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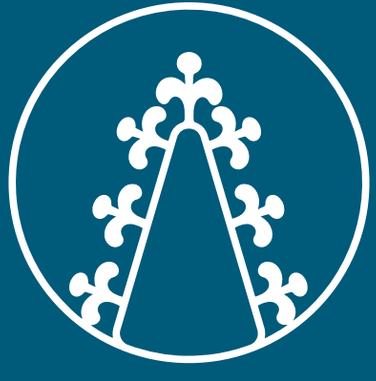

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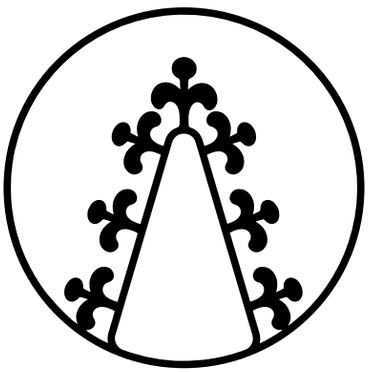

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Sommario

ABSTRACT

In the year 1494, Leonardo composed a bestiary of about 100 short entries on virtues and vices combined with animal symbolism (Paris, Bibliothèque de l'Institut de France, Manuscript H). Research has always accepted the three sources from which this bestiary is derived as the medieval *Fiore di Virtù,* Cecco d'Ascoli's *Acerba* and Pliny's *Natural History* (in the version of Cristoforo Landino), but overlooked another important source, the *Libro della Natura degli Animali* (also called *Bestiario Toscano*), which is a synchronistic version of the *Fiore di Virtù* and a bestiary. As much as Leonardo was inspired by these sources, he never copied entries directly for his repertory, but selected passages and alternated the narrative. This article investigates, on the one hand, the reasons for Leonardo's selection process, which attempts to make the bestiary a pan-religious and pan-cultural repertory of animal symbolism, relying on moral and religious choices. On the other hand, it offers an investigation on the application of the repertory and its sources in his allegorical drawings by making the symbolism and short entries a reading key for his moral and witty sketches.

Nel 1494, Leonardo compose un bestiario di circa 100 brevi voci su virtù e vizi combinati con il simbolismo animale (Paris, Bibliothèque de l'Institut de France, Manoscritto H*). La ricerca ha sempre accettato che le tre fonti da cui deriva il bestiario siano il* Fiore di virtù *medievale,* l'Acerba *di Cecco d'Ascoli e la* Historia naturale *di Plinio (nella versione di Cristoforo Landino), ma ha trascurato una quarta più importante, il* Libro della natura degli animali *(detto anche* Bestiario toscano*), che è insieme una versione sincronica del* Fiore di virtù *e di un bestiario. Per quanto Leonardo si ispirasse a queste fonti, non copiò mai direttamente le voci per il suo repertorio, ma selezionò i passaggi e alternò la narrazione. Questo articolo indaga, da un lato, le ragioni del processo di selezione di Leonardo, che tenta di rendere il bestiario un repertorio pan-religioso e pan-culturale del simbolismo animale, basandosi su scelte morali e religiose. D'altra parte propone un'indagine sull'applicazione del repertorio e delle sue fonti nei suoi disegni allegorici, facendo del simbolismo e delle brevi annotazioni una chiave di lettura per i suoi schizzi morali e arguti.*

KEYWORDS Leonardo da Vinci • allegory • drawing • animal symbolism • key reading • Naturalis Historia • Acerba • Fiore di Virtù • Bestiario Toscano • Pliny • Cecco d'Ascoli • Renaissance • Italy

PAROLE CHIAVE *Leonardo da Vinci • allegoria • disegno • simbolismo animale • chiave di lettura • Naturalis Historia • Acerba • Fiore di virtù • Bestiario toscano • Plinio • Cecco d'Ascoli • Rinascimento • Italia*

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PEER-REVIEW

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Leonardo's Bestiary as a Reading Key for Moral Allegories

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Leonardo da Vinci, one of the Renaissance polymaths, left visual and written evidence in a large variety of fields: painting, architecture, technology, anatomy, natural sciences, music, literature, and much more. Among his literary oeuvre, there are sketches for treatises on painting, optics, geometry, military engineering, hydraulics, the flights of birds and other natural phenomena, and also on different literary topics, such as fables, invectives - and a bestiary.

Leonardo's so-called *Bestiario* from 1494[1] runs over thirty-nine consecutive pages with only occasional interruptions, a fact that is not true for his other writings, which appear scattered among other thoughts[2]. This speaks for a condensed effort and concentration over a short period of time. Despite being written in the vernacular, like all of Leonardo's writings, the *Bestiario* has been seen as belonging to the literary tradition of medieval bestiaries. Being preceded only by some pages with Latin conjugations, sketches of water and sand, it is then composed of ninety-five (plus a possible additional five scattered elsewhere) often quite short phrases on animals and their symbolic meaning in literature. Usually, these short accounts run one to three sentences, mostly following the intention of adding the animal's symbolic significance within the moral system of virtues and vices. On a few occasions, these moral meanings have a short extension, such as an allegorical reading with an interpretation of the animal and its meaning.

Since Gerolamo Calvi published his article on Leonardo's *Bestiario* in 1898 and identified its sources in the *Fiore di Virtù* (c. 1320)[3], Cecco d'Ascoli's *Acerba* (c. 1327)[4] and in Pliny's *Natural History* (in Landino's translation, 1476)[5], the majority of researchers have supported these three sources[6], while some of them have added other texts, such as Franco Sacchetti's *Delle Proprietà degli Animali*,[7] the *Physiologus*[8], Aesopus's *Fables*[9], and Brunetto Latini's *Tesoretto*[10], Carlo Vecce's proposal to introduce a comparison with Franco Sacchetti's *Proprietà degli Animali* based on a condensed version of the *Fiore di Virtù* is an interesting idea, to which we will return later[11].

The *Physiologus*, Aesopus and the *Tesoretto* are in fact not necessary for the reading of Leonardo's bestiary and provide little overlap, while the *Fiore di Virtù*, the *Acerba* and the *Natural History* had all been used in snippets to compose the bestiary. Furthermore, all three texts were in Leonardo's personal library, and all three were in double copy![12]

I would like to thank my two anonymous peer-reviewers for their careful reading and for raising a number of attentive points, as well as the editorial assistant Gloria de Liberali for her prompt and competent editing.

1 Paris, Bibliothèque de l'Institut de France, Manuscript H, Ms 2179, fols. 5*r*-27*v*. For the date March 1494, proposed by Calvi 1898 (pp. 73-116) and thereafter never seriously questioned, see Pedretti 2008 and Bambach 2019b, II, pp. 76-81.

2 For example: Leonardo/Marinoni 1974, pp. 97-114 (with some literary references for the single entries); Leonardo/Vecce 1992, pp. 73-93 (with literary references for the entries); Leonardo/ Stoppelli 2011; Leonardo/Cirnigliaro-Vecce 2019, pp. 31-50 (taken here as a source of reference).

3 On the *Fiore di Virtù*, see *Fiore di Virtù* 1483, 1491 and 1504; *Fiore di Virtù*/Fersin 1953 (here all taken here as a source of reference); Corti 1959, pp. 1-82, and also Dooling, forthcoming.

4 *Acerba* may point to *acervus* as an accumulation, and it was intended as an educational book. Calvi (1898, p. 87) sees it as an incomplete encyclopedia. For related illustrations in Leonardo's bestiary, see D'Ancona 1920, pp. 120-124 (BSB, Ms Hamilton 138, probably Lombardy 15th century, illustrated with acquarels, geometrical figures, astrological objects, symbols, images of virtues, fantastic animals); and Cogliati Arano 1982, pp. 151-160.

5 Leonardo used Landino's translation of Pliny's *Natural History* that was printed in 1476. On Leonardo's general interest in Pliny, see Sconza 2019, pp. 79-84, and Versiero 2020, pp. 533-540.

6 Just to mention a few: Leonardo/Brizio 1952, p. 122; Genette 1982, p. 7; Leonardo/Calabrese 2011, p. 25-26; Bambach 2019b, I, p. 493; Bisanti 2019, pp. 47-54; Mesirca 2019, pp. 55-60; Vecce 2019, pp. 19-30. For Cohen (2008, pp. 25-29), only the two sources of the *Fiore di Virtù,* and Cecco d'Ascoli's *Acerba* should be sufficient.

7 Leonardo/Vecce 1992 (pp. 73-93, especially p. 89) proposes two sources: *Fiore di Virtù*, or rather Franco Sacchetti's version of it (*Delle Proprietà degli Animali*), and l'*Acerba* by Cecco d'Ascoli, all of which would have been accessible in Leonardo's private library (although he actually possessed the *Fiore di Virtù,* and not Sacchetti's version). Many other entries were after Plinius in Landino's version (Leonardo/Vecce 1992). Vecce compared the sources for every animal allegory in Leonardo. Franco Sacchetti's *Delle Proprietà degli Animali* was published in Sacchetti/Gigli 1857, pp. 255-261.

8 Although some of the content in the *Fiore di Virtù* and the *Acerba* does overlap with the *Physiologus*, and he must have been familiar with this basic iconographical text through his school education, Leonardo did not possess a *Physiologus* edition, nor did he engage with it directly on a literary level.

9 For Aesopus, see Calvi 1898, pp. 73-116. However, in Aesopus's *Fables*, animals are usually given in pairs, while the little stories serve different intentions, which are not comparable to Leonardo's bestiary.

10 Brunetti has been seen as an additional source, on top of the others (Leonardo/Giovanetti 2019, p. 36).

11 Other proposals: Sacchetti-Cecco d'Ascoli-Pliny (cf. Leonardo/Vecce 1992, pp. 73-93; Leonardo/Cirnigliaro-Vecce 2019, p. 33). According to Marsh 2003 (p. 17), Leonardo took Alberti's *Apologies* as an example for his *Bestiario*.

12 There is one copy each of Pliny, Cecco d'Ascoli and the *Fiore di Virtù* in both the *Codice Atlantico* and the Codex Madrid II (BNE, Inv. 8937); see Vecce 2017, pp. 198-200.

As a medieval school text, the *Fiore di Virtù* proved to be an immensely useful book for artists, especially for composing iconography containing virtues and vices[13]. Many painters relied on it to find useful references for basic allegorical depictions. Leonardo had been introduced to the *Fiore di Virtù* at the entry school level[14], and the text proved to be a valuable source for him, to which he returned on many occasions in his paintings, drawings and in his own writing. Occasionally, researchers have noticed that either a printed version of the *Fiore di Virtù* or Leonardo's bestiary might have been the source for a very few of Leonardo's emblems and allegories[15], but they used the texts only for occasional and sporadic explanations. Thus, many questions regarding the organization of the text and the purpose of the bestiary remain open. This essay wishes to identify two issues that so far have gone unnoticed. This article investigates, on the one hand, the reasons for Leonardo's selection process, which attempts to make the bestiary a pan-religious and pan-cultural repertory of animal symbolism, relying on moral and religious choices. On the other hand, it offers an investigation of the application of the repertory and its sources in his allegorical drawings by making the symbolism and short entries a reading key for his moral and witty sketches. It is worth noting that the *Fiore di Virtù*, written around 1320, circulated in a variety of forms, with two major and many minor variations. The two major variations consist of an essential version and one containing an allegorical extension. The essential, condensed form contains a discussion of virtues and vices and of their respective symbolic animals, each running only a few sentences. The extended version adds allegorical readings, explanations, and citations by the so-called *auctoritas*, ancient and medieval sources of religious or secular texts. This version was called *Fiore di Virtù Historiato*. The short version circulated in manuscript form in the fourteenth century, while almost all *Fiore di Virtù* versions from the fifteenth century go back to the *Fiore di Virtù Historiato*, with some variations with respect to the number of chapters and to the choice of *auctoritas* given as a reference. The well-known editions printed in Florence in 1483 and 1491 were likely familiar to Leonardo. There, each chapter develops along three lines: first, a presentation of the given virtue or vice, then an example of an animal allegory associated with it, and finally an example from the literature that references the *auctoritas*.

