

# Fig-bulls, Bull-Cows, and Other Animals: The Vicissitudes of Renaissance Hieroglyphs in Giovan Battista Della Porta's Natural Magic

Sergius Kodera

**Abstract:** Over the course of his long life as a publicist Della Porta became increasingly aware of the *Hieroglyphica* by Horapollo. Della Porta developed a peculiar way of using hieroglyphic images to develop, confirm, propagate, and memorize his ideas about, and practice of, natural magic. He took a thoroughly idiosyncratic view of hieroglyphs, one that was directed towards his practical goals as experimenter and natural magician. This chapter argues that Della Porta conceived of hieroglyphs as abbreviations or memory aids for recipes for practices in his natural magic, and as visualizations of instructions for action. Hieroglyphs function simultaneously as testimony of the foundations of natural magic—of universal sympathies and antipathies—and as their emblematic confirmation. In tandem with this, and over the years hieroglyphs became convenient rhetorical topoi that lent credibility to some of the key tenets of Della Porta's natural magic, and in ever new combinations they were useful in organizing the memory. This essay treats key texts by Della Porta, *Magiae naturalis libri IV* (1558); *De furtivis litterarum notis vulgo De ziferis libri IV* (1563), *L'arte del ricordare* [1566]; *De humana physiognomia* (1584, 1602); the second, expanded edition of the *Magiae naturalis libri XX* (1589); *Phytognomonica* (1588); and *Villae* (1592).

**Keywords:** Hieroglyphic, experimentalism, experience, natural magic, art of memory.

## 1. Introduction

Giovan Battista Della Porta was a restless conductor of experiments who embodied the contradictions but also the intellectual diversity of his epoch in a very specific way like few other intellectuals. Della Porta was not only the inventor of the telescope and an improved, almost cinematic vision of the camera obscura; he was also one of the most famous physiognomists of his epoch. An influential playwright, he probably wrote close to thirty plays, of which fourteen comedies and three tragedies have survived. Even in sixteenth-century perception, Della Porta was an exceptional writer because he published in an astonishing number of different literary and scientific genres. Della Porta was a prolific writer (with chronic difficulties in getting his books through the ecclesiastical censors) and, from the 1590s onwards, one of the most prominent

Sergius Kodera, University of Vienna, Austria, [sergius.kodera@univie.ac.at](mailto:sergius.kodera@univie.ac.at), 0000-0003-3119-2749

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figures in contemporary European intellectual life. His works were printed well into the eighteenth century.<sup>1</sup>

At the beginning of the fifteenth century, a manuscript written in Greek and attributed to a Horapollo—the *Hieroglyphica*—was discovered on the island of Andros. This text, probably written in the third century or even later, contained an interpretation of the meaning of about 200 images as they were allegedly used in the scriptures of the priests in ancient Egypt. The *Hieroglyphica* became immensely popular during the following couple of centuries, and it was printed countless times in translations that were sometimes also lavishly illustrated.<sup>2</sup> In the following, the changing role of a set of these hieroglyphs is examined for the first time in a synopsis of Della Porta's key works, and with regard to his ideas about natural magic: the *Magiae naturalis libri IV* (1558); the cryptography (*De furtivis litterarum notis vulgo De ziferis libri IV* [1563]), *The Art of Memory* (*L'arte del ricordare* [1566, Latin 1602]); *De humana physiognomia* (1584, 1602); the second, expanded edition of the *Magiae naturalis libri XX* (1589); *Phytognomonica* (1588); and *Villae* (1592). Over the course of his long life as a publicist Della Porta became increasingly aware of the *Hieroglyphica* by Horapollo. Della Porta also developed a peculiar way of using hieroglyphic images to develop, confirm, propagate, and memorize his ideas about, and practice of, natural magic. He took a thoroughly idiosyncratic view of hieroglyphs, one that was directed towards his practical goals as experimenter and natural magician. I will argue that Della Porta conceived of hieroglyphs as abbreviations or memory aids for recipes for practices in his natural magic, and as visualizations of instructions for action. In tandem with this, hieroglyphs were convenient rhetorical topoi that lent credibility to some of the key tenets of Della Porta's natural magic, and in ever new combinations they were useful in organizing the memory.

Della Porta's Europe-wide reputation was largely founded on his two texts on natural magic (first published 1558, and then in a greatly expanded version in 1589). Both texts develop a general theory of magic, which Della Porta takes predominantly from Pseudo-Albertus Magnus' *Mirabilia*, Marsilio Ficino's Neoplatonic magic, and Agrippa von Nettesheim (see Verardi 2018, 83–115). The major part of both versions of the *Magia*, however, consists of collections of more (or less) practical recipes for seemingly completely heterogeneous sub-

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<sup>2</sup> For a simultaneously magisterial and succinct introduction to the topic with many references, see Wolkenhauer 2021; Boas 1950; and Volkmann 1923.

jects, for example, the grafting of fruit trees and the cross-breeding of animals, the production of monsters, the making of mirrors, beauty recipes, cooking, distillation, hydraulics, metallurgy, and the use of drugs. There are also a large number of instructions for magic tricks and practical jokes. In contemporary understanding, Della Porta thus published as a *professore dei segreti* (professor of secrets) (see Eamon 1994; 2010).

## 2. The Two Versions of the *Magia naturalis* (1558 and 1589)

Della Porta's *Magiae naturalis libri IV* immediately became a European best-seller. In 1558, the date of the first publication, the author was obviously still unfamiliar with the text of Horapollo's *Hieroglyphica*. Della Porta mentions Egypt, *en passant* and in connection with gems and rings. He explains that such objects are engraved with images of scorpions, and he recommends them as talismans against the scorpion's sting, or in conjunction with other images that channel the stellar power of a planet.<sup>3</sup> Such recipes and their underlying theoretical assumptions had become the object of polemics against Egyptian magic, and its characters, the hieroglyphs, animated talismans and statues of the gods as early as the end of the fifteenth century, especially following the publication of Marsilio Ficino's *De vita coelitus comparanda* (1489), perhaps the most sophisticated and certainly a formative text for natural magicians of the sixteenth century.<sup>4</sup>

Yet, images from the *Hieroglyphica* are nor more than tangentially present in the first version of the *Magia*, for example when Della Porta writes that a wild bull becomes tame the moment it is tied to a fig tree. The reference to the text of the *Hieroglyphica* is quite imprecise here, namely when it speaks of a bull "garlanded" with figs becoming tame. Perhaps Della Porta got this idea from Pliny; perhaps it was directly copied from Agrippa von Nettesheim's famous encyclopedia of magical arts, *De occulta philosophia*. There, as in the *Magia*, the example comes in a chapter on secret sympathies and antipathies between animals,

<sup>3</sup> Della Porta 1561, 171–73 (lib. IV, cap. 23): "Sapientem quendam Aegyptium scorpionis sigillo thure impresso sanasse, qui scorpionis morsu afflicteretur, ille anulo scorpionis imaginem deferebat, & insculpi iusserat coeli medium, vel ortus cardinem occupante, & cum Luna iuncto, quod & à Serapione simile narratur." *Ibid.*, 169: "Sunt & aliæ imaginum configurationes, quibus lapides veteres effigiabant, iuxta Indorum, Aegyptiorum, Magorum, & aliorum astrologorum sententias, non tam visibiles quam imaginabiles, vt in prima Arietis facie, hominem aiunt ascendere nigrum, corporis ingentis, rubeos habens oculos, pannoque præcinctus albo, ascendit in secunda mulier clamyde cooperta lintea, viridibus pannis cincta, vnum retinens pedem. Sic signa omnia, arietes, tauros, geminos, cancos, leones, & cætera, & ex Stellarum naturis planetis conformibus operationes eliciunt. In tertia vero ascendit homo rubeis indutus vestibus, armillam habens manibus auream, cupiens & bonum facere, nec potest, sic in cæteris aliis sunt ascriptæ, quas qui quæsierit, eorum quærat libros, longum enim & nimis fastidientis esset lectionis eorum opiniones recensere, quæ & inter se diuersantur, ideo diuersis & variis insculptæ imaginibus reperiuntur."

