issues with pests, they also believe that information should come from the municipality.

Sanitation

Both Nomor and Anticimex have a similar stance towards the external communication. They are the ones that practically address the problem, the communication is the responsibility of the real estate companies and municipalities.

Every one of Anticimex clients are informed on sight, there is also plenty of information on the webpage. There are even informative YouTube videos. The main communication outward is education for insurance companies, property owners and landlords.

Reflection

Information is key, in this situation, but there seems to be some disconnect about who should provide the information. This is one of the gray areas I mentioned when reflecting on the responsibility. Somehow everybody thinks that Malmö city needs to provide information

about pests, but municipal organs cannot interfere with private workings of real estate companies. Everybody seems to be pushing the responsibility away. The trouble is to communicate about pests without creating a panic. Another important piece here is the language barrier, as stated by Respondent 4. For a pest free environment, it is important that everybody is working towards the same goal, but how can that happen if not everybody can even understand the plan?

The trouble of pests

This segment is a bit different since it touches on feelings and ideas of third parties. I asked the respondents why people react negatively to pests, what the actual problem is. Eddy and Jones share results of an opinion survey in the US where 90% of respondents considered bed bugs to be a public health concern, 73% consider them to pose an environmental justice concern (Eddy, Jones 2011:9).

Municipal

What is interesting is that respondent 1, when asked what the biggest problem with pests is, answers that pests give a sense of insecurity. Some pests, like rats for example, pose a direct health risk due to their ability to carry different diseases and bacteria. But it is pretty uncommon, in Sweden at least, that rats attack or bite. But if there is a lot of rats in a courtyard, it usually is a messy and not a well-kept courtyard. Those things go together, says respondent 1, and do not give a sense of safety and wellness. Pests are almost a bit of a taboo subject, talking about them is uneasy and scary.

Pharaoh ants, for example, are not directly dangerous to our health. They do, however, impose an uneasy and disturbing sensation when found in one's home since they might be around food and in the kitchen. Bed bugs are not known to spread diseases, but the mere thought of them feeding on our blood is uncomfortable.

Respondent 2 answers in a similar way, the feeling of uneasiness, pests are something one does not want to see. Beyond the sanitary part, that there are risks for diseases, people think

that it simply is unpleasant. Some might say things like “oh, these wasps are so nasty!”, because wasps are also in some cases handled as pests, says Respondent 2.

Correlation of maintenance and pests is sometimes easier to see at recycling stations, or around containers, according to Respondent 2. Those types of areas tend to get a bit messy, and this attracts rats. The ground surrounding these areas is of course not a clinically sterile floor, but usually littered, and this attracts rats.

“It is sanitary, but people also get some bad thoughts in their heads about rats. Rats litter and are not as clean as one might think, they carry a lot of diseases. It can be a phobia, but it is really unpleasant to see rats.” Kenneth Nilsson, Respondent 3, VA Syd

Real estate

With pests the whole environment that is lived in is affected and deteriorates, and it can feel safe, says Respondent 4. This also means that actual structures can be affected, rats can chew up pipes and cords. Another aspect is that it might give the property owner or company a bad reputation.

There is a big problem regarding the ignorance about where bed bugs come from, says Respondent 5. They are usually brought in by us, they do not enter apartments on their own. There is always a reason and a background to why they are there.

When it comes to rats, usually the reason for their appearance near housing is waste management. Rats are good at climbing and digging, respondent 5 knows of cases where rats have climbed facades and gotten in through open windows. But the most common problem regarding rats is outdoors, and then it is connected to waste management.

If there is a construction going on near a property, the rats will get disturbed and come up. It was said before that there is a rat for every person in Malmö, but respondent 5 thinks there are more rats.

Sanitation

Respondent 6 says that pests are unsettling, they create unease and are not so nice. They crawl, bite and are hard to catch.

It is possible to get rid of some pests by cleaning, but others have to be professionally exterminated. Some people do not know about this, or ignore it, and try to get rid of furniture that is infested. This just spreads the problem around and does nothing to rid the original person of the problem.

