

KNUCKLEBONE FACES AND THROWS:  
PLAY, RULES, AND RHETORICAL DISCOURSE IN JULIUS POLLUX

Marco Vespa  
University of Fribourg (CH) / ERC Locus ludi  
[marco.vespa@unifr.ch](mailto:marco.vespa@unifr.ch)

Abstract:

*The reconstruction of the culture of play and games in antiquity involves many problems of an exegetical nature, which are especially difficult to analyse because of the limited amount of encyclopaedic evidence that might provide adequate overviews and descriptions. Julius Pollux's lexicon is an essential text in this regard. He wrote in the second half of the second century A.D. a synthesis of ancient knowledge, in which each notice was presented within very specific rhetorical and discursive constraints. This article focuses specifically on a passage (Poll. 9.100) in which two different names are given to the same face of the knucklebone. This passage presents an interpretation problem that led some scholars to hypothesize a specific game rule. This paper shows how the answer to such an exegetical aporia can be solved by looking at the rhetorical specificities of the lexicographic genre and in particular at the discursive organization of the onomastic knowledge by Pollux.*

Keywords: *Pollux - ancient play and games – knucklebones game - lexicography – rhetoric*

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The study of the manifestations of ancient ludic culture presents us with many epistemological problems and hermeneutical implications: the reconstruction of knucklebone throws and games is no exception. First, extant sources are heterogeneous both discursively and chronologically. They are composed of scattered literary allusions and anecdotes, some as early as the *Odyssey*,<sup>1</sup> as well of scholarly ancient texts, such as Julius Pollux or Athenaeus

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<sup>1</sup> E.g. Hom. *Od.*, 1.106-108 (the suitors of Penelope playing with counters); see also Eur. *Suppl.*, 409-410 (the Theban herald asserts that behaving in a certain way Theseus would provide an advantage to the Theban community in the same way as it happens in the game of counters). Play activities are found in many ancient texts, which, however, are all highly formalized from a literary and symbolic point of view such as the epic

of Naucratis using earlier literary evidence, often centuries away.<sup>2</sup> The works of lexicographers, such as Phrynichus or Julius Pollux do not present rules systematically. Although many literary texts mention play with knucklebones since the *Iliad*,<sup>3</sup> and generic ways of playing can be reconstructed, it is impossible for us to recover all the regional and local variants that must have existed. In addition, the few extensive technical texts that have been transmitted are in a fragmentary state. One only has to consider the tradition of Suetonius' lost treatise *On the Games of the Greeks*: its scarce traces are preserved in two medieval manuscripts and it can only be reconstructed from indirect quotations drawn from the ancient commentaries on the Homeric poems by Eustathius of Thessalonica.<sup>4</sup>

These methodological difficulties explain the longlasting conflicting interpretations among modern scholars since at least the 18<sup>th</sup> c., about the games played with knucklebones, their numbers, the names of the throws, βόλοι, and the numerical value assigned to each of them on the basis of the calculation of the four faces.<sup>5</sup>

One of the most important pieces of ancient evidence for the practice of ἀστραγαλίζειν, the “game activity with knucklebones”, is found in the first paragraphs of the section dedicated to games in the book nine of Julius Pollux's *Onomasticon*. Pollux's passage is part of a lexicographic text, whose objectives are to provide recommendations on the good use of the Attic language. However, the information contained in the passage is not entirely clear. This is partly due to the various phases in the transmission of the text characterized by abridged versions and interpolations of the original.<sup>6</sup>

The interest of Pollux's passage lies in the unique, minutious, description aiming to provide a wide, but not exhaustive, cross-section of some names given to the faces of knucklebones with their numerical values. Pollux also includes a number of precious lexicographic information on the traditions related to the onomastics of possible throws:<sup>7</sup>

τὸ δὲ σχῆμα τοῦ κατὰ τὸν ἀστράγαλον πτώματος (100) ἀριθμοῦ δόξαν εἶχεν, καὶ τὸ μὲν μονάδα δηλοῦν καλεῖται κύων, τὸ δὲ ἀντικείμενον χιάς, καὶ Χῖος οὗτος ὁ βόλος. δυὰς δὲ καὶ πεντὰς ἐν ἀστραγάλῳ, ὥσπερ ἐν κύβοις, οὐκ ἔνεστιν. οἱ δὲ πλείους τὸν μὲν ἐξίτην Κῶον, τὸν δὲ κύνα Χῖον καλεῖσθαι λέγουσιν. καὶ μὴν καὶ Στησίχορος ἐκαλεῖτό τις παρὰ τοῖς

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poetry or the tragic theatrical performance. They are not handbooks, nor dictionaries: they do not provide instructions or rules, their allusions are part of a shared cultural knowledge.

<sup>2</sup> On the structure, readership, and pragmatic purposes of an erudite work such as the *Deipnosophistae* by Atheneaus, see in particular Jacob 2013, esp. 270-293.

<sup>3</sup> Hom. *Il.* 23.88.

<sup>4</sup> Taillardat 1967, 27-44.

<sup>5</sup> One of the oldest erudite texts about knucklebones games in ancient Rome is the treatise *I Tali ed altri strumenti lusorj degli Antichi Romani* by Francesco de Ficoroni (1734). More recently, Lamer 1927, esp. coll. 1946-1957 provided an exhaustive overview of the throws' names for knucklebones and dice. The debate still continues. Cf. Kidd 2017 who hypothesized that there were five knucklebones in Greek games, and not four as commonly argued, and suggested that one of the faces of the knucklebone, in particular the narrow one with a flat surface, had the numerical value of “8” and not “6”.