<sup>4</sup> For an introduction to this set of ideas, see Copenhaver 2007.

plants, and stones: for he claims that these forces are the precondition for the foundation of the practice of natural magic.<sup>5</sup>

As we shall see, Della Porta will use the hieroglyph again and again over the following decades, developing it into a key trope that reflects important and different aspects of his *magia naturalis*. Bull and fig have highly sexualized connotations, the connection between animal and plant pointing to the universal sympathies and antipathies that pervade the entire cosmos.<sup>6</sup> Renaissance natural magic as erotic magic is essentially based on the exploitation of these erotic powers.<sup>7</sup> Della Porta uses the “fig-bull” as an example of those hidden forces of repulsion and attraction that are inherent in all things, and which the learned magician knows how to channel in order to produce those *mirabilia* which are the main goal of natural magic.<sup>8</sup>

Thus the “fig-bull” resurfaces more than three decades later, in the second edition of the *Magia*, this time in the context of a brief cooking-recipe. Here, the

<sup>5</sup> Della Porta 1561, 8r (lib. I, cap. 8): “cum ferox Taurus fico arbori alligatur mitescit, domaturque; [...]” On this idea, see Pliny, *Historia naturalium*, lib. XXIII, 130; and Heinrich Cornelius Agrippa von Nettesheim, *De occulta philosophia libri tres* [1533], ed. Vittoria Perrone Compagni (Leiden: Brill, 1992), 123 (lib. I, cap. 18). It is also in Lodovico Ricchieri, *Antiquarvm lectionvm commentarios ...* (Venice: Aldus et Andrea, 1516), 417 (lib. VIII, cap. 46). The misunderstanding is cleared up when we recognize the Latin translation of Horapollo by Fasanini (1517) as the (probably indirect) source: [Horapollo], *Hori Appollinis Niliaci Hieroglyphica*, trans. Filippo Fasanini (Bologna: Platonides, 1517), XXXVr (lib. I, cap. 76).

<sup>6</sup> See Couliano 1987; Koder 2016; and Bianchi 2018, 203–28: 211–17, with references to secondary literature in Italian.

<sup>7</sup> Valeriano 1567 describes the fig as an image of an aroused vagina and identifies the fig as the forbidden fruit of paradise (392v): “ob convolubilem texturam significaret, pari quadam natura cum genitali aestimabatur, atque eius simulacrum videbatur, ubertate scilicet humoris et motu ad prociendae geniturae principia convenientibus [...] Huius generis fuisse praedicant Adami pomum [...] id enim delectatione et voluptatem, idque sensu percipitur significasse plerique Theologorum docuerunt.” And on the nature of bulls, see Valeriano 1567, 22 v: “quod animal hoc sit calidissimum, atque inguine praecipue potens, ita ut uno tantum intuitu citra motum impleat efficacissime. quod si contingat ut ab naturali aberrarit loco, vaccam ea in quam occurrarit parte, qua praeditus est inguinis firmitate, vulnerat, non secus ac si telo eam acuto impetisset. Usque adeo vero semen illi promptuarium est, ut exectum taurum implesse tradat Aristoteles: atque hinc plerique veteres scriptores, viri pudenda Taurum appellavere [...] Animal tamen hoc in libidinem usque adeo concitatum et furens non saepius quam bis die inscendit, a conceptu vero ipsius vaccae modestus castusque, nihil ulterius tentat.” Actually, this is a direct reference to another hieroglyph; see Horapollo 1, 46 (cf. 1950, 78–80) and below.

<sup>8</sup> Della Porta 1561, 9v–10v (lib. I, cap. 8): “Multae sunt rerum *idiosynkrisiai*, id est occultae proprietates, viresque: non ex elementorum qualitibus, sed à forma ipsa vt diximus, & cum ab ea eueniant, materia exigua maximum demonstrat effectum, quod materiae contrarium est: vt enim promptius agat, maiorem exposcit materiem. occultae sunt, quia certis demonstrationibus sciri non possunt [...] Veluti cum ferox Taurus fico arbori alligatur mitescit, domaturque” (“There are many idiosyncrasies, i.e. occult qualities and powers in things; they do not derive from the qualities of the elements, but from the form itself, as we say, and because they arise from it, they show the greatest possible effect even in the smallest quantity of a substance, which is contrary to matter. For [the form] to act more decisively, it needs a greater matter. [These forces] are occult because they cannot be recognized with certain proof [...] like, for example, the wild bull that becomes tame when it is tied to a fig tree”). On the fig-bull see Horapollo 1, 76 (cf. 1517, XXXVr).

reader learns that she can save a lot of firewood by cooking the stems (*caules*) of the wild fig (*caprificus*) with beef, because the meat then becomes tender more quickly, which Della Porta attributes to the occult antipathy between fig trees and bulls. (Considering that Della Porta had postulated the pacification of the animal by the plant, this thesis seems incoherent, by the way: one would much rather assume sympathy). Della Porta also explains that he endorses the popular opinion according to which the bull tied to a fig tree becomes so tame that it can be touched and yoked without danger. The source of these ideas is probably two passages that appear close together in Pliny's *Historia naturalis* that recount a wide variety of different recipes with the wild fig as an ingredient.<sup>9</sup> Yet—and crucially—to the information from Pliny he adds one of Horapollus's hieroglyphs:

This is what the Egyptians alluded to when they represented a man struck by sudden calamity by a bull tied to a wild fig tree, because when it rages and is tied to a wild fig tree it becomes tame again.<sup>10</sup>

This passage provides a revealing view of the structure of Della Porta's argumentative operations: the occult antipathy between plant and animal is proven here (a) from folk belief, (b) from Pliny's cooking recipe, and (c) from hieroglyphics, i.e., from testimonies of different provenance and different content. Two recipes for dealing with living animals or their meat, one description of a human being's mental and social state: these elements are condensed into a set of stories designed to confirm each other and, conversely, to prove the postulated antipathy of fig and bull. The threefold iteration of one and the same occult relation is characteristic of Della Porta's forms of argumentation in his texts on magic.<sup>11</sup> It is also a general characteristic of recipes: they have to be repeated, *wanting* to be enacted, as it were. The "hieroglyphic" representation of the "fig-bull" thus condenses a literary *topos* that is useful as a *visual* memory aid to recollect a set of recipes, practices, and ideas surrounding the hieroglyph. The importance of this visual aspect is also indirectly documented in contemporary illustrated editions of the *Hieroglyphica* (see Fig. 1).<sup>12</sup>

<sup>9</sup> Pliny, *Natural History* 23, 127 (cooking), 130 (soothing influence of the fig).

<sup>10</sup> Della Porta 1650, 483–84 (lib. XIV, cap. 2): "Fidem quoque facit, quod vulgo de tauris proditur, ferocissimos quosque huic alligatos arbori mitescere, tanguique manu, ac subigi tolerant, et efflant iram, animumque veluti flaccescentem deponunt, tantis viribus pollet ea spiritus acrimonia, ut ruat licet, saeviatque taurus imperet furori. [...] Caro bubula ut tenerascit [...] Caules caprifici si addantur ollae, in qua bubulae carnes excoquantur, magno ligni compendio elixantur, ex Plinio. Cuius rationem ex antipathia reddimus. Ad id aludentes Aegyptii hominem novissima calamitate castigatum, designaturi, taurum pingunt caprifico illigatum: nam quum mugit, si de caprifico ligetur, redditur mansuetus."

<sup>11</sup> From the perspective of Aristotelian natural philosophy of the Renaissance, these are *argumenta ex auctoritate*, which, if at all, have at best a very weak scientific evidential character. For a brilliant introduction to this topic see Serjeantson 2006, 132–76: 6 and 30.

<sup>12</sup> Of course, I am not implying that Della Porta is referring to this particular imprint when he writes about the fig-bull.



Figure 1 – Ori Apollinis Niliaci, *De Sacris Aegyptiorvm notis...* Libri Dvo, Iconibvs illustrati, & aucti. Paris: Johannes Ruellius, 1574, fol. 80v, 6.4 × 6.4 cm. Courtesy of the University Library of Vienna. Ph. Sergius Kodera.

