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*Craftsmanship and technology as chorality: the case of weaving  
imagery in Archaic and Classical choral lyric\**

**Abstract**

The article explores areas of interaction between weaving (and the related technique of plaiting) and chorality in archaic and classical choral lyric poetry by considering aspects of the craft and technology of weaving as mapped onto the imagery of a performing chorus. The distinctive interplay of aesthetic pleasure, orderly variegation, and harmonious arrangement of parts that *choreia* displays in literary sources (and that is conveyed in archaic Greek poetry by the notion of ποικιλία) also informs the technology and logic of ancient weaving, a τέχνη largely associated in poetic imagery with both ποικιλία and chorality. Close reading of the relevant passages shows that πλέκειν (including a number of compounds, both verbs and adjectives, from the themes πλεκ-/πλοκ-) is the most conspicuous textile craft term applied by literary sources to song-making and, in particular, to the performance of a dancing chorus, epinician being the song-type that most consistently appropriates the metapoetics of weaving (for matters of generic continuity with PIE imagery and for elements of performance pragmatics, in addition to its status as the most largely attested sub-type of choral lyric). A selective survey of the image of “plaiting a choral dance” is offered, with a focus on the *geranos* as a particular instance of dance whose orchestric features may have been interacting with actual textiles: reviving a hypothesis grounded on ethnographic comparison, a possible performance context for the *geranos* is tentatively proposed.

L'articolo si propone di indagare àmbiti di interazione tra tessitura (e l'affine tecnica dell'intreccio) e coralità nella produzione lirica corale arcaica e classica, prendendo in considerazione aspetti della tecnologia e artigianato tessili in quanto questi vengono introiettati e proiettati nell'immaginario poetico della performance corale. La peculiare dinamica di interrelazione tra piacere estetico, principio di ordine nella variegatura, e armonica disposizione delle parti che contraddistingue la *choreia* nelle fonti letterarie (e che è illustrata in poesia greca arcaica dalla nozione di ποικιλία) informa ad un tempo la tecnologia e la logica della tessitura, una τέχνη cospicuamente associata nell'immaginario poetico alla ποικιλία e alla coralità. L'analisi dei passi interessati mostra come il verbo πλέκειν (e, in aggiunta ad esso, alcuni composti, sia verbi che aggettivi, dai temi πλεκ-/πλοκ-) è il termine di artigianato tessile più massicciamente impiegato dalle fonti letterarie in riferimento alla composizione poetica e, più specificamente, all'esecuzione di un Coro che danza, con l'epinico quale sottogenere di lirica corale che in maniera più consistente si appropria della metapoetica della tessitura (in quanto sottogenere lirico-corale meglio attestato, ma anche in parte per questioni di continuità di genere letterario rispetto ad un repertorio di metafore di matrice Proto-Indoeuropea, e in parte per

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ragioni di pragmatica della performance epinicia). Viene inoltre proposta una rassegna selettiva dell'immagine dell'"intrecciare una danza corale", con uno sguardo particolare al *geranos* in quanto esemplificativo di una modalità di danza le cui articolazioni orchestriche potevano prevedere un'interazione con tessuti reali: attraverso il recupero di un'ipotesi formulata in ambito di comparazione etnografica, si propone un possibile (quantunque interamente speculativo) scenario performativo per il *geranos*.

## 1. Introduction

### 1.1. Choral performance, τέχνη, and generic appropriation in current scholarship

In the frame of the ever-growing scholarly interest in the phenomenology, aesthetics, performance, and broader (socio-economic, cultural, religious) context of archaic and classical Greek choral songs, both dramatic and non-dramatic, this article explores a few aspects of the interaction between chorality, craftsmanship, and technology as reflected in, and effected by, literary imagery<sup>1</sup>. There are, in particular, two dimensions of archaic *choreia* on which recent research has shed new light, and which may be seen as central areas of choral poetics' engagement with the domain of τέχνη. One relates to the perception of a performing chorus as a θαῦμα, a «technologized think of wonder»<sup>2</sup>:

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<sup>1</sup> The study of the archaic and classical Greek choral culture has in the last two decades enjoyed a remarkable popularity among classicists, extensively enriching our knowledge of this fundamental and many-folded phenomenon. It is beyond the limited scope of this article to attempt even a select bibliographical survey of the work done in the past twenty years on chorality, a topic that has been investigated from different standpoints, through various approaches, and for different purposes; particularly significant for the argument presented here are treatments of chorality in: i) studies devoted to a specific sub-genre of choral lyric: CALAME (1997) on *partheneia*, RUTHERFORD (2001) on *paean*, MASLOV (2015) and the essays in AGÓCS – CAREY – ROWLES (2012) on *epinician*, the contributions in KOWALZIG – WILSON (2013) on *dithyramb*, POWER (2010) on *kitharōidia*; ii) works exploring the interplay of dramatic and non-dramatic choral lyric, with a focus on the tragic chorus and its roots in the earlier performance- and song-culture: the essays in COLANTONIO – PERUSINO (2007), GAGNÉ – HOPMAN (2013) and ANDÚJAR – COWARD – HADJIMICHAEL (2018), SWIFT (2010) on choral lyric sub-genres as emerging in tragic odes, and RODIGHIERO (2012) on Sophocles' reconfiguration of melic traditions in his choral songs; iii) studies that engage directly with the culture of choral performance and its phenomenological, socio-political, aesthetic, and literary implications: KOWALZIG (2007), the essays collected in PEPONI (2013), the contributions in ATHANASSAKI – BOWIE (2011) and in CAZZATO – LARDINOIS (2016), and CARRUESCO (2017) with bibliography. In bringing the concept of chorality to bear on iconography, specifically in the construction of visual patterns in Geometric style vase painting, CARRUESCO (2016, 69) helpfully observes: «Beyond choral performance, however, chorality also functions as a cultural paradigm which informed different fields of the community's experience, such as agonistic or juridical procedures or [...] other artistic discourses such as epic poetry or pictorial art».

<sup>2</sup> POWER (2011, 67), introducing the motif of the «uncanny aura of the artificial» as a defining trait of *choreia* in a number of literary representations of choral performances: while the essay is especially concerned with an exploration of the choral (and metachoral) features of the Κηληδόνες of Pindar's *Paeon* 8 SM (=B2 Rutherford), which Power convincingly sees as κόραι-like acroteria endowed with sound and movement, the root of such an instance of «dancing architecture» (p. 78) is traced back to Hephaestus' automata and Daedalus' self-moving statues, whose choral characterization is aptly illustrated (pp. 80ff.) by the ecphrasis of the dancing scene inlaid (the verb used is ποικίλλειν) in the

accounts of chorality in both early hexametric poetry and choral lyric seem to suggest that, through a sort of transfiguration partly triggered by the ritual occasion, the audience of a choral performance may imagine the synchronized choristers as divinely-crafted automata or moving statues – in brief, as an ensemble transcending the realm of what is human<sup>3</sup>. The other dimension pertains to the range of metaphors that choral lyric poets exploit as they present and conceptualize the song – both its structure and its performance – in terms of an artefact, and, consequently, the composer and/or the performers in terms of craftsmen: through the voice of the choral speaker(s), the ongoing singing and dancing of the chorus is assimilated to precious ἀγάλματα (crowns, textiles, jewellery, chariots) that, as votive objects or even part of the choristers' attire, can be connected to the performance pragmatics, either real or evoked<sup>4</sup>. The shift of focus towards seeing craftsmanship imagery in choral lyric as addressing features of performance should in turn come to terms with, and be integrated into, the traditional view that traces Greek metapoetics back to a literary repertoire of Proto-Indo-European origin<sup>5</sup>: drawing on recent work by Boris Maslov, who explores chorality as embedded in archaic Greek poetics through genre-related terminology, and repositions the survival of PIE metapoetics in Pindar and Bacchylides «as part of the

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shield of Achilles in Hom. *Il.* XVIII 590-604, and by the scholia *ad loc.* (Σ AB *ad* XVIII 590, where Theseus is said to have plaited (ἐπλεκεν) the χορός of Athenian youths and maidens upon learning τῆς χορείας τὴν ἐμπειρίαν from Daedalus).

<sup>3</sup> The assimilation of the dancing chorus to both divinity and craft is explored by KURKE (2012) in the context of a discussion of *choreia* as a vehicle for the construction and generation of sacral, aesthetic, and civic value in Greek ritual and cult – all this thanks to the «transfiguring or transformative experience of singing, dancing bodies in motion» (p. 223), a superhuman beauty «whose impact on the audience the Greeks conceived as a heady fusion of *eros* (desire) and *thauma* (wonder)» (p. 220). Kurke's focus is on ways in which poetic texts imagine choral performances as capable of conjuring divine presence and linking together gods, dancers and the audience: in this sense, and in Kurke's words, «choral performance in ritual was a technology that used bodies to produce effects of presencing». See also KURKE (2013), where a similar argument is integrated into a reading of the choral imagery of the puppets (*qua* dancers) in Plato's *Laws*.

<sup>4</sup> Discussing the figure of the poet as «fabricant and donor» in epic and choral lyric imagery, STEINER (2015, 40) convincingly locates the rationale for the 'votive offering ~ choral song' analogy within «the ritual context framing both *choreia* and *agalmata*»: the choral poet's act of «presenting a self-made and highly crafted gift to a god» is projected on the performed song, which in turn is materialized and reified as one of many ἀγάλματα endowed with sound, particularly in Pindar's production (with *Nemean* 8.14-17 drawing the explicit connection: φέρων | Λυδῖαν μίτραν καναχηδὰ πεποικιλμέναν, | Δείνιος δισσῶν σταδίων | καὶ πατρὸς Μέγα Νεμεαῖον ἄγαλμα). Continuity in the imagery of *agalmata* between epic and choral lyric, grounded on the ideology of gift exchanges, is pointed out by FORD (2002, 115-19). For metaphors and performance pragmatics in Pindar see BONIFAZI (2001, esp. 79-83).

<sup>5</sup> DURANTE (1976, 167-79) is still the reference work on PIE poetics and terminology for poetry-making as grounded on metaphors from craftsmanship (especially carpentry, metal-working, and textile crafts); like Durante, WATKINS (1995, 68-84) and WEST (2007, 31-45) explain continuity in poetological imagery of the poet in several Indo-European literatures as originating in a common «notion of verbal specialist, who claims unique expertise in ritual/poetic language» (MASLOV 2015, 294, who criticizes such hypothesis). NÜNLIST (1998, 83-125) surveys and discusses the whole body of craft metaphors for poetry and poetry-making in archaic Greek literature.

genre of cult (choral) song whose likely designation in Greek was *hymnos*»<sup>6</sup>, this article argues that the connection between chorality and the metaphors of craft and technology in Greek poetry has a marked genre-specific nature – in other words, choral lyric appropriates the imagery of poetry-making as craftsmanship in ways that are particularly well-suited to reflect compositional and performative elements of the genre.

### 1.2. *Order in variegation: archaic ποικιλία, weaving technology, and κόσμος*

Crucially, the distinctive interplay of aesthetic pleasure, ordered structure, and harmonious arrangement of parts that *choreia* displays in literary sources, both epic and lyric, is expressed by a specific cluster of terms: among these are formations (often consisting of adjective, verb, and substantive) derived from the roots ποικιλ-, δαίδαλ-, ἄρ-, and κοσμ-<sup>7</sup>. Of particular interest for the discussion presented here is the series ποικίλος/ποικίλλειν, whose broad semantic range and usage in archaic Greek literature – we may refer to it as ποικιλία, though the noun is a late fifth century BC coinage – encompasses notions of variegation, radiance, patterning, and is predicated of things as

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<sup>6</sup> MASLOV (2015, 299), in the context of a detailed analysis (pp. 286-307) of the semantics and usage of the word ὕμνος in archaic Greek literature – with special focus on the numerous occurrences of the term in Pindar – as conveying a «unitary concept of choral cult song» (p. 286); the metapoetics of craftsmanship is not a major concern of Maslov, who is more broadly interested in relating «highly archaic traits in Pindaric epinikion» to the continuity of a «preliterary genre of praise or prayers» (p. 301f.); methodologically interesting is the effort towards reconstructing generic poetics from the semantic development of significant terms in their literary context.

