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The tale of the hermaphrodite monkey: classification, state interests and natural historical expertise between museum and court, 1791–4

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Abstract. A purportedly hermaphrodite monkey which was offered to Grand Duke Ferdinando III of Tuscany in 1791 was sent to the Royal Museum of Physics and Natural History for an evaluation. In their investigation, the museum's naturalists encountered a fundamental classificatory problem which made it impossible to decide whether the animal was monstrous or normal – a 'taxonomist's regress' which constitutes a special case of finitism as analysed in the Edinburgh school's readings of Wittgenstein. The communication between museum and court shows that in resolving this ambiguity, museum naturalist Giovanni Fabbroni demarcated experts from laypeople and defined state interest by distinguishing between the grand duke's private interests and those of the state. This case thus highlights the role of late Enlightenment absolutism for the creation of modern practices and concepts of expertise in the service of the state.

After his visit to the grand-ducal collection of art in the Florence Uffizi in 1785, the French visitor Charles Dupaty warned his fellow travellers, 'Never enter the cabinet of the *hermaphrodite*, if you do not wish to blush for pleasure and shame at the same instant. I dare not even say that it is too handsome.'[1] The *Sleeping Hermaphrodite*, a copy of a Hellenistic marble sculpture, depicted a human figure in repose on its side, twisted in restless sleep in such a way that both back and face were simultaneously visible to the observer approaching the sculpture from behind

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1 C. Dupaty, *Sentimental Letters on Italy, Written in French by President Dupaty, in 1785* (tr. J Povoleri), 2 vols., London, 1789, i, 121 (letter XXXII). British travellers tended to profess less delight at the *Sleeping Hermaphrodite* than their French or German counterparts (see also footnote 3 below). Thus John Moore sternly remarked that the 'excellence of the execution is disgraced by the vileness of the subject'. J. Moore, *View of Society and Manners in Italy: With Anecdotes Relating to Some Eminent Characters*, 2 vols., London, 1781, ii, 367.

Figure 1. The *Sleeping Hermaphrodite*, table XLI in Antonio Francesco Gori, *Museum florentinum*, *Vol. 3: Statuae antiquae*, Florence, Moucke, 1734. By permission of the Warburg Institute.

(Figure 1).[2] This form of presentation drew attention to the figure's amply curved backside, inviting touch.[3] And yet the figure's long limbs and strong facial features, unusual for Hellenistic depictions of female bodies, may have provoked unease in the spectator, and prompted him to walk round to inspect the reclining figure's front. Only then would the sculpture reveal the simultaneous presence of female breasts and, between the sleeper's legs, a swelling, half concealed by marble imitation of drapery, identifying the figure as hermaphrodite. This revelation might well account for the visitor's sense of shame at having his attention drawn so skilfully to the figure's genitals, as well

2 For an analysis of the *Sleeping Hermaphrodite* in the context of Hellenistic sculpture see e.g. J. J. Pollitt, *Art in the Hellenistic Age*, Cambridge, 1986.

3 The German philosopher and theologian Johann Gottlieb Herder encountered a similar copy of the *Sleeping Hermaphrodite* at the Villa Borghese in Rome. In his notes he stressed his compulsion to touch the figure's back since it presented 'an uncommonly lascivious stance which quite invites one to grasp the back … one wants to enjoy and touch everything, the arched back, the shoulders' ('*[e]ine ungemein wollüstige Stellung, die recht einladet, nach hinten zu greifen … man möchte den ganzen gebognen Rücken, Schultern, alles genießen u. fühlen*'). J. G. Herder, *Italienische Reise. Briefe und Tagebuchaufzeichnungen 1788–1789*, Munich, 1988, 602–3. Translations are mine unless noted otherwise.

as to its back, both now retrospectively identified as inappropriate objects of male desire.[4]

Its titillating ambiguity made the *Sleeping Hermaphrodite* one of the central attractions for visitors in late eighteenth-century Florence, recalling familiar uses of the figure of the hermaphrodite as an ideal combination of male and female features in contemporary fiction, poetry and imagery. The hermaphrodite's well-established place in early modern entertainment, both as a trope of fiction and as a curiosity on public display, contributes to the process of classification, professional boundary work and administrative decision-making investigated in the present case study. This paper is mainly concerned with a rather different contender for hermaphroditism in the Tuscan capital: a small live monkey submitted to the grand-ducal court in 1791 for the local Museum of Physics and Natural History. While in the case of the Uffizi hermaphrodite its ambiguity was considered enjoyable and central to the sculpture's appeal, I argue that in the contemporary case of the 'hermaphrodite' monkey its ambiguous status, in this example not between sexes but another kind of sexual ambiguity between monstrosity and normality, was irreconcilable with the animal's suitability as a museum specimen.[5]

Any uncertainty regarding proper classification of the animal had to be resolved. Here I show how, initially, the naturalists in charge of classifying the animal encountered a fundamental problem of natural historical classification. I have dubbed this problem the 'taxonomist's regress', to allude to its structural similarity with Collins's 'experimenter's regress' and ultimately the problem of finitism. The aim of my analysis is to show how, despite this problem, naturalists at the Museum of Physics and Natural History finally arrived at an unequivocal classification of the monkey as a normal female, a classification which in turn enabled the court to make a decision regarding its acquisition. I argue that the act of classification at the museum, and the correspondence between museum and court, affirmed the status of the naturalist as an expert in state service, a role that the late Enlightenment Tuscan regime had created. But this interaction did not only serve to demarcate experts from laypeople. In his correspondence of the examination's results to the court, the museum's vice-director, Fabbroni, succeeded in turning the initial uncertainty regarding the monkey's monstrous status into a secure judgement by mobilizing the notion of state interest. With this act of classification, the expert effectively redefined the notion of state interest by distinguishing between the sovereign's personal interest in the animal and its utility for the public museum. Emma Spary's analysis of the transformation of the Paris Jardin du Roi into the public Muséum d'histoire naturelle has identified the French Revolution as providing an

4 As this description of the *Sleeping Hermaphrodite* is based on male travellers' accounts I explicitly adopt their perspective here. Given the hermaphrodite's inherent ambivalence, however, its appeal to homosexual desires would have been perceived by female spectators as well. For this appeal of the figure of the hermaphrodite see also R. Gilbert, *Early Modern Hermaphrodites: Sex and Other Stories*, Basingstoke and New York, 2002, especially 154–7.

5 For the changing epistemological status of monsters around 1800 see M. Hagner, 'Enlightened monsters', in *The Sciences in Enlightened Europe* (ed. W. Clark, J. Golinski and S. Schaffer), Chicago and London, 1999, 175–217; and L. Daston and K. Park, *Wonders and the Order of Nature, 1150–1750*, New York, 1998.

environment in which naturalists could define the museum as a locus of expertise about natural knowledge in the service of the nation.[6] The case of the hermaphrodite monkey in Florence highlights the continuity of such notions of expertise and museums between late Enlightenment absolutist and revolutionary regimes.