This visual aspect also entails that the “fig-bull” may resonate with other, cognate images. Thus, the second version of the *Magia* introduces a “bull-cow,” another of Horapollus’ hieroglyphs.

Taurus ubi iuencam supervenit, certis signis comprehendere licet quem sexum generaverit: quoniam si parte dextra desiluit, marem seminasse manifestum est, si laeva foeminam. Quamobrem Aegyptiis, mulierem, quae filiam peperit significaturi, taurum pingunt sinistrorum respicientem, si filium, taurum qui se vertat dextrorum. Caeterum si desideras id, quod orietur sit masculus, quo tempore coeundum est, vinculo sinistram testem excipito, si autem foeminam, dextrum similiter deligato, ex Columella, Africano et Didymo (Della Porta 1650, 92–93, lib. II, cap. 21).

[Where the bull mounts the young cow, it can be ascertained by certain signs which sex he begets: for if he dismounts on the right side, it is evident that he has planted a male; if on the left, a female. Wherefore the ancient Egyptians, when they wished to signify a woman giving birth to a daughter, painted a bull looking to the left, but when a son, a bull turning to the right. Moreover, if one wants the offspring to be male, one must tie off the left testis at the moment of coitus, but if female, then tie off the right testis in the same way (“Columella, Africanus, and Didymus”).]

Like the “fig-bull,” so the “bull-cow” hieroglyph encodes a practical procedure.<sup>13</sup> Yet, and unlike Horapollo, Della Porta frames this “hieroglyph” with the act of copulation and the position of the bull after the act, and hence to an image that is not the subject matter of the hieroglyph. For Horapollo says that the bull’s looking to the left signifies that he himself will *father* a heifer, and that his looking to the right will result in a bull-calf, while these two hieroglyphs denote *mothers* of daughters and sons respectively.<sup>14</sup> Figure 2 shows that contemporary illustrations are in line with Della Porta’s idea.



Figure 2 – Ori Apollinis Niliaci, *De Sacris Aegyptiorvm notis... Libri Dvo, Iconibvs illustrati, & aucti*. Paris: Johannes Ruellius, 1574, fol. 63v, 5.5 × 5.5 cm. Courtesy of the University Library of Vienna. Ph. Sergius Kodera.

Della Porta’s marked interest in the sexual aspect of this hieroglyph is echoed in the sadistic instruction to tie off testicles. In the *Magia* the image of the “bull-cow” illustrates and bolsters the creed that one could regulate the sex of future offspring, and at the same time legitimizes the credibility of a special breeding technique. Even though Della Porta does not explicitly recommend the practice of tying off testicles to determine the sex of the offspring, this method of

<sup>13</sup> Cf. Valeriano 1567, 23v, on the role of left and right for the future sex.

<sup>14</sup> Horapollo 2, 42 (cf. 1517, XXVIIIv); 2, 43 (cf. 1950, 93).

breeding selection is presented in an uncannily transferable way. Actually, Della Porta exploits the ambiguity of Horapollo's "bull-cow" in yet another respect: as the image may denote mothers of daughters or sons respectively it blurs the line between human beings and animals.

In particular, Della Porta seems to have been interested in everything concerning the reproduction and artificial generation of life, interbreeding between species, and their artful manipulation.<sup>15</sup> The impression arises here (which will be corroborated in what follows) that hieroglyphs, unlike in Plotinus, are not perceived as ingenious abbreviations of the noumenal, or, as with Iamblichus, as signs with a specific inherent theurgical power.<sup>16</sup> Rather, for Della Porta, hieroglyphs denote actions; they are recipes that have coagulated into images, in which occult properties of animals, plants, and other things confirm and relate to the practice of the natural magician. This set of ideas connects Renaissance hieroglyphics with the literary genre of fable. In the guise of animals, fables speak about the actions and behavior of men and women; like the recipe, "fable is a metaphorical action [...] Fable is invented to form a conception in the image of an action."<sup>17</sup> This is especially interesting when we consider that Della Porta also advocated the close connection of the physical traits and habits of animals with the mores and appearance of human beings.

Della Porta's selection of hieroglyphs is thus often guided by their sexual connotations, just as Horapollo's selection is already exceedingly rich in such suggestions. Another example (already briefly touched upon in the first *Magia*) is the spontaneous procreation of mice, frogs, and snakes born from the mud of the Nile.<sup>18</sup> The second edition of the *Magia* again mentions Egypt in connection with the spontaneous procreation of living beings from mud.<sup>19</sup> However, now Della Porta refers in particular to Diodorus, who says that in Thebes, after the rain, animals emerge from the mud, some fully formed while some are only half formed and still are united with the earth (Diodorus Siculus 1, 10). Della Porta also writes of mice begotten from rain and mud, emphasizing the abundance with which these animals appear in the rotten earth.<sup>20</sup> Our author is visibly fas-

<sup>15</sup> See Della Porta 1561, 77v (lib. II, cap. 24), for detailed instructions for the production of such monsters.

<sup>16</sup> For a subtle analysis of Plotinus' ideas on hieroglyphs in *Enneadas* 5, 8, 6 [39], see Gaier 2003, 143–44; and Balavoine 1986, 209–11.

<sup>17</sup> Blackham 1985, 191. On the function of recipes in early modern books of secrets, see Eamon 2011, 41–3.

<sup>18</sup> Della Porta 1561, 80v (lib. II, cap. 24): "Monstra quomodo gignantur, & de vi mira putrefactionis. Narrat Macrobius in Aegypto, quod ex terra, & imbre mures nascuntur, & in aliis locis ranæ, serpentes, & similia, vnde facilis est earum procreatio." ("How monsters are born and about the wonderful power of putrefaction. Macrobius tells us that in Egypt mice are born from the earth and the downpour, and in other places frogs, snakes, and the like, for their procreation is easy.")

<sup>19</sup> Della Porta 1650, 48 (lib. II, cap. 2); see Horapollo 1, 25 (cf. 1517, IXv).

<sup>20</sup> On the influence of Claudius Aelianus' *De natura animalium* on medieval bestiaries, the fourfold interpretation of scripture, and Renaissance ideas about hieroglyphics, see Boas

cinated by Diodorus' descriptions of intermediate stages: namely, that the animals appeared half-finished, only up to the breast, and were, so to speak, halfway between life and death. Another example borrowed from Diodorus (though not from the *Hieroglyphica*) is the procreation of chicks without a hen. Again, Della Porta had already treated the subject in the first version of the *Magia* (Della Porta 1561, 79r, lib. II, cap. 24), but the second edition is more detailed.<sup>21</sup> This leads him to introduce an invention of his own: he describes how to build a chicken incubator (Della Porta 1650, 232–34, lib. IV, cap. 26). In a similar vein, in the first version of the *Magia*, Della Porta had described his own—albeit highly fantastical—experiments for the creation of monsters, probably developed from the fables about mud-frogs. One ingredient in these esoteric recipes is the legendary *hippomanes*, the mare poison used in ancient love spells.<sup>22</sup>

To sum up: (a) hieroglyphs from Horapollo are not directly mentioned in the first edition of the *Magia naturalis*, yet (b) images from the *Hieroglyphica* are already present here (“mud-toad” “mud-mouse” “fig-bull”); (c) Della Porta uses these sexually charged images as confirmation of his theories and practices in natural magic, expanding them to other species (eggs bred without a hen); (d) the extended version of the *Magia* testifies to a more profound knowledge of Renaissance hieroglyphics; and at the same time (e) it recycles ideas from the first *Magia*. Della Porta indeed must have acquired quite extensive knowledge of hieroglyphics soon after the publication of the first *Magia*, which the following section will demonstrate, as we shall see such Egyptian images gradually acquire the function of *topoi* that also structure Della Porta's ideas in other areas of knowledge.

### 3. Della Porta's Cryptography (1563)

Half a decade after the first version of the *Magia*, Della Porta's knowledge of the hieroglyphic tradition must have expanded fundamentally. His book on cryptography, *De furtivis litterarum notis vulgo De ziferis libri IV* (1563), conveys a rather well-informed, synthetic account of the contemporary understanding of hieroglyphics. He explains that the Egyptians concealed the deepest mysteries within these “*imagines ridiculae vel fabulosae*” (“ridiculous or legendary images”). Della Porta also maintains that hieroglyphs were used by *prisci philosophi*, the ancient sages and poets, to veil supernatural mysteries within fables in order to protect them from profanation, and as a medium to communicate their

1950, 33–35. For an introduction to ideas about spontaneous generation in antiquity, see Flashar 2010.