<sup>7</sup> A focus on the perception of, and aesthetic response to, *choreia* in archaic Greek hexametric poetry provides the starting point for the assimilation of the dancing chorus to products of skilled craft in the above-mentioned essays by POWER (2011), KURKE (2012), and STEINER (2015): again, the archetypal choral dance inlaid by Hephaestus in *Il.* XVIII 590-606 represents the paradigm of such an analogy, in that the verb ποικίλλειν (ποίησεν l. 590) is capable of conveying both «luminosity, the brilliance that emanates from the precious metal from which the dancers [...] are forged», and «the impression of movement [...] which encompasses a motion-filled spark» (STEINER 2015, 41). Further descriptions of chorality in early hexameter foreground the metal-like gleaming of the dancers' feet (the μαρμαρυγαὶ ποδῶν of the Phaeacians κούροι in *Hom. Od.* VIII 264f., discussed by POWER (2011, 83ff.) and KURKE (2012, 228); cf. *H.Ap.* 200-203), and the harmonious fitting together of the choral song-and-dance (e.g. the mimetic performance of the Delian maidens in *H.Ap.* 164 οὕτω σφιν καλῆ συνάρησεν ἀοιδῆ, discussed by PEPONI 2009, 60-68 and KURKE 2013, 146-49; choral lyric makes ample use of ἄρ- terms in metaliterary images: see e.g. *Pind. Ol.* 3.3-6, *Pyth.* 3.112f., *Nem.* 4.44f., fr. 140b.1-4, 8-10 M = G9.1-4, 8-10 Rutherford, *Telest. PMG* 806.2-3 with Dobree's νόμον at l. 3. On ἀραρίσκω/ἀρμόζειν/ἀρμονία as illustrating a choral song in Pindar, cf. STEINER 1986, 52-65). On the series δαίδαλος/δαίδαλλειν/δαίδαλον see: POWER (2011, 80ff.) as pointing to chorality; FANFANI (2017) as cross-craft concept and vehicle of metapoetics in choral lyric; MCEWEN (1993, 41-64) in association to the concept of *kosmos*, weaving, and Daedalus' labyrinth; MORRIS (1992, 1-59) in archaic Greek literature; FRONTISI-DUCROUX (1975, 52-63) on the techniques and crafts associated with the formation. On the series κόσμος/κοσμεῖν as indicating an orderly structure, often a poem (via the *iunctura* κόσμος ἐπέων), in archaic Greek literature see the comprehensive survey by NÜNLIST (1998, 90-97), where occurrences of δαίδαλ- and ἄρ- terminology as metaliterary referents for the poem, the poet or the process of poetry-making are also presented (pp. 97-101). For the series ποικίλος/ποικίλλειν see the following footnote.

diverse as animal bodies, intellectual processes, cosmic order, and highly crafted artefacts of technological, artistic, and musical complexity<sup>8</sup>. What brings together, and into the realm of ποικιλία, the products of carpentry, metal-working, weaving, painting, and the dappled feathers of birds, or the geometrically-patterned textures and scales in the skin of snakes<sup>9</sup>, seems to be for the archaic Greek imagination both a sort of composite, eye-catching surface, «animated by the vibration, gleaming, and shivering of light»<sup>10</sup>, and the perception of an underlying pattern that imposes order through (and despite) variegation and the combination of different elements, materials, or colours. In a sense, the supreme model for a complex structure where symmetry, repetition, but also diversity and multifarious appearance coexist is the world itself: cosmic order, has been observed, becomes embodied in the pattern of the craftsman<sup>11</sup>; the *iunctura* ποικίλος κόσμος in Pind. fr. 194, 2f. M (εἶα τειχίζωμεν ἤδη ποικίλον | κόσμον αὐδάεντα λόγων) is a case in point: here, the cross-sensory (visual and aural) notion of ποικίλος qualifies κόσμος as both the material object of τειχίζωμεν and as song (αὐδάεντα ‘endowed with voice’), possibly a metachoral reference to the ongoing

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<sup>8</sup> Refreshing reviews of the concept of *poikilia* in recent years have reframed the notion in terms of multi-sensory (especially visual and aural) perception, in that «it can be used across the senses [...] without being used metaphorically» (LEVEN 2013, 23); as Pauline LeVen aptly puts it, the adjective ποικίλος «captures, in the description of an animal, an artefact or a sound, the notion that the luscious pattern in a bird’s feathers, the wrought motives of a shield, or the many-voiced and swift-moving notes of a lyre cause an aesthetic reaction of rapt pleasure through the senses» (p. 238). An important divide is traced between what characterizes the effects of being ποικίλος in archaic Greek thought, where *poikilia* «implies dynamics that create balance, order, beauty, and harmony» (GRAND-CLÉMENT 2015, 410), and the shift in aesthetics, philosophy and phenomenology of sensory perception and craft practices that occurs in classical time, when ποικιλία takes in negative connotations: a particularly well-studied case regards the way the category of ποικίλος, in archaic Greek poetry often (positively) associated with the auditory features of specific instruments or certain musical modes, is appropriated by the so-called ‘new dithyrambographers’ for advertising the novelty and complexity of their own musical style at the end of the fifth century BC, and eventually becomes a technical term of musical criticism addressed by musical theorists against the virtuoso experimentation of those musicians; cf. LEVEN (2014, 101-105), LEVEN (2013).

<sup>9</sup> GRAND-CLÉMENT (2011, 418-88) is a comprehensive discussion of the occurrences of ποικίλος/ποικίλλειν in Archaic Greek literature in the context of a study of the perception of colours in antiquity. Some instances of animal-skin imagery in lyric: Pind. *Pyth.* 4.249, snake (κτεῖνε μὲν γλαυκῶπα τέχνης ποικιλόνοτον ὄφιν), cf. Eur. *IT* 1244; Pind. *Pyth.* 8.46, serpent (δράκοντα ποικίλον), cf. *Pyth.* 10.46f., Alc. *PMGF* 1.66 (where the παγχρύσιος ποικίλος δράκων is likely to be a bracelet); Pind. *Pyth.* 4.214: wryneck (ποικίλαν ἴγγα); *fragm. adesp. PMG* 1007: dapple-feathered birds (πτερὰ ποικιλοτρίχων οἰωνῶν). Especially remarkable is the metamusical appropriation of this strand of imagery in Pratinas *PMG* 708.5 οἶά τε κύκνον ἄγοντα ποικιλόπτερον μέλος, where the choral song «of variegated plumage» takes in the features of the swan: on the imagery of musical ποικιλία and early literary criticism that this passage well illustrates see LEVEN (2014, 102).

<sup>10</sup> GRAND-CLÉMENT (2015, 407).

<sup>11</sup> See McEWEN (1993, 79), who locates the rise of sixth century BC Ionian philosophy, with a special focus on Anaximander and architecture, in the context of «an emergent awareness of order whose genesis, whose coming-to-be, was rooted in the early Greek perception of craft as the revelation of *kosmos*». In other words, «the craftsman lets *kosmos* appear through the artifact» (p. 73).

performance<sup>12</sup>; in turn, κόσμος may bear here the two connotations of ‘ordered structure’ and ‘adornment’<sup>13</sup>: both resonate with a significant aspect of the phenomenology of ποικίλος, i.e. the «logic of crisscrossing and meandering» that characterizes archaic Greek artistic ornamentation via a system of repetitive patterns that capture the eye<sup>14</sup>. Just such a logic informs a τέχνη conspicuously associated in poetic imagery with both ποικιλία and chorality, namely weaving (and the related techniques of plaiting, stringing, and interlacing): a number of distinctive (techno)logical features make this craft a particularly apt analogical referent (a sort of paradigm, in a sense) for a mode of composition that is based on order and the generation of patterns, and that produces variegation<sup>15</sup>. In weaving on the warp-weighted loom in use in ancient Greece, every figurative or geometric motif that emerges on the fabric is not a superimposed design (as, for instance, in embroidery), but rather the result of a system of crossing threads regulated by numerical and logic relationships: any woven pattern is thus best described in terms of numbers (i.e. even and odd threads) and their ratio, with colour (alternating coloured threads in warp and/or weft) as a further significant factor of variegation<sup>16</sup>. The notion of a complex structure

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<sup>12</sup> See the observations by POWER (2011, 107f., 110f.) on αὐδά as ‘choral voice’ in Pind. fr. 52b.101 (*Paean* 2) M and on the metaperformative valency of κόσμος in fr. 194 M.

<sup>13</sup> On the usage of κόσμος in archaic Greek literature, with a focus on the Presocratics, where the term is first employed with the meaning of ‘cosmic order’, see the appendix in KAHN (1960, 219-30), who concludes that the Milesian thinkers’ novel use of the word to denote universal arrangement emerges with the notion of «the natural world as an organized system» and «a structured whole in which every component has its place» (p. 229): in turn, this conceit develops from previous literary use of the term to denote «a concrete arrangement of beauty or utility, as well as the more abstract idea of moral and social “order”» (p. 222).

<sup>14</sup> GRAND-CLÉMENT (2015, 413), who draws on GELL (1998) and summarizes the “agency” of ποικιλία with words worth quoting here: «the effect of *poikilia* induces an entrapment of the eye caused by the interplay of chromatic contrasts animating the patterns», a perception that «lies behind the expression *thauma idesthai*». HARLIZIUS-KLÜCK (forthcoming) detects and discusses similar effects of ποικιλία in the woven patterns that are transferred into Mycenaean frescoes, and more broadly in the logic of patterning that characterizes ancient weaving.

<sup>15</sup> The most comprehensive survey of ancient literary and lexicographical sources on weaving technology is BLÜMNER (1912, 135-70); cf. also the rich overview in FORBES (1964, 186-258); BARBER (1991) provides a fundamental discussion of techniques, terminology and material features of ancient textile technology (cf. esp. 260-82 on the Greek textile vocabulary).

<sup>16</sup> Interestingly, the kind of dyadic arithmetic (grounded on the nature and properties of odd and even numbers) that is at the core of the logic of pattern-construction in ancient weaving, as HARLIZIUS-KLÜCK (2004) has argued, emerges first in the number theory sketched in the fragments of some early Pythagoreans, before its formalization in the opening definitions of book 7 of Euclid’s *Elements*. Of particular interest is the arguably epistemological function assigned to numbers by Philolaus of Croton (fifth century BC): things in the world can be known as far as one is able to grasp the numerical relationship that grounds their structure (44 B4 D-K και πάντα γὰ μὲν τὰ γινωσκόμενα ἀριθμὸν ἔχοντι. οὐ γὰρ ὅτιων <οἶόν> τε οὐδὲν οὔτε νοηθῆμεν οὔτε γνωσθῆμεν ἄνευ τούτου, with Boeckh’s <οἶόν> for F ὅτιων τε); see HUFFMAN (1993, 173-76), who discusses the *iunctura* ἀριθμὸν ἔχειν as pointing to an ordered plurality, possibly a pattern; the practice of arranging numbers in pebbles, assigning them a certain shape, is possibly what Eurytus is reportedly doing (esp. 45 2 D-K ὅπερ Ἀρχύτας ποτ’ ἔφη ποιεῖν Εὐρύτου διατιθέντα τινὰς ψήφους, where Theophrastus’ phrasing may suggest the arrangement of

of discrete elements interlaced in patterns and resulting in a multicoloured texture may have been projected from weaving onto cosmology pretty early in the history of Greek thought, if indeed the image of cosmic weaving in Pherecydes' book (sixth century BC) has to be taken as conveying through the verb ποικίλλειν a view of earth's inner order (and dappled surface) as the product of divine craftsmanship: fr. 68 Col. 1 5f. Schibli (= 7 B2 D-K) has Zas weaving onto a φᾶρος – a wedding γέρας for Chtonie – earth, the ocean, and the ocean's dwellings (... τότε Ζᾶς ποιῆι μέγα τε καὶ καλόν, καὶ ἐν αὐτῶ[ι] ποικίλλει Γῆν] καὶ Ὠγη[νὸν καὶ τὰ Ὠ]γενοῦ δῶματα ...)<sup>17</sup>. While the notion, integral to the rich semantics of ποικιλία, of a harmonious arrangement of different components seems to bring cosmos and poem/song (itself a κόσμος ἐπέων) together – via weaving – in archaic Greek poetry<sup>18</sup>, my concern here is with ways in which aspects of the craft and technology of weaving are mapped onto the imagery of *choreia*, i.e. of a singing and dancing chorus<sup>19</sup>. In the remainder of this article, areas of interaction between

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pebbles as a mode of representing the pattern or shape of numbers). The definition of numbers as even, odd, and a mixture of the two probably referring to the unit is in Philolaus' fr. 44 B5 D-K.

