

Plant Series, No. 7. Manuscript MS408. Portfolio 5, Left (JPEG 010).**Gerard E. Cheshire.****Abstract.**

The plants individually described in Manuscript MS408 have all been identified as species from the environs of the Mediterranean Basin, in accordance with the location of origin for the manuscript. This series of papers presents each plant species separately with a translation of its accompanying text and any relevant cross-reference information. In addition to the linguistic value, there is plenty of historical, cultural and scientific knowledge to be gleaned from each of these manuscript pages, so they will be of interest to scholars from various disciplines.

Manuscript MS408 originates from Castello Aragonese, Ischia. It was written as an *aide-memoire* for Maria of Castile, Queen of the Crown of Aragon, c. 1444, whilst her husband, Alfonso V, was conquering the City of Naples. The manuscript remained in the castle library until 1912 when the citadel was sold into private hands by the Italian government and its contents were removed and traded off. Two years later the document found its way out of Italy and the nation unknowingly lost an important part of its heritage.

Within the manuscript there is a series of illustrations of medicinal herbal plants with accompanying text. This project identifies the plant species and translates the text to reveal the information imparted by the author and artist of each entry. The algorithmic method, of priority array queuing, was used to translate and identify the words in the text, as described in the following paper: <https://ling.auf.net/lingbuzz/004653> The method takes Latin as the principal source, with Old and Modern Romance as the secondary and tertiary sources. We can see that the language is placed somewhere between Latin and Romance in linguistic evolutionary terms: i.e. it is a vestigial form of prototype Romance.

Palaeography from historic languages and writing systems is never an exact science, especially when both are unfamiliar, but the subsequent transliterations into English phrasing provide adequately legible intention of meaning. In addition, many of the words are unambiguous in their Latin root and the text cross-references with botanical and medicinal information about the plants described in the images, so serving to verify the methodology.

The plant images are naïvely and inaccurately drawn and coloured, as the artist was untrained and should be viewed as simplified cartoon representations rather than anatomical illustrations. The images also focus on the relevant medicinal or culinary parts of the plants, so that the specimens are often incomplete, disproportionate, unscaled and shown in varying stages of development from young seedlings to mature plants in seed. A few of the images also contain additional pictorial information or annotations to highlight particular points for identification.

Some of the plants would have been grown in the physic and vegetable gardens of Castello Aragonese or else collected from Ischia island. Others would have been purchased from herbal plant suppliers travelling from mainland Europe, as dead specimens collected in the field and preserved by desiccation. Tinctures and essential oils would also have been available for purchase. It is apparent that the illustrations essentially function in substitution for the plant names, simply because scientific names were not yet conceived, and common names would have varied regionally. So the combination of visual and written information was intended to enable the reader to identify the species and use them for medicine or food accordingly.

Plant Species.**Rampion Bellflower. *Campanula rapunculus*.**

Campanula rapunculus was grown as a staple foodstuff in Europe until the introduction of higher yielding crops. Its leaves were eaten as a salad (*mâche salade*) and its roots were eaten as a crisp whitish vegetable, rather like the radish and known commonly as rampion, sometimes as rapunzel. In the wild, the tuberous root has an irregular, knobby shape, because it has not been selectively bred and often grows in stony soil, but cultivar specimens have an elongated turnip-like shape. The irregular wild form is shown in the manuscript and described as a 'péon-lotus' (Old Spanish) or 'peão-lotus' (Old Portuguese) which translates from Iberian-Latin as 'paw-shaped edible-tuber' (pion lotus) due to the shape resembling the lathe turned pawn chess piece.

The word lotus was used for any pale edible root. The modern name rampion (ram'pion) is a contraction of the Latin 'rāmus pion'. The word rāmus means root and survives as ram in Occitan, Galician and Romanian. The word pion, or pión, again means pawn or spinning top (a lathe turned wooden toy) and survives in French, Galician, Spanish, Romanian. Thus, the word rampion is used ambiguously to describe various similar wild edible plant roots. So, the words péon, peão and pion were all used to mean a pawn-like, or top-like, edible root in Vernacular Latin.

So, the manuscript name 'pion-lotus' (pawn root) is essentially the same as the contemporary name 'ramus-pion' or 'rampion' (root pawn), with the words lotus (Vernacular Latin) and ramus (Classical Latin) amounting to the same thing: i.e. an edible rootstock.

The modern scientific species name '*rapunculus*' (*rapun-culus*) translates from the Latin as 'turnip-little'. The genus name *Campanula* (*Campan-ula*) means 'bell-small' alluding to the bell-like flower. The plant is found growing naturally across central and southern Europe¹. The plant has also been known historically as *Rapumsylvestre* or *Rapumsylvestris* which translates from Latin as 'woodland turnip' or 'wild turnip'. It is also the origin of the word rapunzel (i.e. rapumsylvestre → rapumsyl' → rapumzel → rapunzel), which is also used ambiguously to describe similar wild edible plant roots. See the engraving by Adam Lonicer, Fig. 6. These etymologies for the terms rampion and rapunzel are new to science: the former due to the manuscript content, the latter due to archive research.

Another erstwhile name is *Rapane olum*, which means 'smelly turnip' in Old Italian. The word rapane is now used for an edible sea snail (*Rapana venosa*), also known as the rapa whelk or rapana whelk, as the shell is turnip-shaped. The word 'olum' is Latin for smelly, aromatic, stinking.

