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Urban Landscape Experience of Companion Animals and Their Humans

Master's Thesis

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Abstract

The aim of this thesis is to explore how we can expand our urban compassion footprint and better integrate citizens and their animal companions into the urban public spaces. It is argued that city dwellers' pets are invisible for contemporary urban planning professionals. Attention needs to be drawn to this topic because companion animals are an inseparable part of our cities and their number is increasing. The subject is approached through a wider historical background combined with a modern-day overview of keeping companion animals, and finally focusing on the Estonian context in the city of Tartu. The latter is done through an empirical study to explore the current situation. Based on the findings of the scientific and empirical study, possible solutions are offered through which Tartu could better integrate companion animals and their caregivers into urban public spaces. In a broader perspective, considering companion animals in urban planning practices could additionally have economical benefits as well as increase overall well-being for citizens and other animals living in the urban environment, not to mention the possibility to help to decrease animal abandonment and abuse cases by helping pets become a more acceptable and acknowledged sight for non-pet owners as well.

Keywords: companion animals, walking, inclusive urban design

Introduction

Cities are regarded as human-only habitats without any consideration to other non-human life forms in contemporary urban planning theories – may it be mainstream, neoclassical or Marxist urban theory. In reality, people are living side by side with non-human animals, and because of human-driven urbanization and development activity, the number of different animal species living in cities is constantly growing.¹ This causes conflicts, and that is why it is important to look closely into the topic of interactions between human and non-human animals in the cities and try to create a liveable urban environment for everyone.

Non-human animals in the cities can be classified overall as pets, resources (seen as commodities), and wild animals. Pets are the members of our families and scientific research has shown² that they have a positive effect on human health. Because of human carelessness or cruelty, pets can become stray animals and their offspring in turn feral animals. Resource animals are the ones that people use for food, clothing, cosmetics and medical experiments. Wild animals were, until recently, considered the most irrelevant because they are not domesticated and people in the cities seldom have had contact with them.³

Although all of the abovementioned non-human animal groups have conflicts with humans, their well-being is endangered, and while these issues should definitely be discussed, these are separate topics that are too large to cover in this present work. Also, animal commodification is mainly an ethical question that is not so much for discussion in the field of urban planning but in ethics and human-animal studies. This thesis is focused on companion animals and how to better integrate them into the urban environment.

The present thesis deliberately focuses on companion animals. Their numbers are growing in many countries around the world and also in Estonia. They are the closest non-human animals to us – we ourselves have brought them into our everyday lives and environment. Yet, so little consideration is given to them in spaces outside our homes and this affects their quality of life. The aim of this dissertation is to research the current situation of companion animals and their guardians in urban public spaces, identify their needs and offer ideas how to better integrate them into urban environment.

Terminology

Different terms can be used when talking about domesticated animals that people usually keep inside their homes. Therefore, it is important to look at the most common ones and what kind of problems they might present when used.

According to bioethicist Jessica Pierce, the most widely accepted and used terms in today's pet culture are the words "pet" and "owner"⁴.

pet /pet/ noun an animal that is kept in the home as a companion and treated kindly⁵

pet NOUN

https://www.riigiteataja.ee/en/eli/521032019002/consolide (accessed 5 September 2018).

¹ J. Wolch, Zoöpolis. - Capitalism, Nature, Socialism 1996, vol. 7, no. 2, pp. 22-23.

² A. M. Beck, N. M. Meyers, Health Enhancement and Companion Animal Ownership. – Annual Review of Public Health 1996, vol. 17, no. 1, pp. 247–257; D. L. Wells, The Effects of Animals on Human Health and Well-Being. – Journal of Social Issues 2009, vol. 65, no. 3, pp. 523–543.

³ J. Wolch, Zoöpolis, p. 22; Animal Protection Act, 2001 [modified in 2018]. - Riigi Teataja,

⁴ J. Pierce, Run, Spot, Run: The Ethics of Keeping Pets. Chicago: The University of Chicago Press, 2016, p. 213.

⁵ 'pet', Cambridge Dictionary, 2019. – https://dictionary.cambridge.org/dictionary/english/pet (accessed 28 April 2019).

domestic or tamed animal kept for companionship or pleasure⁶

pet $\ | pet \setminus noun |$

a domesticated animal kept for pleasure rather than utility⁷

According to Estonian Animal Protection Act:

*'pet animal' means an animal kept or intended for keeping with the aim of providing personal entertainment or company for humans.*⁸

 $Owner \setminus `\bar{o}\text{-}n \bar{\circ}r \setminus noun$

a person who owns something : one who has the legal or rightful title to something : one to whom property belongs⁹

Jessica Pierce claims that these terms depict most precisely the current attitude towards animals and how we treat them, suggesting these terms have negative connotations.¹⁰ As can be seen from the above mentioned different dictionaries' definitions and also the Estonian Animal Protection Act, these terms mainly suggest that pets are kept for humans' pleasure and owners 'own' their pets, reducing them to property, not living beings with their own feelings and preferences. The same attitude is reflected in the law – in Estonia (and most of the rest of the world except France, Netherlands, New Zealand, Quebec in Canada, Illinois and Alaska in the USA)¹¹ animals are subject to the same provisions that are applicable to things.¹² If animals are treated and thought of as things and not as sentient beings by the majority of the people, it causes problems for the animals – their needs are not considered and their life quality can suffer.

There are two different approaches of how to look at the language in which animals and our relations to them are described. Philosopher Hilary Bok insists that although some animal rights activists argue that using the terms "pets" or "owners" is degrading to animals, we have to look at the real life situation and talk about things as they are.¹³ It is a fact according to law that people own pets, and therefore humans are owners. Substituting the term "owner" with "guardian" or "caregiver" does not cover all pet owners, as there are also owners who do not keep their pets' needs in mind, abuse them and therefore are not worthy of the status of "guardian" or "caregiver".

Jessica Pierce, on the other hand, believes that a change can start from adjusting what kind of language we use.¹⁴ If we alter how we look at things and, together with it, how we speak, the empathy will eventually transfer into our everyday lives, become a part of it and, according to that, our understanding of animals and actions will follow. For example, one possibility is to use the term "companion animal" instead of "pet". According to American Society for the Prevention of Cruelty to Animals:

⁶ 'pet', Oxford Dictionaries, 2019. – https://en.oxforddictionaries.com/definition/pet (accessed 28 April 2019).

⁷ 'pet', Merriam-Webster Dictionary, 2019. – https://www.merriam-webster.com/dictionary/pet (accessed 28 April 2019).

⁸ Animal Protection Act, 2001 [modified in 2018]. – Riigi Teataja,

https://www.riigiteataja.ee/en/eli/521032019002/consolide (accessed 28 April 2019).

⁹ 'owner', Merriam-Webster Dictionary, 2019. – https://www.merriam-webster.com/dictionary/owner (accessed 28 April 2019).

¹⁰ J. Pierce, Run, Spot, Run, p. 213.

¹¹ I.-H. Keres, Not a Thing and Not Human – The Problems of Animal Rights and Welfare in Law. Paper delivered at Tallinn Summer School 2018 Course 'Introduction to Canine Cognition, Behaviour and Human-Animal Interactions', Tallinn University, Tallinn, 20 July 2018. Author's notes.

¹² General Part of the Civil Code Act, 2002 [modified in 2017]. – Riigi Teataja,

https://www.riigiteataja.ee/en/eli/509012018002/consolide (accessed 28 April 2019).

¹³ H. Bok, Keeping Pets. – The Oxford Handbook of Animal Ethics. Eds. T. L. Beauchamp, R. G. Frey. New York: Oxford University Press, 2011, p. 25.

¹⁴ J. Pierce, Run, Spot, Run, p. 213.

companion animals should be domesticated or domestic-bred animals whose physical, emotional, behavioral and social needs can be readily met as companions in the home, or in close daily relationship with humans.¹⁵

This definition already takes into account the needs of an animal, not just humans'.

There are also alternative terms to pet keepers – "owner" can be "guardian" or "caregiver".

guardian /'qaː.di.ən/ noun 1. a person who has the legal right and responsibility of taking care of someone who cannot take care of himself or herself, such as a child whose parents have died.

2. someone who protects something¹⁶

caregiver /'keə,gıv.ər/ noun someone who takes care of a person who is young, old, or sick¹⁷

caregiver $\ 'ker-gi-var \ noun$

a person who provides direct care (as for children, elderly people, or the chronically ill)¹⁸

Although all the explanations of these terms in the dictionaries right now refer to humans, they can easily be applied to animals too. I feel that it is important to pay attention to the language and terms I use in this thesis about animals because it will hopefully also help to fulfil the bigger, more far-sighted purpose of my work – to draw more attention to the situation of companion animals, help people to understand them and advance their position in the society.

Therefore, I will use both of these approaches to these terms in my work, depending on the context. Throughout history, the status of non-human animals has changed. For example, we cannot talk about "animal companions" in the Medieval or Post-medieval period because most of the people during these times believed animals had no soul, were dirty and they were mass-slaughtered by humans.¹⁹ Also, when a person keeps their dog leashed outside in the vard at all times and interacts with him/her rarely, this animal probably cannot be called a "companion animal" as he/she is neglected by the owner.

In the project part of my thesis I feel more comfortable using terms "companion animal", "animal companion", "caretaker," "guardian", as this reflects the idea and research of my project where people take into account their non-human friends' needs and are true partners. I am positive this is the way of thinking that Western culture is headed for. In addition, I will not use the word "it" referring to animals, as is customary in English language²⁰, as animals are living beings.

²⁰ B. Sobieck, How to Handle Animal Pronouns: He, She or It? – Writer's Digest 24 August 2010,

¹⁵ Definition of Companion Animal, 2019. – American Society for the Prevention of Cruelty to Animals,

https://www.aspca.org/about-us/aspca-policy-and-position-statements/definition-companion-animal (accessed 28 April 2019).

¹⁶ 'guardian', Cambridge Dictionary, 2019. – https://dictionary.cambridge.org/dictionary/english/guardian (accessed 28 April 2019).

¹⁷ caregiver', Cambridge Dictionary, 2019. – https://dictionary.cambridge.org/dictionary/english/caregiver (accessed 28 April 2019).

¹⁸ 'caregiver', Merriam-Webster Dictionary, 2019. – https://www.merriam-webster.com/dictionary/caregiver (accessed on 28 April 2019).

¹⁹ R. Gordon, From Pests to Pets: Social and Cultural Perceptions of Animals in Post-medieval Urban Centres in

England (AD1500 - 1900). - Papers from the Institute of Archaeology 2017, vol. 27, no. 1, art. 9, pp. 3-7.

https://www.writersdigest.com/editor-blogs/questions-and-quandaries/grammar/how-to-handle-animal-pronouns-heshe-or-it (accessed 28 April 2019).

Why Pay Attention to Companion Animals?

Companion animals are the closest to humans, but in reviewing the professional literature it seems it is an under-researched problem in urban planning, except for dog parks. When observing the current situation in Estonia, wildlife is at times better protected by laws than pets. For example, on September 26, 2017 Estonia banned wild animals in circuses, but domesticated animals are still allowed there and, at least on paper, the laws are tougher on the abuse of wild animals than domesticated ones.²¹ In recent years in Estonia, due to the decline of biodiversity, more attention has been turned to finding ways how to protect and preserve it in the cities. However, the focus is on plant species, wild animals, insects and birds. The only context in which pets (more specifically cats) are mentioned, is as a threat to the richness of species.²² Also, in Europe and North America, there is an increased interest in rewilding the cities, meaning moving towards creating analogous conditions on abandoned or marginal lands towards how they were before agriculture and animal domestication.²³ This is done in order to try to conserve and protect wildlife.

Timothy Beatley and Marc Bekoff use the term "Urban compassion footprint" in their essay for the "Ethics, Design and Planning of the Built Environment" book. With this term they draw attention to the fact that in contemporary city planning practices, the interests of non-human animals living in our cities are not considered important. Very often and without much thought human interests take precedent. The authors call professionals involved in urban planning to take action, to think not only of humans when designing our cities, but also of non-human animals' interests, incorporating them into the planning policies and practices.²⁴ Although they mean urban wildlife under non-human animals in their writing and bring out the economic, ecological and ethical reasons why they should be considered in planning, I believe the same applies to the companion animals. Interestingly, they write:

For most of us living in cities or suburbs, there is relatively little recognition of or thinking about the other animals and life forms that occupy our planet, aside from the domesticated companion animals (pets) who share a special place in our households.²⁵

It shows how commonplace the view is that our animal companions are often seen as belonging only to the private spheres of the home.²⁶

Several authors point out that the keeping of pets in contemporary societies is so widespread and such an ordinary part of family life that pets have become mundane and invisible.²⁷ When talking about pets in cities, it is a question of space – literally and metaphorically. People tend to allocate them "in their right place" or "out of place". Pets are included into people's homes and family, but

²¹ Eesti loomakaitseajaloo suurim võit: Eesti keelustas metsloomade kasutamise tsirkuses! [The greatest victory in the history of Estonia's animal protection: Estonia banned using wild animals in circuses!] – Loomus 26 September 2017, http://loomus.ee/eesti-loomakaitseajaloo-suurim-voit-eesti-keelustas-metsloomade-kasutamise-tsirkuses/ (accessed 10 September 2018); Penal Code, 2002 [modified in 2015]. – Riigi Teataja,

https://www.riigiteataja.ee/en/eli/522012015002/consolide (accessed 5 September 2018).

²² M. Uustal, P. Kuldna, K. Peterson, Elurikas linn. Linnaelustiku käsiraamat [Biologically Diverse City. Urban Bioversity Handbook]. Stockholm Environment Institute Tallinn Centre, Estonian Institute for Sustainable Development, 2010, no. 15, p. 135-136

 ²³ J. Lorimer, C. Driessen, Wild experiments at the Oostvaardersplassen: Rethinking environmentalism in the Anthropocene. Transactions of the Institute of British Geographers, 2013, vol. 39, no. 2, p. 172.
 ²⁴ T. Beatley, M. Bekoff, City Planning and Animals: Expanding Our Urban Compassion Footprint. – Ethics, Design

 ²⁴ T. Beatley, M. Bekoff, City Planning and Animals: Expanding Our Urban Compassion Footprint. – Ethics, Design and Planning of the Built environment. Ed. C. Basta, S. Moroni. New York: Springer Netherlands, 2013, pp. 185–196.
 ²⁵ Ibid. p. 185.

²⁶ P. Howell, At Home and Astray: The Domestic Dog in Victorian Britain. Charlottesville: University of Virginia Press, Kindle edition, 2015, p. 126.

²⁷ J. A. Serpell, E. S. Paul, Pets in the Family: An Evolutionary Perspective. – The Oxford Handbook of Evolutionary Family Psychology. Eds. T. K. Shackelford, C. A. Salmon. New York: Oxford University Press, 2012, p. 297; P. Howell, At Home and Astray, p. 313.

excluded from public spaces.²⁸ It seems that because companion animals are so ordinary, belong more to the private sphere of the home and are the responsibility of the owner, researchers, planners and city government officials do not see the need to deal with topics connected to pets (besides stray animal management).

Coming from cultural history, the pet is an anomaly. It is a creature that represents an intermediate category between human and animal. Pets are a part of nature, but they are appropriated by people, so they are different from the animality found in the wild.²⁹ Because of that they fall into a liminal space – even when they are considered as a part of the family, they are not humans and do not have the same rights given to them, but at the same time they also do not belong to the wild any more. They are in-between.

Philip Howell claims that the question of the dog's place in society was not resolved when the modern pet was "invented" during the Victorian era (from the middle of the 19th century until the beginning of the 20th century) and the same question has persisted well into modern times. The question is not only about the place of dogs, but also the place of their human guardians.³⁰ Howell is mainly focused on dogs in his book, but I think the same notions and problems can be expanded to all companion animals.

The Main Problem with Companion Animals in the Cities

The number of pets is constantly increasing in many Western countries³¹. More pets also mean more pet owners who have different needs in the urban environment to non-pet owners. Scientific literature and observations show that the needs of companion animals and their owners are barely considered at all in current city planning.

Jennifer Wolch notes that professionals who shape and design our cities (urban planners, landscape architects, architects) have the ability to influence human and animal interactions through their everyday practices, but they do not wish to do so. Animals remain invisible to the representatives of these professions.³² This leads to conflicts in public spaces – companion animals are invisible additionally to lawmakers, politicians and people who do not own pets. Their behaviour is not understood and questions arise over who has the right to use the public space (joggers vs. dogs, children vs. dogs) and where the funding should go.

Some authors go even as far as to draw parallels between the invisibility of domesticated animals in modern society and the exclusion of disabled people in the nineteenth century. People with disabilities started demanding reintegration and access by the late twentieth century and now their situation has improved.³³ It can be seen in Estonia too that people are starting to advocate for their companion animals (as a result there are more pet-friendly restaurants and events), but there is still a lot to do.

The question emerges: how to better integrate companion animals and their owners into urban public spaces through design and policy making, so that their needs are also taken into account?

Structure of the Thesis

This thesis is divided into four main chapters. The first two chapters give a broader context to the work, to understand where we are in terms of attitudes towards companion animals right now and how humans have reached this point. The first chapter looks at the history of domestication and

²⁸ P. Howell, At Home and Astray, p. 126.

²⁹ Ibid. pp. 435–573.

³⁰ P. Howell, At Home and Astray, pp. 110–122.

³¹ A Guide to Worldwide Pet Ownership – Pet Secure, https://www.petsecure.com.au/pet-care/a-guide-to-worldwidepet-ownership/ (accessed 18 February 2019) ³² J. Wolch, Zoöpolis, p. 43.

³³ S. Donaldson, W. Kymlicka, Zoopolis. A Political Theory of Animal Rights. New York, NY: Oxford University Press, 2011, p. 113.

human-animal coexistence to better understand how wild animals became companion animals in the first place and how this notion has changed throughout the history until the 20th century. This is done through a literature overview.

The second chapter investigates the current situation for companion animals and their owners in the urban environment. Web-based research was conducted to see what has actually been done in the Western world to accommodate pets in our cities and by whom. In this chapter I also place the subject in the Estonian context.

The third chapter focuses more specifically on my study area, the city of Tartu in Southern Estonia, and describes the web-based empirical study I conducted and its results. The findings of the study and scientific evidence is combined in order to better understand what needs to be taken into consideration when talking about companion animals and their humans in urban design and why. This chapter also introduces a real-life installation I did in Tartu as an extension for the empirical study.

The fourth chapter introduces possible solutions to the thesis' main question – how to better integrate companion animals and their humans to urban public spaces – through specific design interventions and legislation.

1. History – from Wild Animals to Pets

As companion animals could not exist without the domestication of wild animals, a short history of domestication is given here in order to better understand the complex relations between humans and non-humans and how the transition from wild animals to pets was possible. In addition, as this thesis argues that we need a more contemporary approach towards companion animals and better inclusion to the society through design, the past attitudes towards animals throughout our coexisting times are also briefly shown.

1.1 Prehistory – Domestication of Wild Animals

In the evolutionary process, domesticated animals are only recent newcomers. 20,000 years ago the human population was just a fraction of what it is currently and domesticated animals did not exist – only perhaps a few tamed wolves.³⁴

According to Juliet Clutton-Brock, a prerequisite for domestication is taming – a process where an animal has lost its fear of humans. A non-human animal is truly domesticated when it is held in captivity by humans and its breeding, feeding and organization of territory is also controlled by humans.³⁵ Although taming precedes domestication, they are fundamentally different. During taming animals get accustomed to humans, but their genetic makeup stays the same. During domestication, an animals' DNA is changed and these changes are inheritable.³⁶

Not all wild animals have been domesticated and scientists have questioned why, because if domestication happens by taming captured animals, it should be possible with all animals. It has been found that natural behaviour patterns of wild animal determine the possibility of taming. The less fearful the animals are, the easier it is to tame them.³⁷

1.1.1 The Biological Domestication

The domestication of animals is a combination of biological and cultural processes. When a few animals of one species are separated from the wild and they become used to people, then the biological process starts.³⁸ Often the process of domestication was started by the wild animals themselves when they sought human vicinity for different reasons.³⁹ When these individual animals are mated to each other in captivity and their offspring survive, a founder group has been formed. After animals in this group interbreed and this process continues over many continuous generations, their genetics start to change.⁴⁰

Their genetics responds to Darwin's natural selection theory. Animals who adapt the best living together with humans in man-made environments, survive and get offspring. Then, according to Darwin's unconscious selection theory, humans start to prefer some animals over others for economic, cultural or aesthetic reasons, and finally artificial selection comes into play where humans knowingly and systematically try to modify breeds to specific set standards until the domestic breed is created.⁴¹

Domestication also alters the culture of these animals. Domesticated animals are totally under

³⁴ J. Clutton-Brock. Animals as Domesticates. A World View Through History. East Lansing: Michigan State University Press, 2012, p. 8.

³⁵ Ibid. p. 14.

³⁶ K. Koort, Introduction to Evolution and Domestication. Paper delivered at Tallinn Summer School 2018 Course 'Introduction to Canine Cognition, Behaviour and Human-Animal Interactions', Tallinn University, Tallinn, 16 July 2018. Author's notes.

³⁷ J. Clutton-Brock. Animals as Domesticates, pp. 12–21.

³⁸ Ibid. p. 14.

³⁹ R. C. Francis, Domesticated: Evolution in a Man-Made World. New York: W. W. Norton, 2015, p. 12.

⁴⁰ J. Clutton-Brock. Animals as Domesticates, p. 14.

⁴¹ Ibid. p. 15.

human control – they are placed into the human society and become objects of ownership and trade. Due to this, animals have to adapt to a great range of different ways of life – different sets of social relationships and also new feeding and reproductive strategies.⁴²

1.1.2 Domestication of the Most Common Species in Eurasia

The history of domestication clearly shows that non-human animals were already present in the earliest permanent human settlements and had different functions. Prior to the agricultural revolution, wolves were the first species that were domesticated. They probably started to approach human camps to feed on leftovers and thus paved the way for dogs.⁴³

The first undisputed dog remains that were buried beside a human (showing they had more intimate relationship than being food) are from 14,700 years ago from Germany.⁴⁴ It is believed that dogs mostly functioned as guards, if they had any function at all. Humans did not specifically feed them, dogs scavenged in the piles of human rubbish like their predecessors.⁴⁵

The oldest skeleton of a cat in a human burial was found in Cyprus that has been dated around 9,500 years ago. When humans started cereal cultivation and the storage of grain, it attracted rodents and this in turn drew wild cats nearer to domestic settlements.⁴⁶ This means that wild cats (like wolves) initiated their domestication.⁴⁷

About 8,000 years ago the Neolithic revolution took place that created conditions for an agricultural economy as well as urban life.⁴⁸ At that time the massive domestication of livestock animals (sheep, goats, pigs, cattle) began which allowed people to control their food source and stock up for the future.⁴⁹

1.2 The Cultural Domestication of Pets

To better understand the modern day companion animal keeping, a short overview of the cultural history behind the development of it is given. Throughout history, human behaviour towards animals has been influenced by religion, superstition, philosophy and social status. As the history of animals and humans is long and complicated, only the pivotal points that changed the attitudes towards animals in Western society's history are described here.

The general consensus among archaeologists and historians seems to be that the contemporary practice of keeping pets began in the 19th century,⁵⁰ although there are some exceptions. Anthrozoologist James Serpell's theory is that keeping pets has been present throughout human history, although the popularity of it has changed over time and depending on the region.⁵¹

It is true that animals that nowadays are considered pets, have lived side by side with humans for thousands of years, but their purpose has changed. In many cases dogs just existed besides humans (village dogs) and were tolerated, but not particularly loved or cared for. In many cases they were also used for food.⁵² The definition of a companion animal depends on the time period and geographic

⁴² J. Clutton-Brock. Animals as Domesticates, pp. 18–19.

⁴³ J. Clutton-Brock. Animals as Domesticates, p. 24; R. C. Francis, Domesticated, pp. 66–68.

⁴⁴ K. Koort, Introduction to Evolution and Domestication. Paper delivered at Tallinn Summer School 2018 Course 'Introduction to Canine Cognition, Behaviour and Human-Animal Interactions', Tallinn University, Tallinn, 16 July 2018. Author's notes; R. C. Francis, Domesticated, p. 70.

⁴⁵ R. C. Francis, Domesticated, p. 72.

⁴⁶ J. Clutton-Brock. Animals as Domesticates, pp. 33–37.

⁴⁷ C. A. Driscoll, D. W. Macdonald, S. J. O'Brien, From wild animals to domestic pets, an evolutionary view of domestication. – PNAS 2009, vol. 106, no. 1, p. 9971.

⁴⁸ R. C. Francis, Domesticated, p. 9.

⁴⁹ J. Clutton-Brock. Animals as Domesticates, pp. 19–41.

⁵⁰ R. Gordon, From Pests to Pets, pp. 1-7; R. C. Francis, Domesticated, p. 126.

⁵¹ J. A. Serpell, The Human-Animal Bond. – The Oxford Handbook of Animal Studies. Ed. Linda Kalof. New York: Oxford University Press, 2017, p. 82.