<sup>21</sup> Della Porta 1650, 231 (lib. IV, cap. 26); cf. Diodorus Siculus 1, 74. Earlier, Aristoteles, *Historia animalium*, 559b 1–2 (6.2), had alluded to the possibility of building incubators (559b 4–5). Della Porta refers to Aristotle; see n. 28.

<sup>22</sup> On the magical properties of *hippomanes* see Agrippa 1992, 163 (lib. I, cap. 42); and Della Porta 1561, 76r–77v (lib. II, cap. 24). Content and wording of the passage are obscure. On wind-eggs, from which basilisks are generated, see Eckstein 1930, vol. II, cols. 600–2.

knowledge about secret and forbidden things under the protective cloak of hieroglyphic codes.<sup>23</sup> This form of esotericism accommodates Della Porta's general tendency to present himself as a master of secret, spectacular sciences and arts, and corresponds to his immediate concern, namely to present rules for ciphers.

From a contemporary perspective, it was hardly surprising that *De furtivis litterarum notis* contains an entire chapter on hieroglyphs, since the connection between Egyptian pictorial signs and cryptography had been well established since at least the beginning of the sixteenth century.<sup>24</sup> Della Porta mentions Horapollon, Valeriano, and Paolo Giovio as the creators of *imprese*, that is, the popular and elaborate image–text combinations that not only decorate the shields of princes but also, for example, printers' marks.<sup>25</sup> *De ziferis* describes one of the most famous *imprese*, namely the anchor and dolphin. Della Porta explains that hieroglyphs are called “chimeras” in *volgare* and “emblems” in *Alciati*, and that these images serve as decorations for walls, carpets, doors, ceilings, vaults, or helmets (“parietes, peristromata, lacunaria, fores & clypei ornantur”). Moreover, hieroglyphs may be used to convey the hidden “intentions of the soul.”<sup>26</sup> These ideas are neither particularly new nor original.<sup>27</sup> Della Porta explains that Egyptian signs are a sub-genre of metaphorical speech, in which different things are actually compared (or collated: “collatus”) (Della Porta 1563, 14). In the light of the simultaneously developing debate on the semantics of *imprese* and emblems, however, the intellectual level of Della Porta's account is rather modest

<sup>23</sup> Della Porta 1563, 15: “Huiusmodi fit priscorum philosophorum, et poetarum scribendi ratio, utrique enim Naturae mysteriae et naturam excedentia tractari, ne sua sensa à prophanis violarentur, serio fabularum involucris, quasi quodam velamentum obduxerunt. In huc modum Mercurii, Orphei Musaei, Lini vetustissimorum poetarum et interdum Platonis scripta censentur: imò verò etiam plures Platoni plerumque allegoricum sensum exhibendum putant [...] Sic et sapientes Chymistae sua scripta hisce involucris contexerunt, veluti Hermetem, Geberum, Raymundum, et veteres omnes Pythagoricos allocuto comperimus.” (“According to this method the ancient philosophers and poets wrote in order to treat both the mysteries of nature and its transgressions; in order not to have their serious doctrines abused by the mob, they concealed them under the garb of fables, as if under a veil. To this kind belong the various writings of Mercury, those of the Orphic Muses, of Linos, of the most ancient poets, and also those of Plato. Just as it is true that many Platonists thought that many matters were to be represented only in an allegorical sense [...] And similarly, wise alchemists interwove their writings in allegorical veils, such as Hermes, Geber, Raymundus, and likewise this can be learned from all the ancient so-called Pythagoreans”).

<sup>24</sup> As early as 1521 Cesare Cesarino had identified hieroglyphs with *zyphere seu Karactere* used by princes to communicate secret messages. Volkman 1923, 32–33; Cesarino 1521, 46v.

<sup>25</sup> Printers' marks (also known as signets) are distinguished—even for contemporaries—from the simple *imprese* by the fact that they are always economically finalized. Aldus' mark was introduced as a printer's mark, not as a personal mark, even though this often merged in the later history of effects. The early history of the concept and the style-forming history of the influence of the Aldinian signet are thoroughly treated in Wolkenhauer 2002; and Scholz 2018.

<sup>26</sup> Della Porta 1563, 29–30. Again, these ideas were very widespread; see Volkman 1923, 29–30.

<sup>27</sup> Volkman 1923, 29, quotes Ricchieri, *Antiquarvm lectionvm*, lib. XVI, cap. 25. Boas 1950, 28.

(see Klein 1957; and Drysdall 1992). Overall, the impression is that *De ziferis* reflects an already widespread knowledge of the period. It seems that the contextualization of hieroglyphics is fundamentally different from that of the two editions of the *Magia: De furtivis litterarum notis* does not mention “fig-bulls” or “mud-toads,” yet the Minotaur, that spectacular human–bull crossbreed engineered by Daedalus, figures as *impresa*.<sup>28</sup>

However, Della Porta discusses only two images from the *Hieroglyphica* in greater detail, namely the dove and the hippopotamus. Of them, Horapollo says that the young males drive the father away from the mother as soon as they are physically able to do so, and even kill the father. Both animals are therefore images of ingratitude. The pigeon also has another outstanding characteristic: it lacks gall, and this makes its flesh the only medicine against the plague.<sup>29</sup> Here, too, *De ziferis* does not spread any news, for in fact the scandal of the hippopotamus had already enjoyed some attention in antiquity, for instance in Plutarch, and the hieroglyphic dove and hippopotamus were also popular among Della Porta’s contemporaries.<sup>30</sup>

One might think that Della Porta is simply using the crassness of the theme associated with these two animals to show how incest and patricide conceal divine mysteries. But this is by no means the case.<sup>31</sup> Nor does he make any direct reference to the idea that the communication of incest or patricide in hieroglyphic coding might be quite effective, for instance in diplomatic correspondence. (This could have been very appropriate for the project of a theory of secret writing.) As with the “fig-bull” and the “bull-cow” in the *Magia*, the specific selection of examples from Horapollo in *De ziferis* rather highlights that highly occult properties and eccentric breeding techniques are important topics in the *Magia naturalis*.

There are thus continuities in Della Porta’s interest in hieroglyphs: as in the two versions of the *Magia naturalis*, so our author points to the practical *potes-*

<sup>28</sup> Della Porta 1563, I, 9, 30: “Romanis præterea mos fuit, vexillis, quæ ad bella gerebant Minotaurum depingere, ratio erat, vt quemadmodum Dedalus obscuris illum labyrinthi ambagibus inclusisset, ita omnes sibi ducum consilia custodienda, & prodita auctori obesse intelligerent. Vnde eius rei argumentum tali emblemate notabatur.”

<sup>29</sup> As far as I can see this is the only time in *De ziferis*, that Della Porta quotes, rather literally, from Horapollo (lib. I, cap. 57); see Horapollo I, 56–7 (cf. 1950, 82–3 and 1517, XIXv–XXv); and Horapollo, *Hieroglyphics*, 82–3. For a modern reader it is probably difficult to avoid Freudian readings of these passages. Della Porta 1563, 28.

<sup>30</sup> Plutarch, *De Iside et Osiride*, 364A (cf. 1988, vol. V/2, 206); see also Volkman 1923, 29.

<sup>31</sup> It is noteworthy that Della Porta apparently sees no contradiction in inserting, immediately after the hippo–dove passage, a paragraph about the Egyptians’ arcane knowledge directly or indirectly influenced by Ficino’s reception of Plotinus. Della Porta 1563, 29: “Ratio quare huiusmodi notas illi excogitassent, fuit, quemadmodum dictum est, ne indignis hominibus doctorum sensa proderentur, sic enim vulgaribus hominum ingenijs rerum intellectum vario rerum tegmine, operimentoque subtrahebant, ne nuda aperta que rerum expositio pateret, sed velut fabulosa tractarentur, ut quo magis ridicula viderentur, eo magis ipsa mysteria figurarum nubilo operientur, at summatibus viris sapienti interprete nuda rerum talium se natura praeberet, ac veri arcani Consicij redderentur.”

