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Nature *au naturel* in late-seventeenth-century France

On 15 January 1697, Father Charles Plumier (1646-1704) found himself 4,800 miles from his native France, stooping over the seven-foot-long dead body of an American crocodile.¹ The animal was captured on the marshy banks of a freshwater lake nestling among foothills, probably by a young black slave whom the friar had taken with him the year before to help him with his work. French colonizers knew the lake by the name that the aboriginal Taíno Indians had given it, Miragoâne. The place was a half-day walk from the coastal town of Petit-Goave, north of the Tiburon Peninsula, in the western part of the island of Hispaniola. The animal was '6 [French] feet [*pieds*] and 4 inches [*pouces*]' or about two meters long. Plumier not only anatomized it, but took detailed handwritten notes: 'One foot from the end of the muzzle A to the end of the occiput B. From the end of the occiput B, 8 inches minus 3 lines [*lignes*] to the scapulae C. From the scapulae C to the beginning of the tail D, 1 foot 7 inches $\frac{1}{2}$. From D to E, a bit more than 3 feet.'² The capital letters connect the textual explanation to certain parts of the astonishingly detailed pen-and-ink drawing that occupies most of the same loose sheet. This was the first of the twenty unbound, folio-format pages in which Plumier dissected, through images and text, an American crocodile.

We do not know where Plumier produced the drawings and notes. Or whether they were actually made in the field, while the friar-turned-naturalist dissected the creature. They were perhaps sketched in front of the animal, completed elsewhere using ink, and supplemented with notations and references in the margins. This set of drawings nevertheless accompanied the dissection of the young Caribbean reptile, if not in actuality, at least on paper, for the pictures follow the anatomical process by which the crocodile's body was gradually opened up. The first drawing presents the whole living animal; the second shows it still unopened, but lying on its back (or dorsal decubitus). The following five pictures consist of views of the entire body, still shown lying down, in which successive anatomical layers have been progressively laid bare: the skin, the muscles, the rib cage, a first group of organs, then the remaining organs, and finally the empty trunk of the animal. Another drawing shows the skeleton of the animal, and this is followed by several sheets depicting specific parts of it—the vertebrae, the eye, the bones of the legs, the lungs, the stomach, the heart, and the skull—all accompanied by abundant written commentaries. There is a significant parallel between these twenty pages showing the crocodile and other premodern paper devices such as anatomical

¹ I thank the editors of this volume and the participants in the *Ad Vivum?* conference for their insightful comments, and Thomas Balfe and Caroline Mezger for their close reading of this paper.

² Bibliothèque centrale of the Muséum national d'histoire naturelle (henceforth BCMNHN) MS 30 "Tetrapodes dessinés par le Père Plumier, Minime," fol. 11.

fugitive sheets, a visual genre which enjoyed considerable success during the Renaissance and well into the seventeenth century, in which hinged flaps could be turned back to reveal successive layers of the human body.³

The set of anatomical drawings of this young Caribbean reptile (as well as the textual notes orbiting around them) are a splendid example of the descriptive endeavour of natural history at the turn of the eighteenth century.⁴ They exemplify a way of looking at nature that found its certainties in the minute, thoroughly-crafted and carefully-organized recording of what came before the eyes. Plumier's witty combination of words and pictures advanced a conspicuous claim to firsthand observation. Consider, for example, the verbal annotations. Their purpose was to describe and explain in written form certain parts of the pictures, referring to these by means of letter keys (a, b, c). They state not only what the labelled parts are ('muscles for the movement of the jaws', 'esophagus'), but also what they looked like to the eyes of the author, especially when they were unknown to him ('sort of small false rib,' 'two glands full of a yellow humor,' 'I have seen well, about the middle of the bone that turns towards the tail, a cartilaginous epiphysis made in the shape of a half-round wing'). Some of the notes describe the images to which they refer as *apparences*. This term seems to be used to designate each particular 'aspect' of the crocodile *as it was seen* by the observer, the way in which it *appeared* to the eye of its viewer ('aspect of the arterial trachea,' 'aspect of the sternum, very white', 'second aspect [of the crocodile] once the pectoral muscles were removed').⁵ The quill of Plumier the draftsman and note-taker followed the scalpel of Plumier the anatomist in describing his own gestures ('I pulled easily the entire cord . . . out of the vertebrae').

The marginal notations reinforce the surrogate character of the images, substituting the singularity of the observation (performed in a particular place, at a specific moment and over a rapidly decaying corpse) with the apparent immutability of paper. Among these statements of firsthand observation, three puzzlingly include the expression *au naturel*. Two are found in the loose sheet devoted to the bones of the crocodile's limbs; they refer to two of the small bones included in a small set of images designed as 'figure 4.' In the manuscript legend which accompanies it, figure A is said to be 'a bone of the tarsus *au naturel*,' and figure B, 'a phalanx *au naturel*.' The third image designated by this label is also a detail: on the margins of a page dedicated to the osteology of the head of the crocodile, a small box isolates the drawing of the bones of the ear and designates it as 'a figure *au naturel*.'⁶

What does the term *au naturel* indicate here? Is it a claim to closeness, direct experience and firsthand observation? In a way, perhaps, but then the entire set of drawings seemingly pointed in this direction. Were the bones of the tarsus, the phalanx,

³ Carlino, A., *Paper Bodies: A Catalogue of Anatomical Fugitive Sheets, 1538-1687*, trans. N. Arikha (London: 1999).

⁴ In the tradition of Renaissance natural history: see Ogilvie B., *The Science of Describing: Natural History in Renaissance Europe* (Chicago: 2006).

⁵ BCMNHN MS 30, fol. 13-16.

⁶ BCMNHN MS 30, fol. 22 and 30.

and the ear the only parts drawn from life? We cannot know which, if any, of the drawings, or which parts of them, were made in front of the animal: in all probability, Plumier took some sketches during the dissection and crafted the final pictures elsewhere. Then why such an emphasis on these particular parts of the animal? Are they the only images which represent the objects at their real size? The pages on the crocodile were part of Plumier's papers, a sprawling mass of sketches and drawings, detailed verbal descriptions and hurried annotations, numbered lists of specimens and diary-like logs on loose sheets. A part of his American booty more precious than any of the specimens he collected, these graphic and verbal notes embody an attempt to transcribe nature into words and pictures. But precisely the manuscript nature of these records casts doubt on the rhetorical character of *au naturel* as it was used here. Were these uses of *au naturel* part of a regime of proof, permitting facts to travel from one shore of the Atlantic to the other?