⁵² R. C. Francis, Domesticated, pp. 75–76

location, so the contemporary definition of a pet cannot be applied to a pet in the past.⁵³

Before agrarian societies and domestication, people's attitude towards animals was different – they regarded animals as a natural part of the living world, being a part of nature's cycle without any feeling of supremacy. They felt kinship towards the animals. With domestication it all changed. Humans started to control everything about animals they captured – their feeding, breeding, movements. This led to a conflict between culture and nature. To deal with this conflict, new ideologies were invented where animals and nature overall were degraded and humans put on a pedestal and held higher above all else living. Through art, religion, and myth, animals' souls were taken away and they were put "in their proper place" and seen only in terms of their utilitarian value to humans.⁵⁴

During the medieval and post-medieval period (5th to the 18th century) humans despised animals and tried to deny their own animality. Morals, religion, education, civility – these were all attempts to put humans above animals and to prove human supremacy.⁵⁵ The strong belief was that animals are meant for human exploitation.⁵⁶ Around the 16th century humans started to divide animals based on the status and location of the animal. Stray dogs and cats were seen as something dirty and diseased and were mass slaughtered. At the same time the animals kept by people with higher social status were exempt of this fate.⁵⁷ People were fighting against their beastly side, destroying impure stray animals, while the act of extermination was itself inhumane, beastly and savagely. By the end of the post-medieval period it can be seen that because people had accepted the categorized view of animals (pets, pedigree, livestock, exotic animals), the rise of the popularity of pet keeping was possible.⁵⁸

1.2.1 The Rise of the Modern Pet

Cities in the 19th century contained people as well as animals, living closer than ever before on that scale, and this might be the reason for the first waves of animal activism.⁵⁹ The urban middle class was a part of reordering the urban space. The concern over cattle keeping conditions in the urban environment, as well as the aspiration for making cities safer for the middle class and their pets, led to animals being used for food and transport to be placed on the outskirts of the city. Wild animals were exterminated or captured.⁶⁰

This distancing from direct involvement in the exploitation of animals for consumption led to wider acceptance of animals.⁶¹ The more distant people became fro nature, the more kindly they started to act towards animals.⁶² I think currently the continuous urbanization, decline in biodiversity and natural habitats has strengthened the longing for nature even more and this might be partly behind the continuous rise of pet keeping.

According to Philip Howell, home is the place where the pet dog is culturally domesticated during the second half of the 19th century. During that era, because of pets, people started to think differently about non-human animals and them being in their space. Letting non-human animals into homes as pets showed that the home life was prioritized over the economic principles of the market.⁶³ Pet keeping had no monetary value and was not based on market economy. Pets had no real utilitarian value (like working animals or animals meant for food), their only work was to create a feeling of home and security.

⁵³ R. Gordon, From Pests to Pets, p. 2.

⁵⁴ J. B. Mason, Misothery: Contempt for Animals and Nature, Its Origins, Purposes, and Repercussions. – The Oxford Handbook of Animal Studies. Ed. Linda Kalof. New York: Oxford University Press, 2017, p. 138.

⁵⁵ J. B. Mason, Misothery: Contempt for Animals and Nature..., p. 147.

⁵⁶ R. Gordon, From Pests to Pets, p. 7.

⁵⁷ Ibid. p. 3.

⁵⁸ Ibid. pp. 3–6.

⁵⁹ P. Howell, At Home and Astray, pp. 260–266.

⁶⁰ Ibid. p. 237.

⁶¹ J. A. Serpell, The Human-Animal Bond, p. 83.

⁶² R. Gordon, From Pests to Pets, p. 7.

⁶³ P. Howell, At Home and Astray, pp. 318–448.

On the one hand, keeping pets became more popular and pets were embedded in the man-made environments, but on the other hand the presence of non-human animals in public spaces was controversial and was the subject of continuous debate. As early as the 19th century, dogs were carriers of cultural ambiguity – inside the home they were the members of the family, but at the same time they could be an unwanted and disorderly element on the streets as strays (during that time it was closely connected to the threat of rabies). Dogs were liminal creatures whose status depended on their physical location and symbolic associations.⁶⁴ The same phenomenon of liminality can already be seen in the early stages of domestication, when dogs were kept as pets and at the same time they were eaten or used for fur.⁶⁵

Domestication of the dog was an attempt to privatize the dog, but it was already from the start meant to fail, because stray dogs existed in abundance. Trying to make the dog a "private animal" made it worse for the animal to be accepted in public. In public places, the Victorian pet dog had to be under the owner's control (constrained by the leash, muzzled) for the dog's presence to be accepted by others. A good example of the status of "private animal" is the fact that The Royal Society for the Prevention of Cruelty to Animals did not interfere in the family life and privacy of the homes, they only policed cruelty on the streets.⁶⁶ It seems that the notion of a pet as a "private animal" persists even nowadays to some extent, at least in Estonia.

The debates that took place in Victorian times about problems in the relationships between nonhuman animals and humans are very resonant also nowadays. Before the end of the 19th century the dog was a companion, but not a citizen or a member of the community. Howell implies that the dog has never become a citizen or an appreciated member of the society, even nowadays.⁶⁷

The broader idea behind this thesis is that considering companion animals' and their owners' needs and perspectives in urban design, could make animals a more accepted sight in urban public spaces. When we create more opportunities for the citizens to enjoy urban landscapes with their animal companions and the environment is more welcoming and suitable for the animal, it can reduce stress and make them better adapted to city life. The more stress-free animals are on the streets who get enough mental stimulation and enrichment from the environment and are not concerned with strangers, the more likely it is that non-pet owners will accept them. More people would also acknowledge the companion animal's needs when they start noticing and questioning why some changes have been made in the urban environment, and this can overall help to improve the wellbeing of animals (for example, people who did not know to report animal abuse cases before, are more aware now and can do it). Ideally, it would not be a private matter any more; the whole community could take responsibility for the well-being of our non-human citizens.

⁶⁴ P. Howell, At Home and Astray, pp. 477–483.

⁶⁵ R. C. Francis, Domesticated, p. 75.

⁶⁶ P. Howell, At Home and Astray, pp. 508–518.

⁶⁷ Ibid. pp. 104–122.

2. Companion Animal Keeping in Contemporary Urban Environment

In this chapter, an overview is given on the theories and implications behind modern day pet keeping - why do we still keep pets. It is to further emphasize that pets are here to stay and we need to accommodate them into urban design as well. As the claim of this thesis is that in urban public spaces there has not been much done for companion animals, this chapter researches concrete examples from the Western world. After that, the topic is framed in the context of Estonia.

2.1 Theories and Implications of Keeping Pets

Companion animal caregivers invest a lot of energy, time and money in their animals, but what is the reasoning behind it? And what kind of implications might there be to keeping animal companions?

There seems to be no apparent value to caregivers for keeping companion animals.⁶⁸ Because during Victorian times pet keeping became widespread and currently members of all social groups own pets, it can't be said that pet keeping is just a pastime of the rich or elite any more.⁶⁹

There are several theories that try to explain this phenomenon. One of them is social parasitism theory, according to which companion animals exploit humans, live at their owner's expense and there is no benefit to the owner. The supporters of this theory bring out the small size and infantile like features and behaviour of companion animals that trigger the human parental responses.⁷⁰ Actually, people themselves genetically bred some dogs to look like this (see chapter 1.1.1), so it is not natural selection that made dogs look like human children in order for them to be able to manipulate humans' feelings.

Another theory originated from the Victorian era, according to which keeping pet animals is seen as an opportunity for children to practice taking care of somebody and develop empathic skills. It can also be seen as increasing one's social status – proving a person can take care of another being and therefore can be a suitable partner.⁷¹

Currently the theory of pet keeping as mutualism is more prevalent – owners care for their pets, shelter them, give food and at the same time benefit psychologically and physically from the human-animal bond.⁷² The number of people living alone especially in urban areas is on the rise – divorce rates are increasing, couples are choosing to have fewer children or none at all, traditional social support systems are failing. In these cases, companion animals can act as social buffers, helping people to cope better with loneliness and the loss of loved ones.⁷³ All these aforementioned theories might have been correct at some point during history, depending on the cultural context and historical period.⁷⁴

Although the contemporary view is that humans and companion animals both benefit from the human-animal bond and pet keeping, companion animals can have a damaging impact on the environment. Free-roaming cats prey on birds, animal waste pollutes parks and natural areas, food production for pets uses vast amounts of farmland, dog bite injuries occur, zoonotic diseases and allergies affect people.⁷⁵

Also, while many animals benefit from being a pet, there are countless animals who suffer through a failed human-animal bond. Their health and welfare is seriously compromised – they are abused, abandoned, prematurely euthanized, inbred and used for/raised in puppy mills. The reasons

⁶⁸ J. A. Serpell, E. S. Paul, Pets in the Family, p. 297.

⁶⁹ J. A. Serpell, The Human-Animal Bond, p. 83.

⁷⁰ Ibid. p. 84.

⁷¹ P. Howell, At Home and Astray, p. 454.

⁷² J. A. Serpell, The Human-Animal Bond, pp. 84–85.

⁷³ J. A. Serpell, E. S. Paul, Pets in the Family, p. 303.

⁷⁴ Ibid. p. 305.

⁷⁵ J. A. Serpell, The Human-Animal Bond, p. 90.

can vary from pure ignorance on the owners' side to deliberate cruelty.⁷⁶

Studies made in Europe, Australia and North America have shown that 22-44% of pets are overweight or obese.⁷⁷ The number of obese companion animals is steadily rising, mainly due to too many consumed calories and lack of physical activity.⁷⁸

This all could be contained and improved if people were more knowledgeable and responsible pet owners, and I believe this can be done through local government policy making and adapting public spaces more to different companion animals.

2.2 Pets and Owners – Experiences from Western Cities

During the literature review I found several professionals⁷⁹ in urban planning, animal behaviour and on the local city council level expressing the necessity for taking into account the presence of nonhuman animals and their needs during the city planning and design processes. For example, in the Dog and Cat Management Plan 2017-2022 prepared by the council of the city of West Torrens in South Australia, it was stated: "We are also aspiring to provide well designed, functional open spaces that will meet the needs of our residents, pet owners included."⁸⁰

The main goal of this part of the research was to follow up the literature review and find out if and how different countries have translated these growing demands for better urban space for pets and their owners to urban design (besides dog parks). Where I could not find any indication of how it is done at the design level, I looked what has been generally done for the well-being of pets and their owners in the cities (how city councils and private corporations approached the topic) based on what information was available. This stage of my research was largely web-based.

Putting together information found from the aforementioned countries, three key categories emerged through which we can look at what has been done in the cities for companion animals and their humans.

2.2.1 Local Governments – Legislations

Many city councils, private organizations and NGO-s advocate for responsible pet ownership to prevent pet nuisance and dog bite injuries, and that all city inhabitants could share public spaces peacefully. Cities advocate for responsible pet ownership through mandatory microchipping, spaying or neutering pets and providing community programs to educate pet owners as well as other city inhabitants.⁸¹ Often the money comes from pet registration fees.

When I started the empirical research on what has actually been done in cities in order to make lives better for pet owners and their pets, South Australia was the first region that came up, because

⁷⁶ J. A. Serpell, The Human-Animal Bond, pp. 90–91.

⁷⁷ P. Sandøe, C. Palmer, S. Corr, A. Astrup, C. R. Bjørnvad, Canine and feline obesity: a One Health perspective. – Veterinary Record 2014, https://veterinaryrecord.bmj.com/content/175/24/610 (accessed 5 May 2019).

⁷⁸ J. Pierce, Run, Spot, Run, p. 81.

⁷⁹ J. Wolch, Zoöpolis, pp. 21–47; T. Beatley, M. Bekoff, City Planning and Animals, pp. 185–196; Dog and Cat Management Plan 2017-2022. - City of West Torrens,

https://www.westtorrens.sa.gov.au/CWT/content/Services/Pets and animals/Dog and Cat Management Plan, (accessed 17 February 2019).

⁸⁰ Dog and Cat Management Plan 2017-2022. – City of West Torrens,

https://www.westtorrens.sa.gov.au/CWT/content/Services/Pets and animals/Dog and Cat Management Plan, (accessed 17 February 2019).

⁸¹ Pets and the city: Living with animals in crowded urban centres. – University of Calgary,

https://explore.ucalgary.ca/pets-and-city-living-animals-crowded-urban-centres (accessed 9 February 2019); Dog and Cat Management Plan 2018-2023. - City of Mitcham,

https://www.mitchamcouncil.sa.gov.au/dogandcatmanagementplan (accessed 17 February 2019); Dog and Cat Management Plan 2017-2022. - City of West Torrens,

https://www.westtorrens.sa.gov.au/CWT/content/Services/Pets and animals/Dog and Cat Management Plan, (accessed 17 February 2019).

of their Dog and Cat Management Act of 1995.⁸² It requires all councils to prepare a five-year plan for managing pets in their area. In addition, Australia has one of the world's highest dog ownership rate, but the place of the dogs in the cities is still a very controversial one⁸³, so the local governments have had to adapt to these changing situations and create new legislations.

Switzerland stands out from the other countries with its exceptional laws for animal welfare. In their 2005 animal protection legislation, not only dogs and cats were considered, but fish, goats, sheep and horses also had a separate chapter for themselves.⁸⁴ Since 2008, Swiss law recognizes that some animals are more social beings and therefore can not be kept alone – for example guinea pigs must always be kept in pairs.⁸⁵ Furthermore, starting from 2018, all cats who are the only pet in the household must have daily contact with a human or visual contact with another cat.⁸⁶ Switzerland is a great example on what has been done (in their case not in the design but legislation side) – it lacks specific city designs for pet animals (the whole country has only 1 official fenced in dog park⁸⁷) because they are a natural part of everyday lives, are allowed almost everywhere and through responsible pet ownership there is no need for strict regulations for public spaces. In addition to the aforementioned measures for responsible pet ownership, big dogs (more than 45 cm of shoulder height or more than 15kg of weight) have to go to puppy school in Switzerland. Compliance with this measure is checked.⁸⁸

In Sweden it is stated by law that the owner must take their dog out at least every six hours during a day (puppies and older dogs even more often), so many pet owners take their dogs to day care or hire a dogsitter.⁸⁹

2.2.2 Private Sphere – Ownership and Housing

Problems with housing are among the most common reasons why companion animals end up in shelters.⁹⁰ The examples can vary from, for example, having to change homes and pet animals not being allowed in the new housing, to more complex situations. For example, in 2011 an earthquake and tsunami hit Japan. People affected by the catastrophe were forced to live in temporary housing where they could not take their companion animals, so they were forced to give them up. Those who did not give them up could not get the emergency support from government or voluntary groups. Both options made it harder for these people to transition to a new life.⁹¹

Macmillan US, 2016, pp. 201-215.

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⁸² Dog and Cat Management Plan 2017-2022. – City of West Torrens,

https://www.westtorrens.sa.gov.au/CWT/content/Services/Pets_and_animals/Dog_and_Cat_Management_Plan, (accessed 17 February 2019).

⁸³ L. Instone, J. Sweeney, The trouble with dogs: 'animaling' public space in the Australian city. – Continuum: Journal of Media & Cultural Studies, 2014, vol. 28, no. 6, p. 775.

⁸⁴ E. Livni, The new science of animal cognition is forcing countries to overhaul their laws. – Quartz 24 January 2018, https://qz.com/1181881/proof-of-animal-cognition-is-recognized-by-new-laws-in-europe/ (accessed 14 January 2019).
⁸⁵ Ibid.

⁸⁶ S. Mowbray, How Switzerland Is Leading the Charge for Animal Rights. – Culture Trip (modified 2 February 2018), https://theculturetrip.com/europe/switzerland/articles/switzerland-leading-charge-animal-rights/ (accessed 17 February 2019).

⁸⁷ A. Herren, M. Jakob, R. Kooli-Kõnnussaar, M. Vardja, A. Yau, Better Urban Spaces for Dogs. Group work presentation at Tallinn Summer School 2018 Course 'Introduction to Canine Cognition, Behaviour and Human-Animal Interactions', Tallinn University, Tallinn, 27 July 2018. Author's notes.

⁸⁸ Ibid.

⁸⁹ Dog owners in the city. Information about keeping a dog in urban areas. – Svenska Kennelklubben 2013, https://www.skk.se/globalassets/dokument/att-aga-hund/kampanjer/skall-inte-pa-hunden-2013/dog-owners-in-thecity_hi20.pdf (accessed 1.04.2020)

 ⁹⁰ A Playbook for Pet-friendly Cities. – Better Cities For Pets[™], https://www.bettercitiesforpets.com/wp-content/uploads/2019/01/Mars-Petcare-Playbook-For-Pet-Friendly-Cities-2019-LR.pdf (accessed 12 February 2019).
 ⁹¹ R. Mouer, H. Kajiwara, Strong Bonds: Companion Animals in Post-Tsunami Japan. – Companion Animals in Everyday Life: Situating Human-Animal Engagement within Cultures. Ed. M. Pregowski, New York: Palgrave

Additionally, research in the United States, Canada, Australia and Ireland⁹² shows that when abuse victims own pets, it can prevent them from leaving abusive situations because there are no feasible opportunities to safely shelter their pets. The Netherlands advocates for abuse victim shelters that take pets in addition to women and their children.⁹³ Local governments in the United States, Canada and Australia have acknowledged these problems and are trying to find solutions.

In the United States, developers have noticed the increased demand in pet-friendly amenities since 2014. Buildings in Washington, D.C., Minneapolis, Austin and New York have catered to these needs – there are rooftop parks for dogs, dog-only pools, pet services on the grounds (playground, grooming, care for elderly dogs), dog washing rooms and special places in the apartments where cat amenities could be placed.⁹⁴ Mostly these are luxury apartment buildings to which not everybody has access.



Illustration 1. City Market apartments' rooftop garden for pets in Washington, D.C. (Urban Land Magazine, 2014)



Illustration 2. Minneapolis's Third North Apartments' dog-washing room (Urban Land Magazine, 2014)

In San Diego, a pet-friendly bill was passed in 2017 meaning that when the state finances multi-family housing developments, pets must be allowed in these buildings.⁹⁵

Inside the home itself there are many products and services that are provided for the wellbeing of the pet - for example, an owner could petscape their garden or let professionals do it, meaning to design a garden that is also suitable for pets. And there are several companies that provide

⁹³ M.-J. Enders-Slegers, T. Verheggen, J. Eshuis, Awareness Can Change a Society, 262

⁹² M.-J. Enders-Slegers, T. Verheggen, J. Eshuis, Awareness Can Change a Society: The Link Between Animal Abuse and Domestic Violence in the Netherlands. – Companion Animals in Everyday Life: Situating Human-Animal Engagement within Cultures. Ed. M. Pregowski, New York: Palgrave Macmillan US, 2016, pp. 251–265.

⁹⁴ J. Spivak, Going to the Dogs: Profitable Pet-Friendly Amenities. – Urban Land Institute 18 August 2014,

https://urbanland.uli.org/development-business/going-dogs/ (accessed 11 February 2019).

⁹⁵ J. Stalmer, The pet-friendly housing problem. – San Diego Reader 5 October 2017,

https://www.sandiegoreader.com/news/2017/oct/05/ticker-pet-friendly-housing-problem/ (accessed 9 February 2019).

innovative furniture for felines to relieve indoor cats' stress and providing them with indoor enrichment.⁹⁶

2.2.3 Animal-Oriented Consumption Environment and Public Spaces

This category is the most closely related to my interests – acknowledging companion animals and their owners in the cities and how it is manifested physically in the public spaces.

The growing numbers of different pet animals in people's homes and in the cities have brought about the emergence of new professions (pet walkers, pet sitters, animal behaviourists, groomers), animal-oriented public spaces (dog parks, pet friendly restaurants, cat and rabbit cafes) and in addition, species-specific products and services.⁹⁷

There are special cafés and bakeries that offer snacks and drinks for dogs, dog day spas, dog gyms and dog and cat sitting services that also specialize taking your dog for a special adventure.⁹⁸ In the United States, special food trucks that are dedicated for offering food for dogs have appeared.⁹⁹



Illustration 3. Food truck specialized for canine nourishment (Fido To Go, 2019)

A growing number of pet owners want to spend more time with their animals and take them along when they are running errands, but many businesses still do not allow people to enter with dogs (unless they are service animals). In these cases, people have to leave their dogs in their cars or leash them outside of stores, which can be dangerous for the animal (they can be stolen, assaulted by another dog or a human, get a heatstroke in a hot car). A United States company found a solution for that – DogSpot. It is a sidewalk sanctuary where people can leave their animals without anybody else

⁹⁶ S. Cohen, C. Doherty, Petscaping[™], http://petscaping.tv/ (accessed 12 February 2019); Catastrophicreations, https://www.catastrophicreations.com/ (accessed 13 February 2019); Tuft & Paw, https://www.tuftandpaw.com; Studio Ryte, https://www.studio-ryte.com/ (both accessed 18 February 2019).

⁹⁷ M. Pregowski, Introduction. – Companion Animals in Everyday Life: Situating Human-Animal Engagement within Cultures. Ed. M. Pregowski. New York: Palgrave Macmillan US, 2016, p. 2.

⁹⁸ Take a look inside New York City's first dog café. – USA Today, https://www.youtube.com/watch?v=nzyZvpiaYQc; L. Pickoff-White, Are There Really More Dogs Than Children in S.F.? – KQED 24 May 2018,

https://www.kqed.org/news/11669269/are-there-really-more-dogs-than-children-in-s-f (both accessed 12 February 2019); City Dog Adventures, https://www.citydogadventures.com (accessed 16 February 2019).

⁹⁹ K. Pomranz, Dog Food Trucks Are the New Regular Food Trucks Because Dogs Deserve Them Too. – Bravo 18 May 2017, https://www.bravotv.com/blogs/dog-food-trucks-are-happening; M. Byars, Canine cuisine: Louisville couple starts food truck for dogs. – Daily Camera 30 June 2018, http://www.dailycamera.com/boulder-county-news/ci 31979489/canine-cuisine-louisville-couple-starts-food-truck-dogs (both accessed 13 February 2019).

having access to them. It is a public dog house that is equipped with a locked door, AC, heating and cameras. It can be rented via an app.



Illustration 4. DogSpot dog houses in front of stores (DogSpot, 2020)

Companies have even invented activity monitors for pets, so that owners can monitor if their companion animals have had enough steps and playtime during the day and how the animals sleep.¹⁰⁰

As I left out fenced in dog parks from my search (they are specifically designed for one user group, so in a way semi-public spaces and quite common), the results were scarce. The most common context in which companion animals are talked about in public spaces, is the need for pet amenities (waste stations, hydration stations) and access to green areas. Access to green areas usually means pet-friendly parks and trails where different zones have been established – 'on leash', 'off leash' and prohibited areas for dogs.¹⁰¹



Illustration 5. Hydration station for pets and people (Cool Dog Water Fountains)

 ¹⁰⁰ D. Howarth, Whistle wearable technology for dogs lets owners monitor pet activity. – Dezeen 14 May 2014, https://www.dezeen.com/2014/05/14/whistle-wearable-technology-dogs-new-deal-design/ (accessed 9 February 2019).
 ¹⁰¹ A Playbook for Pet-friendly Cities. – Better Cities For PetsTM, https://www.bettercitiesforpets.com/wp-

content/uploads/2019/01/Mars-Petcare-Playbook-For-Pet-Friendly-Cities-2019-LR.pdf (accessed 12 February 2019); Dog and Cat Management Plan 2017-2022. – City of West Torrens,

https://www.westtorrens.sa.gov.au/CWT/content/Services/Pets_and_animals/Dog_and_Cat_Management_Plan, (accessed 21 February 2019); Dog and Cat Management Plan 2018-2023. – City of Mitcham,

https://www.mitchamcouncil.sa.gov.au/dogandcatmanagementplan (accessed 21 February 2019).



Illustration 6. Waste station with plastic bags (Terra Bound Solutions, 2015)

All over the world, one possibility on how to rank cities is its walkability score. The basis for calculating that is how close different amenities are and how humans feel during their walk (is it interesting, safe, purposeful and comfortable), so it is completely human-oriented.¹⁰² Care.com created a dog walkability score for U.S cities.¹⁰³ To do that, data from average walking time with a pet from pet walkers, dog parks per 10,000 inhabitants and an official city WalkScore were analyzed. According to these results, San Francisco is the best city to take your pet out for a walk.

I found two examples of dog parks that differ from the conventional fenced in ones and are not so much separated from the surroundings, but are integrated into public spaces and allow more users than just dogs and their owners.

Swampoodle dog park in NoMa, Washington, D.C., is interesting because it is the neighbourhood's first public park and it is for dogs as well as kids. Although it is a fenced in dog park, it is designed together with kids' playground and they are adjacent to each other.¹⁰⁴ It is not a very common sight, as these two user groups are usually kept separately by the planners.

¹⁰² L. Laker, Where is the world's most walkable city? – The Guardian 12 September 2017,

https://www.theguardian.com/cities/2017/sep/12/walkable-city-worlds-most-new-york-melbourne-fes-el-bali (accessed 18 February 2019). ¹⁰³ J. Sullivan, Grab Your Pup's Leash: These Are the Most 'Walkable' Cities for Walking Your Dogs. – Care.com 6

¹⁰³ J. Sullivan, Grab Your Pup's Leash: These Are the Most 'Walkable' Cities for Walking Your Dogs. – Care.com 6 April 2017, https://www.care.com/c/stories/8516/most-walkable-cities-for-walking-your-dogs (accessed 13 February 2019).