The flower of *C. rapunculus* sits on a characteristic star-like calyx (ring of pointed sepals), which subsequently becomes the crown of the fruit, after the petals have withered and the ovary swells. Three of these calyxes can be seen in the manuscript image. The flower colour is usually indigo blue, but it also occurs in pale blue, pink and white. The early leaves of *C. rapunculus* are spatulate in shape and form a rosette. As the plant grows taller the secondary leaves become lanceolate and opposed along the stem, with decurved side profiles, as shown in the manuscript image. Note that the similar *C. rapunculoides* (Creeping Bellflower) has a similar root but wider nettle-like leaves, and *C. persicifolia* (Peach-leaved Bellflower) has similar leaves but only a thin root.

John Gerard described the plant thus in his *Herbal* of 1597: "*Small Rampion (Rapuntium parvum). One of the Bell-Flowers, and yet a wild kind of Rampion, hath leaves at his first coming up like unto the garden Bell-Flower. The leaves which spring up afterward for the decking up of the stalk are somewhat longer and narrower. The flowers grow at the top of tender and brittle stalks like unto little bells, of a bright blue colour, sometimes white or purple. The root is small, long, and somewhat thick*".

He also comments on the medicinal use of the rampion: "*Some affirme that the decoction of the roots are good for all inflammation of the mouth and almonds of the throte and other diseases happening in the mouth and throte, as the other Throte warts*". The Middle English term 'throat almonds' is still used by the Dutch to describe tonsillitis: i.e. hard lumps in the throat. The term '*Throte warts*' (throat warts) describes a number of plants used to treat throat ailments.

Note that John Gerard mentions the garden cultivar variety some 150 years after the manuscript was written, and he also uses the Latin name *Rapuntium parvum* vulgo (turnip-like small, common). In *Plantarum Seu Stirpium Historia* (History of Plants or Rootstocks) of 1576, Matthiae de L'Obel similarly uses the name *Rapuntium parvum*. He also describes the root as '*Pes Locustæ*' (Fig. 5) quoting *Auicennæ*, a work by Persian natural philosopher Avicenna from the 10th Century. The word *Pes* means stalk, whilst the word *Locustæ* means lobsters, thus 'lobster stalks' in allusion to the tapering white edible sweetish flesh and pungent aroma of the rootstock. L'Obel's work was the basis for that of Linnaeus, as he had introduced the idea of plant genera and families according to similar anatomy in *Stirpium Adversaria Nova* (A New Alternative to Rootstocks) in 1570, co-written with Pierre Pena.

In *Phyto Basanos* (The Basis of Plants) by Fabio Colonna (1567—1640) of 1592 the plant is named *Erinus*, alluding to the Erinyes (s. Erinys) Erīnús (Ἐρινύς) the Greek goddesses of fury, as the root grows beneath the soil towards the underworld: See Fig. 8. Colonna spent his entire life in Naples area, where belief in the

underworld was prompted by the volcanic activity. Pungent aromas, such as that of the rampion, were also associated with the devil, due to the sulphurous gases emitted from fumaroles, vents and craters of volcanoes. Rampions taste and smell similar to garlic or other alliums.

In *Grandes Heures Anne de Bretagne* (Greatest Hours of Anne of Brittany) of 1503, by Jean Bourdichon (c. 1457—1521), the plant is named both *Mella* (Latin) and *Responces* (Old French). Over time, the word *responces*, became *réponces*, and then *raiponce* (rampion). The word *mella* is a contraction of the Latin *mellarius* (pertaining to honey). When words are written or outlined in red, to draw attention to the eye, it is known as ‘rubrication’ – derived from the Latin ‘*rubrica*’ (red pigment). Fig. 4. Shows two versions of the illumination.

Interestingly, the French name is not derived from the same linguistic origin *rapa* (turnip), as one might presume, but from a different origin, as this excerpt from a French book explains: *Un botaniste, montrait son jardin a une dame, qui lui dit avec dedain: “Tout ce que je vois a un air simple qui peut plus cous plair: mais je trouve que vos plantes ne disent rien.” “Il y a cependant”, répondit le botaniste, “beaucoup de réponces (raiponces).”* In translation this reads: A botanist showed his garden to a lady, who said to him with disdain: “All that I see has a simple quality which may be more pleasing; but I find that your plants say nothing”. “There are however”, the botanist responded, “lots of replies (rampions).” The book is *Biévriana ou Jeux de Mots de M. de Bièvre* (Biévriana or Word Games of Monsieur George de Bievre) by Albéric Deville, 1808.

So, the plant was known whimsically as ‘replies’ in Old French (*réponces* or *responces*) due to its nutritious and appetizing root, hidden from view. It is worth adding that the word ‘*responces*’ also had a spiritual element, as it was used to mean a reply, or answer, to an oracle or prayer, so the rampion was associated with magical medicinal properties as a food. In fact, the Latin phrase ‘*re sponces*’ means ‘I promise’ or ‘I commit’ – the linguistic root of ‘responsible’. Also, the word ‘*repones*’ means to replace, revive, restore, recover, recuperate in Latin, Spanish².

In *Dictionaire ou Promptuaire Flameng-François. (Dictionary or Compendium of Flemish-French)*, by Elcie Eduard Leon Mellema, 1602, there is a listing “*reponcel* (Flemish) a herb used for salads, *raiponce* (French).” So, the name had evolved in French from ‘*responces*’ in 1503 to ‘*raiponce*’ by 1602. Thus the phonetic similarity between ‘*responces*’ and ‘*rapunzel*’ had caused a linguistic convergence or hybridization.