*tates occultae* in *De ziferis*. In the theory of secret writing, however, these are antidotal pigeon meat rather than quickly cooked bull meat, incest and patricide rather than the spontaneous or artificial procreation of monsters from mud. For we have already come to know the author as a practitioner of the artificial creation of monsters, with a marked interest in all that concerns the bringing forth of living creatures, and noted the obvious fascination for interbreeding between animal species that goes with it (Kodera 2015). Moreover, the theme of incest and patricide is one that our author deals with in his theater, where Oedipus looms large.<sup>32</sup>

This interest in scandalous images is related to Della Porta's conviction that they are better and more clearly imprinted in the memory than images of virtues. In fact, he maintains that sexual fantasy is an ideal tool in the art of memory, to be discussed in the following section. We may speculate that *De ziferis* gave Della Porta insight into the usefulness of hieroglyphs as topical arguments resonating with his general outlook as a natural magician. It was not so much that these images are signs with an inherent power; rather, hieroglyphs helped to organize, confirm, and recollect a specific mind-set (and related recipes). Yet this is not a one-way street: for in Della Porta's mnemonics, generative imagination fulfills an important function.

#### 4. Della Porta's *Art of Memory: L'arte del ricordare* (1566)/*Ars reminiscendi* (1602)

Three years after the *De ziferis* Della Porta's treatise on mnemonics appeared, first published in *volgare*.<sup>33</sup> Hieroglyphic writing plays a theoretical role, as Della Porta uses it to model his method for developing an artificially structured memory. The art of memory, a technique handed down from antiquity that was part of the orator's training, experienced a heyday in the early modern period. Essentially, the technique consisted of associating the text to be memorized with an architectural structure. To do this, the rooms of a large building (*loci*), furnished with unusual and memorable objects (*imagines*), must be visualized in the memory. The rhetor walks through these imagined temples or palaces in order to remember the structure of the speech through the *loci*, and the content (*memoranda*) through the sight of the *imagines*. The most important (and the most challenging) task in the art of memory is not to confuse this matrix of imagined architectures and images. The virtual edifices must not become disordered, and the objects or creatures placed in them must remain in place, so that the contents of the speech may be recalled in the correct order. For Della Porta, the art is essentially based on an adaptation, i.e., a similarity between *imagines* and *memoranda*. Hence, hieroglyphs may be useful in mnemonics:

<sup>32</sup> On the structural importance of Sophocles' drama for Della Porta's comedies, see Kodera 2023, 168–71. On incest in Della Porta's comedies, see Beecher and Ferraro 2000, 34–42. Poulsen 2010.

<sup>33</sup> For an English translation, see Della Porta 2012. On Della Porta's method, see Kodera 2019.

Modum ab Aegyptis mutuabimur qui, cum notis careant quibus animi sensi [*sic: sensus*] explicent et promptius philosophicarum speculationum meminissent, picturis rem exprimebant, atque literarum vice quadrupedum, avium, piscium, lapidum, herbarum et eiusmodi talium imaginibus utebantur, quem nostris regulis utilissimum iudicavimus. Nil enim aliud significamus quam verba et conceptus picturis configurare, ut memoria illas figamus et conserventur (Della Porta 2012, 38, cap. 18).

[We borrow a method from the Egyptians by which they explained thoughts. Because they had no letters, and in order to be able to memorize philosophical speculations more quickly, they expressed things in pictures; and instead of letter-writing they used pictures of quadrupeds, birds, fish, stones, herbs, and the like, which we consider extremely useful for our rules [of memory]. For we aim at nothing else than to reproduce words and concepts with images in such a way that they are remembered and retained].

Crucially, the *Ars reminiscendi* enumerates virtually all the hieroglyphs mentioned by Horapollo that are associated with bulls, yet without tying them to recipes or other explanations. The images are here merely the material for organizing the memory. Or so it seems.

Per taurum cum vacca, castitatem [denotant], ligatum ad ficum petulantiam descendentem a dextra vaccae parvae, masculam prolem, a laeva, foeminam; cum patulis auriculis, auditum, per duos iunctos, frugum opulentiam (Della Porta 2012, 39, cap. 18).

[Through the bull with the cow [they signify] chastity, tied to the fig tree exuberance, descending from the cow to the right the male offspring, from the left the female offspring; with ears wide open the hearing, two by two under the yoke the rich harvest].

Moreover, the semantic field opened up by the *imago* of the bull is even wider where the images are not tied to particular recipes. *Ars reminiscendi* emphasizes the value of these signs for cultivating one's individual memory: Della Porta explains that these images are a matrix from which one may invent one's own *imagines agentes* deriving from such a series of hieroglyphs.

Unde vellem ut haec omnia mente teneamus, quod facile in nostris locis locando, in promptu uti poterimus, atque harum similitudine alias ex nobis coningere poterimus, ut non tantum per se ipsas nobis utiles esse possint, quam quod ansam multa plura inveniendi praebeant (Della Porta 2012, 41, cap. 18).

[And therefore I wished us to keep in memory all these things which we may simply locate in our *loci* for immediate use, and from the likenesses of which others may compose more themselves, not so much that they may be useful to us by themselves, but that they might allow [us] to invent many others].

This process is of course modeled on the technique of *inventio*, which is an important topic in early modern rhetoric. Yet, let me add that this technique also

indicates how Della Porta transferred the organic and procreational aspects of his natural magic to his concomitant choice of hieroglyphs. The images themselves generate new images by combination, in a form of mental cross-breeding, that generates marvelous new entities. The creation of marvelous appearances of things unheard of, figments of the imagination yet unseen, is the goal of natural magic; and at the same time they are also useful as memory aids.

It is thus not surprising that other chapters, particularly of the *Arte della memoria*, recommend scandalous subjects as *imagines agentes* because we remember them more easily and thus more accurately than virtuous ones. This is because such graphic images create the most powerful memory images. Bulls are again looming large here, for example the rape of Europa by Zeus, and even more shockingly Della Porta cites the example of Pasiphaë having sex with the bull, or the Roman woman who allows herself to be satisfied by the hero Lucius in donkey form in Apuleius' *Metamorphoses*. Della Porta explains that such sexually charged *imagines* can be linked to much larger amounts of data to be remembered than heroic deeds and events. This argumentation follows the consideration that the more offensive an image, the more massive the somatic reaction to it, and the greater the imprint on the memory (Kodera 2019). Here the impression arises (not at all unfounded) that these erotically charged *imagines* are also particularly agents to form new mental image combinations that anchor themselves deeply in the memory as visual bastards and monsters. There, these images develop a life of their own, an effective power with which they influence the body and habit of the person.<sup>34</sup>

##### 5. *De humana physiognomia* (1602)

Della Porta's book on human physiognomy was among his most popular texts. This art compares animals with human beings, with the aim of translating visual features into habitual mental dispositions that apply both for animals and humans. Each translation contains an implicit practical instruction for action: namely, to identify an individual with certain positive or negative character traits, habits, or inclinations. In eroding the boundaries between humans and animals, the art of physiognomy implies that human beings are only superficially formed by culture. Within its own historical context, physiognomonics was viewed as a *scientia universalis*, a rational science as good as, or perhaps even better than, the new anatomy, since it could be used for universal description and as a means to identify character traits (see Paoletta 2015). It is thus hardly surprising that bulls appear in Della Porta's *De humana physiognomia* (Fig. 3).

<sup>34</sup> I am alluding here to the widespread doctrine, also prominently advocated by Della Porta, of the influence that a pregnant woman's imagination has on the physical and mental constitution of the unborn child. See Della Porta 1561, 76r–77v (lib. II, cap. 24); Della Porta 1650, 91 (lib. II, cap. 20); and Kodera 2018.



Figure 3 – Giovan Battista Della Porta, *De humana physiognomia libri VI*. Naples: Tarquinio Longo, 1602, 83. Courtesy of the University Library of Vienna. Ph. Sergius Koderka.