¹⁰⁴ E. Russell, The latest design for the new Third Street park in NoMa emphasizes kids and dogs. – Greater Greater Washington 23 June 2016, https://ggwash.org/view/42072/the-latest-design-for-the-new-third-street-park-in-noma-emphasizes-kids-and-dogs (accessed 14 February 2019).



Illustration 7. Overwiew of Swampoodle dog park (NoMa Parks Foundation, 2018)



Illustration 8. Children's playground and dog park next to each other (NoMa Parks Foundation, 2018)

The other, more unconventional example is from the Netherlands. In 2008, the design biennale ExperimentaDesign 2008 was held in Amsterdam and a Dutch designer Maartje Dros created a temporary space for both dogs and children called "City Dog Adventure"¹⁰⁵. This project was a response to how increasingly in more public spaces, dogs are not welcome and how due to strict regulation, dogs and children are separated by gates and prohibiting signs. It aimed to become a synthesis of children's playground and dog park (a new type of urban space) where pets, their owners and kids can come together and enjoy playing. Most of the elements in the park can be used by dogs as well as by children.

¹⁰⁵ M. Fairs, City Dog Adventure by Maartje Dros. – Dezeen 7 October 2008,

https://www.dezeen.com/2008/10/07/city-dog-adventure-by-maartje-dros/ (accessed 16 February 2019).



Illustration 9. "City Dog Adventure" playground for dogs and children (Rachel Sender, 2008)



Illustration 10. "City Dog Adventure" playground (Rachel Sender, 2008)

In the United States, Mars Petcare US (subsidiary of Mars, Incorporated) seems to be the leader in advocating for pets and their owners in the cities. In 2017, The Better Cities For Pets[™] movement was initiated. The goal of this movement is to help communities become more pet-friendly through working together with The United States Conference of Mayors¹⁰⁶, helping cities to assess their pet-friendliness, providing resources, city specific guidance and grants for cities for different programs related to pets and their owners.¹⁰⁷ This movement was probably started because of the growing numbers of companion animals in the States. In several United States cities there are reportedly more pets than children. In 2016 there were an estimated 115,000 children under the age

¹⁰⁶ Organization that consists of mayors or other chief elected official of cities with populations over 30,000 inhabitants, https://www.usmayors.org/ (accessed 17 February 2019).

¹⁰⁷ United States Conference of Mayors, Mars Petcare Partner to Make Cities More Pet-Friendly. – Better Cities For PetsTM 2017, https://www.bettercitiesforpets.com/resource/the-power-of-pets-in-cities-82-percent-of-us-mayors-agree-that-pets-positively-impact-their-communities/ (accessed 10 February 2019).

of 18 in San Francisco, and 120,000-150,000 dogs in the city. It is the same case for Seattle, only there are more cats than children in the households.¹⁰⁸ The Better Cities for PetsTM movement has created pop-up dog parks. The idea is to take underused spaces and transform them to spaces that people and pets alike can use – for example, during bigger events that people want to attend together with their dogs.¹⁰⁹ These pop-up dog parks have amenities for dogs (hydration station) as well as for people (seating, waste stations). These pop-up parks have also been used for animal adoption events.



Illustration 11. Pop-up dog park in Austin (Better Cities for Pets, 2018)

Another project of The Better Cities for PetsTM movement is the "Pilot Parklet" application program. The idea is that different entities can apply for creating a parklet – parking spaces along the streets that are transformed to small urban parks.¹¹⁰ Although the parklet movement is nothing new and has been done already in several U.S. cities (San Francisco, Eureka, Philadelphia) and in Vancouver, Canada¹¹¹ the difference is that The Better Cities for PetsTM concentrates specifically on

¹⁰⁸ L. Pickoff-White, Are There Really More Dogs Than Children in S.F.? – KQED 24 May 2018,

https://www.kqed.org/news/11669269/are-there-really-more-dogs-than-children-in-s-f (accessed 12 February 2019). ¹⁰⁹ Adapting Urban Environments for City Pets: A Q&A about Pet-Friendly Communities. – Better Cities For PetsTM, https://www.bettercitiesforpets.com/resource/adapting-urban-environments-for-city-pets/ (accessed 10 February 2019).

¹¹⁰ Adapting Urban Environments for City Pets: A Q&A about Pet-Friendly Communities. – Better Cities For PetsTM,

https://www.bettercitiesforpets.com/resource/adapting-urban-environments-for-city-pets/ (accessed 10 February 2019). ¹¹¹ San Francisco Parklet Program. – National Association of City Transportation Officials, https://nacto.org/case-study/san-francisco-parklet-program/; H. Cresswell, Eureka pilot parklet program to become permanent. – Times Standard 14 July 2017, https://www.times-standard.com/2017/07/14/eureka-pilot-parklet-program-to-become-permanent/; M. Romero, Park(ing) Day Philadelphia: 10 parklets we loved by local design firms. – Curbed Philadelphia 19 September 2016, https://philly.curbed.com/2016/9/19/12969442/parking-day-philadelphia-2016-photos-recap;

parklets with pets and their owners in mind (for example by including pet amenities). A parklet can be, in its nature, more permanent (unlike the pop-up dog park) and can be more natural (real, live greenery can be added).



Illustration 12. Rendering of a parklet in Nashville (Better Cities for Pets, 2018)

All over the world, pet-friendly events are organized in public spaces from movie screenings to art shows curated especially for dogs.¹¹²

As pets have become members of our families, people have searched for ways how to remember their companion animals once they are gone. In the late 19th century, the first pet cemeteries started to appear in the United States, France and Great Britain spreading to Poland, Japan and China in the 1990s and 2000s.¹¹³ As the demand was so high, since 2016 pets can be buried in human cemeteries in New York. Before that, the only option for people who wanted to be buried next to their companion animals, had to be buried in the pet cemeteries.¹¹⁴

Parklets: converting street parking into public spaces. – City of Vancouver, https://vancouver.ca/streets-transportation/parklets.aspx (all accessed 18 February 2019).

¹¹² D. Howarth, Whistle wearable technology for dogs lets owners monitor pet activity. – Dezeen 14 May 2014,

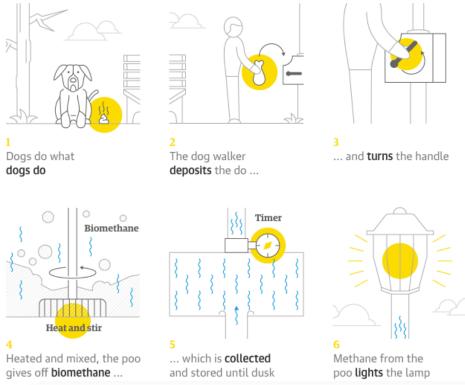
https://www.dezeen.com/2014/05/14/whistle-wearable-technology-dogs-new-deal-design/ (accessed 9 February 2019). ¹¹³ M. Pregowski, Introduction, p. 2.

¹¹⁴ S. M. Nir, New York Burial Plots Will Now Allow Four-Legged Companions. – New York Times 6 October 2016, https://www.nytimes.com/2016/10/07/nyregion/new-york-burial-plots-will-now-allow-four-legged-companions.html (accessed 18 February 2018).



Illustration 13. Hartsdale pet cemetery in the U.S. (Hartsdale Pet Cemetery and Crematory, 2015)

Some more curious examples can be found from what has been done - not so much for dogs as for humans in the cities – using pet waste. In England at Malvern Hills, there is the UK's first dog waste powered street lamp. The aim of this contraption is to motivate people to clean up more after their dogs, as this can produce something useful.¹¹⁵



How 10 bags of poo could give two hours of light

Illustration 14. How canine waste can power the street lamps (Guardian, 2018)

¹¹⁵ N. Fleming, From stools to fuels: the street lamp that runs on dog do. – The Guardian 1 January 2018, https://www.theguardian.com/environment/2018/jan/01/stools-to-fuels-street-lamp-runs-on-dog-po-bio-energy-waste-(accessed 9 February 2019).

Another design has been created for providing pets a place in the cities where to satisfy their physiological needs. This device collects dogs' urine and can be used for compost in city's gardens and parks.¹¹⁶



Illustration 15. Urine collector for dogs (Ado Urban Furniture)

There are also unfortunate examples of what confrontation and misunderstandings between pet owners and non-pet owners can do for the companion animals' and their owners' right to be in the public space. For example, in Hangzhou, China, dog walking is prohibited during the day from 7 a.m. to 7 p.m. because of a fight that broke out between a dog owner and a passer-by.¹¹⁷ Furthermore, because many owners are not aware of what their cats do when outside alone (wandering to neighbouring properties, killing the wildlife), several South Australian councils have already introduced cat confinement to their home property for 24/7 or during the night-time.¹¹⁸

In Benalmadena, Spain city council has received so many complaints about pet waste being not cleaned, that the mayor decided on a new law according to which dog owners have to carry soapy water or vinegar when walking their pet and wash away even the dog's urine. Whoever does not comply can be fined.¹¹⁹

From the findings it can be concluded that local city governments and private companies all over the world have recognized at least on some level that companion animals and their owners' needs are important and they need to be addressed. Overall trends are positive in making pet ownership more accessible to all people and also making companion animals' lives better. It seems more attention has been paid to different legislations to allocate in which public spaces dogs can be,

¹¹⁶ N. Fleming, From stools to fuels: the street lamp that runs on dog do. – The Guardian 1 January 2018, https://www.theguardian.com/environment/2018/jan/01/stools-to-fuels-street-lamp-runs-on-dog-po-bio-energy-waste-(accessed 16 February 2019).

 ¹¹⁷ T. May, Chinese City Bans Daytime Dog Walking in a Crackdown on Canines. – New York Times 16 November 2018, https://www.nytimes.com/2018/11/16/world/asia/china-dog-hangzhou.html (accessed 18 November 2018).
 ¹¹⁸ Dog and Cat Management Plan 2018-2023. – City of Mitcham,

https://www.mitchamcouncil.sa.gov.au/dogandcatmanagementplan (accessed 17 February 2019).

¹¹⁹ Benalmadena cracks down on dog urine. – Megafon 12 December 2018,

http://www.megafon.net/en/news/benalmadena-cracks-down-on-dog-urine/; T. Woods, Taking the Urine: Residents on the Costa del Sol forced to clean after dogs in new council policy. – Euro Weekly 12 December 2018,

https://www.euroweeklynews.com/2018/12/12/taking-the-ps-residents-on-the-costa-del-sol-forced-to-clean-up-dogurine-in-new-council-policy/#.XGR5Vs8za1s (both accessed 13 February 2019).

how to make housing more pet-friendly and educating pet owners for them to become more responsible. In the context of urban design, examples are still scarce of how to include companion animals and their caretakers. Furthermore, most of the examples are from the perspective of the caretaker, not the animal (see chapter 2.2.4). In addition, in many countries, cats are more popular pets or at least as popular as dogs¹²⁰, but in public space design they are not mentioned at all.

2.2.4 Companion Animal-Friendly or Companion Animal Caregiver-Friendly?

When talking about making our cities and public places better for companion animals and their caregivers, we have to be careful to consider both participants. As the behaviourist, dog trainer and author Stephanie Rousseau points out, many things that we consider companion-animal-friendly are actually only companion-animal-caregiver-friendly. Meaning that for example, if a person can take their dog to a restaurant or a bar, it is very convenient for the human, but is the space actually also inviting for the dog? Does the dog feel secure and comfortable, is there enough space between the tables for him to lie down? Is the surface too hard, noise levels too high? Can the dog express species-specific behaviour or is the case that he has to only lie down and cannot sniff or explore his surroundings?¹²¹

I think quite a few of the aforementioned examples are also on the border of this question. For example, although the "City Dog Adventure" playground (ill. 9-10) installation by Maartje Dros includes dogs in an urban playground, the playground itself is located on asphalt which can get quite hot on a sunny day for dog's paws. So, is it comfortable for the dog and does it consider the animal's specific needs?

Of course we have to start somewhere in integrating companion animals into urban public spaces, and these first projects can be the basis on which to build the next and more elaborate ones. The following step would be to consider design from the animal's perspective, not only human's perspective. This is what extending the urban compassion footprint is all about for me – considering other species and really trying to do it based on the scientific data we have gathered about animals, not anthropomorphizing them or considering only one part of the equation (the human).

¹²⁰ A Guide to Worldwide Pet Ownership. - Petsecure, https://www.petsecure.com.au/pet-care/a-guide-to-worldwide-pet-ownership/ (accessed 18 February 2019).

¹²¹ S. Rousseau, Dog-friendly or dog-owner-friendly? – Happyofficedogs.com 5 February 2020,

https://www.happyofficedogs.com/post/dog-friendly-or-dog-owner-friendly (accessed 3 March, 2020).

2.3 Insight to Estonia

After determining how local governments and private companies in Western cities have tried to accommodate pets and their owners in the urban environment through legislation, design and business, a closer look can be taken at Estonia. As this thesis is interested specifically what can be done for companion animals and their caretakers on urban planning level in Estonia, the present setting needs to be firstly identified.

2.3.1 Current Situation

When talking about pets in Estonian urban planning, only dogs are considered to some extent. In Tallinn, the first dog park was opened in 2004 and now there are 20 of them.¹²² It shows that, to some degree, the city's municipality is willing to consider dog owners in the planning process. The current plan is aimed only at dog owners (no other companion animals have been included) – to build one new dog park a year and renovate some of the existing ones.¹²³

In Tartu, the first dog park opened in November 2016, the second one in September 2017 and the third one in September 2018. The starting initiative did not come from the city council side, but at a grassroots activism level in which I also participated actively.

Most of the weight of helping urban pets is on NGO-s, like the Estonian Society for the Protection of Animals (ESPA), Varjupaikade MTÜ and dozens of other smaller NGO-s and single individuals that help animals in distress solely on donations. Sometimes companies with orientation towards social responsibility help out too – like Helmehaldjas who houses stray cats in their store during autumn when it is most critical for the animals – temporary homes are already full of abandoned pets after people leave the countryside when the summer is over.¹²⁴ The local municipality is obligated by the law to catch stray animals on their territory and pay for the first 14 days in the shelter.¹²⁵ After that the shelters have to make a decision – to put the animals down or to support them from donations and try to find a new home. Municipalities do not think it is a serious enough problem. The reality is that some animals stay for years in the shelter.

In 2015 the aforementioned ESPA conducted research into local governments about stray animals. It estimated that 22% of dogs and only 9% of cats are microchipped in Estonia.¹²⁶ These are only the estimates of the local government personnel responsible for dealing with stray animals. As it came out from this research, there are no reliable statistics. That clearly shows that non-human animals are not an important topic for local governments.

For better animal management and planning, clear and reliable statistics are needed about pets. The Estonian government has shown no interest in the topic and regarded it as unimportant. ESPA made a proposal to the government in 2010 that in the 2011 Population and Housing Census there could also be an extra question about pets, but it was rejected on the grounds that the questionnaire is already long enough and no questions can be added.¹²⁷

lugema?id=31472733&categoryID=23955675 (accessed 24 August 2018).

¹²² Koeraga jalutamine [Walking with a Dog], [modified 3 October 2018]. - Tallinn City,

https://www.tallinn.ee/est/lemmikloom/Koerte-jalutamine (accessed 11 September 2018).

 ¹²³ T. Maandi (Tallinn Environment Department Specialist), conversation with the author, July 2017. Author's notes.
 ¹²⁴ Kassiblogi [Cat Blog]. – Helmehaldjas 16 March 2016,

http://helmehaldjas.weebly.com/tarkuseraamat/category/kassiblogi (accessed 11 September 2018).

¹²⁵ Hulkuvate loomade püüdmise, pidamise ja nende omaniku kindlakstegemise ning hulkuvate loomade hukkamise kord [Procedures for trapping, keeping and identifying the stray animals and killing stray animals], 2002 [modified in 2002]. – Riigi Teataja, https://www.riigiteataja.ee/akt/95217 (accessed 14 September 2018).

¹²⁶ Hulkuvate loomadega seotud probleemistik Eesti kohalikes omavalitsustes [Challenges related to stray animals at Estonian local governments]. – Estonian Society for the Protection of Animals 2016, http://www.loomakaitse.ee/wp-content/uploads/2016/05/Hulkuvate-loomadega-seotud-probleemistik-Eesti-kohalikes-omavalitsustes_2015.pdf (accessed 11 September 2018).

¹²⁷ A. Sarjas, Riik ei hakka koduloomi üle lugema [The state will not start counting pets]. – Maaleht 4 June 2010, http://maaleht.delfi.ee/news/maamajandus/uudised/riik-ei-hakka-koduloomi-ule

According to the Estonian Pet Registry there are 48,130 dogs and 14,338 cats in the register.¹²⁸ If to, just as an exercise and approximate estimation, take into account the survey conducted by ESPA that only 22% of dogs and 9% of cats are microchipped, then there might be over 370,000 pets in Estonia (and these are only the most common companion animals – dogs and cats). Estonia has 1,319 133 inhabitants¹²⁹, meaning there is hypothetically 1 pet per 3.5 persons in Estonia. If we look at the European Pet Food Industry (FEDIAF) numbers that are based on FEDIAF and its member associations and pet food companies' estimations, then the number of companion animals living in Estonia is even higher – around 480,000 cats and dogs altogether (200,000 dogs and 280,000 cats).¹³⁰

The same three key categories that I found in chapter 2.2 through which the situation of companion animals and their caretakers can be analysed, can be applied in Estonian context. The legislative side is described more thoroughly because the information was abundant and it also determines what is possible or what needs to be changed; other examples are more scarce and are grouped in chapter 2.3.3.

2.3.2 The Legal Framework – Requirements of Keeping Pets in the Cities

The aforementioned companion animal figures are profound. The approximate accuracy of these numbers can also be derived from the fact that local city governments have seen the necessity to create regulations in cities regarding companion animals. Legislation determines citizens' obligations in public spaces, therefore it is important to look what is allowed and what is not in different cities for companion animals and their caregivers. This can be later compared to the empirical study to see how legislation correlates with the citizens' actual behaviour.

There are several nationwide laws that regulate keeping pets in Estonia: the Animal Protection Act¹³¹, Infectious Animal Disease Control Act¹³², "Procedures for trapping, keeping and identifying the stray animals and killing stray animals"¹³³ and "Requirements for keeping pets"¹³⁴. Every municipality also has their own "Regulations for keeping dogs and cats". In the "Regulations for keeping dogs and cats" municipalities determine if microchipping is obligatory and to which animals, where are pets allowed in public spaces and how (leashed, unleashed, muzzled), the obligation of picking up after their animals and other responsibilities for the pet owners.

I compared what is stated in the 12 largest (by population) city government's "Regulations for keeping dogs and cats" to see how legal framework might affect the city's pet keeping practises. I was especially interested in what the rules are that people have to follow and what the cities offer in return. I chose the 12 biggest cities by population because I believe the conflicts between different user groups arise in places where inhabitants' density is bigger and space is more limited. Inhabitants of smaller places probably can also access natural areas (forests, fields) more easily with their companion animals.

If not noted otherwise, every mentioned city's 'Regulations for keeping dogs and cats' was used for compiling table 1. See appendix A for the full list of the regulations and references.

¹²⁸ Eesti Lemmikloomaregister [Estonian Pet Register]. – Estonian Small Animal Veterinary

Association, http://lemmikloomaregister.ee/ (accessed 27 September 2018).

¹²⁹ Immigration exceeded emigration for the third year in a row. – Statistics Estonia 9 May 2018,

https://www.stat.ee/news-release-2018-050 (accessed 24 August 2018).

¹³⁰ European Facts & Figures 2017. – The Europe Pet Food Industry, http://www.fediaf.org/who-we-are/european-statistics.html (accessed 1 May 2019).

¹³¹ Animal Protection Act, 2001 [modified in 2018]. – Riigi Teataja,

https://www.riigiteataja.ee/en/eli/521032019002/consolide (accessed 7 March 2019).

¹³² Infectious Animal Disease Control Act, 2000 [modified in 2015]. - Riigi Teataja,

https://www.riigiteataja.ee/en/eli/518062015013/consolide (accessed 7 March 2019).

¹³³ Hulkuvate loomade püüdmise, pidamise ja nende omaniku kindlakstegemise ning hulkuvate loomade hukkamise kord [Procedures for trapping, keeping and identifying the stray animals and killing stray animals], 2002 [modified in 2002]. – Riigi Teataja, https://www.riigiteataja.ee/akt/95217 (accessed 7 March 2019).

¹³⁴ Lemmikloomade pidamise nõuded [Requirements for keeping pets], 2008 [modified in 2009]. – Riigi Teataja, https://www.riigiteataja.ee/akt/13006944 (accessed 7 March 2019).

		Mea	ns of identification	of animals]						1		
City	Animals who must be identifiable	Microchip	Registration at the municipality (registration number)	Marking (owner's info on a collar or a tatoo, but no registration	Where must be registered	Leash law in public spaces	Access to public spaces	Public gatherings / culture events	Dog amenities*	Faeces must be picked up	Public transportation	Can be left outside in a public space to wait for the owner	Fines
Tallinn	Dogs and cats	x			LLR (Tallinn Pet Registry)	Leashed or in a carrier bag. Unleashed only in dog parks	Can't go where there are prohibiting signs; can't go to public beaches or into the fountains.	Not allowed, unless it has special designated areas	Dog parks (20), waste stations, designated dog beaches	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	Leashed and muzzled	Up to 200 fine units (800€)
Tartu	Dogs	х			Estonian Pet Registry	Leashed only when necessary	Can't go to public beaches during swimming season (1st of June until 31st of August) or into the fountains.	Can go, but always under supervision	Dog parks (3), waste stations	x	Leashed & muzzled only when necessary	N/A	383,5€ for not picking up after your pet
Narva	Dogs		x		Narva Pet Registry	Leashed with at least 1.5m leash	Must walk with a grown-up (minors can walk only when it does not threathen public safety). Dog owner has to keep the dog 1m away from public roads and sidewalks. Can't go to stores, hospitals, beaches, sports grounds, children's playgrounds, cemeteries, shopping centers, restaurants when not stated otherwise. Can't go into the fountains.	Not allowed, if not stated otherwise	Waste stations will be put up in 2019 and a plan to build a dog park	x	N/A	N/A	N/A
Pärnu	Dogs	x			LLR	Leashed. Muzzled only when necessary. Unleashed in dog parks, dog training areas, regions that are further from populated areas.	Can't go to public beaches, fountains, children's playgrounds, sandboxes.	Can go leashed and muzzled	1 dilapidated dog park, waste stations without bags	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	Leashed and muzzled	Up to 200 fine units (800€)
Kohtla- Järve	Dogs			x	N/A	Leashed. Muzzled only when necessary. Can be unleashed in dog training areas and areas that are further from populated areas.	Can't go to public beaches, fountains, children's playgrounds, sandboxes.	N/A	N/A	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	Leashed and muzzled	Up to 200 fine units (800€)
Viljandi	Dogs and cats	x			LLR	Leashed, but can be unleashed when no-one is around	Can't go when there are prohibiting signs. Can't go to public beaches or into the fountains.	N/A	Waste stations since 2018 (2003 was the first try)	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	N/A	Up to 200 fine units (800€)
Maardu	Dogs		x		Maardu Pet Registry	Leashed. Muzzled only when necessary. Unleashed in dog parks, dog training areas, regions that are further from populated areas.	Are not allowed in public buildings (shops, kindergartens, schools) and public spaces (beaches, sports grounds, children's playgrounds) without a permission from the property owner. Can't take a dog or a cat for a swim at a public beach	N/A	3 dog walking areas	x	N/A	N/A	N/A
Rakvere	Dogs		x		Rakvere Pet Registry	Leashed – when there are no other people/animals within 20m radius, the dog can be on a long 20m leash. When there are other people nearby (closer than 20m), dog must be on 1m leash. Muzzled only when necessary. Unleashed in designated areas for dogs.	Are not allowed in public buildings (shops, kindergartens, schools) and public spaces (beaches, sports grounds, children's playgrounds) without a permission from the property owner.	N/A	N/A	x	N/A	N/A	N/A
Haapsalu	Dogs and for those cats who can go outside	x			LLR (Haapsalu Pet Registry)	Leashed. Muzzled only when necessary. Unleashed at areas that are further from populated areas.	A cat who is vaccinated, microchipped and neutered/spayed can be let outside. Can't go to public beaches or into the fountains.	N/A	1 dog park, waste stations	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	Leashed and muzzled (not longer than 30min)	100-200 fine units
Sillamäe	Dogs	x			LLR	Leashed. Muzzled only when necessary. When there are other people nearby, the dog must be on a 1m leash	Service dogs, guard dogs and fighting dogs can be walked only by a grown-up on a 60cm leash and muzzled. Can't go to shops, restaurants, cafes, schools, public offices, children's playgrounds, sports grounds, market. Can't swim at the public beaches.	Not allowed, unless stated otherwise	N/A	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	N/A	Up to 200 fine units (800€)
Kuressaare	Dogs and for those cats who can go outside	x			Kuressaare Pet Registry	Leashed. Muzzled only when necessary. Can be unleashed in dog training areas and areas that are further from populated areas.	Can't swim at public beaches or fountains.	Not allowed, unless it has special designated areas	1 dog park	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	Leashed and muzzled (not longer than 30min)	N/A
Võru	Dogs			x	N/A	Leashed. Muzzled only when necessary. Unleashed in dog parks, dog training areas, regions that are further from populated areas.	Can't go to public beaches during the summer season (1st of May until 1st of September). Can't go to cemeteries, shops, restaurants, markets, sports grounds, children's playgrounds, schools, kindergartens (except to areas in these places designated for animals).	N/A	N/A	x	Dogs must be leashed and muzzled or smaller dogs and cats in a carrier bag	N/A	Up to 200 fine units (800€)

*Information gathered from the Internet - city council's home page, news

Table 1. What is stated in the 12 largest (by population) city government's "Regulations for keeping dogs and cats (Maiken Vardja, 2019)

In the cities that I compared, the regulations are comparatively similar. The biggest differences are in the means of identification of animals – there are three possibilities that are used. Microchipping is most reliable when, after getting the chip, the animal is also registered in a database that covers all Estonia. Problems occur with the registering, because in different municipalities the responsibility is on different people. In some municipalities the owner has to register their animal by themselves (Viljandi, Sillamäe), but in these cases they can easily forget or do not know how to use the system. In other municipalities the veterinaries can register the animal after microchipping, but in some municipalities they do it only for a fee (Tartu, Haapsalu).