One of the most extravagant names for the plant is found in *Hortus Romanus* (Catholic Garden) by Giorgio Bonelli, 1772, with an engraving by Magdalena Bouchard: See Fig. 7. The name given is *Campanula radice esculenta flore coeruleo* (Small Bellflower with delicious root and blue flowers). In *Theatri Botanici* (Botanical Presentation) 1623, Caspar Bauhin names the plant *Campanula foliis Echii floribus villosis* (Small Bellflower with pointed leaves and hairy flowers) See Fig. 9. Some specimens of *C. rapuncululus* do indeed have hairy petals (See Fig. 2), as do other *Campanula* species. A notable species is the Bearded Bellflower (*C. barbata*) – but it is a dwarf alpine plant with different anatomy. In *Stirpium Historiæ* (Plant Histories) 1583, by Rembert Dodoens, the plant is named *Campanula media* (Medium small Bellflower) to distinguish it from *C. maior* (Greater small Bellflower): See Fig. 10. There is a related species Canterbury Bells (*C. medium*) with similar flowers and leaves but it has no edible rootstock.

The Court of Castello Aragonese, Ischia.

The text of this page refers to the care of Léonora, daughter of Alfonso V, following childbirth. The Court of Ischia would have included a number of royal women and children. King Alfonso V of Aragon (1396—1458) was married to Maria of Castile, Queen of Aragon (1401—58), but his children were produced by his mistress Giraldona Carlino (d’Aragon) (1400—40). They were: Son: Ferdinand I, King of Naples (1423—94), husband of Isabella of Clermont (1424—65) Married 1444. Daughter: Léonora Eleonora Frangepán Modrusi (de Aragon) (c. 1424—93), wife of Giovanni Francesco ("Marino") da Marzano (1420—94), Prince of Rossano. Married 1443. Daughter: Maria d’Aragona (1425—49), wife of Leonello d’Este (1407—50), Marquis of Ferrara. Married 1444.

The court at Ischia in 1444—45 would have included Alfonso’s wife Maria, and his daughters Maria and Leonora, as well as his daughter-in-law Isabella, as Castello Aragonese was a place of sanctuary following Alfonso’s campaign to conquer Naples (1441—42). An earlier campaign to take Naples in 1439 had failed.

Alfonso, his son, Ferdinand, and his two sons-in-law, Giovanni and Leonello, were busy expanding the Crown of Aragon and fighting resistance in the Tyrrhenian Sea during this period, which included the conquest of Sardinia in 1446.

This is why the manuscript is dominated by images of royal women and children, and with an absence of male company, as they were kept in the citadel on Ischia for their safety. For example, Leonora had four daughters of her own, born between c. 1437—45. Ferdinand also had a number of children by his concubines, including a son Enrico d’Aragon in 1431 by Giovanna Caracciolo and a daughter Maria d’Aragon in 1440 by Diana Guardato. Ischia court would have been a rather busy place – queens, princesses, princes, mistresses, concubines, children and babies³.

Translation:

1. péo’o’us [abb. péon-lotus/peão-lotus: pawn-tubers. Spanish, Portuguese] læio [v. lego. I collect, I gather, assemble. Latin] léo’a éop [abb. Léona (Léonora) daughter. Latin from Greek] é a [and the. Portuguese] norns [the Norns: goddesses of fate. Latin] nron [abb. honraron: honoured. Old Portuguese/Spanish]
2. or éia [and come on! Latin, Portuguese] éa éa [she, she. (plural) Latin] emea [acquire. Latin] ælé [v. a lé: as is. Portuguese] o s [abb. opus sit: work is needed] æ’eo [in it. Latin] é eo [is it. Portuguese, Latin] sa é’orna [abb. sana. health it provided. Latin]

Note: The phrase ‘Léona daughter’ refers to Princess Léonora, daughter of Alfonso V, who had given birth to four daughters of her own at the castle by 1445.

Note: The term péon (Spanish) or peão (Portuguese) can describe anything with a lathe turned shape, such as a pawn, a spindle, a child’s spinning top, or a toy soldier. The tubers look similar to these in the wild plant, so the word is used in the manuscript. The muted junctural consonants in the phrase are implied by the way the letters are written, as the author employs a style faithful to their speech phonetics, rather than using formal spelling and grammar.

Note: The word lotus was a generic Medieval term for edible tubers similar to that of the *Nymphaea alba*: See paper, Plant Series, No. 3: <https://ling.auf.net/lingbuzz/004864>

Note: The word sa is an abbreviation of ipsa (herself) in Latin. The word ipse is ‘himself’, and ipsum is ‘itself’ or ‘themselves’.

3. æo æo [io, io: attention, attention. Latin] éaus [v. eaux: holy waters. Old French] æaus [v. eaus. wash, rinse. Latin] naus [food. Vulgar Latin] donaus [donate, gift. Latin] o as [of the. Latin] ara [altar. Latin]
4. doléa [v. doglia. Labour pains. Latin. Italian] do [of the. Old Portuguese.] e’mea [from mine. Latin] é o [is the. Portuguese] meo [to go. Latin] r [abb. recte. rectify, put right. Latin] naus [food. Vulgar Latin] e’meia [and a half. Portuguese] é o aus [is to listen/see: to understand. Portuguese]

Note: The term ‘aus’ is an abbreviation of ‘auscultar’, which means to listen, observe, monitor, examine in Portuguese, Spanish and Catalan. A variant ‘ouç’ is also used in Portuguese, with similar meaning – to perceive, detect, notice.

