CHAPTER 2

New World and other Exotic Animals in the Italian Renaissance: the Menageries of Lorenzo Il Magnifico and his Son, Pope Leo X

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Parrot flocks are so numerous that they obscure the sun

CHRISTOPHER COLUMBUS, *on landing in the Bahamas, 12 October 1492*

In the course of the fifteenth century, even before the discovery of America, the zoological panorama of the Western world was profoundly modified by the arrival of allochthonous biological elements: from North and sub-Saharan Africa, the Balkan peninsula, Anatolia, the Near, Middle, and occasionally also the Far East (Masseti 2012a; Masseti 2017). Collecting allochthonous animals of various kinds was a common practice among late medieval and Renaissance princes, not least in Italy (Ringmar 2006; Gschwend 2009; Masseti and Veracini 2010; Masseti 2015a). The exotic zoological species kept in the menageries of the aristocracy represented authentic status symbols that underscored the affluence and social position of their owners (Belozerskaya 2006; Masseti 2009a and 2012b), while possession and display of rare animals was considered a sign of courtly prestige and power (Ortalli 1985; Giese 2008). Great numbers of animals were brought to Europe in this way, and some – most of them dead – ended up in the hands of naturalists who began the process of describing them in detail, albeit without knowing exactly where most of them had come from (Urbani 1999; Fragaszy et al. 2004). At present we know nothing directly of those in the field who gathered these animals and in consequence we can only infer their activities on the basis of the species they collected, as evidenced by the written accounts and graphic representations compiled after the animals had entered the princely milieu in Europe.

Quite frequently, no coincidence can be found between the archaeozoological record and the zoological species portrayed in artistic representations, although the absence of osteological remains from many of these animals in late medieval and Renaissance archaeological assemblages may be attribut-

 | DOI 10.1163/9789004323841_003

able to the lack of appropriate excavations and/or the absence of specific archaeozoological studies (cf. Masseti 2009a). Nevertheless, their artistic representation provides us with information on the apparent occurrence in the European courts of exotic animals that would otherwise not have been documented. In fact, as Fedele (1985: 67) has observed: "When the desire to reproduce the animal has produced representations of naturalistic quality, the figure effectively becomes, for the archaeozoologist an efficacious palaeofaunistic datum." In many cases the graphic records of naturalistic features have proved so accurate as to enable unequivocal recognition of the species portrayed.

The Wall Paintings of the Villa Medici at Poggio a Caiano

From its privileged position at the summit of the hill at Poggio a Caiano, in the vicinity of Florence (Italy), the Villa Medici overlooks the slow meander of the Ombrone Pistoiese river through the plain that girdles the southern suburbs of the town of Prato; beyond can be glimpsed the first slopes of the Apennines, with the pale blue massif of Monte Calvana. The villa is, perhaps, the most representative and densely-layered manifestation of Medici cultural intentions, stratified in the form of a private (and in some sense autobiographical) residence of the Florentine ruler Lorenzo de' Medici (1449-1492), also known as *Il Magnifico* (Bardazzi and Castellani 1981; Donetti 2013). Designed by the architect Giuliano da Sangallo, but with decisive and acknowledged contributions from its patron, construction work on the villa began in the year 1480. As observed by Donetti (2013), this was the first authentic villa *all'antica* of the Renaissance: a distilled model of antique erudition, programmatic abstraction and awareness of landscape. Modelled on Albertian construction principles, it continued until the end of the sixteenth century to function as both a crucial typological prototype and a *unicum* of architectonic invention and antique elements. It also represented a testing-ground for experimentation of the most up-to-date techniques of construction from a structural point of view, one of the most important of its innovative architectural features being the great barrel-vaulted central hall on the first floor (Ackerman 1990). Also known as the *salone passante* ("passage hall"), and later also as the *Sala di Leone X* ("Leo X hall"), it occupies the space which in earlier castle and palatial architecture had been given over to the central courtyard on the ground floor. However, when Lorenzo died, on 8 April 1492, work on the villa was interrupted: the family was indeed forced to abandon the city in 1494, after Lorenzo's eldest son Piero had alienated the Florentines by siding with the French, and work on

the villa was suspended until shortly after the Medici's return to Florence, in 1512.

The family's return to power was consolidated in 1513, when one of its members was elected pope: with the accession to the papal throne of Giovanni de' Medici (1475-1521), Lorenzo's second son who took the name Leo X, resumed the decoration of the villa at Poggio a Caiano with new vigour. In honour of his late father, the new pontiff conceived an ambitious iconographic programme in which some of the most important painters of the time were to be engaged (Chastel 1975; Medri 1992). Artists such as Jacopo da Pontormo (1494-1557), Andrea del Sarto (1486-1530) and Francesco Francabigio (1482-1525) were commissioned to decorate the central hall (Bardazzi and Castellani 1981; Capretti 2013) – the only decorative project ever to offer Florentine artists the scope that Raphael and his circle enjoyed in this period in the Vatican palace. The portion of the fresco begun by Andrea del Sarto in 1519 (cf. Kliemann 1986) offers perhaps the most accurate representation to have come down to us of the zoological species belonging to the menagerie of Pope Leo X (Fig. 2.1). This paper is an attempt to investigate the taxonomic identity of all these animals, as well as their geographic origin, the documentary intention behind their collection, and the manner in which they came into the possession of the Medici pope.

Commissioned by Leo X himself, possibly the most important potentate of his time, the iconographic programme of the *Sala di Leone X* – in addition to rehabilitating his father and restoring the prestige of the house of Medici – sought to illustrate the economic and political power of the Florentine family. An effective way of demonstrating the tangible role to which the Medici aspired among the international courts was to illustrate their familiarity with the distant lands then newly-discovered, a familiarity they were able to demonstrate by displaying the very rarest animals to the world. Beyond their value as status symbols, these demonstrated the elevated level of scientific knowledge of the owners of the menagerie. Unlike his master Piero di Cosimo (Masseti 2015b), Andrea del Sarto had not yet made his name as an animal painter, but nevertheless he was entrusted with execution of the *Tribute to Caesar*, the mural painting recording the gifts with which *Il Magnifico* was presented in 1487 by El-Ashraf Kāit-Bey (1468-1496), the Mamluk Sultan of Egypt (Tribaldo de'Rossi 1488; Borghini 1584; Lastri 1798; Laufer 1928; Bacci 1976; Mosco 1985; Galletti 1996; Belozerskaya 2006; Lebleu 2006; Ringmar 2006; Buquet 2012; Masseti 2015a). Here the glory of Lorenzo was proclaimed by comparing him to Julius Caesar (100-44 BC) and to the fame garnered by the Roman leader when, in 48 BC, he led a successful campaign in Egypt that allowed him to reassert his power in Rome (Belozerskaya 2006). Del Sarto

FIGURE 2.1 Tribute to Caesar, *fresco by Andrea del Sarto in the Villa Medici at Poggio a Caiano, probably painted between 1519 and 1521.* REPRODUCED BY PERMISSION OF DIREZIONE VILLA MEDICEA DI POGGIO A CAIANO, POLO REGIONALE DEI MUSEI DELLA TOSCANA, FLORENCE.

produced a classical setting in which Caesar sits under an arch to the right of the composition while various figures approach from the left, bringing with them a number of exotic animals. The personnel include:

> ... the figure of an Indian who is wearing a yellow tunic and bearing on his shoulders a cage sketched in perspective, with some parrots inside and outside, a truly rare thing; similarly so are some other figures who are leading Indian goats, lions, giraffes, panthers, *loup cerviers*, and monkeys, with Moors, and other fine and imaginative things (Vasari 1568: 373).