<sup>17</sup> The uncertain readings of the Grenfell-Hunt papyrus (MS Gr. class. f. 48 [P]) have been confirmed, and the lacunose sections integrated, by Clem. Alex. *Strom.* 6.2.9.4 who quotes Pherecydes. See the comprehensive discussion of the fragment in SCHIBLI (1990, 50-77), who takes ποικίλλειν as pointing to embroidery: pattern weaving, however, appears a more likely explanation for the technique that the verb seems to refer to here, i.e. the in-weaving of a figurative motif in a fabric – the main reason being that while embroidery is an ornamental technique, weaving has the pattern generated *within* the structure of crossing threads; SCHIBLI (1990, 53 n. 6), whose focus is on the imagery of divine craftsmanship rather than on technological implications, surveys occurrences of ποικίλος/ποικίλλειν in cosmological context, and observes that the woven robe «signifies that the earth, too, is invested with order, design, and perfection» (p. 56). Cf. Pind. *Isthm.* 4.18-19 (νῦν δ' αὖ μετὰ χειμέριον ποικίλα (Hartung; mss. ποικίλων) μηνῶν ζόφον | χθῶν ὥτε φοινικέοισιν ἄνθησεν ῥόδοις | δαμιόνων βουλαῖς), with the «dappled earth» (trad. Race) blossoming with red roses by divine will («by the gods' design» Race). An interesting instance of cosmologic ποικίλλειν, in this case the result of painting, is Empedocles 31 B 23 D-K, a simile (presented by Simplicius (*in Phys.* 159.27) as a παράδειγμα ... τοῦ ἐκ αὐτῶν γίνεσθαι τὰ διάφορα) comparing the creation of the κόσμος to the pictorial technique of γραφῆες who ἀναθήματα ποικίλλωσιν (l. 1), harmoniously mixing (ἁρμονίῃ μίξαντε, l. 4) the pigments of many colours to depict forms resembling all things. As in the Pherecydes fragment, ποικίλλειν may have been chosen here by Empedocles as an apt term to illustrate the mixing, different from a blending, of different and discrete elements to generate the variegated and multicoloured surface of the earth.

<sup>18</sup> Cf. *supra* n. 7; on the connection between instances of the κόσμος ἐπέων image and weaving see FANFANI – HARLIZIUS-KLÜCK (2016, 81-85).

<sup>19</sup> In fact, however, as observed by MASLOV (2015, 286) in relation to Pindaric epinician, the χορός/χορεύειν/χορεία formation is generally avoided as generic mark (see SLATER (1969, *ad l.*) and the systematic treatment by AGÓCS (2012, 222), who spots in the victory odes only six occurrences of the term as indicating choral performance), for «no genre designation was associated with this root»: ὕμνος and κῶμος are the terms charged with a specific import in terms of generic poetics. As MASLOV (2015, 293) notes, «Pindaric epinikion consistently merges the notions of *hymnos* 'ceremonial poem, usually choral' and *kōmos* 'victory revel, involving collective singing'. Behind this paradoxical combination there lurks the image of *khoreia*, forbidden to epinikion». Apparently, the earliest occurrence of the noun χορεία may be the so-called *hyporchēma* by Pratinas, *PMG* 708, possibly a piece of dramatic choral lyric (arguably from a satyr play: see D'ALESSIO (2007) for a discussion of deixis in the poem) where a chorus of satyrs comment self-referentially on matters of αὐλός-music and concludes with an invocation to Dionysus, called upon to hear τὰν ἐμὴν Δῶριον χορείαν (l. 17).

weaving (and related techniques) and chorality, often triggered by occurrences of ποικίλος/ποικίλλειν, will be discussed in order to provide a broader frame for exploring, in the final section, a particular instance of such a connexion, namely the image of “weaving/plaiting a choral dance”: generally activated by occurrences of πλέκειν (and compounds), the metaphor invites taking into account considerations of textile technology as a clue into a (admittedly highly speculative) hypothesis of visualization of the orchestric features of such a “plaited/braided” choral performance.

## 2. Ποικίλος ὕμνος in (technological) context: weaving, plaiting, and χορεία

### 2.1. Terminus technicus: weaving terminology and musical imagery in fifth century BC

The multi-sensory and capacious semantics of ποικιλ- terms in archaic Greek poetry has a privileged domain of application in the material and auditory features of instrumental music, particularly the sound of the φόρμιγξ<sup>20</sup> – an exception being the polemic reference to αὐλός-music as having «the breath of a spotted toad»<sup>21</sup> (τὸν φρυνεοῦ ποικίλαν πνοᾶν ἔχοντα) in Pratinas’ *hyporchēma* (PMG 708.10), to which the chorus contrasts its swan-like ποικιλόπτερον μέλος (l. 5); representatives of the New Music in late fifth century will revive and re-functionalize the notion of musical ποικιλία for the purpose of their own “αὐλός-revolution”<sup>22</sup>. Interestingly, a slightly similar pattern can be observed in fifth century BC musical imagery’s appropriation of weaving terminology – *qua* technical language – to advertise innovation in instrumental music, or to express statements of poetics<sup>23</sup>: a case in point is represented by the semantics of

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<sup>20</sup> Most of the occurrences are Pindaric, though the image may be traced back to the equivalent *iunctura* φόρμιγξ δαιδαλέη in Hom. *Il.* IX 186f. (on the partially coextensive semantics of ποικίλος and δαιδάλεος in the lexicographic and scholiographic tradition see PRIVITERA (1967, 13 n. 5), who aptly points to Pind. *Ol.* 1.29 δεδαϊδαλμένοι ψεύδεσι ποικίλοις ἑξαπατῶντι μῦθοι): see Pind. *Ol.* 4.2 ὑπὸ ποικιλοφόρμιγγος αἰοιδᾶς ἔλισσόμεναι [sc. Ὀραιοί], *Nem.* 4.14 ποικίλον (adv.) κιθαρίζων, and most prominently *Ol.* 3.8f. φόρμιγγά τε ποικιλόγαρυν καὶ βοᾶν αὐλῶν ἐπέων τε θέσιν | Αἰνησιδάμου παιδὶ συμμεῖξαι πρεπόντως, where the epinician performance for Theron is presented as a balanced arrangement of music and words (ἐπέων θέσις can be seen as a variant of κόσμος ἐπέων).

<sup>21</sup> Trad. LEVEN (2014, 102), who positions Pratinas within the late sixth century/early fifth century “revolution” in αὐλός-music (p. 85 with n. 41), and discusses the use of the image of musical ποικιλία in PMG 708 at ll. 5 and 10 «as a term of both praise and blame». The role of Lasus, Pratinas and (mainly) Pindar in the context of the coeval debate on musical innovation, especially in relation to tonal modulation and the use of *harmoniai*, is investigated by PRAUSCELLO (2012) and, within the history of dithyramb, FRANKLIN (2013, esp. 216 on *poikilia* and Pratinas PMG 708).

<sup>22</sup> The topic (which encompasses as well the question of two subsequent “αὐλός-revolutions”) is explored at length by LEVEN (2014, 101-12 and *passim*). See also FRANKLIN (2013, 216): «central to the controversy over the rise of professional auletes and their music was a contest over what aspects of music were acceptable subjects of *poikilia*, musical artifice».

<sup>23</sup> See FANFANI (2017, 423-30) for detailed discussion of the relevant passages, with a focus on occurrences of κρέκειν in musical context. In general, the transfer (or conceptual mapping) between the



the verb κρέκειν (etym. ‘to beat the weft with a κερκίς’, ext. ‘to weave’), which broadens its musical connotation (‘to strike, pluck the strings of/play a (stringed) instrument’, ext. ‘to make (a song, a voice) to resound’) so as to intrude into the domain of αὐλός-playing<sup>24</sup>. An interesting instance of κρέκειν in connection with music, song, and dance is represented by the epigraphic “Dictaeon Hymn to the Kouros” (*IC* III 2.2 7-10 = *Hymn. Cur.* 7, *CA* pp. 160-62) from Palaikastro, Crete (third century BC), which accompanied the circular dance of the Curets around Zeus, probably a kind of military dance<sup>25</sup>; although lines 7-10 of the first strophe τάν τοι κρέκομεν πακτίσι | μείξαντες ἄμ’ ἀυλοῖσιν | καὶ στάντες ἀείδομεν τεὸν | ἀμφὶ βωμὸν εὐερκῆ («we weave it [*sc.* the present hymn] with pektides mixing it with [the sound of] *auloi* and we sing standing around your altar wall» trad. West 1965) do not describe actual dancing – the chorus self-referentially depicts itself by the participle στάντες as «having taken up a position»<sup>26</sup> around the altar – the occurrence of μολπῆ at l. 6 unambiguously locates the hymn in the tradition of choral song-and-dance performances. Whereas κρέκειν is here associated with a string instrument (the πηκτίς), the crafts of interlacing, plaiting, and weaving seem to be capable of illustrating specific traits of the αὐλετική τέχνη, as compounds of πλέκειν (‘to plait’, ‘to braid’, ext. ‘to weave’) feature in two choral lyric passages that provide aetiologies of aulodic musical modes and songs: in Pindar’s *Pythian* 12.5f. (θρασεῖαν <Γοργόνων> | οὐλίον θρηῖνον διαπλέξαισ’ Ἀθήνα) the verb διαπλέκειν, usually understood here as meaning ‘to weave into music’, indicates the (mimetic and heuristic) modality through which Athena invented (ἐφεῦρε l. 7) the very αὐλετική τέχνη (so the scholia *ad loc.*, 12a p. 265 Drachmann) by interweaving two

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two domains (τέχνη, in this particular case), seems to be favoured by perceived similarities in the auditory sphere, in craft, and in technology.

<sup>24</sup> Κρέκειν with string instruments: Sapph. 99a.4 L.-P. (= Alc. 303a.4 V.) χόρδαισι διακρέκην, on which see NERI (2013); Diog. of Ath. *TrGF* 45 F1.10 κρεκούσας μάγαδιν, in the context of a metamusical description of Asian rituals for Semele; Telest. *PMG* 810.4s. τοῖ [*sc.* οἱ Ἕλληνας] δ’ ὄξυφώνοις πηκτίδων ψαλμοῖς κρέκον | Λύδιον ἕμνον, an aetiology of the Lydian and Phrygian *harmoniai*; κρέκειν with αὐλός: Ar. *Av.* 682f. ὧ καλλιβόαν κρέκουσ’ | αὐλὸν φθέγμασιν ἡρινοῖς. On the semantics of κρέκειν see the comprehensive treatment by RAIMONDI (2000).

<sup>25</sup> On the hymn see WEST (1965); CECCARELLI (1998, 111ff.), especially on the pyrrhic connotation of the dance described in the poem and associated with the Curets in myth and cult; the recent discussion in FURLEY – BREMER (2001, I, 67-75, II, 1-20) links the performance context of a dance in arms to ephebic training (I, p. 75). In discussing Soph. *Ai.* 699f. (Μύσια Κνώσι’ ὀρχήματ’ αὐτοδαῆ), RODIGHIERO (2012, 29-43) offers a detailed account of the syncretic connection/overlap between the dances of the Cretan Curets and those of the Phrygian Corybants, their cultic associations with Rhea and Cybele respectively, and the ways these are connected to Pan and Dionysus in literary (especially tragic and mythographic) sources.

<sup>26</sup> FURLEY – BREMER (2001, II, 11), who observe in addition that «after all, the chorus’ dance in tragedy is denoted by στάσιμον»; while the hymn’s refrain is in iambo-trochaic rhythm, the stanzas are composed in ionics *a maiore* (normal or anaclastic, in the form – ∪ – ∪, which corresponds to a trochee), with the last stanza in ionics *a minore*.

sounds, in coherence with the mechanics of the instrument<sup>27</sup>; the archaeology of the Lydian *nomos* in Telestes *PMG* 806 is similarly projected back onto a mythical act of fitting together (ἄρμοσε, l. 2) by the Phrygian king, «weaving/plaiting around it [sc. Λυδὸς νόμος] on his reeds of quick-moving forms the well-fledged breeze of his breath» (αἰολομόρφοις | πνεύματος εὐπτερον αὔραν ἀμφιπλέκων καλάμοις)<sup>28</sup>: admittedly, the act of pneumatic πλέκειν here described is not easily imagined in terms of weaving or plaiting technology, nor from the point of view of the musical features of the Lydian *nomos*, though the variegated and mimetic nature of the ἀύλός sound, resulting from the interlacements of notes from the two reeds, might in fact activate the analogy with πλέκειν.