Natural knowledge and expertise in late Enlightenment Tuscany

In Florence on 4 May 1791 the Tuscan Ferdinando Petrocchi offered a living monkey to his sovereign, the young Grand Duke Ferdinando III (1769–1824), claiming that it was a hermaphrodite which he had bought in his home town of Pisa. Upon presentation, this 'lucky animal had the good fortune of pleasing His Majesty's Royal consort',[7] the seventeen-year-old Grand Duchess Luisa (1773–1802). In addition, it was potentially of interest to the public Museum of Physics and Natural History, which, since its foundation under Ferdinando's father Pietro Leopoldo in 1775, had acquired a high reputation for its growing collections.[8] The young sovereign passed Petrocchi's offer to the museum for an evaluation. In this, the grand duke followed a pattern of appeal to naturalists' expertise established by his predecessors and especially by his father. From the start of the eighteenth century, Tuscan sovereigns had already initiated a reorganization of their collections in the spirit of systematization, characteristic of Enlightenment concepts of knowledge production. Under the last Medici ruler, Gian Gastone, the early modern cabinet of curiosities of the Medici was systematized according to new taxonomies which separated natural historical specimens from works of art.[9] After the succession in 1737 of the house of Habsburg-Lorraine to the Tuscan throne, the new sovereign Franz Stephan (1708–65) continued this process of separating and systematizing. Franz Stephan's second son Peter Leopold (1747–92), who succeeded to the Tuscan throne in 1765 as Pietro Leopoldo, further intensified and institutionalized this systematization, both at the Uffizi and with the foundation of the new Museum of Physics and Natural History.[10]

Like his father, Pietro Leopoldo had a strong interest in natural history and experimental natural philosophy. In his attitudes towards policy, the young sovereign was influenced by physiocracy, a system of political economy

6 E. C. Spary, *Utopia's Garden: French Natural History from Old Regime to Revolution*, Chicago and London, 2000. However, see also her recent 'Of nutmegs and botanists: the colonial cultivation of botanical identity', in *Colonial Botany: Science, Commerce, and Politics in the Early Modern World* (ed. L. Schiebinger and C. Swan), Philadelphia, 2004, 187–203, for the emergence of categories of expertise in pre-revolutionary French colonial enterprises. I am grateful to Dr Spary for making her paper available to me ahead of publication.

7 '*[Q]uesto fortunato Animale ebbe la forte di piacere alla di Lei Augusta Consorte.*' Istituto e Museo di Storia della Scienza, Florence, fondo Imperiale e Regio Museo di Fisica e di Storia Naturale (subsequently IMSS), filza Negozi 1791, c. 55–63 (doc. no. 16), here fol. 59.

8 For the early years of the Florentine Museum of Physics and Natural History see S. Contardi, *La casa di Salomone a Firenze. L'Imperiale e Reale Museo di Fisica e Storia Naturale (1775–1801)*, Florence, 2002.

9 Cristina de Benedictis, *Per la storia del collezionismo italiano*, Florence, 1995, 140–1.

10 A. Wandruszka, *Leopold II*, 2 vols., Wien, 1963–5; M. Fileti Mazza and B. Tomasello, *Galleria degli Uffizi 1758–1775: la politica museale di Raimondo Cocchi*, Modena, 1999.

understood by its practitioners as 'the science of natural law applied … to civilized societies'.[11] Adherence to the laws of nature as the solution to problems of social order was one of the main tenets of physiocratic theory. Pietro Leopoldo conceived of political action as a form of problem-solving that could be tackled by experimental methods and thus used Tuscany explicitly as a political laboratory for legal, economic, administrative and social reform. On his legal reforms, for example, the grand duke remarked that 'good legislation is like sound natural philosophy, it must be founded on experiment; the laws too should be tried'.[12] The foundation of the museum coincided with and was arguably part of these reforms, which included the transformation of Tuscan learned academies into a body of experts in the service of the state.[13] For a polity operating according to physiocratic principles, the assumption that natural laws could solve socio-political problems gave rise to the practical problem of how to create a society that was able to perceive and follow these laws.[14] The Tuscan state's approach to the problem was to establish a group of experts competent and authorized to produce natural knowledge and to educate the public to accept this knowledge as a legitimate basis for political action.

In addition to the reorganization of local academies and the reform of public education, a central site for the creation both of natural expertise in the service of the state and of an enlightened public for this expertise was the new Museum of Physics and Natural History. The museum's exhibition of minerals, plants, taxidermized animals, wax models of human bodies and physical instruments was to teach visitors the laws of nature. The most celebrated part of the museum was the anatomical model collection, produced at a workshop within the museum itself in a collaboration between the museum's naturalists, local anatomists and artisans. According to the museum director, Fontana, the museum was founded in 1775 to 'enlighten the people and to make them happy by making them civilized'.[15] While the museum displayed a microcosm of creation much like earlier collections, a new function of the exhibition was to showcase the Tuscan nation. A room was dedicated to Tuscan *naturalia*.[16] Models and instruments gave evidence of the accomplishments of Tuscan arts and sciences. At La Specola the nation was thus defined by its natural

11 Du Pont de Nemours (1815), quoted from E. Fox-Genovese, *The Origins of Physiocracy: Economic Revolution and Social Order in Eighteenth-Century France*, Ithaca, 1976, 10.

12 See Dupaty, op. cit. (1), 99–100.

13 On the transformation of Tuscan academies see G. Barsanti, V. Becagli and Renato Pasta (eds.), *La politica della scienza. Toscana e stati italiani nel tardo settecento*, Florence, 1996.

14 S. Kaplan, 'Physiocracy, the state, and society: the limits of disengagement', in *Comparative Theory and Political Experience* (ed. P. Katzenstein, T. Lowi and S. Tarrow), Ithaca and London, 1990, 23–63.

15 N. N., *Saggio del Real Gabinetto di Fisica, e di Storia Naturale di Firenze*, Rome, 1775, 4. Documentary evidence points to Fontana as its main author. See Contardi, op. cit. (8). A contemporary guide to Florence stressed that the exhibition was of interest to philosophers, *curiosi* and artisans alike: V. Follini and M. Rastrelli, *Firenze antica e moderna illustrata*, 8 vols., Florence, 1798–1802, viii, 181–2.