It seems highly probable that the animals portrayed in the painting include not only some of those presented to Lorenzo by the Sultan of Egypt, but also many

others including the parakeets and monkeys offered many years later to Leo X by Manuel I (1469-1521), King of Portugal (Dacos 1969; Kliemann 1986; Falciani 1992; Carpaneto et al. 2010; Masseti and Veracini 2010; Capretti 2013). Del Sarto interrupted the decoration of the hall in 1521, the year of Pope Leo X's death, and the painting was later completed by Alessandro Allori (1535-1607), who extended the composition in 1582 (Capretti, 2013). This part of the painting contains the addition of the famous image of an adult male turkey, *Meleagris gallopavo* (L. 1758) – a New World species, known to have been imported to Europe only after 1511, when King Ferdinand of Spain ordered his chief-treasurer in the West Indies to send to Seville ten turkeys, five male and five female, with each ship sailing to Spain (Danielson 2004; Eiche 2004; De Grossi Mazzorin and Epifani 2016).

The Cheetah and the Giraffe: A Pictorial Allusion to the Menagerie of Lorenzo il Magnifico

The entire composition of the *Tribute to Caesar* appears to be divided in two, both spatially and possibly also chronologically. The zoological elements of Leo X's menagerie occupy the main scene, extending over almost all the foreground space. Caesar/Lorenzo is seated at the top of a broad flight of steps, with below him the many gifts and the rarest animals brought from all the regions of the world. The zoological species which are known definitely to have been owned by *Il Magnifico* were instead relegated to a more marginal position – in the background of the composition, to the centre and to the left. The reason for this may have been not to distract from the commemoration of the Pope, who was indeed the real protagonist of the celebration.

It is well known that for his menageries, Lorenzo de' Medici imported exotic animals from the most far-flung corners of the known world: fallow deer, *Dama dama dama* (L., 1758), from the countries that were under Moorish rule at the time; rabbits, *Oryctolagus cunyculus* (L., 1758) from the Iberian peninsula; and "*phasides aves*" – that is pheasants, *Phasianus colchicus* L., 1758 – from Sicily (Foster 1969; Masseti 2003 and 2015a). We also know that a list of the animals brought as gifts to Lorenzo by the Egyptian embassy in 1487 is contained in the *Ricordanze*, a text derived from an original book written in 1488 by Tribaldo de'Rossi, and later published in *Delizie degli eruditi italiani* (Ildelfonso di Sanluigi 1724?-1792). The list comprised peculiar Indian goats with extremely long ears, Oriental sheep whose fat tails hung to the ground, a tame lion and, above all, a fabulous and extremely rare giraffe (cf. Belozerskaya 2006). This was the first individual of the species to have been seen in Europe since

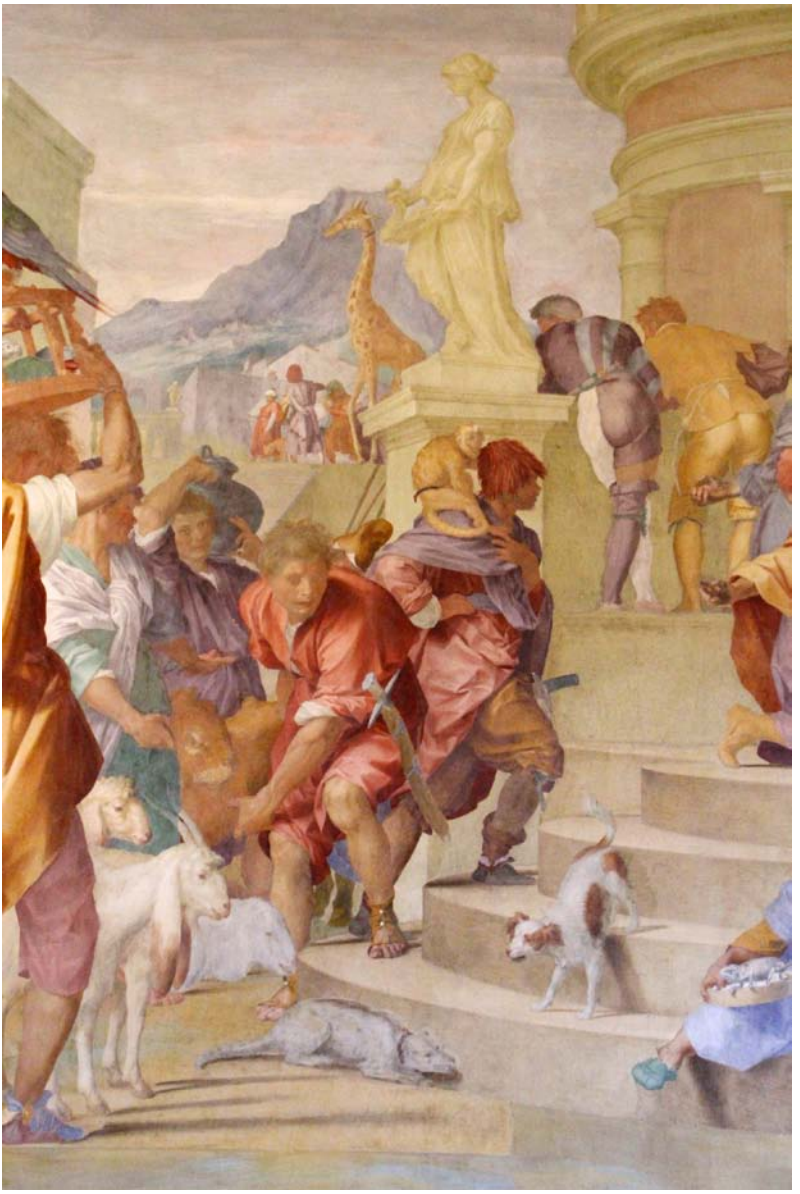

FIGURE 2.2 Tribute to Caesar (*detail*), *by Andrea del Sarto, showing several Indian goats and Near Eastern sheep, a lion, a small Indian civet,* Viverra zibetha (*L., 1758*)*, a spaniel, and a Marcgrave's capuchin,* Sapajus flavius (*Schreber, 1774*)*, in the foreground; a cheetah,* Acinonyx jubatus (*Schreber, 1775*)*, with its Mamluk trainer, and a giraffe,* Giraffa camelopardalis (*L., 1758*)*, are represented in the background.* REPRODUCED BY PERMISSION OF DIREZIONE VILLA MEDICEA DI POGGIO A CAIANO, POLO REGIONALE DEI MUSEI DELLA TOSCANA, FLORENCE.

antiquity. Indeed, in the background of the *Tribute to Caesar* we can identify the images of an individual of *Giraffa camelopardalis* (L., 1758), and a cheetah, *Acinonyx jubatus* (Schreber, 1775) (Masseti 2015a), with its Mamluk trainer. The stories of how these arrived in fifteenth-century Florence are both contrasting and intriguing (Fig. 2.2).

