Amina El Shazly

An Historical Ecology of the Baladi Dog in Egypt



Abstract

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Dogs have a long but neglected history as companion species in Egypt history. From the most valued companion in ancient Egypt the relationship between dogs and humans has changed over time. However, in the present day the Egyptian baladi dog has been abused, neglected, unwanted for centuries. In this thesis, I investigate the nature and relationships between humans and dogs in Egypt in the past and present drawing on archeological, historical and genetic information. I will dig deeper into dog genetics to better understand the distinction between the baladi dog in relation to other breeds. Using online surveys, I interview baladi and non-baladi dog owners to understand how Egyptians perceive the baladi dog today exploring also how and why this perception is changing. Moreover, through interviews with rescuers and veterinarians I examine further the general perception of baladi dogs in Egypt from their perspectives. As I show, perceptions of the baladi dog have changed positively over the recent years both in Egypt and abroad, though there is still a long way to go. The better status of the perceptions of the baladi dog has also meant that the baladi is increasingly seen as a 'breed' or a particular dog type. The changing perceptions of the baladi dog and the debates around them is discussed and scrutinized in relation to urban planning and policy.

Keywords: Dogs, History, Historical Ecology, Egypt, Animal studies, Environment, Canine, Egyptology, Baladi

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Department of Archeology and Ancient History, Uppsala University, Box 626, 75126 Uppsala, Sweden

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1. Introduction

In symbolic terms, the domestic dog exists precariously in the no-man's s land between the human and nonhuman worlds

In this thesis, I trace the relationship between humans and dogs from the ancient era to the present. In particular, I review the discourse around dogs in modern day urban Egypt. To understand our relationship to the dog is also to understand how we define ourselves in relation to our fellow species. The dog remains perhaps one of our most valued companion species. This study investigates how the relationship between humans and dogs in Egypt has changed over time. Specifically I will try and trace the 'baladi dog' historically and trace the debates around the baladi dog in the present. As there is a rapid change in the national perception of baladi dogs during the time of writing this thesis, I incorporate the latest debates revolving around the breed. (not sure where to put this piece of information in the introduction)

The Egyptian baladi dog evolved from ancient Egyptian dogs. It is a stray dog that lives on the streets of Egypt. This dog, which is now mixed with other popular breeds, is considered dirty and unwanted by most Egyptians. The Egyptian government has been working on controlling the evergrowing population by poisoning them or shooting them openly. Many animal lovers and rescuers are trying to create awareness of this problem and recent years have seen a lot of campaigning in social media to change the status of the baladi dog. Baladi dogs have also been exported to other countries which has led to it now becoming regarded as a highly valued breed. In this thesis I will trace and follow these debates on the baladi dog. As I began my research, I found the gap in academic studies about the baladi dog astonishing. There are very few published works about the dog in Egypt in general with some notable exceptions. This thesis aims to fill this knowledge gap by discussing the long term history of the dog in Egypt and the formation of the concept and breed of the baladi dog.

One initial inspiration for this study has been the article written in 1938 by the American Egyptologist, George Andrew Reisner. The article *Ancient King Gives Dog a Royal Burial* is based on the translation of a limestone stela that was found in Giza, Egypt and dated to the 6dynasty, which lasted from 2345–2182 BC. According to Reisner, the stela depicts a man standing, holding what appears to be the leash of a dog (Reisner, 1938). A hieroglyphic inscription on the stela reads as follows:

The dog, which was the guard of His Majesty. Abuwtiyuw is his name. His majesty ordered that he be buried (ceremonially), that he be given a coffin from the royal treasury, fine linen in great quantity, (and) incense. His Majesty (also) gave perfumed ointment and (ordered) that a tomb be

built for him by the hands of masons. His Majesty did this for him in order that he (the dog) might be honored (before the great God, Anubis). (Reisner, 1938, 8)

Reisner explains on the basis of his translation that the dog, Abuwtiyuw, actually did not belong to the king himself, but rather to one of the king's servants. However, Abuwtiyuw guarded the king and would bark—as all Egyptian dogs do—at any stranger who came close to him (Reisner, 1938). The dog came to be the king's favorite. Abuwtiyuw was therefore buried in a royal manner, as a human would have been, and was expected to cross over to the afterlife in order to wait there for the king, so the dog would continue guarding him. It was this story about Abuwtiyuw that awoke my interest in the Egyptian dog. It also made me want to investigate how our relationship with the dog has changed over time, from being, as Abuwtiyuw was, valued a companion species, to today's situation where the Egyptian dog is regarded as a 'street dog', as a vermin to be eradicated. But I also wanted to follow how in recent years the Egyptian dog has become reevaluated as a companion dog and as a breed thanks to the hard work of some very dedicated individuals, some of whom will be interviewed in this thesis.

In Arabic, the word baladi is translated to 'my country' and can mean 'local.' However, in modern colloquial Egyptian Arabic, the word is often used to refer to something of a lower social class or something no one would care much for (Arabic.desert-sky.net, 2007). Two of the many questions I will explore in this thesis is then how did the derogatory name 'baladi' came to name an animal that the ancient pharos used to hold in such high regard, and how does the name itself and its connotations affect how Egyptians perceive and value the Egyptian dog? Being an Egyptian myself, I have come to learn many things about the culture of Egypt and its traditions, and one of them is how the majority of Egyptians use religion to satisfy their subconscious. For example, it is widely believed in Egypt that dogs are religiously dirty and impure, that they prevent angels from entering a house, and that touching them repeals the ablution done before prayer. For example, in The Book of Purification of Sahih Muslim for hadith, mentions that prophet Mohammed (PBUH) gave orders to kill dogs and only keep the ones used for hunting and herding sheep. Another example of disfavor of dogs in Islamic religion is the hadith in *The Book of Hunting* and Slaughtering of Sahih Al Bukhari. The hadith brings into being the belief that dogs are impure by saying that whoever keeps a dog in their house that is not a hunting dog or a shepherd dog will lose two rewards a day (Sahih al-Bukhari 5480). Although the impurity of the dog has never been mentioned in the Quran itself, these texts are widely followed by Muslim Egyptians. Because of this tradition, unknown dogs have been automatically seen as impure. But event though unknown dogs were regarded as impure, dogs were still valued as working dogs. The value of the dogs was assessed based on their use as hunting and/or herd dogs. These working dogs were still allowed and favored in Muslim religion and Egyptian culture.

Nowadays, the system of value may have shifted in Egypt. Though working dogs are still common in the countryside, in the cities the value is being based on pedigree and types of dogs. Thus, dogs in Egypt today are strongly judged and valued based on their appearance and pedigree. Being a dog lover myself, I remember as a little girl nagging my parents to get me a Dalmatian, and as the good parents that they are, I had more than two Dalmatians growing up. Many Egyptians prefer popular 'pure' breeds like golden retrievers, Dalmatians, cocker spaniels, and so on, believing it is more prestigious to have a pure breed than a 'mixed breed' or Egyptian dog. However, social media has had a significant impact on Egyptian society's general perspective on baladi dogs. Over

the past five years, as baladi dog lovers and rescuers have shared their thoughts and stories on social media, more Egyptians have come to learn and care about them. Stories of their abuse and neglect have surfaced, including how the government culls the dog populations in the cities. The increase of non-profit organizations aiming to save as many strays as possible has encouraged more Egyptians to appreciate these dogs and respect their place in society. Moreover, baladi dogs have been exported to other countries and they are now increasingly becoming known and discussed as a 'breed'. Thus in many regards, the status of the baladi dog has shifted somewhat and is still changing, something which I hope to capture and explain in this study.

1.1. Research Questions and Aims

I use historical ecology to help me frame my research, as my thesis is about the baladi dog and its relationship with Egyptians. This thesis aims to restart a conversation about the past and possible future of the Egyptian dog as a companion that has so far only been talked about in history books. I also investigate how the baladi dog is debated and discussed by different stakeholders in Egypt today. Ultimately, I am interested in this debate, as I want to explore how it can be changed and reformed. Beginning this research, I had the suspicion that preconceived ideas of the baladi dog as feral, dirty, and diseased affects our treatment of the baladi. It is my hope and motivation that the historical understanding of the perceptions of the baladi and also of breed standards and genetics, may contribute to better treatment of the baladi dog.

Due to the lack of academic or scholarly literature about the dogs, I have conducted online surveys and interviewed both animal rescuers and veterinaries in Egypt to create a clearer picture of the status of baladi dogs in Egypt. The questions I aim to answer with this study are as follows:

- What has been the nature of the relationship between Egyptians and dogs in the past compared to the present?
- How and why do modern Egyptians view the Egyptian baladi dog differently than other dogs?
- How did Egyptians' perspective on baladi dogs change over time?
- How is Egyptian's perception of dogs changing today and why?

1.2. Outline of the study

The second chapter of this thesis gives a preview on the kind of data and methods I use in the study and includes a brief background on dogs and the way they are perceived in Egypt.

The third chapter delves into the background story and history of the dog as a companion species to ancient Egyptians. I use secondary sources and review a number of studies from Archaeology, Egyptology, and Biology to better understand the history of the dog in Egypt. I also discuss the possible breeds that were present during Egypt's pharaonic era. Moreover, the third chapter paves the road to a further understanding of the genome and social behavior of dogs which is intended as a means to better understand baladis in relation to other popular breeds. I will also in this section discuss the character of the baladi dog in relation to other breeds.

The fourth chapter focuses in on baladi dogs — and also other dog types and how they are perceived in Egypt. Using the tools of online surveys, social media and web searches I discuss the general perception of dogs in Egypt. I also compliment these sources by interviews with dog owners. Moreover, I broadly discuss the possible reasons behind the negative public conception

of the baladi dog in Egypt. The aim of Chapter four is to compare how baladi dogs are perceived and described in relation to other dog types in Egypt, but also to explore some of the temperament and characteristics of the baladi dog as reported by rescuers and owners.

In the fifth chapter, I interview an individual rescuer of dogs in Egypt. Laila Hamdy Fayek who has rescued animals all her life. She started her high profile cases in 2013. I also interview Ahmed Al Shurbaji, founder of a non-profit and non-governmental organization in Egypt that rescues dogs, called HOPE - Baladi Rescue & Rehabilitation. The HOPE rescue organization was launched in 2015. I converse with both rescuers about the perception of the baladi dog in Egypt and abroad and how it has changed over time. Through the interviews I also represent the individual struggles these animal rescuers face in Egypt but also what motivates them in their daily job. The informants tell me about their experiences and also comment on how the Egyptian government is handling growing population of street dogs. Moreover, as veterinaries are the ones who handle and deal with dogs everyday during work, they are an important part for this thesis. To get a better view of the baladi situation and how and if they perceive a change in the understanding of baladi dogs I also interview six veterinarians in Cairo to get an extensive idea about baladi dogs in Egypt.

In Chapter six, I discuss the results of my study and aim to expound my thoughts of how the lives of baladi dogs can be improved. I begin by summarizing and analyzing the results of the surveys and interviews. Using social media as a lens, I then discuss the ongoing change of the perception of baladi dogs in Egypt. I briefly discuss the baladi dogs in relation to urban planning and development. More importantly, I discuss the different aspects of the relationship between the baladi dog and the Egyptian citizens. I also discuss the growing presence of debates on baladi dogs on Egyptian talk shows and social media and its context concluding that there is a growing awareness of the baladi dogs in Egypt.

In the seventh chapter I conclude the study by summarizing the overall research and the results in relation to the research questions and I also make some suggestions for how to change the negative perception of the baladi dog and for a better management of the stray dogs in Egypt.

2. Methods and sources

When I was thinking of a topic for my thesis, I had just gotten a dog off the streets of Egypt as my father had found a puppy under a car and brought him home. The study then evolved in part as a personal desire to know more about the origin of the type of dog we were raising in our house. I wanted to know more about the breed asking: What kind of dog was it? What size is it going to be when it grows? Is it easy to train? As discussed in the introduction, another source of inspiration was the ancient story about the dog Abuwtiyuw that made me realise that the dogs raised in ancient Egypt were once highly regarded, unlike the street dog that was now in my care. This made me ask what kind of dogs lived in ancient Egypt? How did the ancient Egyptians perceive the dog? This thesis then became and exploration and the challenge for me has been if I could link the contemporary Egyptian dog to the ancient Egyptian one?

2.1. Historical Ecology

Historical ecology is the frame and method of research of this thesis. Since this study combines the past with the present, I chose historical ecology in order to bridge the gap in the history of the Egyptian dogs and their relationship with humans. Although historical ecology can have different meanings according to different disciplines, it is agreed that it investigates the history of the relationship between humans and their environments (see Szabó, 2014). Therefore, literature from various fields, such as genetics, biology, history, and digital marketing, are drawn upon in this research. The interdependence of these disciplines is a key to better understand the whole. Plants and animals have survived on the planet long before humans did, however, everything started changing when humans arrived. According to Balée and Erickson (2007) in their book Time and Complexity in Historical Ecology, a collection of studies from various fields; history and evolution play a significant role in the makeup of historical ecology. One cannot study the animals in ancient and modern Egypt without studying the humans who traded and bred them. It is almost impossible to deny the mark left on the landscape and creatures living in Egypt. The thesis also falls within the field of animal studies or multispecies history and specifically urban interspecies history as defined in the volume Animal Cities (Atkins 2012). Both Atkins (2012) and Howell (2012) in the same book lay out a field of study that connects our changing relationship with the dog to urbanism and modernism. This focus, draws on other directions in interspecies history. Moreover, writing about animals throughout history is crucial to understanding our own species (Fudge 2002, 5). As it can be impossible to learn the history of animals without the human perspective. Dogs have been intertwined with Egyptians for centuries and will continue to be so.

2.2. Long-Term Relationships

Though there has been little written on the Egyptian dog in the 20th century, the scientific interest in Egyptian dogs seems to have been intense by the end of the 19th century and I therefore refer to these works here. I draw widely on W. Youatt's popular account The Dog written in 1845 that gives a still excellent historical background on the perception of the dog globally and begins his narrative with ancient Egypt. Another source that I use here is Adolf Erman's book Life in Ancient Egypt from 1894 that discusses the role of dogs and dog breeds specifically. Moreover, I draw on the pioneer Egyptologist and English writer John Gardner Wilkinson and S Birch (1879) and their book The Manners and Customs of Ancient Egyptians, The 1876 analyses of the Egyptologist and antiquary Samuel Birch of dog representations on tablets published in The Transactions of The Society of Biblical Archeology is a very useful source when discussing possible dog breeds in ancient Egypt. For more recent works, I further discuss dogs in Egypt using Alan Mikhail's The Animal in Ottoman Egypt (2013) that investigates the relationship between Egyptians and dogs before and after the eighteenth century. Moreover, I briefly discuss the saluki and basenji breeds as possible ancestors to the contemporary Egyptian baladi dogs. I also discuss Paul Nicholson and Salima Ikram's exceptional excavation and research (2015) on the 'Dog Catacombs' which contained millions of mummified animals, mostly jackals and dogs, to understand the gravity of dogs' importance in the ancient Egyptian society. Moreover, to dig deeper into the dog-man relationship, I utilize Egyptologist Salima Ikram's (2005) illuminative work Divine Creatures Animal Mummies in Ancient Egypt that combines a series of studies on the different types of mummification and how ancient Egyptians mummified animals and specifically pet dogs for its collective historical evidence on how ancient Egyptians regarded dogs as companion creatures.

I have also included discussion and background on the genetics of dog as a background for the reader, although the genetic history is still being mapped. Parker et al. (2004) investigated the genetic relationship of recognized breeds. Vonholdt et al. (2010) studied the geographical and evolutionary factors in dog genetic diversification. Moreover, I utilize Larson et al. (2012) study on the origin of dogs. are the three vital studies on dog genetics and origin, specifically the basenji and saluki which are believed to be the Egyptian Baladi dogs' ancestors. Moreover, I include the rigorous study of behavior geneticist and psychologist John Paul Scott and biologist and also behavior geneticist John L. Fuller (1965) Genetics and the Social Behavior of the Dog. The study which was turned into a book gives substantial insight on the development differences of behavior, expression, and genetics between pure and mixed dog breeds. Another useful study for this paper is the Bellumori et al. (2013) comprehensive study that was done on 27,254 dogs, on the inherited genetical disorders and diseases found in pure and mixed breeds. Moreover, I conclude the genetics section with a recent study done by Donner et al., (2018) on the frequency and distribution of 152 genetic disease variants in over 100,000 mixed and purebred dogs to emphasize the importance of genetics in the breeding process.

2.3. Present day

To understand the issues related to the present day, I combined a literature review with content analyses of social media, online surveys, and interviews. I also carried out a qualitative study, through an internship on a baladi dog rescue organization, HOPE, non-profit and non-governmental Egyptian Baladi Rescue and Rehabilitation organization in Egypt from September to December 2017. This experience allowed me to build up knowledge and understanding around

the subject and was influential when designing the surveys and questionnaires. I have also since continued working with HOPE as a photographer and social media manager. In addition, I also did a number of websearches and surveys that will be described below.

Websearch

The first step conducted was a web search. I used Google's search engine to determine an approximate number of searches for "baladi dogs," and various search strings in relation to this. I used different searches like "Egyptian baladi dogs" "baladi dogs" "Egyptian Dog" "Egyptian Stray Dog" and more that is discussed thoroughly in Chapter 3. Many of the results found on at least the first two pages were news articles about the hard life of stray dogs in Egypt or about an individual dog that was rescued and transferred to Canada. Other links were from online magazines aiming to create awareness about baladis. Moreover, when I used search strings that mentioned popular breeds, the results included fewer news articles and more informative and educational articles and webpages dedicated to those breeds. However, the web search led to many sources and social media discussions that were useful in this research.

Surveys

To be able to collect as much information about baladi dogs as possible, I created online surveys for a variety of people in different roles, including individual and organizational dog rescuers, veterinarians, baladi dog owners, non baladi dog owners and also a non-specific survey about dogs in general as a comparison. The chosen language for survey questions was English except for the veterinarian's interview which was written in both Arabic and English. I used <u>surveyhero.com</u> website to create the surveys. The surveys are still active right now; thus this is to be regarded as a work in progress. The surveys included questions about their experience with dogs in Egypt and questions around the perception of baladis in Egypt and how it is changing over time.