## 2.2. *Plaiting chorality: πλέκειν and choral performance*

Once noticed the partial overlapping of ποικιλ- terminology and weaving imagery in the frame of metamusical pronouncements of fifth century (mainly choral) lyric pieces, what is left to explore are the modes through which the two components (broadly speaking, instances of poetic ποικιλία and textile metaphors for poetry-making), juxtaposed or separately, seem to conjure up the notion of chorality – as both choral song and performance of a dancing chorus – in ways that may reflect aspects of the craft. As the reading of the relevant passages will make clear, πλέκειν (and a number of compounds, both verbs and adjectives, from the themes πλεκ-/πλοκ-) is the most conspicuous textile craft term associated by literary sources to song-making and, in particular, to the choral poem as a product of craftsmanship; the difference in connotation with ὑφαίνειν ‘to weave’ is one of different textile techniques: while the latter commonly indicates the practice of weaving on the warp-weighted loom, πλέκειν may, at least in theory, encompass a number of different sub-crafts of fabric-making, for instance plaiting, sprang, braiding, tablet weaving – all of which (with different peculiarities and possibilities for patterning) being very practical techniques to produce garlands, ribbons, hairnets, fillets, bands<sup>29</sup>. Since crowns are also a product of plaiting,

<sup>27</sup> On this point see HELD (1998, 382): «[T]he dual structure of the *aulos*, the duality of the surviving Gorgons, and the presence of the idea of interweaving which is at least latent in διαπλέξαισ’ (and in every usage of πλέκω and its cognates), together suggests that Athena is indeed interweaving two sounds when she plays her new-found instrument». In his overview of the semantic range of διαπλέκειν (not found in Homer and in the three major tragedians), HELD (1998, 383f.) discusses instances of the interesting image of ‘weaving a day/life/period of time’ (διαπλέκειν ἡμέραν: Alc. *PMGF* 1.37s.; διαπλέκειν βίον: Pind. *Nem.* 7.98ff.; διαπλέκειν βίον: Hdt. 5.92, Pl. *Lg.* 806a;) and notes: «[T]he image behind this usage of διαπλέκω seems to be that of weaving many moments of time (the material) into a period of time (the product)».

<sup>28</sup> Trad. LEVEN (2014, 104), who prints Wilamowitz’s αἰολομόρφοις at l. 3.

<sup>29</sup> See the recent treatment by SPANTIDAKI (2016, 71-77), with updated overview of archaeological textile finds related to each technique, and references to iconographic and literary sources. Cf. BARBER (1991, 79f., 269 with n. 8).

and they were an obvious and pervasive element of the pragmatics of epinician performance (as garlands worn by the choristers, and a constant referent for athletic glory) as they are of epinician imagery<sup>30</sup>, the prominent place of πλέκειν in defining the genre metapoetics comes as no coincidence; still, the plaiting/interweaving metaphor as ‘combination of different elements so as to generate a composite, yet harmonious artefact’, i.e. the song as choral performance, does not exhaust the range of potential references to the specificity of the given technology. While I shall leave to the final section of this article the discussion of a sustained pattern of interaction between the semantics of πλέκειν and features of choral dancing, a quick look at a fragment by Pindar (140b M, of unknown genre but included by I. Rutherford, whose text I print, among the paeans) may lay ground for the argument that this article tries to build<sup>31</sup>:

Ἴων[  
ἀοι[δὸν κ[αὶ ἀρμονίαν  
ἀυλ[οῖς ἐ]πεφράσ[ατο  
τῶ[ν γε Λο]κρῶν τις,

οἶον [ὄ]χημα λιγ[ύ και εὐπλε-  
κὲς Λο[κρ]ὸν παιήρ[  
Ἀπόλλωνί τε και [  
ἄρμενον.

Pind. G9 Rutherford = 140b.1-4, 8ff. M

8-9 [εὐπλε]κὲς Fileni 1987 (cf. Hom. *Il.* XXIII 436 εὐπλέκτω ἐνὶ δίφρῳ, Ps.-Hes. *Sc.* 306, 370)

One of the Locrians devised song and musical mode for αὐλοῖ ...  
He dedicated (ἄνθ[ηκε Grenfell-Hunt, line 7) as a bright-sounding,  
well-plaited chariot, a Locrian one,  
a paean to Apollo and ...  
fitted together (trad. Rutherford 2001, modified)

<sup>30</sup> BLECH (1982, 109-45) offers a comprehensive discussion (including documentary, literary and iconographical sources, material aspects, historical and geographical settings) of the use and function of crowns and garlands in the context of Greek athletic games (see esp. pp. 127-38 on the four main Panhellenic *agones*). Cf. LOSCALZO (2003, 142-50), who points out the centrality of the notion of interlacing/plaiting in epinician poetics, in particular «l'idea dell'*intreccio* che ricorre spesso come metafora di un prodotto composito, frutto della fusione di vari elementi (musica, canto, danza)» (p. 146). Cf. SCHEID – SVENBRO (1996, 117ff.), a work that somewhat represents the critic *vulgata* on the topic: their focus, however, is on the symbolic connotations and cultural associations of literary weaving rather than on technological features of the craft as reflected in poetic and philosophical texts.

<sup>31</sup> See RUTHERFORD (2001, 382f.), who prints FILENI's (1987, 36) εὐπλεκὲς at l. 8f. and FERRARI's (1990) Λο[κρ]ὸν at l. 9. On the genre of the fragment see also the important remarks by D'ALESSIO (1997, 44f.). I draw here on the commentaries to this Pindaric fragment by FILENI (1987, esp. 18-21) and RUTHERFORD (2001, 383-87), and on the observations by STEINER (2015, 41f.); cf. PRAUSCELLO (2012, 81f.) on the possibility of seeing the opening of the poem (via Schroeder's supplement Ἴων[ίδος ἀντίπαλον Μοῖσας) as offering a «contrastive parallel with the Ionian harmony» (p. 82).

Here, the inventor of the Locrian musical mode (ἄρμονία), Xenocritus of Locri, is reported by Pindar as having dedicated (ἄνθ[ηκε l. 7) a paean to Apollo (and to another divinity, possibly Artemis), compared to a chariot (ὄχημα l. 8) that is λιγύ and εὐπλεκές, with the participle ἄρμενον also probably referring to the poem/chariot and picking up ἄρμονίαν at l. 2. Two motifs surfacing in the extant lines of the choral song appear especially relevant to this discussion: one is the recurrence of the notion of ‘fitting together’, activated here by both the technical term ἄρμονία (‘musical mode’, l. 2) and by ἄρμενον, which reinforces the simile by bringing in the idea that both the chariot and the song (and its performance) are complex products of craftsmanship (in similar terms, as we have seen, Telestes sketches the invention of the Lydian mode by «the king of fair-blowing sacred αὐλοί» in *PMG* 806, the verb for the fashioning of the Λυδὸς νόμος being there ἀρμόζειν); the second element is Pindar’s use of the adjective εὐπλεκῆς ‘well-plaited’ (an integration proposed by Maria Grazia Fileni) for the chariot and, by implication, for the choral song as well: the term occurs in association to song in a Pindaric paean (fr. 52c 12 M = D3 12 Rutherford αἰοδαῖς ἐν εὐπλε[κέσσι φωνᾷ μελιγάρυϊ), and to chariot in three *loci* of early hexametric poetry (in two cognate forms: εὐπλεκτός in Hom. *Il.* XXIII 436, and πλεκτός in Ps.-Hes. *Sc.* 306, 370), where «the epithet refers to the plaited leather thongs which were used for the breastwork of the chariot»<sup>32</sup>. While the musical, choral, and even orchestric dimension of this chariot-paean unfolds as the poem continues, and the choral persona reveals the chorus’ urge to shout in imitation of the αὐλός-lover dolphins (ll. 10-15), the technological connexion between the craft of πλέκειν and the material reality of chariot-making provides a richer meaning to the image<sup>33</sup>.

### 2.3. Textile technology and choral lyric metapoetics: a question of structure(s)?

Instances of weaving imagery for song-making in Greek lyric span a variety of song-types (including *carmina convivialia*)<sup>34</sup>, though the most consistent and cohesive

<sup>32</sup> RICHARDSON (1993) *ad* Hom. *Il.* XXXIII 436.

<sup>33</sup> STEINER (2015, 42) may be right to propose that εὐπλεκές «glances to the choristers joined hand in hand in the dancing circle», also considering the possibility that the poem might be a dithyramb, or a ὑπόρχημα (see RUTHERFORD 2001, 387), but I would argue that the first reference of the epithet is to the specificity of chariot construction.

<sup>34</sup> Two consecutive sections of a third century BC Berlin papyrus (P. Berol. 270, *BKT* v 2 = *PMG* 917) offer interesting instances of the trope; the poem in section b) presents at ll. 3ff., σήμαιν’ ὅτι Παρθένων | ἀπείροσι πλέξομεν ὕμνοις | [τ]ὰν δορὶ σώματα κειραμέναν Τρ[οί]αν («proclaim that we shall in-weave Troy in countless *hymnoi* of the Parthenoi») a syntactic construct similar to ποικίλλειν τι ἐν τινι, that we have encountered in Pherecydes’ fragment and that recurs in several choral lyric passages (see *infra*): the idea of the verb is that of weaving (or plaiting) images into the structure of the fabric (in the case of *PMG* 917b Troy is being woven into the poetic structure and performance of many *hymnoi*). Section c) of the papyrus is a hymn to Mnemosyne; at ll. 3f. the choral persona announces self-referentially that they are bringing out a διαποικίλος αἰοιδά. The image of αἰοιδῆν πλέκειν is used as a reference to Anacreon’s

sample of metaphors is found in Pindaric epinician, the best-preserved corpus of archaic and classical melic poetry; as already noted in passing, the cluster of relevant terms here include ποικιλ- and πλεκ- terms, ὑφαίνειν, and ὕμνος, the last two words linked through folk etymology and found as a (para)figura etymologica in a couple of lyric passages<sup>35</sup>. Possibly already attested in Ibycus (*PMG* 282C xiii fr. 27 ... ποικίλος ὕμνος ... Μοισᾶν Πιε[ρίδων, suppl. Lobel), the *iunctura* ποικίλος ὕμνος occurs twice in Pindar: a quite unmarked reference to epinician songs in *Nemean* 5.41f. (τὸ δ' Αἰγίναθε δῖς, Εὐθύμενες, | Νίκας ἐν ἀγκώνεσσι πίτνων ποικίλων ἔψαυσας ὕμνων), the expression gains in metaliterary import when governed by a weaving/plaiting verb, as in *Olympian* 6.85ff., in the context of a complex system of metaphors for poetic inspiration (starting at ll. 82f.) and shifting layers of temporal and spatial deixis (... τᾶς [*sc.* Θήβας] ἐρατεινὸν ὕδωρ | πίομαι, ἀνδράσιν αἰχματᾶσι πλέκων | ποικίλον ὕμνον. ... «[...] I shall drink the lovely water of Thebe, as I plait for spearmen a variegated choral song»)<sup>36</sup>. While a further layer could be added to the weaving metaphor here by taking ὕμνος as originally grounded on textile technology – for instance through etymology from the PIE root \**syuH* that gives ὑμήν ‘membrane’<sup>37</sup> – the word may in fact, as argued by Boris Maslov, convey the notion of cult choral song, a generic mark that, in association with

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parthenaic production in a poem by Critias quoted by Athenaeus (13.600d = *PMG* 500.1-2): τὸν δὲ γυναικείων μελέων πλέξαντά ποτ' ὤδας | ἦδὺν Ἀνακρείοντα Τέως εἰς Ἑλλάδ' ἀνήγευ, for which see IANNUCCI (2011).

<sup>35</sup> The well-known *iunctura* features in the proem of Bacchylides 5 (ll. 9f. ὑφάνας | ὕμνον), one of the few instances in Bacchylidean epinicians where the choral persona is strongly characterized, and interestingly in the third person, «a practice apparently not attested in Pindar» (D'ALESSIO 1994, 117 n.1; see also 127 n. 33). Interestingly, another case of prominent choral speaker in Bacchylides is 13.223f., again a weaving metaliterary image: ὕμνων τινὰ τάνδε νεόπλοκον δόσιν | φαίνω ... (νεόπλοκον δόσιν Blass, νεόξαντον μίτραν Maehler). The two members of the paronymological *figura* ὕμνον ὑφαίνειν are found juxtaposed, but syntactically disjointed, in 19.8 (dith. 5): object of the imperative of ὑφαίνε is τι καίνον, a marked statement of poetic novelty; cf. FANFANI – HARLIZIUS-KLÜCK (2016, 87f. with bibliography). The *iunctura* is also integrated by conjecture in an anonymous lyric poem quoted by Athenaeus (14.636cd = *PMG* 955.1f.), who ascribes it to Dicaearchus, Ἄρτεμι, σοί μέ τι φρήν <ἐφίησιν> ἐφίμερον | ὕμνον ὑφαίνεμεναι (Bergk : ὕμνον νεναίτε ὄθεν cod.); in the second half the poem mentions castanets, which is the reason for Athenaeus' quotation of the fragment.

<sup>36</sup> See the discussion in D'ALESSIO (2004, 289f.) who proposes to see in these verses, and especially in the future πίομαι, an instance of «either composition or performance [...] projected into the future», depending on whether the speaking persona is the «narrative function of the author», or rather it represents the performers.