There is, however, another important source for the comparison with Leonardo's bestiary that has generally been overlooked. The late thirteenth century *Libro della Natura degli Animali* (also called *Bestiario Toscano*) has a rich medieval manuscript tradition of mostly Tuscan origins, as elaborated by Checchi[16]. Although the textual compilation is once again not an exact source for Leonardo, it lends itself to multi-layered comparisons. Like the other medieval sources for animal symbolism, the entries on single animals are much longer than in Leonardo. They usually start with a description of the animal, followed by a moral or allegorical reading, accompanied by one or more references to an *auctoritas*, like the Bible and ancient sages, which is the reason why it can be counted among the Christian bestiaries. What makes this text comparable to Leonardo's is first and foremost the literary fusion of a *Fiore di Virtù* with a bestiary as well as a structure organized in three distinct parts (moralizing descriptions of animals, fables, and moralizing exempla of animals), which mainly follow three sources[17]. The total number of about one-hundred-six entries (depending on the version, some animals appear doubled), and the ending with the *exempla* is also similar to Leonardo's text. What differs from Leonardo is the sequence and the length of the chapters, which once again are more elaborate in the *Libro della Natura degli Animali* than Leonardo's short entries. For example, the Vatican manuscript Chig.M.VI.137 begins with fifty descriptions and moralizations, followed by fourteen fables, and ends with forty more descriptions and moralizations as so-called *exempla*. In other versions, there are seventy-two descriptions and moralizations and fourteen fables[18]. With the *Libro della Natura degli Animali* and its composite format on the nature of animals, examples and fables, the question arises of whether Leonardo's fables should be seen in the same context. His fifty-two fables surpass the usual circa fourteen, and we cannot, once again, speak of a close relationship[19]. Nevertheless, many aspects suggest a similar intention. Leonardo composed his fables right before the bestiary (1490-1494)[20]. Looking at the Florentine examples mentioned below, he probably came in contact with the *Bestiario Toscano* already in his Florentine years, and therefore knew about the possibility to incorporate fables into a bestiary. His fables are, once again, much shorter than others usually were. The most striking point of comparison between these two texts is Leonardo's first fable[21] on the topic of the four elements (water, air, fire, earth), an unusual subject for a fable, which finds its counterpart in other manuscripts of the *Libro della Natura degli Animali* [22]. While in the *Libro* each element is associated with an animal and analyzed through a moralizing Christian lens, Leonardo gives a more literal description of the

13 See Dressen 2021b, pp. 189-193.
14 Leonardo received some schooling in Florence. Since his basic Latin education is documented, one would suppose a preceding entry level education, of which the *Fiore di Virtù* was usually a part. This seems to be confirmed by the books in his possession. On his education, see *ibid.*, pp. 12-13 and pp. 95-96.
15 For example, Nova 2001, pp. 381-386; Leonardo/Calabrese 2011, pp. 32-33; Marani 2015, pp. 271-287.
16 Following Checchi 2017 (pp. 525-578) and 2020 (pp. 142-144), the original text was written after 1270 in a Dominican monastery in Pisa. For the long and short versions of the text, a comparison with other manuscripts, its genesis and sources, see Checchi 2020 and also Goldstaub-Wendriner 1892, pp. 74-107.
17 Not all the manuscripts contain all three parts. The sources of the *Libro della Natura degli Animali* are a lost medieval bestiary called *Bestiario della Formica*, another lost source most comparable to Ms Hamilton 390 (BSB), and Anglico 1492 (*Liber* XVIII). Likewise, Brunetto Latini's *Tesoretto* had been mentioned as being close to these sources as well, especially in the variation of Ms 2908 (BRicc), which also has a different sequence of the animals compared to other manuscripts. See Checchi 2017, pp. 525-578, and 2020, pp. 55-59, 149-155.
18 For the sequence, see Checchi 2020, pp. 11-14.
19 Also, only circa 13 of the 52 fables find a counterpart animal in the *Libro della Natura degli Animali*, and likewise not literally.
20 For the date, see Leonardo/Giuditta-Vecce 2019, p. 5. For an introduction to Leonardo's fables, see Marsh 2004; Cirnigliaro 2023.
21 V&A, Codex Forster III, fol. 2*r*, citation in Leonardo/Cirnigliaro-Vecce 2019, p. 6.
22 BAV, Ms Chig.M.VI.137 (Checchi 2020, no. 18); BML, Ms Ashb. 520 (*ibid.*, no. 19); BNCF, Ms II.VIII.33; BRicc, Ms 2260 (*ibid.*).

elements and associates them with only one animal (i.e. little crabs, «granicoli») and one vice («superbia»), set in the context of the elements. Furthermore, the third part of the book with moralizing *exempla* (e.g. manuscripts in the Vatican, London and Paris)[23] finds an echo in Leonardo's bestiary, where he likewise concludes with an *exemplum* («esempli»)[24], that again is not taken directly from any of his sources. Leonardo's example of six animals revolves around the topic of the eye and of ways of seeing (given by examples of the serpent, wolf, basilisk, ostrich, fish, and others). Albeit very short, his entries are comparable to this third part of the *Bestiario Toscano*, where animals are presented with their nature and properties (using the title *Dela natura e proprietà del* …). Finally, some manuscripts of the *Libro della Natura degli Animali* are accompanied by illustrations for every chapter – simple pen or ink drawings filled with watercolors, on the whole very comparable to the *Fiore di Virtù* illustrations (e.g. BML, Ms Ashb. 520, Florence 1459)[25]. There are also some manuscripts where the *Bestiario Toscano* appears together with the *Fiore di Virtù*, with which it in fact shares a number of animals (e.g. WA/HMM, Ms 132, Florence 15th century). In some cases, the *Fiore di Virtù* is followed directly by the *Bestiario Toscano* or by a similar bestiary type, without much indication of a textual switch[26]. In some manuscripts, the two titles have been mixed up and combined: *Libro della Natura degli Animali* with the incipit «quine comica Fior di virtune» (BML, Ms Ashb. 520), *Libro intitolato Virtù degli Animali* (BRicc, Ms 2260, Florence 15th century), and also *Trattato della Virtù, ovvero della Natura degli Animali* (BNN, Ms XII.E.II, Florence 1482)[27]. Leonardo's knowledge of the three Florentine and the London versions and of their combined texts can be presumed, as well as their shared intentions. Leonardo must have been inspired by this literary genre, even though he did not elaborate over the entries as sequences in a row, as he did with Pliny and Cecco d'Ascoli[28]. Leonardo's bestiary therefore follows along with several esteemed traditions: animals as symbols, animals as allegories of virtues and vices, the nature of animals, and vernacular repertories; it also presents a combination of different textual traditions along the lines of the *Fiore di Virtù* and the *Libro della Natura degli Animali*. The result, nevertheless, is Leonardo's own original version, which carries on the knowledge and echo of these various textual traditions. Bestiaries in all of their forms seem to have kept Leonardo busy for more than two decades. Vernacular editions of medieval bestiaries were common since the thirteenth century, and they were also desired in the Italian courts throughout the fifteenth century. These texts could serve many purposes, and they were highly regarded for their several intellectual layers. Brunetto Latini's *Tesoretto*, for example, was also called *Libro chiamato Thesoro di Philosophia*[29]. That this was in line with the *Libro della Natura degli Animali*, and thus ranking as scientific literature, is established by its incipit (*Liber Naturarum Animalium*): man achieves knowledge through reason («ragione») and intellect («ingegno»), which enable him to understand nature. Nature and religion are explained by the scriptures and by oral accounts, but there are also the sciences («scientia»), which manifest themselves through the «artes» (including painting and sculpture), and through the intellect («ingegno»)[30]. With the handicrafts among the sciences, and the bestiaries as one of the manifestations of those sciences, these complex texts could receive intellectual recognition [31].

The Structure of Leonardo's Bestiary

Following the structure of Leonardo's bestiary, one can distinguish three parts. Comparing the first part to the standard published versions of the *Fiore di Virtù* in the fifteenth century, subjects follow the same order, with only one distinguished category being left out, which brings the usual forty-one entries down to thirty-five. The next sixty-one entries that come directly after the first sequence in Manuscript H have different sources, coming either from Cecco d'Ascoli or Pliny. They either adopt the same allegorical symbolism with slightly different interpretations or propose new allegorical comparisons. Five more entries on subsequent pages in Manuscript H and in other manuscripts (New York, The Metropolitan Museum of Art, single sheets; Paris, Bibliothèque de l'Institute de France, Manuscript I; Milano, Venerabile Biblioteca Ambrosiana, *Codice Atlantico*) have been added by scholarship, increasing the whole set to ninety-five or one hundred entries[32]. These derive likewise mostly from Pliny and Cecco d'Ascoli.

Looking at the first thirty-five entries of Leonardo's bestiary that follow the thematical order of the *Fiore di Virtù*, the intention of the abbreviated version is obviously to deliver the most basic information. Leonardo simplifies the latter by leaving out the discussion of the respective virtues or vices and the literary references to the *auctoritas*. He only gives the example of each animal in its most condensed form. To this end, he must have compared his two *Fiore di Virtù* editions and transformed the story with his own words[33]. The same is true for the later part

23 See Checchi 2017, pp. 571-572.
24 VBA, *Codice Atlantico*, fol. 730*v*; citation in Leonardo/Cirnigliaro-Vecce 2019, p. 50.
25 Others, like the Ms 2260 (BRicc), has obvious blank spaces between each entry, meant for illustrations, which were then not executed.
26 BML, MS ASHB. 520; BNCF, Ms II.VIII.33, and Ms Magl. XXI.135.
27 Checchi 2020, pp. 39-40, and pp. 50-52, 54, 159, 163.
28 Leonardo's bestiary shares 57 animals with the Ms Ashb. 520 (BML), and 54 animals each with the Ms 2183 and the Ms 2260 (BRicc).
29 On the translation, history and diffusion of Latini's book, see Giola 2011, pp. 344-380.
30 See the introduction of Ms Chig. M.VI.137 (BAV) in Checchi 2017, pp. 528-529, and 2020, pp. 203-206. Similar beginnings can also be found in other versions.
31 Regarding the *Libro della Natura degli Animali*, Checchi 2017 (p. 529) supposes an easy access to scientific knowledge for the mercantile population.
32 See Leonardo/Cirnigliaro-Vecce 2019, pp. 31-50.
33 For a textual comparison based on the topic of envy, see Leonardo: «Del nibbio si legge che, quando esse vede i sua figlioli nel nido esser troppo grassezza, che per Invidia egli gli becca loro le coste e tiengli sanza mangiare» (Manuscript H, fol. 5*v*); *Fiore di Virtù* 1483, fol. b2*r* : «El puose apropriare et assimigliare el vicio de la invidia al pio o vero al nibio che uno ocello tanto invidioso che se lo vede li suoi figlioli ingrassare in lo nido si li da de lo beccho ne le coste: accio che la carne amarcisca et chosi si smacrino»; *Fiore di Virtù*/Fersin 1953, p. 19: «We may compare the vice of envy to the magpie who is a bird so envious that when she sees her young getting fat in the nest, she hits them in the ribs with her beak so as to infect their flesh and make them thin»; Sacchetti/Gigli 1857, p. 255: «Nibbio, uccello con poco valore, è di tal natura, che, se vede gli figliuoli ingrassare nel nido, da loro tanto di becco nelle costole, che dimagrano».

of the bestiary, where he takes his examples from Cecco d'Ascoli and Pliny but re-tells them in his own manner[34]. The comparative aspect of his approach is obvious, as he always had two copies on hand for each of the three texts.

In Leonardo's abbreviated version, the lack of a discussion of virtues and vices and the absence of *auctoritas* have a huge impact. These short entries are not simply taken from the first and basic *Fiore di Virtù* editions, which were a little more elaborate. Instead, Leonardo made a precise decision. On the one hand, by giving only the short animal allegories, he combined this first set of entries from the *Fiore di Virtù* with the second part taken from Cecco d'Ascoli and Pliny; on the other hand, he transformed these animals' stories into universal accounts of their symbolism. To achieve this, he left out the reference to *auctoritas* like Aristotle, Pliny, Albertus Magnus, Thomas Aquinas, and others, and most strikingly of all, he left out a Christian reading, reducing the text to a universal moral context. Leonardo even went so far as to eliminate completely the chapters dedicated mostly to a Christian concept, for example the love of God, as well as Carnal Love, Friendship, Amorousness, Natural Love and Women, which had all been given a Christian interpretation. He also left out the entry on Injustice with the example of the devil. He turned the Christian subject of Mercy into that of Gratitude, after which he added Ingratitude, which was not present in the *Fiore di Virtù*, and is here exemplified by pigeons. Also, within the selected subjects, Leonardo avoided associations with Christian iconology like the lion or the pelican being symbols of Christ. This way, he reduced the traditional forty-one entries to thirty-five. The remaining subjects are almost all the same as in the *Fiore di Virtù*. Although the first six entries left out by Leonardo appear in the *Fiore di Virtù* with less animal symbolism than the others, this alone would not have led to the result that they should be omitted. Mercy, a very Christian virtue, is associated in the *Fiore di Virtù* with the Pola bird, but Leonardo still felt that this chapter was not suitable, and therefore changed it into Gratitude symbolized by the bird Upica. His examples, therefore, are based exclusively on animal symbolism, both real and fantastic, including fantastic medieval animals like the unicorn, the basilisk, the phoenix and the dragon, which were absent in the ancient bestiaries. Since the animal symbolism follows the traditional interpretation given in the *Fiore di Virtù*, this is probably the closest connection between the two texts, and not only because Leonardo's initial example, «Amore di virtù», serves almost as a title for his text and already strongly recalls the *Fiore di Virtù*. Indeed, this connection is supported immediately by a comparison between the first two entries, which are identical. In the *Fiore di Virtù*, the «Virtù d'amore», the Love of Virtues, is exemplified by a bird called Calandrino. With a movement of his head, the bird supposedly tells the sick if they shall live or die. Leonardo's first example for the «Amore di virtù» is exactly this same bird with the same capacities to foretell life or death, and thus the Love of Virtues would always be honest and virtuous. Leaving out Heavenly, Earthly and Carnal Love, the next subject is Envy represented by the bird *nibbio*, who eats its children's meals when they become too fat. This example is included by Leonardo too, together with the following entries for «Allegrezza» as the *gallo* (rooster), «Tristezza» as the *corvo* (crow), «Pace» as the *castoro* (beaver), «Ira» as the *orso* (bear), and so forth[35]. We can, therefore, safely affirm that for the first part of Leonardo's bestiary, no other source was necessary besides the *Fiore di Virtù*.

