SOME PROBLEMATIC ANIMALS IN MARCO POLO'S DESCRIPTION OF THE WORLD

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ABSTRACT

There are a number of animals mentioned in Marco Polo's book which present difficulties. A few are considered here. The *papiones* of the area near Fuzhou have been identified as Chinese ferret-badgers. It is suggested that this is probably correct. Wehr's hypothesis that the word "rondes" is a transcription of the Turkic and Persian term *qunduz* is discussed and rejected: "rondes" must be considered a scribal error. Marco's "lions" are usually tigers, but not always. Medieval European conceptions of the tiger are examined. Marco's references to the lynx are also discussed. The term *ercolin* has never been convincingly explained. It is shown that it almost certainly means "squirrel" and is probably derived from a German word.

KEYWORDS

Marco Polo, Papiones, Rondes, Tiger, Ercolin.

CAPITALIA VERBA

Marcus Paulus Venetus, Papiones, Rondes, Tigris, Ercolin.

Although many of Marco Polo's observations regarding plants and animals have already been considerably elucidated, a number of uncertainties remain. Here, an attempt will be made to shed further light on some of the obscurities surrounding a few of the animals mentioned in Marco Polo's book.

1. Papiones

Frances Wood criticised Marco Polo for including in his book "oral legend relating to... foxes that ate only sugar-cane", ² although in reality the text says neither that they were foxes nor that sugar-cane was all that they ate. These animals are mentioned only in the Zelada manuscript:

Ittem inveniuntur in contrata illa quedam animalia vocata papiones, qui papiones quasi vulpibus similantur. Ipsi quidem corodunt et dampnificant multum canas çucarum producentes. Et quando mercatores cum caravanis transeuntes per contratam, in aliquo loco sistunt causa quiescendi et dormiendi de nocte, isti papiones ad ipsos veniunt celate et quicquid possunt furari furantur et auferunt eis inferentes multum dapnum.³

Note that these *papiones* are said to be *quasi vulpibus similantur* ("something like foxes"): they were not actually foxes of any kind. Moreover, the account continues by saying that the merchants are able to catch these animals by making traps from gourds, with an opening only large enough for the animals to push their heads into using significant force. This they are induced to do by putting fat in the bottoms of the gourds. This fat is so attractive to the animals that they push their heads greedily into the gourds and get them stuck.⁴ Thus, contrary to Wood's claim, they clearly liked to eat fat as well as sugar-cane. There is really not enough information about these animals to identify them with certainty, but Haw's suggestion that they were Chinese ferret-badgers, *Melogale moschata*,⁵ fits the available information extremely well.

^{5.} Haw, Stephen G. Marco Polo's China...: 133-134.



^{1.} Haw, Stephen G. *Marco Polo's China: a Venetian in the Realm of Khubilai Khan.* London: Routledge, 2006: 124-146.

^{2.} Wood, Frances. Did Marco Polo go to China? London: Secker & Warburg, 1995: 150.

^{3.} Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo: the Description of the World*. London: Routledge, 1938: II, lii–liii; Marco Polo. *Milione, Redazione Latina del manoscritto Z, Versione Italiana a fronte*, ed. Alvaro Barbieri. Parma: Fondazione Pietro Bembo/Ugo Guanda, 2008: 234. English translation: "There are also in that district certain animals called papiones, which papiones are something like foxes. They indeed gnaw and do much harm to the canes which produce sugar. And when merchants passing through the district with caravans stop in any place for the sake of resting and sleeping by night, these papiones come to them secretly and whatever they are able to steal they steal and carry off, bringing much loss upon them". Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 348. See also Marco Polo. *The Travels*, trans. Nigel Cliff. London: Penguin, 2015: 218.

^{4.} Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 348–349; Marco Polo, *The Travels*, trans. Cliff: 218-219.

Apparently, however, this identification has not convinced everyone, nor is it clear why the word *papiones* was applied to the animals. Moule thought that they might be "black-faced monkey[s]" of some kind.⁶ This idea has been revived recently by Philippe Ménard: *Dans la Chine du Sud, au pays des cannes à sucre, ces animaux pourraient être plutôt des singes* ("in south China, in the land of sugar-cane, these animals might rather be monkeys"). Ménard does not appear to have understood that the ferretbadger is one particular animal: *aux yeux de Haw on aurait affaire à des furets ou à des blaireaux* ("in Haw's eyes, these would be ferrets or badgers"). He also noted that Haw had not explained the etymology of the word.⁷

The identification with monkeys, or with any other kind of higher primate, is certainly out of the question. Firstly, it is clear that the papiones were nocturnal: they stole things from the merchants while they were sleeping during the night (de nocte). There are no higher primates in the Old World which are nocturnal.8 The only nocturnal monkeys are the night monkeys of the genus Aotus, which are restricted to Central and South America.9 In contrast, ferret-badgers are very strongly nocturnal.¹⁰ Another reason to rule monkeys out of consideration is that primates commonly use their front paws to convey food to their mouths: primates "preferentially grasp food with their hands". 11 No monkey could have been trapped in the way that the papiones were. They would simply have scooped fat out of the gourds with their paws. In fact, the application of the word *papiones* (singular *papio*) to any kind of primate is comparatively recent. Today, Papio is a genus of baboons (including all the true baboons and, according to some authorities, also the drill and mandrill). 12 However, such a usage did not become established until after the sixteenth century. Of the cynocephalus (baboon), Conrad Gesner wrote: Atqui Papio *quibusdam dictus, mihi potius hyæna esse videtur ("Yet by some it is called Papio, which* to me seems rather to be the hyena").13 Aldrovandi was more inclined to think

^{13.} Gesner, Conrad. "Historia Animalium", *De Quadripedibus Viviparis*. Frankfurt: Cambierianum, 1602: I, 859. Moule failed to find this reference in Gesner; Moule, Arthur Christopher. *Quinsai...*: 65–66. This is probably because Moule used Christopher Froschover's edition, which does not include the sentence quoted; Gesner, Conrad. "Historia Animalium", *De Quadripedibus Viviparis*. Zürich: Froschover, 1551: I, 971.



^{6.} Moule, Arthur Christopher. Quinsai, with other notes on Marco Polo. Cambridge: University Press, 1957: 65.

^{7.} Ménard, Philippe. "Les Mots Orientaux dans le Texte de Marco Polo". Romance Philology, 63 (2009): 122.

^{8.} Nowak, Ronald M. Walker's Primates of the World. Baltimore: Johns Hopkins University Press, 1999: 8. On primates in southern China, see Wang, Sung; Quan, Guoqiang. "Primate Status and Conservation in China", Primates: The Road to Self-sustaining Populations, K. Benirschke, ed. New York: Springer, 1986: 213–220; Zhang, Yong-Zu; Wang, Sung; Quan, Guoqiang. "On the Geographical Distribution of Primates in China". Journal of Human Evolution, 10 (1981): 218-223; Smith, Andrew T.; Yan, Xie, eds. Mammals of China. Princeton: University Press, 2013: 41-57.

^{9.} Nowak, Ronald M. Walker's Primates of the World...: 8, 111-113.

^{10.} Storz, Jay F.; Wozencraft, W. Chris. "Melogale moschata". *Mammalian Species*, 631 (1999): 3; Zhang, Liang; Wang, Yanping; Youbing, Zhou; Newman, Chris; Kaneko, Yayoi; Macdonald, David W.; Jiang, Pingping; Ding, Ping. "Ranging and Activity Patterns of the Group-living Ferret-badger 'Melogale moschata' in Central China". *Journal of Mammalogy*, 91/1 (2010): 103-104.

^{11.} Fragaszy, Dorothy M.; Crast, Jessica. "Functions of the Hand in Primates", *The Evolution of the Primate Hand*, Tracy L. Kivell, ed. New York: Springer, 2016: 314.