16 Archivio di Stato Firenze (subsequently ASF), Segreteria di Finanze Affari prima del 1788, Pezzo 480, 'Casa Reale. Museo di Fisica', 6 March 1789, '*Ordini da darsi per il Gabinetto di fisica in conseguenza dei punti annessi presentati dall'Abate Fontana*'.

products and its artisanal and scientific traditions, not by a shared language or political unity.[17]

Unlike earlier cabinets of curiosities, the royal museum was from the outset explicitly public. In principle, anyone was permitted to enter; however, persons who did not meet certain standards of clothing and cleanliness were not admitted. Initially visitors were segregated into two groups: 'commoners' were admitted in the morning, upper-class visitors in the early afternoon. In 1789 this practice was abolished at the explicit request of Grand Duke Pietro Leopoldo and all visitors were admitted at the same time.[18] Throughout the museum's early years it remained customary for Fontana to receive fellow naturalists and particularly high-ranking visitors for personal guided tours outside the collection's regular opening hours. This simultaneous presence of established and new methods, visible also in the museum's acquisition practices, highlights the grand duke's and his employees' attempt to develop a new institutional form for the production of knowledge.[19]

Pietro Leopoldo charged the natural philosopher Felice Fontana (1730–1805) with overseeing the grand-ducal collection of instruments and specimens and with enlarging it to form the new public museum. Initially, Fontana resorted to established means of obtaining new material such as making use of his correspondence network to initiate exchange. Between 1775 and 1780 he travelled to England and France to commission new instruments and over the following years repeatedly ordered further acquisitions. In addition to those received means of enlarging the collection, the grand duke also called for contributions from the general public. Local priests throughout Tuscany were requested to issue a call for the submission of local natural products and singularities. Tuscans subsequently brought in a variety of specimens of local flora and fauna and occasionally husbands delivered to the museum their wives' monstrous stillbirths. The famous anatomical model collection, in particular, benefited from the fact that the absolutist sovereign made corpses from Florentine hospitals available to the museum's wax model workshop. Thus Tuscans were made aware of the existence of the new museum and its collections not only through announcements in local newspapers such as the *Gazzetta Toscana*, but also through the calls for specimens which incorporated the population into the museum's mission for public enlightenment as contributors as well as spectators. Despite this inclusiveness, however, the museum's naturalists worked as gatekeepers to define which contributions constituted legitimate objects of study. Careful to preserve La Specola's function as a place of public enlightenment, the administration avoided objects and forms of display which could be connected to

17 Numerous authors have highlighted the function of museums and collections as instruments of nation-building; most locate this development exclusively in the nineteenth century and the emergence of the nation state. See e.g. B. Anderson, *Imagined Communities*, London, 1983; E. Hooper-Greenhill, 'The museum in the disciplinary society', in *Museum Studies in Material Culture* (ed. S. M. Pearce), London and New York 1989, 61–72; F. E. S. Kaplan (ed.), *Museums and the Making of 'Ourselves': The Role of Objects in National Identity*, London and New York 1994.

18 IMSS, filza Negozi 1790, c.12.

19 For this transition see e.g. the contributions in M. Beretta (ed.), *From Private to Public: Natural Collections and Museums*, New York, forthcoming 2005; Contardi, op. cit. (8); P. Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy*, Chicago, 1995.

vulgar entertainment.[20] Botanical and zoological specimens were presented according to Linnaean classification and most objects were accompanied by explanatory lists and schematic drawings.[21] While Fontana initially suggested publicly that delight went hand in hand with instruction at the museum, in their practice of specimen exhibition the museum's naturalists considered aesthetics only in the sense of 'the conditions of sensuous perception' (*OED*) in order to facilitate learning. They did not discuss the beauty of specimens.[22] However, museum employees soon learned that their measures did not preclude visitors from appropriating the exhibition in their own ways.[23] Visitors reported on the specimens and the models on display as objects of beauty as much as of knowledge, or likened their visit to a religious experience.[24] Fragile objects such as wet preparations of monstrous fetuses and wax models of genitals had to be protected by locks.[25] While the naturalists could not prevent such modes of reception, they could and did control what objects became part of the exhibition. Ironically, the appeal for contributions presupposed that Tuscan laypeople had an idea of what constituted an interesting specimen which was not too different from that of the naturalists and which they would likely have acquired at shows of monsters and singularities. The present investigation of the practice of evaluation shows how, in the case of the monkey, museum employees distinguished between a layman's and an expert's interest in natural specimens.

Monkey business: calling on expertise

Among the dutiful Tuscans who followed the call for submissions was 'Ferdinando Petrocchi from Pisa, humble servant and subject of Your Royal Highness'. On 4 May 1791, two days before the grand duke's twenty-second birthday, Petrocchi obtained an

20 For the persistent tension between entertainment and education in the eighteenth century see e.g. B. M. Stafford, *Artful Science: Enlightenment, Entertainment, and the Eclipse of Visual Education*, Cambridge, MA, 1994.

21 A. Walker, *Ideas Suggested on the Spot, in a Late Excursion Through Flanders, Germany, France, and Italy*, London, 1790, 349; N. N., op. cit. (15), 33.

22 N. N., op. cit. (15), 29–30, 33: 'the order and regularity of the pieces is such … that it captivates the observer, and at the same time instructs and delights him'. ('*l'ordine, e la regolarità dei pezzi, è tale … che rapisce l'osservatore, e nel tempo medesimo lo istruisce, e diletta*'.).

23 The control of visitors' experiences and its limits are of course a perennial problem for exhibition organizers. See e.g. the contributions in T. Bennett (ed.), *The Birth of the Museum: History, Theory, Politics*, London and New York, 1995; and in S. Pearce (ed.), *Museums, Objects and Collections: A Cultural Study*, Leicester, 1992. On the historical specificity of visitors' emotional responses see S. Alberti, 'The museum affect: visiting collections of anatomy and natural history in Victorian Britain', in Beretta, op. cit. (19). I am grateful to Dr Alberti for making his paper available to me ahead of publication.

24 E.g. J. C. Eustace, *A Classical Tour through Italy An. MDCCCII*, 4th edn, 4 vols., Leghorn, 1817, iii, 478: 'the cabinet of anatomical preparations in wax … the first in number, beauty, and exact conformity to the human frame, in Europe'. '[I]n M. Fontana's laboratory one kneels and believes.' Louise-Elisabeth Vigée-Lebrun, *The Memoirs of Elisabeth Vigée-Lebrun* (tr. Siân Evans), Bloomington, 1989, 123.

25 See e.g. IMSS, filza Negozi 1801, fol. 81 (doc. 56): 'Sarebbe altresi necessario far mettere due Serrature alla Custodia Grande nella Galleria dei Parti etc ove sono Le Preparazioni Rappresentanti La Vergine, e La Deflorata.' Also IMSS, filza Mandati 1795, receipt no. 86 of 17 April 1795, for 'Ferramenti, e Serrature fatte agli Sportelli delli Scaffali della Stanza dei Feti Umani mostruosi.'

Figure 2. 'Le Callitriche (*Simia sabaea*)', Plate 5 in Jean Baptiste Audebert, *Histoire naturelle des singes et makis*, Paris, 1800. By permission of Edinburgh University Library.

audience with his sovereign and introduced himself 'with the utmost respect, [finding] himself in Florence with a hermaphrodite simian' which he believed to be 'useful for Your Royal Cabinet of Physics'.[26] The animal which he presented was a small tailed monkey, visibly endowed with both breasts and an elongated protrusion between its legs. Like other submissions to the court, the monkey was offered as a personal gift to the sovereign, not as a piece of merchandise for sale. As was the convention for the submission of gifts, the animal was presented in a way which at least in principle allowed the grand duke not to accept it. If the gift were accepted, it would have been customary for the sovereign to reward his subject with a monetary gratification, despite the avowedly non-commercial nature of the transaction. While Petrocchi specifically pointed to the monkey's utility to the museum, it is significant that he did not approach the museum directly, as other donors had done, but rather went to the trouble of a personal audience with the grand duke. The Pisan was probably well aware of the

26 '*Ferdinando Petrocchi di Pisa Umil. Servo, e Suddito di Vostra Altezza Reale col massimo rispetto Le presenta, che Si trova in Firenze coll'Animale Scimmia Ermafrodito, che si diede L'onore già di farle Sapere, e che lo credera utile per Suo Real Gabinetto Fisico.*' IMSS, filza Negozi 1791, fol. 56.