<sup>37</sup> This etymology is deemed possible by both Chantraine and Beekes, while the derivation of ὕμνος from the root of ὑφαίνειν seems to incur into phonological problems; the most comprehensive study of the semantics and etymology of ὕμνος has been undertaken by DURANTE (1976, 155-66), who proposes to see the term as corresponding (etymologically and semantically) to Sanscrit *sumná-* ‘kind thought, goodwill, benevolence’ and the speech act that actualizes it; see MASLOV (2015, 301): «given that the Vedic word can refer to the verbal realization or motivation of such a thought or disposition, it is indeed not difficult to imagine how, on its way to Greek *hymnos*, the word developed a specialized meaning ‘choral cult performance’, intended to evoke divine graciousness». For an overview on the semantic field of ‘thread’, ‘cord’, ‘rope’ in the terminology of archaic Greek poetics see FANFANI – HARLIZIUS-KLÜCK (2016, 86-95).

metapoetic imagery, provides a strong link between chorality and (in our case) weaving. Other Pindaric instances of weaving and plaiting imagery exploit the semantic potential of ποικιλ- terms to convey ideas of complexity in structure, and their multi-sensory capabilities: fr. 179 M is transmitted by a scholion to *Nem.* 7.79 (a passage introducing a further textile technique for conceptualizing the epinician performance: stringing, εἶρειν)<sup>38</sup> that discloses the metaphorical nature of several weaving references in Pindar by providing an example (ὕφαίνω δ' Ἀμυθαονίδασι ποικίλον | ἄνδημα)<sup>39</sup>; granted the possibility that a headband (ἄνδημα) could be woven on the warp-weighted loom, it is not easy to discern the criterion for Pindar's choice of the verb here. Used in the participial form in *Nemean* 8.14ff. (φέρων | Λυδῖαν μίτραν καναχηδὰ πεποικιλμέναν, | Δείνιος δισσῶν σταδίων καὶ πατρὸς Μέγα Νεμεαῖον ἄγαλμα), ποικίλλειν effects the transition between the variegated plaited structure of the Lydian μίτρα (cf. *Alcm. PMGF* 1.67, *Sapph.* 39.2 V., 98a10f. V., 98b V.) and the harmonic texture of the Λύδιος νόμος being performed (the same Λυδία ἄρμονία governs the musical accompaniment of *Nemean* 4.44f., where the φόρμιγξ, that we have seen being qualified as ποικίλη in Pindar, is here invited to weave (ἐξύφαινε l. 44) the ongoing μέλος).

In each of these passages, determining to what extent and how (in the compositional process and/or in performance) the weaving/plaiting metaphor addresses specific structural or performative features of the choral song is clearly a hard task; structural elements at the compositional level may be considered, especially in Pindaric epinician, the (major and minor) themes interwoven in the architecture of a single ode, and the movement and transitions between myth, gnomic sections, and references to the circumstances of the athletic victory. At the performative level, lost any trace of music and orchestric schemata, we are left with the metrical and rhythmical patterns of the poem, grounded, at their most basic level, on a binary system (the opposition of long and short syllabic elements). This may resonate with (but hardly correspond to) another strictly binary logic, that of alternating ups and downs of the weft on the warp in weaving, where the complementary (and again binary) opposition of even and odd warp-threads provides the principle which presides over the creation of the shed(s) for inserting the weft and, thus, generating the patterns<sup>40</sup>. Interestingly enough, the image of the rhythmical design of sung poetry as an “interlacement” (again, the chosen verb is

<sup>38</sup> Εἶρειν στεφάνους ἐλαφρόν, ἀναβάλεο· Μοῖσά τοι | κολλᾶ χρυσὸν ἔν τε λευκὸν ἐλέφανθ' ἄμᾳ | καὶ λείριον ἄνθεμον ποντίας ὑφελιοῖσ' ἐέρσας. See LOSCALZO (2003, 143f.), who observes how κολλάειν «fa pensare più all'assemblaggio di parti, che all'intreccio di fiori»; on συνείρειν and chorality in the frame of the imagery of men as gods' puppets in Plato's *Laws* 654a see KURKE (2013).

<sup>39</sup> Σ *Nem.* 7.79 (Drachmann III p. 133): ἀναφέρει δὲ ταῦτα ἐπὶ τὴν τῶν ὑφαινομένων ποικίλιαν ταῦτην, ἐπεὶ τὸ ποίημα ὑφάσματι παρέοικεν, ὡς καὶ αὐτὸς ἐν ἄλλοις.

<sup>40</sup> Cf. TUCK (2006) on the fascinating hypothesis that the practice (still in use in traditional weaving communities, as ethnographical research shows) of mapping pattern-related information for weavers through rhythmical songs may be traced back to the rise of Indo-European metrical poetry (early hexameter and the Rig Veda in Tuck's discussion).

πλέκειν) of metrical units out of a number of primary rhythmical types is an ancient one: in Plato's *Republic* 398c-400c, in the context of a discussion of musical modes (*harmoniai*) and rhythms informed by Damon's doctrine, Glaucon, asked by Socrates to say what the ῥυθμοὶ κοσμίου τε καὶ ἀνδρείου βίου (399e) are<sup>41</sup>, declares himself only able to observe that «there are just three kinds of *rhythmoi* from which (all) the steps are interlaced»<sup>42</sup> (τρί' ἄττα ἐστὶν εἶδη ἐξ ὧν αἱ βάσεις πλέκονται, 400a 4f.). The use of this metaphor in a technical discussion of rhythmical theory at the time of Plato is quite remarkable, as Liana Lomiento has convincingly argued by tracing the usage of the image (the πλέκειν of rhythms) back to as early as Lasus of Hermione, who is credited by Martianus Capella (*De Nupt.* 9.936) with naming πλοκή a specific branch of his theory of rhythms<sup>43</sup>: along with the metapoetics of weaving/plaiting, well attested in late archaic choral lyric, the appropriation of πλέκειν by the emerging reflection on metre and rhythm (to the point that the verb becomes a *terminus technicus* in metrical theory)<sup>44</sup> attests to the effectiveness of textile technology to convey notions of structural complexity<sup>45</sup>.

A fascinating and thought-provoking exploration of the potential correspondences between weaving technology and Greek choral lyric, and in particular epinician poetics, has been attempted by Bernard Gallet, who has investigated the history, semantics, and technological function of the weaving device καῖρος – a term unattested as such in Greek literature, but widely discussed in the lexicographical tradition<sup>46</sup> – and its

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<sup>41</sup> To these ethically appropriate rhythms Socrates opposes ποικίλοι ῥυθμοὶ and παντοδαπαὶ βάσεις (399e).

<sup>42</sup> Translation: BARKER (1984, 133) modified. See LOMIENTO (2004, 116), who renders «“sono tre le specie di ritmo donde si intessono i piedi”»; βάσεις is translated by Barker as ‘movements’, though he also provides the literal translation ‘steps’, ‘goings’ at p. 133 n. 33.

<sup>43</sup> LOMIENTO (2004) is an important contribution to, among other things, the study of πλέκειν in the corpus of ancient technical literature on musical, metrical, and rhythmical theory (see in part. pp. 113-19).

<sup>44</sup> As LOMIENTO (2004, 116f.) aptly observes, Plato's application of πλέκειν to rhythmical architecture (cf. the occurrence of ἐμπλέκειν in a similar, though parodic, context in *Laws* 669d3) seems to be picked up by Dionysius of Halicarnassus (*De comp. verb.* 18, where the reference is to rhythms that are interlaced (συμπλέκειν) κατὰ τὰς ὁμοζυγίας) and then elaborated into the notion and doctrine of ἐπιπλοκή, a mechanism of metre-generation and modulation within specific rhythmical γένη (see PALUMBO STRACCA (1979, 89-107) for a survey of the relevant Greek and Latin sources on *epiplotē*).

<sup>45</sup> See LOMIENTO (2004, 118) on the rhythmical connotation of πλοκή at the time of Lasus as a likely possibility «in un'età, il VI sec. a.C., nella quale ῥυθμός non aveva ancora acquisito un significato tecnico e ῥυθμοποιία era nozione ancora sconosciuta».

<sup>46</sup> Not surprisingly, lexis do not agree on the function and nature of the device: this could be an indication of the fact that the function of the implement called καῖρος had changed in time (or even that the term was no more in use at the time the lexis were compiled), or, as I would be inclined to think, that the term καῖρος denoted a function (or a series of related functions) rather than a determined object or device; see e.g. Eust. *ad Od.* 7.107 (1571.57ff. Stallbaum) φέρεται ἐν ῥητορικῷ λέξικῷ καὶ ὅτε μεσάκμων, τὸ τῷ κανόνι ὑποδεδεμένον ὃ καλεῖται καῖρος «It is reported in a lexicon that, in regards of the weaver's bars, the one that is attached (to the loom) under the *kanon* (heddle bar) is called *kairos*»: this testimony might indeed be the reason for the identification of καῖρος with the “shed-rod” of the warp-weighted loom (see e.g. BARBER 1991, 270 fig. 12.3); however, Eustathius reports several different

relationship with the homograph *καῖρος*, a key concept of archaic and classical Greek aesthetics, and a fundamental principle of compositional arrangement in Pindar<sup>47</sup>. Gallet identifies the weaving implement *καῖρος* alternatively with the “chained spacing cord” keeping the warp-threads both separated and in due order as the shed is open for the insertion of the weft, and with the “starting border” of the weave, a band keeping together, arranging, and providing the warp-threads for the planned structure of the fabric<sup>48</sup>. This allows him to argue for ways through which such primary meaning of *καῖρος* may in fact ground the semantics of the abstract concept *καῖρος* – granted an original identity of the two terms, and the transition from the concrete to the abstract meaning also resulting in a differentiation of accents<sup>49</sup>. In Gallet’s interpretation, Pindar is exploiting the semantic potential of *kairos* for the purpose of literary ambiguity (syllepsis) in a number of gnomic passages where the abstract *καῖρος* and the concrete *καῖρος* may both fit the context – namely, when the context of a given gnome invites a literal, “technological” reading in view of the accumulation of textile terms in it. In the case of *Pythian* 9.76-79 ἀρεταὶ δ’ αἰεὶ μεγάλαι πλύμυθοι· | βαιὰ δ’ ἐν μακροῖσι ποικίλλειν | ἀκοὰ σοφοῖς· ὁ δὲ καιρὸς ὁμοίως | παντὸς ἔχει κορυφάν, a) the occurrence of ποικίλλειν (constructed, as in the Pherecydes passage *supra* and in Hom. *Il.* 590 discussed *infra*, with accusative and ἐν + dative), b) a passage in Xenophon (*Cyn.* 10.2) where κορυφαῖον indicates the upper border of a fishing net, c) the possibility that καιρὸς (= καῖρος) is here denoting the starting border of the weave, as in Hesychius’ τὰς παρυφὰς τῶν ἀμπεχόνων – these three elements suggest to Gallet a reading of the gnome as grounded in weaving technology; the overall sense of *Il.* 77ff. would be then: «in-weaving ancillary themes (βαιὰ) into the structure of the main themes (ἐν μακροῖσι) of the ode is appreciated by the *sophoi*; *kairos* holds the summit/border of the whole

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*interpretamenta* of the term, where the device is described as a cord, or some kind of binding associated with the starting border: καιρὸς δὲ φασὶ καὶ καιρώμα τὸ διάπλεγμα ὃ οὐκ ἔξ τούτων στήμονας συγγέεσθαι «καῖρος and καιρώμα is called the interweaving/binding that prevents the warp-threads from entangling»; καιρώμα ἢ διαπλοκὴ τοῦ διάσματος ἐν ἧ οἱ στήμονες καθιένται «καῖρώμα is the interweaving/binding of the starting border (διάσμα) in which the warp-threads are let down (inserted?)».

<sup>47</sup> GALLET (1990), a monograph devoted to the use of syllepsis in Pindar’s epinicians, that the case of *καῖρος*-*καιρός* is meant to illustrate. Two are the strengths of the project: the way textile technology, linguistics and literary criticism are set in dialogue towards the reconstruction of the function of the textile implement *καῖρος* in the warp-weighted loom, and the persuasiveness of some individual readings of epinician passages whose alleged “weaving connotation” is activated by the proposed original coincidence of *καῖρος*-*καιρός*: Gallet discusses at length *Pyth.* 9.76-79 (pp. 83-101), *Pyth.* 1.81-86 (pp. 103-114), *Nem.* 1.18f. (pp. 115-121); all the other Pindaric occurrences of the term (surveyed at pp. 123-138) receive a much less detailed treatment.