At the time of Lorenzo *il Magnifico*, cheetahs were still widespread in a huge range of their primeval distribution comprising most of Africa and the Near East, throughout the Levant, the Arabian peninsula and the western Indian subcontinent (De Germiny 1934; Divyabhanusinh 1999; Masseti 2009c). Also known as hunting leopards (cf. Lydekker 1896), these spotted felids had been used for hunting in south-western Asia since antiquity. In southern Europe, literary and artistic evidence confirms their use in hunting in continental Italy, Sicily and Malta, between the twelfth and the sixteenth centuries (De Germiny 1934; Messedaglia 1940; Perosino 1958; Mosco 1985; Ortalli 1985; Malacarne 1998; Erba 1999; Masseti, 2009a, 2009b, 2016). Frederick II Hohenstaufen (1194-1250) must have learned the art of hunting with them from the Sicilian Arabs, but the first Italian to fully appreciate cheetahs was Nicola d'Este (Erba 1999; Masseti 2009b), who had admired their skill in hunting on Cyprus while on a journey to Jerusalem, in 1314. From this time onwards there are records of cheetahs at the courts of northern Italy, such as those of the Sforza and Visconti in Milan and of the Este in Ferrara (Perosino 1958; Erba 1999), and later also in central Italy, at the Medici court of Florence (Heikamp 1965; Masseti 1991, 2009b). It is likely that the main source of cheetahs reaching medieval Europe was North Africa. For example, Emperor Frederick II applied for specimens on more than one occasion to a certain Paolino from Malta and to the *credenziere* of Palermo and Sicily, as recorded in a number of documents discovered by Böhmer (1881-1894). On 12 April 1273, Charles I of Anjou too ordered his *camerario* in Malta, Roberto Caforo, to capture eight cheetahs in the usual places – meaning most probably in North Africa – and to have them transported to him, accompanied by faithful and trusted experts in order to avoid accidents (Mifsud 1917). Cheetahs were brought to the hunting grounds hooded, seated on the backs of horses behind their keepers, being allowed to jump off and pursue the game at the appropriate moment (Harting 1883; Lydekker 1896; Zeuner 1963) (Fig. 2.3). At the fifteenth-century Florentine court, this mode of hunting was portrayed, among others, in a painting of the *Adoration of the Magi* by Gentile da Fabriano (1423, Florence, Uffizi Gallery), and in the frescoes of Benozzo Gozzoli representing *The Procession of the Magi* in the Palazzo Medici Riccardi, also in Florence. Here, the young Lorenzo de' Medici is portrayed riding a horse, proud to show his tame cheetah seated on horseback behind him (Fig. 2.4). It is not easy to ascertain whether the prince was adept

FIGURE 2.3 *Glazed bowl (detail), showing a hunting scene with cheetah, from Nishapur (Iran), ninth to tenth century AD.* ROME, MUSEO NAZIONALE D'ARTE ORIENTALE "GIUSEPPE TUCCI": INV. NO. 2629. PHOTO BY SILVIA CANTAGALLI MASSETI.

FIGURE 2.4 Procession of the Magi (*detail*), *fresco by Benozzo Gozzoli in the Palazzo Medici Riccardi, Florence, dated* post *1459 and* ante *1464.* REPRODUCED BY PERMISSION OF THE POLO REGIONALE DEI MUSEI DELLA TOSCANA, FLORENCE.

at this type of hunting, but it would appear that the Medici had learned of the particular use of cheetahs when the Patriarch of Constantinople and his court visited Florence on the occasion of the Council of 1439 (Masseti 2009a). Executed in 1459-1464 (Santi 1983; Acidini Luchinat 1993), more than twenty years after that visit, Gozzoli's fresco celebrates the members of the Medici family exalting in their perfect knowledge of Oriental courtly etiquette, transforming them permanently from rich merchants into blazoned princes.

The story of Lorenzo's giraffe is rather different, since it was brought as a gift to the Florentine ruler on the occasion of the already-mentioned Egyptian embassy of 1487 (Tribaldo de'Rossi 1488; Lastri 1798; Laufer 1928; Bacci 1976; Mosco 1985; Galletti 1996; Belozerskaya 2006; Lebleu 2006; Ringmar 2006; Buquet 2012; Masseti 2015a; MacGregor 2016) (Fig. 2.5). Native to Africa and notoriously difficult to remove from the "Black Continent", in Europe giraffes appeared as the very epitome of exoticism (Ringmar 2006). Their current distribution covers a large portion of sub-Saharan Africa, albeit in a sporadic manner (Grubb 2005). As observed by Amari (1935), the species figures among the precious and rare curiosities exchanged as costly gifts between the Arab rulers of Africa. Much has been said – and perhaps too much has already been written – about Lorenzo's giraffe, although as far as presently known it remains impossible to determine its provenance: it may have come from Nubia or from the Sudan, where giraffes still survive in the southern parts (Dorst and Dandelot 1970; Funaioli 1971; Haltenorth and Diller 1977; Kingdon 2004; Grubb 2005), whereas they became extinct in North Africa around AD 600 (Schomber and Kock 1961).

In the artistic evocation of the *Tribute to Caesar*, it was indeed the giraffe presented by the Sultan of Cairo that allowed the most telling juxtaposition between the image of the Florentine *Signore* and that of Julius Caesar. We ought indeed to bear in mind that the first example of this species ever seen in Rome – and possibly anywhere else in Europe – was that described by Pliny the Elder and Dio Cassius at the games (*ludi*) of Julius Ceasar in 46 BC (Toynbee 1973). Accounts of Lorenzo's giraffe and the wonder aroused by its arrival in Florence have been provided by several contemporary scholars. Among others, Tribaldo de'Rossi (1488, in Ildefonso di San Luigi 1770: 246-248) described this bizarre and beautiful creature, which was '*7. Bracia alta, el piè chomelbue, piacevole animale o ogniono piaceva … Mangiav dogni chosa ne le ceste dogni Forese metteva il capo quando poteva*" (it was 7 *braccia* tall, with feet like an ox, a most attractive animal that was a delight to all … It ate everything in farmers' baskets whenever it was able to put its head into them). Paraphrasing the Florentine authors of the time, Belozerskaya (2006) described the giraffe as "muscular and dainty, moving both its slender right legs in one stride and its

FIGURE 2.5
Lorenzo il Magnifico*'s giraffe in a detail from the painting* Vulcan and Aeolus *by Piero di Cosimo, soon after 1487.* OTTAWA, NATIONAL GALLERY OF CANADA.

left ones in the next. Its spotted coat stood out brightly in the gloomy autumn air … Its eyes in particular were magical: dark brown, large, and lustrous, gazing softly at the onlookers from under long, thick lashes. The Florentines were dumbfounded and beguiled." This animal brought Lorenzo new respect and prestige across Italy and Europe because of its exceptional rarity: several kings and princes asked to borrow it, or to have its portrait. For this reason too, Lorenzo took the greatest care of it, providing special stables that were heated in winter, but despite all this attention the animal died on 2 January 1488,

breaking its neck when it got its head stuck between the rafters of the barn. Thus, "*In sabato, ischortichorola per serbare la pelle … perché era sì belo animale*" (On Saturday, it was flayed to preserve its hide … because the animal was so beautiful) (Tribaldo de'Rossi 1488, in Ildefonso di San Luigi 1770: 246-248).

