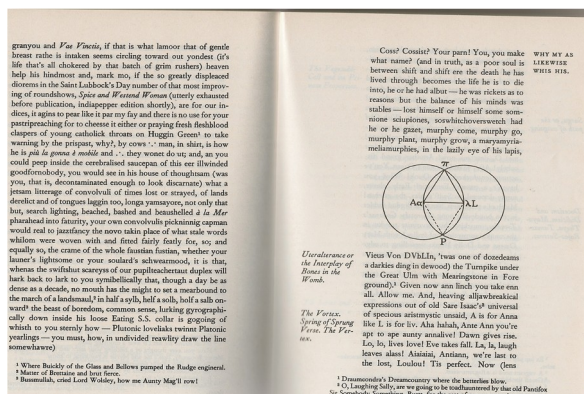


## “Ocone! Ocone!”: ALP’s 3D Siglum and Dolph’s “Night (*Sex-Education*) Lessons”

Jonathan McCreedy

The diagram on page 293 of *Finnegans Wake* has at least six visual interpretations; a geometrical figure, in the style of Euclid, an illustration of Newtonian optics theory also, and even a representation of the conic, internal structure of Dante’s *Inferno*, as I shall later argue. But its root classification, which supersedes all the others, is its identity as the vulva, or pudenda, of ALP, the heroine of the novel. The FW 293 diagram<sup>1</sup> is a transcribed figure, occupying a considerable portion of the page, and it is placed at the mid-point of the completed *Finnegans Wake*, almost as if it is the centre of its overall construction:



The chapter “Plain Geometry” in Margaret Solomon’s *Eternal Geometer: The Sexual Universe of *Finnegans Wake** is the most influential and complete study of the diagram in criticism, putting forth an argument that Joyce originally designed the figure with superimposed rectangular lines over its basic structure of two interconnected circles and triangles. The compositional sigla of the characters HCE (⌌), Shaun (⌋), Tristan (⌋), ALP (⌋) and Issy (⌋) are visually integrated together within this scaffolding, creating a unified collection of all Earwicker family members within the diagram. Since the sigla are superimposed on top of one another, Solomon argues that all the characters are engaging in intercourse, which is incestuous as well as bi-sexual.<sup>2</sup> In a further development of her theory, Solomon interprets four dimensions within the structure of the diagram, which is too complex to summarise.<sup>3</sup> With a close study of the its surrounding narrative, a draft section which is collectively titled “The Triangle” (FW 282.5-304), I will present a new argument that the FW 293 diagram is a









visual amalgamation of the vulva from three separate three dimensional perspectives. In my subsequent reading of “The Triangle”, the teacher figure Dolph is providing his student Kevin with knowledge from multiple educational fields, specifically in Euclidian geometry, Newtonian physics and a study of Dante’s *Inferno*, as part of a literature class. But the root topic of all his classes is biology, in particular teaching him about the human genitalia and its reproductive functions, which, in terms of modern school, is called sex education. My argument is that the FW 293 diagram has direct relation to Dolph’s sex education class, since he uses it as a teaching aid to illustrate to Kevin how the vulva appears from multiple anatomical perspectives. In the course of my essay, I will explain how Dolph also incorporates three dimensional Euclidian, Newtonian and Dantean interpretations into the FW 293 diagram, in order to help teach Kevin about the structure and appearance of the vulva. My primary structural finding is that Joyce uses three dimensional cones to structure almost in all the above FW 293 diagram interpretations. My reading differs greatly from Solomon’s, who does not reference cones when analysing three dimensional structures, so essentially, using the tools of a genetic methodology, this provides a new approach, or argument in relation to analysing the FW 293 diagram in this way. I will now begin my essay by introducing the ALP siglum (△) and its important developmental role in the construction of three dimensional cones in *Finnegans Wake*.