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potential multivalency of the animal; it could be used either as a museum specimen or as a courtly pet. As both a monkey and a hermaphrodite the living creature would have been doubly entertaining at the court. As an embodiment of foolishness or deceit the monkey was a popular figure in literature and imagery.[27] Living monkeys had been kept as pets at early modern courts and bourgeois households, and appeared on stages for their risible mimicking of human characteristics. In the eighteenth century, when such animals were more easily available in Europe, they became street entertainment.[28] Artistic renderings of hermaphrodites such as the Uffizi sculpture amused with their ambiguity, which was further exploited in satire and erotic fiction.[29]

Not surprisingly, the doubly entertaining furry creature pleased the seventeen-year-old grand duchess. However, her young husband Ferdinando had been brought up with his father's high recognition of natural philosophy and natural history, and received lessons from museum director Fontana.[30] Thus he was aware both of problems of taxonomy and of the naturalists at the museum, who had frequently been called upon by the government under his father for the evaluation of *naturalia* such as ores of potential mining interest or mineral waters. Despite Luisa's enthusiasm, therefore, the grand duke did not accept the animal immediately. He personally ordered it to be kept alive while Petrocchi's letter was communicated to the museum's vice-director, the natural philosopher Giovanni Fabbroni (1752–1822).[31]

Fabbroni had been Felice Fontana's student and assistant and had accompanied the natural philosopher on his journey to Britain and France in the 1770s.[32] Unlike the abrasive Fontana, Fabbroni took pains to display great diligence in his dealings with the grand-ducal court and increasingly came to act as the liaison between court and museum. He supported the reform politics of his benefactor Pietro Leopoldo not only in his function as a state employee, but also with the publication of numerous reflections on the improvement of Tuscany's economy. In the course of an administrative reform of the museum in 1789, the court (following Fabbroni's own suggestions for restructuring) created for him the new position of vice-director and financial superintendent, which held considerable power. As overseer of the museum's finances it was he, not the director, Fontana, who had the penultimate word on any acquisitions (final approval being reserved – at least formally – to the sovereign). In his position as head naturalist,

27 J. Schiesari, '"Bitches and queens": pets and perversion at the court of France's Henri III', in *Renaissance Beasts: Of Animals, Humans, and Other Wonderful Creatures* (ed. E. Fudge), Urbana and Chicago, 2004, 37–49.

28 K. Thomas, *Man and the Natural World: Changing Attitudes in England 1500–1800*, Oxford, 1983, Chapter 3, 'Men and animals', 92–142. J. Knowles, 'Apes and others on the early modern stage', in *Renaissance Beasts: Of Animals, Humans, and Other Wonderful Creatures* (ed. E. Fudge), Urbana and Chicago, 2004, 138–63. For monkeys as street entertainment in late eighteenth-century Florence see e.g. ASF, Presidenza del Buongoverno 1784–1808, Affari comuni, 'Affari di polizia', Filza 84, no. 24: 'Supplica di Giovanni Cecchini' (1789): Cecchini asked permission to show monkeys in the streets of Florence for money.

29 Gilbert, op. cit. (4).

30 According to Dupaty's 1789 account, Pietro Leopoldo's younger children were taught natural history at the museum. Dupaty, op. cit. (1), 103.

31 IMSS, filza Negozi 1791, fol. 59.

32 R. Pasta, *Scienza politica e rivoluzione. L'opera di Giovanni Fabbroni (1752–1822) intellettuale e funzionario al servizio dei Lorena*, Florence, 1989.

Fabbroni used his communications to the court to strengthen the demarcation between experts and laypeople. In order to arrive at an unassailable identification of the purported monster, the vice-director suppressed a central ambiguity pointed out by his subordinates charged with the animal's examination. His act of classification ultimately redefined the interest of the state in opposition to the sovereign's personal interest.

Fabbroni began his initial response to the court by applauding the acquisition policy introduced by Ferdinando's father, Pietro Leopoldo. The former grand duke had ordered that new acquisitions for the museum be made only after consultation with and the explicit agreement of the sovereign. This first paragraph not only provided a pleasant introduction, recalling Pietro Leopoldo's wise government, it also served to remind the young sovereign that, in Fabbroni's words, 'with this restriction any capricious acquistion, any useless expense was prevented'.[33] For Ferdinando's frugal predecessor, the zealously enlightened Pietro Leopoldo, it would indeed have been unthinkable to make such a frivolous acquisition unless it were considered a charitable act. Pietro Leopoldo had worked hard to reduce public debt. Fabbroni had reason to fear that Ferdinando's careless spending would undo his father's achievements. Importantly, with his letter Fabbroni turned the acquisition of the monkey from the acceptance of a gift into a business transaction. Not having yet seen the animal himself, Fabbroni agreed that such an acquisition would be useful if the claim to hermaphroditism were true. However, he suggested that 'in the interest of the Royal budget' the animal itself be examined by the museum's staff. He explicitly named the dissector and anatomist Tommaso Bonicoli as one able to 'verify' the monkey's claimed monstrosity.[34] Fabbroni further appealed to the grand duke's own knowledge of natural historical matters by stating that 'His Majesty was already well aware that the price Petrocchi asked for was certainly higher than that of a first-hand acquisition'. Following such praise, the museum's vice-director confidently assured Ferdinando that expenses could be kept to a 'reasonable limit' if the sovereign agreed to let the director of the museum's botanical garden, Dr Attilio Zuccagni, set the price and agreed to 'leave the negotiations at our [i.e. the museum's employees'] liberty'.[35] Thus with his letter Fabbroni reaffirmed the pattern of calling on the museum's experts for the evaluation of *naturalia* established by the grand duke's predecessor. He discursively linked this pattern to the

33 '*Con questo vincolo fu tagliata la strada ad ogni cappricciosa acquisto, ad ogni inutile Spesa, Se mai vi fossero stati, o fossero p[er] esservi in futuro, Ministri i quali avessero più a cuore La propria soddisfazione, che il Reale interesse*.' IMSS, filza negozi 1791, fol. 56 verso. Fabbroni's remark was also a jibe at his superior, museum director Fontana, who had repeatedly run over-budget due to 'capricious acquisitions', thus prompting the court to install Fabbroni as his watchdog in matters financial.

34 '*[A]ffinche venisse dovutamente Salvato l'interesse della R.Cassa, converebbe che La Reale Altezza Vostra si compiacesse ordinare come p[er] mezzo di questo nostro Dissettore Anatomico Tommaso Bonicoli venga verificata La annunziata mostruosità del Sesso nella Scimmia sudetta*.' IMSS, filza Negozi 1791, fol. 56 verso–57.