Pharaoh ants are, for example, tough to get rid of. There can be sanitations going on for years and the ants will survive. They build satellite nests, they spread out and are hard to target all at once. Clients might think they have gotten rid of the problem and then suddenly, a few weeks after a sanitation, the ants will be back.

A challenge regarding pests is that everybody sees their own apartment as an isolated world, but Anticimex looks at buildings as a unit. If one apartment has issues with pests, then they consider the whole building as a problematic object. Respondent 7 states that these cases require that the sanitation company has access to all apartments to determine if the infestation has spread or not. This brings some challenges in the communication. Another communication problem seems to regard the routines needed to be followed by the tenants for a successful sanitation. Then there are all the common spaces to be considered, elevators and stair, it is a really complex process with a lot of moving parts.

These sentiments are supported by *Public Health Significance of Urban Pests*, for some people cockroaches were a more important factor than broken windows, trash in the yard or leaky faucets (Bonney, Kampen, Sweeney 2008:61). A similar study in London showed that more than 80% of the residents from uninfested apartments felt that infestations were worse than poor security, poor heating and poor repair (ibid).

Reflection

We do not like pests, we know that they exist, but we do not want them in our presence. They make us feel uneasy, unsafe and uncomfortable. They can pose health risks,

they can damage property, but we simply don't *feel* good when they are near us. This is interesting, connecting it to de Botton, how pests can affect our state of mind and limit us (de Botton 2006). Listerborn also writes about how our everyday lives are connected to our self-image, and pests as a part of the everyday life are unsettling (Listerborn 2018). Some people can develop general malaise from bed bug bites for example, but pests can also lower a person's vitality and make them listless and constantly uncomfortable (Bonney, Kampen, Sweeney 2008:139)

Development

What needs to happen in regard to pest management and control? In this segment we will lay out the respondent's views on development that would be beneficial.

Municipal

Respondent 1, Miljöförvaltningen, sees collaboration as the future. Both within Miljöförvaltningen, between departments, but also across fields and offices.

Respondent 1 gives management of pharaoh ants as an example. There are apartments that go through 5-6 sanitations and still suffer from the pest. The reason behind this is that pharaoh ants can usually only be eradicated when the whole property undergoes sanitation. Even then it can take several sanitations. Respondent 1 states that sanitations companies should clearly inform the residents and the property owners about this fact. The property owner, on the other hand, needs to be vigilant about seeing sanitations through and supervising the process. The resident has a huge responsibility as well, usually there are instructions to be followed if the sanitations can be successful. The residents can contact a sanitation company on their own, but they cannot see to that the sanitation is done throughout the property if it is needed.

It is also important to take preventive action, if the facade is broken for example rats can easily get in. These things make difference.

Communication and cooperation are the key for successful pest control.

The same sentiment is shared by FGK, cooperation and collaboration is the way forward. Nobody sees a future where there are zero pests, but a future where they are held at an acceptable level. Collaboration becomes more important for a city like Malmö, where there is a lot of progress and changes. There is a lot of will and ambition, from the city and its inhabitants. Cooperation is important so some smaller detail, that is important, does not get lost or missed.

Another important point that Respondent 2, FGK, raises is that we have to be mindful of the way we manage pests, with traps and pesticide. FGK has a nature friendly view where they strive to work environmentally friendly. They must work within the EU standards, norms and directives regarding pesticide. If we want to get rid of rats from our closest surrounding, this means that we have to kill them, otherwise they will still be there. But we must work with the most humane methods we can, death must be quick and painless.

Sometimes people do not think about this completely, that it means death of an animal. Then there are other aspects to this, like handling a dead animal body. What if the trap is forgotten and the body just lays there? It might become a health hazard.

The same goes for bed bugs and cockroaches, we do not want them within our near environment. That means that we have to get rid of them, meaning kill them. The methods on the other hand need to be efficient regarding the way this is done, there are always areas of improvement.