Registration at the municipality and marking are the most unreliable ways to identify an animal, but it is still quite common. The problem is that many municipalities have their own registry for animals that does not connect to the overall database and this way even if the animal is registered, but ends up in other municipality, the owner might not be found.

In addition, there are two nationwide databases in Estonia – Pet registry LLR managed by Spin TEK AS¹³⁵. It is free for citizens and over 120,000 pets have been registered there.¹³⁶ The second nationwide database is Estonian Pet Registry managed by Estonian Small Animal Veterinary Association. You can search microchip numbers from there, but only a veterinarian can add animals' microchips there for a fee (11.50€). There are almost 64,000 animals registered in that registry.¹³⁷ Some animals might be in both registries, but these programs do not communicate to each other, so there is no information about how much overlapping there is.

As the microchipping obligation depends on the local municipality, usually dogs' microchipping is mandatory, but not other animals'. There might be a change in this regulation, because the Estonian Veterinary and Food Board wants to make microchipping for dogs, cats and ferrets who are born after 2021 obligatory nationwide. Also, these animals should then be registered in a single database that covers the whole Estonia.¹³⁸

If we look at all the municipalities, Tartu stands out from the others because it has more relaxed regulations for companion animals. Companion animals have to be leashed in public spaces only when necessary (same applies to public transportation), they are welcome to public events when under supervision and the only place prohibited for them by the municipality are the public beaches during swimming season and cemeteries. In addition, Tartu offers three dog parks to its citizens and waste stations.

Spaying/neutering is additionally one way how to keep the animal population under control and this can be enforced through laws. In Estonia, spaying/neutering of pets is not mandatory, but it is recommended for example by the municipality of Tallinn.¹³⁹ Estonian Society for the Protection of Animals (ESPA) organizes spaying/neutering campaigns every year before the spring starts. During that campaign period certain veterinary clinics offer their spaying/neutering services with reduced prices.¹⁴⁰

¹³⁵ Üle-eestiline Lemmikloomaregister LLR [Nation-wide pet registry LLR], https://www.llr.ee/, (accessed 26 April 2019).

¹³⁶ Lemmikloomaregister LLR [Pet Register]. – Spin TEK, https://www.spin.ee/Lemmikloomaregister, (accessed 26 April 2019).

¹³⁷ Eesti Lemmikloomaregister [Estonian Pet Register]. – Estonian Small Animal Veterinary Association, http://lemmikloomaregister.ee/ (accessed 26 April 2019).

¹³⁸ M. Hindre, VTA tahab lemmikloomade kiibistamise kohustuslikuks muuta [VTA wants to make microchipping pets mandatory]. – Eesti Rahvusringhääling 24 October 2018, https://www.err.ee/871648/vta-tahab-lemmikloomade-kiibistamise-kohustuslikuks-muuta (accessed 30 October 2018).

¹³⁹ Lemmikloomade steriliseerimine-kastreerimine [Sterilization-castration of pets]. – Tallinn City (modified 10 September 2018), https://www.tallinn.ee/est/lemmikloom/Lemmikloomade-steriliseerimine (accessed 9 March 2019).

¹⁴⁰ Steriliseerimise ja kastreerimise kampaanias (2019) osalevate kliinikute nimekiri [List of clinics participating in the sterilization and castration campaign (2019)]. – Estonian Society for the Protection of Animals 26 February 2019, https://loomakaitse.ee/steriliseerimise-ja-kastreerimise-kampaanias-2019-osalevate-kliinikute-nimekiri (accessed 10 March 2019).

It is not allowed to bury an animal in public parks or in humans' cemetery. There are two crematoriums in Estonia that are specialized to pets¹⁴¹ and three pet cemeteries in Estonia: in Harjumaa, Põltsamaa and Valga.¹⁴²

2.3.3 Recent Positive Developments

This chapter tries to show that, although we are still quite at the beginning of acknowledging companion animals on a society level, different topics related to companion animals are becoming more thought of and discussed here too.

As showed in the chapter 2.2, finding housing can be quite difficult for a person with an animal companion. Several governments and private companies overseas have realized that and have started to look for solutions. In Estonia there are two positive developments regarding housing. Firstly, one new rental apartments project advertises itself through relaxed housing policies – meaning that children and pets are welcomed and encouraged.¹⁴³ It can be an testament to the fact that more and more people are getting a companion animal and also these peoples' needs have to be considered in rental apartments market.

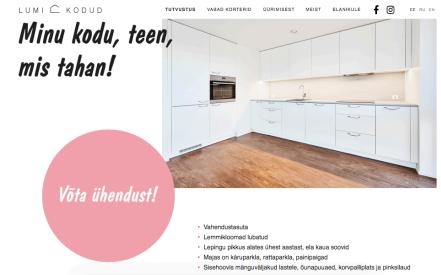


Illustration 16. Lumi Kodu rental apartments' homepage states that pets are allowed (Lumi Kodud, 2019)

Secondly, in February 2019, the Social Insurance Board, Shelters NGO and ESPA signed a goodwill cooperation agreement stating that when an abuse victim searches help from the women's shelter where it is not allowed to bring their animals, then their animals will be placed temporarily in the care of Shelters NGO or ESPA.¹⁴⁴

A more commercial and educational event took place on the 6th of April 2019. An Estonian company specialized in producing quality companion animal products, organized a free movie evening for people with their dogs. There was a buffet for humans and their furry friends. Before the event there were lectures about training a dog and dog nutrition.¹⁴⁵ This shows that also private

¹⁴¹ Tallinna Väikeloomade krematoorium [Tallinn crematorium for small animals], http://www.loomakrematoorium.ee/ (accessed 10 March 2019).

¹⁴² Lemmikloomade kalmistud [Pet cemeteries]. – Mastifite Tõuühing, http://www.mastifid.ee/viited/lemmikloomasurnuaed/ (accessed 10 March 2019).

¹⁴³ Lumi Kodud, https://www.lumikodud.ee/ (accessed 10 March 2019).

¹⁴⁴ Vägivallaohvritest naised saavad tugikeskusesse minnes viia lemmiklooma varjupaika [Women suffering from violence can take their pet to shelter when going to the support centre] .– Estonia's Social Insurance Board 14 February 2019, https://www.sotsiaalkindlustusamet.ee/et/uudised/vagivallaohvritest-naised-saavad-tugikeskusesse-minnes-viia-lemmiklooma-varjupaika (accessed 14 February 2019).

¹⁴⁵ Koerte kinoklubi [Cinema Club for Dogs], https://www.facebook.com/events/419196122166544/ (accessed 3 April 2019).

companies can be responsible for educating companion animal caregivers about responsible animal keeping, not only governments (like was showed in the chapter 2.2 for Switzerland). This event can of course be argued if it was really for animals or it was more for their caretakers. There was no information about how the screening room itself will be made more dog-friendly – were the animals allowed on the seats or was the volume lower than usually in the cinemas. Still, it is a start of making companion animals more seen and recognized in public spaces.



Illustration 17. On the event photos it can be seen that organizers had indeed thought of dogs – Nufnuf provided dog beds for canines, but for an unknown reason most of them were not used and dogs were still lying on the concrete floor (MorroW Shoots, 2019)

3. Site, Methodology and Empirical Study

The first part of this thesis was theoretical research. This chapter introduces the project site, methodology and the empirical study together with the results. As an extension to the empirical study, I tested a garden prototype for companion animals and their humans in an actual public space setting. The results of the testing are included in this chapter.

3.1 Site

This thesis uses Tartu as an example because Tartu is at an interesting development stage. The city government has, to some extent, just started to recognize its inhabitants with companion animals. This has brought on conflicts between different interest groups and raised discussions which I have also been involved in.

As shown in the legal framework overview in chapter 2.3.2, Tartu has a very relaxed policy towards companion animals, compared to other municipalities. This makes Tartu additionally a very interesting site to look at, particularly how these regulations affect the keeping of companion animals in Tartu and how inhabitants themselves see the benefits or the downside of it.

3.2 Methodology and the Multi-Species Idea

My idea was to gather empirical data from citizens with animals to get a better overview of current practises in keeping companion animals in Tartu and how the caregivers themselves see the situation in Tartu's public spaces.

I asked people walking with companion animals to mark their walking routes on the map of Tartu – routes that they like to take and additionally if there are any particular routes /places /stretches of streets that they avoid or do not like for walking. From companion animals, the dog is an everyday sight on the streets, but the main idea of this work was to expand on the urban compassion footprint¹⁴⁶ and give consideration to other companion animals that might benefit from being welcomed to public spaces. Besides canines, I additionally wanted to concentrate on cats and ferrets. Of course there are many more species of companion animals that could be addressed, but the idea of this work was to give one possible scenario of what can be done in urban environments in the context of how to better incorporate companion animals and their owners into the cities. Therefore, these three animal species were chosen based on the possibility of gaining empirical data on them. The welfare of the animals was considered too when choosing the species (not all species can adapt being around a lot of people and noisy environment).

Cats who are let outside by their owners on their own can get hit by a car, get lost or become a victim to human malice. Felines can also be dangerous to others – namely to wildlife.¹⁴⁷ One of the reasons why owners still let their animals out is because they do not want their cats sitting indoors all the time, they want to give them some freedom.¹⁴⁸ One solution to this problem is using the cat harness, to take feline companions out on supervised walks. This trend is increasing, it can be seen from social media (Instagram, different web pages dedicated to teaching of how to walk with your cat) and the news.¹⁴⁹ Of course, not all cats will want to walk on a harness, but their caretakers should

¹⁴⁶ T. Beatley, M. Bekoff, City Planning and Animals, pp. 185–196.

¹⁴⁷ M. Mägi, Kassid on suur oht lindudele [Cats are a great threat to birds]. – Eesti Loodus, 2017, vol. 68, no. 5, pp. 22–

^{28.} ¹⁴⁸ K. Jõgisaar, Kass, kes kõnnib linnas omapäi, pole mitte vaba, vaid on lastud hulkuma [A cat walking in a town on its own is not free but neglected]. - Bioneer 4 September 2018, https://bioneer.ee/kass-kes-k%C3%B5nnib-linnasomap%C3%A4i-pole-mitte-vaba-vaid-lastud-hulkuma (accessed 5 March 2019).

¹⁴⁹ On Instagram: #catwalkingwithleash, #catwalkingharness #catwalking; Adventure Cats,

https://www.adventurecats.org/; H. Yorke, 'Cat on lead' trend is causing pets distress, RSPCA warns. - The Telegraph 13 August 2017, https://www.telegraph.co.uk/news/2017/08/13/cat-lead-trend-causing-pets-distress-rspca-warns/; K. Bratskeir, How To Walk Your Cat On A Leash, And Why You Should. - HuffPost 7 December 2017,

at least provide them the opportunity to try it out. Cats should be walked in areas where there is not much traffic/noise/masses of people and where they can scratch trees and roll in the dirt, sand or grass.¹⁵⁰

With regards to ferrets, as with all companion animals, local governments in Estonia do not count them. Therefore, there is no knowledge about the pet ferret population in Estonia. James Serpell and Elizabeth Paul note in their work that for example in America, as well as cats, dogs and fish, ferrets are favoured pets (population over million).¹⁵¹ There are some indicators that ferrets are quite common in Estonia – there are kennels for ferrets, exhibitions are being organized, a ferret Facebook page is created with almost 1000 members and there is also a society for ferrets in Estonia (Eesti Tuhkrute Liit).¹⁵² During the summer, ferrets can be seen walking with their owners in the parks and having playdates. This gives reason to believe that it might be possible to gather some data about ferrets. Ferrets are very curious by nature and this is why they possibly could like going on walks and exploring surroundings (depending on the personality of the animal of course). They should have the opportunity to hide when something scares them. Ferrets like to dig and some ferrets like water.¹⁵³

Gathering empirical data from the owners can raise a question about evaluating the companion animals' likes (where they feel more at ease) and dislikes (where they seem uncomfortable, nervous or scared). How do we know if their owners interpret their behaviour correctly or is it just the world seen through the owner's eyes?

In 2012, a group of scientists signed the Cambridge Declaration of Consciousness, meaning that after numerous studies, scientists agree that although animals and humans do not look alike and have different brain structures, they are conscious beings who, similarly to us, can feel, think and experience life.¹⁵⁴ Observations have shown that when animals are given freedom to decide, they have their own individual preferences and the competence to decide based on these preferences regarding their food, walking trajectories and even owners.¹⁵⁵

Scientist have been trying to find out how accurately owners can recognize their companion animals' emotions and wishes. For example, one research by Martens, Enders-Slegers and Walker found that people who feel more connected with their companion animal and consider them as family members also recognize more emotions in their pets.¹⁵⁶ Of course with these kinds of research, there is always the question of whether attributing emotions to their companion animals is just an anthropomorphic interpretation. An Hungarian ethologist Ádám Miklósi proved with his research that owners can not only interpret their own dog's basic emotions like anger, fear, or happiness by listening to the dog bark, but based on that, they additionally can understand the barks of strangers' dogs.¹⁵⁷

When taking into account the knowledge gained from these pieces of research, it can be assumed that owners who are more caring towards their companion animals probably know their animals' personality and behaviour better, and therefore can more accurately interpret their body language and therefore their likes/dislikes.

My hypothesis is that when analysing the routes people mark on the map, certain areas in the city become apparent that are positive and reinforce walking and also areas that are problematic are revealed. From this information, conclusions can be made what caregivers of companion animals

https://www.huffpost.com/entry/cat-on-leash-harness-train-cats-walking_n_7656754 (all accessed 3 March 2019). ¹⁵⁰ K. Bratskeir, How To Walk Your Cat On A Leash, And Why You Should. - HuffPost 7 December 2017,

https://www.huffpost.com/entry/cat-on-leash-harness-train-cats-walking_n_7656754 (accessed 6 May 2019). ¹⁵¹ J. A. Serpell, E. S. Paul, Pets in the Family, p. 298.

¹⁵² Eesti Tuhkrute Liit [Estonian Ferret Society], http://www.ferret.ee/; Eesti Tuhkruinimesed [Estonian Ferret People] https://www.facebook.com/groups/168163713385779/ (accessed 8 March 2019).

¹⁵³ Ferret behaviour. - RSPCA, https://www.rspca.org.uk/adviceandwelfare/pets/ferrets/behaviour (accessed 6 May 2019).

¹⁵⁴ The Cambridge Declaration on Consciousness,

http://fcmconference.org/img/CambridgeDeclarationOnConsciousness.pdf (accessed 2 March 2019).

¹⁵⁵ S. Donaldson, W. Kymlicka, Zoopolis, pp. 109–121.

¹⁵⁶ P. Martens, M.-J. Enders-Slegers, J. K. Walker, The Emotional Lives of Companion Animals: Attachment and Subjective Claims by Owners of Cats and Dogs. Anthrozoös, 2016, vol. 29, no.1, pp. 73–88.

¹⁵⁷ Secret Life of Dogs, 2013. Dir. Barny Revill, London: Oxford Scientific Films.

have noticed about their animals, and what kind of environment and elements they think they prefer. This way empirical data and scientific evidence¹⁵⁸ can be compared and used to find the existing positive possibilities and negative effects in the current streetscapes on which my proposal will be based.

3.3 The Empirical Study

The empirical data from Tartu's inhabitants with animal companions was gathered through a crowdsourced map. The aim of the map questionnaire was to find out:

- 1. What are the most common animal companions people walk with in Tartu?
- 2. What are the most popular walking routes and favourite places to be with an animal?
- 3. Where are the problematic areas in Tartu for citizens with animal companions?
- 4. Is there anything that citizens with animal companions feel is missing in Tartu's public spaces?

The purpose of the questionnaire was to gain information on which I can propose my solution to the main question of how to better integrate citizens and their animal companions into public spaces.

3.3.1 The Method of the Questionnaire

The map-based questionnaire¹⁵⁹ consisted of three parts:

- 1. Background information about the respondant and their animal companion to get a better idea of their habits and law compliance gender, age, what kind of animal(s) they walk with, how often they walk, are the animals leashed or not, microchipped or not and what kind of public or semi-public places people have visited with their animals.
- 2. Drawn map-based answers to get an overview of the most common routes people take with their animals, where they like and do not like to walk. The reasons for liking/disliking a place was also asked from people.
- 3. Descriptive questions to get a better understanding of what companion animal guardians themselves feel is missing in the city's public spaces for them and their animals. Additionally, I asked the guardians if they notice their animal companions' preference on walking routes and if they take this into account. This was asked in order to get a better idea how well people are connected with their animals in Tartu, whether guardians think companion animals are capable of their own decisions, and how important it is to consider this.

3.3.2 The Platform and Distribution

The questionnaire had very specific technical needs – people had to be able to answer to written questions and additionally mark their answers on a map. Because of this, the platform needed to have a great UX, otherwise it is likely that people would not have taken the time to answer my

¹⁵⁸ J. J. Ellis, H. Stryhn, J. Spears, M. Cockram, Environmental enrichment choices of shelter cats. – Behavioural Processes, 2017, vol. 141, part 3, pp. 291-296; R. C. Hubrecht, Enrichment in puppyhood and its effects on later behaviour of dogs. – Lab. Anim. Sci., 1995, vol. 45, no. 1, pp. 70-75; D. Wells, J. M. Egli, The influence of olfactory enrichment on the behaviour of captive black-footed cats, Felis nigripes. – Applied Animal Behaviour Science, 2004, vol. 85, no. 1-2, pp. 107-119

¹⁵⁹ See appendix A for the full questionnaire

questionnaire. I used the Maptionnaire platform and distributed it through social media to different Facebook groups dedicated to different animals – dogs, cats and ferrets.¹⁶⁰

3.4 Results and Analysis

As the questionnaire was divided into three different parts, the results are introduced in the same order and analysis is given in each section separately. Where written answers from citizens support and overlap with the analysis of the walking routes map, it is mentioned together. The most important key findings that can be used in the project proposal are shown at the end of this chapter in the findings' summary.

3.4.1 Background Information

There were altogether 155 respondents and each respondent spent on average 7 minutes filling out the questionnaire. 88% of the respondents were women and almost half of the respondents (44,5%) were at the age of 26 to 35.

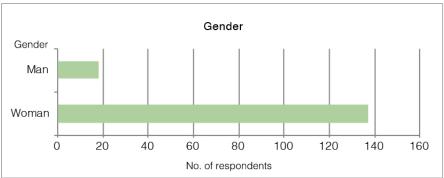


Figure 1. The gender of respondents (Maptionnaire and Maiken Vardja, 2019)

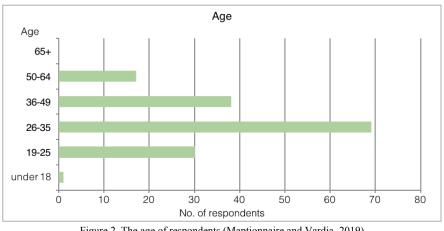


Figure 2. The age of respondents (Maptionnaire and Vardja, 2019)

The most common companion animal people walk with is, as expected, dogs (85%), but in addition, 7% of the respondents walked with ferrets, 6% with cats and 2% with rabbits. Although there was an option to also add other animals with whom people are walking, no other animals were mentioned

¹⁶⁰ See appendix B for the full list of Facebook groups where I distributed the questionnaire

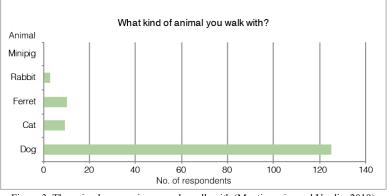


Figure 3. The animal companions people walk with (Maptionnaire and Vardja, 2019)

Almost half of the respondents (44%) take their animal companion for a walk 3-4 times a day. Most of the walkers have dogs, but there was one cat and one rabbit as well. 24% walk their companion animals at least 2 times per day (all dogs). 19% of the respondents walk their animals once a day, most of which are dogs, but also 3 ferrets and 1 rabbit go outside once a day. 6% of animals can go outside to public spaces once a week – 5 dogs, 2 ferrets and 1 rabbit. 7% of the respondents take their animal outside their home once a month – 4 ferrets, 3 cats and 3 dogs. Walking can additionally depend on seasonality - one cat owner mentioned that they walk only in the summer.

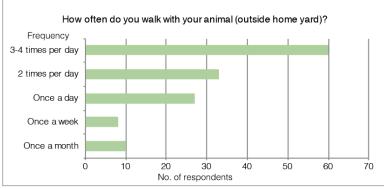


Figure 4. The frequency of walking outside (Maptionnaire and Vardja, 2019)

As mentioned in the legislation chapter, microchipping of dogs is mandatory in Tartu, microchipping of cats and other animal companions is only recommended.¹⁶¹ 93% of the respondents are in compliance with the law and have microchipped their animals. 1 rabbit has been microchipped and put into a registry, one is not and one owner does not know if their animal is microchipped or not . Out of 9 cats, 7 are microchipped and registered, 1 is not and one did not provide answer. Out of 10 ferrets, 6 are microchipped and registered, 4 are not.

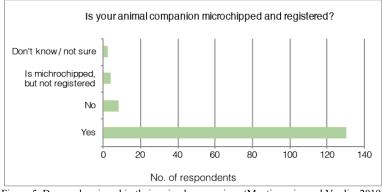


Figure 5. Do people microchip their animal companions (Maptionnaire and Vardja, 2019)

¹⁶¹ Koerte kiibistamine [Microchipping dogs]. – Tartu City https://www.tartu.ee/et/loomad-ja-linnud#koerad-ja-kassid/Koerte-kiibistamine (accessed 9 march 2019).

In Tartu, it is not obligatory to keep companion animals on leashes at all times, only when necessary (it is not specified in which situations it would be necessary).¹⁶² From the respondents, 65% walk with their animals leashed and 33% walk sometimes leashed, sometimes unleashed. 9 ferret owners walk their animals leashed, one unleashed. 7 cats out of 9 are being walked leashed, 1 unleashed and one unknown.

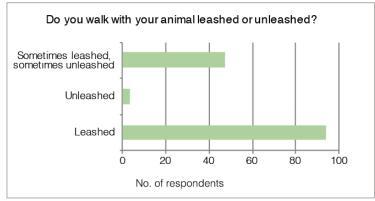


Figure 6. How is the animal companion walked with (Maptionnaire and Vardja, 2019)

92% of the respondents have taken their companion animal either to public or semi-public places. The most popular places have been public events (64% of people have taken their animals there) and work (55% of the respondents took their animals with them to a workplace).



Figure 7. Where do people go with their animal companions (Maptionnaire and Vardja, 2019)

Mostly people take their dogs to different public places/events, but 4 out of 10 ferret owners have taken their animal to their workplace and additionally to a public event. Out of 9 cat owners, 2 of them have taken their cat to their work and one to a public event and to a store inside a carrier bag. And one rabbit out of 3 has visited a workplace and a public event. It was not specified which kind of public event it was; it can also be for example animal shows.

I think these numbers clearly reflect the quite relaxed policy Tartu has about companion animals. It is not forbidden to take companion animals to public events, they can be unleashed in public spaces, they can ride in public transportation and have to wear a muzzle or be leashed only when necessary.¹⁶³

¹⁶² Koerte ja kasside pidamise eeskiri [Regulations for Keeping Dogs and Cats in Tartu], 2015 [modified in 2018]. – Riigi Teataja, https://www.riigiteataja.ee/akt/428052015004?leiaKehtiv (accessed 9 March 2019).

¹⁶³ Koerte ja kasside pidamise eeskiri [Regulations for Keeping Dogs and Cats in Tartu], 2015 [modified in 2018]. – Riigi Teataja, https://www.riigiteataja.ee/akt/428052015004?leiaKehtiv (accessed 9 March 2019).

3.4.2 Everyday Walking Routes

153 walking routes were marked on the map by 69 people. Illustration 18 shows these routes in relation to Tartu neighbourhoods. The thicker the route line is on the map, the more people are walking there. Tartu has 17 neighbourhoods and every neighbourhood had at least one walking path going through it. Most of the routes were marked by people with dogs, but there were also two ferret and two cat walking routes (ill. 18).