<sup>6</sup> The important contributions by Arethas of Caesarea to Pollux's text must be noted, but Pollux must have already been summarised prior to the epitome and the critical observations of the Byzantine scholar; see Conti Bizzarro 2013, 1.

<sup>7</sup> Poll. 9.100. All extracts from Pollux's text are cited according to the reprinted edition of Bethe in 1967.

ἀστραγαλίζουσιν ἀριθμός, ὃς ἐδήλου τὰ ὀκτώ· τὸν γὰρ ἐν Ἰμέρα τοῦ ποιητοῦ τάφον ἕξ ὀκτὼ πάντων συντεθέντα πεποικέναι τὴν ‘πάντ’ ὀκτώ’ φασὶ παροιμίαν.

*The way the knucklebone falls usually has a numerical value, and the one that shows the value of one is called the “dog”, while the opposite side is called the “Chias”, and this throw is called the Chios. The values of “two” and “five” do not exist with knucklebones, in contrast to dice. However, most people claim that the “six” is called Cos, while the “dog” is called Chios. Knucklebone players also claim that the number that gives eight was called Stesichorus; (some) say that the tomb of the poet Stesichorus in Himera, made up of eight (sides) in every part, gave birth to the saying “all eight”.*

As described by Pollux, the game is based on the different values attributed to structure of the knucklebone - which is a bone from the ankle joint of the rear leg (tarsus) of the higher vertebrates - which is composed of two narrow sides and two wide sides (fig. 1).

The wide concave face and the convex one received a name deriving from their shape. Aristotle thus names the concave side ὕπτιον, the “belly”, and the convex one πρᾶνές, the “back”.<sup>8</sup> The narrow faces could be referred to in different ways. According to Pollux, one of the two sides received the name of κύων, that is the “dog”, while the other one could be given the name ἐξίτης, that is the “six-point one”. Alongside these names, however, Pollux also provides the designations of these two faces based on the names of the two islands of the Aegean Sea, that of Chios, associated with the side of the “dog”, and that of Cos, associated with the side of the six.

Pollux – and perhaps before him Suetonius - appears to be the first written source to explicitly associate a numerical value to the faces of the knucklebones, apart from the second century AD inscriptions concerning astragalomancy in Asia Minor.<sup>9</sup> Other sources associate a numerical value to each face of the knucklebone, but they date also to the Roman imperial time or even to the Late Antique period, such as the lexicographer Hesychius.<sup>10</sup>

Moreover, regarding the names of the narrow faces with the designation of the two Aegean islands, the situation is more complicated because previous sources seem to attest to this, in particular some Aristotelian passages. Thus, most scholars have tried and still try to draw a relevant parallel between the designation of the four faces of the knucklebones by Pollux and a passage from Aristotle’s *Historia animalium*.<sup>11</sup> However, Aristotle’s treatise has benefited from a new critical and ecdotic treatment which has completely excluded orographic references to the islands of Cos and Chios. Thanks to a new and more extensive collation of the manuscripts of the Aristotelian text, David Balme and the other editors decided to restore

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<sup>8</sup> For the Aristotelian passage see below.

<sup>9</sup> For a general presentation of the different faces of knucklebones and their specific numerical values, see Nollé 2007, 8-9. See also Rohlf’s 1964. On classical period knucklebones inscribed with symbolic signs and names of deities (no numerals), see e.g. Myrina, Pottier 1886, in Delphi (158 examples), Amandry 1984, 370- 375 ; Caré 2019.

<sup>10</sup> Hsch. κ 4861 Latte: Κῶος Χῖον· ὁ Κῶος ἀστράγαλος, ὁ ἕξ, ὁ μὲν γὰρ Χῖος ἐδύνατο ἕν· ὁ δὲ Κῶος ἕξ. The same association between the numerical value and the name of the island is to be found in the paroemiographical tradition as well, e.g. Zenob. *Prov.*, 4.74 Leutsch-Schneidewin.

<sup>11</sup> Arist. *HA*, 2.1 (499b 26-31).

the readings κῶλα and ἰσχία preserved by most of the manuscripts, instead of κῶα and χῖα. The newly edited text describes the four faces of the knucklebones in the following way: a) πρᾶνές side, “of the back”, which would refer to the wide convex face, b) ὕπτιον side, the “belly” part or wide concave face, c) κῶλον side, or “limb” side, one of the two narrow faces, and finally d) ἰσχίον side, the “basin”, for the second narrow face (fig. 2).

Below is the text in the most recent edition of D. Balme:<sup>12</sup>

Πάντα δὲ τὰ ἔχοντα ἀστραγάλους ἐν τοῖς ὀπισθεν ἔχει σκέλεσιν. Ἔχει δ’ ὀρθὸν τὸν ἀστράγαλον ἐν τῇ καμπῇ, τὸ μὲν πρᾶνές ἔξω, τὸ δ’ ὕπτιον εἴσω, καὶ τὰ μὲν κῶλα ἐντὸς ἐστραμμένα πρὸς ἄλληλα, τὰ δὲ ἰσχία καλούμενα ἔξω, καὶ τὰς κεραίας ἄνω. Ἡ μὲν οὖν θέσις τῶν ἀστραγάλων τοῖς ἔχουσι πᾶσι τοῦτον ἔχει τὸν τρόπον.