^{12.} Nowak, Ronald M. Walker's Primates of the World...: 148-151.

that the *papio* was some kind of monkey, yet he reproduced Gesner's illustration of what is apparently a hyena. ¹⁴ This identification of *papio* with the hyena merits examination. In his list of names of the hyena and similar animals, Gesner has an entry for *papio*. He quotes a number of different authorities for the information which he gives about this animal. The first is Albertus, who reported that the *papio* was abundant around Caesarea, and was a little larger than a fox, with the nature of a wolf. Other authors recorded its occurrence in Syria and said that it is called *dabha* or *aldabha*, presumably in Arabic. ¹⁵ Perhaps, then, *papio* is a Latinized corruption of the Arabic name. However, it may be that the name is onomatopoeic, imitative of a sound made by the animal, so that it might have originated independently in more than one language. ¹⁶

Gesner's Albertus is Albertus Magnus, who says: Papio animal est circa Caesareum habundans civitatem, parum vulpibus maius, luporum habens mores¹⁷ ("Papio is found in large numbers around the city of Caesarea. It is slightly larger than a fox but has the living habits of a wolf"). 18 These animals congregate in packs and howl loudly. It is said that sometimes, when driven by hunger, they raid tombs and eat human corpses. They seem to be a mixture of wolf and fox.¹⁹ It appears that Albertus took this passage more or less in its entirety from Thomas of Cantimpré. Thomas specifies that the Caesarea in question is the one in Cappadocia.²⁰ There are several other mentions of papiones in thirteenth-century writings. The earliest so far discovered is in Thietmar von Merseburg's description of Mount Carmel: papiones, quos appellant canes silvestres ("papiones, which they call wild dogs").²¹ This dates from 1217. A few years later, in his history of Jerusalem, Jacques de Vitry wrote: Sunt ibi papiones quos canes silvestres appellant, lupis acriores, continuis clamoribus de nocte ululantes ("There are papiones which they call wild dogs, fiercer than a wolf, which howl with continuous cries at night").²² The identification of *papio* with the baboon is clearly not supported by these early references, which equate papiones with wild dogs. In fact, it is likely that the later application of the word to baboons resulted from these primates being considered "dog-headed" (cynocephalus): "Cynocephales, are a kind of apes, whose

^{22.} Iacobi de Vitriaco. *Libri Duo quorum prior Orientalis, sive Hierosolimitanae: alter, Occidentalis Historiae nomine inscribitur,* ed. Franciscus Moschus. Douai: Beller, 1596: 176.



^{14.} Aldrovandi, Ulisse. De Quadripedibus Digitatis Viviparis Libri tres, et De Quadripedibus Digitatis Oviparis Libri duo. Bologna: Bernia, 1637: 259-260.

^{15.} Gesner, Conrad. Historia Animalium..., 1551: 630; Gesner, Conrad. Historia Animalium..., 1602: 560.

^{16.} It has been suggested that both *baboon* and *papio* may be of similar origin to "babble"; Weekley, Ernest. *An Etymological Dictionary of Modern English*. London: Murray, 1921: 98.

^{17.} Albertus Magnus. *De Animalibus Libri XXVI, nach der Cölner Urschrift,* ed. Hermann Stadler. Münster: Aschendorffschen Verlagsbuchhandlung, 1920: II, 1420.

^{18.} Albert the Great. *Man and the Beasts: De Animalibus (Books 22-26)*, trans. James J. Scanlan. Binghampton: Center for Medieval and Early Renaissance Studies, State University of New York, 1987: 172.

^{19.} Albertus Magnus. De Animalibus...: 1420-1421; Albert the Great. Man and the Beasts...: 173.

^{20.} Thomas Cantimpratensis. *Liber de Natura Rerum: editio princeps secundum codices manuscriptos,* ed. H. Boese. Berlin: De Gruyter, 1973: 160.

^{21.} Thietmari Peregrinatio, ad fidem codicis Hamburgensis, ed. Johann C.M. Laurent. Hamburg: Meissner, 1857: 22.

heads are like dogs".²³ The scientific name of one species of baboon today is *Papio cynocephalus*.²⁴

Was Gesner right to believe that these papiones were hyenas? Such an identification does not immediately seem unreasonable. The hyena of the region in question, from Cappadocia to Mount Carmel and the Jerusalem area, would be the striped hyena, Hyaena hyaena. This is the smallest of the three species of hyena, which is distributed from parts of Turkey through the Middle East into much of India.²⁵ It does not occur in China, however. The striped hyena would indeed be larger than a fox but smaller than a wolf, and might appear to be somewhat intermediate between the two. The opinion of Albertus, that the papio seems to be a mixture of the fox and the wolf, which Gesner took to apply to the hyena, remained in circulation for a long period. In about 1614, Sir Walter Raleigh thought that it would not have been necessary for Noah to take hyenas into the ark, because they could have been "generated againe" by crossing foxes with wolves. 26 However, the striped hyena is generally not a very noisy animal, and is usually more or less solitary or forms small groups of two to six.²⁷ Thus, it does not fit well with the papiones which congregated in groups and howled noisily at night. Scanlan identified the papio of Albertus Magnus as the golden jackal, Canis aureus.²⁸ This jackal, also called the Eurasian jackal (or often just the jackal), is frequently solitary but will sometimes hunt in small packs of as many as a dozen animals. It howls, particularly during the breeding season, when several males will congregate to compete for the favours of a single female.²⁹ It is much smaller than a wolf.³⁰ It therefore seems very likely that Scanlan's identification is correct.

Papiones are also mentioned more than once by William of Rubruck. This has caused a great deal of discussion, which is all essentially futile, because William gives very little information about them. He apparently only knew *papiones* as furs.

^{30.} Heptner, Vladimir G.; Nasimovic, Andrej; Bannikov, Andrej G. Mammals of the Soviet Union...: II/1b, 129.



^{23.} Topsel, Edward. The History of Four-footed Beasts and Serpents: Describing at Large their True and Lively Figure, their several Names, Conditions, Kinds, Virtues... Collected out of the Writings of Conradus Gesner and other Authors. London: Sawbridge, Williams and Johnson, 1658: 8.

^{24.} Nowak, Ronald M. Walker's Primates of the World...: 148.

^{25.} Régen, Isabelle. "Un Animal 'Bien Aimé' des Anciens Égyptiens: La Hyène Rayée". Égypte, Afrique et Orient, 68 (2012): 50–51; Glickman, Stephen E. "The Spotted Hyena from Aristotle to the Lion King: Reputation is Everything". Social Research, 62/3 (1995): 502, 510; Heptner, Vladimir G., Sludskii, A.A. "Mammals of the Soviet Union", Carnivora (Hyaenas and Cats), trans. P.M. Rao. Washington, DC: Smithsonian Institution Libraries and the National Science Foundation, 1992: II/2a, 20.

^{26.} Raleigh, Sir Walter. The Historie of the World. London: Walter Burre, 1614: 111.

^{27.} Régen, Isabelle. "Un Animal 'Bien Aimé'...": 50; Glickman. "The Spotted Hyena...": 521; Heptner and Sludskii. *Mammals of the Soviet Union*: II/2, 8, 39.

^{28.} Albert the Great. Man and the Beasts...: 172.

^{29.} Heptner, Vladimir G.; Nasimovic, Andrej; Bannikov, Andrej G. Mammals of the Soviet Union, Sirenia and Carnivora (Sea Cows; Wolves and Bears), trans. Bolos Abdul Malek Botros. Washington, DC: Smithsonian Institution Libraries and the National Science Foundation, 1998: II/1b, 152–153, 155; Costelló, José R. Canids of the World: Wolves, Wild Dogs, Foxes, Jackals, Coyotes, and Their Relatives. Princeton: University Press, 2018: 132-137.

He does not describe the furs and says nothing at all about what kind of animal a papio was: pelliceas... de pellibus lupinis vel vulpibus vel papionibus ("fur garments... of the skins of wolves or foxes or papiones"). There have been several suggestions regarding what these papiones may have been. Rockhill thought they might have been "badger, or some variety of fox".32 Risch cites Thietmar, Jacques de Vitry, and also John Mandeville. He decides that the papio must have been the lynx.33 This was also the opinion of Paul Pelliot, 34 whose identification was accepted by Jackson. 35 It seems to have originated with Bretschneider: "The fur of the lynx is much appreciated by the Mongols —Rubruck— mentions, among the furs used by the Mongols, the papio, which properly means the baboon; but most probably he saw skins of the lynx". 36 None of this is much more than guesswork, however, Perhaps William used *papio* to mean "lynx", but it is at least equally possible that he meant some other animal. In fact, he may not have known what animal the furs came from, and simply used a word which seemed to him at the time to be appropriate. I would suggest that he may well have been familiar with the furs of wolves and foxes, which would have been known in Europe at the period, and that the furs of papiones were of some animal with which he was not familiar. This would probably rule out the widespread Eurasian lynx. There is, in fact, no evidence that the word papio was ever used to mean "lynx". Gesner clearly knew the lynx well and calls it "lynx" or lupus cervarius, not papio. 37 Similarly, Albertus says that the Linx est animal notum, perspicax oculis ita ut secundum poeticas fabulas corpora solida penetret ("Linx... is a commonly known animal, noted for the accuity of its vision. According to the poetic fables it is reputed to be able to see through solid objects").38 Here again, Thomas of Cantimpré has similar information.³⁹ It is also significant that Marco Polo apparently

^{39.} Thomas Cantimpratensis. Liber de Natura Rerum...: 143.