For baladi dog owners, I created an online survey, which was divided into two sections. One section accommodated baladi dog owners in Egypt and the other section was directed towards baladi dog owners abroad. For each respondent, the website generates a sequential number, therefore I will quote respondents here based on this number. In the beginning of the survey, I had added a note indicating there is another section for baladi owners living abroad. However, some owners living abroad actually ended up answering the section for owners living in Egypt and skipped the section of owners abroad. In the analyses of the surveys I have still separated responses were possible. The survey section carried out with baladi owners living in Egypt consisted of 14 questions, and the survey section designed for non-Egyptian dog owners included 12 similar questions. I collected 140 responses in total, and the survey remains active. In the survey, I asked dog owners why they chose baladi dogs and how/if they feel that their baladi dog differ from other breeds (provided the respondents had owned or had experience with other breeds). Moreover, I asked the owners how they experienced the general perception of baladi dogs. I also asked them whether they think the perception has changed/is changing, whether they actively try to change public perception of the baladi dog, and if so, how. In addition, I asked owners about their experience as baladi dog owners and about the baladi's temperament. In the last questions orientated towards baladi dog owners, I also asked them how baladis affect urban planning and Egyptians' social and communal life. Lastly, I asked owners their opinions on spaying and neutering. In addition to these surveys I also created a non baladi dog owners survey to better understand the reason why many Egyptians do not consider baladi dogs as potential pets. The survey consists of 11 questions and was answered by 118 non-baladi dog owners. Moreover, I created another survey to investigate how people perceive baladi dogs in Egypt in general. In this survey, I added pictures of baladis and different breeds that look similar and asked the respondents to choose which one is the baladi and which one is the pure breed. I also asked them if and how they know their current dogs are purebred. This survey was answered by 83 people

Through these various surveys, I was able to build a broader survey questionnaire orientated towards rescuers specifically. In the beginning of the survey, I had written a note asking the respondents for permission to use their names in my thesis, and if they did not want their names to appear, they were free to write "anonymous" in the name section of the survey. Of the 14 surveys done, 13 were named while one respondent preferred to remain anonymous. The named respondents are Aya Abdel Salam, Perry Saber, Fedrica, Tracey Sedky, Sandra, Jen, Sherine Shaker, and Hedaya el Fatih. Additionally, I sent the survey to Maggie who (did not give me a second name) is an expat rescuer living in Sharm El Sheikh city. Moreover, when I moved to another city called El Gouna by the Red Sea, I also reached out to the local animal welfare program in November 2017. I also sent the rescuers survey to Shona El Sayed, founder of El Gouna Stars, who has been rescuing, feeding and doing TNR – trap, neuter and release. the trapping, neutering and releasing of stray animals - campaigns for El Gouna's baladi stray dogs for 9 years. In addition, I sent the survey to Karin Bavnick, head of Dahab (a city in Sinai) animal welfare. Finally, I sent my online surveyhero.com rescuers survey to another animal welfare organization founder, Mona Khalil, who started rescuing dogs 18 years ago. Mona Khalil is also the founder of Egyptian Society for Mercy to Animals (ESMA).

Interviews

During my internship at baladi rescue organization HOPE, I interviewed Ahmed Al Shurbaji, founder and manager of HOPE for an insight on organizational rescues in Egypt. I also interviewed independent rescuer Laila Hamdy Fayek to deeper investigate the situation with baladi dogs in Egypt. I also did an initial short interview with Laila Hamdy Fayek in March 2017, one of Egypt's leading individual rescuers. I later interviewed her again using the same questions I asked to other rescuers.

3. The Long-Term Dog Story

Dogs as companion species in Egypt have a long history. In this chapter, I will explore the history of dogs in ancient Egypt and how they were perceived by Egyptians based on historical and archeological records. Moreover, I will go through the lives of dogs with Egyptians between the 6th and 19th century and how their relationship was reformed in different ways throughout the centuries. I also investigate the possible different breeds of dogs in ancient Egypt. Using secondary sources, I also delve deeper into the origins and genetics of dogs in general.

3.1. Dogs in Ancient Egypt

The importance of dogs is reflected in the mythologies of ancient Egypt (see Youatt 1845). Egypt's rise, that was due to the presence of the Nile running north through the center of the country. Most Egyptians depended on the river and its annual flooding. They predicted the floods by waiting for Sirius —a system of stars in the Milky Way galaxy— to rise. As soon as they saw it, they were quick at make ready and move their animals to higher ground to avoid the flood. The importance and value of the dog is shown in the naming of Sirius as the 'dog-star'. Pharaonic Egyptians associated Sirius with dogs and praised them equally, for its protection and warnings, Sirius was like the barks of the dog (Youatt, 1845, 4). Moreover, Anubis, the Egyptian God of mummification and protector of the tombs, was depicted as having the body of a man and the head of a dog (some believe it is the head of a Jackal). Anubis was important in Egyptian myths for his role in the underworld where he is the one responsible for the bodies of the recently dead (Armour, 2001).

Ancient Egyptians in high positions during the time of the Old Kingdom recorded their lives by drawing on walls (Reisen, 1938). These images give us clues on how people defined themselves in relation to and with animals. I have already given the example and quoted the illustrations and text of the dog Abuwtiyuw in the 6 dynasty (Reisner, 1938, 8). Dogs are a recurring animal on these walls, specifically hunting dogs that were important in the lives of all nobles in all the kingdoms and dynasties in ancient Egypt (Reisner, 1938). From history, we know that hunting was a popular activity in ancient Egypt, and using dogs to hunt made the bond between Egyptians and dogs deeper. Adolf Erman explains in his book Life in Ancient Egypt how greyhound-type dogs were used in hunting big game. The man leads an ox to the desert and waits for a lion to attack it. As soon as the lion attacks, the man lets go of the leashes on his dogs, who run and fall on the lion's head (Erman 1894, 242,). Erman continues, describing the lives of ancient Egyptians as incomplete without dogs. Egyptians were animal lovers who had a partial love for dogs. Dogs were not used only by huntsmen and sportsmen, but they were also common among other groups in the Egyptian society. Dogs would accompany persons when they went out and would lie down next to them at home (idem.). Other dogs were used for companionship, and their deaths were mourned by their owners (Wilkinson and Birch 1879, 98).

Moreover, dogs have a great importance in Egyptian society since the Old Kingdom. However, according to Beverley Miles (2010), the human-dog relationship in ancient Egypt was more than that between a hunting dog and its owner. Dog representations found on walls, amulets and

statuettes depict workingmen guiding a dogs' muzzles to their faces. Miles studied the separate artefacts together, which she claims to show more about the hidden relationship between ancient Egyptians and their dogs. For example, on an enstatite amulet, a seated naked man bending and reaching forward with his hands on the seated dog's head. The dog is facing the man with his tongue on the mouth of the man. This representation shows more intimacy than previous Egyptologists have believed was present between humans and their dogs. The depictions previously mentioned in this chapter, are of a hunter or a tomb owner. In those images there is not much contact between the animal and the human. However, Miles approaches the three artefacts from a human-animal studies perspective to better understand the relationship between Egyptians and dogs in ancient Egypt. It is evident that her analysis of sensory perception exhibits the level of bonding and intimacy that was between Egyptians and their dogs: olfactory, gustatory, tactile and visual. Consequently, the existence of the three depictions in the old dynasty of humans interacting with dogs through mouth to muzzle show more intimacy between the human and the animal than previously thought. (Miles, 2010)

Though there is little research that have investigated the role of dogs specifically since the early 19 century studies, more recent research discusses animal burials more broadly. In 2015, a project led by archeologist and Egyptologist Paul T. Nicholson, and Salima Ikram to research the catacomb of ancient Egyptian canine God Anubis, discovered approximately 7,800,000 animal mummies in the catacomb dating back between the late period (747-332 B.C.) and the Roman period (30 B.C.) The catacomb which is located north-east of the Step Pyramid in Saggara, Egypt



Figure 1. Anonymous. 2400. Egyptian man with calf and dog. Wikimedia Commons. Hunting dog with long narrow muzzle and curled tail.

comprised of mummies of dogs, cats, foxes, jackals and mongooses. The study suggests that the domestic dog represents 92% of the animals found in the catacomb (Nicholson et al., 2015) which does attest to the importance of dogs. In a CBC radio interview in 2015, Ikram speaks about the project and the millions of animal mummies they found in the catacomb. Ikram described the catacomb being enormous in size. They found a lot of fragments, fur, and whole mummies. Ikram hypothesized that the amount of dogs and puppies buried in the catacomb is evidence to concentrated breeding of dogs in ancient Egypt. In fact, the examination of the mummies show that a high number

of the animals were young and possibly newly born (Cardiff University, 2018).

Professor of Egyptology and the director of the Animal Mummy Project, Salima Ikram, explains in her book *Divine Creatures Animal Mummies in Egypt* that there were four types of mummies in ancient Egypt: pets, victual mummies, sacred animals, and votive mummies (Ikram, 2005, 1). Ikram (2005) explains how ancient Egyptians mummified many animals like elephants, lions, and baboons. However, in the royal tombs of the first dynasty rulers at Abydos, four dogs were mummified with their own funerary stelae. Pets were sometimes even buried in the same coffin as the human owner. Ikram gives an example of a man named Hapymin who was buried with his dog,

"curled up at his feet" (Ikram, 2005, 4). Moreover, she claims this practice was based on the desire of the owners to preserve the habit of their pet sleeping beside them and to continue that habit in the afterlife.

From the Late period onwards, we have less information on dogs and there has been even less written but 500 B.C. the love of dogs amongst Egyptians appears to have been widely known. The relationship between Egyptians was commented on by the Greek historian, Herodotus (484BC–c. 25 BC) who wrote about how the Egyptians regarded animals in general (see Youatt, 1845). Herodotus would speak about the way Egyptians regarded animals and dogs in specific. When an Egyptian family's dog died, they shaved themselves as a way of mourning (Youatt, 19, 1845.) Moreover, The Greek philosopher Pythagoras (570 – c. 495 BC) traveled to Egypt to learn the Egyptian philosophy of what happens to the soul after death. Inspired by the love of animals by Egyptians, he founded a new school of thought at his return to Greece. He used to teach with the Egyptian philosophers, that at the end of a man's life, the soul will go into the body of an animal. So when any of his disciples died, he would hold the mouth of a dog to the mouth of the dying man for the soul to enter the dog's body. Because no animal can keep the spirit of the disciple better than that of a loyal canine (Youatt, 21, 1845).

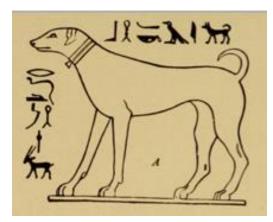
However, perhaps because of their popularity, dogs became less popular with Jews, Christians, and Muslims at the time (Youatt, 1845, 21). The Apostle, in the New Testament warns whom he wrote to, "watch out for those dogs, those mutilators of the flesh" (Philipians, iii). Wherever Judaism and Christianity spread, the dislike of dogs increased. Youatt (1845, 21) proposes that the resentment of dogs originated in the East where the dog was "held in abhorrence as the common scavenger of the streets", thus the dislike of dogs arouse according to Youatt as an urban phenomenon. In fact, Leighton (1907, 4) believed that the hatred of dogs in Judaism was because of the way they were adored by Egyptians. The disregard for dogs was continued in the Muslim tradition. Muslims through the 1800s regarded dogs as unclean and generally it was believed that dogs should not be kept by people at home, but only as protectors of the district or the street (Youatt, 1845, 21). Moreover, Youatt also mentions the Hindus and how they regarded dogs the same way. To the Hindus, the dog was dirty and impure. If a dog was to pass between a teacher and his students, the whole lesson would be regarded as poisoned and should take place on another day. Perhaps this is why both Egypt and India have an overpopulation problem of stray dogs.

However, the relationship between muslims and dogs was not always a negative one. According to Alan Mikhail, the relationship between dogs and Egyptians was a mutual and constructive one (Mikhail, 2014). They used to herd cattle, hunt and simply be companions to Egyptians. But there was always those who considered dogs as dirty and vicious. People did not know how to deal with the dogs population on the streets. In his book, Mikhail stated that during the sixteenth, seventeenth and eighteenth centuries, ideas about dogs were mixed in Islamic countries and especially in Egypt (Mikhail, 81, 2014). However, it is evident that the relationships between Egyptians and dogs started to change to the worse during the nineteenth century. Dogs became widely seen as dirty, noisy, and were becoming useless in people's eyes. They posed a threat to Egypt's growing bureaucracy and urban cities (Mikhail, 104, 2014).

3.2. Mentioned Breeds in the Early Sources

It is believed there have been different breeds of dogs in ancient Egypt from since the 11 dynasty (Erman, 1894). According to Erman, they resembled the basenji, the pharaoh, the greyhound, the saluki, or the whippet. Erman described their physical appearance as graceful, with pointy ears and curled tails. Moreover, according to pioneer Egyptologist and English writer John Gardner Wilkinson and S Birch (1879) in their book The Manners and Customs of Ancient Egyptians, there were several breeds of dogs, fox dogs, hounds and a short-

legged breed that looked like a dachshund or a basset hound. Figure 2. James Watson, 1906. The dog book.



Wikimedia Commons. Bahakaa dog A

One painting from Old Egypt depicts a huntsman with two of his dogs, similar to what we now know as the saluki (Erman, 1894). These characteristics of the Egyptian dog fit perfectly the hunting dog identified as the tesem (Joshua, 2017). Erman (1894) believed, however, that the tesem was not native to Egypt, but to the countries on the Red Sea. Erman also told a story of a prince who preferred to die over being without his greyhound (Erman, 1894). The tesem drawings are found in the predynastic period of ancient Egypt and were drawn with the same characteristics of the previously mentioned breeds. Drawings and paintings of tesem (or tsm) show the elite of ancient Egypt, choosing the tesem as the prestigious breed to own (Goldwasser and Müller, 2002). Additionally, Leighton (1907, 474) writes about the North African Saluki and its varieties thriving in Egypt and beyond in the 1900's. Moreover, he describes another breed in ancient Egypt that looked like a wolf, a big heavily built dog with dangling ears. He also mentions the Greyhound and a small terrier like breed with short legs. This dog was used as a house pet and companion in Egyptian homes. (Leighton, 1907, 4)

Volume four of *The Transactions of The Society* of Biblical Archeology detailed the different types of dogs that lived in ancient Egypt. The document Tablet of Antefaa II was written by Egyptologist and antiquary Samuel Birch in 1876. The tablet was found in the king's tomb in the valley of the El Assassin at Thebes. Birch draws the picture of the lower portion of the tablet, as the upper portion was broken. The lower body of the king is shown with four dogs before him, and one between his legs.

The four dogs had collars around their necks, marked A, B, C, D. Birch delves into each dog breed and where, when, and how they were depicted.

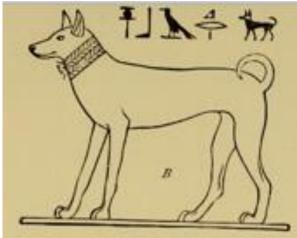


Figure 3. James Watson. 1906. The dog book. Wikimedia Commons. Abakaru dog B

The first dog, A, is wearing a collar with a tie in front and is called "The Dog Bahakaa," with a hieroglyphic expression that means "White antelope," probably in reference "to the color and swiftness of the hound" (Birch 1876, 173). The dog has hanging ears and looks like a foxhound, which is said to have been brought from what was then Nubia. Birch continues to explain that these dogs were also found on the tributes of Ethiopia given to Thomas III and portrayed in the tomb of Rekmara in Thebes. Additionally, the dogs were found on tributes given to Ramses II in Nubia. Moreover, a subspecies of this breed had to be restrained with a leash until the hunter saw the game.

These species, which are like the greyhound, were tall, slim, and fast. Birch is certain that these dogs were a kind of hound and were used for hunting.

The second dog, B, is called "Abakaru". This dog has erect ears, a pointed nose, and a curled tail. He describes the dog's appearance as sharp, with an active look. The dog is the oldest to appear on monuments as old as the 4-dynasty and was called by some The Khufu dog. During the 4dynasty, the dog appears to be a house dog, sitting under the master's chair (the tesem). Birch (idem.) gives more examples of the dog depicted in other tombs, such as one with a collar around its neck under an officer's foot in the 4 dynasty. More dogs of the same breed are found in tombs from the old empire, in small groups and held with ropes or leads around the necks. Birch speaks about the colors of the dogs, citing the Italian Egyptologist Ipollito, who specified one dog as black and another one a liver color. As depicted by Rosellini and Sir Gardner Wilkinson, more dogs of the same breed, Birch explains, were pied colored, meaning they had two different colors. Many dogs with erect ears have been depicted on ancient Egyptian monuments. A female dog is also depicted on monuments, and this dog has small legs; Birch assumes it was a house dog and not used for hunting game. He describes different dogs depicted by Egyptologist Rosellini, many with coats of various colors: yellow, red, blue, and spotted dogs were all house dogs. However, older breeds of these dogs were found depicted on monuments from the 12 dynasty looking like they are ready to start running. Birch is certain the dog was "indigenous to Egypt, is not seen brought as a foreign animal, and has remained till the present day" (Birch, 1876, 178). The literature suggests that many dogs were brought to Egypt from different places and have been bred for

different purposes; however, the original breed was used for hunting and guarding purposes.

The third dog that was found drawn on the second Antefaa tablet was marked C. It was called "Pahates, alias Kamu." It is not evident what the first name means. However, the second one means black, and Birch assumes it is to describe the color of the dog. This dog was a kind of mastiff and was used for chasing big game. Birch explains that this breed has not been depicted enough on monuments and walls and surely not before the 4 dynasty. Birch assumes that it was

introduced to Egypt from Ethiopia when the pharaonic army entered Ethiopia. This dog can also be found on

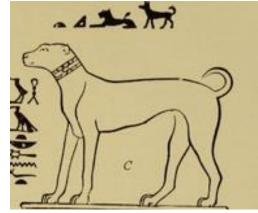


Figure 4. James Watson. 1906. The dog book. Wikimedia Commons. Pahates dog C.

Assyrian monuments, where it is depicted chasing lions. Birch claimed that in a letter from the Queen of Ethiopia to Alexander the great, she mentions 90 blood hounds used by Ramses II to

chase men in his wars: "All these different breeds appear intermingled, and to have produced the varieties of hounds seen in the sculptures" (Birch, 1876, 180). From this part of Birch's text, it is evident that different dogs were brought to Egypt for many reasons and that cross-breeding has occurred ever since.

Lastly, the fourth dog on the tablet found between the legs of the king was marked D, and it was called the Tekar or Tekal. Birch says the meaning of the wording around it is unclear. It is a female, although the way the dog is depicted looks male. Birch claims it resembles the Dalmatian hound

(but does not have spots), was hardly ever represented in hunting images, and was not indigenous to Egypt. Reading the tablet, Birch explained that for dogs A and C, colors were mentioned, and dog B's name described its color ("Ab" meaning "pied" and "Akar" meaning "sphinx")

Moreover, a private grave stele was found during an archeological venture by the archeological Institute Cairo in 1990. After a flooding and a fire, they were able to restore the destructed stele in 1995 and later, it was digitally drawn. On this stele, was a man with a leashed dog sitting in front of him. The man represented on the stele is shown to have the leash in his hand. The dog had erect ears, with his two front legs spaced out and the head looking forward in an attentive manner. As the leash was in the master's hand, it shows that the dog is obedient. The dog is believed to be that of a greyhound or saluki (Polz, 2016).

The Basenji, one of the prominent breeds in ancient Egypt, was common in Nubia and was known as a human-oriented breed (Joshua, 2017). Basenji type dogs were probably found in villages as small game hunters and family pets (Joshua, 2017). The Basenji Club of America has a detailed timeline of the Basenji dog. Canine carvings that resemble a Basenji, a dog with erect ears and a curled tail, have been dated to 3000 BC (Basenji.org, 2018). Moreover, breeds like the mastiff and Tibetan dogs were being imported into Egypt from various countries like Poland, Russia and even China during the Ottoman Empire (Mikhail, 2014). The saluki, however, which is one of the ancient breeds (as will be mentioned below) and one that is considered to be one of the ancestors of Egyptian baladis, is not indigenous to Egypt as usually believed, but to Nubia (Rice, 2006).