Respondent 3 echoes the thoughts on pesticides, stating that we have to realize it is not a magical solution and that it should not be used carelessly. There is also a lot of improvement that needs to be done in regards of preventive work and waste management, two key factors. Respondent 3 also shouts “Stop building!” when asked what needs to happen for the pest situation to get better. As we build, and dig into the earth, we are crossing into the territory of rats. If we stir their dwellings they are bound to pop up.

Real estate

Respondent 4, MKB, considers that bed bugs are becoming a societal problem. Contributory to that is increase in travel and trade with secondhand goods and recycling. Those things are all positive, but still there is a risk that has to be considered. Pests are, according to Respondent 4, also a problem that is connected to secondhand leasing, especially if it is an illegal lease since people then tend to be more afraid of reporting issues. Not reporting a pest always results in the pest spreading. These are all challenges that this issue is facing, but Respondent 4 thinks that the way forward is a good knowledge base and communication.

Respondent 5 echoes this, saying that there needs to be better information available. For example, about how easy it is for rats and bed bugs to thrive if the wrong things are done. Rats are attracted if the environment is not being kept and waste management is poor. Bed bugs are caused by more traveling, recycled furniture and how many people are living in one apartment.

Having said this, Respondent 5 feels secure with having Anticimex handle HSBs pest control and is satisfied with the contract they have. Respondent 5 highlights the responsibility the individual has in this, but he also thinks that it is important that HSB sets a good example. HSB works hard towards keeping clean and nice properties, and the hopes are that the tenants will see this and do the same.

“We have found, through surveys, that people want a clean, nice and safe space. Safety is highlighted. That means everything from cutting down bushes to their correct heights to good lighting. There are areas where people leave things, of course, everything can't be perfect. But then we just have to clean those areas more, we can't expect everyone to behave in a correct way. But we can show everyone that we want it to be clean and nice.”

Lennart Eckerholm, Respondent 5, HSB

Sanitation

“In general, there needs to be more understanding for the industry. Many people are grateful when we are there and helping, but some people get mad at technicians as if it is their fault that there is a pest. It is important for people to have an understanding of the process of getting rid of pests, that they need to contribute as well. Also, one has to think beyond the cost, the problem will not disappear by itself. On the contrary, the problem will become bigger and affect the cost even more if one waits too long. Collaboration from all parts is needed, everybody has to do their part.” Pontus Gillfelt, Respondent 6, Nomor

Respondent 6 sees that there is a gap in knowledge and information, but also stands by the fact that it is not the responsibility of the sanitation company to spear a campaign.

Respondent 7, Anticimex, sees a need for governmental control in the matter. The whole business is already monitored by laws and regulations, what can and cannot be done, which pesticides can be used and how much.

“We have big food sources and waste sources, and all of these things are connected. Sometimes clients, and people in general, think that pesticides can solve everything. But wrong usage of pesticides can be as high of a risk as poor waste management. In these cases, we wish there was an authority that was more involved and had the resources to see what is going on and for example fine poor waste management. Miljöförvaltningen has so many other things that take up their time.” Håkan Kjellberg, Respondent 7, Anticimex

In this instance Respondent 7 is referring to the fact that Miljöförvaltningen is responsible for a whole municipality and that comparing to other issues pest control might not be able to be prioritized. Respondent 7, Anticimex, also sees potential in scrutinizing the law of public procurement. Procurement today is dictated by the demand of holding the costs down, which is not bad in itself. What needs to be considered is the results one gets, and this is sometimes where procurement fails. The municipal offices usually specify what they want in a contract, but they should listen more to the sanitation company that has more experience.

“The work surrounding pests is not a large question for a municipality, considering everything else that needs attention. But it is a huge question for the individual.” - Håkan Kjellberg, Respondent 7, Anticimex

We know that some property owners put in a lot of resources into working preventively and managing pests. Unfortunately, this is almost useless if they are right next to a property that does not care for these things. It is important to look at the whole picture, especially for the municipal offices.

Reflection

The main area of development seems to be collaboration and communication, and this might come as no surprise since pest control has not one single supervisory organ but an endless number of captains.