35 '*L'Altezza Vostra Reale sarà già ben persuasa, che i due predetti animali in mano del Petrocchi avranno sicuramente un prezzo maggior del giusto; maggiore cioè di quello a cui comprerebbersi in un mercato di prima mano … a questo pure verrà messo il più discreto Limite, se a V.A.R. piacerà ordinarne stima al D.r Zuccagni, e Lasciarne intieramente Libera a noi la contrattazione*.' IMSS, filza Negozi 1791, fol. 57.

museum's utility to the state and for the sovereign's glory, thus implying that correct expert judgement was the necessary basis of the institution's value.[36]

Later the same day, Fabbroni sent another message to the grand duke. After meeting with Petrocchi and having seen the animal briefly, he braced Ferdinando for the possibility that it might not be a monster after all. He left this question open until after the anatomist Bonicoli's examination, but suggested pre-emptively that if the animal pleased the sovereign, it might be advisable to keep it alive 'for mere entertainment' at one of the royal palaces and to transfer its remains to the museum after its natural death, to be placed among the other animal preparations at the museum.[37]

Initially, however, Fabbroni passed on the animal to his employee for examination. Tommaso Bonicoli, whom the vice-director had put in charge of investigating the monkey's alleged hermaphroditism, was a physician at the Florentine hospital Santa Maria Nuova. He was hired at hourly rates by the museum to prepare body parts obtained from local hospitals for further use by the artisans who produced the museum's wax models of human anatomy. The problem of identifying the monkey's sex also roused the interest of another museum employee, Dr Attilio Zuccagni. Zuccagni had been nominated by Fabbroni to determine the animal's price in case of acquisition. He now joined Bonicoli in the anatomical investigation as well. Unlike Bonicoli, Zuccagni held a permanent position at the museum. Initially, after his medical studies in Pisa, he had been hired in 1773 'without precise determination of tasks', but was usually assigned to problems of natural history such as the classification of specimens. In 1789 he was named prefect of the museum's botanical garden.[38]

The 'taxonomist's regress'

The same day, the vice-director received Bonicoli and Zuccagni's report. Like most Tuscan intellectuals, the anatomist and the naturalist had embraced or accepted Linnaean nomenclature both for the display and for the classification of specimens. They identified the monkey as a member of the species *Simia sabaea* (Figure 2), and concluded that it was a female.[39] They thus unambiguously refuted Petrocchi's claim

36 '*Il grandioso Museo, che la R.A.V. possiede è incontrastabilmente utile al Paese, e decoroso al Sovrano.*' IMSS, filza Negozi 1791, fol. 57 verso.

37 '*[P]er mero diletto*', IMSS, filza Negozi 1791, fol. 58.

38 '*[S]enza precisa determinazione d'impiego.*' For a brief account of Zuccagni's career at the museum see IMSS, filza Negozi 1794, fols. 269–87 (doc. 57): '*Copia della Portata fatta dai Soggetti impiegati a Ruolo Stabile nel Real Museo di Fisica rimessa alla Reale Segreteria della Corona, e di Corte il dì 31. Luglio 1794*', fol. 277.

39 By the time of La Specola's foundation, earlier controversies among naturalists regarding natural versus artificial systems of classification had been resolved both at the museum and among Tuscan intellectuals more generally in favour of the artificial system introduced by Linnaeus. At the museum, Linnaean taxonomy was used for all botanical and zoological specimens both for their initial classification and for public display. For approval among Tuscan intellectuals of the Linnaean system as the most pragmatic solution, see the diary of Giuseppe Pelli: *Efemeridi*, Serie II, **XVI**, fol. 3032v, 10 February 1788 (Biblioteca Nazionale Centrale Firenze, manuscript collection NA 1050), and an anonymous review of *Elementi di Storia Naturale* by N. G. Leske in the Florentine journal *Novelle letterarie* (December 1786), **50** (15), 797–8. For earlier controversies about the possibility of a natural system see P. Sloan, 'John Locke, John Ray, and the problem of the natural system', *Journal of the History of Biology* (1972), **5**, 1–53.

of the animal's hermaphoditism. Due to an underlying fundamental problem of classification, however, in their report the two experts explained that they were unable to decide on the monkey's status as a monster.

In early modern poetry and fiction, the image of the hermaphrodite continued to draw on the Greek concept of an ideal combination of male and female features. As in the case of the Hellenistic sculpture at the Uffizi, those fictional hermaphrodites possessed both fully formed and fully functional female breasts and a male penis. However, actual hermaphrodites encountered in early modern medical writing and in popular accounts differed markedly. Such hermaphrodites were considered monsters, usually portrayed as ugly and deformed, or, in the words of a contemporary encyclopedia, 'weak and incomplete'.[40] Medical scholarship by the mid-eighteenth century doubted whether humans could be endowed with functional genitals of both sexes. If they could reproduce at all, it was either as a male or as a female, but never as both. The medical attempt to place those persons firmly among one of the two sexes was supported by legal literature, as such ambiguous classifications also cast doubt on the person's legal status which was in turn dependent on gender. Significantly, although doctors were usually called upon for identification, in cases of uncertain gender the person's genital anatomy was not the only feature that came to bear on the classification – the subject's behaviour and perception of self were also taken into account.[41] In particular, the phenomenon of the so-called tribades – women who were taken for hermaphrodites due to their possession of a large clitoris[42] and their masculine behaviour – could lead to a discrepancy between a person's medical classification (as female) and their legal status (as a man).[43]

In their report on the allegedly hermaphrodite simian, however, Bonicoli and Zuccagni did not mention the monkey's behaviour, but based their judgement on a 'most scrupulous examination' of the animal's genitals alone.[44] They came to the conclusion, or, in their own words, they 'discovered', that the simian was without doubt a female, with the 'particularity of being endowed with a clitoris, the existence of which in diverse species of monkey had been doubted by various authors'.[45] However, due to the lack of consensus among natural historians concerning the presence of clitorises in female monkeys, this identification of the animal as a female still did not suffice to

40 '*[S]chwach und unvollkommen*', in *Zedler's Universal-Lexicon* (1732–54), entry 'Hermaphroditus, Androgynus, Zwitter, Zwey-Dorn.'

41 See e.g. *Zedler's Universal-Lexicon*, op. cit. (40), entry 'Hermaphroditus'; Gilbert, op. cit. (4).

42 On the history of the clitoris see T. Laqueur, 'Amor Veneris, vel Dulcedo Appeletur' in *Fragments for a History of the Human Body* (ed. M. Feher, R. Naddaff and N. Tazi), 3 vols., New York, 1989, iii, 90–131.

43 See e.g. T. Laqueur, *Making Sex: Body and Gender from the Greeks to Freud*, Cambridge, MA, 1990, 136–7.

44 Unlike their subsequent account of an autopsy performed on the monkey's corpse three years later (see below), in their report of the examination of the living animal Bonicoli and Zuccagni did not specify the technicalities of this enquiry. On sexual stimulation of animals in the line of natural philosophical duty see e.g. Anton van Leeuwenhoeck, 'Observationes D. Anthonii Lewenhoek, de natis e semine animalculi genitalis', *Philosophical Transactions* (1678), **12**, no. 142.

