Basenji Origin and Migration: Through the African threshold

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Introduction

After entering into Africa, possibly the same time as domestic goats and sheep, the Basenji's ancestor could have taken one or more routes to get to Central Africa. The current distribution of Basenji like dogs along equatorial Africa, from West Africa, Central Africa, to Somalia does not indicate a possible route taken. The archaeology record and prehistoric art may provide an answer.

Dog types of Africa

Gallant (2002) dates the arrival of the dog from the Middle East to 7000 BP (approx. 5000 BC). Slender sighthounds, housedogs, and powerful assault dogs migrated from the Near and Middle East during the early Neolithic (Gallant, 2002). Three basic dog types recorded in Ancient Egypt include the pariah dog, the greyhound and the mastiff (Blench, 2004). Of the three types, the pariah and greyhound have spread over much of the continent while the mastiff was limited to North Africa and is not present in modern times. The three dog types also show up in the rock images of the Sahara (Cesarino, 1997). Epstein (1971) placed the Basenji within the pariah group.

Migration Routes

Cesarino (1997) surveyed the rock art in North Africa and he proposed several routes used by the dog, one along the Mediterranean and Atlantic coast, several routes through the Sahara, and another down the Nile. The Basenji's ancestor could have taken one or more of these routes to reach Central Africa.

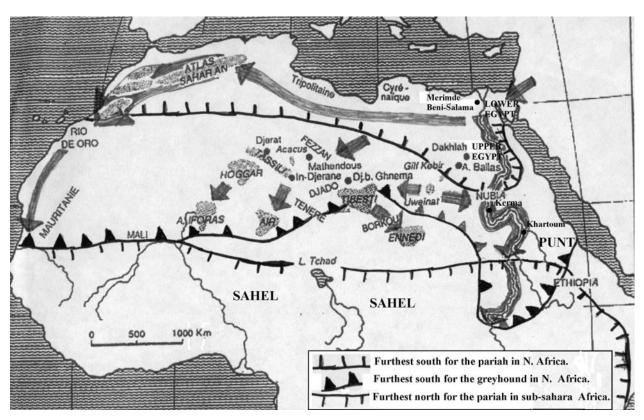


Figure 1 - Map of North Africa
Showing the distribution and migration of dogs.

Dog distribution – Blench, 2005
Dog migration route – revised from Cesarino, 1997 & Willcox, 1984

There is no evidence of either plant or animal domestication in the Nile Valley before 4880 BC (Hassan, 2002). People living in the Nile Valley found their food by fishing, hunting, and plant gathering. The domesticated goat made its appearance around 5900 BC in the Western and Eastern Desert, but did not appear in the Nile Valley until some 5 centuries later (Shaw, 2000). Domestic food production reached the Nile from two possible sources, SE Asia or the Western Desert of Egypt. By 6000 BC people of western desert were herding cattle and ovicaprids as well as cultivation of barley. A drought, occurring between 5000 to 4000 BC in the Sahara and SE Asia, caused movement of groups (most likely Berber speaking people) who herded and cultivated plants into the Nile Valley. (Hassan, 1988). Although the dog may have been in the Nile Valley before the appearance of the goat, it is possible that the dog made a later appearance in the Nile Valley only after the migration of people living in the Western and Eastern desert to the Nile Valley.

The earliest known evidence for dog burials found in Africa was on the western edge of the Nile delta at Merimde Beni-Salama dating from 4800 BC (Brewer, et al., 2001). Predynastic dog burials were found at Heliopolis, Maadi, and Wadi Digla in the Nile Delta and Mostegedda and Badari in Upper Egypt. Dogs interred with humans also occurred in the Predynastic period.