Pope Leo X's Menagerie

The evocation of the "Augustan Age", or the "Golden Age of Peace", depicted by Andrea del Sarto in Poggio a Caiano with the intention of celebrating the government of Lorenzo *Il Magnifico*, was also conceived as a metaphorical parallel to the papacy of Leo X (Danielson 2004). This explains why the painted scene is crowded with rare and exotic zoological species which, as observed by Bellori (1931: 38), included: "the Chameleon, civets, monkeys, parakeets, lions, elephants, and other more exotic animals." The records suggest that there were no fewer than forty-three different animals in the menagerie of Leo X, including monkeys, leopards, ostriches, other exotic birds, and an Asian elephant, possibly white (Lloyd 1984; Bedini 2000; cf. MacGregor 2016). Several species from the Old Word, in fact, are portrayed in del Sarto's fresco: these include a Mediterranean chameleon, *Chamaeleo chamaeleon* (L., 1758), held in the hand of a dwarf (Fig. 2.6), a viverrid, referable to the small Indian civet, *Viverricula indica* (É. Geoffroy Saint-Hilaire, 1803), a lion, a spaniel, Jamnapari goats from India, Near Eastern sheep, some monkeys and several kinds of birds, including at least two African grey parrots, *Psittacus erithacus* L., 1758 (Masseti 2015a). The morphological rendering of many of these animals is so accurate that it would appear that the painter was very familiar with the subjects portrayed, and may even have used live specimens as a model.

The Green Monkey or Cape Verde Monkey, *Chlorocebus sabaeus* (L., 1766)

The monkey wearing clothes portrayed sitting on the steps to the right of the dwarf has been taxonomically referred by Masseti and Bruner (2009) to the species *Chlorocebus sabaeus* (L., 1766) (Fig. 2.7). The same image figures in one of the preparatory drawings made by Andrea del Sarto for the Poggio a Caiano fresco (Fig. 2.8) (cf. Masseti and Veracini 2010). A few years later, in 1548, Giorgio Vasari used an almost identical image in the vast *Wedding Banquet of Esther and Ahasuerus*, painted for the refectory of the Badia delle Sante Flora e Lucilla in Arezzo, today in the local Museo Statale d'Arte Medievale e Moderna (Fig. 2.9).

FIGURE 2.6 Tribute to Caesar (*detail*), *by Andrea del Sarto, showing a spaniel, a dwarf with a Mediterranean chameleon,* Chamaeleo chamaeleon (*L., 1758*), *and a green monkey wearing clothes.* REPRODUCED BY PERMISSION OF DIREZIONE VILLA MEDICEA DI POGGIO A CAIANO, POLO REGIONALE DEI MUSEI DELLA TOSCANA, FLORENCE.

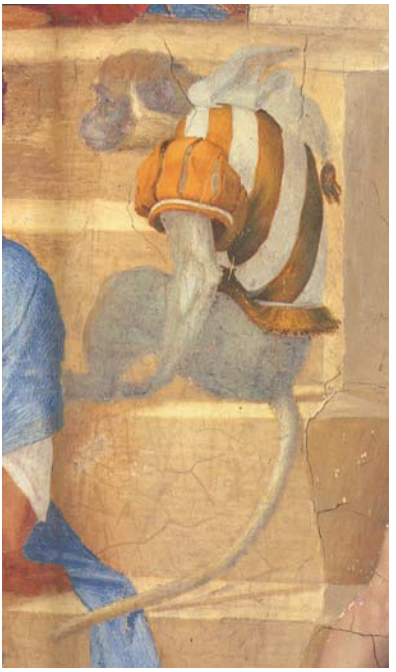

FIGURE 2.7
Tribute to Caesar (*detail*), *by Andrea del Sarto, showing a dressed monkey; it has been taxonomically referred to the species* Chlorocebus sabaeus (*L., 1766*), *also commonly known as the green monkey or Cape Verde monkey.* REPRODUCED BY PERMISSION OF DIREZIONE VILLA MEDICEA DI POGGIO A CAIANO, POLO REGIONALE DEI MUSEI DELLA TOSCANA, FLORENCE.

FIGURE 2.8 *A green monkey wearing clothes also figures in one of the preparatory drawings by Andrea del Sarto for the Poggio a Caiano fresco. Another primate portrayed from the back in an erect posture is also shown, which appears to have the morphological patterns of a capuchin monkey.* DARMSTADT, HESSISCHES LANDESMUSEUM; INV. NO. AE 1373.

FIGURE 2.9
In 1548, Giorgio Vasari used the same image of the dressed green monkey in the vast Wedding Banquet of Esther and Ahasuerus*, painted for the refectory of the Badia delle Sante Flora e Lucilla in Arezzo, and now preserved in the local Museo Statale d'Arte Medievale e Moderna.*

Linnaeus (1766) described the monkey in question as *Simia sabaea* on the basis of the "St Jago Monkey" of Edwards (1758: 10-11, pl. 215), a specimen of which had been brought to England from Santiago (St Jago) in the Cape Verde

FIGURE 2.10
The St Jago Monkey*, as depicted in George Edwards's* Gleanings of Natural History *(1758), on which Linnaeus (1766) based his* Simea sabaea.

Islands, at some time during the eighteenth century (Hazevoet and Masseti 2011) (Fig. 2.10). Edwards gave a fairly accurate description of the animal, also commenting on its behaviour. Known by the common English names of green monkey or Cape Verde monkey, this primate is naturally distributed from Senegal to the River Volta (Ghana), also occurring on the archipelago of Cape Verde, situated between 14° 48′ and 17° 22′ N, and 22° 44′ and 25° 22′ W, some 500 km west off the coast of Senegal (Hill 1966; Haltenorth and Diller 1977; Naurois 1994; Groves 2005; Hazevoet and Masseti 2011). It is believed to have been introduced by human agency to the Atlantic archipelago (Hill 1966; Napier and Napier 1967; Denham 1987). It seems likely that these monkeys originated in former Portuguese Guinea (now Guinea-Bissau): there were regular maritime connections between these two Portuguese colonies and for centuries Portuguese Guinea was administered from Cape Verde (Hazevoet and Masseti 2011). It is not impossible that the animal portrayed in Poggio a Caiano was brought to Rome by the Portuguese who may have captured it on the way back from America. Wild colonies of Cape Verde green monkeys are today found very far from their homeland, across the Atlantic Ocean, in several islands of the West Indies, including Sint Eustatius (St Eustace), St Kitts, Nevis, Grenada and Barbados (Masseti and Bruner 2009; Masseti 2011). As observed by Denham (1987), their story may be bound up with that of the early European settlement of the Caribbean islands, the African origin of West Indian slaves,

and the transatlantic routes from the seventeenth century – and even earlier – up to the nineteenth century.