*All animals with knucklebones have them in their hind legs. The knucklebone is located vertically in the joint, the side of its arched back facing outwards, the side of its belly facing inwards. The flat sides are facing inwards, while those (faces) named after the flanks are facing outwards, with the growths on top. The position of the knucklebones in all the animals that possess them is as described.*

Thus, according to Aristotle’s text, the knucklebone is described as if it were a body within the body, located vertically in relation to the flexion of a quadruped’s posterior joints. This three-dimensional anatomical model seems to be at the root of the knucklebone’s various parts.<sup>13</sup> This miniature body has a dorsal side, the wide convex side, which would have faced outwards or backwards in an animal’s stride. On the opposite side was the belly, the ὕπτιον or the wide concave side facing internally with respect to the animal’s flexion.<sup>14</sup> The other two

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<sup>12</sup> ed. Balme 2002. The other editors of the Aristotelian text, in particular Louis 1964, 40, and almost all the studies of the passage interested in the game of knucklebones (Carbone 2005; Nollé 2007; Doria 2012; Costanza 2018) follow instead the *manus recentior* of codex *m* (Paris. Gr. 1921) with the variants κῶα and χῖα, found in the giuntina edition of 1527. Adopting the correction of the *manus recentior* of the Parisian codex would have the advantage of standardizing and harmonizing the name of the narrow faces of the knucklebone with the rest of the following ancient tradition that constantly refers to the faces of Cos and Chios, justifying these designations by the orographic formations of the islands by the same name. This interpretative and ecdotic process, however, was carried out without taking into account almost all the tradition of the Aristotelian text. Above all it introduces an inconsistency in the metaphorical system built by Aristotle to describe the faces of the knucklebones, a system of anatomical references to the parts of the knucklebone as if these were parts of a body. Louis 1964, 167, reports as a textual parallel to legitimize the amendment χῖον instead of the reading ἰσχίον a passage of *De Caelo* 2.12 (292a 29-30). However this passage does not discuss the sides of knucklebones, but focuses on how to operate chances of success, comparing the extreme difficulty of obtaining the throw of Chios, since the knucklebones tend to fall more often on some sides than others. The section dedicated to the knucklebone in Pliny, *Nat.*, 11.255 is largely inspired by the Aristotelian text: it does not provide useful information on the names of the narrow faces, because it focuses on the description of the wide ones (*Talus autem rectus est in articulo pedis, concave belly eminens, in vertebra ligatus*).

<sup>13</sup> E.g. Arist., *HA*, 1.13 (712a). For a description of the movements of animals and the orientation of the flexions of their limbs, see Carbone 2011, 190-199.

<sup>14</sup> An exhaustive review of the sources concerning the couple πρᾶνές - ὕπτιον and associating πρᾶνές with the convex wide face of the knucklebone is already mentioned in Jüthner 1926, 113: “So heißt πρᾶνής nicht bloß ‘im Rücken befindlich’, sondern auch ‘rückenähnlich, bucklig, erhaben, konvex, also soviel wie κυρτός’”. *Contra* Schädler 1993 who on the basis of a comparison with ancient statuary suggests instead that the πρᾶνές side should indicate the concave dorsal part as in a statue of the classical period.

sides of the knucklebone were also given names which were consistent with the metaphorical analogy of the body. The opposition between the narrow faces is translated into anatomical terms, assigning the name of flank to the narrow, tortuous and undulating side, ἰσχίον, while that of κῶλον, “side” or “surface”, to the smooth and linear opposite side.<sup>15</sup>

Pollux’s text presents a substantial aporia: the reconstructive hypothesis established the system of names for each face of the knucklebones opposing the value of “1” to that of “6”. If both the name of “dog” and that of “Chios” are normally assigned to the narrow face of the knucklebone with a value of “1”, why did Pollux describe these two names as two opposite faces?<sup>16</sup> Traditionally, all the studies of this passage and of knucklebones in Greece in general, basing their work on lexicographic and scholiastic sources of the imperial age, have reconstructed a standard system of oppositions in which certain faces correspond to certain numerical values: the narrow faces corresponding to the values of “1” and “6” and the wide faces of the knucklebone corresponding to the values of “3” and “4”.

The hermeneutic difficulty in Pollux’s text consists in the semantic value to be attributed to the participle ἀντικείμενον which determines the names for the two opposite sides normally indicating the same value of “1”, that is the term “dog” and the term “Chios”. Such a problematic passage has led to reconstruct a rule in which the face to be considered is not the one that is revealed to the player after a throw, but the hidden one facing the ground. Pollux’s text would indicate with κύων, the “dog”, the throw corresponding to the narrow face whose value is one, μονάς. The participle ἀντικείμενον would designate the opposite side and refer to a more ancient rule, perhaps no longer valid at the time of Pollux. The Chios’ throw would thus have a value of one, based on the side facing the ground.<sup>17</sup> According to this possible ancient set of rules the player would look at the narrow flat face with the value of “6”, ἐξίτης. after throwing an astragalus but the throw’s value would be “1”, since the face to be taken into account would be the narrow and tortuous face or “S” shaped one or Chios, that the player did not see. This would explain the use of the participle ἀντικείμενον in Pollux for the side which clings to the ground and whose value is “1” and whose name is Χῖος.<sup>18</sup>

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<sup>15</sup> Especially on the value of κῶλον as a side or even a “flat face”, the “facette” of a geometric figure see LSJ<sup>9</sup> s.v. κῶλον, II, 1. Moreover, a structural and metaphorical analogy between the different parts of the ἀστρογάλος and the anatomical shape of a body, human or animal, seems to be confirmed by several anthropomorphic Graeco-Egyptian knucklebones since the Hellenistic period, see Dasen 2019a.