Further examples of the use of *au naturel* in graphic works of natural history are not any more straightforward than Plumier's drawings. Let us consider a contemporary case of another dissected crocodile, drawn this time from a printed work: the *Observations physiques et mathématiques pour servir à l'histoire naturelle, & la perfection de l'astronomie & de la géographie* (1688).⁷ Edited by the professor of mathematics at the Jesuit college in Paris, Thomas Gouye (1650–1725), this small octavo volume gathered astronomical and natural historical observations by some of the members of the Jesuit mission to Siam sponsored by Louis XIV.⁸ The 'anatomical description of three crocodiles' consists of a written and a graphic part. In the text, the Jesuits reported that the three beasts were offered to them on the orders of the King of Siam and, like Plumier, they gave detailed accounts of their dissection: they included abundant measurements for the creatures and included a minute narration of their anatomical parts. About sixty-pages long, the text meticulously describes the specimens layer by layer, from the skin to the guts and the skeleton. As Plumier did a decade later in manuscript form, the Jesuits dissected the crocodile through text and images, with the patience and attention to detail required by natural history. The description is interspersed with comments by Joseph-Guichard Duverney (1648–1730), probably the most prominent anatomist in Paris at the turn of the eighteenth century, in which he compared the report of the Jesuits to his own anatomical observations of a crocodile in the capital.

The textual description is accompanied by two intaglio engravings at the end of the volume. The first focuses on one of the animals, depicting it alive and in an arid and mountainous landscape. Above the animal, an unrolled parchment depicted in trompe-

⁷ *Observations physiques et mathématiques pour servir à l'histoire naturelle, & à la perfection de l'astronomie & de la géographie: envoyées de Siam à l'Académie Royale des Sciences à Paris, par les Pères Jesuites François qui vont à la Chine en qualité de Mathématiciens du Roy* (Martin, Boudot, Martin: 1688).

⁸ Hsia F.C., *Sojourners in a Strange Land. Jesuits and their Scientific missions in Late Imperial China* (Chicago: 2009) 73-109; Lach D.F. – Van Kley E.J., *Asia in the Making of Europe*, vol. 3, *A Century of Advance*, bk. 3, *Southeast Asia* (Chicago: 1993) 1197; van der Cruysse, D., *Siam & the West: 1500-1700*, trans. M. Smithies (Chiang Mai: 2002 [1991]).

l'oeil shows three anatomical details of its head. The second engraving displays the creature in lying on its back, with the abdomen cut open, presenting its viscera to the viewer in a way not unlike Plumier's manuscript depictions. Below this are laid five unarranged images of different organs: the heart, the spleen, the trachea, one of the kidneys, and the pancreas. The engravings are accompanied by an 'explanation of the figures,' a sort of legend that explained in words those features of the images that did not speak sufficiently clearly for themselves. Marked with keys in capital letters (A, B, CCC), these visual parts are duly elucidated in written form: 'A is the membranous cartilage closing the ear,' 'B is the figure of the pupil.' It is in this 'explanation of the figures' that life-likeness vocabulary appears. For the first engraving, 'the figure of the biggest of the three Crocodiles is represented quite *au naturel* in the posture in which it was before we opened it.' In the second plate, 'the figure represents quite *au naturel* the disposition of the inner parts of this animal, as they appeared when we opened it.'⁹

These two microscopic examples illustrate the elusive, unstable meaning of the category *au naturel*, one of the vernacular cognates to the phrase *ad vivum*. In what follows, I want to trace the term and its usages in the late-seventeenth-century French language for defining the study of nature. First, I will pay close attention to dictionaries in the decades around 1700. These sources reveal multiple meanings of the phrase, ranging from the notion of direct contact with the objects depicted to representational naturalism to a rather vague claim to naturalness and absence of artificiality. Second, I briefly explore the parallel emergence, among a generation of French naturalists, of a specific sort of legitimacy underpinning the representation of nature and its study by and large. It was based on a newly redefined relationship of the (natural) historian to his sources, and this was in turn grounded on claims of firsthand observation by a trained eye. What the two representations of the crocodile had in common was that they were the work of naturalists who were also travellers: in late-seventeenth-century France, many were the naturalists who presented themselves as pioneers of what was in their view a crucial, much-needed turn in the way the natural world was known, one that entailed abandoning the comfort of their cities' countryside for the perils of the high seas so as to see nature with their own eyes. As I hope to make clear by the end of this paper, the use of an expression such as *au naturel* in the work of natural historians (but also of other sorts of historians, such as antiquarians) reveals a 'material' turn in the approach to their objects of study: one in which the 'realm of the eyes' offered a space of certitudes in opposition to what they saw as a bookish tradition fraught with unending controversies and uncertainties.

1 Some definitions

⁹ *Observations physiques et mathématiques* n.p.: 'La figure du plus grand des trois Crocodiles est représentée assez au naturel dans la posture où il étoit avant qu'on l'ouvrît,' and 'La figure représente assez au naturel la disposition des parties internes de cet animal, telles qu'elles parurent dès qu'il fut ouvert.'

Au naturel was a common, perhaps the most common, way of translating the Latin expression *ad vivum* in the French language at the end of the seventeenth century. Consider the title of the most famous work by Giambattista della Porta (1535–1615), *De humana physiognomonia . . . libri IIII*, originally published in 1586. In its French edition of 1615 the reference made in the title to ‘egregis ad vivum expressis Iconibus’ was translated as ‘enrichie de quantité de figures tirées au naturel, ou par les signes extérieurs du Corps’ (enriched by a number of figures made *au naturel*, or according to the external signs of the Body).¹⁰ *Ad vivum* was used only a handful of times in the original work, and always to qualify an image. The exact meaning della Porta gave to the expression is not entirely clear, but this example strongly indicates that *au naturel* served as an adequate translation of *ad vivum* in seventeenth-century French. This correlation endured well into the eighteenth century. There is, for example, the case of Joseph Pitton de Tournefort (1656–1708), probably the most influential French botanist of his time. In 1694 he published his *Éléments de botanique, ou méthode pour connoître les plantes*, a landmark of eighteenth-century botanical classification: his reference to the ‘varie ac multiformes florum species appressae ad vivum’ by Nicolas Robert became, in Tournefort’s French text, an ‘admirable Histoire de plantes peintes au naturel.’¹¹