^{31.} The Texts and Versions of John de Plano Carpini and William de Rubruquis as printed for the first time by Hakluyt in 1598, together with some shorter pieces, ed. C. Raymond Beazley. London: Hakluyt Society, 1903: 153; William of Rubruck. The Mission of Friar William of Rubruck: his journey to the court of the Great Khan Möngke, 1253-1255, trans. Peter Jackson, David Morgan. London: Hakluyt Society, 1990: 86; William of Rubruck. The Journey of William of Rubruck to the Eastern Parts of the World, 1253-55, as narrated by himself, trans. and ed. William Woodville Rockhill. London: Hakluyt Society, 1900: 70; Wilhelm von Rubruk. Reise zu den Mongolen 1253-1255, trans. and ed. Friedrich Risch. Leipzig: Deichertsch, 1934: 57-58. The second mention is very brief: de pellibus papionum; William of Rubruck. The Mission of Friar William of Rubruck...: 188.

^{32.} William of Rubruck. The Journey of William of Rubruck...: 70-71, n. 4.

^{33.} Wilhelm von Rubruk. Reise zu den Mongolen...: 57-58, n. 15.

^{34.} Pelliot, Paul. Recherches sur les Chrétiens d'Asie Centrale et d'Extrême-orient. Paris: Imprimerie Nationale, 1973: 96-97.

^{35.} William of Rubruck. The Mission of Friar William of Rubruck...: 86, n. 6; 188.

^{36.} Bretschneider, E. Mediæval Researches from Eastern Asiatic Sources. London: Kegan Paul, 1910: I, 127–128, n. 320.

^{37.} Gesner, Conrad. Historia Animalium..., 1551: 769-775; Gesner, Conrad. Historia Animalium..., 1602: 677-683.

^{38.} Albert the Great. *Man and the Beasts...*: 156; Albertus Magnus. *De Animalibus...*: 1409. *Lupi cervarii* are listed in the *Codex Cumanicus*, with the Turkic equivalent *silausun*; *Codex Cumanicus*, ed. G. Kuun. Budapest: Library of the Hungarian Academy of Sciences, 1981: 98.

knew what a lynx was, as will be seen below, so it would be odd if William did not. Perhaps William failed to recognise lynx furs when he saw them, but it is more likely that his *papio* was an animal not very well known in Europe. One possibility is the corsac fox, *Vulpes corsac*. This fox is listed among fur-bearing animals in the *Codex Cumanicus*, as *vulpe de arena* ("sand fox"), the Turkic equivalent being *charsac*⁴⁰ (whence "corsac").⁴¹ This is an old Turkic word.⁴² The corsac fox is abundant in Mongolia.⁴³ However, in the absence of any description of the animal or of its fur, this can only be a tentative suggestion.

Thus, it can be concluded that the word papio was used during the thirteenth century to refer to an animal described as a "wild dog", which was a little larger than a fox and was something like a cross between a fox and a wolf. The earliest references are probably to the golden jackal. This is not very helpful as far as the papiones of Marco Polo's text is concerned, as jackals do not occur in China. 44 There is a somewhat similar animal in China, the dhole (Cuon alpinus), but this can be ruled out as it is strictly carnivorous and usually diurnal.⁴⁵ In the absence of detail regarding the appearance of the papiones, no certain identification can be made, but the suggestion that they were Chinese ferret-badgers is highly plausible. The value of the animal's fur attracted Marco's attention: peles multum care venduntur ("their skins fetch a very high price").46 The Chinese ferret-badger "historically has been one of the most important furbearers in the region [southern China]".47 The omnivorous diet, nocturnal habit, and value of the fur all point to the ferretbadger.48 As for the word papiones, it seems to be purely Latin. It was certainly not derived from Chinese, and probably not from any language of Eastern or Central Asia. It might possibly have an Arabic origin. Whatever language it originated in, it may well be onomatopoeic. Marco Polo was talking about an animal which does not occur in Europe and was unknown to Europeans at the time. There was no word available to him that precisely meant "ferret-badger". Papio was used of an animal said to be something like a fox. No doubt it seemed reasonable to apply it to the ferret-badgers of the Fuzhou area.

^{48.} Haw, Stephen G. *Marco Polo's China*...: 133-134. For a description of this animal, see Smith, Andrew T.; Yan, Xie, eds. *Mammals of China*...: 327-328.



^{40.} Codex Cumanicus...: 98.

^{41.} Clark, Howard O. Jr.; Murdoch, James D.; Newman, Darren P.; Sillero-Zubiri, Claudio. "'Vulpes corsac' (Carnivora: Canidae)". *Mammalian Species*, 832 (2009): 2.

^{42.} Clauson, Gerard. *An Etymological Dictionary of Pre-thirteenth-century Turkish*. Oxford: Clarendon Press, 1972: 663; Räsänen, Martti. *Versuch eines etymologischen Wörterbuchs der Türksprachen*. Helsinki: Suomalais-Ugrilainen Seura, 1969: 267.

^{43.} Heptner, Vladimir G.; Nasimovic, Andrej; Bannikov, Andrej G. Mammals of the Soviet Union...: II/1b, 413.

^{44.} Costelló, José R. Canids of the World...: 143; Smith, Andrew T.; Yan, Xie, eds. Mammals of China...: 303.

^{45.} Costelló, José R. Canids of the World...: 145; Smith, Andrew T.; Yan, Xie, eds. Mammals of China...: 305.

^{46.} Marco Polo. *The Travels...*: 219; Marco Polo. *Milione...*: 236; Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 349.

^{47.} Wang, Haibin; Fuller, Todd K. "Ferret badger 'Melogale moschata' activity, movements, and den site use in southeastern China". *Acta Theriologica*, 48.1 (2003): 73.

2. Rondes

There is doubt whether this word really exists or whether it is simply a scribal error. In 1818, Marsden thought it was "probably corrupted".⁴⁹ Yule believed that it was "merely a misunderstanding of the French words *Roi des*".⁵⁰ This opinion has generally persisted.⁵¹ Nonetheless, Barbara Wehr has taken a different view and has seen *rondes* as evidence to support her belief that the Latin translation of Marco Polo's text made by Francesco Pipino *gehe möglicherweise direkt auf einen venezianischen Urtext zurück, der von Marco Polos eigener Hand abgefasst war* ("possibly goes directly back to a Venetian Urtext, which was written by Marco Polo's own hand").⁵² This has gained at least some acceptance: Vogel does not reject it outright, ⁵³ and Ménard has called Wehr's argument *très convaincant* ("very convincing").⁵⁴ Notwithstanding Ménard's opinion, however, there are serious problems with Wehr's view of *rondes*.

Firstly, it is worth looking at some of the variants of the text where *rondes* are mentioned:

[1] la pelle de gebbeline... l'apellent les Tartarz les roi des pelames. Et sunt de la grant dune fayne. 55 [2] pello... de zebelini... et li Tartari chiama questi re dele pelle et sono grandi chomo una faina. 56 [3] pelle de zembellino... camano li Tartari leroide pellami e questi sono pelli grandi come pelli de fayne. 57

[4] pelles de zembelino... vocant eas Tartari lenoidæ pellonæ, et sunt magnæ sicut pelles unius fainæ. 58

^{58. &}quot;'Peregrinatio Marci Pauli', ex Manuscripto Bibliothecæ Regiæ, no. 3195 fo.", *Receuil de Voyages et de Mémoires publiées par la Société de Géographie*. Paris: Éverat, 1824: I, 383; Bibliothèque Nationale de France. Département de Manuscrits, latin 3195, f. 43r.



^{49.} Marco Polo. *The Travels of Marco Polo, a Venetian, in the thirteenth century: being a description, by that traveller, of remarkable places and things, in the eastern parts of the world, trans.* William Marsden. London: the Author, 1818: 349 n. 659.

^{50.} Marco Polo. *The Book of Ser Marco Polo, the Venetian, Concerning the Kingdoms and Marvels of the East,* trans. and ed. Henry Yule. London: Murray, 1871: I, 364, n. 8.