<sup>16</sup> The exegetical difficulty of the passage is perhaps the reason for the different readings in Pollux’s manuscripts for the so-called χιάς side, “of Chios”: in addition to this reading, the codices C and L present the variant τριάς, “of three, three”, while the codex F transmits the numeral χιλιάς, “of one thousand”. It can be hypothesized that the copyists tried this way to overcome the obstacle represented by the designation of the two opposite faces with names that traditionally both referred to the same numerical unit.

<sup>17</sup> There are numerous references to κύων (or *canis*) in the players’ vocabulary, in which this name indicated the poorest throw which consisted in obtaining the number “1”, e.g. Suet. *Aug.* 71.2; Propert. 4.8.46.

<sup>18</sup> Schädler 1996, 64-65, who introduced a chronological distinction in the use of this rule which would go back long before Pollux’s time in the imperial era. The formulation of this “reading” of the knucklebones is already in Rohlf’s 1964, 5 no. 18. G. Rohlf’s argued, in passing, that in some Indo-European languages the origin of the notions of chance and fate might have derived from similar operating rules: the face of the knucklebone one takes into account is the “fallen” face, that one being in contact with the ground; see lat. *casus*, fr. *chance* (< lat. *cadentia*). Following a similar hypothesis we could understand the term πῶμα in Pollux’s passage differently, as a “falling” side, therefore not visible. This hypothesis is not confirmed elsewhere in Pollux where the term is found only in the paragraph on the knucklebones or in other authors; see Eunap. *VS* 23.39, where the expression

This hypothesis, though ingenious, presents some critical issues: the isolation of this passage of Pollux, compared to the remaining sources on the knucklebones' game and to other passages in Pollux, as well as the lack of explicit ethnographic parallels that might corroborate a ludic practice of this type in the Mediterranean area in different periods.

Thus, we will attempt to explain in detail the critical aspects of this hypothesis. An inevitable parallel must be made between Pollux's text - as part of the Greek lexicography tradition - and scholia to Plato's *Lysis*, which are often considered to be an indirect testimony to Suetonius' lost treatise *On the Games of the Greeks*.<sup>19</sup> A large section on knucklebones and their games can be found in the commentary provided by the scholiasts on the games played during the feasts in honour of Hermes, by young men and even children in one of Athens' palaestrae where Socrates met the young Lysis and where he questioned him about *philia*:<sup>20</sup>

παίζεται δὲ ἀστραγάλους τέσσαρσιν καὶ εἷς ἕκαστος ἀστράγαλος πτώσεις ἔχει τέσσαρας, ἕξ ἑβδομάδος κατὰ ἀντίθετον συγκεκριμένας ὥσπερ ὁ κύβος. ἔχει δὲ ἀντικείμενα μονάδα καὶ ἑξάδα, εἴτα τριάδα καὶ τετράδα· ἡ γὰρ δυὰς καὶ πεντὰς ἐπὶ τῶν κύβων μόνων παραλαμβάνεται, διὰ τὸ ἐκείνους ἐπιφανείας ἔχειν ἕξ. ... τῶν δὲ βολῶν ὁ μὲν τὰ ἕξ δυνάμενος Κῶος καὶ ἑξίτης ἐλέγετο, Χῖος δὲ τὸ ἓν καὶ κύων.

*You play with four knucklebones and each individual knucklebone has four ways of falling, which add up to seven on opposite sides, just like with dice. (The knucklebone) has as opposite sides the one of the "one" and the "six" on one side, while on the other side the "three" and the "four" are opposed. The "two" and the "five" are only pertinent to dice, since they have six faces. ... Among the throws, the one that gives "six" was called Cos or the throw that gives "six" [ἑξίτης], while the one that gives "one" is called Chios, i.e. the dog.*

The text of Plato's scholiast distinguishes more clearly between the faces of the knucklebones with their numerical values and the names of the throws, βόλοι; the names of the two islands Κῶος and Χῖος, were given to two special throws.

The names of the two islands in connection exclusively with the βόλοι, that is the scores that were obtained after throwing the four knucklebones, is already found in Pollux in a passage of book seven (βόλων δὲ ὀνόματα τῶν μὲν φαύλων τε καὶ δυσβόλων ἐφ' οἷς τὸ δυσκυβεῖν ... οἱ δὲ βελτίους, ἐφ' οἷς καὶ τὸ εὐκυβεῖν ἐλέγετο...)<sup>21</sup> The picture here is more complex and informative than in book nine or the evidence from Plato's scholiast. Pollux lists according to

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σχῆμα τοῦ πτώματος is used to refer to the form that a sacrificial victim had taken, once placed to the ground after being killed, with no reference to what part of the victim, whether the upper or the lower had to be taken into consideration. No mention of the principle of the "hidden face" in Deubner 1930, 173-174.

<sup>19</sup> On the indirect tradition of the fragments of Suetonius' treatise, see especially Taillardat 1967, 33-36.

<sup>20</sup> Schol. in Plat. *Lysid.* 7 (206E 5) Cufalo. A *locus similis*, probably also derived in this case from Suetonius' treatise on the games of the Greeks, is found in Eust. *Comm. in Hom. Iliad.*, vol. 4, p. 690 van der Valk. See Suet. fr. 1, 19 Taillardat.