Carlo Vecce has pointed to Franco Sassetti's version of the *Fiore di Virtù*, *Della Proprietà degli Animali*, as the closest example to Leonardo's bestiary. There are indeed many similarities, which would speak for a close relationship, although one is not literally a copy of the other. Sacchetti begins his discussion with the bird Calandrino as an example for virtue in general, and thereafter skips over the entries on the different kinds of love and on women, similar to Leonardo. Also, the single entries have a similar length to those of Leonardo's, since they focus on the essential information regarding the animal and mention the respective virtue or vice. However, Sacchetti is less systematic about eliminating Christian meanings from his text. Therefore, he did not eliminate «Misericordia», which in Leonardo had become Gratitude and had no equivalent for Leonardo's Ingratitude, although he included the devil, whom Leonardo had eliminated. The last example also differs in the two texts: while Leonardo presented the ermine for Moderation, Sacchetti gave the example of a man sailing on a ship[36]. In short, one can say that, starting from medieval animal symbolism, Leonardo excluded both human figures and Christian allegory from his bestiary. The allegorical readings are similar to medieval literary allegories on the different basic reading levels. Medieval bestiaries like the *Physiologus*, the *Fiore di Virtù*, and the *Libro della Natura degli Animali* usually came with a Christian allegorical interpretation. What Leonardo did, both in his bestiary and in his fables, was to extract the animals and their symbolism, and to offer a condensed, moralized, non-religious reading in its most essential way[37]. One could even go so far as to speak about a pan-religious, and therefore also pan-cultural reading given that many bestiaries in the high and later Middle Ages crossed cultural and religious boundaries with ease. Leonardo's bestiary would have likewise been applicable in a cross-geographical exchange.

34 Leonardo picks topics in bunches from his sources. After the sequence from the *Fiore di Virtù*, he takes the next 25 entries from Cecco d'Ascoli, switches then to Pliny for the following circa 10 entries, and takes another 10 from both sources. He seems to work through the books and takes the entries in the same sequence, leaving out a few, now and then, which he does not need.

35 See for example *Fiore di Virtù* 1504.

36 Sacchetti/Gigli 1857, pp. 255-267; Leonardo/Vecce 1992, p. 89.

37 Calabrese pointed to the absence of religious-moral aspects in the bestiary, which she interpreted as an ethical and naturalistic aspect (Leonardo/Calabrese 2011, pp. 41, 50). Bisanti 2019 (pp. 47-54) sees the bestiary as a polished version of the *Fiore di Virtù*, in which Leonardo had eliminated everything that he found superfluous, while regarding Cecco d'Ascoli, he worked more pointedly to remodel the text because the original was already substantially more elaborate. Regarding Pliny, by contrast, he stayed more faithful to the text. In the reasoning behind this, Bisanti is following the common opinion that he is delivering a condensed version, which is useful for depicting symbols, and for reflecting on virtues and vices by analogy with humans. He adds to this a possible polemical interpretation, and a vision of reality of the *individuum*.

The moral content and the system of virtues and vices are of course taken from human interactions, and they are intended to be understood in this realm. But many medieval bestiaries offered a religious reading for interpreting the animals, which is true of all *Fiore di Virtù* versions, the *Physiologus*, the *Libro della Natura degli Animali* and others[38]. Non-religious animal allegories can be found in Aesop's *Fables* and in Pliny's *Natural History*. But Aesop's *Fables* have a completely different format for the stories, as they place the animals into a more elaborate narrative setting and the animals often interact with or against humans. By contrast, in his *Natural History*, Pliny gives objective descriptions of the animals, their behavior, procreation, and character. There is no room here for an allegorical reading, which is nevertheless often a red line between the phrases in Leonardo. He can therefore also include fantastic animals, like the unicorn, the siren and the dragon. Despite Leonardo's interest in nature, his accounts refer only in small measure to actual observations. For the most part, he references common knowledge by saying «si dice», «si lege», as if he is citing an *auctoritas*. This way he compiles a repertoire of animal allegories, a kind of repertoire that Carlo Pedretti has already questioned. The animals are presented through a moral allegorical lens and selected on the basis of a comparative literary approach through the use of various texts in multiple versions. If we did not know about the repertoire's origin with Leonardo, it would be difficult to identify the time and place of its creation. The collection thus becomes a pan-cultural and pan-religious account of animal symbolism. In combining the *Fiore di Virtù* with the *Libro della Natura degli Animali* Leonardo echoed the system of the quite common Tuscan bestiaries of the fifteenth century, which can still be found in numerous surviving manuscripts in Florentine libraries today.

Following Calvi, Vecce, and others, the function of Leonardo's bestiary was to provide a reading manual for emblems and *imprese*, as indicated by some drawings located on the same pages of the manuscript, albeit never placed in direct contact (like the unicorn and the ermine)[39]. Calvi noted rather vaguely that «Leonardo è venuto così a formare una specie di bestiario moralizzato, come se ne trovano di frequente nei manuscritti del tempo»[40]. Pedretti pointed to a kind of repertory without much specificity[41]. The concept of the repertory works best to describe what Leonardo's intention might have been, namely, a kind of workshop notebook to facilitate a quick recall for himself and his young apprentices to remember the symbolic meaning of animals[42]. This material might also have been assisted them in reading: as Bambach noted, «many of the Bestiary notes display transcription or reading symbols («o», «+»), indicating that they served the artist as an orderly archive for consultation»[43]. Certainly, reading aides might also have been placed by younger users, but in any case they would indicate a kind of consultation copy.

Leonardo's Allegorical Drawing Exercises as Textual Illustrations

Leonardo's allegorical drawings date mostly between 1475 and 1496, and a large number of them can be associated with Leonardo's engagement with the previously discussed texts. As we will see, the three main sources for his drawings are his own bestiary, followed by the printed books in his possession, various editions of the *Fiore di Virtù*, and occasionally Landino's edition of Pliny. Several drawings in Manuscript H and elsewhere can be associated with single chapters of the bestiary and could have served as illustrations of it, as if Leonardo had planned to edit his bestiary at a later stage. The difference with the circulating *Fiore di Virtù* illustrations is that Leonardo's drawings are more detailed and naturalistic, and thus truer to his personal drawing style. Leonardo sometimes renders these animal drawings with their symbolic meanings, or in relation to the context given in the text passages. Around 1494, with the compilation of his bestiary, Leonardo's main source becomes his own text, with the allegorical sketches shifting from mere illustrations to symbolic depictions based on the reading key developed in the bestiary. A number of researchers, including Kemp, Nathan, Bambach, and Keizer[44], relate the allegorical drawings to theater and festival decorations in the realm of courtly entertainment. Occasional accompanying texts and allegorical meanings are to be seen in this light[45]. Although many scholars have embraced these assessments, I believe that we should seriously question each drawing's purpose. Therefore, in the following, a selection of allegorical drawings will be evaluated against the sources.

Unicorns

The earliest allegorical drawings appear to be literal illustrations of the aforementioned texts. A fashionable animal in the early Renaissance, the unicorn figures in at least three drawings[46] dating from around 1475 to the beginning of the 1480s, when Leonardo was still in Florence (and Botticelli was

38 Only a third of medieval bestiaries were dealing with virtue and vices, as well as with sermons and the lives of saints (Cohen 2008, pp. 5).
39 Calvi 1898, p. 91; Leonardo/Vecce 1992, pp. 89-91, for illustrations and imprese: «Calandrino», «Dama dell'ermelino», «Francesco I con salamandra»; Leonardo/Calabrese 2011, p. 31.
40 Calvi 1898, p. 82.
41 Pedretti 2008, p. 182.
42 In some cases, bestiaries were part of workshop notebooks. The fifteenth-century manuscript Ms 2183 (BRicc) contains *Della Natura di alcuni Animali,* followed by a kind of «libro da bottega», with recipes and lists.
43 Bambach 2019b, II, p. 77.
44 Kemp 2006a; Zöllner-Nathan 2011; Bambach 2019b; Keizer 2012 and 2019.
45 For example, Zöllner-Nathan 2011, p. 484; Bambach 2019b, I, pp. 483, 493. See also Leonardo/Calabrese 2011, p. 30.
46 London, The British Museum, *A Maiden with a Unicorn*, c. 1475-85, Inv. WA1860,0616.98 *verso*, pen and brown ink, with leadpoint, 280x187 mm; Oxford, Ashmolean Museum, *A Maiden with a Unicorn*, ca. 1481, Inv. WA1855.83.1, pen and dark brown ink on white paper, 95x75 mm; and *A Unicorn Dipping Its Horn into a Pool of Water*, c. 1482-1483, wa1855.83.2, pen and dark brown ink, with metalpoint on laid paper, 94x81 mm. On the unicorns, see Bambach 2019b, I, pp. 120-126, which points to the *Fiore di Virtù* and the symbol of sacred and profane chastity.

Fig. 1 Leonardo da Vinci, *A Maiden with a Unicorn*, pen and dark brown ink, c. 1481, Inv. WA1855.83.1 *recto*. © Oxford, Ashmolean Museum, University of Oxford

painting his famous allegories). The versions of *A Maiden with a Unicorn* could have served as illustrations to the text (Fig. 1). Leonardo drew this famous subject several times, but he only depicted the less common episode of the unicorn dipping his horn into the water once[47]. Most versions of the *Physiologus* do not describe this exact subject, and it is also not in the *Fiore di Virtù* nor in Pliny, where the other version can be found (Fig. 2). This rare version of the unicorn detoxifying the water from a snake's poison is elaborated in Pier Candido Decembrio's *De Natura Avium et Animalium* (after 1460, written for Ludovico Gonzaga in Mantua), which became evidently a source for many depictions of unicorns in Northern Italy[48]. Decembrio was travelling between the courts of Mantua, Ferrara and Milan in the 1460-1470s. Leonardo's drawing should therefore be dated to his arrival in Milan, c. 1482-1483, when he had access to Decembrio's bestiary, which is another point of reference, but no direct source. Decembrio's bestiary was intended to be illustrated throughout, although the empty spaces on its pages were filled only a century later. In the *Fiore di Virtù*, the unicorn stands for Intemperance, and twenty years later Leonardo's bestiary tells the story of the wild animal that can be calmed and caught in the lap of a sitting virgin[49]. The passage in the Florentine *Fiore di Virtù* from 1491 is almost the same, but it gives the bibliographical reference and a moral summary as well[50]:

Fig. 2 Leonardo da Vinci, *A Unicorn Dipping its Horn into a Pool of Water*, c. 1482-1483, pen and dark brown ink, with metalpoint, Inv. WA1855.83.2 *recto*. © Oxford, Ashmolean Museum, University of Oxford

> According to the Damascene, intemperance consists in gratifying all one's desires according to one's pleasure. Example: The vice of intemperance may be compared to the unicorn. He is an animal who has such a taste for being in the company of young maidens that whenever he sees one, he goes to her and falls asleep in her arms. Then the hunters can come and capture him.

The unicorn was one of the most popular animal allegories taken from *Fiore di Virtù* and illustrated in paintings elsewhere.

The Dragon Fight

Leonardo sketched several versions of dragon fights that can surely be seen as demonstrating «eager vitality» or the «dynamism from the confrontation between two opposing forces»[51]. Although they remain largely without a textual link, sometimes religious subjects like *St. George Fighting the Dragon* have been suggested despite the unusual dynamism of the composition. Rather, these scenes should be seen in the context of moral combat, and can be read as early examples of a possible illustration based on the *Fiore di Virtù* or on Pliny. Given the early date, the drawing of the so-called *Dragon Fight* (London, British Museum, c. 1482-1483; Fig. 3) might go back to Pliny[52]. In his bestiary, Leonardo tells the story of the basilisk and the horseman, which is a condensed account

47 Bambach (2003b, p. 315, no. 26) sees this drawing as inspired by *Physiologus* 22. Likewise, Kemp-Barone 2010, pp. 81-82.
48 BAV, Urb.lat. 276, fols. 1*r*-23*1v*. On the unicorn versions in art, see Einhorn 1998, pp. 338-343.
49 See Leonardo/Cirnigliaro-Vecce 2019, p. 38, no. 28: «L'alicorno, overo unicorno, per la sua intemperanza e non sapersi vincere, per lo diletto che ha delle donzelle dimentica la sua ferocità e salvatichezza, ponendo da canto ogni sospetto va alla sedente donzella e se le addormenta in grembo, e i cacciatori in tal modo lo pigliano» Bambach (2003b, pp. 307-308, no. 23) had already pointed to Leonardo's description of the unicorn in his bestiary.
50 *Fiore di Virtù*/Fersin 1953, p. 90. The *Fiore di Virtù* 1483 is the same. The unicorn and its meaning can be found in the *Physiologus*. The sources in the *Physiologus* and the *Fiore di Virtù* compare quite closely, and they could both have served as Leonardo's reference:
51 Popham 1954, p 225; Zöllner 2020, p. 176 and pp. 317-318 (*Battle between a Rider and a Dragon/Rider and Griffin*).
52 Inv. 1952,1011.2, pen and brown ink, with brown wash, 138x190 mm. There has been some discussion in the scholarship about whether this rider fighting against a dragon could have been a depiction of St. George (Bambach 2003b, pp. 336-338, no.33; Kemp 2006a, pp. 16-25; Pedretti-Roberts 1984, p. 36), a hypothesis which was rejected by Popham 1954 (pp. 224, 226), and Khalifa Gueta 2018 (pp. 106-109). Other interpretations include a preparatory drawing for the Uffizi *Adoration* (Kemp-Barone 2010, pp. 51-52, 82-83), and an allegorical reading in the realm of a concept of knowledge based on opposites (*ibid.*, pp. 109-111).