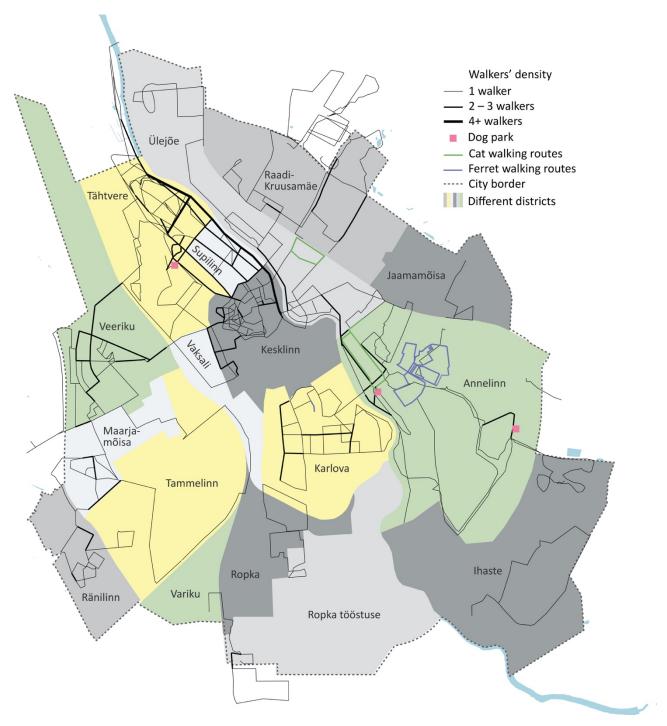


Illustration 18. Walking routes marked on the map by Tartu's citizens who walk with animal companions (Maiken Vardja, 2019)

The neighbourhoods with the highest concentration of walkers are Tähtvere, Supilinn and Kesklinn. Annelinn, Veeriku and Karlova neighbourhoods are quite close behind them. Tähtvere is very popular for walking because it has a dog park and several great green areas – Tähtvere park, Dendropark together with the Jänese hiking trail, and good access to Emajõgi. The most used walking routes are along the river bank. Kesklinn has Toomemägi, which is also a very popular green area where people walk with their animal companions. The half of Kesklinn where no walking routes are marked is the city's commercial centre with shopping malls and heavy traffic. Ropka tööstuse district has only one walker from Ropka district passing by, because Ropka tööstuse is an industrial district with car dealerships, auto repair shops and building materials stores.

Annelinn probably also has quite a high density of walkers because of the panel housing district and number of people living there. Although I expected more answers from there, it might be that the questionnaire did not reach the inhabitants with animal companions in there. Annelinn has the highest number of people over 65 years old living there¹⁶⁴ and they probably do not use Facebook so actively.

In addition, I looked at the population of every city district and plot ownerships, to better understand the marked walking patterns.

There are a lot of walkers in Tähtvere and Supilinn, but not so many inhabitants compared for example to Kesklinn and Karlova. It might of course mean that just a bigger percentage of Tähtvere's and Supilinn's people own companion animals, but based on the questionnaire feedback, I also believe people come from other neighbourhoods by car to walk with their animals in these neighbourhoods because of the atmosphere and richness in green areas.

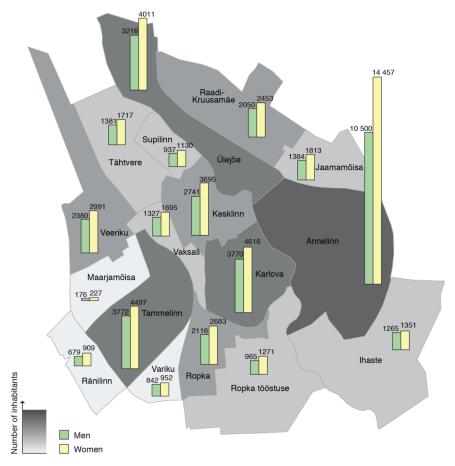


Figure 8. The population of each district and its gender composition (Tartu statistiline aastaraamat, 2017)

Tammelinn's population is above average, but only 2 walking routes pass by this neighbourhood. Tartu city council's numbers show that Tammelinn has the highest concentration of private plots in

¹⁶⁴ Tartu's Statistical Yearbook 2016,

https://www.tartu.ee/sites/default/files/uploads/Tartu%20linn/Statistika/Tartu_statistika_aastaraamat_2016.pdf (accessed 25 April 2019).

Tartu (2151 plots compared for example to Karlova that has 1225 plots and higher walking density).¹⁶⁵ It might be that people in Tammelinn do not walk so much with their companion animals, but let them roam around in their private gardens.

City district	Private land		Municipal land		State land		Current land use and rest of district area		Total	
	Number of plots	Area ha	Number of plots	Area ha	Number of plots	Area ha	Number of plots*	Area ha**	Number of plots	Area ha
Annelinn	799	133,9	229	342,2	5	26,7	15	40,5	1048	543,3
Ihaste	1415	196,0	170	210,4	9	4,6	9	12,4	1603	423,4
Jaamamõisa	179	32,3	88	84,2	12	32,2	8	1,3	287	150,0
Kesklinn	698	94,7	167	73,9	18	4,0	8	7,3	891	179,9
Karlova	1225	160,1	126	58,7	3	1,2	13	9,3	1367	229,3
Maarjamõisa	212	89,1	29	21,5	4	2,7	0	0,0	245	113,3
Ropka	865	82,0	83	53,0	5	5,3	5	3,9	958	144,2
Raadi-Kruusamäe	958	128,4	137	129,9	12	23,9	15	0,5	1122	282,7
Ropka tööstuse	274	220,2	90	129,0	3	2,1	8	12,6	375	363,9
Ränilinn	142	90,6	25	21,4	6	9,1	2	1,1	175	122,2
Supilinn	333	34,1	41	9,7	7	0,8	4	3,7	385	48,3
Tammelinn	2151	225,7	170	72,4	10	18,0	25	2,1	2356	318,2
Tähtvere	621	120,2	76	111,0	6	12,5	11	6,3	714	250,0
Vaksali	378	41,6	38	18,5	4	5,2	25	1,2	445	66,5
Variku	478	46,1	41	21,8	4	7,6	8	0,6	531	76,1
Veeriku	860	189,8	87	61,3	8	13,0	15	18,1	970	282,2
Ülejõe	1049	187,8	173	84,6	6	1,2	30	29,8	1258	303,4
Total	12 637	2072,6	1770	1503,5	122	170,1	201	150,7	14 730	3896,9

*Ownership processes have not yet been completed to these plots

**Contains also unallotted land in specific district

Table 2. The land balance by land ownership form (Tartu's Statistical Yearbook, 2017).

It is interesting to compare the marked walking routes with the amenities the city is offering for its inhabitants with animal companions.

The city has three dog parks – one in Tähtvere and two in Annelinn. The first one was opened in 2016 in Annelinn (Sõpruse dog park near Anne canal). The second one was opened in 2017 in Tähtvere (Tähtvere dog park in Tähtvere park). The third one was opened in 2018 in Annelinn (Mõisavahe dog park) and it is the first one with a sand surface. The training elements in Mõisavahe park are different from Tartu's other dog parks' elements - they are not so much about agility, but about providing the dog with safe situations to practice everyday skills.¹⁶⁶ All three dog parks are around 1500m² and have separate areas for small and big dogs.

From other amenities, Tartu has about 32 waste stations with plastic bag dispensers.¹⁶⁷ There are no public water taps that are meant for people and for animals, but there are temporary water taps for humans, that are up from May until October.¹⁶⁸ It was quite difficult to find information about the

¹⁶⁷ Koerte jalutusväljakud ja väljaheidete kastid [Dog parks and waste boxes]. – Tartu City,

https://www.tartu.ee/et/loomad-ja-linnud#koerad-ja-kassid/Koerte-jalutusv%C3%A4ljakud-ja-v%C3%A4ljaheidete-kastid (accessed 9 April 2019).

¹⁶⁵ Tartu's Statistical Yearbook 2017,

https://www.tartu.ee/sites/default/files/uploads/Statistika/2017/Tartu_stat_aastaraamat_veeb.pdf (accessed 25 April 2019).

¹⁶⁶ I was one of the designers of all the dog parks in Tartu. The first two were really about learning how they work, understanding what citizens and their dogs actually need and the third park in Mõisavahe already tries to implement more contemporary approaches to dog training and enrichment and go beyong the regular agility equipment seen so often in dog parks in Estonia.

¹⁶⁸ E. Eelmäe, Tartlased loobivad tasuta joogivee kraanidesse prahti [Inhabitants of Tartu throw trash into free drinking water fountains]. – Tartu Postimees 3 July 2018, https://tartu.postimees.ee/4513266/tartlased-loobivad-tasuta-joogivee-kraanidesse-prahti, (accessed 19 April 2019); K. Paju, Tartus saab tasuta vett juua neljast kraanist [It is possible to drink free water from four taps in Tartu]. – Tartu Postimees 27 July 2015, https://tartu.postimees.ee/3274207/tartus-saab-tasuta-vett-juua-neljast-kraanist (accessed 19 April 2019).

locations of these drinking water fountains and, as shown from the questionnaire, people walking with animal companions mostly do not even know that these fountains have existed in Tartu since 2015.



Illustration 19. Drinking fountain next to Tartu Kaubamaja (Elerin Eelmäe, 2018).

Illustration 20 shows where the amenities Tartu currently offers for dog owners (waste stations with plastic bag dispensers, dog parks, temporary water taps) are located in the city, compared to the walking routes the respondents to the questionnaire marked down. As one of the main complaints that came out from the questionnaire was that there are not enough waste stations in the city, I compared the existing infrastructure to the map data I got from the answers to see how basic amenities correlate with the reality of walking routes (are these amenities on popular walking routes, are there enough waste stations in the right places).

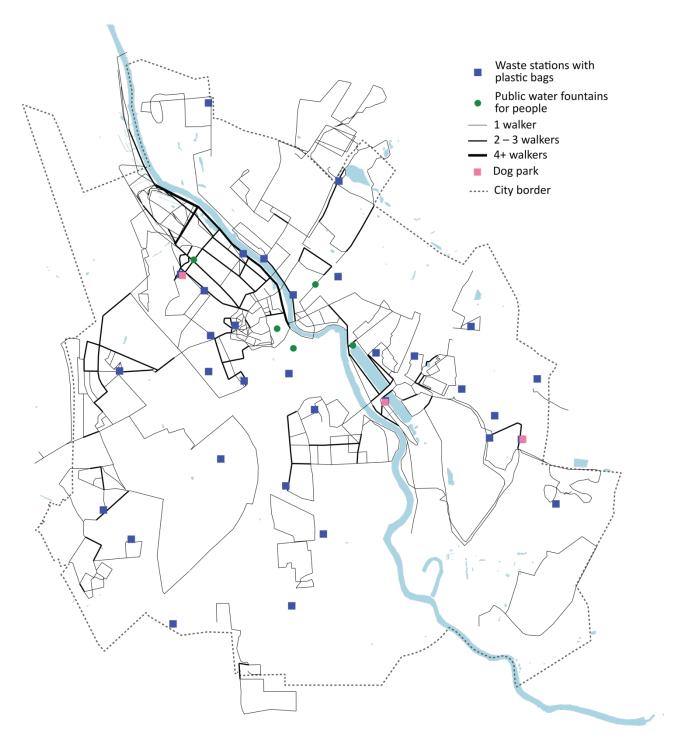


Illustration 20. Correlation of marked routes, dog waste stations, public water taps and dog parks (Vardja, 2019)

When looking at the distribution of the waste stations, about 70% of them are directly on the route of companion animal walkers. When pairing the data from the map and written answers, it can be said that the location of the waste stations can also affect the walkers' route to a certain degree. For example, people can choose which route to take based on the necessity to take more plastic bags or how convenient it is to throw away used bags.

The exception to that are Dendropark and Jänese hiking trail with very high usage, although there are no waste stations with plastic bag dispensers along the way (only two waste bins at the beginning of Dendropark). Overall, although there is at least one waste station in every city district, it is clearly not enough. As it was brought out several times in the written part of the questionnaire, even if people have plastic bags, the greatest problem is throwing away the bag. Nobody wants to walk long distances with a full bag in their hand and there are even not enough regular waste bins to throw away these bags. In addition, some people do not want to throw away full bags for example in the waste bins at bus stops because the smell might be unpleasant to the people waiting for the bus.

There are no guidelines in city design or research I have found that would establish a reasonable distance between waste stations that would be convenient for citizens with animal companions. In my questionnaire, the responders mentioned a distance of 1km would already be very inconvenient. One company in the USA that specialises in dog waste solutions mentions on their homepage that in parks there should be one waste station unit every 152m.¹⁶⁹ When taking an average of that, about 500m would be the maximum distance between the waste stations that would be convenient for people. When applying this to the map of Tartu (ill. 21), it shows that there are uncovered routes where the distance between waste stations is too long.



Illustration 21. Waste stations along the marked routes (Vardja, 2019)

¹⁶⁹ Zero Waste USA, https://www.zerowasteusa.com/advice.asp (accessed 24 April 2019).

In addition to the infrastructure the city is offering, I tried to further understand what kind of routes people use when walking with their companion animals and what might be the reason behind choosing these routes. While analysing the walking map, I noticed that despite several respondents mentioning their animals do not like or are afraid of noise, quite many routes were still going along the biggest and busiest highways in Tartu (ill. 22).

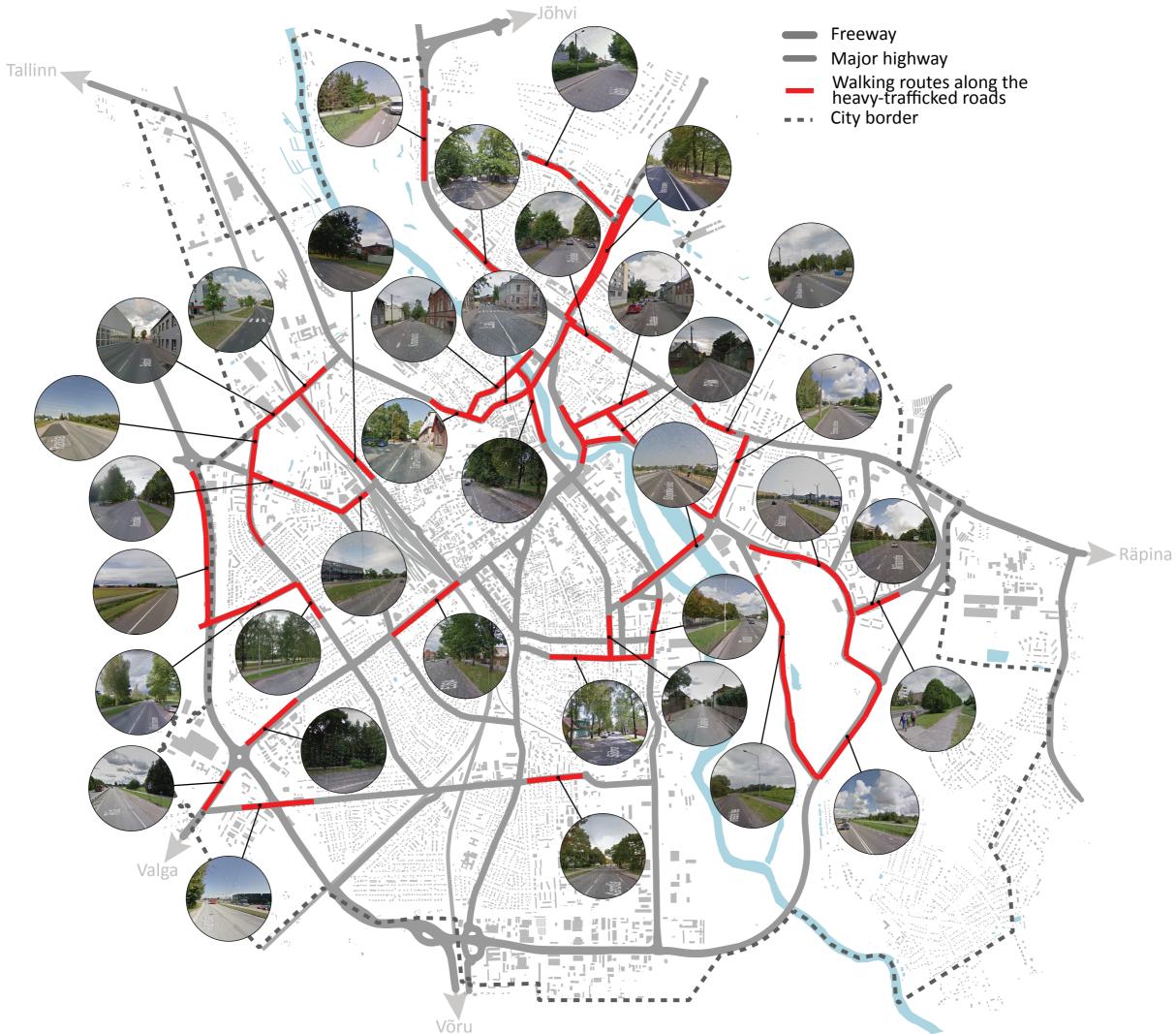


Illustration 22. Walking routes along the major roads in Tartu and the appearance of these roads (Photographs: Google, 2019; illustration: Vardja, 2019)

It might be that in some cases there is no other way to get to more pleasant walking areas/dog parks. For example, coming from Karlova, you have to cross the heavy-traffic Sõpruse bridge to get to Sõpruse dog park.

Actually, if we examine the walking routes along heavy-traffic areas more closely, a pattern emerges. Illustration 22 shows that usually, at least on one side, a light traffic road runs parallel to these highways and the pedestrian road is cut off from the highway by a green strip. It varies, whether the green strip is only with grass or low/high vegetation has also been added, but the common denominator is the green strip. This might be one of the reasons why citizens with animal companions walk along these routes. I will explore the significance of green strips for animal companions shortly. As I used to live in Tähtvere and walk my dog in that neighbourhood or in Supilinn and Karlova, I always assumed it is highly unpleasant to walk with my dog along these big roads. But as it also emerges from the written answers, most of the heavy traffic and noise complaints are from the city centre, where the street structure is more narrow and no green strips have been installed.

All of the visual data I gathered in illustration 22 is translated into street profiles in illustration 23. It shows that the most common street types in terms of greenery that are occurring on the walking routes people marked down.

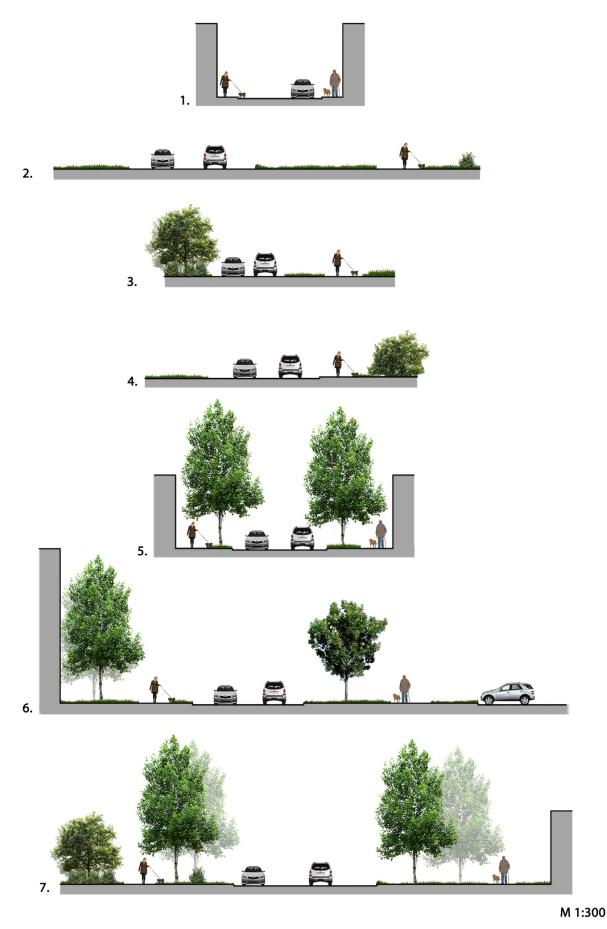


Illustration 23. The types of heavy-traffic roads that companion animal caregivers use (Vardja, 2019)

People marked street type 1 (ill. 23) as the most unpleasant one. This is a one-way street in the city centre. The streets are narrow, there are no front yards with green areas near the sidewalk or green strips separating the sidewalk from the road.

As can be seen, almost all other street types (except type 4) are separated from the car road by a green strip. All the other options besides type 1 have some greenery at either side of the sidewalk and people prefer to use these kinds of roads. From their preferences, no further conclusions can be made. In terms of animal companion welfare, the type nr. 7 is the most desirable one. There is shade from the trees (also on the pavement), the green strips are wide enough and separated from the roads by low vegetation (this helps to block the noise coming from the cars on the height level of animals).

The view from the human's eye level and the animal's eye level differ greatly and this should be taken into consideration when thinking about animals in urban planning and what is needed for them. Some comparison photographs are shown to better explain the different viewpoints and why even small patches of greenery are important for animals.



Illustration 24. View of Lai street from human's eye level (left) and a medium height dog's eye level (right). In this case the sidewalk is narrow and is not separated from the cars by a barrier. Animals are smaller than us, closer to the ground and they experience passing cars more closely and might perceive them threatening because of the proximity and the noise. (Vardja, 2020)



Illustration 25. View of Vabaduse boulevard from human's eye level (left) and a medium height dog's eye level (right). The sidewalk is separated from the road by trees and green patches of grass under the trees. From different heights the details one notices are different. For example, a human might not notice or find much use to the vegetation under these trees, but for an animal it might be a great relief during the summer months. (Vardja, 2020)



Illustration 26. View of Vabaduse boulevard from human's eye level (left) and a medium height dog's eye level (right). Often, the greenery is meant only for people, animals cannot enjoy them (cannot reach them for sniffing, used plants can be poisonous to animals). (Vardja, 2020)



Illustration 27. View of Ilmatsalu street from human's eye level (on the left) and a smaller dog's eye level. Green strips with low and high vegetation can act as great barriers between walking animals and cars. Shrubs that are mature and completely in foliage can effectively visually and audibly block the traffic. (Vardja, 2020)

To further illustrate the benefits of these green strips, I will hereby briefly introduce a couple of studies that have been made in recent years that are relevant to my analysis and support it.

The greenery is not only important because it acts as a barrier from the traffic, but it can also help to relieve stress caused by humans. A field study conducted by two French scientists, Cristina and Aurélien Budzinski, showed that even very well adapted dogs can find city life stressful, especially when somebody is directly approaching them by foot or on bike.¹⁷⁰ They built a special harness for dogs to wear with a heart-rate monitor and started observing and gathering data from dogs when they were on their walks. Their results show that a dog's pulse can rise significantly when somebody they do not know is coming straight towards them (even if the dogs did not react by barking or lunging or showing any symptoms of distress). On further investigation they found that when dogs can freely sniff the ground, chew or roll in the grass, it significantly lowered their heart-rate, even when somebody is approaching them. It shows why for example large areas covered with only asphalt or paving tiles and have nothing natural in them, are not good or pleasant for animals.

In addition to the animal's viewpoint, a measuring of temperatures shows why trees and vegetation is needed in the cities for people as well for their companion animals walking on the

¹⁷⁰ A. Budzinski, C. Budzinski, What can we learn from the pulse of our dogs? A different view to understand how they feel and what we can do to help them cope. Presentation delivered at Dog Symposium 2020, Oslo, Norway, 8 March 2020. Author's notes.

streets. In 2018, on the 1st of August, a senior researcher at Tartu University measured surface temperatures in Tartu after midday (around 15:00 o'clock). The air temperature was 31 °C.¹⁷¹



Illustration 28. Asphalt concrete covered parking lot on the side of Kaubamaja. Surface temperature 48-51,1°C (Aveliina Helm, 2018)

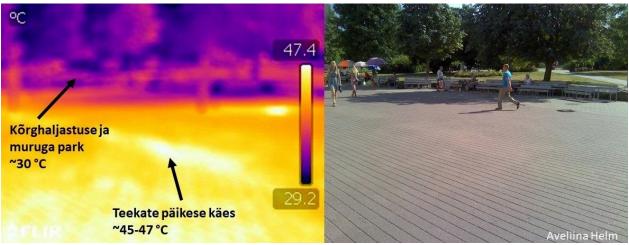


Illustration 29. Stone pavement in front of Kaubamaja. Pavement temperature in the sun 45-47°C (Helm, 2018)

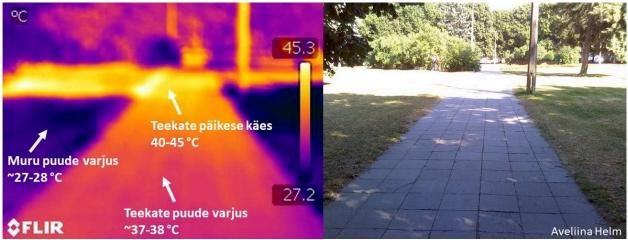


Illustration 30. Park next to Kaubamaja. Grass temperature in the shade is 27-28°C, pavement in the shade 37-38°C, pavement in the sun 40-45°C (Helm, 2018)

¹⁷¹ A. Helm, https://www.facebook.com/aveliina/posts/2039465982752103 (accessed 5 August 2018).