3.3. Telling the Story in Another Way: Genetics

Domestication is the molding of animal genetics via selective breeding (Tuan, 2007). Dogs have been both tamed and domesticated by human beings for thousands of years. Therefore the genetics of dogs are diverse and complex. The official recognition of breeds started in the 1800s. This led to the inbreeding of dogs in attempt to create 'pure' breeds. Thus, the genetic history of dogs is poorly known, especially for half-breed dogs. According to Larson et al. (2012) there are a number of reasons why identifying the ancestry of the first dogs is difficult. During the beginning of dog domestication, the morphological characters used to distinguish animals from their wild ancestors did not yet exist. Moreover, the changes in the evolution of dogs characteristics and the fact that domestication was not deliberate and recorded means that it took a lot of time for it to become registered in historiography. In addition, humans have bred dogs for specific functions and appearances. Modern dogs have a large phenotypic diversity due to the grouping of dogs breeds. Breeders have developed new breeds throughout history by crossing individual dogs within certain

functions and appearances to enhance the desired functions and appearances. Once the genetic mutation is established, it can be crossed with other unrelated lineage to increase the phenotypic diversification process (Vonholdt et al., 2010)

There has been numerous studies aiming to locate the time and place of early domesticated dogs. Larson et al. (2012) list three core studies (Germonpré et al., 2009; Germonpré, 2011; Ovodov et al. 2011) that claim dogs were present in Belgium, the Czech Republic and southwestern Siberia during the Late Pleistocene. However, it can be argued that the remains found are wolves that were still in the evolution process of becoming dogs (Larson et al. 2012). Furthermore, Larson et al. references the study of Vilà C. et al. (1997) where they used mitochondrial DNA and molecular clocks to date back the first domesticated dogs to 135,000 years ago. They also mention another study by Savolainen P. et al (2002) that used the same mitochondrial fragment order using 654 dogs, based on geographical patterns of modern dogs and concluded that dogs were domesticated only once in East Asia (2012). However, Larson et al. argue that it is not possible to date back the domestication of dogs so far back in history and that locating it in East Asia is schematic at best. Because existing studies used deep fossil calibrations on molecular clocks this has led "to an overestimation of the timing of dog domestication" (Larson et al. 2012.) Additionally, they state that after their analyses of African street dogs, a single origin in East Asia is facile. Larson et al., suggest that other studies that integrated nuclear markers proposed various origins of dogs. Nevertheless, they affirmed that even though there is a lot of estimates on the location, frequency, and exact date of dog domestication remains blurred.

However, there are three key studies that have explored the dating of the ancient dog breeds. In 2004 Parker et al. used molecular markers from wolf and domestic dog samples to define the broad genetic relationship among the recognized breeds. Building a consensus tree of breeds using the chord distance measure, Parker et al. rooted the tree using wolf samples; the first split separated four Asian breeds: shar pei, shiba Inu, akita, and the chow chow. The second split of the tree separated the Basenji. The third split separated the Alaskan malamute and Siberian husky. The fourth split separated the afghan and saluki hound breeds. Parker et al. (2014) show that breeds are genetically distinct; however, individual dogs can actually relate to other breeds, based on their genotypes. Therefore, genetics is another way to explain how baladis and other dog breeds evolved to become a species with a significantly broad and diverse genetic pool. Moreover, the DBA story shows that due to the vast variety of genotype and phenotype of dogs, it is injudicious to prejudge baladi dogs solely on their placement in society.

In 2010, Vonholdt et al. presented another paper aiming to understand the geographical and evolutionary factors in the diversification of the dog phenotype. They used 48,000 SNPs of 912 dogs from 85 breeds and 225 grey wolves from 11 different places around the world. Based on their findings, only thirteen breeds were different than the rest. These thirteen breeds were: basenji, Afghan hound, Samoyed, saluki, Canaan dog, New Guniea singing dog, dingo, chow chow, Shar Pei, Akita, Alaskan malamute, Siberian husky, and American Eskimo dog. According to their findings, due to the significant variation in the demographic history of dogs since their domestication, their genetic diversity does not indicate ancestral population like it does in humans. According to their analysis and comparison of dogs and wolves SNPs, the basenji shared a considerable amount of haplotypes with Middle Eastern wolves. Which signifies that the basenji had a bigger population during the early domestications. Moreover, the findings of Vonholdt et al. (idem) suggested that the basenji was a breed that appeared frequently in their allele and haplotype

sharing trees. High haplotype sharing and the long recorded history indicate that the "breed is one of the most ancient extant dogs breeds" (Vonholdt et al., 2010).

The study of Larson et al. (2012) is more recent: They used 49,024 SNPs (single nucleotide polymorphisms) in 19 wolves and 1,375 dogs from thirty five breeds, and collected data from a wide historical and geographical studies of the domestication of dogs by examining the archeological records. They were able to provide the foundation of understanding why some breeds maintain signatures from ancient breeds and some do not. In their results, they have found that the akita, basenji, Eurasier, Finnish spitz, saluki, and shar sei are ancient breeds. They also combined their findings with the results of Parker et al. (2004) and Vonholdt et al. (2010), and the number of ancient breeds increased to sixteen.

Concluding from the three studies, it is evident that the basenji and saluki are all ancient breeds of which some may have been present in Egypt for a long time. As discussed in previous subchapter, the presence of these dog types in pharaonic Egypt is also supported by the sources. Dogs in Egypt spread towards the south and east where the climate is hot and humid (Scott & Fuller 1965, 56). According to Scott and Fuller, ancestral wolves did not adapt to such climates. Thus dogs in Egypt are not wolves or wild dogs as many Egyptians today assume. Moreover, it is sometimes claimed that the pharaoh dog is an ancient breed that actually originated in Egypt. The case is not so as the reports disprove any relation of the pharaoh dog and the Ibizan hound to ancient Egyptian dogs and assert that these breeds have been recreated in modern times to resemble 'old' breeds (Parker et al. 2004). Today, many baladi dog owners tend to describe their dogs as 'half' basenji or half saluki or even half Siberian husky. Some owners also claim that they are descendants of pharaonic dogs. The DNA studies suggest that it is highly unlikely that baladi dogs are related to the older breeds. Moreover, based on Scott and Fuller's (1965) studies on the origin of dogs, there is no individual type of dog that we cannot distinctly separate from the wild species; hence, from a DNA perspective we cannot call any current dog breed 'wild' even if they are stray.

3.4. Dog breeding, and diseases

The last 200 years of intensive breeding of dogs has led to an increase in diseases among many breeds. It is evident that purebred dogs are more likely to have genetically inherited diseases than mutts. Bellumori et al. (2013) compared inherited diseases among purebred and mixed breeds. Over the course of 10 years, they examined over 27,000 dogs, and reviewed 24 medical disorders such as allergic dermatitis, bloat, cataracts, epilepsy, lens luxation, hypothyroidism, elbow dysplasia, hip dysplasia, intervertebral disk disease, patellar luxation, and ruptured cranial cruciate ligament. They found 10 genetic disorders like, elbow dysplasia, cataracts, and hypothyroidism that were more likely to affect purebred dogs than mixed dogs. Moreover, they argued that breeds that emerged recently or dogs with related lineages are more prone to certain diseases affecting all related purebred dogs. However, disorders that they found in the purebred dogs and mixed dogs indicate ancient genetic mutations that span throughout the dog population (Bellumori et al. 2013). Moreover, in 2015, Oberbauer et al. building on Bellumori et al. (2013) and compared purebred dogs and mixed dogs for ten disorders found at a higher rate in purebred dogs. Their analysis of pure breeds (according to the American Kennel Club classification of breeds) or the correlation of dogs on a DNA level, exhibited three conditions that were more common in purebred dog populations than mixed breeds. Their study suggests that the selective breeding based on dog morphology or common ancestry are possibly the reason for the widespread of certain disorders.

An example of a breed that is known for its genetic deformity is the dachshund. Dachshunds are known for their stubbornness and being with short legs affects their behavior (Scott & Fuller 1965, 8). Moreover, according to the American Kennel Club website, the dachshund breed was developed in Germany more than 300 years ago. The breed standard in most countries is the same: short-legged, muscular body, two different sizes, around 12 different colors, and three types of hair. The temperament of this breed is also almost the same, fairly energetic and a little bit stubborn. However, the size comes with many health issues, and spinal cord disorders are common in dachshund and other short-legged breeds, like the corgi, basset hounds and beagles. According to the dachshund owner's guide website, there are three types of intervertebral disk disease that occur in this breed, and they affect the spinal cord, which can lead to severe pain and sometimes paralysis. A considerable amount of effort must be devoted to caring for these dogs, ensuring that they do not jump, so as to avoid putting too much pressure on the spinal cord.

Moreover, Genetic and hereditary disorders can be avoided in pure breeds and mixed breeds like the baladi, if pure breeding is done with genetically inherited disorders in mind. In a study done on the frequency and distribution of 152 genetic disease variants in over 100,000 mixed and purebred dogs, Donner et al. (2018) concluded that genetic disorders are widespread in the general dog population and even mixed breed dogs may suffer from the same disorders. However, they emphasise on the importance of testing, veterinary care and informed breeding protocols when the breeding decision is taken. Moreover, they launched the website www.mybreeddata.com to have breed-specific hereditary disease variations commonness data available to the public in order to advance breed health research.

However, the majority of the general public has no knowledge of these problems and disorders. Because of the copulating of popular breeds with stray baladis in Egypt, Egyptians have started to label more baladi dogs as crosses with other popular breeds based on their phenotypes, for example, a mix of baladi and Siberian husky. In one way, this can be a good thing for baladi dogs. More Egyptians will want to adopt a baladi dog that 'looks' like a certain breed. However, others will not want a Siberian husky dog crossed with a baladi.

3.5 Dog Characteristics & Behavior

Scott and Fuller (1965) conclude in their study of dog behavior and genetics, that identifying a breed by just looking at the dog's visual characteristics is inaccurate and problematic. As it will show in the next chapter, it is difficult for Egyptians to differentiate between a baladi dog and other physically similar breeds like the Belgian Malinois and German shepherd. Assuming a dogs breed based on their physical appearance can be problematic for dogs of a certain breed with physical characteristics that do not match the global breed standard, because in many cases, leads people to abandon or even kill puppies who do not look like the parents.

Scott and Fuller (1965) conducted a massive study aiming to investigate the behavioral genetics of dogs. The experiments of the study were done on 470 dogs of 5 different breeds and the data collection phase took 13 years. In the beginning of the study, they had to choose breeds with significant behavioral differences. They eliminated small breeds and large breeds from the study, large breeds were expensive for the study and the small breeds because of their low fertility (Scott and Fuller 1965, 7). They chose 5 medium sized breeds; basenjis, beagles, American cocker

spaniels, Shetland sheep dogs, and wired hair fox terriers. The study was highly consistent and meticulous. For the first part of the study, they raised the puppies of all 5 breeds in almost identical environments to measure the similarities and differences. They also observed the development of the dogs' behavior from birth to 16 weeks of age. What is compelling about the study was their experiments on socialization and the maternal environments. To study the differences in environment only three of the puppies were removed out of the kennels they were born in and placed in homes. Compared to the rest of the puppies used in the study, the three puppies did not show many differences in behavior but they had very different relationships with dogs and humans.

In the second part of the study, using the Mendelian theory, they crossed two of the five breeds. According to Scott & Fuller the basenji and the American cocker spaniel are two significantly different breeds. The basenji was first introduced in Europe in 1937 without being crossed with other breeds and the cocker spaniel originally from the British isles and had been crossed with a lot of other breeds in Europe. Using the same methods that breeders have long used in selection breeding. All the offspring they crossed were from a single pair of each breed. In this part of the experiment, 201 basenjis and cocker spaniels were crossed. It is evident that mixed breeds are more resilient than other breeds from the results of the study that showed the mixed breed mothers produced more milk for the offspring and "giving excellent care to their offspring." (Scott & Fuller 1965, 11)

Some of the significant findings of their research are relevant to baladi dogs and can aid in better understanding them. Scott and Fuller compare the developmental changes of newborn puppies to the metamorphosis of the tadpole to the frog. Their observations led them to understand that the development of dogs is highly significant in relation to social skills and psychological performance (Scott & Fuller 1965, 17). According to Scott & Fuller, one of the critical periods in a dog's life is at three weeks of age. This is the time when a puppy's experiences will determine who will become the dog's closest social relative. The small amount of experiences a puppy has at three weeks will produce a substantial effect on later behavior. So, if a litter of baladi puppies lose their mother to poison or car accidents, anxiety and fearful behavior will be present in their adult life. However, they also found that puppies who socialized with humans at the age of three weeks, showed less fear responses than puppies who socialized with humans at five weeks (Scott & Fuller, 125, 1965.) Moreover, a puppy in an open space learns how and where to escape from what it perceives as danger. So according to Scott and Fuller, a 4 month old puppy would be difficult to catch, and if caught, would take months of patience to fix the a-social behavior (Scott & Fuller, 131, 1965.) A lot of baladi dogs are timid and shy because a lot of them are born in places with less humans, so as they grow up and start to wander looking for food and are forced to interact with humans, they behave shyly or aggressively. It is evident that socialization from an early age highly affects dogs' behavior. If a puppy from any breed is born in a home, it will show no fearful or flight behavior (Scott & Fuller 1965, 135.) In addition, Scott and Fuller, state that breed temperament differences disappear when the puppies are given reasons to develop fear from a young age. It is clear that baladis like all other breeds, if not socialized well from the age of 3 weeks, their anxiety and fear issues are inevitable when they become adults, hence, attacking or barking at Egyptians on the streets.

After Scott and Fuller's study on physical and behavioral differences between breeds and their hybrids, they concluded that the differences we see between breeds are constructed by a large number of genes which have a highly particular effect on behavior and physiology. Moreover, their results show that heredity is a controller of behavior in dogs, and that the differences in

genetic behavior can be measured the same way as the genetic differences in physical size. However, they state that it is impossible to generalize about a breed by only one experience with one or two individual dogs. Also, the wide range of variety of dogs genes make dogs highly adaptable to selection, and that if we choose to breed depending on behavioral genes, it is possible we can create a breed with the wanted behavior. However, what this means to Egyptian baladis is that because they roam freely in the streets of Egypt and reproduce without the interference of humans, it would be unfair to compare them to other breeds on the basis of a-social behavior. Moreover, as they had centuries to grow their populations and mix their own genes together, and with uncountable environmental experiences, their anxiety issues, barking, protectiveness, are heredity and it would take some generations of selective breeding to change these behavioral traits.

To go back to the idea of breed generalization, though I have shown here that such stereotyping say very little about a dog, generalization still affects the reputation of dogs like the baladi. Another example of a dog breed being stereotyped is the pit-bull type dogs (as Weaver (2013) calls them), seen to be aggressive and extremely problematic dogs. The pit bull breed has been banned in Ontario, Canada, and dogs already inside the city are allowed to stay only if they are sterilized, leashed, and muzzled in public (CBC News, 2005). Another example is the 1989 pit bull ban in Denver, Colorado, USA, when around 3,497 dogs were killed (Maher, 2009). The Denver Assistant City Attorney Kory Nelson argued in the court decision that pit bulls are more dangerous than other breeds because of the severity of their bites. However, based on the findings of The Coalition for Living Safely with dogs, a Colorado group consisting of veterinary associations and animal welfare groups reported that the severity of bites of pit bulls was the same as bites from akitas and Australian cattle dogs, and it was found to be less than that of Dalmatians (Maher, 2009). So generalizing baladi dogs and claiming they are all anxious, or they are all aggressive is highly problematic as this creates a ripple effect of bad reputation for a dog type and decreases their chances in becoming accepted in society.

Summarizing this chapter then we cannot conclude where and when dogs originated. We also definitely cannot conclude that a stray breed like the baladi in the year 2018 is mixed with basenji or the saluki. The global scattering of dogs since 8000 B.C. is signaled by their highly diversified genetics. Additionally, as we can see in this chapter, there was more than one breed of domesticated dogs in ancient Egypt. Dogs in ancient Egypt have been considered loyal creatures to keep by ones side even in the afterlife. We also learnt in this chapter that the saluki and the basenji are ancient breeds, yet we cannot compare Egyptian baladis to them. Moreover, I have discussed here that the more mixed a breed, the less hereditary diseases and disorders it develops. Breeds are not completely 'pure' as the consensus in Egypt would have it, especially mixed dog types like the baladi that has little historical background as a 'type'. As we see the variation between all breeds, their sizes, colors, coats, temperaments etc. it is problematic and inaccurate to point at a baladi dog and deduce breed mixing. One may ask why we are so eager to categorize dogs in breeds and types? This behavior can be because we are still trying to control the image of dogs and breeds. It is only in the past couple of centuries when humans decided to group dogs based on their looks rather than purpose. In this process, the number of known and popular breeds exploded. Moreover, as we have seen here dog genetics is as complex as human genetics. Therefore there is no scientific reason or other reason to stereotype baladi dogs based on assumed characteristics and behaviors. As discussed here how a dog is treated in life have a stronger influence on behavior than its genes.

4. Dogs in Contemporary Egypt

The way Egyptians perceive and treat dogs and baladis in particular, brings to mind Howell's idea of how humans have always tried to discipline dogs through ideas and technologies (Howell 2012). Egyptians have long tried to confine dogs in a certain place in society. The various webpages dedicated to animals in Egypt on social media, including their posts and comments, make obvious that most Egyptians are prone to repeating what they hear about dogs and also other animals. For example, a doberman would be seen to be 'smarter' than a baladi, a golden retriever would be seen to be 'friendlier' than a baladi, a pit bull would be seen to be 'stronger' than a baladi, and a Dalmatian would be 'cleaner' than a baladi. If a dog is from the streets, the dog is dirty and diseased, but if the dog is from a well-known family and with a familiar looking ancestral lineage (e.g. assumed to be purebred) then they are seen to be 'clean', 'polite', 'well mannered', and easily housebroken. These prejudices are very evident in the Facebook groups and pages dedicated to dog adoptions and sales. The word 'pure' is, more often than not, used to describe a litter of puppies sold through the page announcements and posts. There is not much effort in social media put into understanding or challenging such prejudism, such as "if a stray dog is barking it means that it has rabies" or that "being a street dog precludes it from being loyal companion". There is simply a commonly dispersed perception of baladi dogs shared by most Egyptians across different socioeconomic classes, that a baladi is a lesser dog.

Unfortunately, in Egypt, the majority of the public remains unaware of how prejudice affects their perception of dogs, and hundreds of dogs are either abandoned or neglected due to the language used to describe dogs in general. For example, using the word 'pure' to describe a dog's genetic line attracts buyers more than the word 'mix' or 'mutt'. Many dog owners breed their male dogs to the good-looking desirable female they find through a Facebook page or a friend, for the sake of having the litter to sell or to keep a female to breed later with the father—not knowing that line breeding is "the nice word for concentrating selected traits in a family line, otherwise known as inbreeding" as stated by Calvert (2013) risks contributing to genetic diseases. In other words, Egyptians are not fully aware of what inbreeding does to the genetics of dogs. Their focus is on the immediate gratification of having the litter to sell, instead of focusing on what is the best decision for their dog's health. However, when I contacted Egyptian baladi dog owners, they reported no health problems. The health issues they did have arose mostly because of abuse or the unhygienic lifestyle they had on the streets before they were rescued.

4.1. The Baladi Dog in Digital Media

I used Google's search engine to find an approximate number of searches for 'baladi dogs,' which produced 64,000 hits. Related searches were also carried out using the search strings 'Egyptian baladi breed,' 'Egyptian baladi dog size,' 'Egyptian baladi temperament,' 'Egyptian street dog breed,' 'Egyptian baladi bread,' and 'Egyptian baladi dog shedding.' As I followed the links of related searches, there was frequently a repetition in the links to articles found in the original

search. Moreover, as the word 'baladi' is often used to describe different things, here I only followed the links related to the dog types or mentions of dogs in general.