Fig. 3 Leonardo da Vinci, *The Dragon Fight*, pen and brown ink, with brown wash, Inv. 1952,1011.2. © London, The Trustees of the British Museum

of Pliny's tale[53]. Leonardo informs us that, although the basilisk looks similar to a serpent, it does not move in the same way. Since one basilisk was killed by a rider on a horse, another basilisk tried to avenge its murder with its poison, but accidentally killed the horse instead of the rider. This is exactly the scene we see in Leonardo's drawing, where the basilisk attacks the rider and the horse. While the rider is able to shield himself, the horse falls backwards in the attack[54].

These early drawings of the unicorn and the basilisk suggest that Leonardo's interest in using animal symbolism as an interpretative instrument beyond the mere illustration of text passages was on his mind already in the Florentine years, when he likely came into contact with the *Fiore di Virtù*, the *Libro della Natura degli Animali* and Landino's translation of Pliny. Some of these drawings already anticipate the idea of using animal symbolism as a key for reading allegorical compositions.

The Ermine

Like the unicorn, Leonardo rendered the ermine independently both in painting (*The Lady with an Ermine*, c. 1490; Krakow, The Wawel Royal Castle) and in drawing (*The Ermine as a Symbol of Purity*, c. 1496; Cambridge, Fitzwilliam Museum; Fig. 4)[55]. Research has claimed that this latter ermine is a symbol of purity[56], moderation[57] or of a combination of both[58]. Already Marani and Bambach have pointed to Leonardo's bestiary, itself relying on the *Fiore di Virtù* 1491, as a source for the *Ermine*[59]. Following Bambach, the round shape of the drawing could point to a theatrical costume decoration or to an allegorical allusion to Gian Galeazzo

53 Leonardo/Cirnigliaro-Vecce 2019, pp. 46-47, no.75; see also Plinio/Landino 1476, chapter 8.21.
54 Popham (1954, pp. 221-227, see particularly p. 224) and Bambach (2003a, pp. 336-338) refer to similar compositions of the rider as a motif that was picked up numerous times in paintings and drawings, like *The Dragon Fight* from the Rotschild Bequest in the Louvre (Inv. 781 DR *recto*, pen and brown ink, wash, 194x123 mm).
55 Inv. PD.120-1961, pen and brown ink over slight traces of black chalk, on paper, Ø 91 mm.
56 Zöllner-Nathan 2011, p. 496 («The Ermine as a symbol of purity»).
57 Marani 2015, pp. 272-273; Salsi 2019, p. 204.
58 Kemp-Barone 2010, p. 45; Bambach 2019b, I, pp. 493-495.
59 *Fiore di Virtù*/Fersin 1953, pp. 107-118, no. 41; Leonardo/Cirnigliaro-Vecce 2019, p. 39, no. 35. See also Marani 1986, p. 146, and 2015, pp. 272-273; Kemp-Barone 2010, p. 45; Salsi 2019, p. 204; Fémelat 2019, pp. 60-61.

Fig. 4 Leonardo da Vinci, *The Ermine as a Symbol of Purity*, pen and brown ink, over slight traces of black chalk, Inv. PD.120-1961. Cambridge, The Fitzwilliam Museum/ © ArtResource, NY

Fig. 5.1 Leonardo da Vinci, *Allegory on the Fidelity of the Lizard*, pen and brown ink, Inv. 17.142.2 *recto*. © New York, The Metropolitan Museum of Art

Sforza and, according to Cirnigliaro, to Ludovico il Moro[60].
The ermine is a symbol of Moderation, both in the traditional *Fiore di Virtù* version and in Leonardo's bestiary, where it refers to the modest appetite of the ermine, who eats only once a day, and would rather be caught by hunters than stain its coat in the flight[61]. The kneeling hunter, who has dug a canal around the ermine and is trying to beat and catch him, is exactly the subject of Leonardo's drawing. Only a few pages later, the ermine is confirmed as a symbol of Moderation as the virtue that ends all vices[62], which is similar to the interpretation given in the Florentine *Fiore di Virtù* of 1491; the passage refers to the «most moderate and most courteous and noble animal in the world», outstanding qualities indeed, which also add the relative symbolism to Leonardo's painted version[63]. The round shape of this ermine, however, gives it more of an emblematic character than Leonardo's other allegorical animal sketches. The date of the ermine allegory, only two years after the completion of the bestiary, circa 1496, would speak to an illustrative purpose or exercise in this context.

Fig. 5.2 Leonardo da Vinci, *Allegory on the Fidelity of the Lizard* (detail), Inv. 17.142.2 *recto*. © New York, The Metropolitan Museum of Art

The Lizard

The subject of the lizard does not appear in Leonardo's initial sequence of the bestiary in Manuscript H, but belongs to the last five added entries [64]. It appears on a sheet that is now separate, which is kept in the Metropolitan Museum of Art in New York with a date, 1496, close to that of the *Bestiario*[65] (**Figs. 5.1-5.2**). Like the *Ermine*, the scene is inscribed in a round medal shape, but this time the drawing is directly accompanied by a text[66]. It shows a man sleeping in front of a tree, while a lizard is confronting a snake, which is threatening the man. The scene has been interpreted as an allegory of Truth by Zöllner and Nathan[67], or an allegory of Fidelity by Bambach, who points to precedents in medieval bestiaries and in the *Fiore di Virtù*, where however the lizard is not present and the crane is a symbol of Fidelity[68]. The source of Leonardo's allegory is not clear. The lizard appears both in Phaedrus's *Fables* and in the *Physiologus*, but with different stories. Some versions of the *Libro della Natura degli Animali* contain the lizard (BML, Ms Ashb. 520)[69], and although this is not an exact source either, it could nevertheless have served as a precedent. Following Salsi, the purpose of this drawing could have been either a medal decoration or a theater costume[70]. However, while the round composition would speak for an emblem, the accompanying text does not. Text and image are meant to go together, and here we are not dealing with a short *motto*. The image is clearly illustrating the text. The drawing dates to two years after the bestiary was compiled, and therefore indicates Leonardo's ongoing engagement with animal symbolism; it could also suggest a possibly related text-and-image version of Leonardo's compilation similar to the *Fiore di Virtù* and the *Libro della Natura degli Animali*.

«Calandrino»

«Calandrino» is the opening allegory in most *Fiore di Virtù* versions where it stands for «Amore in generale», and in Leonardo for «Amore di virtù»[71]. The bird is a symbol of Virtue and Sincerity due to its capacity to foretell the death of a sick person. On folio 190*v* of the *Codice Atlantico* (c. 1508-1510) is a drawing of a birdcage surrounded by some variations on the subject of knots and the sentence: «I pensieri si voltano alla speranza»[72]. Pedretti already related this drawing to the «Calandrino» in the *Fiore di Virtù* that was in Leonardo's possession, to Leonardo's transcription in his *Bestiario* around 1494, and to the *Fiore di Virtù* illustration from 1491, which shows an almost identical cage. He also pointed to the similar story in book III of Cecco d'Ascoli's *Acerba*[73]. Pedretti interpreted the drawing as an allegory of human life, while Fumagalli saw it as an allegory of man's spirit imprisoned in earthly matter, where the winged spirit longs perpetually for freedom but remains

60 Bambach 2019b, I, pp. 493-495 (also for the transcriptions of Leonardo's notes related to the ermine); Cirnigliaro 2023, p. 174.
61 Leonardo/Cirnigliaro-Vecce 2019, p. 38, no. 35.
62 On this, see Marani 2015, p. 273, with reference to Manuscript H (fol. 48*v*).
63 *Fiore di Virtù*/Fersin 1953, p. 108, no. 41.
64 Leonardo/Cirnigliaro-Vecce 2019, p. 50, no. 98.
65 *Allegory on the Fidelity of the Lizard*, Inv. 17.142.2 *recto*, 202x133 mm.
66 «Il ramarro, Fedele all'omo, vedendo quello addormantato, combatte colla biscia, e se vede non la poter vincere corre sopra il volto dell'omo e lo desta acciò che essa biscia non offenda lo addormentato omo», cf. Leonardo/Cirnigliaro-Vecce 2019, p. 50, no. 98.
67 Zöllner-Nathan 2011, II, p. 496. Following Nathan, it could have been designed for the *verso* of a medal (Zöllner-Nathan 2019, p. 478).
68 Bambach 2003a, pp. 149-162, and 2003b, pp. 447-449 (here giving Pliny as the source), and 2019, I, pp. 491-492.
69 See Checchi 2020, p. 13, no. 47.
70 Salsi 2019, p. 206.
71 *Fiore di Virtù*/Fersin 1953, p. 6, no. 1; and Leonardo/Cirnigliaro-Vecce 2019, p. 34, no. 1.
72 For an image, see *Leonardo//thek@* 2024, <teche.museogalileo.it/leonardo/> (last accessed 26 June 2024).
73 Pedretti 2008, pp. 100-101. See also Cirnigliaro 2023, pp. 86-88.

Fig. 6 Leonardo da Vinci, *Correction*, or *Four elements* (formerly *Allegory of Man's Labors*, or *A Cloudburst of Material Possessions*), black chalk, pen and ink, Inv. RCIN 912698. Royal Collection Trust/© His Majesty King Charles III 2022

trapped forever[74]. Finally, Keizer pointed to the story of the bird «Calandrino» in the context of the Love of Virtue, which could be compared with human values and perceptions[75]. Rather, the «Calandrino» in the cage should be seen in the context of the *Fiore di Virtù*. It does not necessarily refer to the books in Leonardo's possession, but to his own version of his bestiary. In the text, the honest and virtuous bird sits in a hedge surrounded by leaves and flowers, while the imprisoned bird in the cage hopes for a possible change.

The comparison between text and image is one of the many meaningful oppositions that characterize Leonardo's visual engagement with the *Fiore di virtù* versions, including his own bestiary.

Correction or Four Elements

The drawing so-called *Allegory of Man's Labors*, or *A Cloudburst of Material Possessions* (c. 1508-1510; Fig. 6)[76] offers itself for two alternative readings based on the texts examined so far. On the one hand, it might have served as a late example for an illustration of the commercially circulating *Fiore di Virtù*. This sheet could be an illustration for the entry on Correction, although not as given in Leonardo's bestiary, but rather in the *Fiore di Virtù Historiato*[77]. All versions have the wolf biting his own foot as a symbol of Self-Correction, while the allegorically enriched versions («historiale», or «historiato») also refer to the Bible and to the punishment of mankind through the ten plagues: rain of blood and frogs, tempest, flies and beetles, sickness of animals, death of the first-born, flooding, fog and darkness. While Leonardo refers to the first allegory of the self-punishing dog in his text, it looks like he converted the allegorical reading of the drawing into a heavenly punishment of mankind through man's own everyday tools, since the inscription on the bottom reads: «Oh human misery, to how many things are you enslaved just for money»[78]. On the other hand, looking back on the common subject of the four elements present in the first part of the *Libro della Natura degli Animali* and in Leonardo's first fable (both mentioned above), we see the four elements of air, water, fire and earth in the clouds, the rain, and the man-made objects lying on the ground in disparate disorder, as if they were all connected. Although the fable connects Pride (*superbia*) to the example of the crabs, the essence is the same: «ove cadendo la superb[ia] si converte in fuga, e cade del Cielo; onde poi fu beuta dalla secca terra, dove, lungo tempo incarcerate, fe' penitenzia del suo peccato»[79] – while Pride tries to escape, it falls down from heaven onto the earth and seeks penance for its sins.