<sup>21</sup> Poll. 7.204.

the logic of an onomasiological lexicon<sup>22</sup> the names of throws considered to be unfortunate: they include the Chios throw, which as Pollux points out, was called - ἐκάλουν - ‘empty’, κενόν, or οἶνη, a term used in Ionia to indicate the unit, otherwise usually referred to as μονάς (χῖος, ὄν καὶ κενόν καὶ οἶνην ἐκάλουν - ἔστι δὲ οἶνη παρὰ τοῖς Ἴωσι μονάς -).<sup>23</sup> In the list of lucky throws, some onomastic variants evidently referred to different traditions, in particular for the lucky throws associated with the island of Cos, which were also called συνωρίς, “chariot’s throw”, or even “double throw”, and Κεῖος, the ‘Cean throw’ (συνωρίς κεῖος ἢ κῶος).<sup>24</sup> The indication of the plurality of linguistic registers within the Greek language, a very specific attention to the diachronic but also diatopic differences of ἐλληνίζειν, places Pollux in an intellectual and programmatic horizon that was very different from that of other more rigorous atticists, like his opponent Phrynichus.<sup>25</sup> The list of synonyms concerning the throws provided in this passage allows to grasp one of the fundamental aspects of Pollux’s lexicography: its pluralistic nature, of less rigorous character compared to Phrynichus’ alphabetical lexicography.<sup>26</sup> In the preface letter to the book six of his *Onomasticon*, Pollux himself states that the improvement and enrichment of the linguistic reservoir is as important to him as the prescriptive rigor of the choice of certain terms at the expense of others (τὰ μὲν τινα τῶν ὀνομάτων ὡς κρίνων ἔγραψα, τὰ δ’ ὡς μὴ παριεῖς ἐμήνυσα).<sup>27</sup>

Similarly Pollux chose some principles of erudite lexicographic practice that other intellectual groups did not consider relevant. Pollux thus describes the onomastic traditions of knucklebone players, those passionate or hardened gamblers, with the expression παρὰ τοῖς ἀστραγαλίζουσιν, when - in the passage which initiated this article - one of the throws was called “Stesichorus” in the jargon of the ἀστραγαλίζοντες. In his scholarly practice Pollux chose, at least in this case, to include some oral traditions in the tank from which to draw the good use of the Greek language. As the analysis of this passage shows, the discussion is only

<sup>22</sup> On onomasiological lexicography and its distinctive characteristics compared to alphabetical lexicography, see Tosi 2007.

<sup>23</sup> In Hesychius too the term οἶνη is mentioned as a dice throw with a value of “1” and the resulting verb, οἰνίζειν, would be a synonym of μονάζειν limited to a very specific dialectal region, κατὰ γλῶσσαν, most likely in Ionia, Hsch. ο 318 Latte. On the presence of Greek dialects in the lexicography of Pollux see Bussès 2011, 43-45.

<sup>24</sup> Poll. 7.204-205. This passage is very complicated from the point of view of its transmission. Bethe chose to print συνωρίς κεῖος ἢ κῶος, accepting the text found in C with the amendment by Wackernagel that corrects κῖος into κεῖος, on the basis of a comic ἀπροσδόκητον present in *Frogs* about the island from which Theramenes was supposedly a native, precisely the island of Ceos, see Ar. *Ran*, 970. Ms. A transmits drily instead an alternative between a “throw of the double” or “of the chariot”, συνωρικός, and the throw of Cos. See also Dindorf 1824, 568-569. The reference to the term συνωρίς as a lucky throw could also be drawn from the name of a famous courtesan, see Athen 6.51 (247a) quoting a fragment by the comic poet Diphilus, fr. 74 K.-A. For the name Συνωρίς, see also another passage in Athen. 13.46 (583e), where the author mentions her among the most famous Athenian prostitutes and calls her the “Lamp”, Λῦχνος. On the tradition of deriving the names of throws from gods, heroes, and prostitutes, ἐταιρίδες, see Suet. *Peri paid.*, fr. 1.21 Taillardat.

<sup>25</sup> See especially Valente 2013, for an in-depth analysis of συνήθεια in Pollux and on aspects of Atticism the rhetorician was ready to accept in his treatise on εὐγλωττία which also contained terms from the common language, especially regarding some technical lexica, integrating distinct and posterior diaphasic levels compared to the canon of Attic writers. See Chiron 2013, 51-52.

<sup>26</sup> This is true at least for Phrynichus’ *Ecloga*, the only work directly handed down to us. However, Phrynichus’ other work, the lost huge *Praeparatio sophistica*, seems to bear many similarities in structure and linguistic choices with Pollux’ *Onomasticon*, see Matthaïos 2015, 290-295.

<sup>27</sup> Poll. *Epist.* 6. On the differences between a rigorous Atticism and a more moderated tendency regarding linguistic purism, see Matthaïos 2013, 74.

apparently limited to the question of the rules of the knucklebones game: the text also provides very important information on the construction of lexicographic knowledge by Pollux. The specificity of the technical language of knucklebones players reported by Pollux differs from other lexicographic choices recorded in other lexica such as Phrynicus' one.<sup>28</sup> In the same book nine of the *Onomasticon* dedicated to the terminology of play activities, Pollux seems to draw on linguistic habits distinct from those of the canon of Attic authors. Despite the lack of explicit information, it is possible to grasp a non-literary origin in the magic-ritual practice consisting in blowing, or rather shouting, into the ears of the defeated quails to make them forget the voice of the winner, a practise once called ἐντρυλίζειν (λήθην ἐνεργαζόμενοι τῆς τοῦ νενικηκότος φωνῆς· καὶ τὸ ἐμβοᾶν ἐντρυλίζειν ὀνόμαζον).<sup>29</sup>