45 '*[D]al più scrupoloso esame dei genitali di detto animale abbiamo rilevato, che appartenga piuttosto al Sesso Feminino, con la particolarità d'esser corredato di clitoride, la di cui esistenza è stata messa in dubbio da varj autori nelle diverse Specie di Scimie*', IMSS, filza Negozi 1791, fol. 63.

decide whether it was a normal animal or a monster. The experts explained that there were different ways to account for the presence of a clitoris: either the animal was indeed an exception to the assumed absence of clitorises in monkeys, thus indeed a monstrosity (although not a hermaphrodite), or it shared this feature with all females of its species. In the words of Bonicoli and Zuccagni, 'Thus it seems that the individual animal in question shows a manifest exception to the supposed lack of clitorises in simians, either due to a particular monstrosity of this individual itself, or in common with all females of this species.'[46]

Bonicoli and Zuccagni elaborated on the fundamental problem of classification which they had encountered. As the experts perceptively pointed out, the question of whether the individual animal was a monster could not be decided on the basis of even the most thorough examination of the animal's anatomy alone. Instead, the experts inevitably encountered a kind of 'taxonomist's regress'; whether the presence of a clitoris in the individual animal was an exception to normal monkey anatomy or a normal feature depended on whether normal monkeys were expected to have one or not. For scholars defending the opinion that female monkeys lacked a clitoris, the Florentine animal would be a monster, while for those who saw this species of monkey as endowed with one, it would be a normal individual of its species. Even the existence of another animal for comparison would not have helped matters. Bonicoli and Zuccagni realized that the existence of similar species created three different possibilities: (1) all (female) monkeys have a clitoris, (2) monkeys do not have a clitoris or (3) some species of monkey have a clitoris while others do not. Thus a comparison between different animals still would not resolve the problem, given that the two animals could always be of different species distinguished solely by the presence or absence of this particular anatomical detail.

Bonicoli and Zuccagni had encountered a special case of a fundamental problem of classification: the problem of finitism, the phenomenon that there are no criteria internal to a classificatory term that determine how the next act of classification will turn out. This necessitates recourse to external criteria which are historically and locally specific. In the Florentine case Fabbroni, as the museum's spokesman, was in a position to overrule the conceptual conundrum in practice by making use of his expert status and by distinguishing between lay and expert interests, identifying the latter with the interests of the state. I have dubbed the problem encountered by the museum employees the 'taxonomist's regress' because of its structural similarity to the phenomenon of the experimenters' regress described by Harry Collins. In his case study of experiments for the detection of gravitational waves in the 1970s, Collins observed the existence of a kind of a vicious circle regarding the evaluation of experiments designed to detect this type of radiation. When it is not known what the correct outcome of such a gravitational-wave-detecting experiment should be – that is, when there is no consensus regarding the existence of gravitational waves – then there are no criteria internal to the experiment that allow for a decision on whether the instrument used is in fact a good

46 '*Onde pare che l'individuo in questione presenti una manifesta eccezzione contro la supposta mancanza di Clitoride nelle Scimie, o p[er] una particolar mostruosità propria di questo istesso individuo, o comune a tutte le Femmine di questa Specie.*' IMSS, filza Negozi 1791, fol. 63.

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means of detecting gravitational radiation. Depending on whether gravitational waves exist, a competent experiment is either one that detects these waves or one that does not. Collins named this problem the 'experimenters' regress' and concluded that in cases where no criterion for the quality of an experiment was already established in advance, 'a criterion must be found which is independent of the output of the experiment itself'. Thus, Collins concluded, in order to arrive at closure the 'experimenters' regress leads scientists to reach for other criteria of quality'.[47]

As scholars of the Edinburgh school have pointed out, this similarity between the experimenter's regress and problems of zoological classification is not coincidental; both are examples of the phenomenon of finitism as analysed by Bloor and Barnes in their reading of Wittgenstein's work on rule-following.[48] Finitism is at its core a phenomenon that arises from the general impossibility of complete identity.[49] Any decision as to whether two objects of comparison are the same depends on criteria for sameness and difference that are not fully determined by previous acts of classification. Thus Barnes, Bloor and Henry conclude that '[n]o act of classification is ever indefeasibly correct', and 'future applications of terms [such as successful experiment, normal monkey] are open-ended'.[50]

Given the inevitability of finitism, a central task of the historian is to reconstruct the locally and temporally specific criteria and mechanisms which enable classification after all. In the case of Collins's gravitational wave experiments, actors had recourse to criteria such as participants' publications in respected journals in the field and experimenters' reputations finally to bring the debate over the existence of gravitational radiation to closure. In the concluding part of this paper, I return to the Florentine case to address the question of how closure was achieved in the case of the not-so-monstrous monkey and how criteria relevant in this case reflect on natural history around 1800. In the case of the Florentine monkey, the lack of consensus regarding the presence of clitorises in female monkeys had caught the naturalists in charge of the initial investigation of the claim to hermaphroditism in a 'taxonomist's regress'. For their superior at the museum, Fabbroni, the task of communicating their result to the court gave him room to edit the result in a way which obliterated the ambiguity regarding the monkey's monstrosity. With his intervention, Fabbroni further strengthened the boundaries between experts and laypeople. Simultaneously, through the very act of classifying the monkey, the museum's vice-director redefined the notion of state interest in the monkey as a museum specimen by distinguishing it from the grand duke's personal interest in the animal as a pet.

47 H. Collins, 'Replicating the TEA laser', in *idem*, *Changing Order: Replication and Induction in Scientific Practice*, London, 1985, Chapter 3.

48 L. Wittgenstein, *Philosophische Untersuchungen/Philosophical Investigations*, Oxford, 1997; D. Bloor, *Wittgenstein: A Social Theory of Knowledge*, London 1983; B. Barnes, 'The conventional component in knowledge and cognition', in *Society and Knowledge* (ed. N. Stehr and V. Meja), New Brunswick, 1984, 185–208.

49 P. T. Geach, *Reference and Generality: An Examination of Some Medieval and Modern Theories*, 3rd edn, Ithaca and London, 1980 [1962], especially 216.

50 B. Barnes, D. Bloor and J. Henry, *Scientific Knowledge: A Sociological Analysis*, London, 1996, Chapter 4.

Classification and state interest

Due to Bonicoli and Zuccagni's explicit refusal to affirm or deny the monkey's status as a monster, their report by itself would have been of little use to the sovereign who had to decide whether to accept the monkey as a 'gift', buy it as a museum specimen or send Petrocchi away. Thus the vice-director, Fabbroni, did not pass on the report of the two museum employees to the sovereign without comment. After all, it was his appointed task to act in the grand duke's interest and to facilitate Ferdinando's final decision over the question of acquisition. So a day later he communicated to the court the indecisive statement of the two experts accompanied by a cover letter, in which he suppressed their ambivalence and came to the conclusion that, to all intents and purposes, the monkey was a normal female animal. As such, it was of no immediate use to the museum as a specimen, but it could still serve as a simple means of entertainment as a courtly pet.