So far, we have analyzed drawings whose content was taken more or less directly from the *Fiore di Virtù* or from Leonardo's bestiary, or from sources that influenced his

74 Pedretti 1978-7199, I, p. 103, and 2008, pp. 100-101; Fumagalli 1959, pp. 61-62. While Pedretti (2008, pp. 100-101) considers the elements on this sheet as a preparatory drawing for a mural or textile decoration, possibly for Milan, Versiero (2016, pp. 112-115) points more directly to a political allegory in the context of a domestic decoration for a Villa outside Milan, inhabited by an ally of the French king Louis XII.
75 Keizer 2012, p. 452.
76 Royal Collection Trust, Inv. RCIN 912698, black chalk, pen and ink, 117x111 mm. See Zöllner- Nathan 2011, II, p. 498.
77 Leonardo/Cirnigliaro-Vecce 2019, p. 35, no. 12; *Fiore di Virtù* 1483, fol. c5r, no. 16; *Fiore di Virtù*/Fersin 1953, pp. 45-47, no. 17.
78 For the English translation, see Keizer 2019, p. 180. Several authors have pointed to Burchiello's sonnets as the source for his inspiration, and for his dialectical technique of cascading words. The application here should be seen in the light of Leonardo's prophecies (Vecce 2000, p. 31, and Cirnigliaro 2023, p. 181). Keizer (*ibid.*, pp. 179-180) reads this drawing as a prophecy and dates it to 1513. Based on the inscription on the bottom, he sees this in the context of greed and its negative consequences.
79 See citation in Leonardo/Cirnigliaro-Vecce 2019, p. 6.

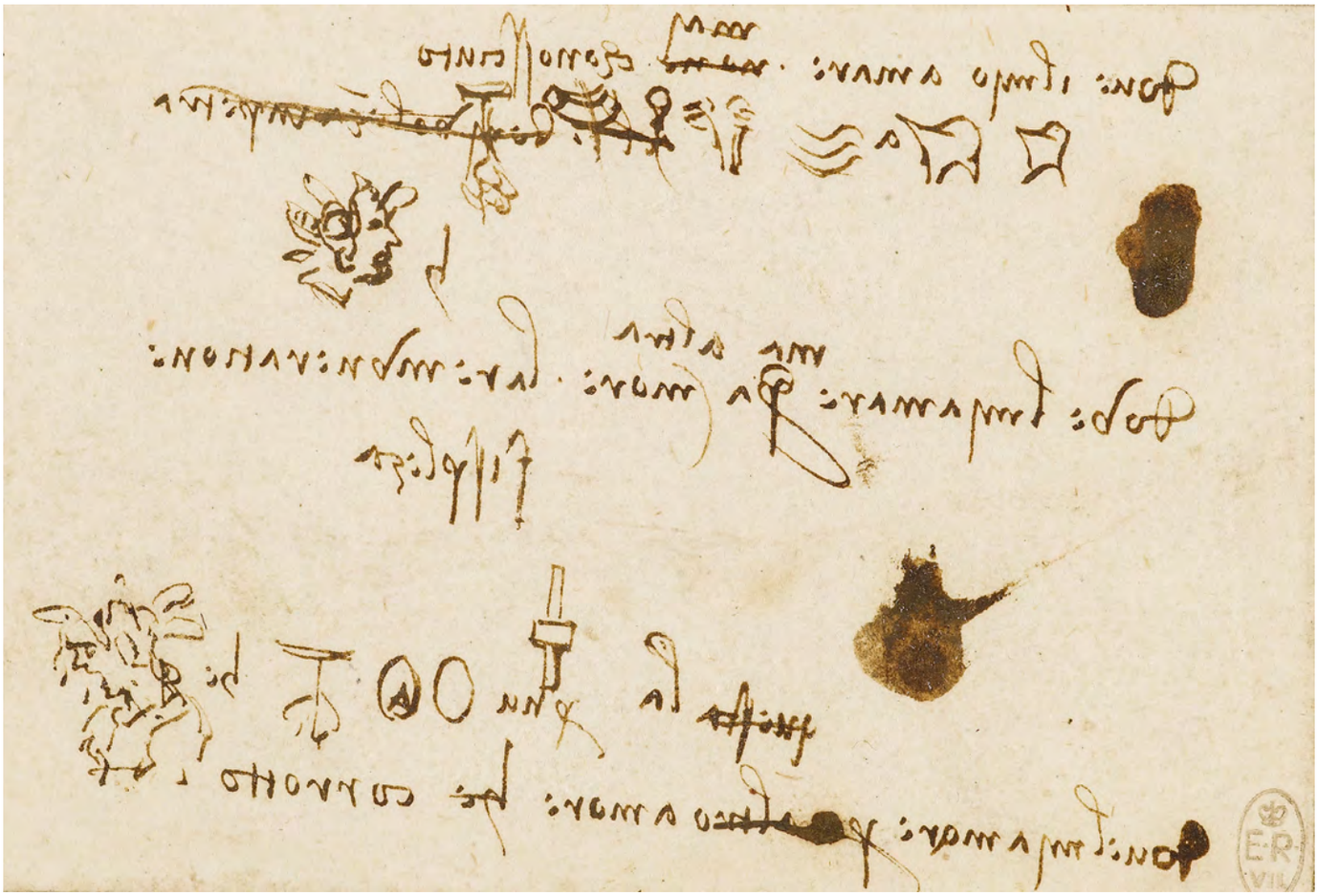

Fig. 7 Leonardo da Vinci, *Pictographs*, pen and ink, c. 1487-90, Inv. RCIN 912696. Royal Collection Trust/ © His Majesty King Charles III 2022

compilation. All these drawings could have almost served as illustrations to the texts but could likewise mirror his reflections on these sources as he was reading them. Another category of drawings also mirrored these reflections in a more complex, composed and layered manner.

Leonardo's Bestiary as a Key for Reading Complex Allegories

Several of Leonardo's more complex allegorical drawings may be interpreted through the symbolism presented in the bestiary. They are not illustrations referring to a precise entry, but they rely on the combined allegorical meanings of individual animals and their symbolic coding. The reading key therefore lies in combining the allegorical meanings of different entries into a syncretistic reading of virtues and vices. Developing a reading key was an exercise that Leonardo had already experimented with on earlier occasions.

Some examples show *Puzzle Writing* using pictograms, as a combination of text, symbols, and sometimes also figurative expressions (Fig. 7)[80]. In a way, the drawing *Geometrical Studies of Related Areas* (c. 1513) may also be seen in a similar light[81]. There, geometrical shapes are listed and described in all their variations and in their dynamic increasing and decreasing of complexity in almost a tabular format, thereby suggesting the idea of a reading key for some other purpose. Kemp has pointed to Leonardo's idea of giving cross-references in his books (here talking about dynamics) and laying out the principles of motion[82], which, in the end, is also a reading key for ornamental motifs.

Apart from the aforementioned drawing exercises in animal allegories, there are different sets of allegorical drawings that include human allegories, sometimes with added animal symbolism, set into the context of an accompanying text. The nature of the text is similar to the allegorical and moral sections in the *Fiore di Virtù Historiato* or the *Libro della Natura degli Animali*. These can be either short phrases and general statements, like quotes from biblical or historical figures, ekphrastic descriptions of the accompanying figurative scene, or allegorical and moral readings and interpretations of a subject. These drawings all date to around 1494, the time of the compilation of the bestiary,

80 Royal Collection Trust, *Puzzle Writing using Pictographs*, c. 1487-90, Inv. RCIN 912692*r*, pen and ink, 300x253 mm; and *Pictographs*, c. 1487-90, Inv. RCIN 912696*r*, pen and ink, 67x103 mm.
81 VBA, *Codice Atlantico*, fol. 455*r*.
82 Kemp 2006b, p. 297.

Fig. 8 Leonardo da Vinci, *Allegory with Solar Mirror*, pen and brown ink, 1494 circa, Inv. 2247 *recto*. Paris, Musée du Louvre, Département des Arts graphiques/© GrandPalaisRmn

and they occur at a time when Leonardo was mainly travelling between the Sforza courts of Milan, Pavia and Vigevano[83].

Allegory with Solar Mirror

The *Allegory with solar mirror*, also called *Allegory with Animals Fighting and a Man Holding a Burning-glass*[84] (c. 1494; Fig. 8) has puzzled generations of scholars. In a rural landscape with ruins, a man is sitting on a stone holding a shield or mirror, which reflects the sunlight onto the five animals fighting in the grass before him[85]. Fumagalli interpreted the animals as a winged dragon attacking a lion, which in turn is being attacked by a wolf. The two animals in the foreground should be another lion and a unicorn, while on the left edge of the picture a wild boar observes the scene[86]. Using the allegorical reading key from Leonardo's bestiary, the identification of the animals changes slightly. In the center, the winged snake-like basilisk/asp stands for Cruelty, as his task is to catch and kill animals in the grass[87]. He is being attacked from behind by a bear, who stands for Anger, which adds cruelty to

83 During this time, he was likewise busy with Latin grammar, mechanics and hydraulics, drawing knots and interweavings, as well as grotesque heads and characters, and possible visits from his mother. Most of his occupations occurred in the environment of courtly life.
84 Paris, Musée du Louvre, Département des Arts graphiques, Inv. 2247 *recto*, pen and brown ink, 104x124 mm. Zöllner-Nathan 2011 (II, p. 495) have entitled the drawing *Allegory with Animals Fighting and a Man with a Burning-glass*.
85 Bambach 2003b, pp. 443-446, no. 67, and Keizer 2012, p. 444.
86 Leonardo/Fumagalli 1915, pp. 360-361. Other interpretations see a dragon, lion, wolf or bear, female lion or cat, and a wild boar (Salsi 2019, pp. 212-213).
87 See *Fiore di Virtù*/Fersin 1953, pp. 35-36, no. 14; Leonardo/Cirnigliaro-Vecce 2019, pp. 35, 41, 46-47, nos. 10, 50, and 75.

the scene[88]. Similarly, the unicorn as a symbol for Intemperance[89], entering the scene from the side, pushes its horn into the basilisk/asp, thus engaging in the fight. In the immediate foreground, another animal is watching the scene closely, bending its forelegs as if ready to jump into the fight. As Leonardo tells us, this is a panther, an animal that never stops fighting even if it is nearly dead[90]. Other animals enjoy looking at it because of its beauty, but they do not look into its terrible face, which the panther likes to hide, and whoever looks at it is immediately devoured[91]. While the bear, the unicorn and the panther are all encouraging the fighting, two other animals appear as the greatest enemies of the cruel basilisk/asp in the center. The basilisk itself is attacking a «bellula» or *donnola* (weasel) in front of him, which is the only animal capable of killing a basilisk[92]. The wild boar hiding on the left could be an Ichneumon, described in the *Physiologus* as being similar to a pig. Leonardo lists the Ichneumon in his bestiary, but without offering a physical description of it. He defines the Ichneumon as the worst enemy of the asp, whom it is actually capable of killing by covering itself with mud from the Nile, drying in the sun, and thereafter fatally attacking the asp[93]. The Ichneumon in the drawing therefore benefits from the sun mirror, which prepares him to fight the evil vice in the center of the scene. The man in the back with the mirror is obviously helping the Ichneumon and the «bellula»/*donnola* kill the basilisk/asp, as he shines the sun-light directly onto these two animals and not onto the others. The sun casts light on this scene of the battle between the virtues and vices, while the man intervenes in the situation as a moderator. In their agency of embodied allegories, the animals are carriers of symbolic meaning, while the man stands for mankind in general. By helping the animals with the sunlight, he is likewise also protecting himself from the vices. The opening chapter of the *Fiore di Virtù* highlights the love of virtue[94], which shines even more brightly when presented in the context of controversies than when it is in the company of other like-minded entities. Thus, the light of virtue shines more brightly when its opposite is around as moral darkness. It is precisely this scene in Leonardo's drawing that exemplifies the Love of Virtues as a whole. The drawing offers itself as a syncretistic reading of Leonardo's bestiary, and it might have been intended for an opening or closing section of the text, possibly as an illustration. In this sense, the scene could also play the role of an *exemplum* («esempli»)[95]. Exempla are the final entries in both the *Libro della Natura degli Animali* as well as in Leonardo, where he compared six animals on the subject of the eye and of ways of seeing, which in the drawing are transformed into six animals dealing with light and the modes of visual perception. Not by accident, the drawing dates to the same year as the bestiary itself. The basilisk appears in the *exempla* part of the *Libro della Natura degli Animali*[96] as the king of the serpents who kills every living thing with its eyes, and only the «bellula»/*donnola* is capable of injuring it. Since the basilisk's age-old enemy was mankind, the «bellula»/*donnola* must be interpreted as the soul when it is full of repentance and ready for penance, and therefore ready to kill the vices[97]. This interpretation in the *Libro della Natura degli Animali* confirms a reading on different levels of the animal's meaning, with the basilisk as a major vice set against mankind and the «bellula»/*donnola* as the savior of the human soul.