For the purposes of brevity, I will not research the possible origins of the △ siglum in this essay, which, like the Shaun (∧) and Shem (⊔) sigla designs may have been inspired by Masonic symbology.<sup>4</sup> Initially, Joyce used the △ siglum as a form of shorthand for the character of ALP, a mother figure and partner for HCE, first introduced as ‘Ma’ (FW 80.15) in Book I, chapter 4. At this stage, Joyce used △ almost exclusively in his notebooks and didn’t integrate it within *Finnegans Wake*. He would draw the △ siglum next to a word or phrase if he felt that it reflected or connected to ALP’s character, and this simple pictorial representation was an effective and economic compositional technique. Within a few months, Joyce began writing down visual parallels between △ and triangular shaped objects in real life, collecting four such examples with a notebook called VI.B.1 (composed between February and April, 1924). These entries comprise interpretations of △ within the fields of biology (2 units), geography and architecture, and notably all of them are three dimensional. They are respectively, female pubic hair: ‘bush pyramid △’ (VI.B.1.025), an Egyptian pyramid: ‘△ stone’ (VI.B.1.68i), a river delta: ‘delta = pubic △’ (VI.B.1.065i) and the vagina: ‘⊙ reddens waters △’ (VI.B.1.131b).

The ‘bush pyramid’ interpretation is a biological parallel between the siglum △ and the triangular shape of female pubic hair on the mons pubis, or cleft between the legs. Although this part of the anatomy is three dimensional, Joyce chooses to draw it as a triangle on a two dimensional

plane. However, its original meaning is kept intact, even though it has undergone a change in perspective. Joyce would subsequently use this technique to represent three dimensional objects onto a two dimensional plane in the diagram on page 293 of *Finnegans Wake*, using the anatomical vulva once more as his most specific and detailed visual parallel. *Les Grands Fleures Historiques*, by Léon Mechnikoff, which Joyce used as a genetic source within the composition of the VI.B.1 notebook, would provide the inspiration for the next two  $\Delta$  interpretations, both of which originate from the text's lengthy study of ancient Egyptian civilisation.<sup>5</sup>  $\Delta$  is associated with such themes throughout VI.B.1, most definitively in the unit: '  $\Delta$  Eg.' (VI.B.1.031), which Lernout speculates is an abbreviation for: '  $\Delta$  Egyptian'.<sup>6</sup> The first visual parallel between the ALP siglum and an object in VI.B.1: '  $\Delta$  stone' could be an Egyptian pyramid, with its  $\Delta$  shape and limestone architecture. Although the pyramid is a three dimensional structure, the triangle is a representation of it on a two dimensional plane. Since the triangle  $\Delta$  is one of the pyramid's three sides, it figuratively rises up from the notebook page as an erect visual image. The unit: 'delta = pubic  $\Delta$ ' is the source for the well known connection between ALP with the river delta, which provides two quotes in *Finnegans Wake*: 'grace of nature alp or delta' (FW 119.20-21) and 'muddy old triangular delta' (FW 297.24). ALP is identified with the Liffey in *Finnegans Wake*, especially in the "Anna Livia Plurabelle" chapter (I.8) but since Dublin's river culminates in a bay and not a delta, it is more likely that Joyce was inspired by the Nile delta. This continues the thematic concept, created in the unit: '  $\Delta$  Eg.' that ALP is Egyptian, in addition to Nile delta being directly cited in *Les Grands Fleures Historiques*. In a passage, regarding how Pharaohs defended their borders by constructing walls, Metchnikoff writes: 'The [*Nile*] delta was hastily fortified and a garrison was established at Rhocotis.'<sup>7</sup> Joyce draws the Nile Delta as a triangle to place it on a two dimensional plane, simplifying it, whilst keeping its original meaning as the mouth of a river, an ever-flowing natural phenomena which, in the siglum form  $\Delta$ , figuratively flows and moves on the page.

The final  $\Delta$  shape interpretation is based on the unit '  $\odot$  reddens waters  $\Delta$ ' which is likely to be a three dimensional model of the vagina within the body. In geometric diagrams, a two dimensional perspective, the shape  $\odot$  means a cone viewed from above.<sup>8</sup> The circle is its base, whilst the dot in the centre is its apex, or point. However, the shape  $\odot$  is a complete representation of the cone's three-dimensional actuality and a sufficient way of transcribing it in geometry. However, since a cone can either be a solid object or a hollow object, its specific properties are difficult to interpreting unless annotations are included alongside the figure. Joyce does not geometrically define his  $\odot$  siglum in such a formal manner but by analysing the genetic unit we can interpret, with a degree of accuracy,

its exact conic identity. The unit: ‘ reddens waters ’ indicates that  is a container of some sort, since liquid (in this case: ‘redden[ed] waters’) cannot form a cone, unless it is held within something. Next, we must determine whether this conic object, housing the liquid, is pointing upwards () or downwards (). This is an important question since the former makes the  siglum rise out of the notebook in perspective terms, whereas the latter makes it penetrate the page, making a hole. The unit: ‘reddens water’ is more than likely a reference to blood, which suggests menstruation because of its positioning next to the ALP siglum , the mother figure of *Finnegans Wake*. If this is the case, the  siglum visually represents the vagina as an interior cone shape tunnelling within the page, with a circular entrance.<sup>9</sup> The siglum becomes a volumized, living figure in the process.