Search	Results
Egyptian dogs	15,300,000
Egyptian baladi dogs	59,300
Egyptian stray dogs	238,000
Stray dogs	5,940,000
Feral dogs	2,090,000
Dogs in Egypt	20,500,000
What dogs are from Egypt?	21,400,000
Golden retriever	38,900,000
Basenji	3,360,000
Pharaoh dog	480,000
Saluki	3.090,000
Whippet	12,400,000

Table 1: Google hits when searching different dog types

I then used other search strings for baladi dogs to compare with number of hits for related breeds (Table 1). For the 'Egyptian baladi dogs,' there were 59,300 results, with the first and second page including news articles about baladi dogs. However, as Egyptians use the word "baladi" for different meanings, there were also articles about baladi bread and baladi dancing that were not included here.

When I used the search string 'Egyptian baladi dogs,' the first page showed nine links about the dogs, with three Egyptian online publication articles about the stray dogs, a link for a Facebook page 'the Egyptian society for baladi dogs,' an article dating back to 2014 from the online magazine *Dogster* about a baladi dog named Baladi who now lives in Arizona, an online article about the same dog on another dog website called Urdogs, a link to a YouTube video about him, and lastly, a link to an Egyptian website called *The Dogs Network* with the title "10 Hot Weather Dog Breeds." However, I could not find any link to official information on the baladi dog. A year later in January 2019 while I was still writing the thesis, I used the same search engine Google and the same search string "Egyptian Baladi dogs" and found around 20,000 more hits (total: 88,800). The results were links to more and new online magazine articles encouraging the adoption of baladi dogs published in 2018.

To better understand the way the general perception of dogs is changing online, I chose an online news media agency called Egyptian Streets. I typed 'dogs' in the search field on the homepage of the website and scrolled the results back to the year 2013. Only a couple of articles about dogs in Egypt were published from 2013 to 2015. In 2015, Egyptian Streets published an article called "14"

Dogs Egyptians Love the Most". The list has 14 different dog breeds like German shepherds, boxers, golden and Labrador retrievers, mastiffs, and more. At the end of the article, there is a subheading posing the question "What About the Least Wanted Dog?" and they continue by answering that the baladi is the least wanted dog in Egypt (Khairat and Awad, 2015). There were other articles in news media agency about the killing of stray dogs in Egypt. Another story in 2015 was titled "Adopting one of Egypt's stray animals can save your life". From 2015 to 2018, there are six articles about baladi dogs in Egypt.

The websearch and the news media agency search together shows that the awareness of baladi dogs in Egypt is increasing. In addition, the Baladi dog is increasingly recognized as a specific 'type' of dog. This pattern is even clearer when looking through the survey results.

4.2. Survey Results

As already explained in Chapter 2, I created multiple online surveys for a variety of people in different roles, including individual and organizational dog rescuers, baladi dog owners, non-baladi dog owners and also a non-specific survey about dogs in general as a comparison. The first survey was oriented towards Baladi dog owners, below I will review the replies to the questions posed in the online survey.

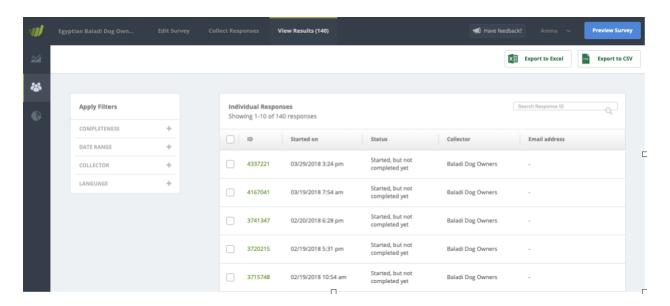


Figure 5. Amina El Shazly. 2019. Screenshot of Egyptian baladi dog owners survey report

Baladi Dog Owners living in Egypt

In the first question, "Why did you choose this breed?" I received 83 responses, in which the majority replied saying the dog was a rescue. Owners chose this term to refer to stray dogs taken off the streets. Either the dog had been rescued from the street or it had been rescued as former owners were abusing it.

On the questions relating to the dogs temperament and character some respondents answered by describing the breed as strong and energetic, with no health issues. One respondent even described baladis as "significantly smarter" than other breeds. The replies to the question "Why did you choose this breed?" suggests that most baladi owners participating in the survey acted out of emotion towards the dogs they rescued or adopted thus their replies to the following questions were also emotional. Respondents used words like 'love' and 'sad' to express the feelings they had when they adopted the baladis. For example, respondent 3372925 said, "Because she was a rescue and she needed me! And I fell in love with her! She's amazing!"

The second question posed in the survey was, "Did you have dogs before? If yes, how is your baladi different?" I collected 101 responses for this question. Answers are very similar, with slight differences in opinion about the breed's temperament. Baladis are often described by respondents as smart, alert, affectionate, easy to train, friendly, independent, protective, wild, and loyal. An example of one a reply is as follows:

"I also have a golden retriever!! My baladi is different in many ways! Smarter as in she only took a couple of weeks to learn where to pee, etcetera. She's more alert with sounds and whatever's going on around. She doesn't shed hair and is generally very slender. Also very stubborn, unlike the golden retriever" (respondent 3372925, 2018).

Respondent 3289981 reported owning a baladi all of her life, saying:

"she has been the easiest to train. She's loyal, calm in the house, and basically doesn't need any directing. She just knows what to do in every situation! Also, I don't think I've even had to take her to the vet for anything other than vaccination and clipping his nails!"

Negative comments on baladi dogs were also offered, but they were more rare than the positive replies. 'Aggressive' was a word mentioned only 4 times indicating some behavioral issues in individual baladis. For example, respondent number 3283569 described their baladi as "More active, more aggressive, very wild, less maintenance." Another respondent, number 3284932 stated:

"He is actually very smart and stubborn, and mine got some behavioral issues, probably from the abuse he has gone through in the street, though he was just five weeks old. He is aggressive out of fear, not friendly with strangers, but he can deal with cats from a distance."

One person had had a mixed breed previously and stated that the baladi the family now owned is similar to the mixed-breed dog they had before. Another respondent claimed that the baladi manages to avoid conflicts with the respondent's other dogs, two German shepherds, and that it calms down fights by using "many calming signals" (this in reference to calming signals described by the Norwegian dog trainer Turid Rugaas (2006)). But, in general baladi dogs appear to be popular amongst the owners, even owners that brought up some negative traits of their dogs. The third question, "Are you happy with your decision of getting a baladi dog?" received 98 answers that were either "yes," "for sure," or "of course."

The third question was, "Describe how you understand the general perception of baladi dogs today? Do you think there has been a change in the general perception of baladi dogs? If so, over what time frame? If so, why do you think the perception of baladi dogs have changed?" The question received 83 answers in total. Fifty percent of the answers to this question confirmed a slight change in the general perception of baladi dogs; however, the other 50% of the responses suggest no change in the general perception. The respondents who confirmed a slight positive change in the general perception of baladi dogs in Egypt cited online campaigns done by social media "influencers" and the rise of animal welfare organizations. Many of the respondents stated that the Egyptian 'working class' still believes the dogs are impure and dirty but that the medium and high income households are becoming more accepting of the idea of adopting or rescuing a stray animal.

Moreover, many respondents also gave examples of people meeting them in the street with their dog and asking them about their dog's breed. Egyptian owners telling this story also specifically add how when people are informed the dog is a baladi, Egyptians are often surprised or disgusted. One Egyptian respondent related to a widely reported incident in Egypt where a pitbull dog named Max was killed in broad daylight in Haram street in the city of Giza, the killing of which received broad social media coverage. The incident caused a slight change in the general perception of dogs in general in Egypt:

"Yes, more people have been considering taking in a baladi dog in their homes. I guess it started with the animal rights awareness that has been rising ever since the incident with Max the haram (Haram street) dog. The general perception started to change when more people show that they adopted a baladi and they go out with them, take pictures, use social media platform to promote how nice and fluffy baladi dogs are" (2853837, 2017).

The fourth question in the questionnaire, "How do you act to change the perception of baladi dogs? Or how do you think it could change?" received 83 answers. Most of the respondents commented on education as a means to change the general perception of baladi dogs. Some respondents suggested as a strategy that owners should take the advantage to talk more with people about the baladis and their positive sides when asked about the type of breed by people in general. One

respondent suggested that a beauty pageant for baladis may be helpful. Other respondents replied that they actively post many pictures of their baladi dogs on social media so that their friends and acquaintances can realize that they are adoptable dogs. However, one respondent (3295350) reported having given up on trying to change the general perception. One person took the opportunity to stress that there should be stricter laws against animal abuse in Egypt. Most answers to the question how to change people's perception revolved around spreading positive messages about baladis, suggesting that many respondents think positive messages would be helpful in changing general perceptions of baladi dogs in Egypt. Four respondents believed that educating children on compassion would create change in the public perception of baladi dogs. For example, respondent 2431045 reported commented on the need of educating children on the problem of stray dogs in Egypt saying: "I am involved in educating children about the stray dog problem in Egypt, and I find the lack of compassion with the younger people quite shocking" (2431045, 2017).

The fifth question was related to differences between baladi dogs and other breeds and how/if people discussed this with them asking: "What are the different comments and/or criticisms you receive about having a baladi dog?" This question received 75 answers. In reply to this question some respondents stated that people had commented on/or asked about some behavioral issues of the baladi dog. For instance, respondent 3700753, whose stepson rescued an abused dog, stated that the responses she had received were: "Mostly critical as she [e.g. the dog] is anti-social and barks at others. Attempts at training have failed to cure this." The dog is described as anti-social and is prone to barking due to the breed's protective or insecure side caused by previous traumatic experience. However, the latter part of this answer does not characterize them as difficult to train but rather as being vocal, which is one of the complaints about baladis I heard often in my research.

Moreover, answers to this question also included other criticisms; someone related the story of how an acquaintance had commented why she/he was raising a "stray, gross, dirty" dog. Another respondent related how he/she was criticized for helping an animal instead of helping less fortunate humans. Other gave examples of how when they were out with their dog passersby were curios and asked the owners whether the dogs are trainable, or why they chose a baladi. The majority of owners reported that they received positive comments and compliments, usually in terms of expressions of surprise that the 'good-looking' dogs were baladis.

The sixth question asked in the survey was, "Do veterinaries do discounts for baladi dogs?" Seventy-nine responses were offered to this question, of which 34.18% said "yes," and 65.82% said "no." I included this question in the survey because my vet had previously gave me a discount for a cat I have rescued myself and told me that the clinic gives discounts for rescue cases.

The seventh question was as follows: "Some people say rescue dogs show gratitude. Do you believe that?" Seventy responses were given for this question. The respondents who replied on these question with a no stated that their dogs were too young to have gone through hardship before being adopted and therefore could not realize the difference between their new lives and their lives before the rescue. Some respondents who answered yes to these questions claimed their dogs show gratitude in a way they "cannot explain". Other respondents who also replied positively on these questions explained that their dogs' expressions of gratitude included being loyal, protective, and affectionate. Some respondents declined to answer this question as they were skeptical about the statement in the question and stated that anthropomorphizing dogs is wrong and that gratitude is a human emotion.

The eighth question "In your experience, how are baladi dogs different from other breeds?" could be thought of as similar to question number two. Some respondents also stated that they had answered this question already in question number two. However, as the survey discussed here was also open to rescuers, trainers, and vets, responses on question eight were slightly different than on number two. 76 responses were received and answers to question number eight were still informative about the general personality traits of the baladis. One dog was described as energetic, very affectionate, and "hysterical at the approach of others," traits commonly used to describe individual baladis. Fifteen respondents also reported that the dogs' health was in very good condition and that they rarely have any health issues. Many of the answers described baladis as highly intelligent, to quote one of the respondent the baladis are:

"... are very smart (not like other dogs but closer to human intelligence), and this might be because they have to survive in very difficult circumstances. They very quickly understand the dynamics and rules of their environment. And they are very, very good with kids. They have free spirits; that is, only positive reinforcement is a suitable training method. Punishments will not work." (2393131, 2017)

Some respondents included the reasons why they believe baladis are insecure, which is in line with the general perception on baladis. To take just one example of a reply from a respondent the person was saying:

"I guess there are some differences, but because they are a mixed breed, you tend to have different personalities. Some may be dominating; others may be submissive. But generally, they are very protective dogs who, however, often scare easily, as well. My dog is very protective over the house, for example. She knows our neighbors, but if someone who doesn't belong there or even just walks around the stairs outside, she will bark, because she knows that they don't live there. We always know when strangers are in our building" (2384493, 2017).

This is a typical response because of the high number of baladi dogs on the street, and the possibilities of the dogs mating with owned different breed dogs, baladis have a wide variety of personality characteristics. However, a common characteristic in baladis is their protective and guarding behavior.

The ninth question was as follows: "Is it easy to train a baladi? Tell me more about your dog. Is he/she a good guard dog?" This question received 80 responses (local and abroad). Only seven respondents said the baladis are difficult or not easy to train. Respondents who regarded baladis as difficult to train, usually gave the explanation that baladis are 'stubborn'. Another reason given was that the dog was an adult when adopted. Other respondents indicated that they did not know why the dogs are difficult to train. Moreover, the responses to this question gave me further insight

into how owners regard the character of the baladis' and their intellectual capabilities. One respondent explained how the dog 'trained herself' in things likes housebreaking, walking on and off the leash, and even in obedience training. The majority of the answers to this question praised baladis as 'amazing' guard dogs. Their hearing capabilities were mentioned, as well as their vocalization. One respondent described baladis simply as 'brilliant.' Moreover, a recurring trait about baladis was mentioned, which is that they are food driven - dogs motivated by food. Some respondents said baladis are as trainable as other dogs and that there are no differences between them and other breeds.

The 10 question was as follows: "Baladi dogs have a bad reputation as street dogs. Why do you think this is?" The question received 74 responses and it generated different replies as to the opinions and perceptions about baladis' reputation as 'street dogs'. Some respondents replied that the negative perception of baladis is due to their tendency to form packs, which makes them feel as a threat to pedestrians. Others mention how the packs of baladis chase and bark at cars entering their areas, which indeed contributes to their reputation as aggressive. One respondent blamed the Egyptians 'need' to own 'valuable things', which therefore makes the baladis of low values because they are not of monetary value and because they fill the streets of Cairo. The lack of education was a recurrent theme in many of the answers also to this question. One respondent replied as follows:

"People are afraid, most people don't know how to be around dogs, they don't understand dog behaviors and they don't respect them, so street dogs develop fear from humans, and they get territorial and bark aggressively to protect themselves" (3284288, 2018).

Moreover, some respondents claimed that baladis are aggressive towards people because of the harsh life they live and the abuse they get from humans. One respondent also brought up a very important issue concerning the reputation of baladis, namely rabies. The respondents explained that:

"Egypt does have a 'stray dog problem' (too many dogs in certain areas causing all kinds of problems) that leads to negative perception with the public. They bark (protecting their territory); the people are phobic (I don't know why). Perhaps the 'rhetoric' about rabies?" (2431045, 2017).

The respondent that brought up rabies also implicitly here referred to lack of knowledge. Because of the lack of proper education about dogs and stray animals in general, people are unfamiliar with the different diseases that can affect animals living on the streets. As an Egyptian, I have myself realized that most Egyptians use the word rabies without knowing what it means (see further discussion on rabies below). Abuse is also a recurring theme in this question about the reputation of baladis as street dogs. Many respondents claim that baladis get their bad reputation because of the abuse they face in the street, especially from kids: "A lot of kids throw rocks or stones at them, then the dogs chase them or bark at them or, worst case scenario, bite them" (2402463, 2017). Others blame their physical appearance, because they look dirty, starving, and sick to the

uninformed eye. Religious reasons were also mentioned in answer to this question; dogs are seen as impure as was explained already in the introductory chapter, as one informant explained:

"Because Muslims are taught that dogs are unclean. This stems from the misconception that dogs were responsible for spreading the plague in the Middle Ages—which they weren't. It's very hard to overcome prejudice" (2384800, 2017).

Question 11 read, "How do you think baladi dogs affect urban planning?" This question was formulated assuming that the question of 'street-dogs' is associated primarily as an urban problem, and based on the replies from the respondents this was a way to assess if informants made the same association between baladi dogs and urban planning. The question was orientated only to owners living in Egypt and received 65 responses, and the majority of the answers suggested that the question was either not fully understood or respondents replies saying that there simply was no urban planning in Egypt. This result could be interpreted to mean that the respondents do not think dogs are taken into account during urban planning. If a city or building is being built, the presence or absence of stray animals is not something that is considered. For example, respondent number 2393132 explains how baladi strays are important for urban living:

"They don't affect urban planning, if I understand the question correctly. They are not by any means considered in any kind of planning made by the government or the private sector, whereas they are very useful in new cities like Obour city, since we have desert animals like foxes. Having dogs around keeps away those desert animals. According to the World Health Organization (WHO), dogs in Egypt whether owned or stray never recorded one case of rabies since 2005. Baladis are not infected with rabies but are prone to infection. If the government follows the recommendations of WHO and launches mass vaccination for 70% of strays, this will create herd immunity that will protect humans against rabies that could come from desert animals especially in new cities" (2393132, 2017).

Some respondents suggested that TNR programs should deal with stray dogs during urban planning, one informant was saying that:

"They should be spayed and neutered so their numbers go down as urban environments continue to grow. With no street dogs eating the garbage, perhaps municipal governments will begin focusing on employing people to keep the streets clean rather than having the dogs eat the garbage" (2611365, 2017).

Other respondents argued that stray dogs are killed in urban areas. For example, respondent number 2404424 stated "I think the government or house builders probably just kill them when they want to build somewhere." Though some respondents were uncertain as to the interpretation of the question, many respondents did reply in a manner to confirm that there is a lack of consideration of stray dogs in urban planning and they also expressed a sense of frustration as to the effects of this lack.

The 12° question was formulated to better understand how integrated baladi dogs are in the Egyptian society and culture, "How do you think baladi dogs affect Egyptians' social and communal life?" This question received 63 responses but many respondents (particularly those baladi owners living in Egypt) replied that they did not understand the question. One reason for this difficulty of interpreting the question may be because Egyptians are not accustomed to thinking about non-human animals in relation to themselves. One respondent simply said they avoid certain streets where packs of baladis live, a reply which is related to the above question on baladis and urban planning. Another respondent suggested that the baladi could enhance Egyptians' social and communal lives by teaching children about non-human animals and empathy towards others:

"Integrating them into our lives positively teaches us a big deal about our environment and how to care for it. And brings us together to find solutions for them. It teaches kids how to respect nature. And also, it teaches us all how to deal with dogs with the realization that these are SENTIENT beings capable of emotional and physical pain" (2393131, 2017).

The last question in the Egyptian resident section was, "What do you think about spaying and neutering?" This question received 72 responses, and only three were against castration. One respondent replied that they cannot do it to their pets. Another replied that only males should be neutered, as the surgery is more complicated for females. One pro-castration answer gives insight into how spaying and neutering strays can help them:

"There are tens of thousands of homeless, abandoned, and abused dogs out there who need homes. Breeding adds to calamity. Moreover, breeding introduced many genetically diseased breeds to life...we don't need more baladis in an environment of hatred and abuse. Castration also prevents cancerous diseases" (2393131, 2017).

The respondent here provides information on how TNR would prevent the spread of genetically inherited disorders as is mentioned in chapter.