While the exact meaning of both expressions remains a matter for discussion, their equivalence seems quite clear. *Au naturel*, however, was not the only way of translating the Latin phrase *ad vivum* into French. There were other equivalents such as *d’après nature* and the more direct cognate *au vif*. Although seemingly interchangeable, the three expressions were not employed with equal frequency in the late-seventeenth- and early-eighteenth-century French language. If we turn our attention to the dictionaries of the period, the formulas *au vif* and *d’après nature* are surprisingly rare. The definition of the adjective *vif* in the first edition of Pierre Richelet’s *Dictionnaire françois* (1680), for example, does not include any reference to the adverbial form *au vif*.¹² Neither does the official dictionary of the French Academy in its first and second editions (1694 and 1718).¹³ An exception is the *Dictionnaire universel* by Antoine de Furetière. In the entry on the adjective ‘vif, -ve’ in the first two editions (1690 and 1701), the expression *au vif* is said to refer to portraits ‘done from nature, and greatly resembling the object

¹⁰ The reference to ‘egregiis ad vivum expressis Iconibus’ does not appear in the first edition (Cacchio: 1586), but in the subsequent revised editions; to my knowledge, the first was the one printed in Hanover in 1593: *De humana physiognomonia Ioannis Baptistae Portae Neapolitani libri IIII; qui ab extimis, quae in hominum corporibus conspiciuntur signis, ita eorum naturas, mores & consilia (egregiis ad vivum expressis Iconibus) demonstrant, ut intimos animi recessus penetrare videantur*. This title was translated into French as *La physionomie humaine de Jean Baptiste Porta, neapolitain. Divisée en quatre livres. Enrichie de quantité de figures tirées au naturel, ou par les signes extérieurs du corps, on voit si clairement sa complexion, les moeurs, & les desseins des hommes, qu’on semble penetrer jusques au plus profond de leurs ames*, trans. François Rault (Berthelin: 1655).

¹¹ Robert Nicholas, *Variae ac multiformes florum species appressae ad vivum* (Poilly: 1670?), and Tournefort Joseph Pitton de, *Éléments de botanique, ou méthode pour connoître les plantes*, 3 vols. (Imprimerie royale: 1694) 1:12.

¹² Richelet P[ierre], *Dictionnaire françois, contenant les mots et les choses, plusieurs nouvelles remarques sur la langue françoise* (Widerhold: 1680) 529.

¹³ *Le dictionnaire de l’Académie françoise, dédié au Roy*, 2 vols. (Coignard: 1694), and *Nouveau dictionnaire de l’Académie françoise dédié au Roy*, 2 vols. (Coignard: 1718).

represented' (*tires d'après nature, & fort ressemblants*).¹⁴ It is also in Furetière's work that one finds the formula *d'après nature* used in connection with the idea of a painting made 'on the natural' (*sur le naturel*), one 'that is not a copy.'¹⁵

These few definitions of the expressions *au vif* and *d'après nature* convey a similar idea: that of a visual representation made in the presence of the object represented. In those same dictionaries, however, the meaning of the third equivalent, *au naturel*, was not as straightforward as the other two. Both Furetière and the *Dictionnaire de l'Académie* defined it in an intriguing way. In the two first editions of Furetière's text, the adverbial form *au naturel* was the object of a specific subentry and referred to portraits: a painter who paints something *au naturel*, for example, captures accurately the likeness of what is represented; interestingly, this sense of the term could also be applied to poetical and oratorical descriptions.¹⁶ In contrast, the two first editions of the *Dictionnaire de l'Académie* included *au naturel* in one of the subentries of the substantive *naturel*, which in turn was defined as the 'the natural and external form of everything. This is painted *au naturel*, taken, drawn from the *naturel*.'¹⁷

We need to bear in mind that dictionaries were a very specific genre, one that spoke more to ideals than to actual practices. In their nature was the attempt to hide the fluidity or even the ambiguity of semantic meanings. That being said, there are several aspects common to these definitions that are worth highlighting. First, *au naturel* seems not to be restricted to graphic representations: 'poetical and oratorical descriptions' equally qualified. Second, it attributed to the author of the description a high degree of accuracy in describing something, whether by means of words or images, but without making any explicit reference to firsthand witnessing. In other words, for these authors the phrase referred to the mimetic nature of the representation, rather than to the conditions of its production—two phenomena that were not necessarily connected. Painting *au naturel*, for example, consisted in capturing the likeness of what was described (*attraper sa ressemblance*). The ultimate reference of this adverbial form seems therefore to be the (substantivized) adjective *naturel*, which delimited the contours of the notions of likeness, naturalness, or accuracy vaguely invoked by the authors of these dictionaries. *Naturel*, they wrote, was something 'simple, without constraint' or 'the real sense of something.' This was one of the most interesting uses of the expression, for it was also applied to texts and images alike: to interpret a book in its

¹⁴ Furetière Antoine, *Dictionnaire universel, contenant generalement tous les mots François tant vieux que modernes, & les termes de toutes les sciences et des arts* (Leers: 1690) 3:817, and Furetière, *Dictionnaire universel, contenant generalement tous les mots françois tant vieux que modernes, & les termes des sciences et des arts*, ed. B. Bauval (Leers: 1701) vol. 3, sig. OOOooo3^r. On Furetière and his *Dictionnaire universel*, see, for example, Rey A., *Antoine Furetière: un précurseur des Lumières sous Louis XIV* (Paris: 2006).

¹⁵ Furetière, *Dictionnaire universel* (1690) 2:713, and Furetière, *Dictionnaire universel* (1701) vol. 2, sig. [LLLLll3^v]: 'On dit aussi, Ce tableau a esté peint sur le *naturel*, ou d'après nature, pour dire, que ce n'est pas une copie.'

¹⁶ Furetière, *Dictionnaire universel* (1690) 2:713, and Furetière, *Dictionnaire universel* (1701) vol. 2, sig. [LLLLll3^v]: 'Ce Peintre l'a peint *au naturel*, il a bien attrapé sa ressemblance, ce qui se dit aussi des descriptions poëtiques, & oratoires.'

¹⁷ *Dictionnaire de l'Académie* 2:110 and *Nouveau dictionnaire de l'Académie*, 2:123: 'forme naturelle & extérieure de chaque chose. Cela est peint *au naturel*, pris, tire sur le *naturel*.'

‘natural’ sense, for example, was to construe it in its real, correct sense. *Naturel* was therefore opposed in these dictionaries to what is artistic, affected, ornamented, or artificial.¹⁸ There is a third and last aspect common to these definitions that needs to be mentioned: the evocation of likeness by the phrase *au naturel* was occasionally related to the ‘external form’ of what was represented—an intriguing idea, also echoed in the title of the French edition of Della Porta’s book, which will be discussed below.