The idea of having a shape physically enter the page, creating an empty space, would be used extensively and with greater development in the diagram on page 293 of *Finnegans Wake*, which Joyce constructed two years later, since it takes the conceptual idea of bringing the ALP siglum into three dimensions, using his VI.B.1 workings as his source of inspiration. The FW 293 diagram incorporates the vagina as an interior cone, which is a cross-section to the written page, a two dimensional plane in geometric terms. This will be further discussed in several stages of this essay.

Initially, Joyce called the narrative section which incorporated the FW 293 diagram “The Triangle”<sup>10</sup>. (FW 282.7-304.2) However, its title changed two more times during its composition: “The Mathematical Lesson” in draft 8.6 (JJA 52:85) and “The Muddest Thick That Was Ever Heard Dump”, published within *The Tales Told of Shem and Shaun* collection in 1929<sup>11</sup>. From the earliest drafts, the FW 293 diagram directs and instigates the content of “The Triangle”. It would form an axis for the narrative in other words, which begins with a conversation between two men, Dolph and Kevin respectively. It develops into a didactic lesson about sex, specifically about what the vulva looks like from a range of two and three dimensional perspectives. The conversation, in juvenile Scottish dialect, begins when Dolph asks Kevin: ‘Can you nei do her numb?’<sup>12</sup> (FW 286.25-6) This question: ‘Did you have sex with her?’ is expected to have the answer ‘know’ (FW 286.26). This is a ‘no’ together with ‘knowing’ her in the Biblical sense. The identity of the girl or woman is unknown, but it is clear that Kevin planned a liaison, indicating his physical maturity. But he was unsuccessful in his aim, his reason to Dolph being: ‘Oikkont’ (FW 286.27) or ‘I can’t. Kevin confides with Dolph, asking in return: ‘Ken you, ninny?’ (FW 286.26-7) that is, if he is a virgin also, a taboo in male society, or if he knows anything about it: ‘Oc, tell it to oui, do, Sem!’<sup>13</sup>(FW 286.31). Since Dolph is a ‘LIBERTINE’ (FW 286.r2) figure, a fact vividly illustrated upon in his character study (FW 287.18-292.32), added in draft 8(ABC).\*1 (JJA 53: 17-19). Dolph shares his intimate knowledge, firstly by instructing Kevin how to draw the FW 293 diagram in five steps, which I will illustrate shortly. Dolph uses the diagram as a didactic tool within the setting of a schoolboy’s lesson, whose overarching topic is sex education. Dolph and Kevin have a teacher-pupil relationship, wherein the former patiently and

generously imparts information to his inquisitive student. The main point of Dolph's lesson is the exposition of the vulva's biological structure. He teaches Kevin using the FW 293 diagram because it visually demonstrates three different perspectives of the organ, encapsulating it in its totality. Sex education, in any practical scientific sense, was non-existent in Ireland in Joyce's lifetime. The Catholic Church taught its pupils in regards to sex as a sin, not its anatomical or biological aspects, leaving young men mystified as to its most basic concepts. Kevin is one such individual, a product of the system. In part III of *Portrait*, Father Arnall speaks about the evils of lust in his sermon about Hell, and the consequences of sin:

Boundless extension of torment, incredible intensity of suffering, unceasing variety of torture - this is what the divine majesty, so outraged by sinners, demands; this is what the holiness of heaven, slighted and set aside for the lustful and low pleasures of the corrupt flesh, requires.<sup>14</sup>

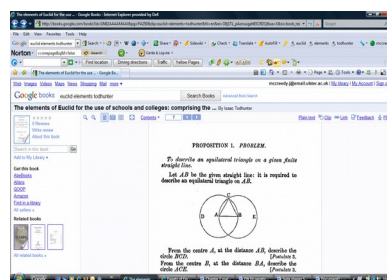
But Father Arnall is not implicit about sexual acts, since these are too severe to retell to young men in a chapel, so even in a sermon about lust no details are given about the condemned behaviour. This is Stephen's sex education in its totality, so by visiting prostitutes in parts IV and V, he finds out about intercourse through experience. Dolph teaches Kevin about sex explicitly since he is outside of the Catholic system and its religious restrictions.