Baladi Dogs Owners Abroad

The first question was "Why did you choose this breed and not a breed from your local shelter?" received 17 responses. Some reiterated the answers given by the owners resident in Egypt, as they had adopted a rescue dog when they were living in Cairo and then traveled back to their home

country with the dog. One respondent, who rescued a baladi from Cairo, stated that adoption from a local shelter would have been preferred if the respondent had not been abroad at the time. It is evident from the respondents' answers that the foreign respondents were already familiar with rescuing and adopting needy animals. In contrast to Egyptian respondents, who found themselves taking on strays without knowing enough about them, respondent number — stated that they had always looked for dogs to rescue and even though there are a lot of dogs in need of homes, she chose to adopt a baladi:

"I have always adopted dogs from shelters. I was made aware of Sokarah while reading a story online about her and her need to be adopted. I felt an immediate connection and I knew I could provide the cute little Egyptian baladi a safe and loving home. There so many homeless dogs here in my area but her story struck me and it became my mission to rescue her" (2487082, 2017).

The second question "Did you have dogs before? If yes, how is your baladi different?" received 12 answers from dog owners living outside of Egypt. However, seven respondents living abroad answered the same question in the localized section of the survey. Respondent number 2487082 described and told the story of their baladi already in the localized section, saying that:

"Yes, I've owned dogs my whole life. My sweet Baladi, Sokarah is unlike any dog I've had. When we first received Sokarah she was clearly in distress from her long trip from Egypt to New York.... We had a busy house as far as family always coming over, Sokarah was and is very fearful even after being with us for 4 years."

Another respondent compared their baladi to their pitbull and Labrador but adding that "Yes I have had a pitbull and now Labrador! They are actually extra loving and extra smart! They do everything like any other breeds but extra" (2384939, 2017). Thus, the replies of the foreign dog owners resonate with those of the Egyptian dog owners suggesting that baladi are a popular type of dog and also seen as intelligent.

Question number three in the foreign section of the survey was, "How did you hear about baladis?" and received 14 answers (many had already answered the third question in the previous localized section). Half of the respondent had heard about baladis through social media and online rescue websites, and the other half heard about baladis through friends or when they were living in Egypt. Unlike the Egyptian baladi owners who know of the baladi type Egyptian dog from seeing them in the streets in their daily lives.

The fourth question for the dog owners living abroad in other countries than Egypt was, "How did your dog arrive in your country? Was it an easy process?" This question received 15 responses. One respondent explained "we flew to Brussels as the airline would take a dog on the same flight. We then drove to England" (3295321, 2018). Another respondent explained how they found their baladi dog in a foster home in Canada. From the replies give it appears it is fairly easy to import dogs from Egypt into North American countries. For example, respondent number 2386428 summarized the process and what was needed for their baladi to enter the United States, saying:

"It was simple and inexpensive. She needed proof of her rabies vaccination and a health certificate. The total cost, including her ticket and her crate, was around \$350USD."

However, from the replies of the respondents it appears to be harder to import dogs in European countries. Respondent number 2404424 related her own experience saying: "I've just moved my dog from Egypt to the UK. It's not an easy process. The UK is the most difficult, but it's doable, quite expensive though, but other countries are easier."

In general, it has become harder for dog rescuers to fly dogs due to the change in rules in airlines since last year. The difficulties reported by some of the foreign baladi owners are confirmed also by dog rescue organizations (see next chapter). According to the HOPE founder and animal rescuer, Ahmed Al Shurbaji, before last year, traveling with more than four dogs per passenger was allowed. However, now only two dogs per passenger are allowed, which has made it harder for rescuers to fly a large amount of baladis to adopters abroad.

The fifth question was specific for baladi owners living abroad, "If you're familiar with it, what do you think of the rescuing community in Egypt?" Which received 14 answers. Only three respondents answered that they were not familiar with the rescuing community in Egypt; however, those who were familiar with it praise the Egyptian rescuing community. Respondent number 2388235 summarized his/her knowledge about the rescuing community saying "I'm not very familiar with it but from what I have heard it is very hard for any dogs to get adopted especially Baladi dogs therefore many dogs end up on the street." One particular respondent in Canada who has fostered a baladi named Sam, mentioned HOPE as their preferred organization to help saying:

"I support HOPE Rescue financially when I can. I think your rescuing community in Egypt is beyond incredible and filled with loving, caring people who will help to change the face of Egypt" (2611365, 2017).

The sixth question was "Are you happy with your decision of choosing a baladi dog?" which received 23 answers, all of which were a "yes". Thus, the response of non-Egyptian baladi dog owners were the same as the equivalent question for baladi owners living in Egypt.

The seventh question in the living-abroad section of this survey was, "Tell me the story behind your rescued baladi dog." This question received 20 long responses, and in 13 of these cases the animals were rescued by the respondents themselves. Some of the dogs were rescued after their mothers were poisoned. One dog was found lounging around the house of the respondents, the respondent in question feared the dog would get poisoned so the family adopted him. Another dog was found crying as a puppy inside a trash bin in the street. One respondent told the story of a dog that she found posted about on social media outlet Facebook, the dog was described as physically and emotionally abused, so the respondent sent an online message to the rescue group or individual (which was not specified), who flew the dog to the owner. Respondent number 2385627 wrote about how their mom rescuing their baladi from some kids "My mother found her tied up and kids were playing with her and putting a basket on her back when she was a puppy. So my mum paid the man and took the dog" (2017).

The eighth question was "What do you think is the perception of baladi dogs in Egypt?" This question received 16 responses. Respondent number 2386428 explained how in Canada people are not familiar with the baladi breed, and that the perception in Egypt has been slightly changing for the better in recent years. The respondent continued explaining how Egyptians perceived their dog when they still lived in Egypt, saying:

"I think there is a huge misunderstanding and cultural perception of them. Whenever I walked my dog in Egypt, I constantly had people come up to me and ask to buy her...situations like those show that the stigma against baladi dogs is superfluous and based on a cultural perception that baladi dogs are bad and dirty".

Another respondent described how they see the perception of baladi dogs in Egypt, based on what they see and read on Facebook. One respondent developed on the contribution of social media here, writing that:

"I can only go by the cases I see posted on the rescuers sites in Egypt and it isn't good. I see the horrific treatment shown in posts. I know animals are abused everywhere but some of these cases are extreme" (2404612, 2017).

The ninth question was, "Do people comment about your baladi dog? What are the different comments/criticisms that you get?" This question received 14 responses. All answers commented the same thing, mainly that, abroad, baladis are always complimented on their physical, and people ask about the breed and its origins. For example, respondent number 2487082 stated how they receive compliments about their dog:

"I have never received a negative comment. In fact, we get so much praise for rescuing the baladi. We get many comments on how unique the baladi is. People always ask me questions about her and how they can adopt a baladi. They are also saddened to hear the plight of the baladi" (2017).

The respondent states that they never encounter criticism on their baladi dog abroad. Rather, according to the respondents, they receive a lot of compliments and questions of fascination. The respondent 2487082 usually takes the opportunity to tell people asking about their baladi breed what baladis face in the streets of Egypt, eg promoting the perception of the baladi in the home country. On the other hand, owners in other countries get either complement the dogs or say they have never heard of the breed before.

The 10 question was "In your experience, are baladi dogs different/how from other breeds?" Which received 8 responses. Similar replies to Egyptians and resonating with the overall positive comments on the baladi dog and its intelligence. The 11 and last question in the abroad section of the survey was "is it easy to train a baladi? Tell me more about your dog. Is he/she a good guard dog?" Which received 7 answers. Only one respondent claimed their dog is neither food nor toy

motivated and not easy to train, however, the rest of the answers praised the baladis guarding skills. One respondent said their baladi is food driven yet easily distracted and a good watchdog.

4.3. Non-Baladi Dog Owners

As a comparison to the replies of baladi dog owners, I created another online survey on surveyhero.com for non-baladi dog owners in November 2017. This comparison shows the unanimity of the public's opinion on; the problems the dogs face in the street, how their reputation also negatively affects them. Moreover, the comparison shows that people judge the baladi dogs based on preconceived ideas. The respondents either had dogs of other breeds or presently did not have dogs at all. The survey had 11 questions and was answered by 118 people.

The first question was, "How did you hear about baladi dogs?" This question received 110 answers. All but four respondents had seen baladi dogs on streets. The four respondents who had not seen baladis themselves seemed to be foreigners not living in Egypt, but they still had heard about them from online sources or from a friend. For example, respondent 3689713 answered, "I live in Cairo," and respondent 3585569 answered "I'm an Egyptian...I grew up with them." Respondent 2427205 jokingly answered, "hear? They are more than us humans."

The second question to the respondents who did not themselves own a baladi was, "As a nonbaladi owner, what's the reason for not having one?" This question and received 100 answers. The answers to this question varied. One respondent said, "I don't like dogs" (3291410, 2018), and this respondent also skipped the rest of the survey. Another respondent said he or she was allergic to dogs and thus skipped the rest of the survey. Respondent 3285249 seemed to be confused or had the mindset that one can only buy dogs, answering, "didn't think there is a place you can buy them from"; this respondent also skipped the rest of the survey. Respondent 2593998 reported having parents who do not think that baladi dogs are "good enough" (2017), and thus skipped the rest of the survey. Respondent 2445939 answered, "because they are stray." Another respondent, who did not have any dogs, said that if they did get a dog, it would be another breed that they are more interested in. Some respondents answered that they did not have the time to care for a dog. Others indicated that they already have dogs and cannot have more dogs at the moment. Respondent 2423582 wrote: "I hear they're hard to train and control. I also don't have space for big dogs". A respondent who had a dog before said the dog was poisoned, indicating a reluctance to get another dog. Respondent 2394325 answered, "scared of how they [dogs] would react." Respondent 2393302 answered, similarly, "The lack of info I have on the breed and the fear of the dog having a bad experience that can result in aggression."

The third question was the same as I asked in other interviews and surveys, addressing the general perception of baladi dogs and how (if) it is changing – a question that is also a main question for this thesis. This question received 68 answers. This question prompted varying answers some replying positively that the perception of the baladi dog had changed. Some of the positive answers, such as that of respondent 2442102, mentioned social media as a reason for a change in the general perception of baladi dogs. Some examples of positive answers include respondent 2442102's answer that:

"I'm not a dog expert, but what I know about them is that they're stray dogs. Indeed, the perception changed due to more exposure through social

media, I don't know, that's just my opinion. I think it changed over the past year, or maybe this is when I heard people start to raise awareness to this issue."

The replies echo similar responses from baladi owners both in Egypt and abroad, pointing out the importance of social media in the change of the general perception. Respondent 2476655 replied that he/she thought the perception of the baladi dogs had changed and then used his/her own personal experience with baladi dogs to stress this change writing that:

"... a few years ago people used to fear them, thinking they will attack or bite and spread rabies, but that has changed, I think, mostly due to social media and animal lovers groups and due to people sharing videos and information about how peaceful and harmless baladi dogs are, along with the fact that rabies is very rare now in Egypt, so the rabies phobia phenomenon is gradually fading."

Here the respondent sums up how social media had a significant role in the change of perception of baladi dogs. Which is also brought up above in relation to the previous reply about the social media affect. Another answer that sums up the situation clearly came from respondent 2388451, a person resident in Egypt who writes:

"Yes, I think in the past two or three years. I think that recently people became more aware of baladi dogs, because there have been a lot of Facebook posts about how the government or random people poison baladi dogs, and other people ask for help and donations for sick baladi dogs, so people started sympathizing with them over time, influenced by these posts, and started wanting to adopt them. People used to know that for a fact but were never aware of it until they saw real pictures with real cases on social media. Of course, there are other reasons, but I think this is the main reason why there was a change in perception" (2017).

However, some respondents do not believe that there has been a change in the general perception of baladi dogs. The majority of the respondents not owning baladi or dogs at all believes that there is a general perception that the strays are dirty and diseased and some also personally share this opinion as has already been shown in the quoted replies above. Respondent 2423582 answered, "The general public perception is that it's a 'street' dog—filthy, diseased, and dangerous and 'neggess,' which means 'unholy' in Arabic' (2017). Respondent 2398237, who is not an Egyptian, offered observations of how Egyptians perceive baladi dogs:

"It seems to me that many Egyptians don't see these dogs as (1) dogs or (2) sentient beings. I did not live in the region long enough to witness a change. It almost seemed like a lot of people felt that the baladi dog was 'beneath them' in some way' (2017).

One interesting answer was given from respondent 2401513, who stated that there has indeed been a change in perception of baladi dogs, but that the majority still perceive baladis as a low-grade animals, the respondent goes on to explain that:

"I think it's actually both. There are many people today who educate others about baladi dogs, and there are more organizations that have their welfare at heart. However, there are still so many people who view the baladi dog as an inferior animal, and this is truly unfortunate. We need much more education, not just about baladi dogs but about animals in general. We need to work harder to protect animal rights on a national level" (2017).

Here, the respondents again, as other baladi dog owners have done, bring up education as an important tool in creating more awareness about animal welfare.

The fourth question in this survey was, "How do you, or do you, act to change the perception of baladi dogs? Or how do you think it could change?" This question received 64 answers. As none of the respondents owned -baladi dogs themselves, their answers were particularly interesting to read. One respondent used his/her personal experience to explain how the perception of baladi dogs can change:

"With myself, I remind me not to be dog 'racist,' but I still like certain non-baladi breeds because of lifelong positive branding. With others, I do very little, but I don't like to judge regardless, neither positively nor negatively. I do think perceptions would change with more positive branding efforts around baladis. For example, a friend who has both a baladi and two purebreds once commented that the baladi was more intelligent. It affected me. It's also one of the few things I know about baladis compared to mountains of information it is easy to find about any non-baladi breeds" (3705132, 2018).

The respondent explains how they try to not judge dogs based on their breeds but still have an interest in purebred ones. Many non-baladi owners would still choose a pure bred dog despite their understanding of breeding affects. Moreover, the respondent believes that other non-baladi owners would change their perception is if more effort is put into it, whether by word of mouth or more information is provided about them. Respondents who do not own baladi dogs themselves agree with baladi owners that social media is important. One respondent stated that she believes that if more celebrities and social media influencers adopt the perception would change eg. "when more celebrities, influencers, etc... start owning and adopting baladi dogs" (3336843, 2018).

"Education" as has already been brought up several times by both owners and respondents not owning baladi for the fourth question. For example, respondent 3689540 stated:

"I try to educate people in [my] neighborhood about the baladi dogs we have around. By feeding them every day, some people have come to realize that these dogs are not dangerous, rabid, etcetera" (2018).

Perceptions can be changed when people actually see others interacting with stray dogs and understanding that they are not as dangerous as they thought. Word of mouth and spreading knowledge about baladis is a definite way to change. The fifth question was, "Are you thinking of getting a baladi dog one day?" which received 68 responses, 70.59% of which were "Yes," and 29.41%, "No."

The sixth question in this survey was as follows: "Baladi dogs have a bad reputation. Why do you think this is?" This question received 67 responses. The answers varied and revolved around the points that have been discussed here several times as important in shaping the perception of baladi dogs in Egypt, for example their barking at passersby, the way they look because they live on the streets, preconceptions that they are diseased, associations with rabies and so on. Respondent 3294883 drew upon personal experience to explain the problems of the baladi dogs in terms of their barking, defecation, and more, taking the example of when walking their own dog in Cairo:

"Personal problems I face with baladi dogs are aggression and violence towards my dog and defecation everywhere. They can also be very noisy when opposing packs run into one another. Another reason I think they have a bad name in Egypt is that a huge number of Egyptians are scared of dogs, and some even believe they are the devil's work" (2018).

Baladi dogs in the street usually form packs of minimum three. As mentioned a number of times previously, they are territorial which leads them to barking and showing aggression towards people or other dogs. Also as strays, defectation is a problem as the dogs live in the street and people are faced with it. Fear is a prime motivator to people's perception about baladi dogs. Like, another respondent indicated that baladi stray dogs have a bad reputation due to lack of understanding, which leads to fear:

"People are just scared of them. But also, in all fairness, it takes a lot of patience to take care of baladi dogs. Like small dogs being aggressive because they are small, baladis need a lot of care. But mainly the reputation is from being scared of them" (3291075, 2018).

Baladi dogs are medium sized dogs and can weigh around 32 kg. People tend to disregard the aggression of small dogs because it is easier to control them or get away from them. But baladi dogs who are larger would be harder to keep away once provoked.

The seventh question was to ask how the non-baladi owners think baladi dogs affect urban planning. The question received 50 responses. Sixteen of the respondents are not aware of how baladis affect Egypt's urban planning. Some respondents gave examples of how baladi dogs positively affect urban planning, for example respondent number 3692498 "they are guardians of the neighborhood:) and cute". One reply gave an insight on urban planning in Egypt and how developers and governments do not consider baladi dogs when planning:

"I think there is very little urban planning in Egypt, or its governance is so poor that urban development choices are driven more by private interests than public ones. Against such a backdrop I doubt Baladi dogs even figure as a concern. I imagine their habitats are destroyed without a second thought or maybe without any awareness of how they would be impacted. And I think if they became a problem to any urban development work they would be poisoned en masse" (3705132, 2018).

More respondents mention the lack of environmental assessments in urban development. Respondent number 3292352 does not believe the government and municipalities put effort in replacing baladi strays before or during urban planning, "I don't think the Egyptian government considers stray/Baladi dogs except when it comes to getting rid of them. Highly unfortunate!". One respondent suggests TNR to help both dogs and developers, "I don't think an out of control dog population is helpful to urban planning nor to the dogs' welfare. TNR and other humane solutions are important in creating a harmonious environment to live in for sure" (2384759).

The eight question in the non-baladi dog owner survey was "How do you think baladi dogs affect Egyptians social and communal life?" Also received 50 replies. Responses circled around the notion that baladi dogs are harmless and not as big of a problem as the majority makes them to be. For example, respondent number 3705132 states that stray baladi dogs do not affect Egyptian's lives, and that if they do, they are killed for it:

"I don't think they affect social or communal life at all. When they are a nuisance they are probably killed by community actors, or reported and then killed by authorities. Otherwise they are tolerated but not without fear and mistrust. Their effect is mainly that they are a nuisance" (2017).

It is evident from the replies in all the surveys that the killing of stray baladi dogs in Egypt has become widely recognized by a growing number of people. Along with the dogs' existence being hardly tolerated, confirms the struggle rescuers go through in trying to TNR the stray population and saving the ones in danger. Moreover, non baladi owners also believe that baladi dogs bring people together, "I think based on what I've witnessed, populations of baladi dogs have massive potential to bring communities closer together and even likely to blur the growing gaps between social classes" (3284418, 2018).

The ninth question was to ask people's opinion about TNR. Which received 60 responses. Only six respondents said they are against castration. One respondent expressed strong feelings about castration:

"That's the worst thing a human could ever do!! It's inappropriate and against all religions and even humanity...why would anyone do this!! They cannot speak and that's why we take decisions for them but that doesn't mean that we kill their feelings that's god creation!! We can control our dogs and control baladi dogs in shelters but spaying and neutering!! No Way!! Even uneducated breeders should be handled that's how we should solve it" (3693847)

The strong reaction of respondent 3693847 can perhaps be explained by the fact that it is common for people in Islamic countries to be against castration, as they believe it to be against God's will and nature. However, the rest of the responses were all in support of TNR and how it can help the baladi stray population in Egypt. For example one respondent was saying "it is an effective way to control" (3292796). Another respondent believed that it is important to do it to stray dogs in the street but not necessary for owned dogs:

"At the population level, I agree with arguments that it's good for dog welfare. It makes sense in terms of helping control unchecked population growth. At the individual dog/owner level, I ve read evidence that lowered testosterone from early neutering can be a factor in ligaments not reaching full strength, and in turn, can lead to joint problems being more pronounced. Either way I think we shouldn't judge people who do or don't "fix" their dogs. Egypt has a bigger problem right now of unregulated unprofessional breeding and a crowded online marketplace full of garage/rooftop breeders who run puppy factories for money, and who train for and advertise "aggressiveness" as a positive/desirable trait" (3705132, 2018).