Animals from the New World in the Vatican Loggia

A particularly striking aspect of the murals by Andrea del Sarto at Poggio a Caiano is the representation of several zoological species of certain American origin. The decoration of the great barrel-vaulted central hall was executed less than thirty years after the discovery of the New World; consequently, for some of these animals, this was the first artistic – and even scientific – representation known in the Western World.

Earlier artistic evocation of Nearctic and Neotropical species is indeed almost unknown, apart from a few – still contested – details of the decoration in the Vatican *Loggia*. Much of the latter was executed by Giovanni da Udine (1487-1561), an artist working with Raffaello Sanzio (1483-1520) who was commissioned to carry out the decoration of several rooms in the papal palace. Giovanni da Udine developed a specialization in naturalistic representations of animals and plants and, as Vasari (1568) commented, took pleasure in painting "*uccelli di tutte le sorti*" (birds of every kind). According to Vasari (1568) and Bellori (1931), this artist portrayed all the animals kept by Leo X in the zoo at the Roman Belvedere. Dacos (1969) noted the occurrence of several Mexican species among the zoological images portrayed in the Vatican *Loggia*, very likely inspired by the animals kept in the pontifical menagerie – in particular a pair of hummingbirds (details on the eleventh pillar) (Fig. 2.11), a lizard of the genus *Anolis* Daudin, 1802, (detail on the seventh pillar), and a pair of California quail, *Callipepla californica* (Shaw, 1798), represented in a detail on the fourth pillar. As observed by Dacos (1977: 61), prior to this the first scientific description of hummingbirds had been believed to date from several decades later – not before the beginning of the second half of the sixteenth century – when Jean de Léry published his *Histoire d'un voyage fait en la terre du Brésil* in 1556 (see also Morisot and Necker 1975). Carpaneto et al. (2010) are, however, of the opinion that only the hummingbirds represented on the eleventh pillar can be confidently identified, and they challenge the identities given to the lizard and the California quails by Dacos. Again, the taxonomical identity of other images of hummingbirds accepted by Chiozzi and Leonardi (2002) as having been portrayed in another part of the *Loggia* is not fully convincing, and it is impossible to identify to species level the hummingbirds portrayed on the ninth pillar. These New World birds are today dispersed over a huge geographical

FIGURE 2.11 *A pair of hummingbirds portrayed by Giovanni da Udine on the ninth pillar of the Vatican* Loggia*, presumably between 1518 and 1519.*

area that ranges from Canada and the United States down to most of South America.

Teixeira (2015, pers. com.)[1] and Carpaneto et al. (2010) also accept the identification of three American parrots on the curtain wall of the thirteenth bay of the Loggia and the vault of the twelfth bay as the genus *Amazona* Lesson, 1830, but Carpaneto et al. (2010) are of the opinion that here too, the lack of detail and the superficiality of their rendering make specific identification difficult (Fig. 2.12). A certain similarity can be found, for example, with the Mealy parrot, *Amazona farinosa* (Boddaert, 1783), a species still present in mainland northern South America (see Hilty 2003), including the Atlantic Forest of Brazil. Several parrots of the genus *Amazona* have been reported from the Caribbean islands too; in the Lesser Antilles they represent a very old group and a relict population, the relationships of which are still obscure (Greenway 1967). Labat (1722) cited the occurrence of one such bird that lived on Martinique in his time, while a parrot of the same genus was described as living on Guadeloupe by du Tertre (1654) and, again, by Labat (1722). There are no surviving specimens or remains of either island population, so their taxonomy may

1 Dante Teixeira, "Com o diabo no corpo: uma breve história dos papagaios no Brasil Colônia", paper contributed to the International Colloquium *Exotic and strange animals in Renaissance Portugal and Europe: their importance and contribution to the 16th century natural sciences*, Lisbon, Tec Labs – FCUL, 26-27 February 2015. <http://www.escolademar.pt/internationalcolloquiumexoticanimals2015/>.

FIGURE 2.12 *The medium-sized green parrots depicted by Giovanni da Udine on the curtain wall of the thirteenth bay of the Vatican* Loggia *might be identified as representatives of the Neotropical genus* Amazona *Lesson, 1830, and possibly of the species* Amazona farinosa (*Boddaert, 1783*)*, the Mealy parrot.*

never be fully elucidated. The status as separate species of these two birds is unproven and they are regarded as hypothetically extinct *taxa* (Fuller 1987). In the Guadeloupe islands, another as-yet undetermined vanished *Amazona* is known from La Désirade (Grouard 2001; Gala and Lenoble 2015), whereas the equally extinct Guadeloupe parrot, *Amazona violacea* (J.F. Gmelin, 1789), has been reported from the namesake island and the smaller Marie-Galante (Olson and López 2008; Gala and Lenoble 2015). On three islands, Dominica, St Vincent, and St Lucia, there are four forms: the endemic, large green and purple Imperial amazon or *sisserou*, *Amazona imperialis* Richmond, 1899 of Dominica is the most specialized of these (Greenway 1967). Early explorers of Cuba, such as Columbus and Diego Álvarez Chanca, mentioned the Caribbean parrots in fifteenth- and sixteenth-century writings. Originally associated with Eastern Asia and Africa, after the early voyages of Columbus these birds soon came to be held as symbolic of America in the European courts. Acting, as it were, as intermediaries between the two Worlds, they were the first American animals to circulate in Europe as representatives of an alien reality (see Pieper 2006; Gschwend 2009) and were particularly appreciated at the aristocratic courts because they could be taught to speak. According to Mobley (2009), Columbus

brought back a pair of colourful Cuban Amazon parrots, *Amazona leucocephala* (L., 1758), as a gift for Queen Isabella of Spain in 1494. This species is still present on Cuba, the Isle of Pines, some of the Bahamas and the Cayman Islands (Bond 1936; BirdLife International 2015).