There is also a lack of information, both about what pests are but also what is needed to keep them away or get rid of them. What is needed to manage pests is the strength and the weakness of the process, namely many people working together.

There also needs to be more thought behind the process of development, to take precautionary measure for ensuring a pest free environment is sustainable and environmentally friendly. It is a way of securing less use of poisons.

Conclusion and discussion

This chapter will remind us of the research questions and aim as well as giving a brief summary of the results and analyses.

This research set out to investigate the responsibility areas of pest control in Malmö. I wanted to find out who is responsible where. The reason for this is that pest occurrences have been largely increasing, and pest control seems to fall between authorities. What is needed to keep pests away is numerous actors' involvement. I also wanted to add another layer to the housing debate, since pests in relation to urbanity are not a common subject. As our cities are growing and international movement is becoming more of an everyday event, it is important to anchor the relevance of urban pests to this development. The purpose of that is double: to clearly understand the situation in order to better manage it and to understand the correlation between urban pests and sustainable cities.

Who is responsible *when* and *where*?

An occurrence of pests has several actors that bare some type of responsibility. If the pest is within someone's home, then that person must report this. In that case the contracted sanitation company will act on the report, but the final responsibility is had by the property owner. Supervision that this is carried out is done by municipal organs, like Miljöförvaltningen. They can at the same time not get too involved due to jurisdiction as well as lack of time and manpower. Sanitation companies are the ones that perform the actual sanitation, they are also the ones with the most knowledge and experience.

How does the pest situation in Malmö look like?

Reports are showing an increase in several types of pests, and this is echoed by the respondents. The reasons for increase in pests differ, when it comes to rats the increase is connected to the larger scale of building and construction. As we dig into the earth, we are disturbing the habitat of the rats, making them come up to ground level. Aspects like these

can be worked with, there are preventive methods that can be applied when planning a construction.

Pests like bed bugs and pharaoh ants spread with us, by our traveling and bringing them with us in clothes, furniture and other objects. The way to work around this is clear information that states what is considered a pest as well as how to prevent infestations.

This research has shown that the ones responsible for pest control regarding housing, the property owners, put a lot of trust in their tenants. Trusting the tenants is not a bad thing, on the contrary. Where it falls short is that it only takes one tenant that is a bit careless for an infestation to take place, and therefore property owners should be more on top of pest control. Letting tenants handle sanitation processes alone with sanitation companies detaches the property owner of what is happening.

What seems to be lacking the most is collaboration between decision making organs, collaboration between municipal, property owning and sanitation organs. I argue, and this is something Respondent 7 also states, that there needs to be a group focused on exactly pest control. As I have already written, pest control seems like a minor subject to a municipality when one thinks of all the other aspects a municipality must tend to.

Why is this important?

Listerborn writes about how our everyday life plays a role in our self-image (2018), she also gives us an insight in several housing stories. de Botton, albeit lacking class analyses, reflects on how our surroundings affect what we deem as possible, our ideas and thoughts.

Our homes are many times deeply connected to our visions of ourselves, we anchor different parts of our person in pillows and paintings. Having this area under the uninvited attack of a pest can cause huge stress and unease. This is supported by previous research, Bonnefoy, Kampen, Sweeney write about the physical effects and diseases but highlight the psychological effects as well (Bonnefoy, Kampen, Sweeney 2008).

Looking at the effect of pests is highly relevant for the debate about housing, it is yet another perspective that risks excluding people. Skeggs uses *respectability* and *capital* to examine movement in class and how we view ourselves, and these terms are applicable in this research as well (1997).

Respondent 1 states that the challenged areas are the ones that might need the most help but are usually the last ones to ask for it. This is both because the residents of these areas do not know that they can turn to Miljöförvaltningen, but also because there is a sensation of taboo around the subject. It is not *respectable* to have bed bugs or rats, and it is even harder to admit to having an infestation when one already is on the wrong side of *respectable*.

Pests are a part of the urban, they are also a part of unsustainable planning. We need to look at how we handle pest management, the systems in Malmö might be similar to other cities.

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