In the meantime, it is important to highlight that no mention was made in Richelet’s, Furetière’s or the Académie’s dictionaries to firsthand witnessing in the description of the formula *au naturel*. Nonetheless, they *did* relate the alternative expressions *au vif* and *d’après nature* to the simultaneous presence of the author and the object of representation. Even more striking is the fact that, while *au naturel* is said to be applicable to both visual and verbal descriptions, *au vif* and *d’après nature* were restricted to paintings. An interesting exercise is to look at the usages dictionaries made of these expressions; here again, *au naturel* seems not to be limited to graphic representations. Consider a rather meta-linguistic example: in his discussion of different languages, Furetière considered that the language of the Spaniards was too charged with ‘pomp & ostentation.’ ‘Their language,’ he wrote, ‘is not at all proper for portraying their thoughts *au naturel*; it usually makes objects bigger than they are, & goes beyond nature.’¹⁹

2 Natural history: a description of ‘things as they are’

Au naturel came to designate precisely what was opposed to distortion and artifice, and carried this meaning in reference to both the visual and the textual. In this sense, it found a particularly prominent place among the vocabulary relating to a specific artistic area: that of anamorphosis, the distortive art par excellence.²⁰ One of the best-known seventeenth-century manuals on anamorphosis was *La perspective curieuse* (1638), in which Plumier’s fellow Minim friar Jean-François Nicéron (1613–1646) minutely explained the methods for the production of visual trompe-l’œil. This sort of delusive art required specific devices or the taking up of a special point of view by the observer in order for the undistorted image to be revealed. Most of the methods described by Nicéron required, first, the depiction of the image to be subsequently distorted in a grid called ‘*plan naturel*, because we delineate in there *au naturel* what we want to depict through the lens, before transcribing [the squares of the grid] to the artificial plan, &

¹⁸ *Dictionnaire de l’Académie* 2:109: ‘On dit, En parlant de l’interpretation d’un livre, d’un passage, Prendre une chose dans son sens naturel, pour dire, L’interpreter selon son veritable sens. . . . [S]ignifie aussi, Qui n’est point déguisé, point altéré, point fardé, mais tel que la Nature l’a fait.’

¹⁹ Furetière, *Dictionnaire universel* (1701) vol. 2, sig. [Rrrr3^v]: ‘Il semble que les Espagnols font dépendre la noblesse & la gravité de leur langue du nombre des syllabes, & de l’enflure des paroles. . . . Leur langue n’est point propre à peindre les pensées au naturel; elle fait pour l’ordinaire les objets plus grands qu’ils ne sont, & va plus loin que la nature.’

²⁰ A classic on this topic is Baltrušaitis J., *Anamorphoses ou magie artificielle des effets merveilleux* (Paris: 1969), trans. as *Anamorphic Art* (Cambridge: 1976) esp. 36-60.

thus to disguise it.’²¹ While the distorted perspective was designated as an *artifice*, the original, life-like picture on which the delusion was based constituted the image *au naturel*. The same procedure for the production of anamorphic representations was used in d’Alembert’s article ‘Anamorphoses’ for the *Encyclopédie*: the ‘plan naturel’ was now called in a much more Enlightened way ‘prototype craticulaire,’ but it still referred to the depiction of the image ‘*au naturel*,’ prior to its distortion.²²

The expression *au naturel* was used along similar lines when defining the epistemic foundations of natural history in the decades around 1700. Let us return to our dictionaries: in none of these reference works was natural history the object of an independent entry. The term existed, though, and appeared as part of the definitions of the word *histoire* at large. What, then, was ‘history’? The Académie’s dictionary alone gave several meanings. First, it was ‘the narration of the actions & things worthy of memory.’ In this respect, it invoked expressions such as ‘to devote oneself to history’ (*s’adonner à l’histoire*) and examples like *l’histoire d’Hérodote*. Another meaning was that of a story, a ‘narration of all kinds of particular adventures’—*je vous veux conter, vous faire une petite histoire, une plaisante histoire, une histoire grotesque*. But the second sense listed in the dictionary of the Academy, before that of ‘story,’ dealt with the study of the natural world: ‘[*Histoire*],’ they wrote, ‘is also said of all sorts of descriptions of natural things, such as plants, animals, minerals &c.’²³ For the academicians, therefore, history simultaneously had three denotations: civil history, natural history, and a simple story.

Richelet’s dictionary also distinguished between these two main meanings in its two first editions (1680 and 1706): the *histoire* dealing with social actions and the *histoire* treating natural things.²⁴ But Furetière’s text is again the richest in implications:

[*Histoire* is a] description, narration of the things as they are, or of the actions as they happened, or as they could happen. This word comes from the Greek *Historia*, which properly means *the research of curious things, the wish to know*. It also means the exposition of things of which we have been the spectators. For *Historiein* means precisely *to know, or to know something as a result of having seen it*. It is true that the signification of this word became afterwards larger, & came to signify

²¹ Nicéron Jean-François., *La perspective curieuse ou magie artificielle des effets merveilleux* (Billaine: 1638) 108: ‘Un plan continue, que nous appelons plan naturel, parce qu’on y décrit au naturel, ce qu’on veut faire veoir au tableau par la lunette, avant que de le reduire par pieces au plan artificiel, & le desguiser, comme nous dirons.’

²² d’Alembert, Jean le Rond, “Anamorphoses,” in *Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers*, vol. 1 (Briasson, David, le Breton, Durand: 1751) 104: ‘Dans ce carré ou cete espèce de réseau, que l’on appelle prototype craticulaire, tracez au naturel l’image dont l’apparence doit être monstrueuse.’

²³ *Dictionnaire de l’Académie* 1:565: ‘Narration des actions & des choses dignes de memoire. . . . Il se dit aussi de toutes sortes de descriptions des choses naturelles, comme plantes, minéraux &c. . . . Se dit aussi du recit de toute sorte d’aventure particuliere.’