Together with the hummingbirds, the Amazon parrots portrayed by Giovanni da Udine may possibly have come from the Caribbean islands rather than Mexico or other parts of continental Mesoamerica. It is believed that the painter worked on the decoration of the Vatican *Loggia* between 1517 and 1519 (Dacos 1969 and 1986; Masseti and Veracini 2010), not many years after the start of colonization of the Caribbean islands, but still before the discovery of continental Mesoamerica. The conquest of Mexico can be said to have been completed only after 1519, when Hernán Cortés began the subjection of the Aztec nation (Reeves 2006). On the other hand, it is well known that Europeans began to colonize insular Mesoamerica – that is to say the West Indies – immediately following the discovery of the Caribbean islands by Christopher Columbus in 1492 (Dunn and Kelly 1989; Wilson 2007; Masseti 2011), so much so that a natural history of its archipelagos was already published by Gonzalo Fernández de Oviedo as early as 1526 (Giletti Benso 1992).

Andrea de Sarto's Red Macaw

The strikingly colourful parrot portrayed by Andrea del Sarto on the top of the above-mentioned cage of birds being carried by a servant, could also favour the theory of a Caribbean insular origin for some of the species depicted at Poggio a Caiano (Fig. 2.13). From a taxonomic point of view, this parrot could perhaps be referred to the morphology of the Cuban red macaw, *Ara tricolor* Bechstein, 1811 (Dante Teixeira, pers. com.; Masseti 2015a). This is an extinct species, endemic to mainland Cuba and the nearby Isle of Pines or Isla de la Juventud (Walters 1995, Olson and Suárez 2008; Wiley and Kirwan 2013), whereas its historical occurrence on the more distant Hispaniola is still debated (Wetherbee 1985; Olson 2005; Wiley and Kirwan 2013). The last known specimen was collected in 1864 (Bangs and Zappey 1905) and the latest reports of it in the wild appeared in 1885 (Lack 1976), but the species may have survived in southern Cuba for another twenty years (Purcell 1999). A complete overview of available knowledge concerning *A. tricolor* has recently been provided by Wiley and Kirwan (2013). At least nineteen specimens (Moreno 1992) and three fossils (Olson and Suárez 2008) are known. The overall plumage pattern of the Cuban macaw suggests that its nearest mainland relative may be the scarlet macaw, *A. macao* (L., 1758): the distribution of red and blue in the plumage is

FIGURE 2.13 *The colourful parrot portrayed by Andrea del Sarto on top of a bird-cage in the* Tribute to Caesar *has been identified as a Cuban macaw,* Ara tricolor (*Bechstein, 1811*).

similar, as is the presence of a white facial patch that is featherless except for small crescentic lines of tiny red feathers (Matthew and Steadman, 2001). The scarlet macaw is a species now restricted to tropical evergreen forests, from southern Mexico down to Bolivia (Forshaw 1978; Nader et al. 1999; Hilty 2003). In the Caribbean islands, it has been recorded on the continental island of Trinidad, but is not currently resident there (ffrench 1991). The Cuban parrot differs mostly from the latter in that it has an all-black bill, and is much smaller, being about 50 cm long. Another difference is the occurrence of the yellow shoulder-patch in the plumage of *A. tricolor* (Fig. 2.14), *à propos* which it is significant that this pattern is completely absent from the parrot painted by del Sarto. Consequently, the possibility cannot be ruled out that we are dealing with a representation of a red-and-green macaw, *Ara chloroptera* Gray, 1859, as already assumed by Masseti and Veracini (2010), although this would be a smaller-sized specimen, more akin in dimensions to the Cuban red macaw. *Ara chloroptera* is a bird dispersed over a huge geographical range that covers almost all of South America (de la Peña and Rumboll 1998; Hilty 2003). Should

FIGURE 2.14
Mounted Cuban macaw in the collection of the Naturalis Biodiversity Center, Leiden, inv. no. rmnh.110095. COURTESY OF NATURALIS BIODIVERSITY CENTER, LEIDEN.

it be confirmed in the future as the representation of a specimen of *A. tricolor*, the macaw portrayed by Andrea del Sarto is possibly the most ancient scientific depiction of the species to have come down to us.

Several representatives of another Neotropical genus of parakeets, the *Aratinga* Spix, 1824, a smaller relative of the macaws, may also be present in del Sarto's fresco, again within the cage of birds. This assumption, however, is based merely on the green coloration of the plumage rather than on any detectable phenotypic patterns. Consequently it is equally possible that they could also represent other Old World – and not New World – species, such as the ring-necked parakeet or rose-ringed parakeet, *Psittacula krameri* (Scopoli, 1769).

The Marcgrave's capuchin monkey, *Sapajus flavius* (Schreber, 1774)

Also featured in del Sarto's fresco is a very peculiar Neotropical monkey, the Marcgrave's capuchin or blonde capuchin, *Sapajus flavius* (Schreber, 1774) (Fig. 2.15). Its presence here is quite astonishing: firstly because the representation

FIGURE 2.15
Detail of the fresco by Andrea del Sarto showing a living specimen of Marcgrave's capuchin monkey.

of this endemic South American species reveals an awareness of the authentic existence of Brazil on the part of the commissioner of the painting, only a few years after its discovery in 1500; secondly because it represents the very first documented evidence for this species of extremely rare primate (Masseti and Veracini 2010).

The story of the scientific discovery of the blond capuchin is absolutely intriguing. The animal was first recorded as *caitaia* by the German traveller Georg Marcgrave (or Markgraf) only in 1648 (Oliveira and Lannguth 2006), and was regarded as extinct soon after its description as *Simia flavia* in 1774, when Schreber posited the monkey as an independent species, although a specimen had long been lacking (see Schreber 1774). Over the years, this capuchin has been the subject of extensive but inconclusive discussion among taxonomists as to its origin and identity. Since no specimen of Schreber's *Simia flavia* was present in any scientific collections up to very recent times, and in view of the seeming improbability of its bright yellow coat colour, it was never identified as a true species. The Marcgrave's capuchin was only recently rediscovered in Brazil (Oliveira and Langguth 2006; Pontes et al. 2006; Oliveira et al. 2015). Oliveira and Langguth (2006) stated that Schreber's *Simia flavia* is the oldest

FIGURE 2.16
The Marcgrave's capuchin was only recently rediscovered in Brazil, where it still lives in relic fragments of the Atlantic Forest in the states of Rio Grande do Norte, Paraíba, Pernambuco and Alagoas. PHOTO BY ADRIANO GAMBARINI.

specific name available for the primate; in light of this, they proposed its denomination as *Cebus flavius*, only recently changed to *Sapajus flavius* on the basis of morphological studies carried out by Lynch Alfaro et al. (2011) (Fig. 2.16). It currently lives in narrow fragments of relic Atlantic Forest, exclusively limited to the Brazilian states of Rio Grande do Norte, Paraíba, Pernambuco and Alagoas. Its distribution was probably more extensive in the past, and at the time of the European discovery of Brazil Marcgrave's capuchins may well have inhabited areas that were among the first to be explored by Europeans, areas whose natural resources were soon to be intensively exploited. It was probably one of the first species of Brazilian primates to be brought to Europe. According to the 2015 IUCN *Red List of Threatened Species*, its present status is "critically endangered", and it may be on the brink of extinction. Indeed, the size of the estimated total remaining mature populations is less than 200 individuals (Oliveira et al. 2015).