As Leonardo's drawing appears to be more than just a study, the question arises as to whether it could have served as a presentation piece. One drawing stands particularly well for this attitude, which presumes shared knowledge as a premise for a reading key, which lies at the basis of most allegories, especially in Florence. When returning to Florence in 1500-1501, Leonardo exhibited a drawing at the Santissima Annunziata for two days, and Vasari reports that it was a *The Virgin and Child with Saint Anne and a Lamb*. The point in question was exactly whether the spectator would grasp the drawing's allegorical content. The contemporary Carmelite Pietro da Novellara described two different allegorical steps to approach images. The first is the simple reading of the figures and their allegorical meaning, which is, for example, Mary symbolizing the church, and the lamb symbolizing the passion; on top of this, are more sophisticated interpretations of their interactions. For instance, the friar proposes a reading of Saint Anne holding back Mary from separating the Child and the lamb as meaning rescuing Christ from his future Passion[98]. The two different steps in allegorical interpretation require different levels of preparation from the spectator. While for Mary as the church and the lamb as a symbol of the Passion widely available texts like Bible *compendia* or beginner's reading text from the school *curriculum* as the *Fiore di Virtù* or the *Physiologus*, which transmitted a broad knowledge of religious and moral interpretations, would have been sufficient, the second step of the allegory is more challenging and requires greater interpretative knowledge and capacity for reflection on behalf of the spectator. The fact that Leonardo exhibited this drawing in Florence for two days therefore was probably due to his empirical interest in challenging spectators and in observing and listening to them to see how far they would get in their understanding of

88 Following Fumagalli's reading of this animal as a wolf (1915, pp. 360-361), some researchers have agreed – although this identification seems less likely. If this was the case, it would stand for Correction, trying to behold and mediate (*Fiore di Virtù*/Fersin 1953, pp. 45-46, no. 17; Leonardo/Cirnigliaro-Vecce 2019, p. 35, no. 12).
89 Cf. notes 47 and 48.
90 Leonardo/Cirnigliaro-Vecce 2019, p. 49, no. 92.
91 *Ibid.*, p. 45, no. 71.
92 *Ibid.*, p. 47, no. 76.
93 *Ibid.*, pp. 47-48, no. 81. In the *Physiologus*, the pig-like Ichneumon killing a dragon is compared to Christ killing the devil (*Physiologus*/Schönberger 2001, pp. 43-45). The *Libro della Natura degli animali* lists a wild boar with the characteristics of being cruel and prideful, and parts of it would serve as medicine (Vatican, Chig.M.VI. 137, no. 88, see Checchi 2020, pp. 352-353).
94 *Fiore di Virtù*/Fersin 1953, pp. 4-7, no. 1; Leonardo/Cirnigliaro-Vecce 2019, p. 34, no. 1.
95 VBA, *Codice Atlantico*, 730*v*; citation in Leonardo/Cirnigliaro-Vecce 2019, p. 50.
96 BAV, Ms Chig.M.VI.137 (Checchi 2020, p. 11, no. 101).
97 For the citation, see Checchi 2020, pp. 369-370.
98 On the drawing, see Vasari/Bettarini-Barocchi 1966-1987, IV, p. 29; Bambach 2003b, pp. 3-30, especially p. 19, and 2019a, pp. 59-71; Keizer 2012, pp. 433-455; Nagel 2014, pp. 117-127.

Fig. 9 Leonardo da Vinci, *Two Allegories of Envy*, pen and brown ink, with some light red chalk, c. 1494, Inv. 0034 *recto*. © Oxford, Christ Church. By permission of the Governing Body of Christ Church

the image: acknowledging a fine composition with sweet and caring expressions in the typical Leonardesque manner, reading the basic Christian symbolism in its figures, or realizing the more complex religious allegory behind the more eye-catching and obvious details. A spectator of the animal allegory would have likewise been challenged to read the moral allegory, which would have only been possible for those knowledgeable about the *Fiore di Virtù* and the *Libro della Natura degli Animali*. These texts conveyed the animal symbolism for the single figures, but on top of this, the spectator would have been asked to put the symbolism together to form a combined allegorical message. In the scholarship, the scene of the *Allegory with the Solar Mirror* has often been interpreted as a moral allegory[99] a political allegory[100] or a singular version of *Orpheus among the Animals*[101]. Following Fumagalli and Bambach, the sun would stand for Truth and the man would be holding the mirror of Virtue or Science[102]. Versiero and Marani interpreted the *Allegory with the Solar Mirror* as an allegory of *Veritas* (1494)[103]. A number of researchers has already made the connection to Leonardo's Manuscript H containing the bestiary and the fables, although they have only used it for single allegorical readings, like for the bear and the unicorn[104]. According to Bambach's summary reading, *Allegory with Solar Mirror* can thus be understood as a struggle between the world of evil, i.e. of darkness, symbolized by the protection of animals fighting among themselves, and the world of truth, symbolized by the blazing sun whose rays are reflected on the shield-mirror[105]; it

99 For example, Popp 1928, p. 37.
100 Bambach (2003a, pp. 149-162) proposed two different readings: as a moral and political allegory addressing Lodovico Sforza, or as a representation of the underworld with an animal fight, aided by *Veritas* holding the sun-mirror to brighten up the darkness. See also Leonardo/Fumagalli 1915, pp. 360-361, and Salsi 2019, pp. 212-213.
101 Chastel 1959, pp. 272-274.
102 Leonardo/Fumagalli 1915, pp. 360-361; Bambach 2003b, pp. 443-446, no. 67. See also Khalifa Gueta 2018, pp. 127-130.
103 Marani 2015, p. 275: «Verità che mette in fuga le fiere, allusive dell'intemperanza (l'unicorno) e dell'ira (l'orso) che incitano alla violenza autodistruttiva (il drago, che 'morendo fa sua vendetta': Ms H, 15 recto) cui si oppone la forza (leone e leonessa)»; Versiero 2012, pp. 259-260.
104 Leonardo/Richter 1970, nos. 1220-1263; Marani 2008, pp. 60-62.
105 Bambach 2003b, pp. 445-446, no. 67.

is the essence of the animal symbolism and of Leonardo's invention to use different animals from his bestiary for the composition of one complex allegory. Thus, Bambach's interpretation as a Mirror for Virtue can be confirmed by reading this scene as a battle between virtues and vices as symbolized through the allegorical reading in Leonardo's bestiary. A political reading could then be placed on top of this, but it is not necessary as long as we understand the allegory as a syncretic approach to the bestiary.

Two Allegories of Envy

Around the year 1494 and almost contemporary with the bestiary, Leonardo produced a series of allegories on Envy, drawings that picture human personifications and sometimes add animal symbolism, which are set into context with an accompanying text. The sheet in Oxford, Christ Church shows allegories related to Envy on both sides of the paper[106]. These allegories are particular as they have a text body running next to them that expands on the subjects presented. Nova dates the sheet to circa 1483-1487 or 1494, Marani to 1485-1487, Bambach to circa 1485-1487, and Zöllner and Nathan a little later, to around 1490-1494[107]. Dating the sheet around 1494 would make them coincide with Leonardo's bestiary, to which they seem connected. While Bambach and Keizer do see a connection with literature, they observed this only on a general, abstract level where painting competes with literature. Bambach writes: «They could have served as examples of how a painter might pictorialize an idea in competing with a poet in a *paragone*, or comparison of the arts»[108]. Joost Keizer supposes that the text and the image were intended merely as a private exercise, «written by and for himself, and not for anyone else»[109]. The drawing shows on the *recto* an ugly old woman riding on a skeleton, with a bundle of arrows as a saddle (**Fig. 9**). The accompanying text begins with a description of the scene[110]:

> Envy should be seen as a figure pointing heavenwards, for if she could, she would challenge God. She holds a mask before her face to look more beautiful. Among her other features figure is her thin appearance, which is due to the evil words she speaks, symbolized by arrows for their pointy character. In her hand she holds a vase full of flowers, hiding toads and scorpions in the water. As Leonardo explains, Envy would never die and therefore she has all her instruments of death with her.

Applying Leonardo's bestiary as a reading key for the aforementioned animals, the masked Envy, hiding her intentions, is Evil-Speaking, which makes her heart like a serpent – an animal, following Leonardo, that could absorb and breath in its victims through its mouth, therefore underlying a reading of the mouth as an organ that brings death[111]. The text continues with a description of the woman's tongue as an arrow, which she uses to offend people. Her leopard cover would help killing the lion in an act of envy. In the bestiary, the leopard is an animal always close to the enemy and its victim, whereas the fearless lion helps people on their way to virtue[112]. A positive ending is obviously not intended in the drawing, where every act leads towards envy and oppresses virtue. The vase filled with flowers, scorpions and toads, described as poisonous, can be read through the animal symbolism as Avarice and Gluttony, an excess of greed. Toads as a symbol of Avarice, and scorpions as a symbol of Gluttony both align well with the intended Envy and with the characters who usurp everything for their own advantage[113]. On the right side of the page is a couple standing, which share one pair of legs but have two separate torsos and two heads. Below them is a short allegorical statement, comparable to those usually given by a literary *auctoritas* in the moralizing and allegorical sections of the *Fiore di Virtù Historiato*: «Subito che nacscie la virtu que la partorisscie chontra e la invidja / e prima sia il chorpo senza l[']onbra chella virtu sanza la invidja»[114]. The sentence suggests that virtue and vice have the same origin and are made from the same element. This is precisely what is depicted on the right side of the drawing: the one body with one pair of legs, but two upper parts. The *Fiore di Virtù* defines Envy as one of the main vices, standing in opposition to love, which is the basis for all virtues. Envy could be seen as having two orientations: feeling sorrow for other people's good fortune, or being content about other people's misfortunes. Aristotle had said that the nature of virtue requires a well-structured mind rather than physical beauty, because virtue resides in a person's soul, and is exemplified in piety and love, and in honoring God[115]. The drawing with its accompanying text can be read as an addition to Leonardo's entry on Envy, which was indeed very short[116]. The text Leonardo adds here is along the same lines as an allegorical reading of a *Fiore di Virtù Historiato*, with the two differences that in his examples Leonardo adds some pointed verbal wit to the characters, and the same vein

106 Inv. 0034*r-v*, pen and brown ink, with some light red chalk on the *recto*, 210x289 mm (Byam Shaw 1976, I, pp. 36-37, no. 17).
107 Nova 2001, pp. 381-386; Kemp-Barone 2010, pp. 87-89; Zöllner-Nathan 2011, II, p. 494; Marani 2015, p. 274; Bambach 2019b, I, pp. 483-484.
108 *Ibid.*, I, p. 483. See also Bambach 2003b, pp. 400-403, no. 54; Keizer 2019, pp. 128-135. In another essay, Keizer (2012, pp. 451-452) had pointed to nature as the starting point for Leonardo's *idea* for this sheet, where Leonardo on the basis of natural objects «re-assembles it as culture». Following Martin Kemp and Juliana Barone, the sheet might have been cut significantly, leaving an impact on the remaining drawings and texts (Kemp-Barone 2010, pp. 88-89).
109 Keizer (*ibid.*, pp. 442-443) sees the accompanying text as the artist working as an art historian to explain the drawing.
110 *Recto*, on the left: «Questa j[n] vid[ia] si figura chole fiche v[er]so l' cielo / p[er]che se potessi v[er]e[b]e le sue forze cho[n]tro a dio / fasi cola maschera j[n] volto dj be[l]la dimostratio/ne fassi che la ferita nella vista da palma / e olivo fassi ferito lorechio di lavro e / mirto a ssignificare che vettoria e vertu loffendono fassi le usscire molti folgori / a ssignificare il suo mal djre fassi magra / e ssecha p[er]che sempre j[n] continuo strugime[n]to / fasse le jl core roso da un serpe[n]te e[n]fian / te fassi le un turchasso che le frecie / lingue p[er]che speso cho[n] quela offe[n]de / fasse le una pe[l]le dj liopardo p[er]che chuel[lo] / p[er] invidia ama[z]za i[l] lione chon i[n]ga[n]no / fasse le un vaso j[n] mano pie[n] di fiori essi / acque li pie[n] di scorpioni e rospi e altri / veneni fasse le chavalchare la morte / p[er]che la invidia no[n] more[n]do mai languisce a signoreg[g] iare fassele la briglia [chari] / cha e charicha dj div[ersi] armj p[er]che / tuti strume[n]ti de la morte»; *recto,* on top: «Tolerare. / J[n]tolerabile» (Bambach 2003, pp. 400-401; Bambach 2019b, I, p. 485-486). See also Keizer 2012, p. 443 (quote).
111 Leonardo/Cirnigliaro-Vecce 2019, p. 44, no. 64.
112 *Ibid.*, pp. 37, 42, 45, nos. 21, 59, 68.
113 *Ibid.*, pp. 35, 41, nos. 8 and 54.
114 Bambach 2019b, I, p. 484: «As soon as virtue is born, envy is delivered in the same instance. It would be easier to find a body without its shadow, than virtue without envy».
115 See the allegorical reading in *Fiore di Virtù* 1483, fol. b2*r*, no. 7; *Fiore di virtù*/Fersin 1953, pp. 19-21, no. 8; and also Leonardo/Cirnigliaro-Vecce 2019, p. 34, no. 2.
116 Leonardo/Cirnigliaro-Vecce 2019, p. 34, no. 2.