Thus, for instance, Della Porta identifies Cesare Borgia as typically taurine and hence as a virile and masculine man, capable of decapitating a raging bull in the arena with a single blow.<sup>35</sup> Yet “fig-bulls” and “bull-cows” are not mentioned in the *Humana physiognomia*. Let me suggest that this is because such hieroglyphs were not directly related to the topic at hand, human–animal resemblances. For “physiognomonics”, however, it is not a matter of deciphering a hidden meaning from *dissimilar* images, as in hieroglyphics, but, on the contrary, of stating the *similarity* between the shared mores of animals and human beings (and vice versa).<sup>36</sup>

<sup>35</sup> Della Porta 1602, 134: “Caesar Borgia Dux Valentinus habile corpus habebat, validaque nervorum compage firmissimum, cuius artus reliqui ad decorem egregie correspondebant. Ad cunctas equestris, & pedestris armaturae, ludorumque omnium exercitationes efferebat, in palestra robustissimum quemque prosternebat, & currentem in arena taurum uno macherae ictu decollabat.” For a description of the physical traits of taurine and hence audacious individuals, see Della Porta 1602, 240.

<sup>36</sup> This understanding of the image is genuinely Aristotelian; see Klein 1957, 338–39.

## 6. The Physiognomy of Plants (1588)

Yet, Della Porta's art of physiognomonics was not limited to animals. His *Phytognomonica* (1588) describes such affinities everywhere, from plants and animals to the bodies and faces of humans, and even further up the ontological scale to the appearance of the planets (see Müller-Jahncke 1990). Like *De ziferis*, the *Phytognomonica* mentions Horapollo together with a list of examples from the *Hieroglyphica* (Della Porta 1589, 231–32, lib. V, cap. 27). Scattered through different books of the *Phytognomonica*, many passages explain that even plants have a sort of behavior, and that such mores are caused by sympathy and antipathy (Della Porta 1589, 25–6, lib. I, cap. 16). Human beings, thanks to the divine order, may decipher this language because it relies on the universal figurative similitudes. Comparing such images to the hieroglyphs of the Egyptian sages,<sup>37</sup> Della Porta calls this idiom “*pictura loquens*” and claims it to be more powerful (“*valentior*”) than all other systems of signs and even spoken words. He also explains that illiterate people use such images, which allows them to gather some knowledge of the hidden properties of things, for instance to find medicines. Importantly, he claims that<sup>38</sup>:

We can use the power of such similitudes in astrology, the interpretation of dreams, agriculture, and in other sciences, and it will be easy for us to know in a short time what took our ancestors a long time to find out, because they were only guided by experience without [knowledge of] causes.<sup>39</sup>

<sup>37</sup> Sachiko Kusakawa has pointed to analogous affinities between botanical classification in Conrad Gessner, an important source for Della Porta. Gessner says that images of plants drawn from life are like “natural hieroglyphs,” and hence are far truer than the characters of the Egyptians. See Kusakawa 2012, 175–76.

<sup>38</sup> *Hac vi similitudinis in astrologia, somniorum interpretationibus, agricultura, & alijs scientiis uti poterimus, brevisque temporis momento eo nosse non difficile, quae maiores nostri longis temporum intervallis sola experientia duce, sine causis adinvenire.*

<sup>39</sup> Della Porta (1589, 17, lib. I, cap. 8) further explains: “*Est quippe per similitudinem demonstrandi modus, quo saepissime summus rerum opifex divinas & occultas res solet patefacere, ut supremam idearum similitudinem referrent. Nec praestantiori, aut concinniori poterat modo. Nam si plantam loqui fingamus, & secreta suae naturae commoda, quibus praestat, promere vellet, quocumque sermone, quibusvis modis loquutura [sic: locutura?], non ab omni perciperetur, quum & sermones, & scribendi characteres singulis gentibus proprii sint, & peculiare: unde aut uni nationi, aut infinitis loqui linguis oportuisset: sic arguta naturae solertia suis rerum similitudinis & breviter, & perspicue satis simul omnibus facit. Est enim similitudo pictus sermo, vel pictura loquens, quae quovis sermone, quibusvis notis valentior est: nam muti, quibus pro sermone gestus sunt, & animalia sermone carentia, motibus corporis suos indicant affectus [...] Similitudo & si semper eiusdem habitus, tantum habet momenti, ut ipsam dicendi vim superet, nullaque res magis animo infigitur, quam artificiosa pictura. Vulgo pictura idiotarum sermo dicitur. His accensendae videntur similitudines, & proprie rerum facies, quibus Aegyptj sapientes, suos animi conceptus exprimebant, ut non omnibus essent conspicui quas hieroglyphica grammata nuncuparunt. Sic rudi vulgo, montium accolis, opilionibus, mulierculis mapalia habitantibus, & ijs, qui in desertis mundi plagis nascuntur, longè a medicis, eorumque consilijs, quomodo sibi mederi possint, proprijs picturis morbum designantibus alloquitur natura, ne praesidio destituti a morbis trucidentur.*”

Here, as in his *Art of Memory*, Della Porta points to the potential of *inventio* by means of a recombination of a set of signs. Yet the present context is not mnemonics, but what the author called sciences: the interpretation of dreams, agriculture, and astrology. These arts are not foreign to the agenda of the *Hieroglyphica*: George Boas, for example, has pointed to the formative influence of Artemidorus' *Interpretation of Dreams* (*Oneirokritika*) on Horapollo's text (Boas 1950, 25–7).

*Phytognomonica* distinguishes between male and female plants. The “fig-bull” is an example that supports this claim, because it highlights the difference between the sweeter, softer, and moister (and hence female) fruit of the fig tree and the (male) wild fig. Della Porta explains:

The wild fig has less milk, is more robust, denser, with less fruit, is more long-lived, and much stronger than the fig, because if the neck of a bull—however raging it may be—is bound to its branches, it will become calm because of the amazing nature [of the wild fig].<sup>40</sup>

In this context, the topos of “fig-bull” is here used to bolster one of Della Porta's most cherished botanical theories: as an example demonstrating that male and female gender stereotypes are transferable to the life and mores of plants. The “fig-bull” is mentioned again in a similar context and with similar intent in another passage of the *Phytognomonica*, where Della Porta explains that he believes that only the wild fig has the power to calm a raging bull, because only the stems of the wild fig have the power to soften bull meat, thus making it possible to cook using less firewood, as Pliny had claimed. Again, Della Porta refers to the “fig-bull” in Horapollo, and he recounts that the ancient Egyptians represented a man struck by sudden ill luck with the image of a bull tied to a fig tree. We have analyzed these elements and their reciprocal uses as arguments, but the hieroglyph is here inserted into a botanical context where Della Porta employs the topos of the “fig-bull” to classify plants and to explain their special magical properties as deriving from their male or female sex. And he adds that the bull's blood has a special fibrous quality, which he claims to be the reason why bulls are the fastest animals to achieve an erection and why they ejaculate semen most quickly. Della Porta refers to yet another of Horapollo's hieroglyphs: the image of the bull with an erect penis. It denotes “fortitude” because the animal's penis is so hot that it does not have to move inside a cow's vagina to ejaculate; moreover, a bull would gravely hurt a cow if his member penetrated some other part of her body. At the same time the hieroglyph signifies temperance, because a bull will not mount a pregnant cow.<sup>41</sup> Della Porta adds that bull's blood

<sup>40</sup> Della Porta 1589, 27–28 (lib. I, cap. 17): “Caprificus lactis minus habet, robustior, spissior, fructuque infecundior, ac diuturnior vita, multoque fico validior, nam tauros quolibet feroces, collo earum ramis alligatus mirabili natura compescit.”