The respondent here contradicted themselves by claiming TNR is a good way to control the stray population. However, with the number of "unprofessional breeding" they do not think it is beneficial for personal dogs.

The tenth question was to discern what non-baladi owners think of the current way in controlling the stray baladi population which is by using globally banned poison and guns. It received 61 answers and they were all against. Respondent number 3289677 expressed their fear of having poison around in the streets "It's the worst idea ever!!!! It's cruel, dangerous and not achieving anything. I have to use a muzzle on my dog in case she eats poison. I'm scared all the time about it" (2018). Another respondent used personal experience with the poison to describe the situation,

"I'm very furious about it and I've tried to save some cats and poisoned puppies, but sadly it was too late and vets don't really cooperate much. I'm surprised this is not an issue for most people here who even support and demand it" (2476655, 2017).

As non-animal lovers try to poison stray dogs, animal lovers try to rescue them.

The eleventh and last question in the non-baladi dog owners survey was "would you like to learn more about baladi dogs in the future?" Received 61 answers. 5 respondents 8.20% answered with No and 56 respondents 91.80% answered yes. In summary then, non-baladi owners might be persuaded to adopt more baladi dogs if official information about the dogs are more easily available to them. It is clear also that social media



Would you say this dog is a pure breed?

Pure breed

Egyptian Baladi

Figure 6. Amina El Shazly. 2019. Screenshot of a Belgian Malinois from the defining baladi survey.

campaigns have been influential in changing the overall perception of the baladi dogs in Egypt and that the overall perception of the baladi dogs is changing positively.

4.4. Defining the Baladi

Another survey was constructed to explore how people perceive baladi dogs, and how dog owners define a baladi dog in relation to a "pure bred" dog. As has already been discussed and problematized in Chapter 2.3 dog owners (and also non dog owners) tend to associate behaviors and "breeds" on the basis of impressions and assumptions on how a particular breed should behave, which generally can be true, but dog breeds are regulated by kennel clubs and not biologists (Weaver, 2013). For example, many Egyptians buy and breed chow chows because they look like teddy bears and appear cute. This trend means that dogs are largely judged based on their phenotype and not their purpose or individual behavior. One example is respondent number 3705132 who tries to not judge dogs based on their looks, they still prefer pure bred dogs because of their "positive branding".

In order to address this issue in relation to baladi dogs in Egypt, I made a small survey on surveryhero.com, a website that lets the user create surveys in different forms. The survey was available online starting March 13, 2017, and is still available. In the survey, I asked people to define what a 'pure breed' is and how they know whether a dog is purebred, and I added pictures of baladi dogs alongside pictures of popular breed dogs, asking them to choose the ones they think are baladi, based only on their pictures. For this survey, I collected 83 responses. Only 65% of respondents to this survey have dogs themselves, and 53% answered that their dogs are not pure bred. Of the 83 respondents some replied that they categorized dogs to a particular given breed based on phenotype (20 respondents), others based on temperament (28 respondents), and others based on size (25 respondents). Moreover, 36 respondents said they categorized dogs to breeds based on "other" characteristics.

In the survey, I displayed twelve pictures of different breed dogs and asked respondents to choose from the answers. I started with a picture of a Belgian Malinois (downloaded from Google images),

I asked respondents whether they believed the dog is a baladi or a 'pure breed,' and 72.86% respondents answered 'baladi.' The next picture was of a pharaoh dog, and 78% answered 'pure breed.' The third picture was of a baladi, and 66.1% answered 'baladi.' The following picture was of a mixed blue heeler-chihuahua puppy, and 60% chose 'pure breed'. A picture of a baladi and 54% chose 'baladi'; correctly. I asked respondents to choose which dog is the pure breed one on a picture of a baladi and a German shepherd and 80% answered correctly. The following two pictures were of two different baladi dogs and the majority answered correctly. Moreover, on a picture of a purebred Basenji, also gathered from Google images, 65% of respondents indicated that the dog is a baladi. I then added a picture of two of the puppies bred by Scott and Fuller (1965) from a purebred cocker spaniel and a purebred basenji (see chapter 3) and asked survey takers to write the name of the breed they think the puppies were. None of the respondents were able to identify the breed of the puppies. Fourteen offered remarks such as 'cute' and 'adorable', one respondent suggested they were pit bulls and eight other respondents believed they are baladi. On another picture of a white shepherd dog, only 46% of respondents answered "pure breed". Some of the respondents taking this survey either quit during taking it or skipped some questions which affected the results. For example, when asked if they would adopt a baladi puppy 90% of 64 respondents answered yes. However, the following question, which was about reason for not wanting to adopt a baladi, only got 16 responses. Fifteen of respondents stated they would not adopt a baladi because it is dirty and diseased, three because they are from the streets, and nine chose "other" reasons for not adopting them. For a better explanation, I asked survey takers to volunteer more reasons for not wanting to adopt a baladi. This extra question received fourteen responses, six of them were due to the baladis bad reputation. For example, respondent 705284 answered "Bad temperament, smart but not courageous, good for families and groups". Another response suggested that the lack of information on baladi dogs is a significant reason for Egyptians not adopting them "I don't know their character and not sure if they're good for protection (I know that they could be trained but not sure if they're strong enough" (700096, 2017). Moreover, the following question, which received 64 responses, was "Have you ever dealt with an Egyptian baladi dog before" and 83% of responses were "yes". I then asked respondents to rate this encounter on a scale from 1 to 5, 5 being "great": 34 respondents chose '5'. I added a final picture of a white shepherd dog in an apartment and 57% of respondents chose 'Baladi' when trying to identify the dog type of this picture.

From this quick survey, it is evident that it is quite difficult for Egyptians to differentiate between a baladi dog and a similar looking 'pure breed' dog. Also, many Egyptians are better able in identifying popular distinct breeds like German shepherds, golden retrievers, pugs, etc., but less so for more unknown breeds or dog types.

Overall, summarizing all the survey data presented in this chapter it appears that the perception of the baladi dog is changing to the better though there are still problems. In the next chapter I have spoken with baladi rescuers and Egyptian veterinarians to get more insight on baladi dogs situation and general perception in Egypt, characteristics, behavior and more.

5. The rescuers, veterinarians and the Baladi

As shown in the previous chapter, social media and information campaigns have been enormously influential in reshaping the perception of the baladi both in Egypt and abroad during the recent years. There are over 50 Facebook pages and groups dedicated to animal welfare in Egypt, with thousands of followers. Also, a lot of people post pictures and stories of animal cruelty asking for help. Many of the stories and pictures are graphic and from the responses of baladi owners living abroad presented in the previous chapter, it seems that many individuals around the world have become more aware of what they go through as stray dogs than before. Who are these influencers and rescuer organizations then? How do they view the baladi and how do they explain the perceptions of the baladi dogs and how it has changed over time? In this chapter we meet a few individual rescuers. One of them is Laila Hamdy Fayek, one of Egypt's leading individual rescuers. An individual rescuer who has dedicated her life to saving and rehoming abused baladi (or non baladi) dogs. I also did an initial short interview with her in March 2017. Another, is Ahmed Al Shurbaji, the founder of the Egyptian Baladi Rescue and Rehabilitation organization HOPE. I had previously spoken to Ahmed Al Shurbaji, during my internship at the organization. In addition, I interviewed other individual rescuers using the online version of the interview on www.surveyhero.com. However, I will only include two interviews in full in this chapter and the other interviews will be included in the discussion.

Moreover, I also sent my online surveyhero.com rescuers survey to another animal welfare organization founder, Mona Khalil, who started rescuing dogs 18 years ago. Mona Khalil is the founder of Egyptian Society for Mercy to Animals (ESMA). In addition, I interviewed Shona El Sayed, founder of El Gouna Stars, who has been rescuing, feeding and doing TNR campaigns for El Gouna's (a resort city close to Hurghada) baladi stray dogs for 8 years. Furthermore, I interviewed Karin Bavnick, head of Dahab (a city in Sinai) animal welfare. Through these interviews, I was able to build a broader survey questionnaire orientated towards rescuers specifically. In the beginning of the survey, I had written a note asking the respondents for permission to use their names in my thesis, and if they did not want their names to appear, they were free to write "anonymous" in the name section of the survey. Of the 14 surveys done, 13 were named while one respondent preferred to remain anonymous. The named interviewees are Aya Abdel Salam, Perry Saber, Fedrica, Tracey Sedky, Sanda, Jen, Sherine Shaker, and Hedaya el Fatih.

5.1. Conversations with rescuers

Laila Hamdy Fayek

In course of the building of this study, I interviewed Laila Fayek twice. The first time in March 2017 when I was first embarking on my first year as a master's student and was looking for a thesis topic. The second time in November 2017 when I started my research on Egyptian baladi dogs specifically. Both interviews were in English.

In my first interview with Laila Fayek that took place on the Facebook messenger application. Fayek described the adult Egyptian baladi as a well-built, medium sized dog with erect ears and a curled tail, much like the ancient Egyptian tesem found on pharaonic paintings. She explained the life of a stray Egyptian baladi as tough and challenging to survive. If they are not being abused or deliberately run over by cars, they are generally neglected. Moreover, Laila recounted how baladis have a strong sense of adventure, and they have survival skills that have developed from living on the crowded streets of Cairo.

Fayek explained to me the challenges she faces as an individual dog rescuer in Egypt. In her opinion, the government's lack of laws regarding animal cruelty has increased the level of abuse and neglect towards Egyptian baladis. Another problem facing Egyptian baladis, according to Laila, is that most veterinarians are not equipped with the knowledge to treat severe health problems of the dogs, which may require bone and eye surgeries. In general, according to Laila it is difficult to find home not just for baladi dogs but also other abandoned dogs in Egypt. Laila therefore was forced to look for adopters abroad, as Egyptians are more interested in popular and foreign breeds. She flew her first dog to the United States in 2013 for adoption. The dog was a paralyzed golden retriever that was abandoned due to his paralysis. According to Laila Fayek, one of the main challenges that she faces as an animal rescuer in Egypt, is that a majority of Egyptians abandon their popular and pure breeds when they get sick or too old. She explained to me that a large number of pets were abandoned due to lack of commitment and "the irrational excuse that a dog barks," which forces rescuers to work harder on re-homing abandoned animals than saving the ones on the street. Another problem, according to Laila Fayek is also that Egyptians look down at Egyptian baladis and consider them dirty.

In my second interview with Laila Fayek, that was more structured based on prepared questions I wanted to know more about the personal motivations for becoming a rescuer and campaigning for the baladi dog. Laila Fayek explained she has been rescuing animals all her life. Since she was a little girl, she used to rescue with her parents and later herself but keeping it 'low profile'. The work accelerated in 2013 when she started what she calls "the actual high profile rescue cases" Laila Fayek continues her story by explaining that her lifelong love for animals and the baladi dogs' situation in Egypt were the main reasons for getting into animal rescuing. Since 2013, Fayek has sent over 150 dogs abroad, but says that despite success, exporting animals is not an optimal choice, however, with the state of animal welfare in Egypt, it is their only chance to find a permanent home.

I asked Laila about any rescue cases that have moved her in particular, and after thinking for a while she responded that she has seen many heartbreaking cases in her lifetime, but the case that was of particular significance was that of a baladi dog she named Dodge. Dodge was thrown off the fifth floor and was beaten with a metal rod. After he was found, Fayek took the paralyzed

Dodge with two broken front legs into her own home. Fayek described Dodge as a vocal dog "who used to sing".

Moreover, Fayek spoke about the general perception of baladi dogs and how it has been slightly changing in the years 2015 – 2016. She mentioned social media as a means for the increase in awareness amongst Egyptians. Fayek believes that despite the minor change in baladi dogs adoption rates, more people have been helping them. To help change the general perception of baladis, Fayek said that her life revolves around saving them. In March 2016 she created a national day (which has now become virtually an international one) for Egyptian baladi dogs, which is now celebrated on May 28 each year. To promote the reputation of the baladi dog in Egypt she also created a YouTube video that included 60 people: Egyptians, Americans, British, Dutch, Canadians, Irish, Swedish, and Germans. People in the video say "I have an Egyptian baladi dog". The video was viewed more than 50,000 times. Fayek also created many Facebook photo albums for baladi dogs that are public on her profile, in order that whoever comes across her profile would see them. 3,838 people now follow Fayek's Facebook profile. She also manages a Facebook page called "All I know about dogs & cats", where she posts as much information as she can about baladis. Additionally, Fayek tried to create a Wikipedia page for Egyptian baladi dogs; however, it was deleted due to the referencing regulations of Wikipedia.

I asked Fayek how she finds the dogs she rescues and how she handles the whole rescue case. She disclosed that she finds the cases usually on the social media outlet Facebook, or when people send her private messages. She even once received a bag containing two kittens on her doorstep. The most common cases Fayek finds are dogs hit by a car, in need of amputation surgeries, poisoned, or abused. Depending on what time of day it is when she receives the rescue Fayek looks for a vet that is willing to take an emergency case. She then starts creating a fundraiser post on Facebook for surgeries, flights to adopters abroad, and boarding if the rescue needs to stay in a clinic.

One of the things that are most challenging for Fayek in animal rescue is the lack of people offering help or donations. According to Fayek "most people just comment on posts or take pictures of the dog in need and just leave." Some other challenging parts in Fayek's rescue missions are the difficulty in finding a place to board the dogs or someone to escort them on flights out of Egypt. The largest challenge is and raising funds for her cases and she comments that "all these challenges come with each case, so every case is hard." For Fayek, animal rescue and welfare is emotionally and physically exhausting and draining. Fayek said that the most common criticism she receives about what she does is people telling her to help humans instead of animals, by now she has a standard reply for such criticism saying that that people who help animals help humans as well.

When I asked Fayek about the government's strategy in controlling the stray population of baladi dogs, she related how the government and municipalities poison dogs and shoot them in broad daylight. She opined that spaying and neutering stray baladis are the best solution for the over population of strays. Moreover, Fayek's opinion on euthanasia was quite interesting; she indicated that she treats dogs the same way people treat babies, arguing that they do everything in their power to save babies, so she does the same for dogs. She doesn't give up on her cases and euthanasia is always off the table for her. When asked about rabies in baladi dogs, Fayek stated that rabies does not exist in Egypt the way Egyptians think. She exemplified her point saying that "unfortunately, people here are ignorant when it comes to rabies, and for most, any dog who barks is rabid." Thus, the fear of rabies Fayek argues is based on prejudice.

According to Fayek, dogs are not considered in any developmental projects and if anything, it is urban planning that affects the dogs negatively rather than vice versa. Finally, when asked about her thoughts regarding future perception of baladi dogs, Fayek told me that she is not hopeful there will be a big change in the general perception of baladis in the future. However, she expressed her belief that with more awareness in children education by parents and school would make a significant difference.

Ahmed Shurbaji

The interview with Ahmed Al Shurbaji took place at HOPE II in September 2017. The interview was carried out in our mother tongue language, Egyptian Arabic. I then translated the interview to English.

Figure 7. Amina El Shazly. 2017. Shurbaji with a few of his baladi rescues in HOPE I



Shurbaji started rescuing stray animals in 2014, when he stumbled upon an aged baladi dog that was hit by a car and fell into a coma. Shurbaji took the dog straight to the vet and paid for her medical care from his own pocket. As the dog kept falling in and out of the coma, Shurbaji was hopeful and decided to call her Hope. However, Hope died five days later, and he was heartbroken. After that, Shurbaji followed animal welfare pages on social media outlets.

After being exposed to the cruelties that animals face on the streets, he decided to take matters into his own hands and continue rescuing stray animals in need. From 2014 Shurbaji started rescuing

animals and boarding them in different clinics. After sometime he realized that he had 18 different dogs and cats distributed among clinics, so he decided to put them all in one place and in March 2015 opened his rescue center, HOPE, named after his first rescue. When Shurbaji opened this center, he was boarding 25 dogs. As Shurbaji kept rescuing animals, he found that he needed more space for them, so he moved all the dogs into a bigger space on the outskirts of Cairo. He started renting out a piece of land in Shabramant, Giza. When I asked Shurbaji about how he funded his first and second rescue centers, he told me, "Anything I have done for the stray animals in Egypt was all because of the donations I was collecting". As more animals were being checked in into HOPE, Shurbaji realized that he needed a new space for more dogs to be rehabilitated before flying them abroad to foreign adopters. Shurbaji opened phase two of the HOPE rescue center in September 2017, when I began my internship with him. At the time of this writing, HOPE I and HOPE II together sheltered 250 dogs.

Since 2014, Shurbaji has flown 93 dogs to adopters abroad; 75 of them are baladi, and the rest are golden retrievers, Dalmatians, pit bulls and a great Dane. Shurbaji described to me the different cases he receives of baladi dogs: "Leg and spinal injuries are the most common cases we receive

at HOPE. The worst one was 'fighter,' a baladi dog that was shot, and the bullet was 10 cm deep into his shoulder. We took him in, and our in-house vet operated on him and was successful in rescuing him and removing the bullet. Unfortunately, no one has offered to adopt fighter, and he is still with us in our center till today." Shurbaji remembered another heartbreaking story of a baladi dog that was rescued: "Marzouka was shot more than once in Alexandria, Egypt; she lost an eye. We brought her in when she was limping and traumatized. As with all our rescues, we operated on her, rehabilitated her, and flew her to the United States to an American adopter, and ABC news did a story on her."

Shurbaji also rescued another baladi who was used as dog bait in dogfights. Shurbaji told the story of Bisou as follows:

"When we found Bisou we found him surrounded by many baladis, protecting him from us. We were finally able to take him into our center where he underwent two amputation surgeries, and we kept him for six months to work on his trauma and behavior, and thank God we found him a permanent home in the United States. Now, he even has a Facebook page dedicated to his journey, called Bisou's Journey" (2017).

To Shurbaji, all the rescues in his rescue centers are dear to him, and he hopes that one day he would be able to find all of them long-term adopters. Most of the success stories of which Shurbaji speaks are of baladi dogs that have traveled abroad and been adopted by foreigners. When asked about the reason for the adopters being mostly foreigners, Shurbaji stated that he believes that foreigners in developing countries are "not used to the level and severity of abuse that happen to our strays, so they feel for them and wish to adopt them more than Egyptians do."

During my interview with Shurbaji, I asked him what he thinks about the general perception of baladi dogs in Egypt and what he thinks about the way they are treated. He told me "90% of people want stray baladi dogs dead, and the other 10% like the dogs and accept them." However, he believes that in the past two years, the general perception of baladi dogs has changed, and more people are becoming aware of animal welfare in Egypt. When I asked Shurbaji what he thinks was the reason for this change in the general perception, he said, "Only social media was the reason for that change." Shurbaji explained that pages of animal welfare on social media outlets like Facebook have around 400,000 followers each: "These pages raised awareness of the state of animals living on the streets. People take pictures of stray animals and post them. Some others post pictures of their adopted baladi dogs or cats, and many more post pictures of animals in need of immediate medical care calling for rescuers or anyone to help." Shurbaji also believes that the involvement of celebrities and public figures was a reason for the change in the general perception of baladi dogs. Shurbaji was able to bring celebrities like Ahmed Fahmy and his former wife

Menna Fahmy on board with his idea of HOPE. The couple greatly helped in the foundation of his rescue center. Moreover, Shurbaji received some international media coverage when Chinese, Spanish, and United Arab Emirates news agencies contacted him and interviewed him at HOPE.