In the light of these latter considerations on the character of Pollux's lexicon, we can now try to solve the interpretative aporia of book nine concerning the apparent contradiction in the designation of two opposite faces with names normally associated with the value of "1", by focusing on the rhetorical-communicative operation underlying some parts of Pollux's text. Specifically, we can hypothesize that he first indicated the two narrow faces, those with the values of "1" and "6", naming the first κύων and the other χιάς, then went on to evoke the numerical values of "2" and "5" (missing in knucklebones, in contrast to dice) and finally, without considering the wide faces normally associated with the values of "3" and "4", concluded the section with a clarification regarding the name of the narrow faces. As often happens in the *Onomasticon*, Pollux refers to linguistic usage, to the custom, of the majority - οἱ δὲ πλείους. This allusion to majority practice for the use of a certain word does not necessarily refer to a contemporary usage: in fact the πολλοί could relate to the Attic linguistic norm of the classical period, to the majority of the authors of a genre or to the whole Atticist canon, or even to different diachronic (modern use vs. ancient use of the authors) and diatopic (Attic vs. non Attic) uses.<sup>30</sup> In this context, Pollux, as he did for the term οἴνη instead of the more common μονάς to indicate the value of "1", is limiting the description of κύων and χιάς to the linguistic usage of a minority. The negative particle δέ implies a relationship of contrast with a similar onomastic distinction, referring instead to the most widespread tradition - that of οἱ πλείους - on the subject. The narrow face "6", ἐξίτης, is normally called Κῶος, while the side "1" is called Χῖος or for some κύων. The comparative form of the adjective πολὺς presupposes a comparison, if not a contrast, between minor

<sup>28</sup> On the notion of position as an important variable in the construction of the professional and social identity of an intellectual, even in the ancient world, see recent observations in Jacob 2018, 128-129, with a revival of Bourdieu's perspective on *communautés savantes*. In the context of the controversy against Phrynicus, who had accused him of presenting an incorrect canon of authors for the model of "beautiful speech" in Attic Greek, Pollux defended his own lexicographic choices, evoking the legitimacy of resorting to the linguistic habits of speakers in some technical areas of the Greek language, Poll. *Epist.* 10 (...ἀλλὰ κέκ τῶν ἰδίων ἔδει). See Tribulato 2018, 262-263.

<sup>29</sup> Poll. 9.109. The practice of reciting magic-performative formulas in the ear of the sick animal can also be found in traditional veterinary texts, especially in horse medicine treatises, cf. *Hippiatrica Cantabrigiensia*, 24, 5 Hoppe-Oder (τὸ ὄνομα τοῦ ἰδίου δεσπότου, καὶ εἰς τὸ οὖς δὲ τὸ ἀριστερὸν ἐπίλεγε τρίτον· ἀλέκτωρ ὕδωρ οὐκ οὔρει.); on ancient folk representations considering the ear as the location of stored memory, see recently Dasen 2019b. As a consequence, the intervention on the ears could exert an effective action to generate oblivion, cf. Bettini 2000, esp. 47-51.

<sup>30</sup> On the use of οἱ πολλοί, see the in-depth analysis by Matthaïos 2013, 95-105. See also Bussés 2011, 37-38.

linguistic uses and those which Pollux presents as the predominant language practice of his own time or of the past classical period. This formula, οἱ πλείους, which refers to the linguistic habits of the majority of speakers, may point either to the negative linguistic model that should be avoided or to the normal and common use as opposed to the idiosyncratic and unconventional one by a particular ancient author.<sup>31</sup>

In the third book of the *Onomasticon*, the same expression, οἱ πλείους, is used to compare the terminology related to slavery; the question revolves around the most appropriate use of the term σύνδουλος compared to the alternative ὁμόδουλος (a “fellow-slave”). The dilemma is settled by summoning, on the one hand, Lysias and Euripides who used σύνδουλος, and on the other hand, Hyperides and the πλείους, a significant number of other authors,<sup>32</sup> or the vast majority of Attic Greek speakers of the past, who legitimised the use of ὁμόδουλος.<sup>33</sup>

Internal considerations linked to the discursive dynamics of Pollux’s text, taking into account the structure of the lexical work, the very pragmatic objectives of the author’s rhetorical-educational agenda, also compared to other similar lexica, may explain our issue against the background of different onomastic traditions of different authors or distinct geographical and dialectal areas of the Greek world.<sup>34</sup> Furthermore, in the context of the *Onomasticon* itself, the section on play from book nine (94-129) appears as more descriptive than prescriptive compared with other sections of the same book.<sup>35</sup> Pollux himself at the opening of this part exposes that he aims at clarifying some particularly obscure playful practices, probably because they were no longer in use (οὐκ ἂν φαῦλον εἶη διὰ βραχέων ὀνόματα παιδιῶν ἐπιδραμεῖν, παρεξηγούμενον τὴν ἐν αὐτοῖς ἀσάφειαν).<sup>36</sup> His attention seems to be less directed to the good speech, therefore to the selection of the right and proper words according to the Atticist canon, than to the knowledge, as wide as possible, of the play activities and to the terms that referred to them, ὀνόματα παιδιῶν. It is no coincidence, therefore, that prescriptive markers such as εὐτελής, ἰδιωτικόν, φαῦλον etc. that express judgements throughout the whole work on the good use of Attic language and guide its choices are almost absent from this “ludic” section.<sup>37</sup>

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<sup>31</sup> See Matthaios 2013, esp. 95-98.

<sup>32</sup> For this point see Poll. *Epist.*, 3 (... ταῦτα παρ’ αὐτῶν λαβῶν, εἰ μὲν πλείους ἦσαν οἱ χρησάμενοι...).