²⁴ Richelet, *Dictionnaire françois* 403: ‘C’est une narration continuée de choses vraies, grandes et publiques. . . . Discours de la nature de certaines choses comme des poissons, de plantes.’

a narration of several memorable things, *even if we do not know them but by the report of others*.²⁵

For Furetière, therefore, *histoire* was a ‘description, narration’ either ‘of things as they are’ or ‘of the actions as they happened, or as they could happen.’ The first of these two typologies corresponded to natural history and the second to civil history:

In the first meaning [that of ‘narration of the things as they are’], it is said of the description of natural things, of animals, vegetables, minerals, &c. . . . With regard to actions, it is said of this real narration, coherent and continuous of several memorable events.²⁶

Histoire was thus defined as a regime of knowledge based on ‘description’ or ‘narration,’ with two main applications: the first—before any other—was the natural world; the second, human actions of the past. Natural history and civil history could have different objects, but in the end they were based on the same descriptive method. In this sense, history was generally perceived as a mode of inquiry or a regime of knowledge rather than a field organized around a specific object of research. In this respect, it was opposed to philosophy, which was understood as a form of research based on the ‘study of Nature & Morals, *based on reasoning*.’²⁷ History was defined in opposition to the abstract approach of philosophy. Furetière introduced, furthermore, two elements to the description of history that are worth keeping in mind. First, for him, history encompassed any ‘research into curious things, or the wish to know,’ senses which it retained from its origins in Greek. Second, it involved a testimonial dimension that has fluctuated over time: the historian was originally the one who narrates those things of which he has been the ‘spectator,’ who describes what his eyes have seen; over time, however, this form of testimony became delegated or reported.

Both the Académie’s dictionary and Furetière defined *histoire*, and particularly *histoire naturelle*, as primarily a *description*. So let us now flip through the pages of our dictionaries and look for this term. Furetière gave three meanings for *description*:

[A] painting, a representation of something *au naturel* through figures or through discourse (*par des figures, par le discours*). . . . it is also said of a rough & imperfect

²⁵ Furetière, *Dictionnaire universel* (1690) 2:263: ‘Description, narration des choses comme elles sont, ou des actions comme elles se sont passé[e]s, ou comme elle se pouvoient passer. Ce mot vient du Grec *historia*, qui signifie *proprement recherche des choses curieuses, envie de sçavoir*. Il signifie aussi l’exposition des choses dont nous avons esté les spectateurs. Car *Historein* signifie précisément *connoistre, sçavoir une chose comme l’ayant veuë*. Il est vray que la signification de ce nom deviant ensuite bien plus étendue, & signifie une *narration de plusieurs choses memorables*.’

²⁶ Furetière, *Dictionnaire universel* (1690) 2:263: ‘au premier sens il se dit de la description des choses naturelles, des animaux, vegetaux, mineraux, &c. . . . [A] l’égard des actions, se dit de cette narration veritable, suivi, & enchainée de plusieurs evenemens memorables.’

²⁷ Furetière, *Dictionnaire universel* (1690) 3:114: ‘Estude de la Nature & de la Morale, fondée sur le raisonnement.’

definition that gives only an idea of the thing, & that does not explain its nature. . . . it also means a written enumeration of things.²⁸

The word *description* conveys three meanings, namely a representation, a definition, and a written enumeration. Significantly, the 1706 edition of Richelet's *Dictionnaire françois* also retained these three meanings of the term *description*.²⁹ But there are important elements which should be noted here. In its first meaning, the word *description* applied to a vivid representation of something by means of either images or writing. Such a representation, however, was qualified as *au naturel*—perhaps it was characterized by a mimetic resemblance to its subject, perhaps it was simply naturalist in style, perhaps its author saw what was represented with her own eyes. Be that as it may, such a representation *au naturel* was not necessarily visual, but could well be done 'through discourse.' The second meaning of *description* also echoes the methodological foundations of *histoire*: it refers to a definition that is incomplete because it does not 'explain [the] nature' of the thing studied, in line with history's purpose of 'describing things as they are,' without necessarily reasoning about them, which was the goal of philosophy.

The association of the word *description* with history as a mode of inquiry—particularly when applied to the study of nature—endured well into the eighteenth century.³⁰ In the *Encyclopédie*, the first sense of the term actually referred to natural history. *Description* was, first and foremost, a term of natural history for the encyclopédistes, and its visual dimension was explicitly evoked: 'to describe the different productions of nature is to trace their likenesses and to draw a picture (*tracer leur portrait, & en faire tableau*) representing those productions, both inside and outside, below their surfaces, and in different states.'³¹ Only following this first sense are enumerated other meanings of *description* that refer to the fields of geometry ('to make or trace [geometrical] figures') and belles-lettres ('enumeration of the attributes of something'). *Description*, as a matter of fact, encompassed all that natural history was about in this period: already a distinct discipline by the mid-eighteenth century, it was 'the description of nature's works from the foundation of its *history*; this is the only way to distinguish each one in particular and to give a correct idea of their formation. . . . [D]escriptions include the interior parts of each object as well as the exterior.'³²

²⁸ Furetière, *Dictionnaire universel* (1690) vol. 1, sig. [Gggg3^v]: 'une peinture, une representation d'une chose au naturel par des figures, par le discours. . . . [S]e dit aussi d'une definition grossiere & imparfaite, qui donne seulement une idée de la chose, & qui n'en explique pas la nature. . . . [S]ignifie aussi, Denombrement redigé par écrit de quelque chose.'

²⁹ Richelet Pierre, *Nouveau dictionnaire françois, contenant généralement tous les mots anciens & modernes* (Jean Elzevir: 1709) 581: 'C'est la representation qu'on fait de quelque chose par le moien des paroles. . . . Ce mot en termes de *Logique & de Rhetorique*, signifie une definition imparfaite, qui donne quelque idée d'une chose, sans en expliquer parfaitement la nature. . . . Denombrement.'

³⁰ Stalnaker J., *The Unfinished Enlightenment: Description in the Age of the Encyclopedia* (Ithaca: 2010) esp. 30-96.

³¹ *Encyclopédie* 4:878: 'Décrire les différentes productions de la nature, c'est tracer leur portrait, & en faire un tableau qui les représente, tant à l'intérieur qu'à l'extérieur, sous de faces & dans des états différents.' trans. V. Lenthe – A. Lincoln, *The Encyclopedia of Diderot & d'Alembert. Collaborative Translation Project*, <http://hdl.handle.net/2027/spo.did2222.0002.593>

³² *Encyclopédie* 8:225: 'La description des productions de la nature fait la base de son *histoire*; c'est le

Some substantial shifts took place in the field of natural history in the half century between Furetière and the *Encyclopédie*, and their respective definitions partially echo those changes. By the mid-eighteenth century, (civil) history and natural history were regarded as two distinct epistemic fields, as their respective entries in Diderot's and d'Alembert's work indicate. Voltaire, the author of the entry 'Histoire' in the *Encyclopédie*, clearly framed his discussion along these lines. 'Natural History [is] inappropriately termed *history*,' he wrote, since it is actually 'an essential part of Physics.'³³ By now, moreover, the methodical division of the productions of nature had become the central, most pressing problem in the study of fauna and flora, as the author of the entry *histoire naturelle* (most probably Luis Daubenton) makes clear from the first line ('[t]he object of *Natural history* is as vast as nature') and throughout the whole text ('[t]he naturalist considers something only to compare it to other things'). As a matter of fact, *méthode* as it was applied to the categorisation of 'animals, vegetables and minerals into classes, genres, species' was the object of an independent entry by Diderot.³⁴ Half a century before, however, the main problem of natural history seems not to have been order, but the representation of its objects *au naturel*.