I asked Shurbaji about how the Egyptian government deals with the overpopulation of stray baladi dogs that leads to their deaths; Shurbaji responded, "the government doesn't use any scientific ways to fix the problem of the growing population of strays. They instead poison them or shoot them in broad day light." He continued discussing rabies in stray dogs in Egypt and how the government claims that rabies is the reason for the inhumane culling process. He said that rabies in stray dogs does exist, but not as widely as the Egyptian government affirms:

"The government says that rabies is very common in stray dogs, but it actually exists in very few cases, and the government cannot confirm that anyway because in Egypt, we don't have any labs that test for rabies even when the dog dies. We don't have enough safety precautions to test for it"

Shurbaji also told me about how challenging it is to fund and manage a rescue center for dogs in Egypt. "It is difficult to collect the amount of donations needed to get the center going. From feeding the 250 dogs twice daily, to maintenance, salaries, and the ongoing rescue finances. We do our best to care for our resident dogs and not fall for hoarding too many dogs." Shurbaji told me about the people who find healthy stray dogs and message his Facebook page asking the center to take the dogs, "unfortunately, we can't take in all the cases sent to us because sometimes they are healthy dogs and people are just worried about them, or because the center is full and we don't have a place for another case." People get upset at Shurbaji without understanding that taking in any case he gets, will negatively impact his hard work in maintaining a good quality of life for the unfortunate dogs already found in his care.

5.2. Conversations with veterinarians

Veterinarians have a significant role in any dog's life. In addition to dog owners and rescuers, I also wanted to capture how Egyptian vets define the baladi dog and how (if) they perceive that the general perception of the baladi dog in Egypt has changed. I asked six veterinarians in Cairo to participate in a survey using the website for online surveys surveyhero.com. The questions were written in both English and Arabic for the veterinarians to be able to choose the language they prefer. I then chose to interview Dr. Aziz Sharafeldin, Dr. Moataz Shaaban, Dr. Karim Hegazy and Dr. Ramy Eissa for a deeper inquiry. The choice of interviewing these veterinarians was based on their reviews from a Facebook page called 'Vets in Egypt: recommendations & reviews.' I also interviewed an additional veterinarian who chose to stay anonymous over the phone. I had sent Dr. Sharafeldin, Dr. Shaaban and Dr. Hegazy the survey to answer on surveyhero.com. I interviewed Dr. Eissa on the phone. Additionally, during my field studies and internship at the HOPE organization, I had a chance to meet the in-house veterinarian at the rescue center, Dr.

Ahmed Al Ghareeb and interview him in person. The interview was conducted in Arabic and I translated it to English for this thesis. Below I have thematized the surveys/interviews in a few themes and I will summarize the individual responses under these themes.

Changing perception of the baladi dogs

An important question relating to the main question of my thesis relates to how the veterinarians define the general perception of baladi dogs and if they think it has changed over time in Egypt and abroad. As shown earlier in this thesis, there are different viewpoints on the general perception of baladi dogs in Egypt. Vets are a good source to understand better how the perception has changed, because who else can really tell if people started raising more baladis than vets?

When I spoke to Dr. Ghareeb at HOPE, he told me that he does not believe the perception of the baladi dog has



Figure 8. Amina El Shazly. 2017. Baladi dog in HOPE II

changed, at least not in the magnitude that he wishes and thinks is needed. Additionally, he opined that the perception of dogs is better and more merciful in the more rural areas in Cairo, than it is inside the more densely urbanized parts of the city. Where dogs usually form packs around houses or areas, and they protect and prevent new dogs or burglars from entering. Dogs are more appreciated for their work in rural areas. While Dr. Ghareeb doesn't think the perception has changed much, Dr. Hegazy's opinion is that the perception of baladi dogs in Egypt has indeed changed. He explained, giving the example of the expatriates living in Egypt who initially were the ones who raised baladi dogs as indoor pets. According to Dr. Hegazy, more Egyptians now raise baladi dogs and take them to vet clinics for regular checkups. However, Baladi dogs are still neglected overall by people in Egypt. Dr. Hegazy adds that this is mainly because of prejudgments and the general fear of the dogs. Dr. Hegazy gave the example of how Egyptian mothers can sometimes use baladi dogs as a way to scare their children and convince them to eat their food, telling them if they will not eat their food, the dogs will eat them. Dr. Hegazy goes on to explain that this practice plants fear inside the children against the baladi who later on develop violence towards them. Similarly, Dr. Eissa, strongly agreed that the general perception of baladi dogs has changed and that more people now care for baladi dogs than before. He believes that the change happened in the last four years mainly due to social media outlets. Like Dr. Ghareeb, Dr. Eissa concurs that a change has taken place especially in low-income households, where they raise baladi dogs to become guard dogs. Dr. Eissa also recognizes the influence of expatriates that have always raised baladi dogs. Nevertheless, more Egyptians now adopt and raise baladis than before.

Despite Dr. Hegazy's wish to change the perception of the baladi dog further, it is evident from the responses both from the rescuers, veterinarians and as relayed in the last chapter also dog owners, that the perception of the baladi dog has changed in thee recent years. Dr. Sharafeldin believes that people now have a different mentality about dogs and that this new mentality also led to a positive change in the general perception of dogs. Dr. Shaaban also agreed that the general

perception has changed with more people having sympathy and awareness towards baladi dogs. He said that more people are adopting baladi dogs than buying breed dogs. Moreover, Anonymous opined that the general perception of baladis has improved largely due to awareness campaigns, and the work of rescue organizations that are becoming more common. In addition, the media have been focusing more on animals than it used to before, in particular the digital social media. Anonymous also points to the importance of several Muslim sheikhs speaking out about the religious understanding of dogs being impure as misinterpretation. They explain that raising dogs is not forbidden according to Muslim faith. However, many of the veterinarians are still of the opinion that many people believe dogs are vicious and dirty animals, and that people are still abusive to baladi strays.

Overall perception of the baladi dog amongst veterinaries

Another relevant and related question is how the veterinaries themselves perceive the baladi dog. It should be pointed out here that the way I have selected veterinaries for the survey also makes them somewhat positively biased towards the baladi dog. The first question I asked in my interview with the vets was about their experiences working and treating baladi dogs. All veterinarians I was in contact with defined the baladis as 'smart dogs'. Dr. Ghareeb, the resident veterinary at HOPE, told me that he treated baladi dogs more than he treated other dog breeds. He also added spontaneously that, in his professional opinion, baladi dogs are one of the smartest and friendliest breeds. Dr. Hegazy described baladi dogs as affectionate, and said that once people show them love and care, they will reciprocate. But they need to feel safe and secure first. With baladis being anxious dogs, working with them is different than working with popular breeds. He explained that baladi dogs behavior in the clinic is usually based on fear. Dr. Eissa continued describing baladi dogs behavior in the clinic as fearful and anxious, even if they were never abused before. However, Dr. Sharafeldin responded saying that he receives a lot of baladi dog cases and that treating baladis is usually a good experience. The veterinarian that chose to stay anonymous (hereafter referred to as Anonymous) also described his experience with baladi dogs as 'pleasant' and claimed that baladis are one of the smartest and kindest dogs a person can meet.

Working with baladi dogs

To get a better understanding of the number of baladi dog cases that vets receive in Egypt, I asked the veterinarians to estimate the number of baladi dogs cases they treat at their clinics. Dr. Ghareeb, who has his clinic at HOPE rescue center, told me that they do not receive a specific number of baladi cases, rather the amount of cases they take depends on the space they have available at the rescue center. However, Dr. Hegazy receives approximately eight to twelve baladi dogs per month. Dr. Eissa answered 40 baladi dogs per month. Dr. Sharafeldin and Dr. Shaaban, who both work at the same clinic, explained that they receive a lot of urgent rescue cases that need treatment, around 20 to 25 dogs per month. Additionally, they have around 20 regular baladi patients. Moreover, Anonymous answered that out of 10 dogs they get at the clinic, three of them would be baladi dogs most of these cases bring rescue cases rather than home pets.

As more people are taking baladis to vets, whether as their own pets or rescue cases, knowing the common medical problems baladis face in Egypt will paint a better picture on the breed. So, I asked the veterinaries about the common cases they receive of baladi dogs and the six veterinaries concurred that car accidents are the most common issue with baladi dogs in particular. For example, Dr. Ghareeb reported that as a vet working in a rescue organization, the common cases

are baladis hit by cars or dogs with distemper disease. He adds that other common issues are scabies and sometimes aggression due to the lack of socialization with humans.

Moreover, Dr. Hegazy adds that the most common cases and diseases he receives related to baladi dogs are also car accidents or dogs that have been poisoned. Also Dr. Hegazy mentions distemper as a common disease, and in addition to this also Parvo virus, all types of blood parasites (due to heavy infestation) giardiasis, mange, and worms. In Dr. Eissa's opinion when I asked him if baladis' health is better than other breeds due to them being a mixed breed, he opined that the health of baladi dogs health are not necessarily better than other breeds, rather he argues it depends on the individual case. Most of them are rescue cases in need of urgent medical care. Dr. Shaaban's most common baladi cases are poisoning, skin conditions, orthopedic cases for rescue stray baladis, and blood parasites as tick borne diseases.

It is evident that living on the streets highly affects the lives of not just baladi dogs, but all animals. But the veterinarians also expounded on the baladi dogs general health and immune system. Dr. Ghareeb said that baladis have a strong immune system and that due to their strong immune systems he doesn't find many baladi dog health issues, compared to other breeds. According to Dr. Ghareeb baladis are very energetic and well adapted to Egypt's climate. Also, their immune system works better against common viruses and bacteria compared to other breeds. Moreover Dr. Hegazy explained that baladi dogs don't have the common health issues he finds in other breeds, like hip dysplasia or acute ligament. On the other hand, Dr. Eissa argued that baladi dog's immune system is not necessarily "better" than other breed dogs. They can also get infected by viruses and diseases just like other breeds. However, Dr. Sharafeldin stated that baladi dogs have good stamina. Anonymous stated that even though baladi's general immune system is stronger than other breeds due to them living on the streets and eating from trash, they could also catch scabies or become severely malnourished. Anonymous added that it could be more difficult to treat baladis because of the lack of their medical history. Moreover, Dr. Shaaban also stated that baladis have good stamina and less health issues if they are well taken care of.

The presence of Rabies

Because many Egyptians do not understand what rabies is and how a rabid dog behaves, a lot of dogs are poisoned due to this lack of knowledge on the disease or dog behavior. All veterinaries agreed that most Egyptians do not understand what rabies looks like in dogs. In fact, Dr. Ghareeb told me that he has never seen a case of rabies in dogs. However, he knows about it and added that the symptoms are fear of water, sunlight, and more often than not, fear of anyone or anything. However, Dr. Hegazy and Dr. Eissa gave a different perspective on the disease. They both stated that Rabies is a virus that kills more than HIV in Africa due to lack of awareness and can be transmitted by a bite of a rabid animal. Moreover, a rabies vaccine is given to dogs and people who work with dogs like rescuers, veterinaries or vet students. Dr. Hegazy also claimed that people believe that if a dog eats raw meat he will get infected, so people choose to kill the dog or throw them on the street. Dr. Eissa also agreed that even though there is awareness about the disease, many Egyptians do not know what it is or what the symptoms look like. Because the disease is fatal, Egyptians resort to killing dogs they suspect are rabid. With this in mind, because of lack of understanding, Egyptians believe that barking or aggression are enough signs for them that a dog is rabid. In fact, Dr. Sharafeldin agreed that rabies in stray dogs is rare. Additionally, he explained that there are two phases for rabies, a vicious phase and a paralysis phase. Moreover, Anonymous described rabies as a dangerous fatal virus that can affect anyone; nevertheless, it is rare to find in stray dogs. In his similar viewpoint, people who are unaware of that, believe that aggressive and

fearful stray dogs are rabid, so they start neighborhood and municipality campaigns to kill them. Dr. Shaaban also stated that despite people having a misunderstanding regarding rabies and confuse a fearful or aggressive dog with a rabid one. He believes that more people are now aware of the disease and can differentiate between an aggressive dog and a rabid dog.

Solving the problem of the street dog

To get a better and scientific understanding on how to solve the over population of baladi problem, I asked the veterinarians about castration and euthanasia. Which are the two sides of the current argument in Egypt. Dr. Ghareeb stated that castration is the best solution for their growing population on the streets. In his opinion, it is best to resort to castration instead of using the inhumane ways, which are poisoning and shooting. He also stated that religiously if the operation doesn't negatively affect the dogs then why not? Because a lot of Egyptians, believe that castration is forbidden in Islam. Dr. Ghareeb continued saying that people believe it is considered as 'taking away' a dog's manhood or motherhood. Moreover, Dr. Hegazy also agreed that castration is the best way to control the growing population. He stated that people believe it is 'haram' or religiously forbidden to interfere in God's creation. Dr. Eissa also strongly believes that spaying and neutering stray baladis is the best way to control their population. He stated that when foreigners take their animals to his clinic, the first thing they ask about is castration. But, not all of his Egyptian clients want to castrate their animals. Their reason is more often than not is because it is religiously forbidden. Dr. Eissa told me he tries to calmly explain the benefits of castration to his non-believing pet owners. He continued saying that when people state on Facebook groups that they do not believe in castration, other Facebook members attack them and call them 'uneducated'. He believes that a good approach in proper education is a good way to convince others. Additionally, Anonymous explained that religiously, sheikhs have said that it is acceptable to choose for the dog. Moreover, anonymous explained that mating is an instinct for dogs, for example, for female dogs who can only reproduce twice a year, so removing the hormone will prevent her from getting pregnant. In his opinion, castration is the best solution for the growing stray population. Dr. Sharafeldin asserted the health benefits of castration. Moreover, Dr. Shaaban said that spaying and neutering of strays is an important project that should be implemented on a national scale and sponsored by the government. To protect the dogs from mass murder and the society from overpopulation that leads people to killing them instead of finding a better solution. He also opined that castration is not forbidden religiously because "by any means killing and harming baladi dogs is the one thing that is forbidden."

To look at this another way, when I asked Dr. Ghareeb about euthanasia, he quickly stated that he is against it in all cases and doesn't believe in it. However, the rest of the veterinaries agreed that euthanasia is important in certain cases. Like Dr. Hegazy explained that sometimes, an animal can be in a lot of pain that is not treatable. For example, a case of communicable disease like rabies must be euthanized. Likewise, Dr. Eissa only performs euthanasia on animals that do not have a chance of living. For example, a case with total paralysis would be euthanized. Dr. Sharafeldin agreed that if a dog is suffering and the case is hopeless euthanasia is needed. Anonymous said he only performs it on cases of late stages cancer, or late stage chronic renal failure, total paralysis due to break fracture of vertebral column. Lastly, Dr. Shaaban supported euthanasia on few cases of painful diseases with no more effective treatment or pain relief. So, while one of the veterinaries does not perform euthanasia on any case, they all agree that if it has to be done, it should only be done on hopeless cases, and not just to control the baladi stray population.

On the whole, it is evident that the general perception of baladi dogs has changed in recent years. People, veterinaries, and organizations are all agreeing that there has been an increase in awareness on the Egyptian baladi dog and its issues. Even though the pace towards real changes is slow, there is definitely a hopeful future for the baladi dog in Egypt. In the next chapter, I will summarize the findings of this thesis in the context of the current events and themes taking place in Egypt regarding the baladi dogs.

6. Discussion

I set out in this thesis, to trace the relationship between humans and dogs from the ancient era to the present. We have been introduced to the relationship between Egyptians and the dog in the pharaonic times and around the eighteenth and nineteenth centuries. I have also attempted to trace the evolvement of the Egyptian dog from this time using several sources. In addition, I used genetics to trace the origin of domesticated dogs in general. I included genetic studies to understand what are the ancient breeds, if breeding 'pure' dogs increases the hereditary diseases, and dog characteristics and behavior. The greatest contribution of this thesis lies however in tracing the changing perceptions of the baladi dog in the recent past. Here I have used surveys and interviews with dog owners at home and abroad, rescue workers and veterinarians. But, while I was still writing this thesis, many things happened in the world of baladi dogs that could be followed in social media. In this chapter I will begin with summarizing the findings of the results presented in this thesis and I will then in the next subchapter go on to discuss the ongoing debates on the baladi dog in Egypt today.

6.1. Summarizing the Results

Past relationship with the dog

In the second chapter of this thesis I gave a preview on the kind of data and methods I used in my research and I also included a brief background on dogs and the way they are perceived in Egypt. As I discuss in Chapter 3 the way the dog and the baladi dog is perceived in Egypt today is very different from the situation in the distant past. Based on the archeological and historical sources presented in Chapter 3, ancient Egyptians held the dog in high regard. They perceived them as valuable and treasured them, dogs were buried with owners so they could meet them again in the afterlife. Ancient Egyptians also associated the flooding of the Nile to Sirius - a system of stars and called Sirius the 'dog star' as a symbol of protection and warning. Moreover, dogs were used for hunting big game and companionship. Dogs were depicted on the tombs and ancient artefacts. In the Chapter 3, I also explained that there were several breeds/types of dogs in ancient Egypt. Moreover, we learned in the third chapter that it is difficult to pinpoint the origin of dogs. Using significantly large studies on dog genetics, it is evident that out of all the breeds we currently know of, only 16 can be regarded as 'ancient'. Two of these 16 breeds are the saluki and the basenji which were breeds found in ancient Egypt. I use this evidence to suggest that there is a chance that baladi dogs are related to dogs from pharaonic times. This hypothesis can be confirmed only with genetic studies on the baladi dogs. However, at the moment it would still be inaccurate to say the baladis are an ancient breed.

Moreover, in Chapter 3, I referred to a study on genetically inherited diseases in dogs to prove that mixed breeds are superior in genetic health over 'pure' breeds. Additionally, the study concludes

that selective breeding done based on the physical appearance of dogs is possibly the reason for the spread of certain genetic diseases. For a deeper understanding of dog behavior and genetics, I cite the prominent study of Scott and Fuller (1965). The extensive study shows that it is highly problematic to claim that baladi dogs are mixed with certain breeds based on their looks. As much as breeds are a-like, it is also inaccurate to prejudge a breed just by one or two experiences with dogs from the same breed. Despite their findings that behavior can be hereditary, Scott and Fuller also assert that a dog's different experiences in life highly affects their behavior as adults. So, even though baladis can be known for instance to be 'anxious' it depends on the individual dog, where it was born, the nature of its relationship with its mother, sociability with humans etc.