Dolph's lesson, although rooted within sex education or biology, is presented in three stages, each representing a field of study known to schoolboys. These sections occupy several pages of narrative each and they are in approximate chronological order: 1) geometry 2) physics and 3) literature. The respective topics prompt an idiosyncratic interpretation of the FW 293 diagram specific to its field. The FW 293 diagram stays constant on the page, as print, but its dimensions and perspective change, with association to Dolph's teaching in the narrative. It has no fixity of meaning. It is 'alive', changing and moving, and totally unlike a representation of something definitive. In the geometry portion, Dolph instructs Kevin how to construct an equilateral triangle, with a circle and straight lines, using Book I of Euclid's *Elements*, as his teaching model. It is likely that Dolph uses Book I of Sir Isaac Newton's key text *Opticks* in his physics lesson. Dolph's uses this text to explain optics, which the science concerned with the formation of images through mirrors, lenses and other devices that use light. Finally, in the Literature class, Dolph studies the complete text of Dante's *Inferno*, teaching Kevin about the cantos by re-enacting Dante's Harrowing of Hell, vividly descending down its conic structure, retelling him what he sees in each of its circular sections. When the respective diagrams from each of the fields combine they visualise the vulva in its totality. The geometry lesson illustrates the anatomical details of the vulva from an exterior perspective, and in the physics section it focuses on looking inside the vagina, using a three dimensional diagram. In the literature class, the FW 293 diagram is an exposition of the vagina's internal structure, using a three

dimensional cross-section to a flat plane. The first extant drawing of the 293 diagram is in 8AC.\*0 (JJA 53:4), which was the ‘first draft [of “The Triangle” [...] written in the large fibreboard-covered notebook containing the first drafts of III.4 and I.1; July 1926.’<sup>15</sup> The diagram in 8AC.\*0 is drawn freehand with the lower triangle  $A\alpha\lambda LP$  filled in with straight completed lines. Its completion at such an early stage is puzzling and it calls into question the estimated dates of Joyce’s composition of “The Triangle”. Joyce was not in the habit of keeping non-lexical, that is, pictographic, workings, as with his sigla shape designs created in early 1924, ( $\Delta$ ,  $\Pi$ ,  $\square$ ,  $\wedge$  and  $\square$ ),<sup>16</sup> so we are missing his original sketches, and will probably never obtain them. We can speculate that Joyce spent many months designing the FW 293 diagram, before throwing his drafts away once he was satisfied. Therefore, “The Triangle” section may have its origins as early as March-April 1926.

In the geometry section, Dolph uses a diagram from Euclid’s *Elements* as his teaching model. Prior to Dolph and Kevin’s initial dialogue, a voice imitating the *Elements* states: ‘Problem ye ferst, construct ann aqualittoral dryankle Probe loom!’ (FW 286.19-20), a genetic re-write of Euclid’s instruction in Book I’s 1<sup>st</sup> Proposition: ‘To describe an equilateral triangle on a given finite straight line.’<sup>17</sup> The original diagram from this Euclidian problem is transcribed below:

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John Casey’s edition of the *Elements* was most likely Joyce’s genetic source<sup>19</sup> as ‘Casey’s frost book of page torn on dirty.’ (JJA 53: 35; FW 286.9-10) is written in 8.\*2, the fourth draft of “The Triangle”: (JJA 53: 35-43) ‘9 handwritten pages, completed in 25<sup>th</sup> September, 1926’.<sup>20</sup> The geometry section begins with Dolph telling Kevin how to draw the FW 293 diagram in five stages, which is a parody of Euclidian geometric construction. In the *Elements*, Euclid provides a series of instructions following each of his diagrams, which are usually directions to draw lines or calculate and plot angles. The first three instructions in Euclid’s 1<sup>st</sup> Proposition are:

From the centre A, at the distance AB, describe the circle BCD.