Early depictions indicate that the dog in Egypt had erect ears and tails high over their back (Brewer, et al., 2001). Scholars have referred to these hounds by the Egyptian word Tesem, which means dog. Painted pottery and rock art dated to the Naqada I and II period (3750-3400 BC) depict these hounds and they are frequently portrayed in Old and Middle Kingdom desert hunting scenes. An Amratian ware dish (Naqada I, c. 4500 BC) portrays a scene with a hunter armed with bow and arrow and holding four dogs with leashes that resemble the Basenji (Germond & Livet, 2001). The Egyptians drew or carved many Tesem with tightly curled tail similar to the Basenji. Hilzheimer (1932) remarked that the Egyptians idea of good breeding was a curly tail and often exaggerated it in their works of art. The initial Tesem form began to increasingly diversify from Predynastic to New Kingdom times (c. 4,000-1,500 BC), indicating that the Egyptians probably were doing selective breeding (Brewer, et al., 2001). Saluki-type dogs having floppy ears and curved tails and dogs with short limbs appeared just prior or during the Middle Kingdom period. Brewer (2001) compared data published in 1903 by Lortet and Gaillard on shoulder height. The data suggests that two population types existed in Egypt, one with an average height of 45.66 cm and the other of 50.73 cm. Although both types are larger than the Basenji (41-43 cm), it is possible they are closely related or are offshoots from the Basenji's ancestor. Pariah dogs living in present day Egypt have an average shoulder height of 55 cm, erect ears and lemon-and-white or pure white in color, sometimes all lemon or all brown with occasional black or tawny and a long bushy tail (Epstien, 1970).

Nubian dogs given as tribute are pictured in the Tomb of Amenmose, Dynasty XVIII 404-399 BC, and are physically similar to Salukis with saber tails (Osborn & Osbornova, 1998).

Higher up the Nile river in northern Sudan at Kerma dog skeletons were found in graves, most likely buried as pets, companions of the deceased, or shepherd dogs (Chaix, 1999). They were buried between 2700 to 1500 BC. Measurements taken of the skeletons show a striking uniformity in morphology and body size. Mean average wither height was found to be 53.8 cm and the dogs had elongated skulls (Chaix, 1999). Measurements taken of three dogs found at Eheima in Sudan, buried between 1600 to 1000 BC, indicate dogs standing about 50 cm and more at the shoulders and present-day dogs of the area have generally the stature of setters (Gautier & Neer, 1997).

The Dog spread even further up the Nile beyond Egypt and probably was present in Khartoum by 4000 BC. Evidence of a possible skeleton of a domestic dog, partially destroyed, was found buried with a human skeleton in the vicinity Khartoum at El Kadada (Geus, 1991). The El Kadero site near Khartoum was dated to an approximate age of 5300 -5100 B.P. and had mostly domesticated fauna with some game. Domestic animals include cattle, small livestock, and possibly dog. Later Neolithic sites indicate the people were pastoralist (cattle). Graves yielded remains of gazelle, crocodile, goat, sheep, cattle, and dog. People living later had similar domesticates.

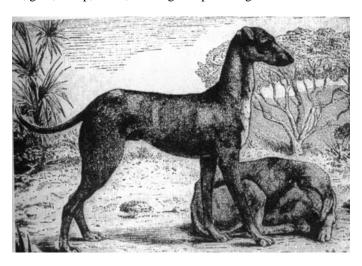


Figure 2 – Greyhounds from northern Sudan (Nubia) – Epstein, 1971.



Figure 3 - Wadi Rizegat – Early Nile-valley – Winkler, 1939.



Figure 4 - Nubian Rock Drawing - Basch & Gorbea (1968).

Current distribution of the pariah up the Nile ends just past the present day border of Egypt with Sudan and they are not present in the area where the Nile splits into the Blue and White Nile and only reappear south of Khartoum (Blench, 2005). Distribution of Greyhound types reaches further south on the Nile and ends just south where the White Nile and Jur River meet. The archeological record and current distribution seems to indicate that the pariah type dogs did not spread as far south as the Greyhound types. Comparison of ancient dogs with modern dogs of northern Sudan shows no significant differences in morphology or size (Chaix, 1997). The Basenji is shorter at the wither and does not have an elongated skull. The Nile River corridor provided one route for dogs to enter Africa. This route does not appear to be the one taken by the Basenji's ancestor.

The Mediterranean/Atlantic route

The end of favorable conditions (6100 -5800 BC) in the Levant caused a collapse of agrarian communities. People migrated out of the area going southwards into Arabia and westwards via the Sinai into NE Africa (Hassan, 2002). They brought with them the goat, sheep and dog.