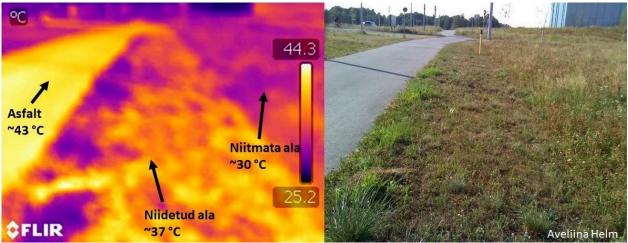


Illustration 31. Asphalt, cut and uncut grass near Estonian National Museum (Helm, 2018)

As can be seen from the illustrations 28-31, the surface type and where it is located (under the trees in the shadow or out in the sunlight) plays a great role in the temperature.

Surface type	Asphalt in the sun	Stone Stone pavement in pavement in the sun the shadow		Cut grass in the sun	Uncut grass in the sun	Cut grass in the shadow
Temperature °C	43-51,1	40-47	37-38	37	30	27-28

Table 3. Summary of different surface types temperatures' in the sun/shadow (Information: Helm, 2018; table: Vardja, 2019)

As table 3 shows, vegetation (both, high and low) is very important in creating tolerable and pleasant areas during the summer in the city (not to mention mitigating the heat island effect). Another point to consider is that people usually wear shoes when navigating the cityscape, but our animal companions have to walk on the same surface without any protection in the summer.

The most common and easily accessible non-scientific way to decide whether a surface is suitable for walking with an animal or not, is for humans just to try the surface with their own hand and see if they can keep it there for a few seconds or if it is too hot. On first glance there seems to be no scientific studies about temperature effect on companion animals' paws during the summer. Marcia Breithaupt, a professional home and pet sitter service provider with experience of over 15 years has gathered some information on that topic, finding that 48°C is the initial pain threshold for animals' paws.¹⁷² Of course it depends on the size and condition of the animal (if they have calluses). Clearly the asphalt and stone pavement in the sun becomes too hot for animals to comfortably walk on.

All of the abovementioned reasons are why we should use more animal-friendly surface materials and greenery in urban design.

¹⁷² M. Breithaupt, How Hot is That Sidewalk? – Liberty Home and Pet Services, 2010,

http://www.lhaps.com/images/DogTemperatureArticle_09jun2010.pdf (accessed 25 July 2018).

3.4.3 Places People Like

After analysing the walking routes, I focused more narrowly on the concreted places in the city on the walking routes that people brought out. 122 likeable places were marked on the map by 60 people.



Illustration 32. Location of the places citizen like with their animal companions (Vardja, 2019)

The most popular reasons people gave for why they like certain places in descending order by mentioning frequency are as follows:

- Possibility to let the dog run free
- Closeness to nature greenery, birds singing, quiet, feeling like the countryside, clean air
- Safety almost none or no traffic
- The presence of a dog park
- Possibility to go for a swim with the companion animal
- Not so many people passing by
- Just a pleasant park, cosy place
- Can play together with the dog, exercise with him not a dog park
- Many other people walking with friendly dogs
- Diverse area different paths, can make several choices

- Open wide area
- Many recycle bins where to throw the dog waste bags
- The possibility to walk longer, greater distances
- The dog can socialize with other dogs

8 pleasant areas were mentioned and marked on a map by 6-12 people. These places can be seen in illustration 33.



Illustration 33. The places people like the most – green areas (Vardja, 2019)

As can be seen from the map, most of the pleasant activities are centred alongside water. The reasons for liking have been divided into three categories by user types: what are the human reasons for liking a place, what owners think their animal companions enjoy and the reasons that are for both for them (tables 4-5).

	Toome hill (Toomemägi)	Tähtvere dog park + park	Raadi manor park and Estonian National Museum main building surroundings	Sõpruse dog park
Guardian	Nature (leaves changing colour in the autumn); Pleasant place, cozy	Very nice and pleasant park to walk in		
Animal companion	Nature (many trees to sniff)	Can run without leashes in the dog park; Can socialize in the dog park	Possibility to run free when no other people are present; Possibility to swim	Can run without leashes in the dog park; Can socialize in the dog park; Swimming possibility next to the park
Guardian + animal companion	No traffic	The dog park is very actively used	Interesting landscape (alternating); Possibility to take different pathways; Quiet and peaceful, no city noises	

 Table 4. Reasons for liking most popular green areas from different user perspectives (Vardja, 2019)

	Green area between Anne canal and Emajõgi (starting from Turusild and going past Väike Anne canal	Dendropark	Jänese hiking trail	Alley alongside Emajõgi from Marja street to the public beach
Guardian		Lots of greenery (birds singing); Clean air	Peaceful	Beautiful and cosy alley; Many waste bins along the road
Animal companion	Dogs can run without leashes; Ferrets like to dig under tree trunks and on the river banks.	Other friendly dogs	Dogs can run without leashes with their playmates	Dogs can run without leashes when nobody is around
Guardian + animal companion	Not so many people; Enough space for playing with the dog; Big enough distances so that different user groups do not have to come into contact with each other (dogs, walkers/joggers without animals, ferrets)	Lots of space; Not so many people; No traffic; Possibility to walk longer distances	Swimming possibilities; Feeling of being in a forest	Swimming possibilities

Table 5. Reasons for liking most popular green areas from different user perspectives (Vardja, 2019)

3.4.4 Places People do Not Like

35 places were marked on the map by 27 people.



Illustration 34. Location of the places citizen find unpleasant with their animal companions (Vardja, 2019)

The reason for not liking, in descending order by frequency, are as follows:

- Heavy traffic, noise (mentioned more near the city centre)
- Narrow sidewalks (especially in the city centre)
- Lots of litter left behind by humans (broken bottles, empty plastic packages, bones, syringes)
- Non-animal owner user groups who do not consider others (disc golf players throwing their discs over dog walkers' heads, fishermen leaving trash on the riverbanks)
- Aggressive dogs with owners who cannot control them
- Aggressive dogs in private houses' yards (fence not secure enough)
- Dogs without leashes who do not listen to their owners, approach even if not wanted

3.4.5 Open-Ended Questions

Out of the 155 respondents, 56 people suggested what is missing in Tartu for them and their animal companions while taking walks. 2 people thought nothing more is needed and 97 people did not respond anything to that question.

What people think is needed in Tartu according to mentioning frequency in descending order:

- More waste bins throughout the city (both, with and without dog waste bags). Dendropark was mentioned several times, as it has high density of walkers
- Places where to take clean drinking water throughout the city
- Fenced places with training equipment for animals (dog parks)
- Greenery
- Large and wide fenced-in areas with no obstacles (training elements), only space for running around safely unleashed
- Benches throughout the city
- Companion animal owners need to be educated more about keeping animals, how to ensure animal's well-being and safety and also other citizens' safety.
- Better leash law (leashed at all times, not only when necessary)
- Better supervision from the city council's side for enforcing the regulations related to keeping companion animals
- Wider roads for pedestrians
- Public beaches where animals are allowed
- Toilets for people on hiking trails

Most of the answers were from people with dogs, but 2 people with ferrets see the need for more benches, potable water possibilities and greenery. One ferret guardian points out that the fences in dog parks could have smaller fence mesh, that way ferrets could also play in these parks and even with dogs. One cat owner misses drinking water possibilities in the city.

Out of 155 respondents, 57 people answered to the question of whether they notice their animal's wishes and preferences on walking routes and how often. Out of them, 41 people let their animals choose the walking routes to some extent at least sometimes (68%) or at least once a day (32%). 8 people don't notice their animal's preferences or don't let them go where they want. 5 people mentioned that they have well-known routes they take every day, 2 of them mentioned the reason for that being safety (less chance of meeting unleash dog they don't know). 2 people feel their dogs have no preferences. One person mentioned that although they don't let the animal choose the route, they let them choose the pace of the walk.

The factors that influence the route selection:

- Time how much time the guardian has
- Weather
- The mood of the guardian, impulses of the guardian
- Practical aspects if there is a need to go to the store, visit friends
- Companion animal's decisiveness (lays on the ground, does not move forward)
- The quality of the infrastructure how many waste bins there are, the width of the sidewalk, green areas along the way
- Noise, bulky buildings that scare the animals

None of the rabbit owners answered this question. One cat owner shared that she does not notice her animal's preferences while walking and one cat owner lets her cat choose the route once a day. Two ferret owners let their animals choose the routes.

Out of 155 respondents, 47 people answered the question of whether they feel they want to take

their companion animal to more public places but for some reason it is not possible. Out of them, 30% (14 people) feel that they can go where they want with their animals and are not limited in any way. The remaining 60% (33 people) mentioned the following places and/or reasons why they can't take their animals to more public places in descending order:

- Fear unleashed aggressive dogs in public spaces
- Supermarkets animals are not allowed
- Public beaches there are none for animals and their owners
- Dog parks, but there are none nearby
- Attitude of non-animal owners
- There could be more light traffic ways leading out of the city, with greenery
- Can't go to more places because of dogs themselves too big, untrained
- Can't go to public spaces, because strange people come and pet the dog without asking for permission
- More animal friendly cafes
- Would like to hike more, but no waste stations, don't want to walk long distances with a waste bag
- Shopping malls
- Many parents have the notion that children and animals don't go together, can't take wellbehaved dog to children's playground
- No parks nearby

There are no answers from the rabbit owners. One cat owner pointed out that she would like to go to the store with her cat, but doesn't because of other people's reaction. Two ferret owners feel that they can go wherever they want with their animals, just have to take care and be attentive themselves.

3.4.6 Summary of Findings

There were 155 responders altogether. 85% of the responders had dogs, 7% had ferrets, 6% had cats and 2% had rabbits. Almost half of the respondents (44%) walk with their animal companion three to four times per day. 65% of the responders keep their animal companions leashed at all times, 33% keep them leashed and sometimes unleashed, 2% walk always without leashes. Quite high number of people (92% of the responders) have taken their animal companion to a public event, restaurant or to their workplace.

The most densely walked neighbourhoods in Tartu are Tähtvere, Supilinn, Kesklinn and Annelinn (ill. 18). The preferred walking areas by citizens and their animal companions (ill. 33) are near water (along Emajõgi, Anne canal, Raadi lake and ponds) or bigger green areas (Dendropark, Toome hill).

The central topics that came out from the walkers' answers were the lack of waste stations (with plastic bag dispensers), lack of potable water fountains, lack of access to public beaches and the quality of the streets in the city. Guardians with companion animals use several pedestrian roads that run alongside heavy-traffic roads (ill 22), but most of the noise and traffic complaints come actually from the city centre. The reason might be the structure of the streets – in the city centre the streets are narrow and there is no room for greenery. Alongside bigger roads, the light traffic roads are separated from vehicles by different quality green strips (ill. 23).

On one hand, people mention they like places where they can let their dog run free (not only dog parks), but on the other hand, they do not like strange dogs approaching without leashes. This creates an interesting paradox that will be further discussed in the proposal part.

The route selection of a walker can depend on several key factors: how much time the walker has (is the walk in the morning before work, in the evening, on the weekend); the weather (when it's raining/cold/too hot, the walk will be shorter); are there any practical aspects (does the walker need

to visit friends, go to the store, take out cash); quality of the infrastructure (are there enough waste bins, is there any greenery). People are also quite likely to consider their animals' needs -32% let their animals choose the route at least once a day, 68% of people let their animal companions sometimes choose the route (of course depending on the guardian's schedule, but at least they are aware and notice what their animal companion prefers).

Overall, citizens with animal companions evaluate Tartu to already be quite an animalfriendly city compared for example to Tallinn (based on other people's attitude towards animal companions, access to green space), but in comparison to Europe it still has a long way to go (in terms of allowing animal companions to shopping malls, more restaurants and bars).

3.4.7 Limitations to the Empirical Study

The biggest limitation of the data comes from the fact that the questionnaire was distributed only through social media. The answers were limited to people who have access to a computer/smartphone and use social media. It can be assumed that this was the reason why, for example, there were no answerers from the 'over 65' age group. According to several marketing and statistics analytics pages¹⁷³, Facebook has most users between the age of 25 to 34. That is also the age group from whom I received the most answers.

It can additionally be pointed out that the questionnaire was distributed only in Estonian. According to Tartu city council¹⁷⁴, 78% of Tartu's inhabitants are Estonians, 14% are Russian and 8% are of other nationalities. It might be that because of the language barrier, some people could not fill out the questionnaire, but I think the significance is minuscule. A study done in 2013¹⁷⁵ (as there is no available data from Tartu city council) found that neighbourhoods that have the most Russian speaking city dwellers are Jaamamõisa, Maarjamõisa and Annelinn. When looking at the marked routes (ill. 18), only Jaamamõisa has the lowest answering rate from these neighbourhoods.

Most of the responses came from the people with dogs, so the number of different species of companion animals was not very high. Although the results were better than I expected. I think the nine cat and 10 ferret walker answers show that people do walk with other kinds of animals too. As the awareness rises about the impact of our animal companions on wildlife and their need for enrichment and exercise, there will definitely be more people with different animal companions walking in urban environment.

¹⁷³ M. Ahlgren, 20+ Facebook Statistics & Facts for 2019 (modified 2 April 2019). – Website Hosting Rating https://www.websitehostingrating.com/facebook-statistics/ (accessed 26 April 2019); K. Kowalczyk, Facebook and Instagram user demographics in Estonia – August 2017. – NapoleonCat 12 August 2017,

https://napoleoncat.com/blog/facebook-and-instagram-user-demographics-in-estonia-august-2017/ (accessed 26 April 2019); Distribution of Facebook users in the United States as of December 2016, by age group. – Statista 2019, https://www.statista.com/statistics/187549/facebook-distribution-of-users-age-group-usa/ (accessed 26 April 2019). ¹⁷⁴ Tartu arvudes 2017/2018 [Tartu in numbers 2017/2018]. – Tartu City,

https://www.tartu.ee/sites/default/files/uploads/Statistika/Tartu_arvudes_2018_EST.pdf (accessed 26 April 2019). ¹⁷⁵ J. Lina, Etniline segregatsioon tartus mobiilside andmete põhjal [Ethnic Segregation in Tartu Based On Mobile Communication Data]. BA thesis. Tartu: Tartu Ülikool, 2013, p. 34

3.5 Prototype for an Intervention

As an extension to the empirical study I wanted to test, in a real-life situation, how interested the citizens of Tartu would be in additional functions offered in a public space for companion animals and their caregivers. Therefore, I took part in the international interdisciplinary Urban Festival UIT 2019 student installation competition "Living park". This topic posed a question about the parks in Tartu – there are many green areas in the city, but how many of them are actually actively being used. The aim was to remind people that parks are places where we can come together and enjoy socialization.¹⁷⁶

The competition requirements were to propose a temporary installation in a public space in Tartu that could be exhibited from the 21^{st} until the 24^{th} of August 2019. The jury rated interactivity, ingenuity, adaption to the environment and also feasibility of the project. Two works were selected as winners and each given $1500 \in$ to carry out the project and $1000 \in$ as a royalty. The competition was funded by Estonian Ministry of Culture. My project "Urban Sniffari" was one of the selected projects.

Concept

"Urban Sniffari" is a sensory garden prototype for companion animals and their caregivers. A sensory garden is usually in a broader sense a safe and peaceful place where humans can experience and discover their surroundings with all five of their senses (sight, hearing, smell, taste and touch) and this can have positive therapeutic and/or educational effects on them.¹⁷⁷

In recent years, it has also become more common for example in the United Kingdom, to use it for companion animals, especially in animal shelters where life can be very stressful for the animals.¹⁷⁸ Sensory gardens have additionally picked up momentum in Western Australia, where citizens create them in their own backyards and let other people with dogs visit them based on schedules.

These gardens are used in a variety of circumstances – to help to rehabilitate dogs with medical problems, to offer enrichment for bored dogs and also to teach people more about their dogs' needs. Sensory gardens usually have various areas that stimulate dogs' senses – there are different landscape forms, surface materials, plants, junk brought from landfills, everyday objects and different animal products (sheep's wool, manure from various animals). Encouraging natural movement, sniffing and letting dogs explore their surrounding and new things at their own pace helps them to become more confident, curious and calm.¹⁷⁹ These traits make them better equipped for city life and handling the stress that comes with it.

For my installation, I had to take into account that it was only temporary and I had to be able to set it up and take it down efficiently. Therefore, I chose one component of the sensory garden that is easily feasible – plants that can be beneficial to companion animals as well as their caregivers. At the same time, I also wanted to show that this kind of intervention could be implemented more permanently in urban public spaces. The idea was that dog and cat owners could bring their animals to the garden to sniff the plants and explore, and that the plants would have positive effects on them – relaxing, stress reducing, anti-inflammatory and antispasmodic. Plants contain essential oils that

¹⁷⁶ Urban Festival UIT 2019, https://www.uit.ee/elavpark?lang=en (accessed 12 April 2019).

¹⁷⁷ Department of Health & Human Services, State Government of Victoria, Australia,

https://www.betterhealth.vic.gov.au/health/healthyliving/gardens-for-the-senses (accessed 10 March 2019).

¹⁷⁸ Battersea Dogs & Cats Home, https://www.battersea.org.uk/how-make-sensory-garden-your-dog (accessed 10 March 2019); The Mayhew, https://themayhew.org/sensorygarden/ (accessed 10 March 2019); Bath Cats & Dogs Home,

https://www.bathcatsanddogshome.org.uk/uploads/documents/1375455927_SensoryandEnrichmentGarden.docx.pdf (accessed 10 March 2019)

¹⁷⁹ J. Harvey, Busselton Snuffle Garden Project. Presentation delivered at Dog Symposium 2020, Oslo, Norway, 7 March 2020. Author's notes.

consist of various substances that can affect the receptors in the brain. These receptors, in turn, affect human and non-human animals' organ systems.

Prototype Location

The sensory garden was created in the city centre of Tartu, in Keskpark next to Tartu Kaubamaja.



Illustration 35. Location of the installation "Urban Sniffari" (Vardja, 2019)

As the topic of that year's Urban Festival UIT wanted to draw attention to underused city parks in Tartu and invite people to spend more time in urban green spaces, Keskpark felt like a suitable place. According to my observations it is used mainly for passing by, although it is located in a busy area in Tartu with businesses and offices nearby. As it is increasingly popular to take animals to work in Estonia, this location was suitable because of its proximity to different workplaces. In addition, a public water tap was located near to this area, so that animals could have fresh drinking water. The area was also surrounded by trees that could offer shade for animals and people if necessary.

Technical Implementation

The prototype consisted of 16 portable plant containers, each approximately 80x30cm. In planning the size of the containers, I had to take into account the weight of them together with plants and (wet) soil for transporting and lifting. The plant boxes were made of recyclable materials and coloured with water-based paints, so that they would be environmental- and animal friendly. It was important that the smell of the paint would not be unpleasant for animals and overpower the smell of plants.

Every plant had an introductory sign with its name, the main active substance in that plant and a list of useful effects on animals. The grasses I grew myself, herbs I bought from the Tartu open air market, and other plants I got from a gardener through a Facebook gardening group. There was also a sitting area for humans made of four EUR-pallets and a sign explaining the project on the entrance to the sensory garden.



Illustration 36. Making of the portable plant boxes and planting (Vardja, 2019)

Sensory Garden Plan and Plants Used

The idea was to create a sensory walking experience through the plant containers where animals could sniff, lick, eat, touch and otherwise observe and try out these plants. On entering, the plants lining the walkway had a calming effect, so that over-excited animals could become more relaxed. Inside the sensory garden area there were various plants, some for specific medical purposes (anti-inflammatory, stomach problems) and some for just eating (grasses). The walk ended also with calming plants, so that before stepping back to city trails, the animal (and possibly the walker) could calm down from all the new smells in the garden.

The plants were all edible in small quantities (there were 2 species specific exceptions I will bring out in the list of the plants). The plants used in the project and their main possible effects were:

Barley grass (Hordeum Vulgare) – rich in vitamins, suitable for eating in larger quantities
Basil (Ocimum Basilicum) – reduces stress, strengthens the immune system
Catmint (Nepeta × faassenii) – induces happiness and playfulness in cats, mild sedative for dogs
Chamomile (Matricaria recutita) – relieves stress and anxiety, for cats only external use
Cilantro (Coriandrum sativum) – helps with bloating and abdominal cramps, stimulates digestion
Lavender (Lavandula angustifolia) – soothes the central nervous system, relaxes
Oat grass (Avena sativa) – rich in vitamins, suitable for eating in larger quantities
Peppermint (Mentha x piperita) – refreshes the breath, calms the central nervous system, helps with nausea. Not suitable for cats!
Pot marigold (Calendula officinalis) – anti-inflammatory and antifungal, for cats only external use
Rosemary (Rosmarinus officinalis) – natural strong antioxidant, anti-bacterial
Sage (Salvia officinalis) – antiseptic and anti-inflammatory
Thyme (Thymus vulgaris) – antiseptic, antioxidant
Wheatgrass (Triticum aestivum) – rich in vitamins, suitable for eating in larger quantities

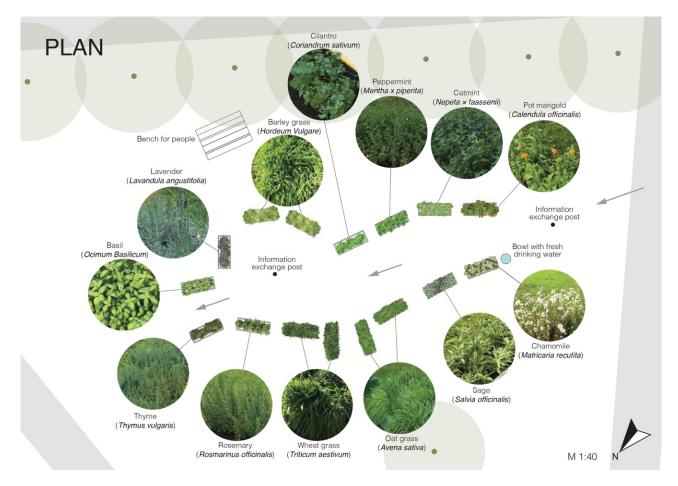


Illustration 37. Plan for the sensory garden (Vardja, 2019)



Illustration 38. Ready-made installation "Urban Sniffari" (Vardja, 2019)

Reception by the Public

The idea was to test in a real-life situation how citizens accept this kind of intervention for companion animals in public space and if they see it as necessary.

In the end, the installation "Urban Sniffari" was in Keskpark from the morning of 21st of August until the afternoon of 25th of August. As the 21st of August was a rainy, sombre day and there were not too many people in the city centre, I did not spend much time there after setting everything up. From the 22nd to 25th of August I visited the sensory garden every morning for a couple of hours and additionally in the evening for a couple of hours to talk with the visitors and explain the project. I saw 49 people visiting this garden, but this is definitely not the actual number, because I was not there all the time and I also read from Facebook posts later that other people had visited.

95% of the visitors were people with dogs, but there was in addition one cat and people who had animals at home, but not with them. One guardian came to celebrate her dog's 1st birthday in the sensory garden. The reception was very positive and most of the people said that if they had a place like this in the city, they would definitely go there with their companion animals. Almost nobody had heard the term 'sensory garden' before in the context of companion animals and came to see what it was about. People wrote down the names and effects of the plants, and also took home branches of different plants to give to their animals. There were a few people who had their own gardens and had seen their animals eat different plants (for example peppermint), but they did not know that there might be an actual reason behind it. Most of the people did not know that most of the herbs we eat can also be eaten in small quantities by companion animals and that these can even be useful to them.

As for companion animals, they were most interested in the grasses, as was expected. The cat also liked the lavender and some dogs liked peppermint and pot marigold, but grasses were by far the most popular choices. Grass is the most familiar plant to them and it was eaten, urinated on and lain on. Most of the animals had never seen or been allowed to sniff the other plants before, so it is natural that during one visit these plants might seem a little bit strange and unfamiliar to them. This shows that we could use these kind of beneficial plants in city greenery so that animals would be more used to them and would know how to use them themselves. In addition, there were a lot of other dog's smells, so it took some dogs some time before they could settle down and start sniffing the plants, not other dogs.



Illustration 39. A puppy climbing on top of a wheatgrass container (Vardja, 2019)



Illustration 40. A cat sniffing lavender (Vardja, 2019)

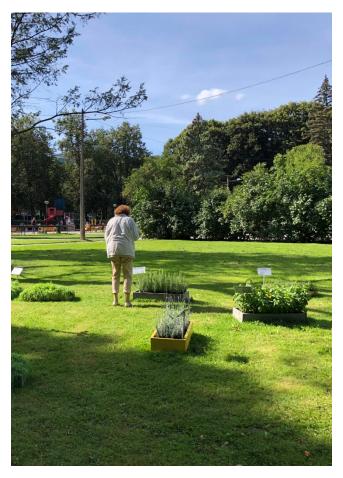


Illustration 41. A woman writing down plant names (Vardja, 2019)



Illustration 42. Bossi sniffing peppermint (Prangel, 2019)

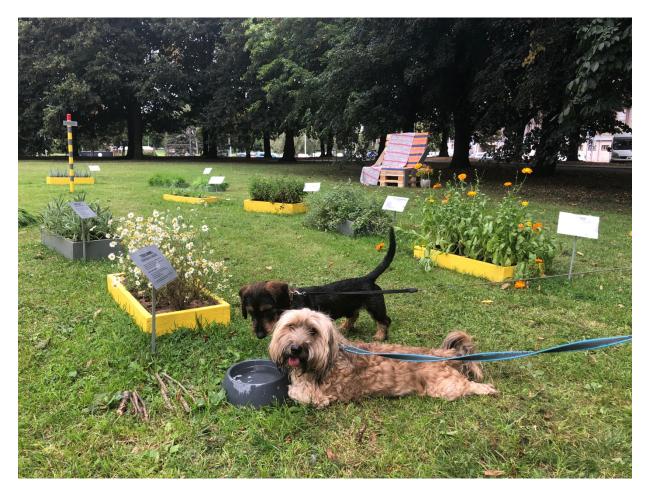


Illustration 43. The satisfied customers of "Urban Sniffari" (Vardja, 2019)

The term 'sensory garden' became the word of the week after my project in one of the most known Estonian newspapers Eesti Ekspress. The garden project was also featured in local newspaper Tartu Postimees.