From the centre B, at the distance BA, describe the circle ACE.

From the point C, at which the circles cut one another, draw the straight lines CA and CB to the points A and B.<sup>21</sup>

This is a ‘problem of antiquity’, which allows for the use of only a ruler, compass and pencil in its solution, with no protractors allowed.

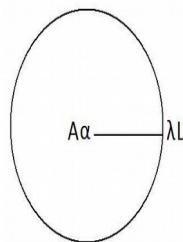
Kevin draws his diagram in the mud, using his fingers, emphasising his childish innocence: ‘First mull a mugfull of mud, son.’ (FW 286.32; JJA 53: 4). This reveals, on a naturalistic level, that Dolph and Kevin are in a damp area of land. However, their location is not important to the narrative because the diagram immediately becomes the focus of the section. Kevin’s first instruction is transcribed underneath the FW 293 diagram in the completed *Finnegans Wake*, although in the original drafts it was positioned beforehand (See, JJA 53:4). This makes more sense since at this point the diagram has yet to be drawn by Kevin, according to the narrative’s action. Dolph’s initial command is: ‘Now [...] we see the copyngink strayed line [*straight-line*] AL [...] from being continued, stops ait Lambday [*lamda/λ*].’ (FW 293.23-294.4) This results in the following line being traced by Kevin in the mud:

“Now [...] we see the copyngink strayed line [*straight-line*] AL [...] from being continued, stops ait Lambday [*lamda/λ*].” (FW 293.23-294.4)

Aα ————— λL

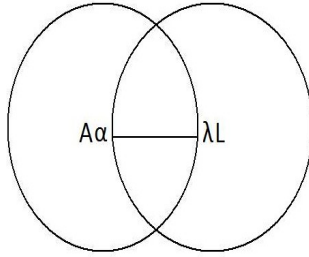
Every step of the FW 293 diagram’s construction can be recreated in visual form, which illustrates the Euclidian didactic method which Dolph is using. In the second step, Dolph tells Kevin to draw a circle, with precise relation to the previous instruction, using the point Aα as its centre: ‘With Olaf [*aleph/alpha/a*] as its centrum [*centre*] and Olaf’s lambtail [*lambda/λ*] for its spokesman circumscrip a cyclone. Allow ter! Hoop!’ (FW 294.8-11):

With Olaf [*aleph/alpha/a*] as centrum [*centre*] and Olaf’s lambtail [*lambda/λ*] for his spokesman circumscrip a cyclone. Allow ter! Hoop! (FW 294.8-11)



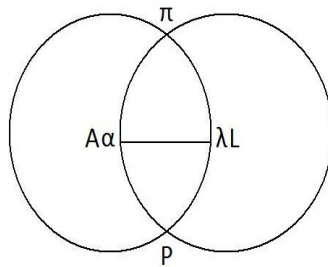
Indeed, the line AαλL is visually the spoke of a wheel. Dolph’s elementary teaching method, which uses visual childish parallels to make the construction more understandable, and less mechanical. In stage three, the Euclidian construction method continues, with another circle being asked for using the point λL as its centre: ‘Now springing quickly from the mudland Loosh [*L*] [...] turn a somersault [*circle*].’ (FW 295.18-21).

'Now spring quickly from the mudland loosh [l][...] turn a somersault [circle]:' (FW 295.18-21)



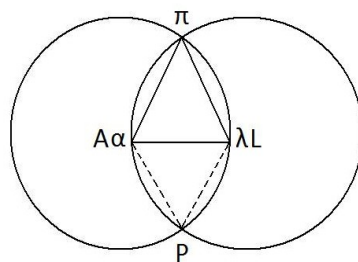
However, in stage four, Dolph incorporates the symbols  $\pi$  and P at the top and the bottom of the diagram respectively, which develops the image of the vulva into the figure, as they visually represent anatomical parts. Dolph's instruction to Kevin is: 'I'd likelong, by Araxes, to mack a capital Pee [P] for Pride down there at the batom [bottom] [...] and mick your modest mock Pie [ $\pi$ ] out of humbles up your [top] end.' (FW 295.19-21)