^{51.} For example, Barbieri and Andreose state that 'rondes' is a 'traduzione errata' of 'roi des pelames'; Marco Polo, *Il «Milione» veneto, ms. CM 211 della Biblioteca Civica de Padova*, ed. Alvaro Barbieri, Alvise Alveose. Venice: Marsilio, 1999: 270.

^{52.} Wehr, Barbara. "Eine Crux im Text von Marco Polo: *rondes"*, *Sprachkontakte in der Romania: Zum 75. Geburtstag von Gustav Ineichen*, Volker Noll and Sylvia Thiele, eds. Tübingen: Niemeyer, 2004: 147.

^{53.} Vogel, Hans Ulrich. Marco Polo Was in China: New Evidence from Currencies, Salts and Revenues. Leiden: Brill. 2013: 20 n. 32.

^{54.} Ménard. "Les Mots Orientaux...": 104.

^{55. &}quot;the skin of sable… The Tartars call it the king of furs, and they are the size of a marten". Marco Polo. *Il Milione, prima edizione integrale,* ed. Luigi Foscolo Benedetto. Firenze: Olschki, 1928: 88; Bibliothèque Nationale de France. Département de Manuscrits, français 1116, f. 42v. For the English translation see Marco Polo. *The Description of the World*, trans. Sharon Kinoshita. Indianapolis: Hackett, 2016: 84.

^{56.} Staatsbibliothek. Hamilton 424, f. 54v.

^{57.} Bibliothèque Nationale de France. Département de Manuscrits, italien 434, f. 28v. I am not confident that my reading of this manuscript is absolutely correct, but *leroide pellami* is clear.

[5] pelle de zebelini... Li Tartari l'apelano in soa lingua rondes et sono de grandeza de fuine. 59

[6] pellium çambellinorum... Animalia illa, a quibus hec pelles habentur, dicuntur rondes et sunt magnitudinis unius fayne. 60

[7] la pelle zibellina... li Tartari la chiamano regina delle pelle, θ gl'animali, si chiamano Rondes della grandeza d'una fuina. 61

What is important here is that there is a clear progression from the (probably correct) version of text [1] in Italianate French (the language of the manuscript usually designated F) through variants where les roi des has been misunderstood and miscopied (leroide, lenoidx) to very different variants where the word pelames has been dropped and [les] roi des has become rondes. It is easy to understand how this transformation occurred. Perhaps the grammatically incorrect use of roi corresponding to a feminine noun confused scribes: it may be noted that Ramusio [7] made a correction to regina delle pelle (Ramusio also copied both the major variants into his edition of the text). Only one variant [5] says that the Tartars call the animal rondes en soa lingua ("in their language"). It should also be noted that a clear distinction between the name of the skins and the name of the animal from which the skins were obtained seems first to have been made by Francesco Pipino [6]. Pipino's text in fact has three occurrences of *rondes*, 62 but it is clear that the two later ones most probably result from his editing. In both cases Pipino states that these animals have been referred to above: de quibus supra in 2º libro cº xxº mencio facta fuit; de quibus dictum est supra.63 It is entirely plausible that these additional mentions were added by Pipino. The text of the Zelada manuscript has a passage similar to the first of these extra mentions: et cibellinos multos de quibus fiunt care pelles quas superius diximus esse tam magni valoris ("and many sables from which are obtained those valuable skins which we said above were of such high price").64 Although Pipino's reference to the sables having already been mentioned is perhaps justified by this, there is no equivalent to *rondes* here. It is very difficult to imagine that these two versions of the text, roi des and rondes, are completely independent (which seems to be Wehr's thesis). Nor does it seem at all likely that the "king (or queen) of furs" version is erroneous and is derived from the rondes version. Far more likely is that *rondes* is simply a corrupted version of *roi des*.

This conclusion is strongly reinforced by examination of Wehr's proposed explanation of the word *rondes*. She identifies it with Turkic *qunduz*.⁶⁵ Phonetically,



^{59.} Marco Polo, Il «Milione» veneto...: 183.

^{60.} Marka Pavlova z Benátek. *Milion*, trans. Justin V. Prášek. Prague: Emperor Franz Joseph Czech Academy of Sciences, Letters and Arts, 1902: 96.

^{61.} Marco Polo. "L'Historia delle cose de Tartari, & diversi fatti de'loro Imperatori", *Navigationi et Viaggi*, ed. Giovanni Baptista Ramusio. Venice: Giunti, 1559: II, 28D.

^{62.} Wehr, Barbara. "Eine Crux...": 148.

^{63.} Marka Pavlova z Benátek. Milion...: 195.

^{64.} Moule, Arthur Christopher; Pelliot, Paul. Marco Polo...: II, cxix; Marco Polo. Milione...: 510.

^{65.} Wehr, Barbara. "Eine Crux...": 152-154.

this is not unproblematic. It is necessary to assume at least two scribal errors to arrive at rondes. Not only must the initial consonant have been wrongly copied at some stage, but there is also a serious difficulty with the vowels. Turkic "u" is a back vowel, which is not represented well by Italian "e". Far more serious, however, is the fact that *aunduz* does not mean "sable"; it means "beaver". This is the only meaning given by Clauson and by al-Kāšyarī. 66 The idea that it may sometimes mean "sable" was obtained from Frähn.⁶⁷ He, however, was working with an Arabic text. Moreover, he admitted that his source for the possible meaning "sable", in addition to "beaver", cited no authority. The dictionary in question die Bedeutung 'Sable' beigefügt hat: auf welche Autorität, weiss ich nicht ("additionally gives the meaning Sable: on what authority I do not know").68 This dictionary of "Persian, Arabic, and English" has the following entry: "P[ersian] kunduz, The beaver. Sable. An emblem of the night. A dark night. Wine. Name of a country on the confines of the region of darkness".69 This is not good evidence that the word ever actually meant "sable" in Marco Polo's time. The meaning may simply be a dictionary definition, or it may relate to a period later than the thirteenth century. It is not even clear that "Sable" is intended to mean the animal (and its fur) rather than the colour: note that the definition says "The beaver", clearly meaning the animal, but "Sable", with no article. In any case, this was a meaning in Persian, not in Turkic or Mongolian.

On the basis of Wehr's arguments, Ménard concluded that *Les Mongols utilisaient en fait un mot persan* ("the Mongols in fact used a Persian word") for the sable.⁷⁰ This is inherently highly improbable. The sable is native to Mongolia.⁷¹ The Mongols were certainly familiar with the animal from an early period. It is hardly likely that they would have used a loanword for the sable. That they would have used one taken from Persian is not at all credible. Had they borrowed the word *qunduz/kunduz*, they would undoubtedly have taken it directly from Turkic. However, they did not. The Mongolian word for "sable" is well attested: it occurs multiple times in the thirteenth-century *Secret History of the Mongols*, as well as in other texts. It is

^{71.} Heptner, Vladimir G.; Nasimovic, Andrej A.; Bannikov, Andrej G. *Mammals of the Soviet Union, Carnivora (Weasels; Additional Species)*, trans. Bolos Abdul Malek Botros. Washington, DC: Smithsonian Institution Libraries and the National Science Foundation, 2001: II/1b, 785-786; Monakhov, Vladimir G. "Martes zibellina (Carnivora: Mustelidae)". *Mammalian Species*, 43.1 (2011): 79.



^{66.} Clauson, Gerard. *An Etymological Dictionary...*: 635; al-Kāšyarī, Maḥmūd. *Compendium of the Turkic Dialects (Dīwān Luyāt at-Turk)*, ed. and trans. Robert Dankoff, James Kelly. Cambridge, MA: Harvard University Printing Office, 1982: I, 344. Räsänen also gives "otter" as well as "beaver", but not "sable": Räsänen, Martti. *Versuch eines etymologischen Wörterbuchs...*: 301.

^{67.} Frähn, Christian Martin. *Ibn-Fozlan's und anderer Araber Berichte über die Russen Älterer Zeit.* St. Petersburg: Imperial Academy of Sciences, 1823: 56-57. Yule refers to Frähn's suggestion; Marco Polo. *The Book of Ser Marco Polo...*, 1871: I, 364, n. 8. In the index to his translation, Yule says that this explanation of *rondes* is "ingenious but futile"; Marco Polo. *The Book of Ser Marco Polo...*, 1871: II, 514.

^{68.} Frähn, Christian Martin. Ibn-Fozlan's...: 57.