<sup>41</sup> Horapollo 1, 46 (cf. 1950, 78–80); for an illustration, see again Valeriano 1567, 29v. Here image and French translation follow Fasanini's Latin version of the *Hieroglyphica*, and replace the bull's erect penis with the euphemism of a “completely healthy” bull (“integrate valetudinis”).

is poisonous if you drink it.<sup>42</sup> Yet, there are exceptions: for Pliny says that some priests in Aegyra drink bull's blood during ceremonies of geomantic divination, and Della Porta adds that this strong sympathy is caused either by religion or by the qualities of the specific place where these ceremonies happen. We also learn that Dioscorides recommends a sip of bull's blood as medicine against flatulence caused by drinking the milky juice of the wild fig.<sup>43</sup>

The new set of ideas in the sign of "bull-fortitude" illustrates how over the years Della Porta was elaborating the set of recipes, theoretical claims, and practices within a group of bull-hieroglyphs. This allowed him to create new resonances and refer to more and more hieroglyphs with cognate meaning. In this case, the *Phytognomonica* imbricates a discussion of the medical and gastronomic efficacy of figs, with the hieroglyphs of the "fig-bull" and "bull-fortitude," with the lethal (or manic) properties of bull's blood in connection with geomancy,<sup>44</sup> and the medical use of small quantities bull's blood against flatulence caused by the juice of the wild fig (which implicitly testifies to the antipathy between wild fig and bull). Like a deck of cards or a gallery of mnemonic images, these series of topoi are the male and female forces in the universe: in short his erotic, if not outright sexual, magic. Like both versions of the *Magia*, *Phytognomonica* is an assemblage of extraordinarily heterogeneous quotations that are accommodated to topoi in order to prove a given claim (in our example, the mores of the wild fig). Yet, a reader who wonders why the blood of the bull is so special must look for an explanation in a completely different part of the *Phytognomonica*. Here she learns that it has a spiky, stinging, fibrous quality ("quaedam corpuscula, pilorum imagine oblongas"), which causes the animal's fierceness. The information comes next to another instance where Della Porta mentions the "fig-bull."<sup>45</sup> In the context of yet another recipe *Phytogno-*

<sup>42</sup> On remedies against poisoning from bull's blood, see Pliny, *Natural History* 20, 25, 94; 22, 90; 28, 102; 31, 120.

<sup>43</sup> See Pliny, *Natural History* 23, 128. Della Porta 1588, 297–98 (lib. VII, cap. 29 [actually 19]): "Caprificus tauros quàm libet feroces collo eorum circumdata, in tantum mirabili natura compescit, vt immobiles praestet, ex Plinio. Sed Plutarchus ad ficum, non ad caprificum mansuescere dicit, ego ad caprificum dicerem: nam & caules caprifici, si carni bubulae inter elixandum addantur, vt Plinius alibi scribit, magno ligni compendio eam percoquunt. Hominem novissima calamitate castigatum designaturi Aegyptij, taurum pungunt [*sic*: pingunt], caprifico alligatum, hic enim cum mugit, si de caprifico ligetur, redditur mansuetus: Horus Apollo. Taurorum sanguis fibris refertus est, quare omnium celerrimè coit, & durescit, ex Aristotele, ideo laetifer in potu. Plinius excepta Aegyra, ibi enim sacerdos terræ vaticinatura, tauri sanguinem bibit: tantum potest sympathia illa, de qua loquimur, vt aliquando religione, vel loco fiat. Caprifici succu lacteo succo turgentè ex posca, Dioscorides propinat ad haustum taurinum sanguinem: [...]."

<sup>44</sup> On the theory and practice of this divinatory and magical art, see Agrippa 1992, 204 (lib. I, cap. 57), 367–70 (lib. I, cap. 48), and esp. 380 (lib. III, cap. 50).

<sup>45</sup> Della Porta 1589, 104 (lib. III, cap. 7), an idea repeated on page 297, perhaps an indirect reference to Lucretius *De rerum natura* 2, vv. 333–478 (cf. 1994, 46–9). The idea that bull's blood is spiky is repeated in Della Porta 1602, 17.

*monica* also mentions the “bull-cow”: Pliny says that if a pregnant woman eats the veal of a young bull (*vitulus*) that is cooked in bulbs of *aristolochia* (“birthwort”), she will give birth to a boy.<sup>46</sup> We also encounter “mud-frog,” this time with tales of the spontaneous generation of ducks and similar birds from sea-shells in the British Isles.<sup>47</sup>

### 7. *Villae* (1592)

In *Villae* (*Estates*) Della Porta presented a *summa* of ancient and modern forestry, agriculture, and horticulture as it had been known and practiced in Europe. *Villae* is organized in a scenic manner, “an imaginary round tour through an open-air theater.”<sup>48</sup> The reader is guided through the diverse zones of an imaginary vast country estate. Emphasizing first-hand experience, Della Porta’s *Villae* focuses on plants cultivated in Puglia and the Capitanato, the province surrounding Naples. Even though *Villae* was not a big success, it implicitly catered to a way of life that took its inspiration from Cicero’s ideal of an independent life. This was well matched with a trend in Della Porta’s day among the ruling classes to move to the countryside, which also resulted in the construction of some of Andrea Palladio’s most impressive rural villas. In general, *Villae* betrays an implicit astrological agenda as Porta conceives of plants as recipients of celestial influx. *Villae* was innovative in several respects: it was the first text to dedicate an entire treatise to the cultivation of olives, as well as containing one on grafting. This latter topic is especially interesting because it demonstrates the extent to which Della Porta’s ideas on agriculture intertwine with his ideas on natural magic.

*Villae* has a brief chapter on the wild fig and a longer one on the fig tree, both chapters mentioning “fig-bull” (Della Porta 1592, 171–73, lib. II, cap. 17; 300–27, lib. V, cap. 16). Della Porta describes the qualities of the tree as marvelous

<sup>46</sup> Della Porta 1589, 145 (lib. III, cap. 45): “Taurus vbi iuvenca supervenerit, si à dextra desilierit [desiluit?], marem seminasse certum est, si laeva feminam: carnem vituli si cum aristolochia inassatam edant mulieres circa conceptum, mares parituras promittit Plinius.” On the powers of the *aristolochia* (birthwort) in obstetrics, see Della Porta 1558, 28, 151–52, 153, 268.

<sup>47</sup> Della Porta 1589, 35–36 (lib. II, cap. 2): “Et si quibus dubium videtur, quod stirpes ex aqua mistura progignerentur, consideret animalia quamplurima, & perfecta etiam ex putri limo generari, quorum ortus difficilior omnibus iudicatur, & iam de eorundem exortu variæ sunt confirmantes Philosophorum opiniones. Inter Phoenicum & Aegyptiorum placita censeri asserit Porphyrius animalium genera ex terræ visceribus prorepisse Solis agente vi. Ranæ etiam, quæ suos in aquis natales habent, ex palustri limo generantur, nec solum ex limo, sed per se etiam nascuntur, conspers tantum imbre littorum; & itinerum pulverulentis arenis, temporariæ dictæ, sic etiam serpentes: Macrobius in Aegypto mures ex terra; & imbre nasci scripsit, mitto anates illas, vel eius congeneres aues in Scotia, in Orcadibus, & ad Temesim amnem, quæ conchis nascuntur; quæ navium musco, & limo semi putridis carinis [sic: carnis] evelluntur, labantes in sicco moriuntur, quas verò aestus maris alluit, conchis excluduntur.”

<sup>48</sup> Orsi 2005, 53 and *passim* for the best introduction to *Villae*.

miracles of nature (*prodigiosa naturae miracula*) (Della Porta 1592, 303), mentioning the recipe for the softening of meat; yet the recipe is new: it is not beef that is cooked with stems any more. Here Della Porta quotes almost verbatim a long passage from Plutarch's *Table Talk*, according to which freshly slaughtered poultry becomes tender when hung from a fig tree. Plutarch attributes this to the special nature of fig juice.<sup>49</sup> Like Plutarch, Della Porta maintains that the acrid nature of its most abundant juice, manifest also in the smoke produced by burning the wood of the tree, is an especially strong *halitus* and *spiritus*<sup>50</sup> that irritates the lungs, that the ashes are a most powerful detergent lye, and that milk is curdled by the fresh juice of figs. Another "miracle of nature" is that the wild fig is even shunned by the heavens, because no flash of lightning will strike a wild fig: an occult property that the fig tree shares with seals and hyenas. Again, this is caused by the bitterness of the fig tree's juice.<sup>51</sup> Plutarch's explanations for the special power of the fig tree are similar to the one Della Porta had given for the special nature of bull's blood. In the chapter on the wild fig, Della Porta

<sup>49</sup> Plutarch, *Symposiaca*, 696E–697A (cf. 1969, 510–15). The "fig-bull" is discussed (without reference to Horapollo) in the context of inexplicable antipathies in Plutarch 1969, 174–77, (641B–C).