'I'd likelong, by Araxes, to mack a capital Pee [P] for Pride down there on the batom [bottom] [...], [...] and mick your modest mock Pie [ $\pi$ ] out of Humbles up your [top] end.' (FW 296.4-10)



However,  $\pi$ 's identity as an anatomical part cannot be determined until Dolph's final instruction to Kevin, which completes the FW 293 diagram, and hence the vulva as a figure. Dolph states to Kevin: 'Now to compleat anglers [angles] [...] join alph pea [line  $\alpha P$ ] and pull loose by dotties [dotted lines] and, to be more sparematically logical, eelpie [line  $L\pi$ ] and pale ale [line  $\pi\alpha$ ] by trunkles [trunks/straight lines].' (FW 296.22-28)

Now, to compleat anglers [angles] [...] join alpha pea [line  $\alpha P$ ] and pull loose by dotties [dotted lines] and, to be more sparematically logical, eelpie [line  $L\pi$ ] and pale ale [line  $\pi\alpha$ ] by trunkles [trunks/straight lines]. (FW 296.22-28)





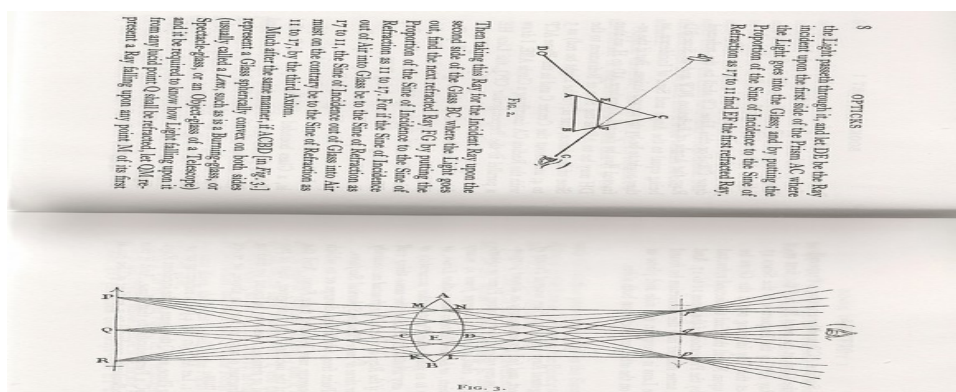
The lines which Dolph asks Kevin to construct, making two triangles ( $A\alpha L\pi$  and  $A\alpha LP$ ), completes the final image of the geometry lesson, which is the exterior of the vulva with three dimensional anatomical parts. The area inside the triangles is the part of the vulva where the urethra and vagina are positioned. In the diagram interpretations told in Dolph's subsequent physics and literature classes, the vaginal entrance is the line  $A\alpha L$  when viewed on a three dimensional plane, which I shall illustrate at those stages in the essay. The direct geometric surrounding of this area is three dimensional and an anatomical part of the vulva also. The portions of the diagram where the triangles intersect with the circles, creating half ellipse shapes visually resemble the labial folds which enclose the main parts of the vulva. Dolph incorporates them within his geometry class to educate Kevin about every part of its anatomy. Indeed, Joyce was not shy in discussing the labia in *Finnegans Wake* since in the "Dave the Dancekerl" section (FW 461.33-468.19) from Book III.1, written in late 1925, contemporary to Joyce's construction of the 293 Diagram,<sup>22</sup> he incorporates the phrase: 'It's good for her bilabials, you understand.' (FW 465.26), where 'bi' means two, defining the folds in their accurate double structure of labia majoris and minoris respectively.<sup>23</sup> In the diagram, the labia rise up into three dimensions, whilst the urethra and vagina are inside it in terms of perspective. The  $\pi$  at the top of the FW 293 diagram as an anatomical shape, namely the clitoris, is more apparent having knowledge of the above information. When  $\pi$  is classed as a number it is a flat geometric figure, but within in the diagram where the exterior vulva is being viewed its perspective changes, rising up into an erect three dimensional shape visually representing the clitoris. Dolph includes the clitoris to education Kevin about the vulva, foreplay and masturbation, in perhaps his most intimate parting of information. He uses the phrase 'bissyclitties' (JJA 53: 223; FW 294.23) to explain how it can be stimulated to produce an orgasm, with 'bissy'/busy referencing speed and movement. Additionally, within the inclusion of her name within 'bissyclitties', Dolph identifies the sexual act with 'Issy', the sister figure in *Finnegans Wake*.