^{69.} Richardson, John. A Dictionary of Persian, Arabic, and English, with a dissertation on the languages, literature, and manners of eastern nations. London: Parbury, Allen and co., 1829: 1150.

^{70.} Ménard. "Les Mots Orientaux...": 104.

bulugan; plural bulugat/bulugad.72 This was a commonly-used word, which occurs in toponyms and personal names.⁷³ Turkic words for "sable" are also attested in medieval sources. In its list of furs, the Codex Cumanicus has an entry for zebelin with the Persian equivalent zardauais and the Turkic equivalent chis.⁷⁴ Kiš or kīš was the usual Turkic term for "sable". 75 There is also another word used in some Turkic languages, principally those which have been in close contact with Persian (it is apparently a loanword from Persian): samūr or sammūr.⁷⁶ Thus, neither in Turkic nor in Mongolian was there a word for "sable" which resembles "rondes". Qunduz/ kunduz can be ruled out, because it means "beaver", not "sable". Neither the Turks nor the Mongols were likely to confuse these two animals. It seems that those who sometimes confused the two were the Arabs.⁷⁷ This is not surprising, as neither the sable nor the beaver occur in Arab lands, where they would have been known only as skins. It is also the case that kiš, samūr and buluaan were all used to refer both to the animal and to the furs: there were not separate words for the animals and for their fur, as Pipino suggested (followed by Ramusio). Overall, it must be concluded that Wehr's hypothesis about "rondes" has no validity and must be rejected. "Rondes" is nothing more than a scribal error.

3. Lions, tigers, and other big cats

Marco Polo refers to "lions" multiple times. Clearly, at least as far as "lions" in China are concerned, he really meant "tigers". He describes the striped fur of the tiger more than once.⁷⁸ It has been suggested that the use of the word "lion"

^{78.} Marco Polo. Le Devisement dou Monde, ed. Mario Eusebi, Eugenio Burgio. Venice: Foscari, 2018: 112, 115; Benedetto, Luigi Foscolo. Livre de Messire Marco Polo, citoyen de Venise, appelé Milion, où sont décrites



^{72.} The Secret History of the Mongols, A Mongolian Epic Chronicle of the Thirteenth Century, trans. Igor de Rachewiltz. Leiden: Brill, 2006: I, 2, 30, 34, 40, 164; Pelliot, Paul. Histoire Secrète des Mongols: Restitution du Texte Mongol et Traduction Française des Chapitres I à VI. Paris: Adrien-Maisonneuve, 1949: 6, 22, 25, 27 (buluqačin, "sable catchers"), 93 (buluqat, buluqad), 122, 142, 143, 146, 149.

^{73.} Kara, György. "Medieval Mongol Documents from Khara Khoto and East Turkestan in the St. Petersburg Branch of the Institute of Oriental Studies". *Manuscripta Orientalia*, 9/2 (2003): 30; Franke, Herbert. "A 14th Century Mongolian Letter Fragment". *Asia Major*, New Series, 11 (1964/1965): 123; Rybatski, Volker. *Die Personennamen und Titel der Mittelmongolischen Dokumente: eine lexikalische Untersuchung*. Helsinki: Yliopistopaino, 2006: 244.

^{74.} Codex Cumanicus...: 98.

^{75.} Doerfer, Gerhard. Türkische und Mongolische Elemente im Neupersischen, unter besondere Berücksichtigung älterer neupersischer Geschichtsquellen, vor allem der Mongolen- und Timuridenzeit. Wiesbaden: Steiner, 1967: III, 267; Radloff, W. Versuch eines Wörterbuches der Türk-Dialekte. St. Petersburg: Imperial Academy of Sciences, 1899: II/2, 1391; Räsänen, Martti. Versuch eines etymologischen Wörterbuchs...: 272; al-Kāšyarī, Maḥmūd. Compendium...: II, 212.

^{76.} Doerfer, Gerhard. Türkische und Mongolische Elemente...: III, 266-267; Räsänen, Martti. Versuch eines etymologischen Wörterbuchs...: 400; al-Kāšyarī, Maḥmūd. Compendium...: II, 212.

^{77.} Doerfer, Gerhard. Türkische und Mongolische Elemente...: III, 267.

to mean "tiger" was a result of lack of knowledge of tigers in medieval Europe.⁷⁹ This is supported by the descriptions of the "tiger" in medieval bestiaries which, in general, bear very little resemblance to the real tiger.⁸⁰ The same is true of more scholarly works of the thirteenth century. Albertus Magnus describes the tiger in almost exactly the same way as the bestiaries. He wrote that it is:

an animal which lives in the lands of the Hyrcanians. It has remarkable speed and ferocity... The tigress gives birth to a large litter of cubs. When a hunter captures some of the cubs, he may find his only escape in a boat; even if he beaches the boat at a far distant point, he may encounter the tigress in full pursuit. To divert her attention he can cast one of the cubs into the path of the approaching mother; and while she is occupied with carrying the rescued cub back to her lair, he can proceed further on with his prey.

He continues by relating the story of how some hunters carry glass balls with them, which can also be used to distract the pursuing tigress. When one is thrown towards her, she stops to look at it and sees her own reflection, which she thinks must be one of her cubs. All this is more myth than reality, of course. Thomas of Cantimpré gives an even less realistic description of tigers: *ut dicit Solinus, bestie sunt notate maculis* ("as Solinus says, they are animals marked with spots"). Thus it is clear that thirteenth-century Europeans had no good idea of what a tiger really was. Indeed, although in the mid-sixteenth century Conrad Gesner depicted a striped animal that is recognisably a tiger to modern eyes, a few decades later Aldrovandi declared that this was an error. According to him, *Tigris igitur bestia est nigris maculis oblongis potius* ("Therefore the tiger is rather a beast with oblong black spots"). It is scarcely surprising, then, to find Marco Polo referring to what were clearly tigers as "lions".

Notwithstanding this, it cannot be assumed that Marco's "lions" were always tigers. It is almost certainly the case that the "lions" carved in stone on the bridge over the Sanggan River⁸⁵ were really intended to portray lions, though no doubt in the usual Chinese style. This is certainly the case with the extant bridge, but it must be realised that the bridge seen by Marco Polo was not identical with the one that can be seen today. The bridge was repaired and rebuilt several times during the

^{85.} Marco Polo, *Le Devisement dou Monde…*, ed. Eusebi and Burgio: 126; Benedetto, Luigi Foscolo. *Livre de Messire Marco Polo…*: 340; Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo…*: I, 255-256; Marco Polo. *The Travels…*: 141.



les Merveilles du monde, ed. Samuela Simion. Venice: Foscari, 2016: I, 311-312, 315; Moule, Arthur Christopher; Pelliot, Paul. Marco Polo...: I, 227, 232; Marco Polo. The Travels...: 116, 120.

^{79.} Haw, Stephen G. "The Persian Language in Yuan-Dynasty China: a Reappraisal". East Asian History, 39, (2104): 9-10; Haw, Stephen G. Marco Polo's China...: 61.

^{80.} Haw, Stephen G. "The Persian Language... ": 10; Pastoureau, Michel. *Bestiaires du Moyen Âge*. Paris: Seuil, 2011: 77-79. For descriptions of the "tiger" in various bestiaries, see *Bestiari Medievali*, ed. Luigina Morini. Torino: Einaudi, 1996: 388, 446-447, 501, 608-609.

^{81.} Albert the Great. Man and the Beasts...: 176. Albertus Magnus. De Animalibus...: 1423.

^{82.} Thomas Cantimpratensis. Liber de Natura Rerum...: 163.

^{83.} Gesner, Conrad. Historia Animalium..., 1551: 1060; Gesner, Conrad. Historia Animalium..., 1602: 936.

^{84.} Aldrovandi. De Quadripedibus Digitatis...: 103.