5. æo s(ensu) æia [look felt to be. Latin] emo o mous [gather of the lungs. Latin, Old French] æia [to be. Latin from Hebrew] doméous [those of household. Latin] éo naus [it’s the food. Portuguese, Vulgar Latin]
6. amé’o’a [love of it. Spanish, Old French] æ [ab. e dans l’a: is in the. Latin, Old French] oléa [olive oil. Latin] epe [stomach. Old Italian] ona [large. Portuguese]

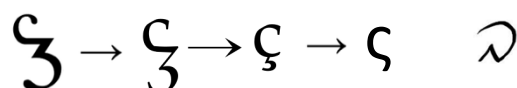
1-6. *The pawn lotuses (rampions) are gathered for the daughter Léonora and the Norn goddesses to be honoured. And come on ladies! As to acquire them work is needed in it for the healthiness it provides. Attention, attention! Wash them in holy water and make an offering to the altar. I give the suffering woman the food to rectify it, but the other half of it is to listen and to understand. Gathering the food is felt in the lungs by those of the household. The food is loved in olive oil, in the large (pregnant) belly.*

7. moséa [abb. monseñora. Crown of Aragon noble lady. Spanish], æ'eos [in the them. Latin] éos [dawn. Latin] æ'oléa epe a na [in the olive oil is in stomach. Portuguese, Old Italian]

Note: The term 'mous' (s. mou) is a vernacular French word used to describe the lungs: i.e. lightweight, air-filled.

Note: The diphthong æ means 'e dans l'a' (it in the, is in the: Latin, Old French).

Note: The Portuguese words ouç (aus) means to listen, hear, understand, comprehend, visualize, etc. Also the Castilian letter ç (cê cedilhado: 'c' with a small 'z') clearly has the same root as the manuscript 'sitting s'.



Note: The sequence above shows the evolution of the 'cê cedilhado' symbol Medieval to Modern, with the manuscript symbol 'sitting s' (right), which is a mirror image.

Note: The word moséa (v. mosén) is a word used exclusively by the Crown of Aragon to mean someone of nobility or importance. The term is still used in Aragon, Valencia and Catalonia as a title for Catholic clergy: mossén or mossèn. The word is a contraction of 'monseñora' or 'monseñor' (my lady, my lord), which derives from the Latin meus senior/a. The terminal 'a' indicates the feminine.

Note: The word dolé is French vernacular for an anxious or troubled person, thus doléa is the feminine – from Old French.

8. orais [pray. Portuguese] éos [morning. Latin] emeor [to exit, emerge, issue, vomit (verb): Latin from Greek] æo [v. io. attention. Latin] o'mos [of habit, custom, as always. Latin] eme'osa [evil emerges. Latin from Greek]

Note: The component word eme means to emerge, eject, emit, exit, egress, go out, proceed, regurgitate, vomit, etc. By extension, it also means to acquire, spend, buy, purchase: i.e. to give out money.

9. do'olo [emit aroma. Latin] uis [strong, pungent. Latin] é e [and is. Portuguese] osa [v. osus: disliked. Latin] é eme (abb. emeticus. Vulgar Latin) a [it's vomit of. Latin] æola [v. aeola: changeable, variable, lively (like the wind). Latin from Greek] naus [food. Vulgar Latin].

Note: The word osa is the feminine form of osus/odi, which a Pre-Classical Latin term for hatred, dislike, displeasure. The term was also used in Vulgar Latin to mean the devil or evil.

10. o'maus [for harms. Portuguese] æ [v. e dans l'a: it's in the. Old French] eo [it's. Portuguese] oleo na [smell on. Spanish] éor éo [enter sister. Latin] leona [Léonora: daughter of Alfonso V]
11. æo [v. io: to exclaim. Latin] léio [smooth. Latins] æon [time. Latin] a [of. Latin] æ'maus [the harm in. Portuguese] domor [to tame. Latin] naus [food. Vulgar Latin].

12. dolea [lament, grieve. Latin] æo [v. io. exclaim. Latin] oleor [smell. Spanish] t [terminus. Latin] lea [read, monitor. Galician, Spanish] æas [v. eas: to progress.] éas [and the. Portuguese] ona [large, important. Portuguese]

Note: The term oléo means olive oil, but the term oleor means smell.

13. æona [aióna (αἰώνα): forever, for good Latin from Greek] t [terminus] éios [v. lejos: far, distant, gone Latin] éo'lona [is the ageing, stress. Portuguese] æ o naus [in the food] doma [house, home. Latin]
14. o éona [of them. Latin] éa lia [and to smooth. Latin] é mona [is the upset, annoyance, fuss, bother, stress. Portuguese].

7-14. *The noble lady has it in olive oil in the stomach in the morning. It is the custom with morning prayers to pray for the evil to emerge and exit. A pungent odour is emitted that is disliked, with changeable vomiting, the food is for badness inside and smell on sister Léonora. To exclaim smoothness, with time the food tames the badness and the lamentable smell. Monitor for significant and permanent progress. Gone is the stress, it's in the food of them of the house, and the upset is smoothed.*

The text describes the rootstock of *Campanula rapunculus* being gathered, prepared and consumed as a food with believed medicinal qualities. Childbirth had the potential to be an exhausting and injurious ordeal in the Medieval, when allopathic treatments were unavailable. So, the administration of nutritious food and fluids would have been important to the convalescence of the patient. Attribution to supernatural powers would have been considered normal too, as the Medieval mindset was entirely focused on religious beliefs and superstitions. If an outcome was good then it was viewed as approval, if an outcome was bad then it was viewed as disapproval, and if an outcome was neutral then it was viewed as indifference. Therefore, the Medieval mind was locked into a superstitious psychology whereby every outcome was perceived as a godly judgement. In this particular instance pagan gods, such as the Norns, were still incorporated as part of the overall Christian belief system due to deep rooted ancient traditions. Ordinary people saw now problem with this practice, as it came quite naturally, but the Catholic church took a heavy hand to those with 'melange' religions as it was seen as heresy.