Strictly, the scientific field Dolph teaches in the physics class is called geometric optics, and not simply optics. Although the term 'geometric' is added, it has nothing to do with Euclid. Rather, it is the specific science concerned with the formation of images through mirrors, lenses and other devices which use light. Dolph teaches geometric optics to educate Kevin about the interior anatomy of the vagina, so in the physics class the interpretation of the FW 293 diagram changes to that of a Newtonian figure illustrating the properties of light when projected upon the eye. Dolph's diagram in the physics class uses scientific principals which are exact to Newton's pioneering research in *Opticks*, so it is possible that this was one of the sources which Joyce used to collect information for this section. Dolph quotes Newton under the FW 293 diagram in the completed *Finnegans Wake*, where it is possible that the 'alljawbreakical expressions' are his optics theories which are being cited: 'And heaving alljawbreakical expressions out of old Sare Isaac's universal of specious arismystic unsaid [...].' (FW 293.26-28). Dolph's physics class begins with the instruction: 'Now (lens your

dappled yeye here, mine's presbyoperian, shill and wall) we see the copyngink strayedline AL [...]' (FW 293.23-294.3), which is the lens of Kevin's eye, being directed to look at the line AαλL. In the FW 293 diagram, Kevin's eye is represented by π and its gaze is the triangle projecting from it (AαλLπ). In the physics class, π changes from its anatomical meaning as a clitoris to that of the eye of an outside observer. Since π is pointing downwards towards the vulva, its shape does not resemble an eye, but if it is turned 90° anti-clockwise (⊥), and viewed this way, the two horizontal lines can appear to be eye-lashes and the vertical line between them being its lens.

I will use the following figure from book I of Sir Isaac Newton's *Opticks* as a comparative scientific model to explain Dolph's physics interpretation of the FW 293 diagram:

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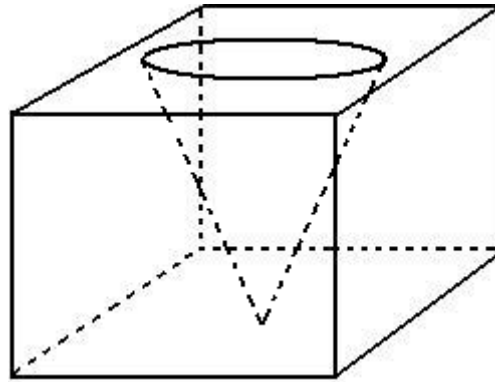
Newton's diagram is an arrangement of three symmetrical triangles which mirror each other through a lens. This lens is the large elliptical shape in the centre of the figure. These triangles are the visual representation of the rays of light which project from the eye. When the eye looks at a lens, light converges through it, focusing on the object on its other side. In Dolph's diagram, π represents the 'lazily eye of [Kevin's] lapis' (FW 293.11), projecting light upon the line AαλL in a Newtonian manner. This line is the entrance to the vagina in biological terms, but in optics it is a lens which converges light. The image being focused on through the lens is the interior of the vagina, its base being the letter 'P'. In sexual imagery, the vagina is equated with the eye due to its circular opening, which is why Dolph calls it the 'dappled yeye' (FW 294.1) which is 'presbyoperian' (FW 294.1). The letters APL (or ALP) within 'dappled', linking it with Anna Livia Plurabelle, creates a parallel between the eye and the vagina, which is a lens in the FW 293 diagram.

Newton's *Opticks* figure is a cross-section through the centre of any lens, making it three dimensional in its construction. The triangles of light are actually cones and the lens is a convex piece of glass. However, since a cross-section of any such experiment will produce the same diagram, a two dimensional representation is usually sufficient. However, a physics student will be aware of its complete properties. Dolph's diagram is also a cross-section, so its lens AαλL is a circular shape in three dimensions, equating with the anatomical vaginal opening. The light from Kevin's eye