Ming and Qing periods (1368–1911). ⁸⁶ Wood's assertion that "it has survived from the thirteenth century to the present day" ⁸⁷ is not correct. The *Da Ming Yitong zhi* of 1461 describes the bridge as it was then as follows:

The Lugou Bridge is 35 li [c. 18 km] southwest of the prefecture (fu) [of Beijing], crossing the Lugou [Sanggan] River. It was first built in the Mingchang reignperiod of the Jin dynasty [1190–1195]. It was rebuilt in the ninth year of the Zhengtong reign-period of the present dynasty [1444]. It is more than 200 paces long. The stone balustrades are carved with the shapes of lions.⁸⁸

The stone lions therefore certainly existed after 1444. It is entirely reasonable to think that there were lions decorating the bridge as it was when Marco saw it. On the other hand, the "lions" which were portrayed on the golden "tablets of authority"⁸⁹ were undoubtedly tigers. There are many references in Chinese sources of the Yuan period to "Golden Tiger Tokens" (*jin hu fu*), which were given to high-ranking officials, as Marco describes.⁹⁰

Again, when Marco discusses the animals which were used to designate years, 91 "lion" certainly refers to the tiger. At one time, it was suggested that Marco must have been thinking of "the Persian word *shir*, which, notoriously, can mean either 'lion' or 'tiger'". It was further claimed that Marco could not have been "translating from Turkic or Mongolian, in which the two animals are clearly distinguished". 92 This was part of the alleged evidence for Marco's use of the Persian language while he was in China. This supposed evidence has already been refuted, 93 but there remains more that can be said. The word *shir* can be excluded completely, for in both Turkic



^{86.} Muzhanga (穆彰阿), ed. 大清一統志 (*Da Qing yitong zhi* [Comprehensive Gazetter of the Qing Empire]). Shanghai: Guji Publishing, 2008: I, *juan* 9, 171.

^{87.} Wood, Did Marco Polo go to China?: 86-87.

^{88.} Li, Xian (李賢). 大明一統志 (*Da Ming yitong zhi* [Comprehensive Gazetter of the Ming Empire]). Taibei: Chongwen Publishing, 1965: I, *juan* 1, 106.

^{89.} Marco Polo. *Le Devisement dou Monde...*, ed. Eusebi and Burgio: 101-102; Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 203-204; Benedetto, Luigi Foscolo. *Livre de Messire Marco Polo...*: 289; Marco Polo. *The Travels...*: 95-96; Marco Polo. "L'Historia delle cose de Tartari...": 21B.

^{90.} See, for example, Song, Lian (宋濂). 元史 (*Yuan shi* [History of the Yuan dynasty]). Beijing: Zhonghua shuju, 1976: II, *juan* 22, 491; XII, *juan* 161, 3786; Lu, Zhi (盧擊). "湖南宣慰使趙公墓志銘" (Hunan xuanweishi Zhao gong muzhi ming [Tomb Inscription of Lord Zhao, Pacification Commissioner of Hunan]),全元文 (*Quan Yuan wen* [Complete short writings of the Yuan period]), Xiusheng Li (李修生), ed. Nanjing: Jiangsu Guji Publishing, 2000: 22; Yu, Ji (虞集). "句容郡王世績碑" (Jurong jun wang shi ji bei [Supplementary Inscription recording the Generations of the Princes of Jurong Prefecture]), 全元文 (*Quan Yuan wen* [Complete short writings of the Yuan period]), Xiusheng Li (李修生), ed. Nanjing: Phoenix Publishing, 2004: 230.

^{91.} Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 252-253; Benedetto, Luigi Foscolo. *Livre de Messire Marco Polo...*: 333; Marco Polo. *The Travels...*: 137-138; Marco Polo. *Milione...*: 110-113.

^{92.} Morgan, David O. "Persian as a Lingua Franca in the Mongol Empire", *Literacy in the Persianate World: Writing and the Social Order*, Brian Spooner, William L. Hanaway, eds. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, 2012: 162.

^{93.} Haw, Stephen G. "The Persian Language...": 8-10.

and Mongolian usage the equivalent of the Chinese *hu*, "tiger", in the animal year cycle is *bars*. ⁹⁴ The original meaning of this word was probably "leopard", but it was frequently applied to other big cats, including the cheetah, the tiger, and the lynx. ⁹⁵ As suggested above, for medieval Europeans the tiger was more or less a mythical beast. Marco may simply have used "lion" as the equivalent of Chinese *hu* because, for him, "tiger" was not appropriate. Alternatively, he may have had the Turkic and Mongolian term *bars* in mind. There is absolutely no evidence that he was thinking of *shir* or of any other Persian word.

Marco mentions lions, leopards and lynxes a number of times. In some cases, it seems likely that he was simply giving a conventional list of large felines. There is no likelihood that there were really lynxes in *Comari* (the vicinity of Cape Comorin), ⁹⁶ for example, as the range of the Eurasian lynx (*Lynx lynx*) is much more northerly. ⁹⁷ Nor does the caracal (*Caracal caracal*), sometimes confused with the lynx, occur so far south in India. ⁹⁸ In other cases, however, there is no reason to doubt that lynxes were indeed what Marco meant. The lynx seems to have been fairly familiar to medieval Europeans. It is described moderately well by Albertus Magnus. ⁹⁹ It is not included in all bestiaries, perhaps because it was a familiar animal. Those which do describe it are sometimes accurate, sometimes not. ¹⁰⁰ Gesner depicts the lynx quite accurately. He gives the alternative name of *lupus cervarius* for the lynx, which he says is what the Italians call the animal. ¹⁰¹ This term is found in a number of the manuscripts of Marco Polo's text, including *F*, which has *leus cerver* several times. ¹⁰² Elsewhere, however, the same manuscript uses the word *lonces*. ¹⁰³ One of

^{103.} Bibliothèque Nationale de France. Département de Manuscrits, fr. 1116, f. 87v, 91v, 92r, 94v; "Voyage de Marc Pol"...: I, 222, 232, 235, 240.



^{94.} Doerfer, Gerhard. *Türkische und Mongolische Elemente...*: II, 235-237; al-Kāšyarī, Maḥmūd. *Compendium...*: I, 271-272; Melville, Charles. "The Chinese-Uighur Animal Calendar in Persian Historiography of the Mongol Period". *Iran*, 32 (1997): 88; Clauson, Gerard. "The Earliest Turkish Loan Words in Mongolian". *Central Asiatic Journal*, 4/3 (1959): 183. Note, however, that Clauson erred in saying that the tiger is "exotic... to the Siberian forests"; see Turner, Alan. *The Big Cats and their Fossil Relatives: an Illustrated Guide to their Evolution and Natural History*. New York: Columbia University Press, 1997: 73; Smith, Andrew T.; Yan, Xie, eds. *Mammals of China...*: 289-290.

^{95.} Doerfer, Gerhard. Türkische und Mongolische Elemente...: II, 235-238; Clauson, Gerard. An Etymological Dictionary...: 368.

^{96.} Marco Polo. *Le Devisement dou Monde...*: 211; Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 416; Benedetto, Luigi Foscolo. *Livre de Messire Marco Polo...*: 466-467; Marco Polo. *The Travels...*: 276. For the identification of *Comari* as Comorin, see Pelliot, Paul. *Notes on Marco Polo: ouvrage posthume*. Paris: Imprimerie Nationale, 1959: I, 403.

^{97.} Hunter, Luke. Wild Cats of the World. London: Bloomsbury, 2015: 127-128.

^{98.} Hunter, Luke. Wild Cats...: 79-81.

^{99.} Albertus Magnus. De Animalibus...: 1409; Albert the Great. Man and the Beasts...: 156.

^{100.} George, Wilma, and Yapp, Brunsdon. *The Naming of Beasts: Natural History in the Medieval Bestiary*. London: Duckworth, 1991: 49-50.

^{101.} Gesner, Conrad. *Historia Animalium...*, 1551: 769-770; Gesner, Conrad. *Historia Animalium...*, 1602: 677-678.