In his covering letter Fabbroni stressed that, from a natural historical point of view, a hermaphrodite monkey would indeed be of much interest to the museum, since such a specimen could 'decorate the museum with a monster which affirms the opinions of a number of physiologists' – presumably that genuine hermaphroditism existed in nature.[51] To do so, however, the monkey's identification required 'the greatest attention' to arrive at an uncontestable result. In his account of the examination that had taken place at the museum, Fabbroni once more explicitly named Tommaso Bonicoli, including his title of dissector, and added that Attilio Zuccagni had joined the examination at his own request. Fabbroni highlighted Zuccagni's credentials by explicitly mentioning his doctoral title as well as his title of Prefect of the Botanical Garden and stressed that Zuccagni was also 'most expert in all other branches of natural history'.[52]

Once more, therefore, the museum administrator and natural philosopher affirmed the status of his institution as a locus of expertise that could produce secure identifications of natural objects. In addition to this reaffirmation, in this cover letter Fabbroni also strengthened his cautious rhetorical stance. Hoaxes were not unknown to early modern naturalists, some of whom had received severe blows to their reputation when it became known that they had been duped into acquiring forged specimens of alleged curiosities.[53] To maintain the Florentine museum's reputation, therefore, any specimen

51 Gilbert, op. cit. (4). A hermaphrodite may also have been considered useful to the director Fontana's investigation of the development of genitals in human and animal embryos. P. Knoefel, *Felice Fontana: Life and Works*, Trento, 1984.

52 '*[D]ecorare il Museo Reale di un Mostro convalidante le opinioni di alcuni Fisiologi*'; '*maggior attenzione*'; '*espertissimo in ogni altro ramo di Storia Naturale*'. IMSS, filza Negozi 1791, fol. 60.

53 The most prominent example in the eighteenth century was the case of Würzburg professor J. B. A. Beringer. He had bought fabricated 'fossils' and produced a lavishly illustrated volume on the presumed *mirabilia* which after discovery of the deception he tried to buy back in a futile attempt to save his reputation. See Johann Beringer, *The Lying Stones of Dr Johann Bartholomew Adam Beringer, Being his Lithographiae Wirceburgensis* (ed. Melvin E. Jahn and Daniel J. Woolf), Los Angeles and Berkeley, 1963; and J. H. Mallat, 'Dr. Beringer's fossils', *Annals of Science* (1982), **39**, 371–80. Fabbroni's father-in-law Giuseppe Pelli mentioned the episode in his diary of 1771. Pelli, op. cit. (39), Serie I, **XXVIII**, 55–7. For a case of artefact forgery in seventeenth-century Tuscany which drew much attention see I. Rowland, *The Scarith of Scornello: A Tale of Renaissance Forgery*, Chicago, 2004.

open to challenge had to be rejected. And indeed, in the following section of his letter, Fabbroni went on to note that previously the eye of the layperson had been deceived by some of the monkey's external features and had misidentified it as a hermaphrodite. The museum's naturalists, on the other hand, had seen through this illusion and 'revealed' that the monkey was clearly a female.

Fabbroni explained that the presence of a prominent clitoris in the animal had 'feigned' to the eyes of 'the ignorant' a male genital organ, which had presumably been the cause of its being mistaken for a hermaphrodite. Similar cases of misidentification, Fabbroni pointed out, had also been known in humans. But since most if not all species of monkey were endowed with a clitoris, Fabbroni asserted, he concluded that the animal did not represent any singularity in its features, at least no singularity that would have been 'instructive' to the museum's research. Nevertheless, as the museum did not possess a normal monkey of this species either, Fabbroni admitted that Petrocchi's renewed request for acquisition might be admissible, even if partly motivated by the desire to get rid of 'this annoying pest of a man'. In the end, at the Royal Gardens the monkey could always serve as a 'plaything' while it was alive.[54] Importantly, with his act of classification the vice-director in effect redefined the state interest that he was supposed to advance by demarcating clearly the concerns of the public museum from the grand duke's personal interest in the monkey as a pet. The following day the sovereign gave orders following Fabbroni's suggestions and granted a payment of twelve zecchini[55] from the crown's account to Petrocchi, as well as having the animal handed over to the Department of Royal Buildings and Gardens.

To summarize, in his cover letter Fabbroni put forward four arguments to achieve a clear-cut identification of the monkey as a normal female:

1 alleged hermaphroditism is a phenomenon well known in humans, where the presence of a large clitoris has similarly led to false assumptions of hermaphroditism;
2 most or all types of monkey (which Fabbroni does not specify) are endowed with a clitoris, therefore its presence is not a criterion for monstrosity; significantly, in his letter to the sovereign Fabbroni suppressed the possibility, pointed out by Bonicoli and Zuccagni, that the presence of a clitoris in a type not presumed to have one would constitute a monstrosity.

However, he goes on:

3 if the presence of a clitoris were indeed a monstrosity, it would not be one that is of interest to the museum because it is not 'instructive';
4 there are other reasons to buy the animal anyway: it is entertaining and the museum does not yet possess this particular species.

Fabbroni's partly contradictory arguments rest both on a distinction between the grand duke's and the museum's interests and on a number of assumptions indicative of

54 '*Singolarità istruttiva*'; '*si libererà da una importuna inquietudine di un'uomo*'; '*trastullo*'; IMSS filza Negozi 1791, fols. 59 verso–60.

55 Twelve zecchini (160 lire) was almost one-eighth of Zuccagni's annual stipend of L1,000. IMSS, filza Negozi 1794, doc. 57, fol. 277.

shifts in the practices and conceptual frameworks of late eighteenth-century natural history. First, at least since Edward Tyson's *Anatomy of a Pygmy Compared with that of a Monkey, an Ape, and a Man* of 1699 and Linnaeus's unification of humans and monkeys as members of the order of primates in his *Systema Naturae* of 1735, natural historical discourse had revolved around the admissibility of such a fundamental continuity and ontological similarity between humans and animals. This debate stretched from Diderot and Buffon to its changed nineteeth-century rearticulation in the reception of Darwinism and touched not only upon issues of classification but also on comparative anatomy and linguistics.[56] However, Fabbroni's final decision depended at least in part on an argument of analogy between humans and monkeys, which was presented in a way that suggests that this analogy was perceived to be entirely unproblematic. It was possible to present it to the sovereign himself without any cautionary rhetoric. On a practical level, apparently, there was no problem in accepting the similarities between humans and monkeys at the Tuscan court and Tuscan natural historical institutions. A number of factors might account for this acceptability, such as the highly secular politics of Ferdinando's father and predecessor as grand duke, Pietro Leopoldo, politics that were formative both for his son and for his protegé Fabbroni. While comparative anatomy was not institutionalized with a chair in Florence until 1807, already in the 1780s and 1790s local scholars such as the renowned professor of anatomy Lorenzo Nannoni stressed the importance of comparison for understanding the functioning of the human body.[57] In addition, analogies between humans and monkeys were of course familiar from contemporary images of monkeys in literature and art.[58]

Second, a similarly secularizing trend is visible in Fabbroni's decision regarding the monstrosity of the animal. He claimed that if the presence of a clitoris in the Florentine monkey were indeed an individual particularity, it was at best a singularity that was 'not instructive'. Thus Fabbroni admitted the possibility that in the context of the Museum of Physics and Natural History this anatomical singularity did not have any meaning. It was taken neither as an expression of Nature's playfulness nor as an indication of God's omnipotence, as early modern interpretations of the significance of monsters claimed. Neither did Fabbroni attempt to make the potential singularity meaningful in a developmental sense. Michael Hagner has shown that from the late eighteenth century, naturalists reinterpreted 'monsters' as incomplete expressions, or early stages, of the law-governed formation of animal organisms.[59] Thus monstrosities provided a material basis for the analysis of those underlying laws. However, Fabbroni decided that for the museum's purposes the 'uninstructive singularity' could not be made meaningful in either the physico-theological or the developmental contexts.