Very likely, the Marcgrave's capuchin monkey painted by Andrea del Sarto figured among the animals brought as gifts to Pope Leo X. The Florentine painter may have had the opportunity to see and study it during his visit to Rome (Masseti and Veracini 2010), in connection with the commission for the decoration of the Medici villa at Poggio a Caiano, since the fresco *Tribute to Caesar*, strongly suggests a direct experience of Raphael's work – and that of other artists in his circle – in Rome (cf. Bardazzi and Castellani 1981; cf. Kliemann 1986).

According to Shearman (1965), followed by Kliemann (1986) and Masseti and Veracini (2010), del Sarto would have brought with him an initial sketch of the Poggio a Caiano fresco for his commissioner's approval, a sketch that can

be traced to the drawing of the *Tribute to Caesar* now in the Musée du Louvre, Paris (Cabinet des Dessins; inv. no. 1673) (see Fig. 2.8). This includes representations of very few of the animals: a medium-sized monkey (possibly of the genus *Chlorocebus* Gray, 1870, represented in a rear view), a spaniel, the vague image of a dromedary, a civet – *zibetto* in Italian (and here we should recall the famous *Canzona dello zibetto*, the 5th of the *Canti Carnascialeschi* written by Lorenzo *Il Magnifico*: see Sanguineti 1992) – and the memory of Lorenzo's giraffe (Masseti and Veracini 2010). Apart from the latter, none of the animals represented in the Parisian sketch appears to be of particular value: for this reason, the Pope may have been dissatisfied with their representation and may have asked the Florentine artist to portray some of the exotic species that were present in his menagerie – and, more specifically, those originating from the recently discovered New World. There are no known documents confirming a visit to Rome by Andrea del Sarto, but such a visit could have taken place just before he started work on the frescoes of Poggio a Caiano, which, as we have already seen, were not begun before 1519. Therefore, it cannot be ruled out that, during a stay in Rome, Andrea drew inspiration from direct observation of the animals kept in the Pope's menagerie, as well as from the works of Giovanni da Udine who, as mentioned above, was active in Rome between 1517 and 1519 (Masseti and Veracini, 2010). As a result, in the Poggio a Caiano fresco, the Marcgrave's monkey is shown being carried on the shoulders of an Oriental servant, positioned fairly centrally, almost as if acting as the fulcrum of the whole composition and emphasizing the high prestige and value of this Neotropical primate (Masseti and Veracini 2010). A monkey portrayed from the back in an erect posture is also shown in the preparatory drawings by del Sarto in the Hessisches Landesmuseum mentioned above (see Kliemann 1986). The animal appears to have the morphological patterns of a capuchin monkey; it is probably connected with the portrait of *S. flavius* in the fresco, even though in the end it was not used in this form in the painting (Masseti and Veracini 2010).

However, it should not be thought that the Marcgrave's capuchin depicted by del Sarto is the most ancient portrayal of a Neotropical monkey in the Western World. Indeed, although representations of live American mammals remain extremely uncommon in early sixteenth-century European sources (Urbani 2004, 2007; Groves 2008), the German painter Hans Burkgmair the Elder (1473-1531) portrayed a capuchin monkey in the woodcut *Natives with a herd of animals*, conceived to illustrate the triumph of Maximilian I (cf. Veracini 2011) (Fig. 2.17). This formed part of a series of the *People of Calcutta*, dated to 1508 (Leitch 2009), a decade before Andrea del Sarto began his fresco at Poggio a Caiano. Despite the name, it was inspired by the observation not of Asian Indians but of Brazilians (Appelbaum 1964). Pictorial representations of Neo-

FIGURE 2.17 *Dated to 1508, the woodcut* Natives with a herd of animals *by Hans Burkgmair the Elder (1473-1531) was conceived to illustrate the triumph of Maximilian I. A capuchin monkey is portrayed on the shoulders of the native in the left part of the drawing.* FLORENCE, PRIVATE COLLECTION.

tropical animals became increasingly more numerous in the European artistic productions of the second half of the sixteenth century (Fragaszy et al. 2004; García-Frías Checa 2005; Capanna and Gippoliti 2007; Masseti and Veracini, 2010, 2014).

Beyond the Ends of the World. Concluding Remarks

Cortés sent his famous present of Mexican treasures to Queen Johanna and King Charles, later Emperor Charles V, in 1519 (Heikamp 1972), the same year in which del Sarto's fresco at Poggio a Caiano was begun. The European discovery of South America had taken place only a few years earlier: the Portuguese arrived in Brazil at the dawn of the sixteenth century, and colonization began on 22 April 1500 under the sponsorship of the Kingdom of Portugal (McAlister 1984) – not twenty years before the realization of del Sarto's fresco.

The discovery of America brought the Europeans far beyond the *eschatiai tes oikomenes* – the extreme ends of the ancient world – which up to that time had been confined to the geography of Ethiopia (indicating sub-Saharan, "Black Africa" in its entirety) and India (cf. Li Causi 2003). We cannot imagine the impression made by the discovery of the New World on European people in the early 1500s: as observed by Heikamp (1972: 9), it was a breathtaking miracle. To give some idea of this, we may recall what López de Gomára wrote in the dedication to Charles V of his *Historia de las Indias*, published in 1552: "*La mayor cosa después de la creación del mundo, sacando la encarnación y muerte del que lo crió, es el descrubrimiento de Indias; y así las llaman Mundo Nuevo*" (The most important thing after the creation of the world, not considering the incarnation and death of he who created it, is the discovery of Indies; and so they call them the New World). This was why princes and scholars competed for possession of the rarities of America, giving ample scope to exoticism. The discovery of South America encouraged the exportation of the living evidences of its existence. This was a new way of intellectually grasping this amazing new experience.

In this sense, it was not difficult for Pope Leo X to flaunt his enormous earthly power. He was the owner of the most diverse and peculiar living animals originating from every corner of the then-known or very recently discovered world. The most influential monarchs of the time were honoured to send them to him as gifts, with the King of Portugal, Manuel I, being particularly eager to obtain papal concessions (Bellori 1931; Fontoura da Costa 1937; Kliemann 1986; García-Frías Checa 2005; Gschwend 2009; Masseti and Veracini 2010). Details survive of at least two Portuguese embassies sent to the Vatican between the years 1514 and 1516. Perhaps the more famous was that of Tristão da Cunha who arrived in Rome on 12 March 1514 with "*animais indianos*" (Indian animals) including the famous Asian elephant, *Elephas maximus* L., 1758, named Hanno (Fig. 2.18), and one "*onça*" (Fontoura da Costa 1937: 23; see also Lloyd 1984; Bedini 2000; Gschwend, 2009). The latter Portuguese word is now applied to the jaguar, that is the species *Panthera onca* described by Linnaeus (1758: 42) and fixed by Thomas (1911: 136) as native to the Brazilian region of Pernambuco, but in reality, the term *onça* can be used to indicate a fairly wide range of large felids, among which the cheetah is possibly the species to be identified in this case.