^{102.} Bibliothèque Nationale de France. Département de Manuscrits, fr. 1116, f. 41r, 49v, 50r, 52v; "Voyage de Marc Pol", Receuil de Voyages et de Mémoires publiées par la Société de Géographie. Paris: Éverat, 1824: I, 100, 123, 124, 130.

the Latin manuscripts has *linceos, id est lupos cervarios*.¹⁰⁴ A Venetian manuscript has *lovi zervieri*, but uses *onze* for the animals in *Comari*.¹⁰⁵ Pipino's Latin translation has *lincei* and *leoncie*.¹⁰⁶ The Zelada manuscript omits many of the mentions of lynxes. In *Comari*, it has *lonças*.¹⁰⁷ There is considerable inconsistency among the various different versions of the text. Indeed, it is not entirely clear that the terms *lonces, leoncie* and *lonças* necessarily refer to the lynx rather than to some other large cat. *Onze* is presumably *ounce* rather than "lynx". Ramusio's edition, however, always uses *lupi cervieri*. This is so for the animals in *Comari* as well as elsewhere (some of the mentions which occur in F are omitted).¹⁰⁸ Marco says that lynxes were among the animals trained for use in the Qa'an's hunting. This is by no means improbable. The lynx has sometimes been so used,¹⁰⁹ and the Eurasian lynx occurs in northeast, northwest, and west China.¹¹⁰ The leopards similarly trained may well have been cheetahs.¹¹¹

4. Ercolin, erculin

This word has caused much puzzlement. Marsden wrote that he was "unable to trace [ercolin] either in dictionaries or in books of natural history". He thought it might be a corruption of Italian *arcigolosi*, the equivalent of French *goulu* or *glouton*.¹¹² The "glutton" is the wolverine (*Gulo gulo*).¹¹³ Yule could only suggest that it might be "some animal of the ermine or squirrel kinds affording valuable fur, but I can find no similar name of any such animal. It may be the Argali or Siberian Wild Sheep... ".¹¹⁴ Pelliot rightly discounted this last possibility, which is clearly based solely on vague phonetic resemblance. He thought that *ercolin* was some kind of squirrel, but he was unable to explain the origin of the word. He proposed, without much conviction, that it might be "another form of *organinus*", which apparently was



^{104. &}quot;Peregrinatio Marci Pauli...": 380; Bibliothèque Nationale de France. Département de Manuscrits, lat. 3195, f. 42v.

^{105.} Marco Polo. Il «Milione» Veneto...: 180, 237.

^{106.} Marka Pavlova z Benátek. Milion...: 91, 114, 179.

^{107.} Marco Polo. Milione ...: 386.

^{108.} Marco Polo, "L'Historia delle cose de Tartari...": 27F, 33E, 33F, 56D, 57F.

^{109.} Marco Polo. *The Book of Ser Marco Polo, the Venetian, Concerning the Kingdoms and Marvels of the East,* trans. Henry Yule. London: Murray, 1903: I, 398–399, n. 2. Cordier's note about the lynx in China is completely out of date.

^{110.} Smith, Andrew T.; Yan, Xie, eds. Mammals of China...: 284.

^{111.} Marco Polo. The Book of Ser Marco Polo..., 1903: I, 398, n. 1.

^{112.} Marco Polo. The Travels of Marco Polo...: 748, n. 1517.

^{113.} Heptner, Vladimir G.; Nasimovic, Andrej A.; Bannikov, Andrej G. *Mammals of the Soviet Union...*: II/1b, 920; Bewick, Thomas. *A General History of Quadrupeds*. Newcastle upon Tyne: Bewick and Hodgson, 1807: 285.

^{114.} Marco Polo. The Book of Ser Marco Polo..., 1903: II, 483, n. 4.

a kind of "vair".¹¹⁵ More recent work has not arrived at any more certain conclusion. Pelliot's suggestion of a connection with *organinus* has been restated.¹¹⁶ A few other occurrences of the term, in the forms *arcolini*, *archolini*, *arcoline* and *archolina*, have been found in Venetian documents dating from about 1300 to 1312, and from 1437. There is also a Genoese variant, *arcornim*.¹¹⁷ A proposal to link the term with *arcobaleno* ("rainbow")¹¹⁸ does not seem very convincing. It has been suggested that the orthographic variants with initial "a-" are probably original and that variants with initial "e-" are derivative, possibly due to scribal error.¹¹⁹ This is questionable. *Ercolin* occurs twice, and *erculin* once, in manuscript *F*.¹²⁰ Manuscript *Z* has *erculinos* three times.¹²¹ Francesco Pipino wrote *herculini/herculinos/herculinorum*.¹²² The fact that initial "e-/he-" is used consistently in all these redactions suggests that it is not a scribal error. I would propose that *ercolin/erculin* is the French form of the word, from which the Latin forms of manuscript *Z* and Pipino are derived, and that variants with initial "a-" are Italian (Venetian and Genoese).

There can be little doubt that "vair" was squirrel. It seems that it was the fur of a kind of squirrel from Russia which was grey in colour, with a white belly. According to Albertus Magnus:

Pirolus est animal quod alio nomine spiryolus vocatur, et est animal maius aliquantulum quam mustela, sed non longius, et ut dicunt quidam, a vario non differt nisi secundum locum. Nam quod in Germania rubeum est antiquum, et nigro primo suae nativitatis anno, in Polonia ruborem miscet cum griseo, et in Rusciae partibus totum efficitur griseum: et ideo in figura et in quantitate et moribus et cibum nulla penitus inter pirolum et varium invenitur diversitas.¹²³

Gesner gives the same illustration for both the "squirrel" (*sciurus*) and the "vair" (*varius*) or "Pontic mouse" (*mus ponticus*), saying that the only difference is the colour. He also notes that one of the German names for the squirrel is *eichhermlin*...

^{123. &}quot;The squirrel (*pirolus*) is an animal which is also called *spiryolus*, and it is an animal a little larger than an ermine, but not longer, and as some might say, it differs from the vair only according to place. For that in Germany is reddish when old, and black during its first year of life; in Poland it is rufous mixed with grey. In parts of Russia it is completely grey. In shape, size, habits and food there is no essential difference between the squirrel and the vair". Albertus Magnus. *De Animalibus*...: 1421. For the English translation, see: Albert the Great. *Man and the Beasts*...: 173.



^{115.} Pelliot, Paul. Notes on Marco Polo: ouvrage posthume. Paris: Imprimerie Nationale, 1963: II, 643-646.

^{116.} Cortelazzo, Manlio. "Coccolini e arcolini". Lingua Nostra, 59 (1998): 45-46.

^{117.} Cortelazzo, Manlio. "Coccolini e arcolini"...: 44-45.

^{118.} Mascherpa, Giuseppe, Skliar, Xenia. "Ancora su 'Arcolino': un'indagine etimologica". *Studi di Lessicografia Italiana*. 28 (2011): 233-237.

^{119.} Mascherpa, Giuseppe, Tagliani, Roberto. "Quattro Note 'Veneti' per il TLIO". Studi di Lessicografia Italiana, 27 (2010): 7.

^{120.} Marco Polo. *Le Devisement dou Monde...*: 251, 252; Bibliothèque Nationale de France. Département de Manuscrits, fr. 1116, f. 105v, 106r.

^{121.} Marco Polo. Milione ...: 514, 516, 550.

^{122.} Marka Pavlova z Benátek. Milion...: 195, 198.

id est mustelam quercuum ("eichhermlin... that is, oak weasel"). ¹²⁴ Here is a possible origin of ercolin, which might well be a Romance version of German eichhermlin. Alternatively, ercolin might be derived from German eichhorn with the diminutive ending "-lin". There are many variations of eichhorn/eichhermlin, including aicher, aicharm, eichhermelin, eichermlin, and eckern. ¹²⁵ It also seems quite likely that the true derivation of the word "vair" is not from Latin varius ("diverse, dappled, variegated", etc.), but from Slavonic. Gesner wrote:

Sciurus... Illyricum 'wewerka': Poloni quidam scribunt 'wijewijerka'... Varios enim... Germanice etiam 'werck' nonnulli appellant, alii 'vech', aut 'fech'... ¹²⁶

In modern Czech, "squirrel" is *veverka*. Gesner suggested a connection between "vair" and *wewerka*. It would not be surprising if words used in the fur trade, for furs which originated in north-eastern Europe and were traded through Rus', were derived from Slavonic languages. Ultimately, "vair" may have come from a Uralic language spoken in the region where the animals were caught. In Komi (Ziryene) and some other Uralic languages, the word for "squirrel" is *ur*.¹²⁷ This shows a clear resemblance to "vair". The Komi are said to have played an important part in the fur trade from an early period.¹²⁸

As Albertus and Gesner wrote, the difference between the squirrel and the vair was essentially the colour. Vair was the grey and white squirrel which came principally from northern Russia. The name "Pontic mouse" was probably applied to it because these furs often reached western Europe via the Black Sea.¹²⁹ An alternative route was from Novgorod to the Baltic region.¹³⁰ It is likely that this latter route became particularly important to the Venetians after 1261, when the Genoese



^{124.} Gesner, Conrad. *Historia Animalium...*, 1551: 839, 956; Gesner, Conrad. *Historia Animalium...*, 1602: 741, 845. Topsel. *History of Four-footed Beasts and Serpents...*: 509.