3 The realm of the eyes and a history of particulars

The link between *description* as a mode of knowledge and the study of nature was not as explicit at the turn of the eighteenth century as it became half a century latter, yet it was present. The three characteristics of the term *description* given by Furetière—representation, imperfect definition failing to capture the nature of things, and enumeration—are suggestive when approaching late seventeenth-century natural history. The way in which naturalists thought about their craft at this time involved similar understandings of *description*. Consider, for example, the case of Tournefort. In the preface to his *Histoire des plantes qui naissent aux environs de Paris*, published in 1698, the botanist listed the three goals that, in his view, defined this enterprise:

1. the enumeration (*dénombrement*) of the plants growing around Paris: 2. the critique of the authors who have written about these plants, & whose descriptions are not consistent with the natural (*ne sont pas conformes au naturel*): 3. the choice of the virtues & usages that the best Physicians have proposed.³⁵

seul moyen de les faire reconnoître chacune en particulier, & de donner une idée juste de leur conformation. . . . [L]es descriptions comprennent les parties intérieures de chaque objet comme les parties extérieures' (trans. Lenthe and Lincoln).

³³ *Encyclopédie* 2:220-1: '[History] est le récit des faits donnés pour vrais . . . l'*Histoire naturelle*, improprement dite *histoire*, & qui est une partie essentielle de la Physique' (trans. Lenthe and Lincoln).

³⁴ *Encyclopédie* 8:225-6: 'L'objet de l'*Histoire naturelle* est aussi étendu que la nature'; '[l]e naturaliste considère une chose que pour la comparer aux autres.' For the entry *Méthode* as 'division méthodique des différentes productions de la nature, animaux, végétaux, minéraux, en classes, genres, espèces,' *Encyclopédie* 10:458.

³⁵ Tournefort Joseph Pitton de, *Histoire des plantes qui naissent aux environs de Paris* (Imprimerie royale: 1698) sig. a4^r: 'On s'est proposé trois choses dans cet Ouvrage: 1. Le dénombrement des plantes qui naissent aux environs de Paris: 2. la critique des auteurs qui ont parlé de ces plantes, & dont les descriptions ne sont pas conformes au naturel: 3. le choix des vertus & usages que les plus habiles Medecins ont proposez.'

According to Tournefort, the botanist and the student of nature by and large had three goals: the enumeration, or the making of comprehensive lists or catalogues of species; the study of their medical properties; and (more important) the critique or correction of previous authors, both ancient and contemporary, by collating their descriptions to *le naturel*. Enumeration and the comparison of previous descriptions with *le naturel* were, for Tournefort, the primary aims of a history of plants: only after those two were achieved could a study of their virtues or medicinal properties be developed. In his *Éléments de botanique*, Tournefort stated that ‘Botany, or the Science dealing with Plants, has two parts that need to be differentiated with care: the knowledge of plants, & that of their virtues.’³⁶ The ‘knowledge of plants’ could only be accomplished, for him, through the ‘study of their observable parts’ (*l’étude des parties sensibles des plantes*).³⁷ The work of the historian of plants was indeed a description as Furetière described it: an ‘enumeration’ and a ‘representation . . . au naturel,’ but even so, one that was ‘an imperfect definition’ which did not deal with the nature of vegetable things. There is something particularly telling in the way that Tournefort grounds a history of plants in their ‘observable parts,’ for the expression recalls the enigmatic reference to the ‘natural and external form’ in the Académie’s definition of *naturel*. Might we understand this reference to the ‘external forms’ as signifying that which could be embraced by the eyes? A description may well not have been exclusively visual in its outputs. Yet this was a regime of knowledge based on the realm of what could be seen.

Au naturel was simply an expression and, like any expression then and now, its meaning was never incontrovertible. But, when tracing some of the ways in which it was used in making sense of natural history in this particular period, we find it being employed to refer to a specific regime of knowledge based on the ‘external forms’ (that is, the ‘observable parts’) of things. In other words, the expression might well not refer exclusively to a visual rendering, or to one actually made in the presence of the object represented, but it points to an epistemic programme that found its certainties in the realm of the eyes.³⁸

4 Sciences of ‘What may be the Object of the Sight’

A specific definition of natural history was at stake in the uses of *au naturel* in the study of nature at this time. Unsurprisingly, French naturalists like Plumier or Tournefort presented themselves as resigned and fatigued scholars and elaborated on a rhetoric of laboriously-gained experience through strenuous botanical travels. The

³⁶ Tournefort, *Éléments* 1:1: ‘La Botanique ou la Science qui traite des Plantes, a deux parties qu’il faut distinguer avec soin: La connoissance des plantes, & celle des leurs vertus.’

³⁷ Tournefort, *Éléments* 1:2: ‘L’examen des parties sensibles des plantes par où nous connoissons leur caractere.’

³⁸ This aspect was not exclusive to natural history, but was also germane (perhaps even more so) to anatomy: see Mandressi R., *Le regard de l’anatomiste. Dissection et invention du corps en Occident* (Paris: 2003). Anita Guerrini has recently noted that ‘as a visual and descriptive discipline, anatomy was closely intertwined with natural history, and dissection was integral to the natural history of animals.’ See Guerrini A., *The Courtier’s Anatomists: Animals and Humans in Louis XIV’s Paris* (Chicago: 2015) 33.

knowledge they aimed at producing was to be sought in the field, however recondite this might be.³⁹ When explaining his method for the classification of the vegetable world, Tournefort insisted that, if there was any difficulty in the practice of botany, this was not the diversity and ordering of species, but their observation at first hand:

If there is any fatigue in herborizing, it is because very often we need to seek the plants in the highest mountains, or in dreadful precipices; whereas we can learn the other sciences at school, & in the cabinet: but we are quite rewarded for this exertion with the pleasure we get from seeing a part of the most beautiful things that there are in nature.⁴⁰