<sup>33</sup> Poll. 3.82: καὶ τὸ συγκαταδουλώσασθαι παρ’ Ὑπερείδῃ, καὶ οἱ συνδουλεύοντες παρὰ Δεινάρχῳ σύνδουλοι δὲ λέγει Λυσίας καὶ Εὐριπίδης, Ὑπερείδης δὲ καὶ οἱ πλείους ὁμόδουλον λέγουσιν. In this case it is possible that the reference to the majority of the speakers has a somewhat negative value because it is coupled with the use of Hyperides, whose lack of refinement Pollux had already highlighted previously, e.g. Poll. 3.74; cf. Conti Bizzarro 2014, 50.

<sup>34</sup> In fact, we cannot rule out that behind the indication οἱ πλείους Pollux wishes to draw a diatopic distinction between Attic usage and that of other Greek linguistic regions, as is also the case elsewhere in the *Onomasticon*, see Poll. 7.170; 9.88. See on these passages Matthaios 2013, 97. Already Lamer 1927, col. 1957, had rightly pointed out the importance of the expression οἱ πλείους to understand the logic of Pollux’s discourse, who wanted to account for different uses of the ancient Greek language.

<sup>35</sup> E.g. Poll. 9.92 (ἡ δὲ τῶν πολλῶν καὶ ἰδιωτῶν χρῆσις τὸν χαλκὸν τὸ ἀργύριον λέγει), on the most popular but inaccurate use of the term χαλκός for talking about “money”; Poll. 9.131 (τὸ γὰρ παρομοίως εὐτελής...), on the humble and unrefined nature of the adverb παρομοίως.

<sup>36</sup> Poll. 9.94.

<sup>37</sup> On these aesthetic and normative markers for the achievement of a good speaking ability, see Bousès 2011 and Conti Bizzarro 2018.

A potential validation of the variety of names attributed to the faces and the different throws of the knucklebones could also come from modern ethnographic comparisons that document a number of game practices both in southern Italy and in most of the Greek world, especially the islands. One of the most important surveys for the documentation of games with knucklebones was carried out between the 1950's and 1960's by Gerhard Rohlfs, one of the most authoritative linguists and dialectologists of southern Italy. In his description of the basic mechanisms of the game of knucklebones based on the semiotic differentiation of the four faces of the knucklebone, Rohlfs dwelt on the extraordinary variety of designations, often divergent, and sometimes contradictory, which were assigned to the same face in different areas of the Mediterranean basin. One of the most significant examples concerns the case of the wide faces: in different regions of Greece linked to different geographical-dialectal areas, the name "donkey" was given both to the convex wide face (*gaidaros* in Samos or Peloponnese) and to the concave wide face of the knucklebone (*samari* in Euboea).<sup>38</sup> Interestingly, Rohlfs tries to explain the different names given to knucklebones using the principle that in some areas it was the practice to score not the face shown to the players after the throw, but only the hidden face in contact with the ground. This way, Rohlfs explains why the values of "6" and "1" are attributed to the two narrow faces, as is often the case in Arabic, Persian or Turkish areas where different and opposite names are found compared to various areas of the Greek world. The validity of this rule, though, needs to be substantiated and supported by evidence that neither Rohlfs nor subsequent scholars have ever clearly provided. Moreover, the testimonies that come from the ethnographic research of Greek folklorists of the first half of the twentieth century do not confirm at all a supposed rule of the "hidden face".<sup>39</sup>

Some modern ethnographic testimonies point in the opposite direction to this supposed knucklebone game rule. A film shot by the documentary filmmaker Virgilio Sabel in October 1970 for the famous series *Uno alla luna*, broadcast by the Italian national television RAI, recorded some of the most important events of the country's recreational culture, focusing on the game of *vizzeri*, the game of knucklebones in the southern Calabrian dialect. It is described *in vivo* by some young people in the province of Reggio Calabria, in the community of Oppido Mamertina.<sup>40</sup> One of the protagonists of the film explains the values assigned to the four faces: the convex wide face is called *corpa*, the meaning of which is "boot", "beating", which the player who has thrown the knucklebone will receive. The concave wide face has the generic name of *vizzeri*, or "astragalo", and is worth a null throw, the player must repeat the throw. The flat and smooth narrow face is called the club, and indicates the role of the one who must inflict the blows on the player. Finally, the narrow S-face is called the king and represents the lucky shot that allows those who obtain it to give orders to the group of other players. Throughout the entire film, the documentary filmmaker's

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<sup>38</sup> Rohlfs 1964, 7-8.

<sup>39</sup> Nouaros 1934, 197 who speaks explicitly of the upper face as the face to be taken into account for the distribution of roles in the game of Beryzes: "...ποιάν πλευράν θά δείξει οὔτος πρὸς τὰ ἄνω, ὅταν πέσει." A critical review of such folklore studies is to be found in Gougoulis 2000.

<sup>40</sup> Sabel 1970.

interviewees provide details on the rules and the performance of the game. No one ever mentions the supposed rule of the hidden face and, above all, at minute 4:39 of the footage,<sup>41</sup> when, following a throw, the knucklebone falls with the wide convex face visible and turned to the players, all the boys shout “*corpa*”, the name of the face indicating the beating, while the name of *vizzeri* is not pronounced, which would have been the case had the rule of the hidden face prevailed.