^{125.} Diefenbach, Lorenz, Wülcker, Ernst. Hoch- und Nieder-Deutsches Wörterbuch der mittleren und neueren Zeit, zur Ergänzung der vorhandenen Wörterbücher insbesondere des der Brüder Grimm. Basel: Schwabe, 1885: 400.

^{126. &}quot;The squirrel... in Illyrian [presumably Slavonic] is wewerka: some Poles write wijewijerka... As for the vair... in German, some call it werck, others vech or fech..." Gesner, Conrad. Historia Animalium..., 1551: 955–956; Gesner, Conrad. Historia Animalium..., 1602: 845.

^{127.} Hausenberg, Anu-Reet. "Komi", *The Uralic Languages*, Daniel Abondolo, ed. London: Routledge, 1998: 323; Collander, Björn. *Fenno-Ugric Vocabulary: an Etymological Dictionary of the Uralic Languages*. Hamburg: Buske, 1977: 63.

^{128.} Collander, Björn. *An Introduction to the Uralic Languages*. Berkeley: University of California Press, 1965: 19-20. On the Komi, see also Golden, Peter B. "The Peoples of the Russian Forest Belt", *The Cambridge History of Early Inner Asia*, Denis Sinor, ed. Cambridge: University Press, 1990: 252-253.

^{129.} Ducène, Jean-Charles. "Le Commerce des Fourrures entre l'Europe Orientale et le Moyen-Orient à l'Époque Mediévale (IX^e-XIII^e siècle): pour une perspective historique". *Acta Orientalia Academiae Scientiarum Hungaricae*, 58/2 (2005): 216-217; Martin, Janet. *Treasure of the Land of Darkness: the Fur Trade and its Significance for Medieval Russia*. Cambridge: University Press, 1986: 43-49, 64-65.

^{130.} Martin, Janet. Treasure of the Land of Darkness...: 49-52.

obtained a monopoly of trade in the Black Sea, to the exclusion of the Venetians.¹³¹ It is perhaps not surprising, therefore, to find a term relating to the fur trade of putative German origin used by Marco Polo towards the end of the thirteenth century. In the early 1250s, William of Rubruck had noted the importance of Soldaia in the Black Sea trade between Russia and Turkia. He specifically mentions varium et griseum and other furs as being the principal goods brought from "Russia and the north". 132 The elder Polos sailed from Constantinople to Soldaia (Sudak) during their first journey to the court of Oubilai Oa'an. 133 They were unable to return by the same route, however, no doubt because the Genoese had driven the Venetians from Constantinople. 134 The recapture of Constantinople by the Byzantine Emperor Michael VIII, in alliance with the Genoese, was only one of several events which had a major effect on the fur trade during the thirteenth century. The Mongol campaigns of the late 1230s and early 1240s resulted in the subjugation of the Volga Bulgars, and the destruction of Kiev and more than a dozen other Russian towns. 135 Novgorod, however, was untouched, probably because it submitted to the Mongols before their armies arrived to attack it. 136 Novgorod was a major centre for the fur trade. Increasingly, during the thirteenth century, Novgorod traded the furs which it acquired from areas to the north and northeast to German merchants from the Baltic region, who in turn traded the furs to England or Flanders. 137 From there, they entered the network of trade routes leading to the Mediterranean.¹³⁸

The squirrel fur used in Europe for making fur garments almost certainly all originated from one species of squirrel, the Eurasian red squirrel (*Sciurus vulgaris*). This widespread species occurs right across Eurasia, from the British Isles in the west to Hokkaido in the east. There are a number of subspecies across that wide range: the exact number is a matter of varying opinion.¹³⁹ Variation in the colour of the fur is marked and only partially corresponds with geographic distribution.¹⁴⁰ The

^{139.} Lurz, Peter W.W.; Gurnell, John; Magris, Louise. "'Sciurus vulgaris'". *Mammalian Species*, 769 (2005): 2. 140. Thorington, Richard W. Jr.; Ferrell, Katie. *Squirrels: the Animal Answer Guide*. Baltimore: Johns Hopkins University Press, 2006: 40, 46; Lurz, Peter W.W.; Gurnell, John; Magris, Louise. "'Sciurus vulgaris'"...: 2.



^{131.} Ciocîltan, Virgil. *The Mongols and the Black Sea Trade in the Thirteenth and Fourteenth Centuries*, trans. Samuel Willcocks. Leiden: Brill, 2012: 94.

^{132.} William of Rubruck. *The Mission of Friar William of Rubruck...*: 62-64. Jackson translates *varium et griseum* as "squirrel and miniver".

^{133.} Moule, Arthur Christopher; Pelliot, Paul. *Marco Polo...*: I, 74; Marco Polo. *The Description of the World*, trans. Kinoshita: 2; Marco Polo. *The Travels...*: 4, 360, n. 5.

^{134.} Haw, Stephen G. Marco Polo's China...: 48; Nicol, Donald M. The Last Centuries of Byzantium, 1261–1453. Cambridge: University Press, 1993: 33-36.

^{135.} Jackson, Peter. *The Mongols and the West, 1221-1410.* London: Routledge, 2014: 40; Haw, Stephen G. "The Mongol Empire – the first 'gunpowder empire'?". *Journal of the Royal Asiatic Society,* Third Series, 23/3 (2013): 461-462.

^{136.} Haw, Stephen G. "The Mongol Empire...": 462.

^{137.} Martin, Janet. Treasure of the Land of Darkness...: 61-67.

^{138.} On trade routes between Venice, Germany and Flanders, see Nam, Jong-kuk. *Le Commerce du Coton en Méditerranée à la fin du Moyen Age*. Leiden: Brill, 2007: 254-256.

only other tree squirrels which occur naturally close to the range of the Eurasian red squirrel are the Caucasian squirrel, *Sciurus anomalus*, from southwestern Asia, including Turkey and the Caucasus region,¹⁴¹ and the recently-recognised *Sciurus meridionalis* from southern Italy.¹⁴² Furs from northern regions were generally preferred in the medieval fur-trade as they are usually denser and warmer.¹⁴³ The use of different words to refer to the furs of the same animal reflects differences of colour and quality, and sometimes also of geographical origin.¹⁴⁴ It is not surprising to find vair and *ercolin* listed together by Marco Polo.¹⁴⁵ Both are squirrel, but no doubt of different colours, qualities or origin.

In summary, the papiones of the area near Fuzhou which were "something like foxes" were probably Chinese ferret-badgers, Melogale moschata. There is insufficient information to allow definite identification, however. *Rondes* is simply a scribal error: Wehr's hypothesis that it is a transcription of the Turkic and Persian term *qunduz* must certainly be rejected. Marco's "lions" are often, but not always, tigers. The medieval European concept of the tiger scarcely resembled the real animal. Marco appears to have been familiar with the lynx and there is no reason to doubt that, in many cases, his references to lynxes are correct. In other cases, however, the lynx cannot have been meant: it is questionable whether the terms lonces, leoncie and loncas should be taken to mean "lynxes" rather than some other large cat. Ercolin undoubtedly means "squirrel" and is probably derived from German eichhermlin or a related term. "Vair" is the grey and white squirrel of northeastern Europe, just west of the Urals. The word may originate from a Uralic language such as Komi, passing into western European languages via Slavonic. It is entirely plausible that terms such as "vair" and ercolin should have travelled along the routes of the fur trade with the goods to which they related.

^{145.} Marco Polo. *Le Devisement dou Monde...*: 251, 252; Bibliothèque Nationale de France. Département de Manuscrits, fr. 1116, f. 105v, 106r.



^{141.} Koprowski, John L.; Gavish, Leah; Doumas, Sandra L. "'Sciurus anomalus' (Rodentia: Sciuridae)". *Mammalian Species*, 48 (934) (2016): 50-51.

^{142.} Wauters, Lucas A.; Amori, Giovanni; Aloise, Gaetano; Gippoliti, Spartaco; Agnelli, Paolo; Galimberti, Andrea; Casiraghi, Maurizio; Preatoni, Damiano; Martinoli, Adriano. "New endemic mammal species for Europe: 'Sciurus meridionalis' (Rodentia: Sciuridae)". *Hystrix, the Italian Journal of Mammalogy*, 28/1 (2017): 1-8.

^{143.} Martin, Janet. Treasure of the Land of Darkness...: 1.

^{144.} Pelliot, Paul. Notes on Marco Polo...: II, 643-644; Martin, Janet. Treasure of the Land of Darkness...: 65; Ciocîltan, Virgil. The Mongols and the Black Sea Trade...: 110, n. 217.