Tournefort effectively associated his work and own person with an idea of botany funded upon what he presented as new foundations: a review of his *Institutiones rei herbariae* (1700) fostered this idea that botany was a science of unmediated observation as if it were an innovation. In the fifteenth century, naturalists ‘did not look for plants but in the Books of the Greek & the Latin,’ wrote the anonymous reviewer, but ‘eventually *reason came to the World with the Sciences*. Nature began to be studied as much as Books, and we dared to seek Plants in the countryside.’⁴¹

This insistence that the naturalist ought to endure the fatigues of long journeys in exotic lands for the sake of the natural historical enterprise needs to be placed in the larger context of its practitioners’ contemporary ideals and attitudes towards the sort of knowledge they aimed at producing. Consider the well-known project for the natural history of animals by the Paris Academy of Sciences. The unsigned preface to the 1671 volume of the *Histoire des animaux*, written in fact by Claude Perrault, provides an explicit articulation of the principles that they sought to apply to their intellectual project. The author distinguished between two types of historical writing: in the first, he said, the historian gathers what has been written at different times and by different authors on the topic he treats; in the second, in contrast, the historian ‘confines himself in the narration of *particular facts*, on which he has positive knowledge.’ We may call the first typology a general history, made out of testimonies, and the second, a history of particulars. Perrault and his circle of anatomists aimed at the latter. This history of particulars was not without pitfalls, but the benefits in his view far exceeded the limits: ‘although [the second typology of history] does not contain but the parts, or the elements that compose the body of History, & has not the majesty of a general history,

³⁹ I deal with this question in the first chapter of my PhD thesis at the European University Institute: “Nature in Draft: Images and Overseas Natural History in the Work of Charles Plumier (1646-1704).”

⁴⁰ Tournefort, *Éléments* 2:4: ‘S’il y a de la fatigue à herboriser, c’est parce qu’il faut aller bien souvent chercher des plantes dans les plus hautes montagnes, ou dans des précipices affreux; au lieu que l’on peut apprendre les autres sciences dans l’école, & dans le cabinet: mais on est assez recompensé de cette peine par le plaisir qu’on a de voir une partie de ce qu’il y a de plus beau dans la nature.’

⁴¹ *Histoire de l’Académie royale des sciences, année 1700. Avec les Memoires de Mathematiques & de Physique, pour la même année. Tirés des Registres de cette Academie* (Boudot: 1703), 71: ‘alors qu’on ne songea qu’à entendre les Anciens pour en tirer les lumieres, qui avoient été si long-tems ensevelies, les Botanistes ne chercherent les Plantes que dans les Livres des Grecs & des Latins. . . . Il n’étoit pas possible qu’enfin la raison ne revînt au monde après les Sciences. On se mit à étudier la Nature aussi-bien que les Livres, & on osa chercher les Plantes dans les campagnes.’

it has nonetheless the advantage of Certitude & Truth [*la Certitude & la Vérité*], which are the most commendable virtues of History, provided that the one who writes is exact, & honest [*exact, & de bonne foy*].’ But exactitude and honesty, Perrault warned the reader, ‘is not enough for the general Historian, who often may not be veritable, however passionate he is about truth, & regardless of the care he employs to discover it, for he is always in danger of being mislead by the testimonies he works with.’⁴²

The problem was for Perrault one of credit and distance. Many histories of animals of both types existed at the time, he tells us: not only were there ‘the great & magnificent Works that Aristotle, Pliny, Solinus, & Aelianus composed by drawing from other Authors or from those who made the observations themselves,’ but also ‘particular accounts that Travellers have written on a number of Animals that can only be seen in the Countries in which they were.’ Yet ‘we do not see any certitude neither in those Histories nor in those Accounts.’ The writers of ‘general Histories of Animals’ had been concerned by putting order in their narratives, which they wrote using the testimonies of those ‘who made the descriptions of the Animals on the scene,’ but (and this was important) they had no way to be assured of ‘the exactitude and fidelity [of these descriptions].’ In other words, those general histories were ‘laid upon poor foundations, and all the great building erected on them with such a beautiful symmetry has no real solidity.’⁴³ On the other hand, those who travelled and observed by themselves the animals they described were not scholars, and thus lacked the qualities required for an ‘exact research’: ‘it does not seem likely that Merchants & Soldiers were endowed with the *esprit* of Philosophy & the patience that are necessary for observing all the particularities of so many different Animals.’ The lack of the necessary ‘qualities in most of those who have written particular accounts makes their work irrelevant, and their testimony very suspect.’⁴⁴

⁴² [Perrault Claude,] “Préface,” in *Mémoires pour servir à l’histoire naturelle des animaux* (Imprimerie royale: 1671) sig. a^r: ‘L’Histoire, de quelque nature qu’elle soit, s’écrit en deux manières. En l’une on rapporte toutes les choses qui ont esté recueillies en plusieurs temps, & qui appartiennent au sujet qu’elle traite: en l’autre on se renferme dans la narration des faits particuliers, dont celui qui écrit a une connoissance certaine. Cette dernière manière, que les Romains appelloint Commentaires, & que nous nommons Memoires, bien qu’elle ne contienne que les parties, & comme les élémens qui composent le corps de l’Histoire, & qu’elle n’ait pas la majesté qui se trouve dans celle qui est générale, a néanmoins cet avantage, que la Certitude & Vérité, qui sont les qualitez les plus recommandables de l’Histoire, ne lui sçauroient manquer, pourvû que celui qui écrit soit exact, & de bonne foy; ce qui ne suffit pas à l’Historien general, qui souvent peut n’estre pas veritable, quelque passion quil ait pour la verité, & quelque soint qu’il emploie pour la découvrir; parce qu’il est toujours en danger d’estre trompé par les memoires sur lesquels il travaille.’

⁴³ [Perrault,] “Préface” sig. [a^r-v]: ‘Nous avons assez d’Histoires des Animaux de l’une & de l’autre de ces manières. Car outre les grands & magnifiques Ouvrages qu’Aristote, Pline, Solin, & Elian ont composez de tout ce qu’ils ont pris dans d’autres Auteurs, ou qu’ils ont appris de ceux qui avoient fait eux-mesmes des observations; nous avons encore des relations particulières que les Voageurs ont écrites de quantité d’Animaux, qui ne se voient que dans les Païs où ils sont passes. . . Mais on peut dire qu’on ne voit aucune certitude ni en ces Histoires, ni en ces Relations. Ceux qui ont écrit l’Histoire générale des Animaux . . . [ont utilisé des témoignages de] ceux qui avoient fait les descriptions des Animaux sur les lieux, & dont l’exactitude & la fidélité ne leur pouvoit estre assez connue pour en répondre. . . . [Ces histoires étant] posées sur des mauvais fondemens, il est vrai de dire que tout le grand édifice qu’ils ont élevé en suite dessus avec une si belle simmetrie, n’a point de veritable solidité.’