Fig. 10 Leonardo da Vinci, *Two Allegories of Envy*, pen and brown ink, c. 1494, Inv. 0034 *verso*. © Oxford, Christ Church. By permission of the Governing Body of Christ Church

of wit to the allegorical drawings. The nature of the written moral allegory and its visual counterpart speaks for the hypothesis that Leonardo might have had his own illustrated version of the *Fiore di Virtù* or the *Bestiario Historiato* in mind[117]. The back side of the sheet (*verso*) presents another two allegories on the subject of Envy, likewise with explanatory texts next to them (Fig. 10). On the left are two men riding a frog, with the first aiming at something with a bow and arrow. Behind the group, a skeleton is running. The right side presents another double human figure with one pair of legs and two upper bodies, one male and one female, this time looking away from each other at objects in their hands. Leonardo describes the group on the left as Evil-thinking («mal pensiero») and Envy[118]. Bambach has reconstructed the partially destroyed accompanying text with the help of the Milanese painter Giovanni Paolo Lomazzo's description of the sheet (*Trattato dell'Arte de la Pittura*, 1584). Following Lomazzo's reading, Evil-thinking as Ingratitude and Envy are both riding a frog, which would stand for Imperfection. Thus, the first rider in Leonardo's drawing symbolizes Evil-thinking, a brutal, thin and choleric person, naked and with arrows in their hands; behind them sits Envy itself, an old, ugly and pale person, as Apelles had pictured them[119]. This is a rare occasion where Leonardo explains the animal in the allegory directly in the accompanying text, namely, the frog as a symbol of Imperfection, thus confirming that animals in his drawings could be read symbolically. His bestiary gives two additional interpretations for the toad or frog: one version stands as a symbol for Avarice, someone wanting more and more, while in the other version, the toad is running away from the sun, meaning that it is fleeing

117 Keizer (2012, p. 443) sees the drawings as «a private reflection on the making of an allegory. It is an experiment in the way pictures gather allegorical meaning».
118 Figures below and on the left: «il mal pe[n]siero e[n] i[n]vidia / over j[n] gratitudine»; *verso*, on bottom: «fango, oro» (Bambach 2003b, pp. 400-401). See also Kemp-Barone 2010, pp. 87-89; Keizer 2012, pp. 433-455, especially p. 443.
119 «Fomansi ancora, per ammaesstramento et instruttione della vita umana, altre figure in questo genere, come il mal pensiero con l'invidia, overo ingratitudine, la quale si rappresenta sconcertata e mal acommodata sopra una rana che è l'imperfezioni, e dinanzi mal pensiero, cioè l'intento dell'invidia, tutto magro, asciuto, secco, pallido e colerico, con faccia malvagia e gesti iniquo, che scocca a mira una saetta, essendo tutto ignudo […]. Ma l'invidia la quale è di dietro, seguendo il suo malvagio pensiero, si dipinge vecchia, brutta e pallida, come già la fece Apelle» (quotation in Bambach 2019b, I, pp. 486-487). See also Keizer 2012, p. 453, and 2019, pp. 133-135; Bambach 2019b, I, pp. 486-487.

away from the light of truth and virtue[120]. In Leonardo's drawing, this is rendered exactly in the same context, with Evil-thinking, Ingratitude and Envy trying to escape on their animal vehicle. Evil-thinking or Ingratitude, the first rider on Leonardo's frog, is a vice that Leonardo added to his list of bestiary entries[121], as it was not present in the printed *Fiore di Virtù* versions. He presented the story in the context of ungrateful children, who, once grown, turn against their parents and steal from them. Interpreted through Leonardo's bestiary, the drawing points to a reading of Envy in the context of a personal circumstance, where people are trying to flee from the light of truth. Along with Ingratitude, Leonardo likewise added Gratitude as a pairing concept in the bestiary[122]. Both versions deal with children and their parents, with the one as an example of ungrateful children, and the other of loving and caring children. This may be the connection to the double figure on the right in Leonardo's right-hand drawing. This figure displays the same body for two people, a male and a female, forming a couple labeled by Leonardo as «piacere» and «dispiacere»[123], always going together but facing in opposite directions due to their different natures but the same essence, as explained in the text[124]. Both figures stretch their arms to their front and back, while they hold additional elements together. On the right is a tree branch bearing fruits while the left side shows a bundle of wood, where the text explains ironically that this could only be used by Tuscans as legs on beds. This pair is obviously connected to Leonardo's entries on Gratitude and Ingratitude, which concern caring for ravenous children. Both allegories of Envy on this side of the sheet may therefore deal with Envy in a personal or familial context. This interpretation may be strengthened by Leonardo's ironic note in the accompanying text, implying that Tuscans staying in bed too late in the morning in order to recover from the previous night instead of getting up early to start the day in a productive manner and not with laziness and lascivious pleasures. This combined allegory is certainly one of the most puzzling. It looks like Leonardo was experimenting with different kinds of Envy: in society, in the family, and in politics. Scholars have been searching for a Milanese court context to attach to both sides of the sheet, as Nova tried to do by suggesting four political allegories for the court of Ludovico il Moro[125]. Following Keizer, the whole drawing could have been intended as a demonstration piece to be displayed at the Milanese court, which might have earned Leonardo the position of court allegorist[126]. While the *verso* of this sheet certainly seems more personal, it should still be seen in the light of Leonardo's allegorical interpretations in word and image, as he practiced devising animal symbolism and readings of the virtues and vices on different allegorical levels. The syntax of moralization is once again comparable to the *Fiore di Virtù* and the *Libro della Natura degli Animali*: «Et chi est padre et madre delo peccato? Superbia, che est principio del peccato, et ingratitudine, che tucti li notrica quanti homo ne fae»[127].

Two Other Allegories of Envy

The two allegories of envy on another sheet in Oxford, Christ Church[128] (**Fig. 11**) are likewise complex in their composition, but this time there is either no or very little text associated with them. Following shortly after the others, their date should remain the same, around 1494. On the left side of the *recto*, two women are sitting next to each other with their lower bodies parts almost joining into one. One woman is looking into a mirror held in her hand; the other figure is double faced: one is a male (otherwise interpreted as an old woman) looking backwards into the other side of the mirror, and the other is a young woman holding a sword in one hand while facing towards the first woman. In her other hand is a snake (with more snakes below her) and she is leaning backwards, where the devil is rushing into the scene in the company of a pack of foxes. Above the devil, a falcon approaches him and the foxes. This front page has no inscriptions that can help with our interpretation, but looking into traditional symbolism and to the *Fiore di Virtù* allegories can help us disentangle the characters. On the left side, the women with the mirror and the sword are easily readable as Prudence and Justice, here rendered with their traditional attributes, a sword and a mirror. Both personifications are listed in the *Fiore di Virtù* and in Leonardo's bestiary as virtues[129]. In Leonardo's bestiary there are several snakes, often fighting with birds that have the ability to kill them. Here they are obviously directed towards the falcon, which is flying in from the right. Other snakes («aspido») bring immediate death to the enemy through the venom in their fangs. On the right side, the falcon, a symbol of Pride («Superbia»), is exciting the pack of foxes, who stand for Falsity. They are running towards the sitting women and their snakes, which then start a fight with the foxes[130].

120 Leonardo/Cirnigliaro-Vecce 2019, pp. 35, 42, nos. 8 and 56.
121 *Ibid.*, p. 35, no. 9.
122 *Ibid.*, p. 35, no. 7. While enriching the original *Fiore di Virtù* entries with Gratitude and Ingratitude, Leonardo obviously paired them with animal symbolism, birds in both cases (bird «Upica», pigions), which he obviously did not want to incorporate in the drawing.
123 *Verso* on upper right: «Piacere e dispiacere / fannosi binati p[er]che maj luno e sanza laltro chome se fussin appiccati volta[n]si / le schiene p[er]che so[n] co[n]trari»; *verso* below figures: «se piglieraj il piacere sap[p]i che lui a djrieto asse chi ti porgiera / tribolatione e pe[n]time[n]to» (Bambach 2003b, pp. 400-401).
124 *Verso,* on the left: «questo si e il piacere i[n]sieme chol dispiacere e figuransi binati p[er]che mai luno e spiccato dal altro / fan[n]osi cholle schiene voltate p[er]che son chontrari l'uno a l'altro fan[n]osi fondati sopra un me / desimo corpo p[er]che an[n]o un medesimo fondame[n]to j[n]p[er]oche ']l fonda[men]to del piacere / si e la faticha chol dispiacere il fondame[n]to del dispiacere si sono j vani e lascivi piacieri. E pero qui si figura chola channa nella ma[n] destra ch e vana e se[n]za forza / e le puncture fatte cho quela so[n] venenose metto[n]si j[n] Toscana al sostegnio / de letti a significare che quivi si fan[n]o j vani sogni e quivi si chonsuma / gra[n] parte della vita quivi si gitta di molto utile tempo c[ioè] quell della mattina / che la me[n]te e sobria e riposata e chosi il corpo atto a ripigliare nove fatiche / anchora li si pigliano molti vani piaceri e chola me[n]te jmagina[n]do cho/se j[m]possibili a se e chol chorpo piglia[n]do que' piaceri che spesso son cha/gione di ma[n]chame[n]to di vita siche per questo si tiene la cha[n]na per tali fo[n]damenti» (Bambach 2003b, pp. 400-401); and also Bambach 2019b, I, pp. 487-488. Oppio (1995, pp. 190-193) sees the combined allegory inspired by Filarete's combined figure of Virtue. Filarete's figure, instead, should be read in the same context of opposed virtues, as in the *Fiore di Virtù*.
125 Nova 2001, pp. 381-386; Kemp-Barone 2010, p. 16.
126 Keizer 2019, pp. 134-135.
127 BAV, Ms Chig.M.VI.137, see Checchi 2020, p. 217, no. 5.
128 Inv. 0037*r-v*, pen and brown ink, 206x283 mm (Byam Shaw 1976, I, p. 37, no. 18).
129 Leonardo/Cirnigliaro-Vecce 2019, pp. 36-37, nos. 14, 16, 18, 19, 21. While the virtues are listed in both texts, the respective animal symbolism has not been integrated into the sheet (ant, bees). Leonardo had chosen the classical figural allegory.
130 Leonardo/Cirnigliaro-Vecce 2019, pp. 37-38, 41, 44, nos. 19, 30, 51, and 64. Similar passages may be found in the *Fiore di Virtù*.

The allegory of the devil is only given in the traditional *Fiore di Virtù* versions (1483 and 1491), while this entry is missing in Leonardo. The devil stands for Injustice, the opposite of Justice, which means for the drawing that he is aiming at the woman leaning backwards trying to defend herself with her death-bringing snakes, who are heading towards the false foxes sent by the devil. Most of the *Fiore di Virtù* versions would have also contained the symbolic components to read this allegory, regardless of whether they were «historiata» or not. The allegorical drawing therefore refers to the combined sources of the *Fiore di Virtù* with the *Bestiario*. The double figure seated on the cage, from which the snakes are coming, could be another example of Leonardo's combined opponents, this time Justice and Injustice, if we read the old face as the devil's counter face. The double-faced person therefore carries both parts in themselves. To summarize: Prudence is necessary for recognizing justice or injustice in a person. Once discovered with the help of the mirror, justice needs to activate her death-bringing devices against Falsity and Pride, the means of Injustice. Reading the allegory could therefore reveal a person's inner struggle. Using further allegorical content from the *Fiore di Virtù* 1491, we learn that the devil does not listen to reason and that he finds pleasure in doing evil[131]. One of his seven daughters was Lady Envy, who married an artisan. This allegorical detail could locate the drawing once again in a personal context. Several authors have attempted to read these drawings as political allegories. Nova put it in the context of a possible *Fiore di Virtù* reading and pointed to Leonardo's bestiary, wherefore he also expanded the date range from between 1483-87 to around 1494. He reads the large bird flying in from the right as a kite or «Nibbio», which in the *Fiore di Virtù* stands for Envy. The allegory, to be placed iconographically at the court of Ludovico Sforza in Milan, would show «Ludovico's virtues on the left (Justice, Prudence, Vigilance, Truth), which protect the Milanese grass serpents in the cage», all attacked by the kite/«Nibbio» from above[132]. Kemp, Versiero and Salsi followed this idea of a political allegory[133]. Zöllner and Nathan called it *Allegory of Statecraft (Justice and Prudence)*[134], while Bambach, in this interpretive vein, proposed the title *Allegory on the Political State of Milan*; she also interpreted the snakes and the dove above the double figure in the middle, which the woman is waving at the foxes and the devil, as allegorical symbols for Ludovico Sforza and Bona di Savoia[135]. As in the other cases, and still following the allegorical vein of the *Fiore di Virtù* with multiple interpretative layers, it would be possible to superimpose a political allegory on top of the *Fiore di Virtù* reading. In this case, the snakes become a more powerful weapon, which are fighting falsity and injustice in a specific context. In any case, this drawing should not be read as a study for theater designs or other temporary decorations[136], but rather as an intellectual experiment in applying different levels of allegorical symbolism on pictorial exercises. Once again, Pier Candido Decembrio might have influenced Leonardo here. The Milanese court humanist, sometimes condemned sometimes acclaimed, composed the lives of Filippo Maria Visconti and Francesco Sforza with a lot of detail, wit, rivalry and ambiguity. While we can once again exclude a literal comparison, the at times entertaining short stories of the leader's behaviors entail plenty of political and personal wit mixed with pointed descriptions that might have caught Leonardo's interest upon his arrival in Milan[137].