<sup>48</sup> For the “chained spacing cord” see HOFFMANN (1974); for a discussion of the “starting border” in its technological and literary aspects, see FANFANI – HARLIZIUS-KLÜCK (2016).

<sup>49</sup> See GALLET (1990, 28f.) for a helpful survey of the functions performed by the *καῖρος* on the warp-weighted loom as potentially capable of generating several figurative senses; see pp. 45ff. on cases of homographs (Gallet mentions νομός-νόμος, γαῦλος-γαυλός, μυρίος-μύριοι) where the accent differentiates between material and abstract meaning.



fabric applying constant tension (ὁμοίως)». Appealing as this kind of reading may be, such an interpretative proposal rests on unsafe grounds as far as the real technological function of καῖρος is concerned, and the “weaving” dimension of the passage may only be argued for when several elements in the context clearly indicate that textile technology lies at the root of the image<sup>50</sup>; still, in cases like *Pyth.* 9.76-79, this can be a stimulating exercise in both textile terminology and in the conceptual richness of the logic and technology of ancient weaving.

### 3. *Plaited χορός: an overview on πλέκειν and choral dancing*

Broader is the chronological spectrum of attestations of a further set of images grounded on textile technology: the metaphor of “weaving/plaiting a choral dance” crosses Greek literary history from Homer (and his reception) down to Nonnus, and sources encompass both poetry and prose: what emerges from the following survey of a selected sample of passages is a sort of terminological consistency around the verb πλέκειν, and a pretty nebulous scenario in terms of elements of choreography<sup>51</sup>. In several occurrences of the trope, a central aspect of the described choral performance is the function of thread(s), cord(s)/rope(s), possibly part of the orchestric arrangement of the choristers, who might mimic the presence of textiles, or rather interact with them in their dancing; precisely this aspect seems to suggest the possibility that the creation of a textile by the dancers (through their movements) may have been in some cases implicated. A case in point is represented by testimonia on the *geranos* (listed and discussed in section 3.1), as this particular instance of plaited dance (see *infra* Σ AB ad *Il.* 18.590) is associated in literary, scholiographic, and documentary sources with both archetypal *choreia* and with the use of textiles for choreographic purposes; section 3.2 brings together a selected sample of poetic occurrences of πλέκειν in connection with choral dance. It is important, however, to acknowledge at the outset of this overview that no ancient textual or iconographic sources provide any explicit support for the kind of interplay between choral dancers and elements (and practices) of textile crafts that is tentatively suggested in the concluding remarks below<sup>52</sup>.

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<sup>50</sup> This consideration precludes any search into an automatic equation καῖρός = καῖρος for archaic Greek literature, as the comprehensive and systematic survey by TRÉDÉ-BOULMER (2015, in part. 72-75 for a balanced and well-argued discussion of the technical term καῖρος, and n. 167 for a detailed engagement with Gallet’s book) demonstrates.

<sup>51</sup> A helpful orientation on the question in CALAME (1997, 34f. n. 63, 53-58).

<sup>52</sup> Helpful methodological remarks and caveats on the use of textual and iconographic sources in reconstructing elements of ancient dance are offered by NAEREBOUT (1997, 149-273) in the second of his “three preliminary studies”; the conclusions of Naerebout’s comprehensive discussion are largely negative: «the forms of ancient Greek dance cannot be traced. No actual sequence of movements can be reconstructed. And suggesting for a moment that we could, what about floorpatterns, tempi, expressiveness? All unanswerable questions, that neither images, nor texts, have much to tell about,

### 3.1. *Daedalus' χορός, geranos, hormos, and the role of textiles*

1) Hom. *Il.* XVIII 590-604: Hephaestus inlaying (ποικίλλε *Il.* 590) a χορός (both 'dancing floor' and 'choral dance': see Σ *ad loc.*)<sup>53</sup> of youths and maidens on the outer ring of Achilles' Shield<sup>54</sup>; this χορός is connected to the one Daedalus fashioned for Ariadne (οἶον ποτ' ἐνὶ Κνωσῶ εὐρείῃ | Δαίδαλος ἤσκησε καλλιπλοκάμῳ Ἀριάδνῃ, *Il.* 591f.); a thong stands in circle around the desirable chorus (ἰμερόεντα χορόν, *Il.* 603); the choreography of the dancing youths and maidens, who are holding hands at each other's wrists to form a chain (ἀλλήλων ἐπὶ καρπῶ χειρᾶς ἔχοντες, *Il.* 94)<sup>55</sup>, has them running in alternating circles (compared to the potter's wheel, *Il.* 600f.) and straight lines/rows (ἐπὶ στίχας), towards each other (ἀλλήλοισι); two tumblers, leading off the song and dance (μολπῆς ἐξάρχοντες), are whirling in their midst (ἐδίνεον κατὰ μέσσοις); as Jesus Carruesco argues, three are the orchestric patterns in the scene: κύκλος, στίχες, δίνη<sup>56</sup>.

2) Σ AB *ad* 18.590 (Bekker p. 514, *Il.* 33-37): ἐξεθλῶν δὲ μετὰ τὸ νικῆσαι ὁ Θησεὺς μετὰ τῶν ἠθέων καὶ παρθένων χορόν τοιοῦτον ἔπλεκεν ἐν κύκλῳ τοῖς θεοῖς, ὅποια καὶ ἡ τοῦ λαβυρίνθου εἴσοδος τε καὶ ἔξοδος αὐτῶ ἐγεγόνει. τῆς δὲ χορείας τὴν ἐμπειρίαν ὁ Δαίδαλος αὐτοῖς ὑποδείξας ἐποίησεν. In this scholiographic account, the χορός of youths and maidens is the object of the verb πλέκειν, whose subject is Theseus: the hero, whose skills in the art of arranging a choral dance are traced back to Daedalus, «plaited the chorus in a circular formation for the gods»; a noteworthy element of the scholium is the highly mimetic character of the dance, which replicates

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although once in a while an informed guess is possible, again without being in any way determinate. The absence of any technical literature and the loss of music are crucial. Survival of ancient dances in some recognizable and usable form down to the present cannot be called anything but wishful thinking» (pp. 271ff.).

<sup>53</sup> Cf. Scholia A *ad* 18.590a (Erbse IV p. 564), Scholia BT *ad* 18.590b (Erbse IV p. 564), Scholia T *ad* 18.590c (Erbse IV p. 564).

<sup>54</sup> In what is likely to be the earliest attestation of the syntactical construct ποικίλλειν τι ἐν τινι, on which see FANFANI (2017, 431-34); cf. also GALLET (1990, 86ff.). The use of ποικίλλειν (*hapax* in Homer) here in connection to choral dance has prompted some scholars to see a reference to weaving, though Hephaestus is more likely seen to be inlaying the scene on the shield; see CARRUESCO (2016, 71f.): «the use of ποικίλλε would have evoked in the audience textiles and weaving as much as weapons and forging, and significantly both kinds of products are found in the description of the chorus that is being introduced by that verb, namely, in the shiny daggers and the beautiful robes of the dancing boys and girls (595-598)».

<sup>55</sup> CARRUESCO (2016, 75) aptly observes that the chain of interlocking hands «elsewhere can be described as a σειρά or a ὄρμος, and in some cases even doubled by a rope».

<sup>56</sup> CARRUESCO (2016, 77 table 1). In the context of a comprehensive study of the *Tabulae Iliacae*, SQUIRE (2011, 303-70) treats in details the two tablets (4N, 5O) that depict the Homeric description of the shield of Achilles: originally round in shape, tablet 4N features in the lower band of the obverse the circling choral dancing of the youths and maiden, where «nine figures are to be seen, all holding hands and arranged in a ring» (p. 318 and fig. 154).

the entrance to and exit from the labyrinth – a characteristic foregrounded as well in the next source.

3) Plut. *Thes.* 21: Theseus ἐχόρευσε μετὰ τῶν ἡϊθέων χορείαν ἣν ἔτι νῦν ἐπιτελεῖν Δηλίους λέγουσι, μίμημα τῶν ἐν τῷ Λαβυρίνθῳ περιόδων καὶ διεξόδων, ἔν τινι ῥυθμῷ παραλλάξεις καὶ ἀνελίξεις ἔχοντι γιγνομένην. καλεῖται δὲ τὸ γένος τοῦτο τῆς χορείας ὑπὸ Δηλίων γέρανος, ὡς ἱστορεῖ Δικαίαρχος. This version of the institution of the *geranos* by Theseus in Delos provides some further details about the movements of the choristers: again, the mimesis of the turns and twists of the labyrinth is a major orchestric feature of the dance in Plutarch's account, as much as the evolutions and involutions performed rhythmically (ἐν τινι ῥυθμῷ παραλλάξεις καὶ ἀνελίξεις)<sup>57</sup>.

4) Pollux 4.101 τὴν δὲ γέρανον κατὰ πλῆθος ὠρχοῦντο, ἕκαστος ὑφ' ἑκάστῳ κατὰ στοῖχον, τὰ ἄκρα ἐκατέρωθεν τῶν ἡγεμόνων ἐχόντων, τῶν περὶ Θεσέα πρῶτον περὶ τὸν Δήλιον βωμὸν ἀπομνησαμένων τὴν ἀπὸ τοῦ λαβυρίνθου ἔξοδον: here the account goes more into the details of the chorus disposition, though elements of choreography are not easy to single out; what Pollux seems to be describing is that «the chorus formed a line, one behind the other, and at each end of the line was a *choregos*»<sup>58</sup>, with the two ἡγεμόνες re-creating (in their role of *choregoi*) the dance of Theseus around the Delian altar, in turn imitative of the exit from the labyrinth. Just this circular choral dance is referred to by Callimachus, though not explicitly associated with the name *geranos*, in *Hymn to Delos* 307-13: lines 312f. introduce the element (a consistent feature in iconographic accounts of the episode) of the musical accompaniment by the lyre/kithara in the performance (πότνια, σὸν περὶ βωμὸν ἐγειρομένου κιθαρισμοῦ | κύκλιον ὠρχήσαντο, χοροῦ δ' ἡγήσατο Θεσεύς)<sup>59</sup>; as scholars have long noticed, the Delian altar described here may likely be identified with the βωμὸς κεράτινος, the horned altar mentioned in Callimachus' *Hymn to Apollo* 58-64 as plaited by the god (ὁ δ' ἔπλεκε βωμὸν Ἀπόλλων, l. 61, which follows the reference to Apollo as weaving the foundations of cities, l. 57 αὐτὸς δὲ θεμελίλια Φοῖβος ἔπηξε)<sup>60</sup>.

<sup>57</sup> As LAWLER (1946, 113f.) rightly observes, the dance described as performed on the Shield of Achilles does not entirely match the description of the choreography of the *geranos* as we have it in this Plutarch passage: the latter is a devious, winding, wandering dance, while the former is a crisp, rapid circle dance; of opposite advice CALAME (1997, 56): «The movement of the Homeric chorus, both circular or alternating, correspond exactly to the ἀνελίξεις and the παραλλάξεις used by Plutarch to describe Theseus' dance at Delos».

<sup>58</sup> CALAME (1997, 55), who acknowledges the problem posed by the contemporary presence of two ἡγεμόνες, and proposes to solve it through a visualization of the Crane Dance with the chorus «divided in two lines, with a leader at the head of each; it would have thus had the form of a *lambda*» (p. 56); a further reason for the presence of the two ἡγεμόνες, again for CALAME (1997, 56), might have resides in the «alternating movements» performed by the chorus.

<sup>59</sup> For a recent reassessment of the iconography of the *geranos*, with a focus on the choral dance led by Theseus in the François Vase, see HEDREEN (2011).

<sup>60</sup> On *Del.* 307-13 see GIUSEPPETTI (2013, 239f.); on *Ap.* 57-64 see WILLIAMS (1978, 56-60).