⁴⁴ Perrault, “Préface,” sig. [a^v-e^r]: ‘Le défaut de ces qualitez dans la pluspart de ceu qui ont fait des relations particulières & des memoires, rend leur travail peu considerable, & leur témoignage fort suspect:

What were then the solutions proposed by Perrault? The alleged exactitude of his and his circle's descriptions was founded upon the fact that 'we do not propose anything that we have not seen.' The *Histoire des animaux* was thus presented as a 'selection of all what we found & carefully noted in the Animals we could examine.' And 'we have limited ourselves to such a description, to such a *naïve painting*, & we have no other intention than *showing things as we have seen them* [*de faire voir les choses telles que nous les avons veuës*], like a mirror, which adds nothing, and represents only what is presented to it.' Much was at stake: 'in contrast to the Ancients & most of the Moderns, who treat the knowledge of Animals as if it were a Science—that is, by speaking always generally—we do not present things but as being particular.'⁴⁵

What Perrault is saying is important. He is explicitly articulating the two central components of a specific way of making natural history that came to prevail in the late seventeenth century: the simultaneous presence of subject and object of observation and the non-representative nature of the knowledge thus acquired.⁴⁶ This approach to nature was an imperfect and 'naïve painting' because it did not aspire to establishing generalities, but particularities.

This sort of 'historical' approach was not limited to the study of nature. Around the same period, antiquarians were developing the exact same 'historical' way of proceeding. Take the case of the French Benedictine monk of the Congregation of Saint-Maur Dom Bernard de Montfaucon (1655–1741). His colossal 1719 *L'antiquité expliquée et représentée en figures* 'treats of All Antiquity, every Part is considered and illustrated with a great Number of Figures; and these Figures explained with all the Accuracy I was capable of.' As in the contemporary works of natural history evoked above, Montfaucon aimed at a 'material' turn. Against an antiquarian literature fraught with contradictions and controversies, what Montfaucon offered was the antiquity *au naturel*: 'I have reduced into one Body all Antiquity. By the Word *Antiquity* I mean only what may be the Object of the Sight [*ce que peut omber sous les yeux*].'

5 Conclusion

This brings us back to the marshy banks of Late Miragoâne and Plumier's drawings of a crocodile, maybe (or maybe not) partly crafted during his dissection of the animal. After leafing through all these dictionaries, the mysterious use of *au naturel* in seventeenth- and eighteenth-century natural history—and in our two reptilian cases in

n'y aiant gueres d'apparence que des Marchands & des Soldats soient pourvus de l'esprit de la Philosophie & de la patience, qui sont necessaires pour observer toutes les particularitez de tant de différens Animaux.'

⁴⁵ Perrault, "Préface" sig. [e^v-o^r]: '[N]ous nous sommes donnée [la liberté], de dire que nos Descriptions sont exactes, parce que nous ne proposons rien que ce que nous avons vû. . . . C'est pourquoi nous avons choisi une manière de faire nos Decriptions toute particulière. Car au lieu que les Anciens & la pluspart des Modernes traitent la doctrine des Animaux comme celle des Sciences, parlant toujours généralement, nous n'exposons les choses que comme estant singulières.'

⁴⁶ These are the two principal components of the visual regime 'de la chose vue' identified by Charlotte Guichard in her indispensable "'D'après nature' ou 'chose vue'? Autorité et vérité de l'image scientifique au XVIIIe siècle," in Debuissou D. – Raux S. (eds.), *À perte de vue: les nouveaux paradigmes du visuel* (Dijon: 2015) 35-51.

particular—is anything but clear-cut. In Plumier’s manuscript drawings of the American crocodile, only the small depictions of the bones of the tarsus, phalanx and ear were qualified *au naturel*, as if the other parts depicted were not done in front of the animal, or were not naturalistic enough, or were not pictured at their real scale. The Jesuits’ crocodiles from Siam were only ‘quite’ *au naturel*: is this an allegation of a mimetic effort, of a representational realism not entirely achieved?

Along with Tournefort’s praise of botanical travel and Perrault’s determined defence of the ‘narration of particular facts,’ these can indeed be seen as manifestations of an emphasis on the value of direct observation, but also—and perhaps more accurately—of the new status of objects (whether natural specimens or antiquities) as evidences for the making of ‘historical’ (i.e. descriptive) forms of knowledge. Within such a historical approach, descriptive in its endeavour, the ‘observable parts’ of nature were understood as offering a legitimate ground for the intelligibility of nature. By embracing exclusively “what might be the object of the sight” (i.e. the realm of the particular and non-representative, or still, nature *au naturel*), images such as those by Plumier’s, Perrault’s circle of anatomists, or the Jesuits in Siam (as well as their written descriptions) stood as sources—that is, documents standing for the objects themselves and consequently impervious to controversies. The “revolution in historical method” brilliantly diagnosed by Arnaldo Momigliano in early eighteenth-century ancient history (“the Age of Antiquarians”) had its equivalent in natural history, for although each field targeted different objects of research, both shared a “historical” way of proceeding.⁴⁷

This exploration of the uses of *au naturel* also points to two further problems that deserve more attention than is given in these pages. First, the treatment of natural history and others forms of ‘history-oriented’ fields, such as antiquarianism, as distinctly delimited and differentiated epistemic fields is more the result of our current disciplinary cartographies than an accurate account of the actual practices underpinning such scholarly endeavours. In late seventeenth-century France, natural history was part and parcel of the domain of *histoire*, whether this was applied to the study of nature or to that of the remains of the past. Only by the mid-eighteenth century would both fields be understood as two areas of scholarship with clearly distinct ‘ways of knowing.’ Second, we have seen that *au naturel* referred to a mode of knowledge that—at least for late seventeenth-century French (natural) historians—based its certainties in ‘observable particulars,’ but this did not necessarily result in graphic forms. This is important in relation to the current notion of ‘visual culture,’ which has certainly permitted historians to conjugate the gesture of graphic representation with the act of scholarly observation, but has done so by isolating (if not directly opposing) images and image-making from written culture and other forms of verbal inscription. It thus risks imposing an artificial compartmentalization upon its objects of study, and bringing together phenomena that were not necessarily related at any time (e.g. observation and visual representation), while separating others that might have been (e.g. written and iconographic cultures).

⁴⁷ Momigliano A., “Ancient History and the Antiquarian,” *Journal of the Warburg and Courtauld Institutes* 13, 3-4 (1950) 285-315.