The manuscript illustration of *Campanula rapunculus* (Fig. 1) emphasises the pawn-like shape of the rootstock to make it clear which plant species is being described to the reader. Similarly, the diagnostic flower, spikey calyxes and lanceolate leaves are shown. The rootstock of the wild rampion is modest in size but large enough to be worthwhile harvesting as food. It also has an interesting flavour and aroma that is regarded as a delicacy in modern times. It is reported to have a palatable sweetish flavour similar to a blend of walnuts and mild garlic. The salad leaves are said to taste slightly bitter and peppery, similar to watercress. Rampions contain inulin, rather than starch.

The photographs in Figs. 2 & 3 show the living wild plant: flowers, calyxes, leaves, rootstock. As with all plants harvested as foodstuffs, cultivars of *C. rapunculus* were selectively bred to produce a more reliable and substantial crop following the Medieval. Modern rampions resemble large whitish carrots.

Historically, the plant has been used medicinally as an astringent (to cause cell contraction), antiseptic (to kill bacterial infection), anti-inflammatory (to reduce swelling), alterative (to restore health), lactagogue (to encourage lactation), vulnerary (to heal wounds) and wart treatment⁴. In Medieval times the supposed efficacy of herbal medications was passed from one generation to the next. Due to the aforementioned validating belief system, outcomes were always assessed by belief, so any evidence that a remedy hadn't worked was attributed to higher judgement rather than scientific failure. As a result, the same remedies were handed down from Antiquity to the Medieval.

It wasn't until the Enlightenment that medicines were first considered in terms of empirical standards, so that the evolution from homeopathic to allopathic medicines began. Even though we now have a comprehensive scientific understanding of chemicals and their effects on the body, there is still no clear dividing line between homeopathic and allopathic medicines because the situation is complicated by placebo effects, human belief systems and medicinal traditions.

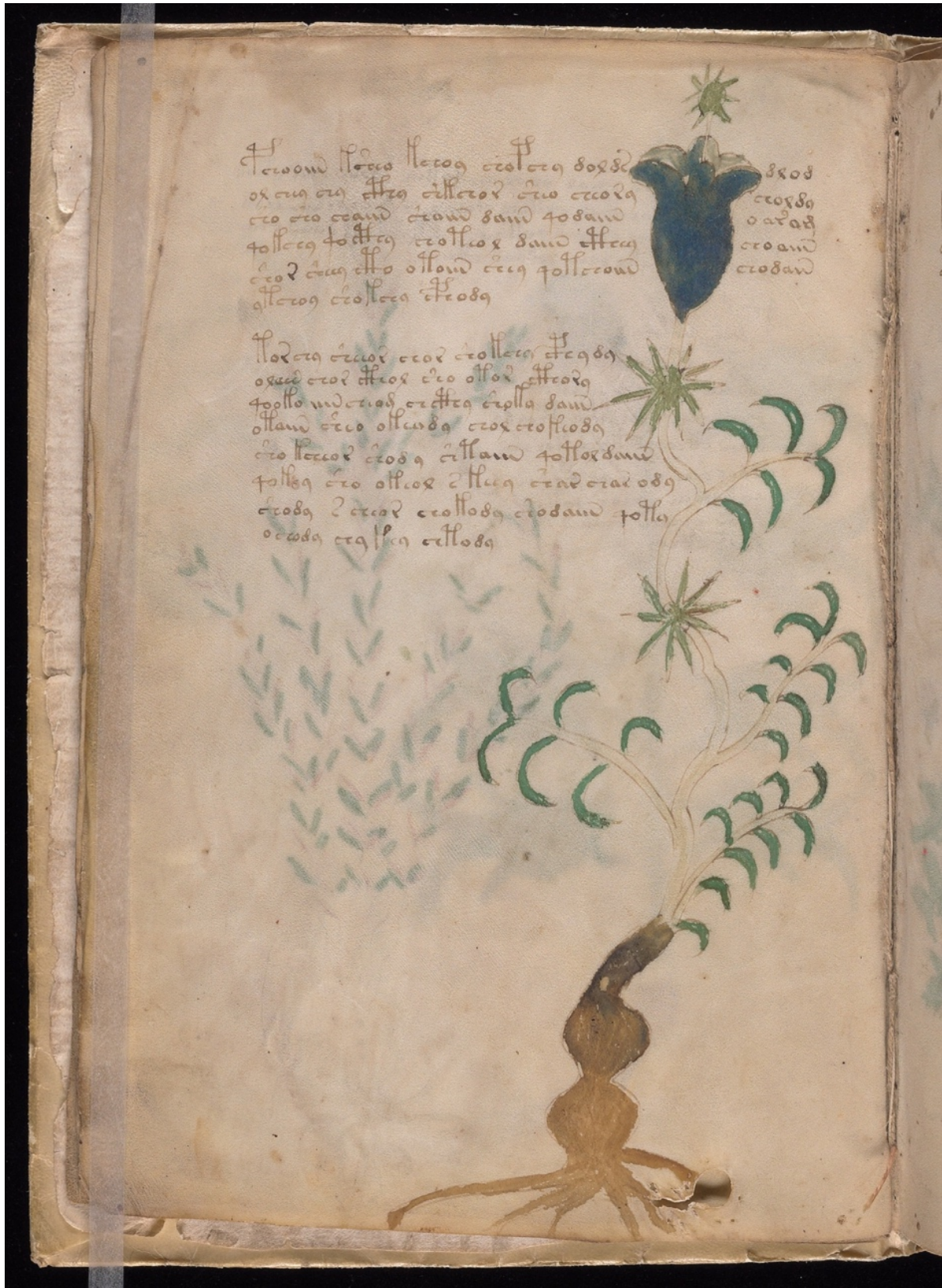


Figure 1. Plant No. 7. Rampion Bellflower (*Campanula rapunculus*), described in the manuscript as the Péon-Lotus (pawm tuber). The root vegetable is also known as the rampion, which is a contraction of 'ramus pion' (root pawn), or rapunzel, which is a contraction of 'rapum sylvestre' (woodland turnip).