Perception of the baladi dog today

In the fourth chapter, I discussed dogs in contemporary Egypt and how Egyptians perceive them in the present. I used web searches to better understand how Egyptians perceive baladi dogs. The links found from the web searches regarding baladi dogs were all news stories about the culling of stray dogs in Egypt. I did not find any official information on baladi dog temperament or characteristics like for other popular dog types and breeds. I also interviewed and surveyed baladi dog owners in Egypt and abroad, non-baladi dog owners, and also rescuers, and veterinarians. From the results of the surveys, I was able to better understand the general characteristics of the baladi dog in relation to other breeds. Most baladi dog owners have a baladi that was rescued. Respondents often describe Baladis as smart, alert, affectionate, easy to train, friendly, independent but also protective, wild, and loyal. Fifty percent of responders believe there has been a slight change in the perception of baladi dogs in Egypt. It is also evident from the responses that most agree that this change is due to the rise of awareness on social media outlets like Facebook. Moreover, baladi dog owners in Egypt are usually met with criticism for raising a baladi dog, however baladi dog owners abroad are usually met with compliments.

From the survey where respondents were asked to define the baladi (targeting Egyptians who own or do not own dogs), it is evident that Egyptians find it hard to differentiate between baladi dogs and other breeds. Out of the twelve pictures of dogs I added to the survey, the majority of respondents misidentified six of them. There is ample variety in the physical characteristics of the baladi dog which blend with a lot of other breeds' physiologies. When comparing baladi dogs to other breeds, some respondents of the baladi owners survey claimed that baladis are smarter than other breeds, protective, good guard dogs, affectionate etc. (e.g. same comments as given by the owners in Egypt and abroad). Some respondents suggested that baladis are comparable to other breeds like Labradors. The majority of the respondents praised baladis as 'amazing' guard dogs. Some owners also mentioned Baladis hearing capabilities. Baladis were also described as vocal. Moreover, baladi dog owners abroad confirmed the given thought that baladis are smart and good guard dogs but insecure and sometimes fearful. Other respondents stated that their baladi dogs show anxious behavior. It is also evident from the results that baladi dog owners think some of their baladis show good character because of their mix with other popular breeds. Only 7.5% of respondents claimed their baladi dogs are not trainable. Other respondents said baladis are as trainable as other dogs and that there are no differences when compared to other breeds.

Still a lot of the respondents of the defining baladi survey do not want to adopt baladi dogs due to their preconceived ideas about baladis. From the survey with baladi dog owners, results show that there are different opinions on why baladi dogs have a bad reputation as a breed. The baladi dogs on the street are viewed different than baladi dogs living in homes. Some respondents stated that the negative perception of baladis is due to their tendency to form packs, which threatens

pedestrians on the street (see below). As baladis living on the street, they need to develop their protective skills to protect their territory or litter of puppies, which leads people to prejudge baladis. Moreover, some respondents believe that baladis on the street are aggressive because of their experience with humans. The abuse they receive makes them fear humans therefore the dogs attack and bark at them.

As a comparison to the replies of baladi dog owners, I created another online survey for non-baladi dog owners. This comparison showed the agreement of the public's opinion on; the issues baladi dogs face in the street, how their reputation also negatively affects them. Moreover, the comparison showed that people judge the baladi dogs based on preconceived ideas. This survey also showed that Egyptian individuals, who do not own dogs or at least baladi dogs, have little emotional connection with baladi dogs.

Changing perception of the baladi dog

From both the surveys and interviews it is clear that social media campaigns have been influential in changing the overall perception of the baladi dogs in Egypt and that the overall perception of the baladi dogs is changing positively. The sharing of videos and pictures of baladi dogs online and the rise of animal rescue organizations in Egypt have been very important in reshaping the negative perceptions. Though baladi owners themselves maybe biased positively in their responses, non-baladi dog owners confirmed that social media is helping to change the negative perception of the baladi dog. All foreigner respondents were already familiar with rescuing and adopting rescue dogs, but Egyptians are fairly new to the practice of adopting rescue dogs. Moreover, in the survey were participants were asked to identify a baladi, 70% of respondents stated that they would adopt a baladi dog when they can. Half of the foreigner respondents stated that they heard of the baladi dog through social media and the other half have heard of them from friends or when they previously lived in Egypt. Thirteen of twenty of the foreigner baladi owners rescued their baladi dogs themselves while living in Egypt. Therefore, as baladi dogs are given increasing attention abroad it may also be that they are also increasing in popularity in Egypt.

Both rescuers confirmed to me that there has been a slight change in the general perception of baladi dogs in Egypt. The rescuers are in agreement then also with the five veterinarians who answered the surveys in this study. The veterinarians claimed that they are receiving more baladi dogs as regular patients who are adopted by Egyptians.

However, both rescuers and veterinarians agree that there is still a long way ahead for baladi dogs. The changes in the perception of the baladi dog are not enough. Most Egyptians still abhor baladi dogs and are highly misinformed about them and there are still many Egyptians who believe dogs are 'dirty animals'.

Non-baladi owners also help in changing the perception themselves by trying to change their preconceived ideas of baladis. Moreover, many respondents believe that other non-baladi owners would change their perception is if more effort is put into raising the awareness of baladi dogs, whether by word of mouth or more information is provided about them. Many individuals can be convinced to adopt baladi dogs if official information about the dogs are more easily available to them. However, some of the respondents still believe that there is no change in the perception and that the baladi reputation as dirty and diseased is still as common as before

From my interviews with both Shurbaji and Fayek, it is evident that baladi rescuers in Egypt face a lot of challenges. Both rescuers complained about the difficulty in finding baladi dogs adopters in Egypt and how they are forced to look for adopters abroad. Egyptians seem to have become desensitized to the abuse and neglect towards baladi dogs. From their experience, foreigners act faster when it comes to opening their homes for dogs in need. They also find it difficult to collect enough donations for their cases. Both rescuers use social media outlet Facebook to collect donations by posting pictures and updates for the cases.

Baladi dog and urban planning

From my questions in the survey regarding baladi dogs and urban planning and baladi dogs versus Egyptians' social and communal life, it is apparent that Egyptians are not accustomed to thinking of dogs or animals in general in relation to themselves. Many respondents did not quite understand the questions. For example, the majority of the answers in the urban planning question suggested that the question was either not fully understood but there were also replies saying that there simply was no urban planning in Egypt. Moreover, non-baladi owners also confirmed that there is a general feeling that urban planning in Egypt does not take stray animal populations into consideration. As Atkins (2012) discusses in the context of the emergence of the 'modern' urban cities, it seems that urban planning in Egypt is still in an 'anthropocentric' phase. Baladi dogs can be considered a vermin according to the four categories of urban animal classifications discussed by Atkins (2012). As in other 'modern' cities dogs are therefore seen as a problem to be 'cleansed' in the eyes of urban planners.



Figure 9. Amina El Shazly. 2017. Baladi mother and puppy in Cairo slums

While many respondents said that baladi dogs do not negatively affect the social and communal lives of Egyptians, as street dogs they carry a bad reputation. Baladi dogs in a pack attack and bark at passerby with their personal dogs. 'Noisy' was a word used to describe baladi dogs by non-baladi owners due to their consistent barking. A reason for non-baladi owners to not get baladi dogs is precisely from their own personal bad experiences with baladi dogs on the streets.

Both rescuers accuse the Egyptian government and municipalities of using inhumane methods to control the stray baladi population. From the surveys, it is also evident that the majority of Egyptians are aware of the ways used by the government to cull the baladi populations and they are all against it. But, due to the bad treatment of the street dogs many Egyptians are also becoming more sympathetic with the baladi dogs. The two rescuers both receive countless messages on Facebook urging them to save threatened street dog packs if not already poisoned or shot dogs.

A problem brought up by the rescuers is also the misconception about rabies and street dogs. Both rescuers told me that rabies is not as wide spread in stray dogs the same way most Egyptians think. Additionally, the veterinaries confirmed that rabies in stray dogs is rare. One respondent of the baladi owner survey brought up the fact that urban planning and the existence of street dogs could in fact help counter spread of rabies though I used this quote before in Chapter 4.2, I will repeat it here as it does suggest that the baladi dogs can actually amend the problem of rabies:

"They are not by any means considered in any kind of planning made by the government or the private sector, whereas they are very useful in new cities like Obour city, since we have desert animals like foxes. Having dogs around keeps away those desert animals. [...] If the government follows the recommendations of WHO and launches mass vaccination for 70% of strays, this will create herd immunity that will protect humans against rabies that could come from desert animals especially in new cities" (2393132, 2017).

Thus, the rabies issue cannot be automatically linked with street dogs. However, many Egyptians do not understand the symptoms of rabies and therefore choose to kill the dogs they believe are carrying this deadly virus. According to the rescuers barking or aggressive dog is seen by people in general as 'rabid', which leads authorities to kill the dogs in Egypt. The irrational fear of rabies in Egypt has turned into a police problem. It is now the job of the police to control and 'fight' the disease because of the ongoing complaints and lack of knowledge. But, as Ritvo (1987) explains, rabies becomes more than a disease, it is seen as "a sin that the afflicted animal had somehow deserved or brought on itself" (Ritvo 1987, 175). Hence irrational fear is mixed with other emotions resulting the strong negative feelings against the baladi dog. But overall, the veterinarians believe that the general health of baladi dogs is good, meaning they do not find any genetically inherited conditions. The fact that baladis also come from the street also means that they have a strong immune system according to the veterinarians.

6.2. Ongoing debates

While I was still writing this thesis, many things have happened in the world of baladi dogs. At the end of October 2018, a talk show on Egyptian television channel DMC showed a statement of Shawki Ibrahim Allam, the current Grand Mufti of Egypt - the grand mufti is the highest official of religious law in a Sunni country - stating that it is forbidden to kill stray dogs if they do not pose a threat on the society, meaning that killing them should be the last option people resort to. However, the spokesman of ministry of agriculture later explained on the mentioned television talk show, that they received many complaints from Egyptian citizens who are threatened by the stray baladi dogs on the streets. The ministry stated that they have to kill the stray dogs when citizens complain because they have no other solution. However, the animal welfare organization founder Mona Khalil, who has also been quoted in this thesis, asserted on national television that the ministry has been offered the TNR option by the Animal Welfare Foundation more than once and the ministry had declined this offer. In addition, following up on the debate in November 2018, the spokesperson of the ministry of agriculture announced on national TV that 4,100 cats and dogs would be exported abroad. In response to this announcement, there was a widespread national online campaign with thousands of 'shares' of posts protesting the government's decision. There was a wide belief that the government is planning on sending the shipment of dogs and cats to countries where eating them is considered somewhat the norm. It may be that the communication from the government was merely a scare tactic from them to divert the focus of the animal loving Egyptians from what the government is doing to the dogs presently on Egyptian streets. Moreover, due to the growing awareness in Egypt, TNR campaigns have been taking place in Hurghada, El Gouna, Alexandria, Cairo and Giza. Animal rescuers, volunteers and veterinarians, lead these campaigns but the government is not involved. In some instances, the government has also poisoned castrated packs of baladi dogs.

In the animal rescuer Laila Hamdy Fayek's opinion who was interviewed for this thesis, the main struggles she faces as an animal rescuer in Egypt are the overall lack of laws protecting animals in Egypt. Recently, official statements of Egyptian baladi dog culling campaigns are also shared on Facebook. For example, one announcement from the Egyptian Army Forces was shared in December 2017 to the general assembly of veterinary medicine. The announcement stated that due to the growing complaints of citizens to the army, they asked the GAVM to do what they see is right to 'destroy' the packs of stray dogs. However, after the rumors of exporting dogs abroad in November 2018 and its strong reactions on social media, the member of parliament Nadia Henry proposed a legislative amendment for article #357 of the Egyptian law to include penalties of imprisonment and punishments to anyone who kills, poisons, abandons, trades for food or severely harms an animal.

In September 2018, I was added to a Facebook group called "Egypt Animal Protection Law" which gained 2,132 members in one month. The group's aim is to put pressure on the Egyptian government to pass "the first animal law in Egypt". I was also added to a chat on Facebook messenger that also included around 180 people. From the tone and wording it was clear that many were angry with the Egyptian government for what they are allowing to happen to the dogs but very few proper solutions were suggested. One expatriate also went as far as to rally for a 'tourism boycott' of Egypt on the Facebook group due to the treatment of dogs from the government.

Both rescuers interviewed for this thesis are of the opinion that TNR is the humane method to control the growing population on the streets. Moreover, the veterinarians who participated in the surveys presented here also agreed that castration is the safest and most humane way to control the

stray baladi dog population. In the larger surveys Egyptian respondents were supporters of spaying and neutering however only four percent of respondents were against. Moreover, when asked about castration the majority was for it, however, six respondents were highly against it which can be explained by the fact that people in Islamic countries would consider it as going against 'God's will'. Thus, based on my own limited surveys there appears to be support for the TNR solution (with some exceptions) both inside and outside Egypt.

We can also see the negative social media effects in animal welfare in Egypt. Due to the virtual popularity of animal rescuers and rescue organizations, many Egyptians seem to only be capable of sharing pictures of animals in need of immediate medical help, tagging rescuers on Facebook posts, or simply typing 'F' - for Follow- to stay updated. It is evident that this affects the animal in need and the tagged rescuers. Shurbaji stated that he becomes stressed and burdened because of social media. The rescuer has told me that he is tagged over 500 times on Facebook per day and he once received a phone calls at 5am asking him to host a pack of dogs at his rescue center that were threatened to get poisoned. When he calmly explained to the caller that his rescue center does not have space for healthy dogs, the caller was displeased and called him merciless. Lack of immediate action and total reliance on rescuers to save the animals is problematic at the least.

Moreover, On February 4th 2019, Shurbaji has posted his thoughts about rescuing in Egypt on Facebook. He stated that rescuing is falling apart in Egypt. With the rise of awareness, comes the rise of 'selfish' people who call themselves rescuers. He criticized the new 'shelters' and stated that a lot of them are just apartments where they hoard the animals inside without medical care or castration. Shurbaji also stated that these rescuers ask for donations and claim their animals will die of hunger. He also criticized the 'shelters' that do not have in-house veterinaries. He questioned in frustration how they keep 'rescuing' animals when they do not have enough money or resources for rescue. The next day, he asked his Facebook followers and animal lovers to create a non-official committee to visit all the 'shelters' in Egypt to check on all the animals and their well-being in order to raise awareness about the shelters that must be boycotted and should not receive donations.

6.3. Concluding discussion

As has been discussed in this thesis there is a strong debate on the treatment of the baladi dog also in the present. In some ways this debate perhaps echoes earlier debates on the baladi dogs and its relationship to humans. There are many things that can be done to raise the awareness of baladi dogs in Egypt. Social media is an important tool and must be used wisely, as one online post will either negatively or positively affect baladi dogs. The ongoing debates will continue as this thesis comes to its close. There will be more happening in the world of Egyptian baladi dogs and I am hoping that more people will study this breed and take it from here.

7. Conclusion

Based on the archeological and historical sources presented in the thesis, ancient Egyptians held the dog in high regard as a companion species. Dogs were used for hunting big game and companionship. Dogs were depicted on the tombs and ancient artifacts and were also buried with their owners. Two of the 16 dog breeds that can be considered 'ancient' are present in Egypt, the saluki and the basenji and I raised the possibility that the baladi dog can be traced to these breeds. There was a change over time away from this very close and intimate relationship between dog and human to present day when the baladi dog in particular has a very poor reputation in Egypt. It is evident that mixed breeds are superior in genetic health than pure breeds. It is problematic to point at a baladi dog and assume their mix, because the physical appearance is just part of the whole and it disregards the true essence of the baladi breed.

Today, dogs in Egypt are not regarded the same way they were in ancient times. However, I was able to collect significant information about the baladi dog by doing websearches, online surveys with owners, rescuers and veterinarians. Here, I have interviewed two prominent rescuers. From the results, it is evident that the perception of the baladi dog in Egypt is changing to the better however in the eyes of many this change is still to slow. There is still a long way for the Egyptian baladi dog to be considered as a home dog like other popular breeds in Egypt. Many answers from the baladi dog owners survey showed me that each baladi dog is an individual in the eyes of their owners, and each one is seen as unique. It is clear that most owners see them as the same 'breed' e.g. the 'baladi', and that there are also some general characteristics that can be deduced from the owners, such as the dog being smart and independent. These characteristics, would apply also to other types of dogs. However, 'intelligence' is a commonly described trait among baladis, a characteristic that I believe these dogs develop from living on the harsh streets of Cairo.

What has been most influential in changing the perception of the Egyptian baladi dog has been social media. The virtual sharing of pictures and videos of abused and rescued dogs has been creating a lot of awareness for the baladi as has been shown here. The Facebook pages and groups dedicated to animal welfare in Egypt, have thousands of followers. Additionally, a lot of people post pictures and stories of animal cruelty asking for help in social media. Many of the stories and pictures are graphic and it seems that many Egyptians and baladi admirers around the world are now more aware of what the dogs go through as stray dogs. But unfortunately, due to the lack of academic studies on the breed and the government's tendency to cull stray dog populations, it is still hard to convince people that these dogs are adoptable just like other breeds.

However, Many Egyptians work hard on changing this perception to the better by talking to others and educating them. By posting pictures of their own dog and explaining how the dog is as good as any other dog. Moreover, from my interviews with the animal rescuers Shurbaji and Fayek, it is evident that baladi rescuers in Egypt face a lot of challenges. It is still difficult for them to find homes for baladi dogs in Egypt. Foreigners are faster in making the adoption decision than families in Egypt. Moreover, the wide misconception about rabies as a virus leads people to poison and kill stray baladi dogs. In urban planning, baladi stray dogs are simply not considered. Therefore, baladi

dogs affect social and communal lives of Egyptians in both negative and positive ways, both protecting and attacking Egyptians.

But, in the grand scheme of things, it is evident that the general perception of baladi dogs has changed in recent years. People, veterinaries, and organizations are all agreeing that there has been an increase in awareness on the Egyptian baladi dog and its issues. Even though the pace towards real changes is slow, there is definitely a hopeful future for the baladi dog in Egypt. Maybe one day we will come back full circle when the Egyptian dog again becomes our closest friend.

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Appendix

Table 1: Google hits when searching different dog types

Figure 1. Anonymous. 2400. Egyptian man with calf and dog. *Wikimedia Commons*. Hunting dog with long narrow muzzle and curled tail.

Figure 2. James Watson. 1906. The dog book. Wikimedia Commons. The dog book.

Figure 3. James Watson. 1906. The dog book. Wikimedia Commons. The dog book.

Figure 4. James Watson. 1906. The dog book. Wikimedia Commons. Pahates dog C.

Figure 5. Amina El Shazly. 2019. Screenshot of Egyptian baladi dog owners survey report

Figure 6. Amina El Shazly. 2019. Screenshot of a Belgian Malinois from the defining baladi survey.

Figure 7. Amina El Shazly. 2017. Shurbaji with a few of his baladi rescues in HOPE I

Figure 8. Amina El Shazly. 2017. Baladi dog in HOPE II

Figure 9. Amina El Shazly. 2017. Baladi mother and puppy in Cairo slums

The below links give access to the surveys carried out in this thesis:

Baladi dog owners survey report

https://surveyhero.com/results/36950/148690b7646d6a25c0bd641d1d4e74f4

Non-baladi dog owners survey report

https://surveyhero.com/results/36952/34aae24649ea3fcc052d14965bfe29e5

Dog breeds in Egypt survey report

https://surveyhero.com/results/12929/465dd941268f5349bc147c93ccf77e96

Rescuers survey report

https://surveyhero.com/results/39803/5148340a88d2a67a93475c6addaff903

Veterinarians survey report

https://surveyhero.com/results/51792/3317d7c82350d199dcbf3c36a113002c

Links to other posts and pages referred to:

https://www.facebook.com/groups/Egypt.Animal.Law/