56 G. Barsanti, '*Storia naturale delle scimmie*', *Nuncius* (1990), **5**, 99–165, especially 120ff; R. Wokler, 'The nexus of animal and rational: socio-biology, language, and the enlightenment study of apes', in *Biology as Society, Society as Biology: Metaphors* (ed. S. Maasen, E. Mendelsohn and P. Weingart.), Dordrecht, 1995, 81–103.

57 Lorenzo Nannoni, *Trattato d'anatomia, fisiologia e zootomia*, 3 vols., Siena, 1788–91, i.

58 Gilbert, op. cit. (4).

59 Hagner, op. cit. (5).

A third shift is visible in the criteria used for classifying the animal's sex. Throughout the early modern period, just as behaviour contributed to the classification of human contenders to hermaphroditism, so behaviour in monkeys had been drawn upon to characterize their sex. Naturalists and travellers such as Jacob de Bondt (1658) and Henry Flower (1738) had, for instance, stressed the supposed bashfulness of female apes in their descriptions.[60] Londa Schiebinger has pointed out the persistence of ascriptions of gendered behaviour as criteria for assigning sex well into the nineteenth century not only in monkeys, but even in the case of lower animals and plants.[61] In the practice of the museum's experts, however, observation of behaviour was not even considered as a potential aid to identification. The only feature of the animal that bore on the determination of its sex was the anatomy of its genitals.[62]

Conclusion

On 3 March 1794 the monkey returned to the museum, dead.[63] During the preceding years it had been kept at the Royal Garden. Once more, upon the animal's entry into the museum as a potential addition to its collection of taxidermized animals, its status had to be determined unambiguously. In his correspondence with the court, Fabbroni stressed that the museum experts' original verdict of 1791 had been correct and was once more 'verified'. This time, the anatomist Bonicoli performed a full dissection of the monkey's corpse. In his second written report he reaffirmed his earlier judgement; the 'illusion' had been due to an extraordinarily long clitoris which 'purported to be' a male member. However, with the results of the autopsy the anatomist could now add the additional findings that the organ possessed no urethra and that the animal's abdomen contained neither testicles nor spermatic ducts.[64]

What relationship between state, sovereign and expert emerges from this episode? The vice-director's role as an expert was initially shaped by the current grand duke's predecessor Pietro Leopoldo, who had fostered the emergence of a group of specialists, created the museum as a place for the production of natural knowledge for the state and appointed Fabbroni the administrator of Tuscany's natural historical capital. The museum's employees' status as experts was affirmed both by Ferdinando's gesture of calling upon this expertise and by Fabbroni's subsequent assumption of a rhetoric of expertise which clearly demarcated expert naturalists from laypeople. Further, this role enabled Fabbroni, through his act of classification, to define not only the monkey's identity but also, simultaneously, the state's interest.

60 Barsanti, op. cit. (56), 109, 114.

61 L. Schiebinger, *Nature's Body: Sexual Politics and the Making of Modern Science*, London, 1993.

62 One should note, however, that both Bonicoli and Zuccagni were accustomed to anatomizing and classifying dead specimens.

63 IMSS, filza Negozi 1794, fols. 38–49 (doc. 14).

64 '*[E]saminando adesso il cadavere ho trovato unicamente derivare l'illusione da una apparente mostruosità delle pudende esterne, a segno che la Clitoride, essendo alquanto prolungata, imponeva essere membro virile, ma anatomizzata, si riscontro solamente i corpi cavernosi, senza uretra unitavi, come è proprio della Clitoride med[esim]a. Aperto la cavita d[e]l Basso ventre non furno riscontrati nè Testicoli nè vessicole seminali parti proprie d[e]l Sesso mascolino*', IMSS, filza Negozi 1791, fol. 42.

The museum's employees' correspondence with the court shows that, while in their initial report the naturalists Zuccagni and Bonicoli still admitted a degree of uncertainty in their classification regarding the monkey's status as a monster, the vice-director, Fabbroni, in his subsequent expert advice to the sovereign, explicitly ruled out any claims to monstrosity which could easily be challenged, as long as there was no robust consensus among naturalists concerning the anatomy of monkey genitalia. Any false claim would endanger the museum's status as a place where reliable knowledge was produced and thus potentially put at risk its mission of public education and knowledge production in the service of the state. Fabbroni was intent on upholding this function of the museum. Thus his verdict was deliberately cautious. Even if the animal turned out to be monstrous due to the presence of a clitoris (a possibility which Fabbroni did not rule out entirely), in his judgement it was still decidedly not of interest to the museum. In an act of inspired boundary work, the chief naturalist managed to suppress the uncertainties inherent in the process of classification by implicitly drawing on criteria which became increasingly acceptable in late eighteenth-century natural history. While professing to act in the sovereign's interest, with this decision to classify the monkey as a normal female Fabbroni in effect redefined that interest by distinguishing between the grand duke's personal use of the animal, as a plaything whose place was at the Royal Gardens, and the interest of the expert and therefore the state in obtaining it for the museum's collection. This study of specimen acquisition at the museum based on administrative records therefore highlights the point that finitism is not just a theoretical phenomenon but an element of everyday classificatory practice that requires the definition and mobilization of interests to arrive at a judgement accepted by the actors involved.

In her study of the transformation of the Paris Jardin du Roi into the Muséum d'histoire naturelle, Emma Spary has highlighted the importance of the French Revolution for creating a conceptual and institutional framework in which naturalists came to 'present themselves as experts in defining the natural'[65] in the service of the nation. As the case of the 'hermaphrodite' monkey shows, in late eighteenth-century Tuscany it was the enlightened absolutist regime itself which provided the framework for naturalists doing so. The Florence Museum of Physics and Natural History thus provides a complementary example which brings to the fore the continuities between late Enlightenment and (post-)revolutionary practices and concepts of natural expertise.[66]

65 Spary, *Utopia's Garden*, op. cit. (6), 9.

66 Spary points out that in the Paris Muséum's case, the institution's transformation from a 'mirror for … the absolute monarch' to 'a body answerable to … the nation' pre-dates the Revolution (Spary, *Utopia's Garden*, op. cit. (6), 257). For the emergence of the persona of the expert in late absolutist regimes see also the contributions in V. Hess, E. Engstrom and U. Thoms (eds.), *Figurationen des Experten: Ambivalenzen der wissenschaftlichen Expertise im ausgehenden 18. und frühen 19. Jahrhundert*, Frankfurt, 2005.