Figure 2. Various photographs of wild *Campanula rapunculoides*, showing the bell-shaped flowers, the sepal stars and the lanceolate leaves, as shown in the manuscript illustration.



Figure 3. Photographs showing the wild rampion root. Note that it has a narrow neck above the rootstock, and the rootstock is variable in shape depending on the substrate, with filaments growing from the bottom.



Figure 4. 1503 illumination from *Grandes Heures Anne de Bretagne* (left), showing the Latin name Mella above and the Old French name Responces below. To the right is a second version of the illumination in a 1515 *Book of Hours*, clearly taken from the original.



Figure 5. 1597 engraving of *C. rapunculus* by L'Obel, who has named the plant *Rapuntium parvum* and *Pes Locustæ*. The image shows the lanceolate leaves of the mature plant (left) and the spatulate leaves of the young plant (right).



Figure 6. 1557 engraving of *C. rapunculus* by Adam Lonicer, showing the young plant (left) and the mature plant (right). The second name *Rapumsylvestre* is the origin of the modern name Rapunzel.



Figure 7. 1772 engraving of *C. rapunculus* by Magdalena Bouchard. She names the plant *Campanula radice esculenta flore coeruleo* (Bellflower with delicious root and blue flowers).

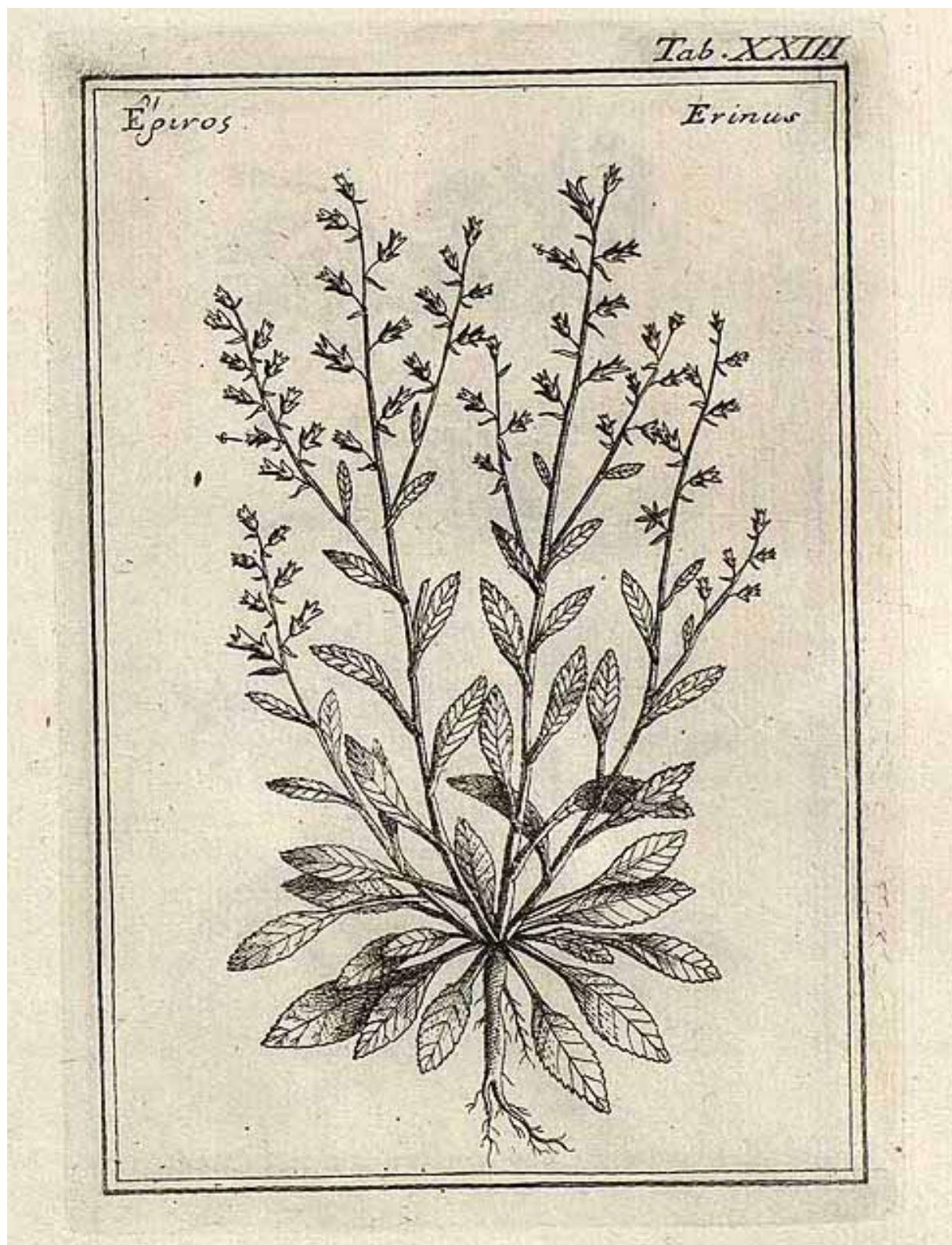


Figure 8. 1592 engraving of *C. rapunculus* by Fabio Colonna. To the left there is the word Epiros (Greece) and to the right there is the word Erinus (goddess of fury). There is a closely related species now called the Small Bellflower (*Campanula erinus*) that is found on the Mediterranean islands, so it is possible that the two were considered a single species in the 16th century. Indeed, the image shows a multi-stemmed plant with small flowers, which is typical of *C. erinus*, but the leaves and root are more like *C. rapunculus*.