The Ovicaprids (goat and sheep) were found west of the Nile in Farafra Oasis and Nabta Playa dated at 5500 cal. BC. The proto-Berber people living just to the west of the Nile probably absorbed the people coming from the Levant. Rock art in the western desert depict dogs that are found with present day Berber (Brewer, et al., 2001). A hunter-gather society stretched along the North African coast from Libya to the Atlas and Aures Mountains. Experts disagree whether the Berber people moved west along or just inland of the Mediterranean coast or if they already were living along the Mediterranean and the ovicaprids and dogs migrated through the existing hunter gather society. At Hanu Fteah in Cyrenaica, around 7000 years ago, a new economy of raising goat and sheep replaced hunter-gather society. Ovicaprids were found at Grotto Capeletti in Algeria dated at c. 4850 cal. BC. Not long after, along the Maghrib coast and within and around the Atlas and Aures mountains sheep and goat were introduced to the area. Later on, 5000 year ago, cattle started being kept and were grazed in upland pastures in the summer and valleys during the winter.

Rock art depicting dogs has been found just west of the Atlas Mountains, in the Atlas Mountains, and southwest to Rio de Oro (Cesarino, 1997). Most of the dogs are shown in hunting scenes and are pricked-eared with saber tails. A few are shown with loosely curled tails and a few that may be of greyhound type (Leclant & Huard, 1980).

Several different types of dogs developed over time and both types, pariah and greyhound, are represented in present day dogs. Small terrier-like pariah dog with a mean weight of 5 kg occurs in large numbers in Libya and the Atlas countries. They stand 25 to 30 cm at the shoulder and have prick ears with occasional drooping tips (Epstein, 1971). The Aidi or Atlas sheep dog is a terrier-like pariah found in Morocco, Algeria, Tunisia and part of Libya. It used as a stock protecting dog and stands at 52 to 62 centimeters. Ears are semi-drop and the tail is long, carried low, and slightly curved. It is possible it was mixed with a Molossian breed imported from across the Mediterranean to area (Hall, 2003).

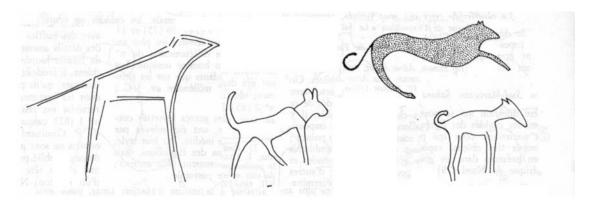


Figure 5 – Dog art from south Morocco and Rio de Oro (last dog on right) – Leclant & Huard, 1980.

The Basenjis ancestor might have taken the Atlantic route to reach central Africa but the probability of this is may be low. Prehistoric rock paintings in this area are not detailed enough to say if any represent the Basenjis ancestor. Current pariah dogs of the area don't seem to have the same stature or conformation as the Basenji, although this may have changed because of later introductions of dogs from across the Mediterranean. The current distribution of pariahs does not go any further than Rio de Oro. Greyhounds are seen further south. The distribution of the pariahs might reflect the retreat of people from the Sahara when it got drier or the furthest limit for pariah type dogs since their introduction to the area.

The Saharan routes

The early Holocene (ca. 11,000 BP) climate in the Sahara was moister than it is currently. Lakes and marshes existed as far north of the Hoggar Mountains, supporting a diverse aquatic flora and fauna (Street & Gasse, 1981). After a short drying period (8,000 – 7,000 BP), wetter conditions returned and reached further north in the Sahara. Evidence from sedimentation during this time indicates that the rainfall regime was more intense and tropical than during the early Holocene (Street & Gasse, 1981). People who spoke Nilo-Saharan languages moved west from the Nile into the mountains of the Sahara (Ennedi, Tibesti, Tassili, Hoggar, & A. Iforas mountains).

Cattle keeping emerged as early as 8500 cal. BC. in the Eastern Sahara, and in the southeastern corner of the Western Desert of Egypt. Abrupt cold climatic events at 7500, 6600, and most significantly c. 5800 cal. BC, were crucial in the spread of cattle keeping westward across the Sahara (Hassan, 2002). Pastoralist communities established themselves in better-watered range and basin areas associated with a series of highlands, such as the Ennedi, Tibesti, Tassili and Hoggar massifs. After 6,500 B.P. the opening of the grassland niche with increased rainfall allowed expansion of the pastoral way of life throughout the Central Sahara. (Smith, 1989).

Evidence for domestic goat in the Western and Eastern deserts has been dated to 5900 BC (Hassan, 2002). This is some 5 centuries before their appearance in the Nile Valley (Shaw, 2000). It is possible the dog entered the Sahara before going down the Nile corridor.