Thus, with respect to the supposed rule of the covered face and to conclude our excursus on Pollux’s brief passage, it might be appropriate to mention a parallel, also taken from *Onomasticon*’s book nine, in which the discussion focuses on ὀστρακίνδα, the “game of the potsherd”. Described broadly both by Pollux and by the indirect tradition of the lost Suetonian treatise,<sup>42</sup> the potsherd was a zero sum game in which two teams faced each other in a dynamic capture. The game was very similar to today’s game of “tag”: a dividing line is drawn between the two teams, and the roles of pursuers and pursued are fixed through potsherd throws, ὄστρακον, which had been especially dyed with black pitch on one side. Each surface of baked clay, one light and one dark, was associated to one or the other team before the throw. The distribution of roles between pursuers and pursued took place according to a *modus operandi* that was not so different from knucklebone throws since it depended precisely on which side it was going to fall on (ὁπότερον...μέρος). Pollux, however, indicates at least for this game precisely which side was usually taken into account as the decisive side: the verb ὑπερφαίνω, “show up” or “appear on the surface”, seems to exclude any reference to the face that was not visible after the throw. The pursuers were those who saw the face to which they had been associated appear high in front of them, the pursued were those who did not see their “own” face of the potsherd.<sup>43</sup> According to the testimony of Eustathius, a fragment of Suetonius’ treatise *On the Games of the Greeks* reports the words uttered by the child who throws the sherd up in the air. He says “night or day” alluding to which side of the sherd will appear, thus deciding which of the two groups of children will assume the role of pursuers. In this case, the verb ἐπιφαίνω also seems to indicate quite clearly which of the two parts of the sherd was considered relevant for the player’s choice, that is the one who shows up.

In conclusion, this study, while focusing on a detailed linguistic analysis of a short passage of Pollux on the rules of play with knucklebones, has revealed how important it is to consider the rhetorical-discursive genre of the work and its pragmatic implications before using it for reconstructing widespread ancient Greek habits and traditions. The apparent contradictory use of the same name to indicate two different sides of the knucklebone can only be understood by taking into consideration the synonymic and “horizontal” character of Pollux’

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<sup>41</sup> See the Teche Rai website <http://www.teche.rai.it/1970/10/uno-alla-luna-ovvero-giochi-dei-bambini-tutta-italia-astragalo-ossicini>.

<sup>42</sup> Poll. 9.111. On this game, see especially Carbone 2005, 432-433.

<sup>43</sup> See Suet. *Peri paid.*, 8 Taillardat: ὅπερ ἀναρρίπτων ὁ παῖς ἐπέλεγε «νύξ ἢ ἡμέρα», τουτέστι «τὸ λευκὸν ἐπιφαίνεται τοῦ ὀστράκου ἢ τὸ πισσηρὸν σκοτεινόν» (...). It should also be noted that later texts that formed the indirect tradition of Suetonius, first of all Eustathius of Thessalonica, use the term ἐπιφάνεια to indicate the face of a knucklebone or a die, resorting therefore to a noun which was also used in classical times meaning “visible side”, “aspect”, to the point of referring in some texts to the skin of living beings, see LSJ<sup>9</sup> s.v. ἐπιφάνεια, II.

lexicon. The choice to document different and plural linguistic habits explains very well the presence of several onomastic traditions that must have existed in the ancient Greek world for the game known as ἀστραγαλισμός. In the prefatory letter of the book nine, Pollux himself claims the importance of the disposition, σύνταξις, of the topics dealt with in his lexicon.<sup>44</sup> Precisely the excellent choice of the terms and the configuration of their order are presented as one of the most important novelties of his own lexicon compared to the others (e.g. Gorgias' lexicon); such a configuration would be able, through the wise variation of the registers and the topics, to make the reading less laborious and more appealing. Pollux designed an original strategy to avoid the risk of giving the reader indigestion, προσκορές, in front of plethoric list of names: he chose to present a colourful overview of onomastic traditions, including narrative digressions in his lexicographic description.

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<sup>44</sup> Poll. *Epist.*, 9. Cf. Tribulato 2018, 266-269.

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## Figures

Fig. 1

The location of the knucklebone in the rear leg of the animal

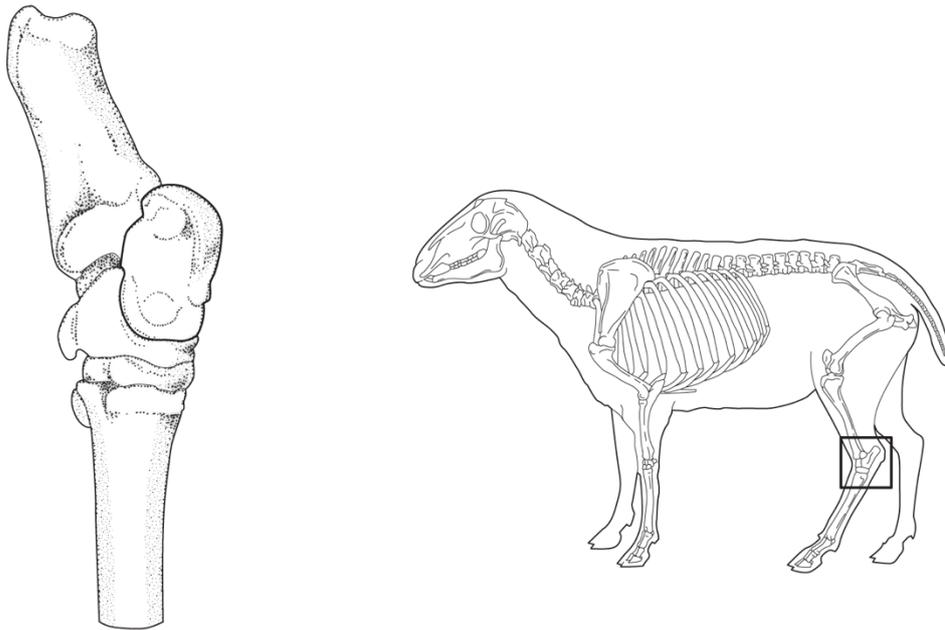


Fig. 2

The four sides of a knucklebones © M.-N. Baudrand