GUUD-BÄÄD/NÄDALA SÕNA



AREEN

Illustration 44. The word of the week (Eesti Ekspress, 2019)

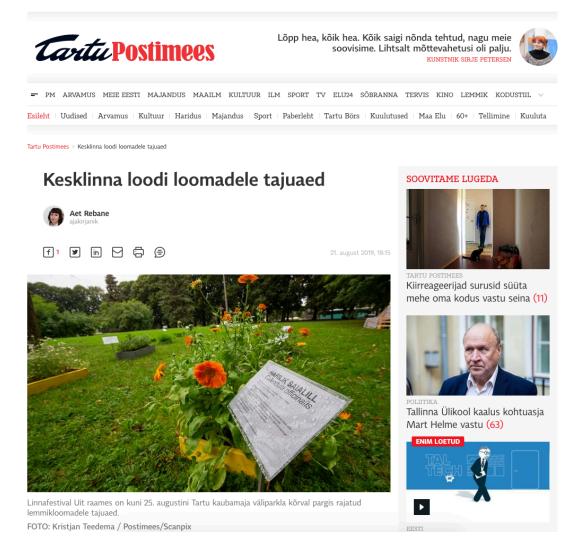


Illustration 45. Article in local newspaper (Tartu Postimees, 2019)

As the plants survived the four and half days quite nicely, I took the plants to Tartu Animal Shelter so that the animals there could also benefit from them. Later, when I asked for feedback, I was told the animals in the shelter are too stressed to pay any attention to these plants.

The sensory garden concept can be used as an intervention in my proposed solutions in chapter 4.3 to create additional value for citizens and their animal companions, and to diversify urban areas.

4. Proposal

The aim of this work is to offer ideas on how to better integrate citizens with their companion animals into urban public spaces in the field of urban studies. For that I have given a wider background of how wild animals became companion animals in the first place, sharing their life with humans from the very first settlements. On arriving at the current practices of keeping companion animals in Western cities, I identified three categories through which animals' and their humans' condition can be analysed. It was followed by a situation assessment in Estonia, after which I focused even more specifically on the southern Estonian city of Tartu where I conducted an empirical study. The results of the study showed the opinions of companion animal's caretakers, to which I draw parallels to scientific evidence. Combining the scientific and empirical data, I will sketch out design ideas that could be considered when addressing companion animals and their humans in urban planning, and also showing how this could affect cities on a broader scale. Things that could be changed on the legislative side are also mentioned as problems related to it came up several times in my research.

4.1 The Concept of the Proposal

The proposal is a synthesis of the key findings:

1. Scientific research – the current situation of keeping animal companions, what the current regulations for keeping companion animals in the city of Tartu are, what animals need, the rising problem of companion animal obesity due to the lack of exercise, evidence of how caregivers can recognize their animals' emotions correctly.

2. Map data – what kind of amenities the city offers right now to its citizens with animal companions (specifically the locations of waste stations, potable water fountains, dog parks, green areas), the findings of the empirical study (locations of the most walked routes, liked places and problem areas).

3. Key points of the written answers to the questionnaire – the factors that influence route selection, what the caregivers themselves think their animals need.

Based on these findings I will suggest walking routes with different purposes and interventions in order to show what can be done for companion animals and their caretakers. The idea is to demonstrate how considering the animal's perspective in design and making even small changes can already improve both their own and their human's well-being.

I will focus on Tähtvere, Kesklinn and Annelinn neighbourhoods and make the walking routes proposals in these areas. The reason for this is that they have the highest number of walkers with companion animals (ill. 18) and all of these neighbourhoods have different street structures that influence walking in different ways (see chapter 3.4.2.). It is interesting to see what should or could be done in terms of companion animals in these different environments within Tartu city limits.

Factors that are considered for planning the routes are: the time – how much time people have, what kinds of animals' people are walking with (species, age, health), the surface/street structure, practical aspects, quality of infrastructure (greenery, waste stations, potable water).

As it came out from the citizens' answers, Tartu is already quite an animal-friendly place to live. There were only some major concerns about the legislation and the education of owners – several respondents have had problems with owners who do not leash their companion animals. Even if these animals are friendly, the leashed animals might not be and when a loose dog gets too close there might be some potentially dangerous situations, not to mention the damage to wildlife the unleashed animals can cause.

4.2 Thoughts on What Could Be Done in Terms of Legislation

An interesting paradox emerges from the answers of citizens with animal companions regarding letting dogs run free. They like places (not necessarily fenced in) where they can let their animal

companions run free without leashes, but at the same time do not like unknown unleashed dogs approaching them (even if they might not be aggressive). They would like other people to keep their canine friends leashed in public spaces (excluding designated dog parks). The problem can come from the fact that in Tartu, walkers with animal companions must leash their animals only when necessary and that is a very vague definition. The necessity of leashing an animal can depend on the education of the caregiver, how well they can evaluate the situation and read the body language of both their own dog and the other.

To think of other companion animal owners, the safety of wild animals and citizens without animal companions, Tartu should change its leash law to mandatory in public spaces (except for designated places). In some aspects, the relaxed regulations in Tartu free citizens with animal companions, but making a mandatory leash law might possibly integrate companion animals even better, because people who do not own animals and are afraid would not have grounds for conflict anymore. In addition, it would be safer for the animals themselves. Alongside changing the leash law, Tartu should offer alternatives for its inhabitants – fenced in areas without any man-made equipment, for example - where dogs could run safely without leashes but in a controlled environment (they could not get out).

As a renowned Norwegian dog trainer has remarked – contrary to popular belief, the average household dog does not need to run around mindlessly and free in order to exhaust themselves or feel happy. Dogs need proper positive training and mental stimulation that can be done through enriching their everyday environments, and this will exhaust them much more than just running around.¹⁸⁰ Of course, there are some dog breeds and individual dogs who need more physical exercise and people should definitely provide their animals the opportunity to run around without leashes from time to time, but when a person knows what to do on the other end of the leash, it is not "a must" every day.

The problem with the regulations around keeping companion animals is also that they are not enforced. Even if it were mandatory to leash an animal companion in public spaces, nobody could control it. There is a fine, for example, for not picking up dog waste (table 1), but despite this the streets and parks in Tartu are not clean. It is not even stated in Tartu's pet keeping regulations who should be in charge of the legal supervision of matters related to animal companions and public spaces.

As there are many citizens who walk with their animals at any given time of the day, enforcing the laws are difficult and can only be done partly. Therefore, even more important is to educate society on both sides (companion animal caregivers and people who do not have any animals). This kind of "get to know animals' behaviour and their needs" program should be incorporated from the state level into the school system, so that from childhood people can learn why they should be compassionate to other species, how to take care of different animals and what kind of responsibility comes with it. Better education and knowledge would solve several problems regarding animal companions.

There are also other legislations through which the local city government could ensure the needs of companion animals and their humans are taken into account in city planning matters. For example, the city's maintenance rules could articulate what kind of new plants can be used in city landscaping (non-poisonous species to animals, more bushes that are better noise barriers) and also the mowing frequency (it should be more seldom). Wildlife would benefit from these changes too, because greenery creates habitats for them. Another aspect to think about is road maintenance – during the winter, the salt and gravel used on the main roads against slipperiness are uncomfortable and damaging to animals' paws (if one pays attention, one can notice limping dogs when they are crossing roads in the winter). Gravel gets stuck between their paws and can cause micro-wounds, and when salt comes into contact with their paws, it will cause pain. Currently sand, chlorides or granite gravel is allowed on the sidewalks.¹⁸¹ More animal-friendly options should be used (like sand).

¹⁸⁰ T. Rugaas, The past, present and future of dog training. Presentation delivered at Dog Symposium 2020, Oslo, Norway, 8 March 2020. Author's notes.

¹⁸¹ Tartu linna heakord [Tartu's Maintenance Rules], https://www.tartu.ee/et/heakord (accessed 9 May, 2020).

4.3 Planned Walking Routes for Citizens and Their Animal Companions

In the chapter 2.2.4 I pointed out that it is quite easy to consider something companion-animal-friendly, when it is actually mostly companion-animal-caregiver-friendly. On planning the walking routes, I tried to avoid that and instead take into account both participants – the animal companion and the walker. The walks should be interesting and beneficial for both.

From the empirical study it can be seen that almost half (44%) of people walk with their animals three to four times per day. Considering the fact that people have their own everyday routines and things to take care of (work, studies, family, friends), it is probably not possible for most working people to walk one hour routes three to four times per day. This was also mentioned in the questionnaire answers, that the amount of time the guardian has plays a big role in route selection. The social needs of caretakers have additionally been taken into consideration on some of the route plans.

Turid Rugaas, who has experience in positive dog training (no punishment used) for over 40 years and has educated dog trainers all over the world, argues that as long as the walker lets their animal express their species-specific behaviour (sniffing the ground, observing) and the route is interesting and provides mental stimulation, the walking time does not matter so much for the animal as the quality.¹⁸² There could be quite short walks in the mornings and afternoons, longer in the evenings.

In addition, people walk with different animal species (dogs, cats, ferrets) of different age groups (puppies, adults, seniors) with different physical needs. Because of that, the proposed routes are of different lengths, so that every person can find a suitable one for their preferences and their animal's abilities and needs. As dogs are the ones who are most accustomed to being walked in the city, the walking time is based on the average walking speed of a medium-sized dog. Of course, these times are only indicatory, as animals should be able to express their species-specific behaviours (sniffing, digging, observing) on their walks. Some animals like to walk and run more, some like to explore their surroundings thoroughly and not walk longer distances.

The dog pulse and asphalt temperature measuring projects mentioned in chapter 3.4.2. showed how important street structure and existing greenery is for the walk – it can help to reduce stress while the animal is walking and also make the environment suitable for walking in the first place. This I also tried to consider in planning of the walking routes and show how it can be made better in cases where the streetscapes are not so accommodating.

Although waste bins with plastic bag dispensers and potable water taps are very basic and simple solutions, I also considered these aspects on the planned routes, as these are the essential necessities that every city should have.

¹⁸² T. Rugaas, The Complete Dog seminar. Tallinn, 26. – 27. October 2019. Author's notes.

4.3.1 Route 1 – a Weekend Hike in Dendropark and Jänese Trail

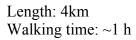




Illustration 46. Location of the Dendropark and Jänese hiking trail (Vardja, 2020)

Different routes in Dendropark were the most popular ones in Tartu. This trail was created because of its popularity among citizens, but also because there were some concerns that could be addressed. From the analysis, it emerged that although it is a beloved walking route, there are not enough waste stations (with and without plastic bag dispensers) along the route. This is not only a question of convenience for owners, but also hygiene and cleanliness of public space. In addition, there were problems with disc golf players who throw their discs without paying attention to people or animals walking there. As moving objects are very interesting for dogs, as well as dangerous for unsuspecting people, it is best to find a way for different user groups to share this valuable urban greenery with the least possibility of conflicts.

It was mentioned several times that there are no public swimming areas in Tartu for companion animals and their caregivers. People are starting to use the Jänese hiking trail to take their animals for a swim, but usually people themselves do not go inside the water as there is no proper beach and places to enter the water are quite often unmaintained and small. Additionally, the area has quite high pedestrian and bicycle traffic, so it is not the most relaxed area to stay for a longer period to enjoy nice weather if you constantly have to be aware of passers-by who might attract the attention of your animal.

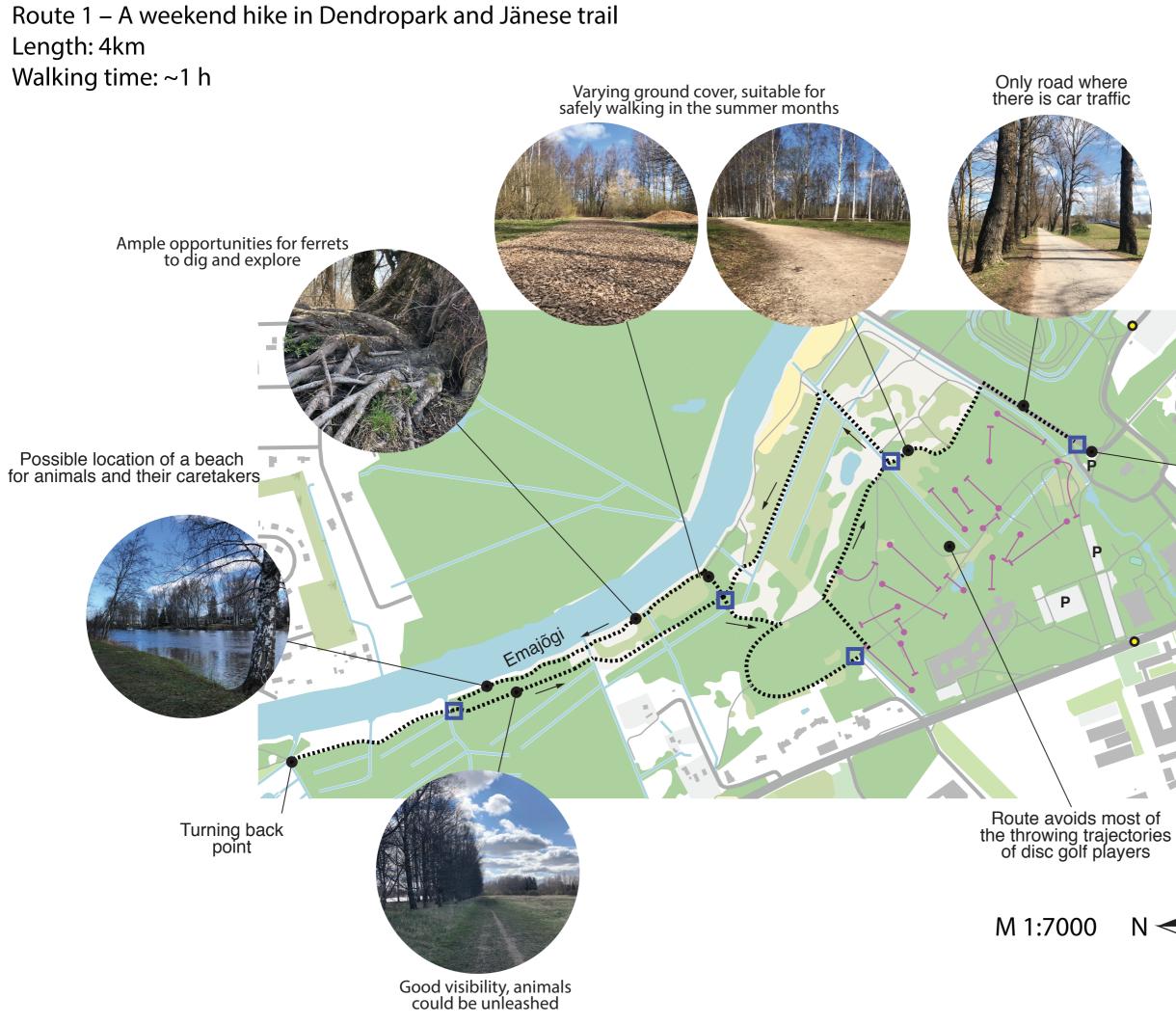
This proposed walking trail takes all the aforementioned components into consideration and the route is planned accordingly (ill. 47). As the trail is also popular among inhabitants of other neighbourhoods, the starting point is at a parking lot, where people can park their cars. The area is also approachable on foot from other districts and by bus. Bus numbers 3, 6, and 13 have stops close to Dendropark and these lines cover almost all of Tartu. As stated in the city regulations, companion

animals can ride in public transportation without a leash and a muzzle (table 1), so it would be quite convenient and easy to reach the park without owning a car. Dendropark's main roads are lighted until 23:00 in the evening, Jänese hiking trail is not artificially illuminated. As there are no existing waste stations with plastic bag dispensers in this area, illustration 47 shows new possible locations (every 500-650m). There is no need for potable water fountains, because of the river with flowing water (standing small water bodies can be dangerous for animals due to the risk of leptospirosis – a potentially deadly disease carried by rodents)¹⁸³. During the winter, there are ski tracks in this area, so companion animal walkers have to take care to walk on the side of the road in order not to damage the trails, but most of the planned route is not on the ski track by purpose. This route is meant for a longer walk when there is no time pressure and the walker can take time with their animal, explore and enjoy the surroundings.

Illustration 47 shows the location of the trail and the most important aspects of the trail. At the beginning, the route will continue for a short stretch along a road where cars drive, but the speed limit is low (20km/h). The trail takes this course to avoid the disc golf players' throwing trajectories. In this way the park's different user groups can coexist peacefully and avoid unnecessary conflicts. When approaching the park along the main road, it passes straight through the disc golf area and there have been accidents where walkers get hit by flying discs.

All surfacing in Dendropark and Jänese hiking trail are perfectly suitable for animals, as they are natural and no pavement is used, meaning in the summer months it will not get as hot as on asphalt (even the short stretch at the beginning on asphalt is under the trees). This trail already has much to offer naturally for the enrichment of animals – different surfaces (sand, gravel, mulch), different spaces (wide open fields, more enclosed spaces in the spruce forest, bushes) and in addition, wild animals (foxes, different birds, rabbits) who leave interesting smells behind. As there is a lot of space and always the opportunity to step away from the marked route, cats and ferrets can also enjoy this route and when somebody comes, just observe them from a distance. Ferrets have ample opportunities to dig in the riverbank, and special places can be made on trees for cats to explore their surroundings from a higher vantage point. Illustration 48 shows some of the most characteristic aspects of this route through the eyes of the human and the animal – different ground cover, landscape views and water elements.

¹⁸³ Leptospiroos [Leptospirosis]. – Animal Clinic of Estonian University of Life sciences, http://loomakliinik.emu.ee/vaikeloomakliinik/nouanded-loomaomanikule/leptospiroos/ (accessed 9 May 2020).



- ······ Proposed walking route
- Proposed waste stations
- Disc golf throwing trajectories
- Bus stop
- Lower vegetation
- Higher vegetation
- Official beach
- Road with cars
- Existing walking path
- P Parking

Starting point

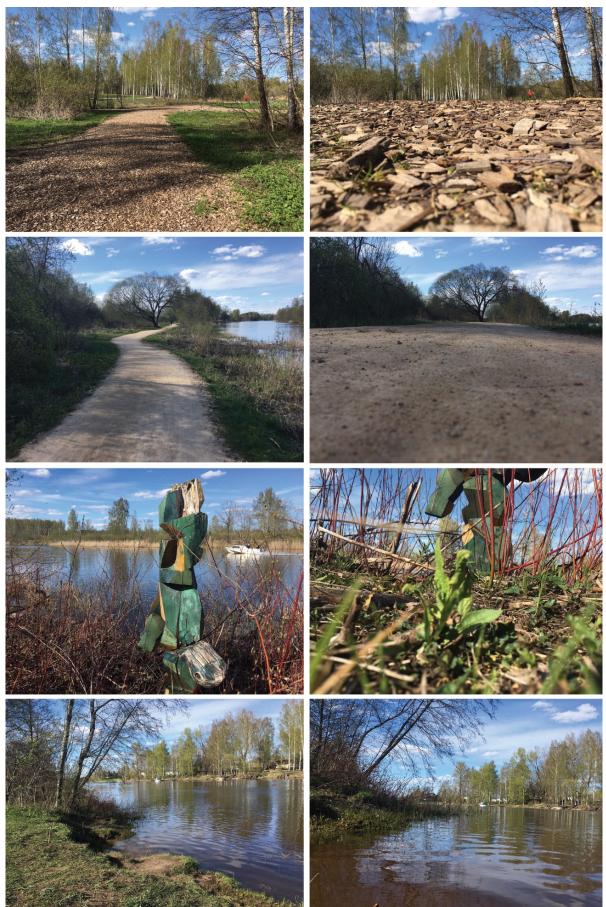


Illustration 48. Some of the characteristics of the Dendropark and Jänese hiking trail through the eyes of a human (left) and an animal (right). It is important to also consider the viewpoint of an animal. (Vardja, 2020)

Offering the possibility to go for a swim can enrich the animals' life, help them to gain confidence and also have a very practical reason – help them during the summer months to cool down. In addition, this kind of activity can strengthen the human-animal bond. Of course not all animals enjoy the water, it depends on the individual. One possible location is suggested for an official companion animal-friendly beach, where owners could go swimming together with their four-pawed friends. The area could be fenced in, in order for people to let their dogs have fun in the water and not worry about passers-by.

In the last couple of years there have been landscaping works going on in Dendropark, as this area won the participative budgeting competition in 2017 that the city started to carry out in 2018.¹⁸⁴ Participative budgeting is a competition started in 2013 where citizens can offer ideas of what to do in areas of public use in Tartu. The overall budget is 200,000€ and two winning projects are selected through voting (every citizen of Tartu who has the city registered as their place of residency can vote). As part of this competition, more trails have been added to Dendropark, bush has been taken down and surface materials have been renewed. This is a good example where what can be good for humans is not necessary good for animals. In terms of wild animals, their habitats have been destroyed by taking down more of the bush. The grass is cut regularly in the summer and this in turn decreases biodiversity in the area. Cut grass is additionally not so interesting for companion animals. Everything is made very neat and orderly for the humans. In my proposal, I would suggest at the very least not mowing the Jänese hiking trail green areas, instead planting more companion animal-friendly plants that can grow in Estonian conditions – meadowsweet, catmint, chamomile, plantago, wheat.

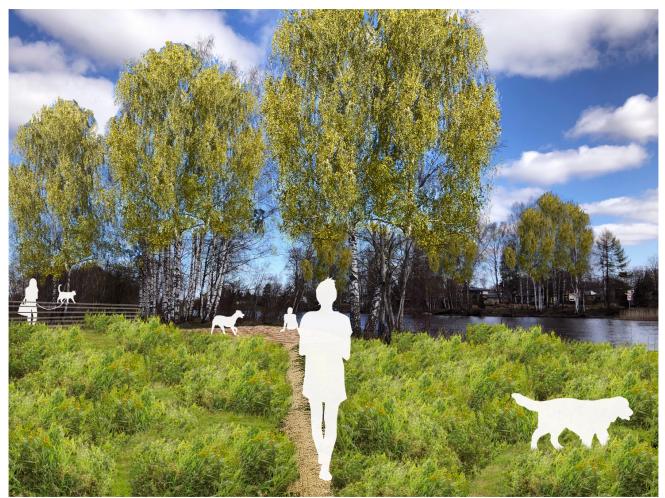


Illustration 49. View of the possible new location of companion-animal friendly beach. The area would be fenced in, the grass would not be cut, only some paths would be mown inside the area. Non-poisonous plants to companion animals should be used. (Vardja, 2020

¹⁸⁴ Participative Budgeting Winning Ideas – Tartu City Council, https://www.tartu.ee/en/participativebudgeting#winning-ideas (accessed 9 May 2020).

4.3.2 Route 2 – Socialising in the City Centre

Length: 2,5km Walking time: ~40min

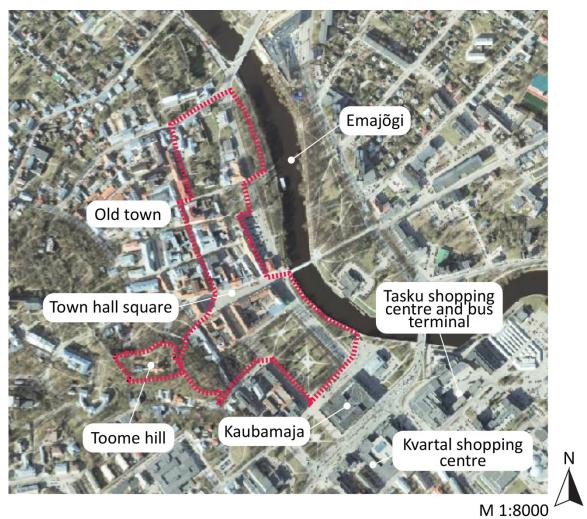


Illustration 50. Location of the city centre walking route (Vardja, 2020)

One of the key points that came out from the questionnaire was that walking depends on practical aspects. This walking route tries to connect practical concerns of the walker and the needs of the animal. The route follows the vicinity of animal-friendly restaurants and bars, existing amenities for animals, and grocery shops for the humans. It is meant to show how companion animals can also be included when the walker conducts their own business (having lunch with friends, doing quick grocery shopping, withdrawing cash from ATM).