The other embassy was embarked in 1515 on the ill-fated vessel captained by João da Pina, which was to have brought to Rome the Indian or greater one-horned rhinoceros, *Rhinoceros unicornis* L., 1758, that provided inspiration for the famous drawing by Albrecht Dürer (Fig. 2.19) when the vessel called at Lisbon (Clarke 1986), before the animal was lost in a shipwreck on the steep

FIGURE 2.18
Annone *or* Hanno, *the Asian elephant,* Elephas maximus (*L., 1758*)*, arrived in Rome among other gifts brought by the Portuguese embassy of the naval commander Tristão da Cunha on 12 March 1514. Drawing by Raphael dated c.1514.* BERLIN, KUPFERSTICHKABINETT.

FIGURE 2.19
Woodcut of the Indian rhinoceros, Rhinoceros unicornis (*L., 1758*)*, by Albrecht Dürer dated around 1515.* © TRUSTEES OF THE BRITISH MUSEUM.

and dangerous coast just to the north of Porto Venere, at the entrance to La Spezia ("*nas perigosas costas abruptas pouco ao norte de Pôrto Venere, à entrada de Spezia*") (Giovio 1555; Fontoura da Costa 1937; Cwalinski 2004). Tristão da Cunha may have further enriched the mission with "American produce": "The Portuguese were able to obtain this in Brazil, an obligatory stop on the journey to the Indies, thus taking the opportunity of making even more precious gifts that were entirely new in Europe" (Dacos 1977: 61). Manuel I used his animals

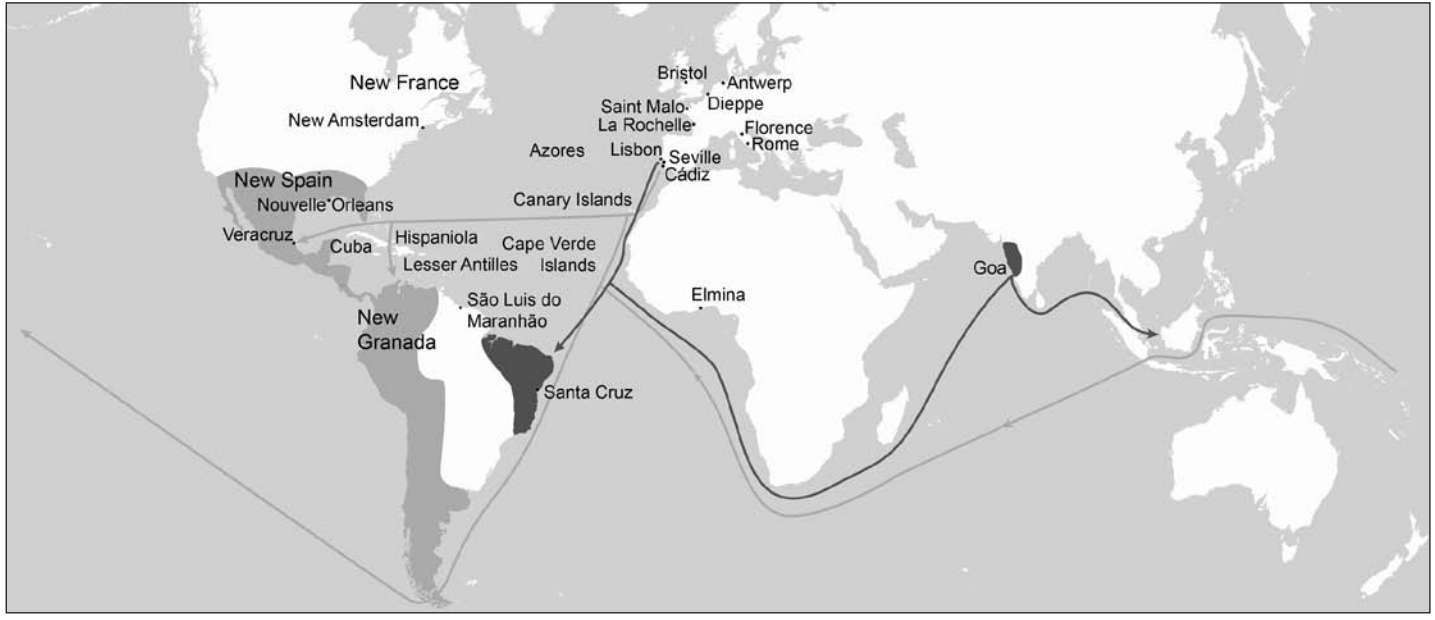

FIGURE 2.20 *The sixteenth-century expansion of the Portuguese (dark grey) and Spanish (pale grey) monarchies throughout the world (from Mollat du Jourdin 1993, redrawn and modified).*

to reinforce his image as a magnificent and powerful sovereign (Fontes da Costa 2009; Grigson 2016) and controlled, for a short time, the international market in exotic species, such as monkeys and parrots (Bedini 2000; Gorgas 1997; Grigson 2016; MacGregor 2016).

We should bear in mind that sixteenth-century Lisbon must have been a vast and spectacular emporium, offering opportunities for trade in the most diverse merchandise from every corner of the known world. At that time, the Portuguese monarchy was extending its reach throughout the world, trading with India, the East Indies, and newly discovered South America, as well as consolidating its control over the trade in spices and slaves. From the beginning of the sixteenth century, Brazil too became a colony and part of the already immense Portuguese empire. Setting in geographical relation the homelands of the principal zoological species belonging to Leo X's menagerie, and portrayed by Andrea del Sarto, is like forming an imaginary map of the overseas routes of the Portuguese colonial hegemony acquired by Manuel I. This journey of the imagination would start from the Indian subcontinent, where Indian civets and Jamnapari goats (together with white elephants and rhinoceros) are to be found, moving on to the Atlantic forest of Brazil, homeland of the Marcgrave's capuchin and the *Aratinga* parrots, then passing through sub-Saharan Africa, where African grey parrots could be collected, and the island of Cuba, home to intriguing and colourful macaws, via the archipelago of Cape Verde, the adopted homeland of the green monkeys (Fig. 2.20). An enlightened Pope such as Leo X could certainly not fail to give due consideration to such an immense empire of knowledge.

Acknowledgements

Among the many friends and colleagues who helped in the preparation of this paper, I would like to express my appreciation and gratitude in particular to Stefano Casciu, Polo regionale dei musei della Toscana; Carlo Falciani, Accademia di Belle Arti, Florence; Monica Gala, PACEA–UMR CNRS 5199, Pessac, France; Caroline Grigson, UCL Institute of Archaeology, London; Giorgio Galletti, University of Florence; Steven van Der Mije, Naturalis Biodiversity Center, Leiden; and Pietro Li Causi, *Zoomathia*, Palermo. Special thanks also go to Cecilia Veracini, ISCSP–CAPP University of Lisbon, and Dante Teixeira, Natural History Museum of Rio de Janeiro, for the enjoyable and stimulating discussions on the early importation of American animals in Europe.

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