Throughout the central Saharan Mountains people have carved or painted pastoral and hunting scenes. Dogs are pictured predominantly in the hunting scenes. The dog shown in figure 6 was pictured in a pastoral scene and was found in the Tassili Mountain. The pattern of the coat is similar to Basenjis and it includes a white tail tip.



Figure 6 - Fat Basenji-like dog pictured at Tikadiouine in Tassili Mts. - Muzzoline & Boccazzi, 1991.

Another rock picture found in the Tassili Mountains at Iheren is of a Basenji-like dog possibly walking in front of his master (you can see his right foot). His tail curves upward and the head very much looks like a Basenji.

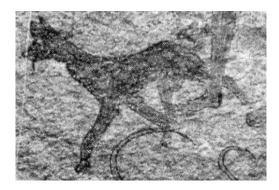


Figure 7 - Rock picture of a Basenji-like dog found at Iheren in the Tassili Mts. - Muzzolini, 1986.

This Basenji-like dog (figure 8) was painted sniffing for game and is above an archer. The painting was found at Sefar in the Tassili Mountains.



Figure 8 – Painted rock picture of a hunting dog sniffing – Lhote, 1959

Some of the rock pictures in the central mountains of the Sahara look very much like Basenjis. It is possible that the Basenjis ancestor migrated through the central Sahara before entering Central Africa.

Egyptian impact on the Basenjis development

It has been said that the Basenjis either originated in Egypt and was introduced into Central Africa or came from Asia to Central Africa and given by the Pygmies as tribute to the Egyptians (Coe, 1994).

Coe (1994) writes that an expedition by Prince Herkhuf in VI dynasty to the home of the Pygmies as a possible means the Egyptians got Basenjis. Several records of other expeditions have been uncovered from the VI dynasty showing they went to southern Nubia where they turned westward. The last expedition acquired a pygmy or dwarf. Even if this occurred, depictions of Basenji like dogs occur 1,000 years before the VI dynasty (Brewer et al., 2001).

After 3000 BC, when the Egyptian dynastic period began, the Sahara started drying out. Over time cattle herds could not be maintained in the Sahara. Nomads moved out of the Sahara into the Nile Valley from the Libyan Desert. C-Group peoples appeared in northern Sudan around 2500 BC. By 2000 BC cattle raising people appeared in the Sahel (Clark, 1980: 568). During this time dogs were brought into the Nile Valley from the Sahara. It is possible dogs related to the Basenjis ancestor was introduced into ancient Egypt. Egyptians did not start practice dog breeding until the dynastic period, well after the dog had been introduced into the central Sahara.

The Egyptians from the earliest time had contact with three areas, Africa (primarily Nubia, Libya, and Punt), Asia (Syria-Palestine, Mesopotamia, Arabia, and Anatolia) and the northern and eastern Mediterranean (Cyprus, Crete, the Sea Peoples, and the Greeks) (Shaw, 2000). The area of Africa the Egyptians had contact was in East Africa, from Sudan, Eritrea, and possibly Ethiopia. There is no record of contact with Central Africa.

There are few records left by the Egyptians on various stelae giving us a hint of the trade of dogs with other areas. In the XI dynasty the Pharaoh Intef II apparently received Libyan and Nubian dogs as tribute which were recorded in text (Janssen & Janssen, 1989). During XVIII dynasty dogs were imported into Egypt from Punt (Dunn, 1999)

Midant-Reynes and Braunstein-Silverstre (1977) have recently reinvestigated the history of the dromedary (camel) in Ancient Egypt. According to them the dromedary became well known in Egypt only from the Ptolemaic period (332- 30 BC) onwards. There are some indications of camels being introduced as exotics, but no significant numbers were every maintained in ancient Egypt (Blench, 2005). The Egyptian had use of the donkey since ancient times, but it cannot survive as well as the camel on a trip through the Sahara.

It is probably unlikely the Egyptians traveled to Central Africa through the Sahara or by going down the Nile and across the Sahal. Travel across the Sahara was almost impossible without the camel, which was not introduced into Egypt until well after the dog was brought into Central Africa. Egyptian records only indicate they went as far as

Northern Sudan and on the coast possibly to Ethiopia. Therefore, the Egyptian probably had no impact on the development of the Basenji and did not introduce the Basenjis' ancestor into Central Africa.

Conclusion

The Basenji's ancestor had three major routes they could have used to reach Africa. Out of the three, the most likely route was through central Sahara. It is possible they could have gone along the Atlantic route. They probably did not travel down the Nile.

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