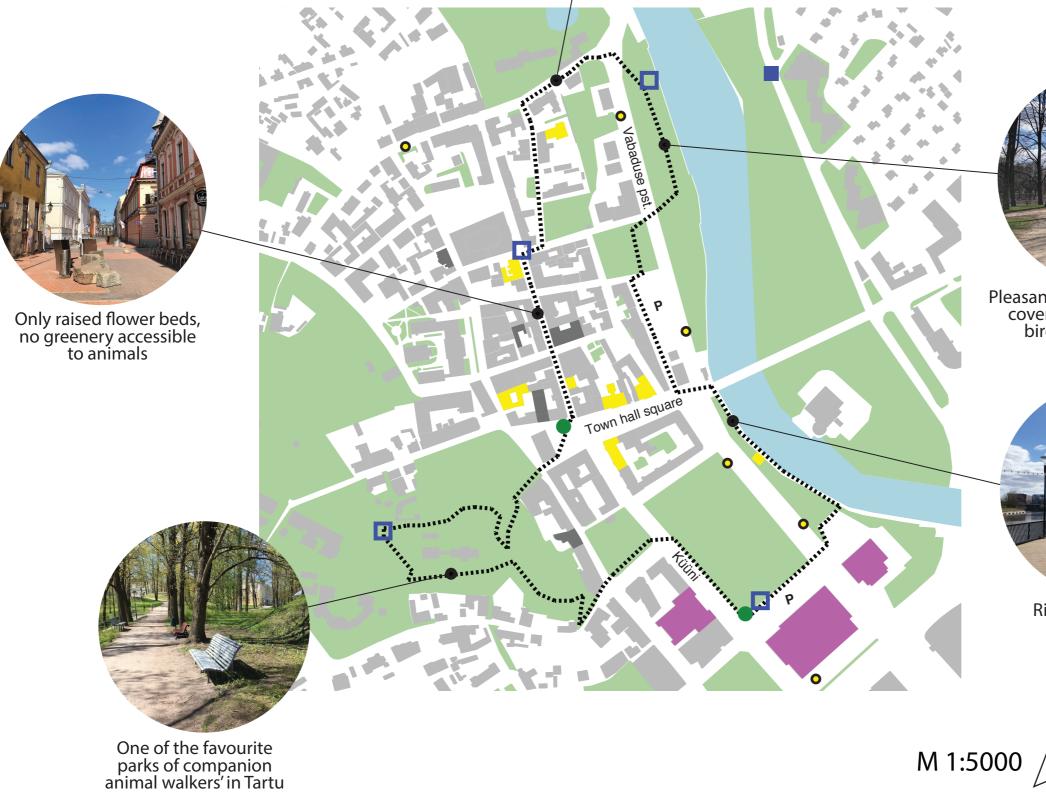
This trail could be a great starting point for tourists with companion animals when they search for information about Tartu – they could get information about where to stay in the city centre, where to eat and also where to take their animal for a walk. In an unfamiliar city this is usually the most difficult question – what are the most interesting places where locals go with their animals,.

As this walking route is in the city centre and goes in a circle, it does not have a certain starting or ending point (ill. 51), unlike the Dendropark and Jänese hiking trail. It can be accessed by car, on foot or by public transportation. Over eight different bus lines stop near this trail, so it is easily accessible from all over Tartu. The streets are lit all night long. On this route, there are no existing waste stations with plastic bag dispensers, but there are two existing water fountains. New locations for waste stations are proposed.

Route 2 – Socializing in the city centre Length: 2,5km Walking time: ~40min



Narrow sidewalks, no greenery





Dog-friendly restaurants/bars Dog-friendly hotels/hostels Supermarkets/markets Existing waste station Proposed waste stations Existing water fountain (summer) Main parking lots Bus stop



Pleasant park, suitable ground cover for animals to walk, birdwatching for cats



River promenade



The idea of this trail is to try to incorporate a human's possible social activities with pleasant activities for the companion animal, so that they can be taken along and the benefit for both would be balanced.

This route has, in addition to pleasant areas for companion animals (Toome hill with its greenery and absence of cars), not so pleasant areas in terms of street structure. In the old town, the streets are narrow and there is no greenery to divide the sidewalk from the road (type 1 from illustration 23). Although the old town's main street Rüütli is car-free, it has been renovated with paving stones and the only nature that exists on this street has been put to flowerpots that are raised from the ground (see illustration 52) where animals cannot reach.

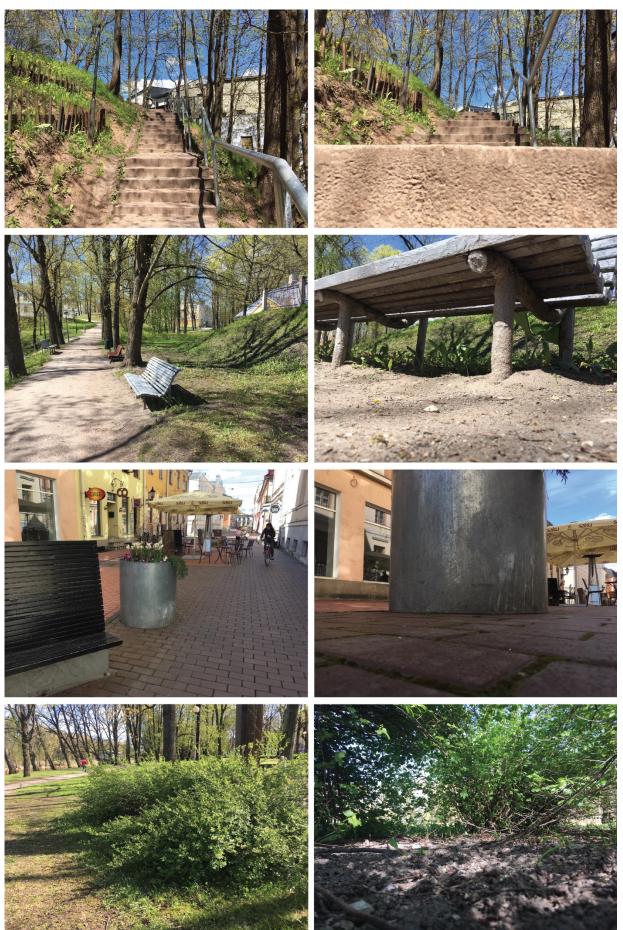


Illustration 52. Selected characteristics of the route planned in the city centre through the eyes of the human and the companion animal. (Vardja, 2020)

I propose an intervention (ill. 53) to show how this urban environment consisting mostly of man-made materials can be made more suitable for companion animals. When planning portable greenery on the streets, the height should definitely be considered on the companion animal level too (extra flower pots for them). In addition, small sensory gardens can be created all over the city to occupy existing parking spaces. The sensory garden would be concealed from the road side by walls and be open to the sidewalk, so that humans and non-human animals alike can enjoy this area without too much traffic noise or distractions. This mini-park would consist of boxes with live plants that are non-poisonous to animals and even beneficial when sniffing. For example, in Estonian conditions, rosemary, chamomile and catmint could be used. Some plant boxes could also be filled with sand/dirt where ferrets could go digging. Boxes could be with different heights, some on the ground level, some higher up, but there should be a possibility for the animals to climb higher and investigate all the plants.



Illustration 53. View of Rüütli street showing a sensory garden possible location in the city centre instead of a parking spot and portable greenery on the level of companion animal reach (Vardja, 2020)



Illustration 54. An example of the idea how the parking space sensory garden could look like from the inside. This specific park is meant for humans (also the plants), but it could be adapted to companion animal use. Everything could be built from the wood, but with different heights. For the animals of course there should be smaller steps in order for them to climb to higher surfaces and there should be no gaps between the wooden slabs, so that their paws could not get stuck. (Benchspace, 2019)

4.3.3 Route 3 – A Quick Stroll in the Home Neighbourhood



Length: 1km Walking time: ~15min

Illustration 55. Location of the Annelinn's walking route (Vardja, 2020)

There are several reasons for choosing this area as the third walking route. As mentioned before, Annelinn had one of the highest concentration of walkers. In addition, this neighbourhood is one of the examples of Soviet panel housing districts and, as these types of areas have sparked discussions about the quality of the living environment¹⁸⁵, it is interesting to see it from the perspective of the animal and analyse, based on the findings, how this area might affect companion animals. This concrete area of Annelinn was chosen because of the proximity to the Sõpruse dog park and Anne canal trail (route could be extended there in the future).

In addition, several current walking routes pass by near this area (ill. 18), but they pass through school territory that is forbidden (there are prohibiting signs). This route is offering an alternative to that. Tartu has not stated in its regulations that it is forbidden to go to the school territory with an animal (unlike some other cities), so probably the signs have been put up by the schools. Although the idea of my work is to include companion animals to urban environment, I think the welfare of the animal needs to be considered at all times. Offering alternatives to passing by in the middle of two schools and kindergartens can be beneficial to the animals. This environment might not be so pleasant for them (for example, in the morning when there is a lot of foot traffic and noise).

The third walk is a quick 15-minute stroll and it is mainly meant for the local inhabitants of this neighbourhood. In terms of companion animals, it is quiet (there is minimum amount of exposure to traffic on this route), and there is ample space between the buildings to accommodate different companion animals who can have enough distance to observe each other from further away (ill. 56). Although a main highway goes next to this route, the green strip is so wide and covered with different

¹⁸⁵ See for example: M. Mutso, Kas "mägedel" on tulevikku? [Do "hills" have a future?]. Sirp 10 November 2011, https://sirp.ee/s1-artiklid/arhitektuur/kas-maegedel-on-tulevikku/ (accessed 9 May, 2020)

vegetation (high and low) that it is possible not to notice the heavy traffic at. There is one smaller kindergarten in the middle of the route, so some noise might come from there, depending on the season and time of the day. But it might be interesting for animals to look at the children from further away and just to observe their action.

The only negative side is that the space is quite homogeneous in between the buildings (ill. 57) – empty fields between the houses where the grass is cut. As animals like visual variation and different points of view, this area could be enriched with topographical forms (ill. 58). Different plants and sensory gardens can also be used in this area to make the green areas more biodiverse. Trees that are located on the route are great for climbing for cats (ill. 59).

Route 3 – A Quick Stroll in the Home Neighbourhood Length: 1km Walking time: ~15min



Illustration 56. Walking route in Annelinn (Vardja, 2020)

Existing waste station Proposed waste stations

School and kindergarten territory



Natural paths where walking is better for the animal in terms of ground cover



Illustration 57. Main characteristics of the Annelinn's walking route (Vardja, 2020)



Illustration 58. Enriching the animals' lives through topography (Vardja, 2020)



Illustration 59. There are quite many trees in this area where cats could climb on. (Vardja, 2020)

4.4 Future and Larger Scale Implications

Although it does not belong to the scope of this Master's thesis, the work could be taken further and the whole Tartu could be covered in different types of routes varying in length and suitable environment for companion animals and their caretakers with different needs. Every neighbourhood could have the best possible routes sketched out with different timeframes (for example, 15 min, 30 min and 1h walk), as taking their animals for a walk depends on the owners, and time is the most important parameter people use to choose where to go for a walk.

These routes could be compiled into a booklet that can be distributed to tourists or people just moving to the city. One option is also to make an app where first-time companion animal caretakers, people who have just moved to Tartu with their animal companions, tourists trying to find activities they could do with their animals, and other inhabitants in Tartu who sometimes would just like to visit other neighbourhoods could get useful information from about where to walk with their animal.

On a larger scale, including companion animals in our thinking about cities on policy and planning practice level, can have more far-reaching positive effects. When there are more people walking on the streets, it will create a sense of security for the whole community. This could also have a positive effect on the economy – the more people are on foot, the more likely they are to stop at small businesses that maybe otherwise are hard to reach because of problems with parking. When they are offered the opportunity, they can stop by shops, restaurants and create additional revenue. As already mentioned before, these routes could also create more tourism from domestic and neighbouring countries when marketed right.

Planning for companion animals and their walkers will not only affect and improve their city experience, other user groups can also benefit. For example, young children's viewpoint is much closer to that of an animal than a grown up. Enriching animal's perspective will also offer new interesting experiences for children. The sensory garden solution is not only for animals, but suitable for humans, because the plants have almost the same effects on humans as they have on dogs. In addition, diverse plant selection is good for the insects. Companion animal-friendly design is supporting the well-being of all user groups (humans as well as wild animals and insects).

Conclusion

This thesis claims that in current urban planning practices, companion animals and their humans are barely considered at all as they have become such an ordinary sight and seem to belong rather to the private sphere of home. However, as cities are not only human habitats and the number of companion animals is constantly increasing, we need to expand our urban compassion footprint and look beyond human-centred design.

The aim of this thesis is to research the current situation of companion animals and their guardians in urban public spaces, identify their needs and then offer solutions about how better to integrate them into the urban environment. I started to approach this topic by looking at the history of how wild animals became pets in the first place, sharing life with humans from the very first settlements and how we have reached the modern day practices of keeping companion animals.

On arriving at the current practices of keeping companion animals in Western cities, I explored whether there is anything that has been done for companion animals and their guardians and, if there is, what and by whom. I identified three categories through which the situation of animals and their humans in a city can be analysed – legislation (how local city councils regulate pet keeping, what the animal protection laws are); ownership and housing (how easy it is to find housing with companion animal), animal-oriented consumption environments and public spaces (if there are special businesses directed to companion animals, public projects done by private companies or city councils). In the field of urban planning and related legislations, the results were scarce. There were mentions from the city government side of the need for recognizing humans with companion animals in urban public places, but there are no concrete examples, guidelines or policies how to actually do it.

The overview of Western cities was followed by a situation assessment in Estonia, after which I focused more specifically on Tartu where I conducted my empirical study. The aim of the empirical study was to analyse the current urban landscape experience of companion animal walkers and, using the insight combined with the scientific study, to find an answer to the main question – how to better integrate companion animals and their guardians into urban public spaces.

The empirical study had 155 respondents in total. Most of them were dog owners, but there were also ferret, cat and rabbit owners. It shows that dogs are not the only companion animals that people take outside for walks. My proposal also tried to take this into consideration. The city of Tartu seems to be lacking in some cases even the most basic amenities for companion animals and their guardians – there are not enough waste stations and public water fountains. I identified through this study the key elements that influence walking: the time the guardian has, practical aspects and quality of the infrastructure. On these elements I proposed three walking routes with different purposes. Through these routes, animals and their humans can be made more visible in the urban environment, as walking is the basic need and natural part of their everyday life.

This thesis additionally demonstrated through a pop-up sensory garden that there is an actual need in current Estonian city planning for these changes in ways of thinking. I created an installation in Tartu in the form of a sniffing garden for animals and their guardians in order to measure public interest in the topic and test out how in real life a public space solution for companion animals and their caregivers could work. The garden was visited in four days by at least 49 people and the feedback was positive.

The urban environment needs to be looked at from a new perspective – that of a non-human animal, literally and figuratively. This thesis found that the needs of companion animal owners and animals themselves need to be identified and then translated into legislation – what kinds of plants we use in city landscaping, how we maintain our roads in the winter, what kind of street structure we create. Even through small interventions, the urban landscape experience of animals and their humans can be made better (using non-poisonous plants, not mowing too often, offering mental stimulation and enrichment through different surfaces).

Kokkuvõte

Käesolevas magistritöös väidan, et tänases linnaplaneerimise praktikas ei arvestata lemmikloomade ja nende omanikega peaaegu üldse. Selle põhjuseks loen tõsiasja, et nende näol on tegemist niivõrd tavapärase vaatepildiga ning nad näivad kuuluvat pigem kodusesse erasfääri. Kuna aga linnad pole elukeskkonnaks ainult inimestele ning lemmikloomade arv on tõusmas, peame tegema linnaplaneerimist veelgi enam kaasavaks ning inimkesksusest kaugemale vaatama.

Antud töö eesmärgiks on uurida lemmikloomade ja nende omanike hetkeolukorda avalikus linnaruumis, tuvastada nende vajadused ning pakkuda lahendusi nende paremaks lõimimiseks linnakeskkonda. Alustasin käesolevale teemale lähenemist ajaloost - kuidas metsloomadest lemmikloomad kujunesid ning kuidas esmaasustustes inimeste kõrval elamisest oleme jõudnud lemmikloomapidamise tänapäeva.

Jõudes tänapäeva läänemaailma, vaatlesin, kas, mida ja kelle poolt lemmikloomade ja nende omanike jaoks ära on tehtud. Leidsin kolm kategooriat, mille kaudu saab lemmikloomade ja nende omanike olukorda linnas analüüsida - seadusandlus (kuidas toimub linnavalitsuse tasandil lemmikloomapidamise reguleerimine, millised on loomakaitseseadused), majutus (kui kerge on koos lemmikloomaga elamispinda leida), loomadele suunatud tarbimiskeskkond ja avalik ruum (lemmikloomadele suunatud äride olemasolu, eraettevõtete või linnavalitsuste poolt tehtud avalikud projektid). Linnaplaneerimise ja sellega seotud seadusandluse osas olid tulemused napid. Linnavalitsuse poolelt mainiti vajadust avalikus linnaruumis lemmikloomaomanikega arvestada, kuid puudusid konkreetsed juhised või nõuded, kuidas seda reaalselt teha.

Läänemaailma linnade ülevaatele järgnes hinnang olukorrale Eestis ning täpsemalt Tartus, kus viisin läbi empiirilise uuringu. Selle uuringu eesmärgiks oli analüüsida, kuidas lemmikloomadega jalutajad tänast linnamaastiku tajuvad ning selle tulemustest lähtuvalt leida vastus põhiküsimusele - kuidas lemmikloomi ja nende omanikke paremini linnaruumi kaasata.

Uuringule vastas kokku 155 inimest. Enamus neist olid koeraomanikud, kuid leidus ka tuhkru-, kassi- ja jäneseomanikke, mis näitab, et koerad pole ainsad lemmikloomad, kellega inimesed õues jalutamas käivad ning oma ettepanekutes võtsin seda ka arvesse. Tartu linnas puuduvad lemmikloomade ja nende omanike jaoks kohati isegi kõige elementaarsemad vahendid, näiteks pole piisavalt prügikaste ning joogiveekraane. Tuvastasin uuringu raames ka peamised faktorid, mis jalutamist mõjutavad - kui palju omanikul aega on ning infrastruktuuri praktilisus ja kvaliteet. Neist faktoritest lähtuvalt pakkusin välja kolm jalutusteekonda erineva eesmärgiga. Nende teekondade kaudu saab lemmikloomi ja nende omanikke linnaruumis nähtavamaks teha, kuna jalutamine on nende põhivajadus ja osa igapäevaelust.

Lisaks tõestasin oma magistritöös ka pop-up tajuaia abil, et tänases Eesti linnaplaneerimises on sedasorti mõtteviisi muudatuste järele reaalne vajadus. Lõin Tartusse installatsiooni korras nuuskimisaia lemmikloomadele ja nende omanikele. Selle eesmärgiks oli mõõta avalikkuse huvi antud teema vastu ning katsetada, kuidas lemmikloomade ja nende omanike jaoks mõeldud avaliku ruumi lahendus reaalsuses toimiks. Tajuaeda külastas nelja päeva jooksul vähemalt 49 inimest ning tagasiside oli positiivne.

Linnakeskkonnale on vaja hakata vaatama uue nurga alt - mitteinimesest looma perspektiivist, nii otseses kui kaudses mõttes. Jõudsin käesolevas magistritöös järeldusele, et lemmikloomade ja nende omanike vajadused on tarvis kindlaks teha ning seejärel seadusandlusesse lisada, nt. milliseid taimi linnahaljastuses kasutada, kuidas talviti teid hooldada, milliseid tänavastruktuure luua. Isegi väikeste sekkumistega (mittemürgiste taimede kasutamine, harvem niitmine, vaimse stimulatsiooni ja erinevate pindade abil rikastamise pakkumine) on võimalik linnamaastikku lemmikloomade ja nende omanike jaoks paremaks teha.

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Appendixes

Appendix A

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Appendix B

Küsimustik Tartu lemmikloomapidajatele

Hea Tartu lemmikloomaomanik!

Olen kirjutamas Eesti Kunstiakadeemias urbanistika erialal lemmikloomadest magistritööd "Inimdomineeritud linnakeskkonnast liigirohkema linnaruumini". Magistritöö põhieesmärgiks on välja selgitada Tartu näitel, kuidas on läbi linnadisaini võimalik lemmikloomi ja nende omanikke paremini avalikku ruumi kaasata. Lemmikloomade all mõtlen kõiki linnas peetavaid loomi, kelle elu väliruumis viibimine rikastab (nt kassid, tuhkrud, minisead jne).

Palun aidake kaasa minu magistritöö valmimisele, vastates antud küsimustikule. Küsimustiku eesmärgiks on välja selgitada:

1) milliste lemmikloomadega käiakse Tartu tänavatel/parkides jalutamas;

2) millised on kõige populaarsemad jalutamisteekonnad erinevates linnaosades;

3) millest tunnevad lemmikloomaomanikud linnaruumis kõige rohkem puudust.

Vastamine võtab aega kuni 10 minutit ning kõik vastused on anonüümsed.

Ette tänades

Maiken Vardja maiken.vardja@artun.ee

1. Üldine taustainfo

– Vanus

alla 18 19-25 26-35 36-49 50-64 üle 65

– Sugu

Naine Mees

- Millise lemmikloomaga jalutate?

Koer Kass

Tuhkur

Jänes

Minisiga

Muu (palun täpsustage)

- Kui tihti käite enda lemmikloomaga jalutamas (väljaspool koduaeda)?

- 1 kord kuus
- 1 kord nädalas
- 1 kord päevas

2 korda päevas 3-4 korda päevas Muu (palun täpsustage)

- Kas Teie lemmikloom on kiibistatud ja mõnda registrisse kantud?

Jah

Ei On kiibistatud, kuid pole registrisse kantud Ei tea/pole kindel

 Kas jalutate enda lemmikloomaga rihmastatult või lahtiselt? Rihmastatult Lahtiselt Kuidas kunagi

– Kas olete külastanud oma lemmikloomaga väljaspool kodu asuvaid kohti (võite märkida mitu sobivat vastusevarianti)?

Olen käinud restoranis Olen käinud hotellis Olen käinud avalikul üritusel Olen tööle kaasa võtnud Muu (palun täpsustage)

2. Kaardile märgitavad vastused

– Igapäevane jalutamisteekond. Klikake antud küsimusele, seejärel saate hakata kaardile teekonda märkima. Joonistage kaardile tavapärane/igapäevane jalutamisteekond enda lemmikloomaga. Kui neid on mitu, võite ka mitu teekonda kaardile märkida.

– Meeldiv koht. Klikake antud küsimusele, seejärel saate punkti kaardile kanda. Märkige Tartu linnas meeldiv koht/kohad, kus oma lemmikloomaga viibida. Punkt võib asuda ka jalutusteekonnal.

– Ebameeldiv koht. Klikake antud küsimusele, seejärel saate punkti kaardile kanda. Märkige Tartu linnas ebameeldiv koht/kohad, kus oma lemmikloomaga viibida. Punkt võib asuda ka jalutusteekonnal.

3. Kirjeldavad küsimused, palun vastake vabas vormis

– Millest tunnete puudust oma lemmikloomaga tavapärasel jalutamisteekonnal liikudes (nt prügikastidest, pinkidest, rohelusest, veevõtukohtadest, treeningkohtadest vms)?

– Kas märkate enda lemmiklooma eelistusi jalutusteekonna suhtes ning lasete ka temal teekonda valida (lähete sinna, kuhu loom soovib)? Kui tihti?

– Kas tunnete, et soovite oma lemmikloomaga rohkemates kohtades käia, kuid mingil põhjusel ei ole see võimalik? Kui jah, siis palun täpsustage, kuhu olete soovinud minna ja miks see ei ole võimalik olnud mingil põhjusel (nt teiste mitteloomaomanike reaktsioon, puudulik infrastruktuur jne).

Appendix C

Dogs

Eesti koerainimesed https://www.facebook.com/groups/eestikoerainimesed/ 35,622 members (accessed 7 March 2019).

Sõbralikud Eesti koerainimesed https://www.facebook.com/groups/1591772904400239/ 2,652 members (accessed 10 March 2019).

Tartu sotsiaalsed koerad https://www.facebook.com/groups/341760349353406/ 1,150 members (accessed 10 March 2019).

Sõpruse koertepark https://www.facebook.com/groups/577636739110308/ 304 members (accessed 10 March 2019).

Cats

Eesti kassiinimesed https://www.facebook.com/groups/EestiKassiinimesed/ 9,133 members (accessed 7 March 2019).

Kassisõbrad https://www.facebook.com/groups/530229760322528/ 28,931 members (accessed 6 March 2019).

Ferrets

Valgetuhkur Boneknapper&Lego Duplo&Pickpocket's Awe of Thunder https://www.facebook.com/Valgetuhkur-BoneknapperLego-Du- ploPickpockets-Awe-of-Thunder-1229121700437602 / 185 likes (accessed 8 March 2019).

All animals

Tartu koduta loomade varjupaiga sõbrad https://www.facebook.com/groups/244684673134854/ 60 members (accessed 6 March 2019).

My own personal Facebook page

Wrote to, but got no answer/did not share my questionnaire

Tartu City Council

Eesti Tuhkrute Liit MTÜ https://www.facebook.com/Eesti-Tuh- krute-Liit-MT%C3%9C-161311440547027/ 656 likes (accessed 8 March 2019).

Tartu Koduta Loomade Varjupaik https://www.facebook.com/Loomadevarjupaik/ 6769 likes (accessed 10 March 2019).