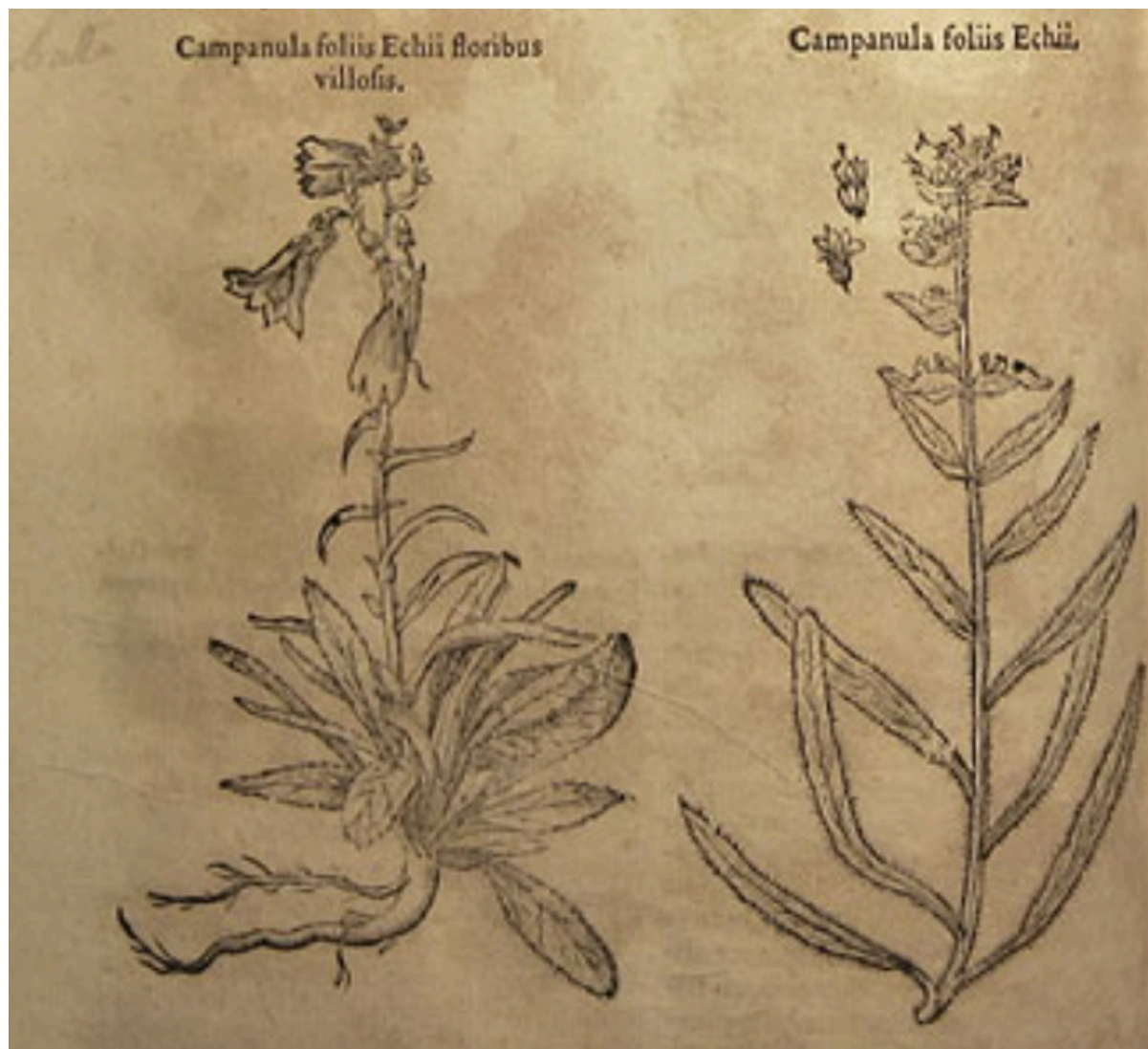


Figure 9. 1623 engravings of *C. rapunculus* by Caspar Bauhin, using the name *Campanula foliis Echii floribus villosis* (left).