The allegory of the *verso* is usually called *Allegory of Fame Attacking Envy* (**Fig. 12**). On the right, a winged figure holding a spear up with their right hand is attacking another person in front of them who in turn is holding a bow and arrow in their direction. At the top of the sheet we read: «A body may sooner be without its shadow than Virtue be without Envy», while the words between the figures read «fame, or rather virtue»[138]. Bambach connects the winged figure to Lomazzo's interpretation of Leonardo, in which «Virtue was to be portrayed almost like the god Apollo»[139]. The *Fiore di Virtù* 1483 and 1491 present Envy as the main vice, which is the opposite of the Love of Virtue versions. The *Fiore di Virtù* tells us that, before one can deal with and understand the different directions of Envy, which required Intelligence, one first should look at the nature of virtue itself. Virtue requires an intelligent mind and is therefore located in the soul. The description of love in general, meaning the Love of Virtue, likewise points in this direction, whereas the Love of Virtue is impossible without Reason and Intelligence. There can be no virtue without Love, while virtue originates from both Knowledge and Love. Virtue will shine brighter when placed against its opposite, like a light in the darkness[140]. The allegorical example of Envy in the *Fiore di Virtù Historiato* is the fight between Cain and Abel, where Cain attacked his brother with a stick out of envy[141]. The example and the literary quotations show that envy between relatives and friends is worse than among other people[142]. Once again, on top of a personal or family allegory, it would be possible to apply a second layer. A political allegory has been proposed by Nova, for example, who places this drawing too in the series of allegories for the court of Ludovico il Moro. The drawing is another example of composing different layers of symbolic meaning and allegories on top of each other. It may be understood as a pictorial competition with the different layers of allegorical readings as

131 *Fiore di Virtù*/Fersin 1953, pp. 61-64, no. 22.
132 Nova 2001, pp. 381-386.
133 The big bird is interpreted as a «gallaccio», which can be seen as a homonym for Gian 'Galleazzo' Sforza, and also as a heraldic emblem of Bona of Savoy. The two women on the left (Justice and Prudence), would help to defend the «gallaccio» against both the wolves and the satire; see Kemp 2006b, pp. 151-152, and Versiero 2010, pp. 107-108. For the Milanese political interpretation, see also Salsi 2019, pp. 201-202: Ludovico Il Moro would be the defender of his nephew «gallo»/Galleazzo); and Kemp-Barone 2010, pp. 16, 90-91.
134 Zöllner-Nathan 2011, II, p. 492. See on the Sforza allegories also Kemp-Barone 2010, pp. 90-91.
135 Bambach 2019b, I, pp. 484-485.
136 This has been proposed, for example, by Kemp 2006 (pp. 151-152); Kemp-Barone 2010, pp. 90-91.
137 Published in Decembrio/Ianziti-Zaggia 2019.
138 Bambach 2019b, I, p. 484: «prima sia il corpo sanza l[']onbra, che la virtu sanza invidia»; and «Fama ovvero la virtu» (this note is similar to the one on fol. 34*r*).
139 *Ibid.*
140 *Fiore di Virtù*/Fersin 1953, pp. 4-7, 15-21, nos. 1, 7, 8.
141 *Fiore di Virtù*/Fersin 1953, pp. 19-21, no. 8.
142 Nova 2001, pp. 381-386.

Fig. 11 Leonardo da Vinci, *Two Allegories of Envy* (*Allegory on the Political State of Milan*), pen and brown ink, c. 1494, Inv. 0037 *recto*. © Oxford, Christ Church. By permission of the Governing Body of Christ Church

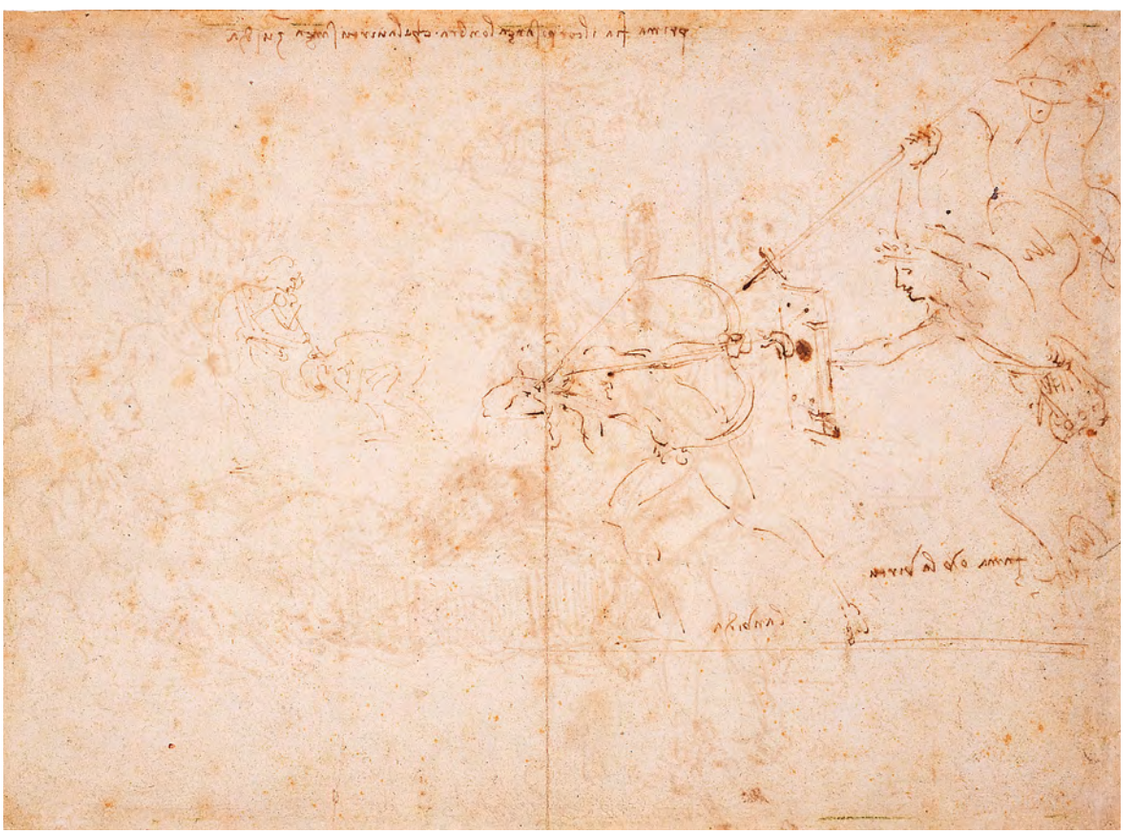

Fig. 12 Leonardo da Vinci, *Two Allegories of Envy* (*Allegory of Fame Attacking Envy*), pen and brown ink, c. 1494, Inv. 0037 *verso*. © Oxford, Christ Church. By permission of the Governing Body of Christ Church

presented in the *Fiore di Virtù*, where opposite virtues and vices are set next to each other, which are then exemplified by moral readings with multiple allegorical layers.

Reading the Allegorical Key

Leonardo used animal symbolism and allegorical readings throughout his life. While he usually relied on the *Fiore di Virtù* and occasionally on Pliny, around 1494 he used these two sources together with the *Libro della Natura degli Animali* and Cecco d'Ascoli's *Acerba* to compose his own bestiary, which became his main source for allegorical drawings, while the *Fiore di Virtù* continued to be an important point of reference for him. The examined allegories demonstrate different stages of reflection on it and on Leonardo's own *Bestiario*. The first group of drawings can be seen simply as illustrations of exercises based on one of those texts, leading us to wonder whether Leonardo had intended to edit a volume himself, or if he was mainly exploring allegorical possibilities concerning select passages. Research has always claimed that his unfinished *Libro di Pittura* was meant for publication, a task that his closest pupil Francesco Melzi wanted to take upon himself (BAV, Urb.lat.1270). If Leonardo indeed had an edition of his own *Bestiario* in mind, it would, however, not have been simply a text with illustrations. As we have seen, a group of drawings take key elements of the bestiary and apply them to different allegorical complexities and levels.

On the first allegorical level, animals as well as virtues and vices are coded as symbols. The bestiary is therefore the first reading key to apply to the allegory. It provides the respective animal with a virtue or vice (e.g. «Gratitudine» – bird «Upica», «Ingratitudine» – pigeons, etc.) and explains it through a short moral story. This coded visual language can be seen on analogy with Leonardo's symbolic language that he had developed in various exercises. The examples of the drawings showing *Puzzle Writing* using pictographs and the *Geometrical Studies of Related Areas* have already been mentioned above. Kemp interpreted his pictographs as «picture writing in which punning images or symbols form a short phrase or text, like a parody»[143], which is comparable here, when one puts the bestiary and the illustrations together. On a second allegorical layer come Leonardo's pictorial readings of combined entities, often set in pairs, where the combination of entities allows for yet another allegorical interpretation. It has often been mentioned that in his allegorical drawings Leonardo was attracted by the combination of opposites. This is actually one of the distinctive features of the *Fiore di Virtù*. Generally speaking, the various versions are composed this way: taking the example of Envy (*Fiore di Virtù* 1491)[144], the entry begins by explaining the nature of the vice: «Envy, which is the vice opposite to the virtue of love, is perhaps of two kinds...». This is then followed by one or more *auctoritas* on the topic: «Aristotle says that virtue is a good quality of the mind whereby one lives righteously and avoids evil»; after this the animal symbolism follows, in this case the envious bird, a magpie. This is then followed by a second example, here a sequence from the Bible on the brothers Cain and Abel, while in other circumstances the literary reference may come from classical texts[145]. These second and third layers are built on moral literature and historical or biblical references, which is the case, likewise, for the *Fiore di Virtù Historiato* and the *Libro della Natura degli Animali*. In his short version of a bestiary, Leonardo does not call for an *auctoritas*, but points occasionally to common knowledge by saying «si dice», «si lege». He refers here to the shared knowledge-base that a semi-educated person would have had access to, which are, in fact, the aforementioned texts. Leonardo uses in his drawings the same structure of two or three layers, where symbolic, moral and political layers are possible. In these, Leonardo's drawings appear to be a reflection on the meta-level, which leads to a multi-layered interpretive structure[146]. His exercise of *The Virgin and Child with Saint Anne and the Lamb* are to be seen in the same light, where a two layered interpretive structure has already been discussed. Layering interpretive structures was common in literature too, where allegories were read at different levels of depth and meaning, sometimes deliberately obscuring the final intention at first glance, as this was part of the allegorical challenge. In literature, a multi-layered approach to historical, allegorical and moral exegesis was very common since the late Middle Ages. To this could be added Boccaccio's suggestion of poetic obscurity as a mean to stimulate the search for truth[147]. This became even more complex, when, as in Leonardo's case, allegorical readings were split into several layers, which turns out to be a method that in Florence was practiced only by the foremost allegorical painters like Botticelli. Leonardo was not known principally as an allegorical painter, although he utilized this genre at the highest levels, as these drawings show. Reading the allegories was only possible for those spectators who participated in this shared knowledge base of key texts for allegorical readings.

Research has often suspected that Leonardo's complex allegorical drawings might have been intended as a *paragone* with literature, although authors have failed to explain the nature of this competition[148]. We actually do not need to look very far. The *Fiore di Virtù* offered the layered structure of allegorical interpretation, with the virtues and vices useful for personal education and reflection, as enriched with narratives from a broader religious or historical context to which Leonardo added his usual wit and sharp eye and mind. Editing the bestiary as a *Bestiario Historiato* with more textual parts and figural allegories is, of course, only one possibility for how the allegories might have found their purpose. In any case, even if we do not see them as a preparatory set, they would still convey the spirit of an intellectual exercise for the development of different levels of symbolic and allegorical meaning.

143 Kemp 2006b, p. 149.
144 *Fiore di Virtù*/Fersin 1953, p. 19-21, no. 8.
145 *Ibid*.
146 On the topic of visual commenting in Renaissance painting, see Dressen 2017, pp. 336-338, and 2021a, pp. 149-150. Clark 2006, p. 23, and Leonardo/Calabrese 2011, pp. 66-67, point to a theory of four layers of allegorical reading, which are literal or historical, allegorical, tropological, and anagogical.
147 On the different strategies and layers of allegorical reading, see Dressen 2021b, pp. 135-137.
148 While Bambach (2019b, I, p. 483) and Keizer (2019, pp. 128-135) see a connection with literature, they find this rather on a general abstract level, where painting competes with literature. See also Bambach 2003b, pp. 400-403, no. 54.

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