5) Back to the *geranos* and the elements of its performance<sup>61</sup>, the lemma γερανουλκός (formed on ἔλκειν/ἔλκύειν ‘to pull’) in Hesychius (Γ 404 Latte ὁ τοῦ χοροῦ τοῦ ἐν Δήλῳ ἐξάρχων) may imply that the chorus leader of the dance somewhat “pulled” the choristers – possibly with the help of a rope/ropes? Delian temple inventories present in a number of cases the mention of ῥυμοί, a term that may indicate ‘ropes’ (ID 442, 189), in one particular case in association with choral dancing for Artemis (ID 442, 186 λαμπάδες καὶ ῥυμοὶ εἰς τοὺς χοροὺς Ἀρτεμισίους, Βριτομαρτίους)<sup>62</sup>; L.B. Lawler, following Latte, has brought attention to a Delian inscription (IG XI.2.161<sub>B</sub>61-62) interestingly linking the two terms γέρανος and ὄρμος (ἡ καλουμένη γέρανος καὶ ὁ ὄρμος ὁ ὑποτείνων ὑπὸ τὴν γέρανον, ἄστατα, also in the variant ὄρμος ὁ περὶ τῆ γεράνῳ): while Lawler believes that here both γέρανος and ὄρμος (whose basic meaning she claims to be ‘rope, cord’) may refer to types of ropes that were used in performances of the *geranos* as replicas for the objects originally carried by the dancers<sup>63</sup>, such a mention of ὄρμος in connection to choral performance can help us make more sense of the rather elusive *hormos* dance as described by Lucian in *De Salt.* 12 (ὁ δὲ ὄρμος ὄρχησις ἐστὶν κοινὴ ἐφήβων τε καὶ παρθένων, παρ’ ἕνα χορευόντων καὶ ὡς ἀληθῶς ὄρμῳ εἰκότων· καὶ ἡγεῖται μὲν ὁ ἔφηβος τὰ νεανικὰ ὄρχούμενος καὶ ὅσοις ὕστερον ἐν πολέμῳ χρήσεται, ἡ παρθένος δὲ ἔπεται κοσμίως τὸ θῆλυ χορεύειν διδάσκουσα). Here the ὄρμος, a mixed courtship dance on the model of the choral performance inlaid on the Homer Shield of Achilles, is characterized as symbolizing the harmony of civic union: however, as Lawler remarks, «a snake-

<sup>61</sup> For a bibliography on the *geranos* see NAEREBOUT (1997, 131f.). SCHEID – SVENBRO (1996, 101ff.) take as their starting point the delta formation fly of the cranes, and propose that the crossing of two choruses (the boys’ one, and the girls’ one) in delta formation produced a X and finally a V, a sort of upside-down delta: «[T]o “retie the knot” (*plekein*), the dancers merely continue, turning slightly toward the interior and crossing one another again, each row now finding itself in the other’s original place» (pp. 102f.). In a reference work on the topic, LAWLER (1946) interprets the *geranos* dance as not linked to the birds’ movements, but to a Delian ritual featuring a chthonic maze dance – in particular, its original shape may have had the features of a snake-carrying dance (the snake being one of the forms in which the Cretan Great Goddess «revealed herself to her worshippers», p. 120) that from Crete was transferred to Delos, where it appropriated local features (among which Ariadne, «who was probably a variant of the Great Cretan Goddess herself», p. 123). Lawler proposes to connect the adjective γέρανος (which she thinks presupposes the noun ὄρχησις) to the PIE root \*ger-, «defined by Walde and Pokorny as “drehen, winden”» (p. 124), thus tracing back the primordial nature of the *geranos* to an instance of mazing-dance, a widespread type of ritual dancing in Mediterranean civilizations.

<sup>62</sup> Cf. the discussion of the inscriptions, and of the possible meaning of ῥυμοί in this context, in LATTE (1913, 67f.) and LAWLER (1946, 125ff.), who in the frame of her interpretation of the *geranos* dance (see *supra* n. 61) suggests that the word ῥυμός may have denoted «a conventionalized replica of a snake, which was dragged or carried in the dance by a group of fourteen dancers, and then burned on the sacred fire» (p. 125); in turn, the replica would have in time «become more and more schematic, until it resembled a thick rope» (p. 126), and thus it could be associated with Ariadne’s clue.

<sup>63</sup> The representation of a snake in «a thick, cable-like form» in the case of ἡ γέρανος, and «a long garland made up in part of gold or silver ornaments, and fastened to the *geranos* or twisted around it» in the case of ὁ ὄρμος; see LAWLER (1946, 127); on the Delian inscription and the *geranos* see also LATTE (1913, 71).

carrying dance can easily be softened into a garland-carrying dance and, still later, can become a dance with hands enmeshed, to represent the object formerly carried»<sup>64</sup>. Whatever one makes of Lawler snake-carrying hypothesis, remnants of a dance whose performance implied the use of ropes surface in Roman times in a couple of literary passages<sup>65</sup>. Back to the *aition* of the γέρανος, Pherecydes the Attidographer reports (*FGrH* III.148 = Σ MV Hom. *Od.* 11.322) that «Ariadne gives the ball of thread to Theseus having received it from Daedalus the architect» (Ἀριάδνη δίδωσιν ἀγαθίδα μίτου λαβοῦσα παρὰ Δαίδαλου τοῦ τέκτονος), thus establishing a connection between the thread and the creator of the χορός (as both the maze-shaped dance floor and the orchestric movements of the choral dance)<sup>66</sup>.

6) Bringing together choral dancing, weaving, and maze-shaped patterns in a rather literal fashion is a passage from an epigram by Antipater of Sidon (*AG* 6.287), a dedication of a woven border (πέζαν, l. 2) to the goddess Artemis by three women; at lines 3f., Bitie is described as the one who τάσδε χοροισθαλέας κάμε κούρας | λοξά τε Μαιάνδρου ρεῖθρα πολυπλανέος, where the reference to the river Meander seems to point to the widespread geometric motif (the meander) depicted in vase painting and, arguably, pattern-woven in fabric borders.

### 3.2. Πλέκειν and dance: a few further instances

1) Critias *Perithous TrGF* 43 F4: σὲ τὸν αὐτοφυᾶ τὸν ἐν αἰθερίῳ | ῥύμβῳ πάντων φύσιν ἐμπλέξανθ', | ὄν πέρι μὲν φῶς, πέρι δ' ὀρφναία | νύξ αἰολόχρως, ἄκριτός τ' ἄστρον | ὄχλος ἐνδελεχῶς ἀμφιχορεύει («You, the self-generating, who wove the nature of all things in the aetherial *rhumbos*, about whom spangled night and the indistinguishable throng of stars perpetually dance» trad. Csapo 2008, 273). The syntax of ll. 1f., ἐμπλέκειν τι ἔν τινι, points to the analogous construct with ποικίλλειν: much of the interest of this cosmologic fragment rests on the meaning of ῥύμβος, a «lozenge-shape figure, or a bullroarer»<sup>67</sup>: given that lozenge-shape woven patterns are very common in antiquity, and the starry sky is a favourite recipient of ποικιλία, the circular

<sup>64</sup> LAWLER (1946, 127).

<sup>65</sup> In Livy 27.37.15 an expiation ritual is reported where maidens execute a choral dance for Iuno apparently keeping a rope in their hands (*per manus reste data virgines sonum vocis pulsu pedum modulantes incesserunt*); Terence *Adelphoe* 752 (*Tu inter eas restim ductans saltabis*), referring to a man intended to have his wife and a prostitute under the same roof, seems to imply a parody of a mixed dance performed with a rope: one of the point that the joke may be making, according to LAWLER (1946, 129), who see this as a reference to the *geranos*, is «that the dancers must go wherever the γερανουλκοί “drag” them».

<sup>66</sup> Cf. HEDREEN (2011, 506f.).

<sup>67</sup> So CSAPO (2008, 273), who assigns the fragment to Euripides and opts for the bullroarer, observing aptly that «the apparent choice of ‘doctrinally charged’ language to describe the circular motions of cultic dance is one of the most typical features of Euripidean choral projection».

dance of the stars around the deity invoked by the chorus might just be imagined to be performed against a pattern-woven, lozenge-shaped background.

2) Theocr. *Id.* 18.7f.: ἄειδον δ' ἅμα πᾶσαι ἐς ἓν μέλος ἐγκροτέοισαι | ποσὶ περιπλέκτοις, ὑπὸ δ' ἴαχε δῶμ' ὑμεναίῳ «They [*sc.* παρθένοι] all sung in unison, keeping time with their interwoven steps, and the palace echoed to the sound of the wedding hymn». The *iunctura* ποσὶ περιπλέκτοις may point back to the epic image μαρμαρυγᾶς ... ποδῶν (Hom. *Od.* VIII 265), the spectacle of Phaeacians dancers at which Odysseus marvels<sup>68</sup>.

3) A remarkable instance of literary reception of the metaphor of “plaiting a chorus” is to be found in Nonnus, in particular through the neo-formation χοροπλεκῆς which occurs twice in the *Dionysiaca*: at 6.49, in a festive context where plaiting (l. 44 στεφάνους ἔπλεξεν Ἐωσφόρος) and dancing (l. 47 Ἑσπερος ὀρχηστῆρι ποδῶν ἐλελίξετο ταρσῶ) are mentioned, Hesperos is said to be πομπὸς Ἑρώτων, | καὶ σκαρθμῶ μεμέλετο χοροπλεκέων ὑμεναίων, with the adjective qualifying a song-type of choral lyric, the *hymenaios*; at 14.33f. we encounter the circular chorus of the Curets/Corybants (cf. *supra* the epigraphic hymn to Zeus from Palaikastro) lead by Pyrrhichos and Idaios (ἡγεμόνευε χοροπλεκέων Κορυβάντων | Πύρριχος Ἰδαῖός τε σακέσπαλος). The term χορός is the object of πλέκειν (here seemingly meaning ‘to dance’) also in *Dionys.* 30.118 and, more generally, Nonnus seems very fond of the imagery of choral πλέκειν in the *Dionysiaca*, as the verb occurs several times in association with μέλος (7x) and with specific types of choral song (6x)<sup>69</sup>.

### 3.3. Braiding choral dancers from the geranos to Maypole dance: reviving a hypothesis

Going back for a moment to the first sample of “plaited choral dance” surveyed in section 3.1, i.e. the Delian/Cretan *geranos*, there seems to be a couple of stable elements in the different accounts of it: i) the movements of the choristers mimetically replicated the twists and turns of Daedalus’ labyrinth; ii) the choreography of the *geranos* might have included the aid of rope(s) or cord(s) for enhancing the coordination of the dancers’ schemata in the maze-shaped dancing floor, for which Ariadne’s thread in the myth might have provided a sort of aetiology. A possible parallel to the Greek *geranos* is the Roman *Lusus Troiae*, an equestrian game performed on a spiral, maze-like surface through complex evolutions: the only poetic description of the game, Virgil’s *Aeneid* V 545-602, features a comparison between the pattern of the equestrian movements and

<sup>68</sup> Cf. HUNTER (1996, 140).

<sup>69</sup> See LOMIENTO (2004, 116 n. 50) for a list of occurrences, to which a few more are added here; governing μέλος: *Dionys.* 1.506, 10.220, 13.351, 20.278, 29.233, 43.388, 46.164; μολπήν: 5.110, 13.550; πένθμον ὕμνον: 2.83; κῶμον: 5.100, 11.500; θρήνον: 46.301.

the Cretan labyrinth, and is replete with weaving imagery<sup>70</sup>. Interestingly, a remarkable spiral structure known as “Troy town” (or “Maiden dance”), an arrangement of stones in the shape of a labyrinth, is found largely in Northern Europe. The astonishing similarity between the specific design of such “Troy towns” and the depictions of Minos’ labyrinth in a third century BC Cretan silver coin, or the graffito labyrinth drawn on the Etruscan Tagliatella vase (sixth-fifth century BC) depicting a horseman with a “Troy-spiral” and featuring an inscribed word *truia*, have prompted historians of labyrinths, ethnographers, and classicists to look for the historical connections between Mediterranean and Northern European instances of the “Troy town” design (which surfaces as well in ninth century AD manuscripts accompanied by mentions of Daedalus’ labyrinth, and in floor mosaics of Medieval churches)<sup>71</sup>. There is, in particular, a study of the “Troy town” that may potentially be of relevance for the image of “πλέκειν a choral dancing”: as a result of a wide ethnographic survey of the phenomenology of the “Troy” spiral shape, L.-I. Ringbom has proposed to see the motif as originating in a method of drawing spirals, the string-compass<sup>72</sup>. Literary and mythographic accounts link Daedalus, through his nephew Talos, with the invention of the compass and the potter’s wheel<sup>73</sup>: Ringbom offers an interpretation of the building of the Cretan labyrinth by Daedalus as a monument to the spiral’s winding form, and suggests to see the χορός of *Iliad* XVIII 590 as a dance meant to be performed on a specific dance floor – the shape of which might have resembled the design of the “Troy Town”. The element of the string/cord/rope (the characteristic feature of the string-compass) as an aid to arrange a choreography for that particular dance floor would then be, in Ringbom’s proposed reconstruction of an aetiology for the connection between *geranos* and the Cretan labyrinth, what Ariadne handles to Theseus and the Athenian youths for their exit from the labyrinth and, most notably, for the successful execution of their choral performance. The link with the *geranos* as a dance possibly executed with the aid of a rope, as some ancient sources may seem to suggest, allows Ringbom to propose a hypothesis of reconstruction of the performance of the *geranos* as featuring a rope/band/string and being executed on a distinctively shaped dance floor (meant to recall Daedalus’ labyrinth, and eventually resurfacing in the “Troy town” buildings of Northern Europe). Surveying instances and evidences for “rope dances” both in antiquity and in later folk traditions, Ringbom elaborates his model of how a “band/string dance”, possibly also a mixed dance like the *geranos*, might have been

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<sup>70</sup> SCHEID – SVENBRO (1996, 40-49) discuss in detail the *Aeneid* passage, and several interesting implications of the *Lusus Troiae* in terms of its origins, associations with weaving and with Greek models.