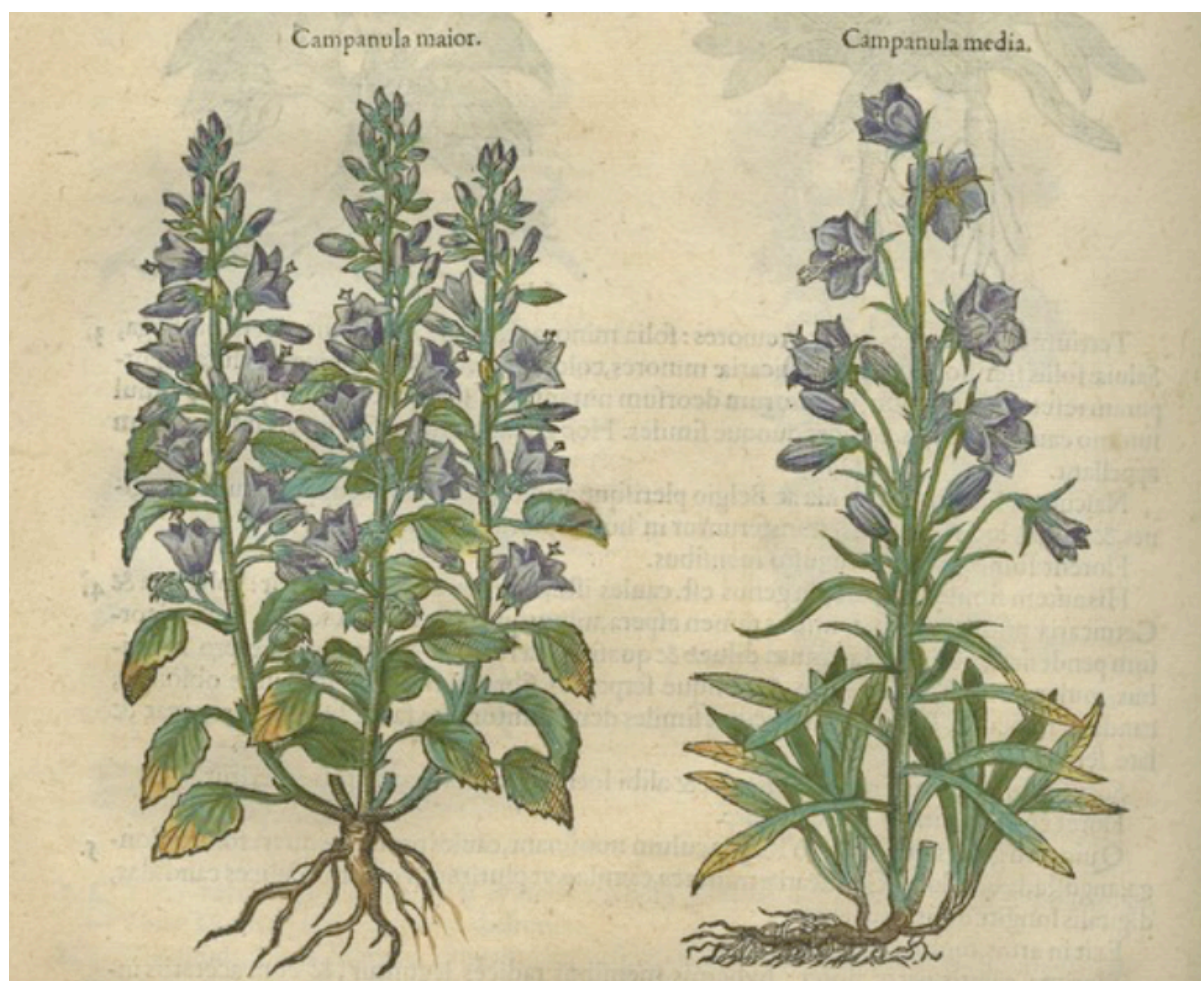


Figure 10. 1583 engraving of *C. rapunculus* by Rembert Dodoens, using the name *Campanula media* (right).

References:

1. Mueller, H. (1988). [Forgotten vegetable species: *Campanula ranunculus*]. [German]. *Gemuese/Gemüse (Vegetables) Journal*. München. ISBN: 0016-6286 00.
2. Daniel Boileau. (1821). *A Dictionary of French Homonymes..* Henry Colburn & Co. London.
3. Genealogy for Leonora, daughter of Alfonso V: Re: <https://www.geni.com/people/Leonora-Frangepán-modrusi/6000000004360793405>
4. Umberto Quattrocchi. (2012). *CRC World Dictionary of Medicinal and Poisonous Plants*. CRC Press, Taylor & Francis. ISBN: 9781482250640.

Further reading:

1. Plant Series, No. 1. *Atropa baetica*. <https://ling.auf.net/lingbuzz/004797>
2. Plant Series, No. 2. *Serratula erucifolia*. <https://ling.auf.net/lingbuzz/004845>
3. Plant Series, No. 3. *Nymphaea alba*. <https://ling.auf.net/lingbuzz/004864>
4. Plant Series, No. 4. *Euphorbia myrsinites*. <https://ling.auf.net/lingbuzz/004880>
5. Plant Series, No. 5. *Hesperocodon hederaceus*. <https://ling.auf.net/lingbuzz/004917>
6. Plant Series, No. 6. *Andromeda polifolia*. <https://ling.auf.net/lingbuzz/004971>
7. The Language and Writing System of MS408 (Voynich) Explained. <https://www.tandfonline.com/doi/full/10.1080/02639904.2019.1599566>
8. Linguistic Missing Links. <https://ling.auf.net/lingbuzz/003737>
9. Linguistically Dating and Locating Manuscript MS408. <https://ling.auf.net/lingbuzz/003808>
10. Consonants & Vowels, Castles and Volcanoes. <https://ling.auf.net/lingbuzz/004381>
11. The Algorithmic Method for Translating MS408 (Voynich). <https://ling.auf.net/lingbuzz/004653>

Symbol key for Manuscript MS408. Gerard Edward Cheshire. University of Bristol. www.sciencesurvey.link

Symbol-Italic key for MS 408.			
Symbol	Italic	Symbol	Italic
a	a (trapped)	9	a (free)
aw	ais	aw	aus
æ	æ (ae, a, e, i)	4	d
c	e (short)	cc	e'e (intonation)
ç	é (long)	c	i
l	l (ll)	ll	ele (elle)
m	m (mm)	mm	eme (emme)
n	n (nn)	o	o
p	p (pp)	pe	epe (eppe)
qu	qu	qe	eque
r	r (rr)	z	s/z (ss, zz)
s/z (ss, zz)	s/z (ss, zz)	sa	sa/za
t	t (tt)	ta	ta
u	u	v f fv ph pv	v, f, fv, ph, pv