<sup>50</sup> In Plutarch the word is *pneuma*, Plutarch, *Symposiaca* 696E (cf. 1969, 512).

<sup>51</sup> Plutarch *Symposiaca* 664C–D (cf. 1969, 316–19). Della Porta 1592, 303 (lib. V, cap. 16): "Sed afferamus aliqua huius arboris prodigiosa naturae miracula, quorum alterum est tauros quantumlibet indomitos fico alligatos cicurari, & quasi immobiles conquescere. Alterum, victimas caesorumque animalium carnes perquam celeriter tenerescere, & fragiles effici, quae in fico pependerit. Horum causam demonstrat Plutarchus in symposiacis dicens: Quum inter obsonia Aristionis coquus immolatum Herculi gallinaceum gallum, recentem, tenerum, & penè friabilem obtulisset, tam citam teneritudinem ficui acceptam referebat Aristio, contendens iugulatas aves etiam praeduras teneritatem contrahere, quae pensiles adhaesere ficui. Causam affert Plutarchus: Nanque quod auram halitumque vehementè, ac validum expirat ficus, visus satis testatur. Fidem quoque facit, quod vulgò de tauris dicitur: ferocissimus quisque huic adligatus arbori mitescit, tangique manu, ac subiugi tolerat, & efflans iram, animumque veluti lassum deponit, tanta vi pollet ea spiritus acrimonia, vt ruat licet, saeviatque taurus, imperet furori. Siquidem arbos ficu plus caeteris lacte copioso praegnans est, ut lignum, rami, pomum eo planè resarciantur, quapropter cum comburitur, fumus que eructat maxime mordet & vellicat lixivus quoque cinis maximè deterget, purgatque. Quin & cogitur caseus ficulneo lacte, quod emittit arbor si virentè saucies corticem. [...] Sed alij sunt, qui haec ad caprificum, non ad ficum referant. Aliud quoque accedit naturae miraculum ab eodem traditum, quod ficus de caelo non tangitur, id vtique amaritudini acceptum referre oportet, tale genus quippe non attingunt fulmina, quod vitulus comprobatur marinus, atque hyæna. Theophrastus ab aruspibus ostenta existimari ait, quae fortuita mutatione fieri contingit, vt ex caprifico ficum, & ex fico caprificum, sed de fico in caprificum deterius, vnamque ex candida nigram, & ex nigra candidam." It is tempting to read these remarks as an oblique reference to the magical properties of the hyena, an animal that is prominent in the *Hieroglyphica*, and which allegedly can change its sex. See Koderá 2010, 92–93. Yet Della Porta denies this possibility, at least in *Phytognomonica*, 289 (lib. VII, cap. 14). Even so, he enumerates several other magical properties of the hyena. For an especially dense passage, see Della Porta 1589, 286 (lib. VII, cap. 15); he also refers directly to the *Hieroglyphica* when he mentions the properties of hyenaskin: Della Porta 1589, 281 (lib. VII, cap. 11).

furthermore stated that this immunity to lightning strikes makes the tree holy to *haruspices* (diviners who interpreted animal entrails, wonders, and lightning), who believe that this phenomenon is *praeter-natural* (i.e., demonic). Well in accordance with his general approach to cross-breeding, Della Porta also reports that that wild fig trees may change into fig trees and vice versa, just as trees producing black figs may change and produce white fruit.<sup>52</sup> Accordingly, in *Villae* Della Porta does not seem to be as convinced as he had been in *Phytognomonica* that only the wild fig has these properties. In *Villae* he again adapts his kaleidoscope of hieroglyphic images to a slightly different position, the assemblage of familiar images catering to yet another set of practices, while the elements of this mannerist machinery of invention remain untouched—just as the cosmos remains a safely closed set of elements.<sup>53</sup>

## 8. Conclusions

Della Porta's ideas on and use of hieroglyphs began to develop in the context of talismanic magic. Over the years, he integrated these images into sets of highly flexible rhetorical topoi covering a wide range of purposes. Hieroglyphs serve as *imagines agentes* for the organization of the memory; as ciphers; as *sedes argumentorum* to bolster the credibility of some more or less amazing recipe; and hence as another example testifying to the truth of natural magic in general, as a source of wonder, a spectacle of nature, and last but not least as a rich source to enhance and fertilize the life of the imagination. These kaleidoscopic permutations, accompanied and at the same time generated by the recombination of a set of relatively few visual elements, make good reads, as they are simultaneously containers and signifiers of wonders. Raphaële Garrod has argued (in a slightly different context) that early modern readers perceived descriptions in the genre of natural history not merely as sources of information, but as aesthetic phenomena, especially when they rendered vivid (figures of *enargeia*, *hypotyposis*) descriptions of marvelous phenomena. Undoubtedly Pliny's *Natural history* was the model for such accounts that catered to the development of modern literary taste (see Garrod 2018, 7, 15). Della Porta's approach to and use of hieroglyphs exemplified in this paper seems to confirm these claims: his accounts of *meraviglia* were intended as good reads, just as the human imagination, not least in its capacity to influence one's own body in amazing ways, was the hotbed for all sorts of magic.

Let me therefore suggest reading *Phytognomonica* and *Villae* alongside the *Magiae* as collections of implicit instructions for action, as books of recipes. In this format, theoretical explanations are not obligatory: on the contrary, rec-

<sup>52</sup> Della Porta 1592, 171: "Sed si unquam ex caprifico ficus, aut ex ficu caprificus fieret, aruspices pro ostento haberent, tanquam prodigia, & praeter Naturae normam accidere arbitrarentur. (Pliny)."

<sup>53</sup> On this set of ideas, see the important contribution by Quondam 1975, 13–14, 157–58, 212–17, and *passim*.

ipes usually do not explain *why* something works, they rather tell you how to make something work. The recipe is a genre in which concrete instructions for action are conveyed, and the systematic context—philosophically religious, or social—is usually only implicit. The recipe is hence a formidable device to elide any direct reference to potentially heterodox theoretical claims about magic, divination, or religion.<sup>54</sup> The topological nature of these recipes also entails that the related image may surface several times in the text; that it may be associated there with different arguments.

Boas has pointed to the formative influence of Artemidorus' *Interpretation of Dreams* on Horapollo's text (Boas 1950, 25–7). Artemidorus understands dream images as translations, metaphors, which have an inherent prognostic capacity. Della Porta left no interpretation of dreams: with him, the prognostic and thus action-guiding dimension of such images is shifted to physiognomonics and to mnemonics. But he embraces the method, even ascribing to it the potential to invent new things. In Della Porta's other writings discussed here, this aspect is also expressed in the important function of *meraviglia*, of astonishment: namely, in both versions of the *Magia* in a practice of artful, indicative display of bodies, all of which can be translated into extraordinary, often hidden, qualities and powers (*qualitates, virtutes occultae*). This is mostly located in the (explicitly or implicitly) sexual. Horapollo's collection of Egyptian *imagines* is a rich source for sexually explicit content, for there mothers are slept with, fathers are murdered or repressed, and mice and other creatures are born from the mud. Della Porta expands this set of scandalous images: in his work, bull testicles are tied, incubated in a retort and from dirt, bred and cross-bred. In his mnemonics, Della Porta emphasizes the power of such images in the human imaginary: they are astonishing, secular miracles that imprint themselves deeply on the memory and shape the individual. Hieroglyphs thus function simultaneously as testimony of the foundations of natural magic—of universal sympathies and antipathies—and as their emblematic confirmation.

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<sup>54</sup> The young Tommaso Campanella criticized Della Porta for this lack of metaphysics; see Bianchi 2018, 210–11. Yet Campanella's own biography, alongside Giordano Bruno's *vita*, is a salient example of how dangerous it had become for intellectuals to meddle with metaphysics in Counter-Reformation Italy.

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