<sup>71</sup> See HELLER (1946) for a helpful survey of literary and iconographical sources on this figure.

<sup>72</sup> See RINGBOM (1938).

<sup>73</sup> The relevant sources on Talos as inventor of the compass are Diod. 4.76.4-5, Ov. *Met.* 8.247ff. (*primus et ex uno duo ferreae brachia nodo | unxit ut aequali spatio distantibus illis | altera pars staret, pars altera duceret orbem*), Hyg. *Fab.* 274; see COOK (1914, 724ff.) on the myth of Athenian Talos.

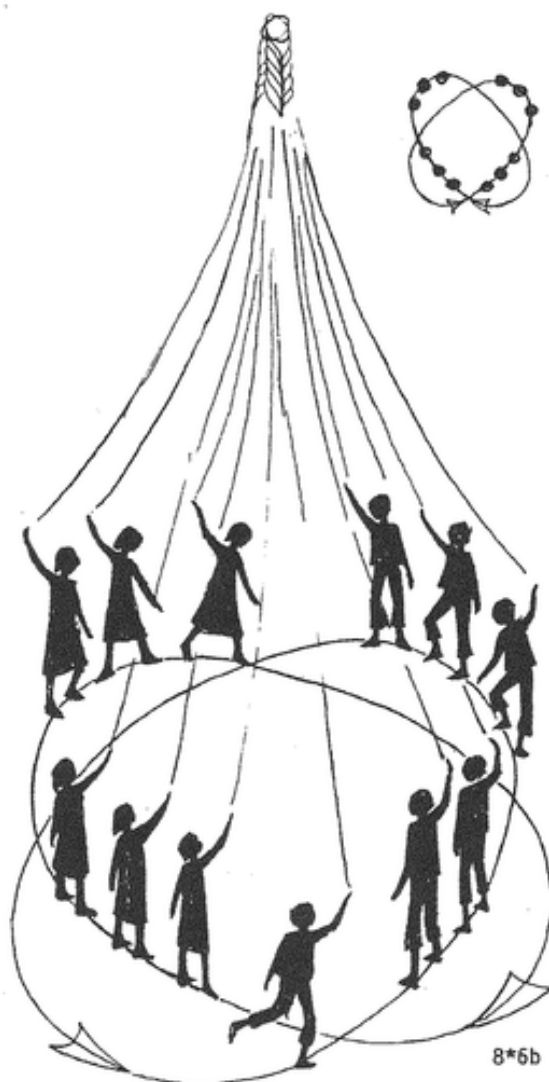
performed in a “Troy Town” dance floor; a young man at the centre of the maze holds a band, held in turn at the other extremity by a young girl dancing in ring in accordance to the structure of the labyrinth-shaped floor; if the band is bound to the girl’s arms or waist, she is thus able, through twists of her body, to “string the dance”<sup>74</sup>. In terms of comparative forms of modern folk dances, the so-called “maypole dance” (see fig. 1) may provide an interesting template for not only a rope or string dance, but indeed a plaiting or braiding dance, in that the result of the evolutions of the dancers – i.e. the patterns they draw on the floor, which can be fairly complex, especially when the dance is performed in pairs, like in fig. 2 below – is the making of an actual braid<sup>75</sup>. While Ringbom’s mapping of a sort of maypole dance on the “Troy town” maze-shaped floor (see his drawing in fig. 3 below) is suggestive of certain features of the *geranos* (with seven pairs of dancers and a χορευός/γερανουλκός at the centre, and the labyrinthine patterns of the choristers on the dance floor), the aim of this article in reviving his hypothesis rests on the attempt to make sense of the pervasive literary image of “weaving/plaiting/braiding of a choral dance” in ways that may connect both with elements of ancient textile craft and technology, and (admittedly, in a tentative and highly speculative way) with practices and folk traditions of dancing with cords/ropes/strings.

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<sup>74</sup> See RINGBOM (1938, 92 fig. 16).

<sup>75</sup> The reference work on the technology of braiding is SPEISER (1983), from which the drawing in fig. 1 is taken (p. 79); Speiser’s explanation of the Maypole dance in terms of braiding technology (when the resulting braid is referred to as «tubular plain oblique interlacing») is worth being quoted: «Boys and girls dance in opposite directions, alternately passing their partners to the right and to the left as they meet. This makes a track-plan of two round, but sinuous tracks crossing each others as many times as there are dancers» (p. 79). The three figures used in this article appear together in a post on github.com on “Meandering Dance and Craft” by bit.craft lab (link: [https://github.com/bitcraftlab/meandering-code/blob/master/project\\_posts/2014-03-24-inspiration.md](https://github.com/bitcraftlab/meandering-code/blob/master/project_posts/2014-03-24-inspiration.md)).





**Fig. 1** Maypole dance: drawing and notation, taken from Speiser (1983, 79)

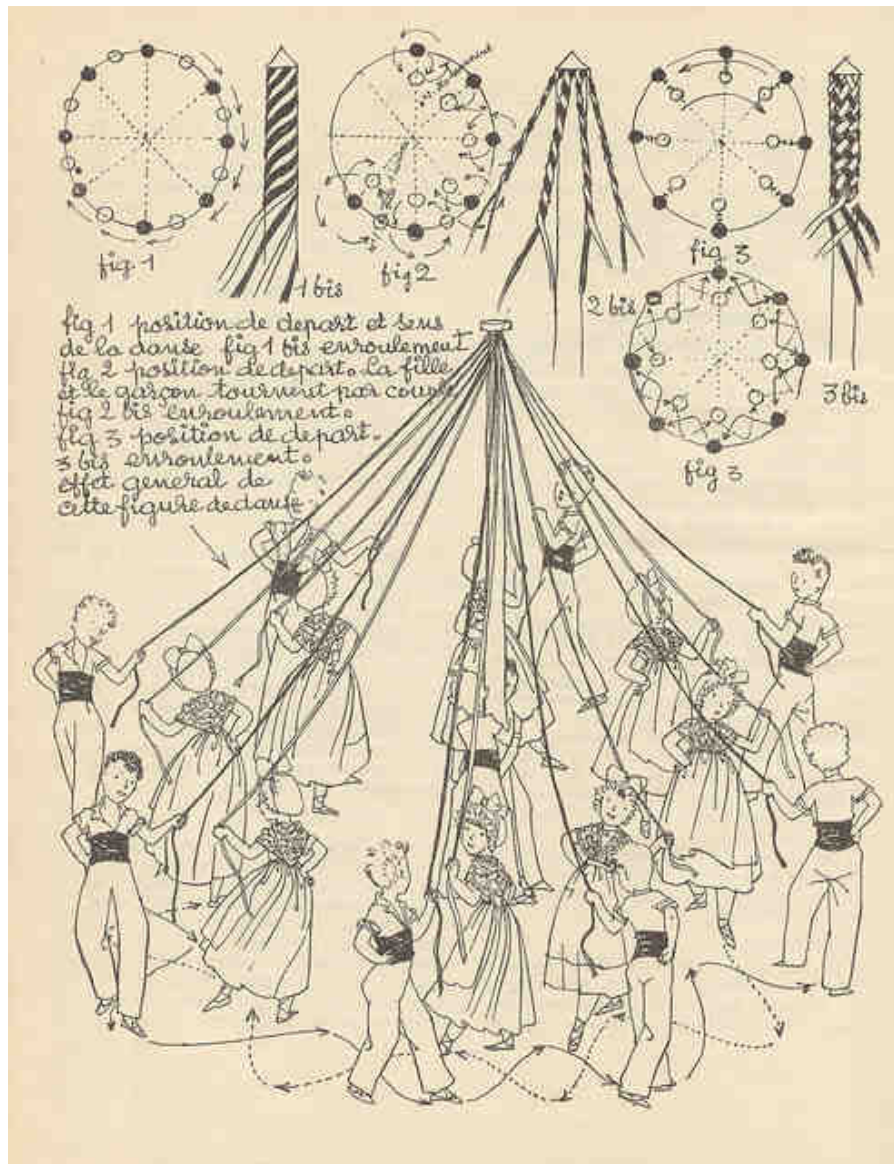
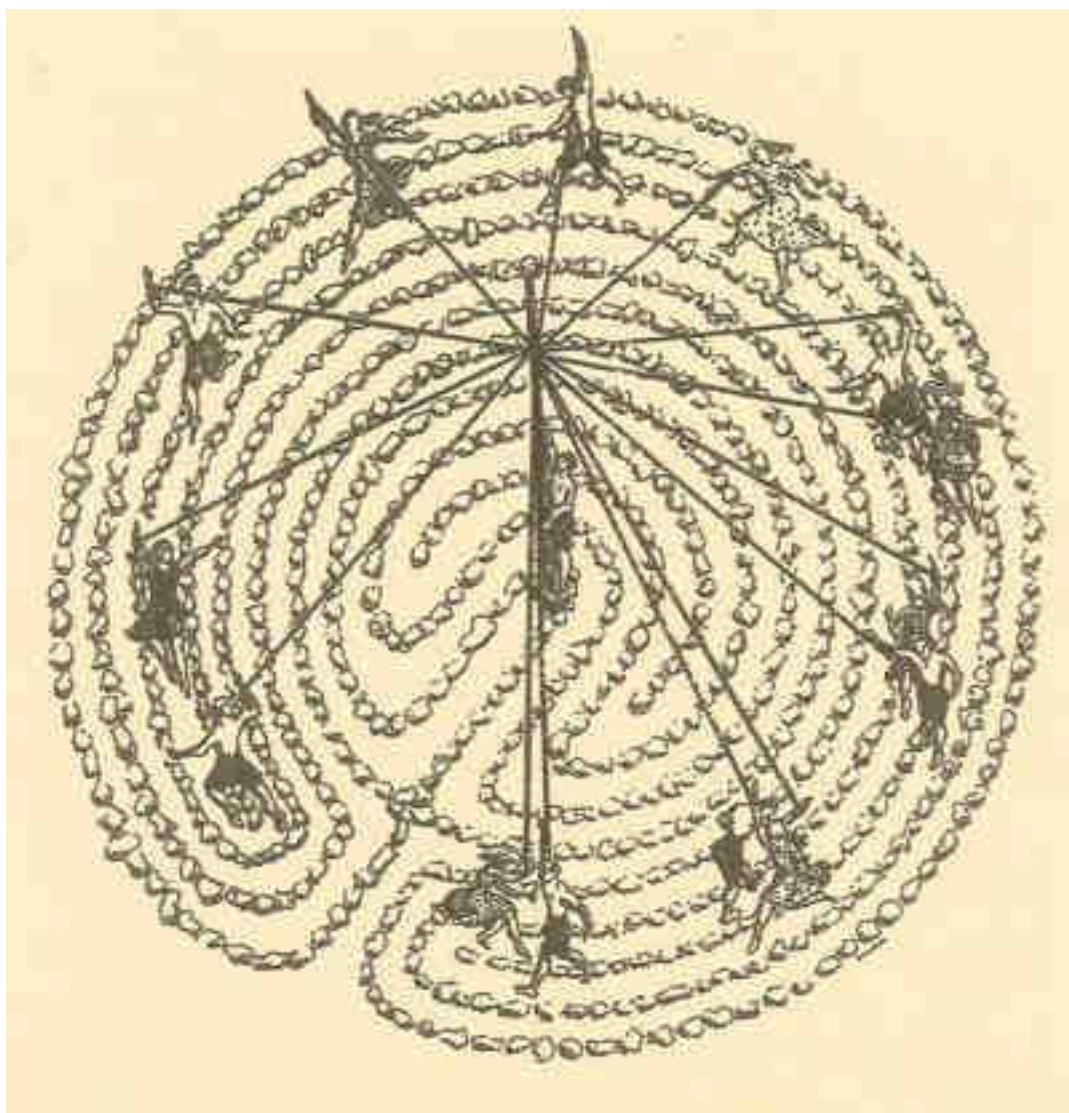


Fig. 2 Drawing of a Maypole dance: French print from 1940



**Fig. 3** Reconstruction of the *geranos* as a Maypole-like dance executed on Daedalus' *choros*: in Ringbom (1938, 95 fig. 19)

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