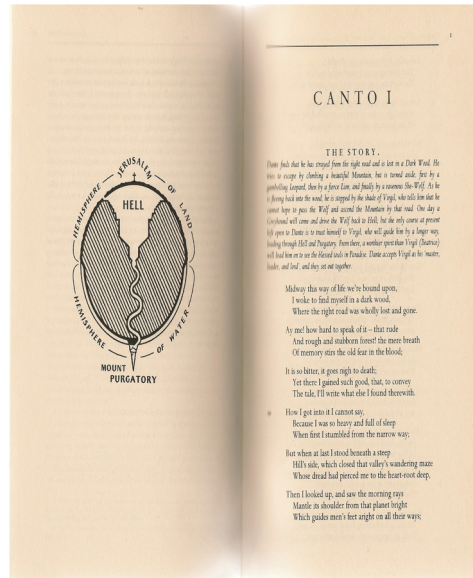
converges upon the point P in a cone shape, revealing to him the interior three dimensional structure of the vagina. In Dolph's diagram, the light rays passing through the vaginal entrance are represented by dotted lines, or the 'dotties' (FW 296.25) which he instructed Kevin to draw in the geometry lesson. In mathematics and physics diagrams, reflected light, whether through a mirror or lens, is usually represented by dotted lines, by convention. In Dolph's physics class, the dotted lines demonstrate that the converged light rays through the lens have created an image which he defines as a 'blushing reflection [*reflection*]' (FW 299.18) which Kevin must 'wandret down [*with his eyes*]' (FW 299.17).

Prior to the literature portion of the lesson, Dolph teaches Kevin a hypothetical technique for looking up ALP's dress, in order to see her vulva. He states that if: '[*He*] flung [*ALP's*] headdress on her from under her highlows [...]' (FW 297.1-3), or throwing her clothing over her face and blinding her, Kevin would have a chance to view her vulva from behind, without being seen. This action is sexual assault, and an example of Dolph's 'LIBERTINE' (FW 286 13) mindset. Dolph's second deviant suggestion to Kevin is summarised in a unit from the VI.B.12 notebook (composed June to August 1926): '□ [*Dolph*] holds △'s [*ALP's*] skirt as child.' (VI.B.12.50). Dolph will list up ALP's dress and Kevin will look up inside at her vulva, an act of voyeurism which involves both men in the sexual act, a plan structured into first draft of "The Triangle": 'Then we carefully lift up the apron of our A.L.P carefully until its ^nether^ apex is where its navel ought to be.' (JJA 53:5; see FW 297.7-14).

Introduced by the sentence: 'You know you'll be dampned [*damned*], so you will, one of these infernal [*The Inferno*] days but you will be, carotty!' (FW 300.6-8) and concluding with the final sentence of "The Triangle" section: 'Rip! [*Rest in Peace*] And his cominghands rose.' (FW 304.1-2). Dolph's literature class on Dante's *Inferno* begins several pages after the geometry and physics lessons in the completed *Finnegans Wake*. The diagram for the literature class teaches Kevin that the vagina is an internal anatomical structure, like a cone. This interior cone is represented as a three dimensional cross-section to the exterior vulva diagram from the geometry class, which Dolph revisits. Dolph represents the hidden, subterranean cone using dotted lines, in a shift in meaning from the physics class where they are reflected light rays. Dotted lines are also used in geometric diagrams to show parts of an object which are unseen. If a hollow cone is to be integrated within a three dimensional object, it must therefore be illustrated using dotted lines: In the following example, this convention is shown, using a cube as the arbitrary object which the cone has penetrated:



In the FW 293 diagram, the dotted lines add a cone within the external vulva, where its circular entrance is represented by the line  $A\alpha\lambda L$ . Dolph's literature class is not a reading of Dante's *Inferno* but rather a re-creation of its cantos through a harrowing, or journey, into Hell. Dolph's narrative progresses in schematic order through each of the nine circles in the *Inferno*<sup>25</sup>, encountering each of Dante's class of sinners in turn, and their respective *contrapasso* punishments. The FW 293 diagram represents the *Inferno* as an interior cone to the flat plane, noted by dotted lines. Indeed, Dante designed the *Inferno* as grand cone shape, hollowing out the Earth through to its centre. With its highly architectonical structure, the world in Dante's *Divine Comedy* becomes a starting point for geometrical representations in literary texts, such as the series of ten images such as the series of ten images in Dorothy L. Sayers' English translation of the *Divine Comedy*.<sup>26</sup> Such diagrams aid a reading of the *Inferno*, so their content researches Dante's narrative meticulously. Artistic representations of the architectonics of Dante's *Inferno* show its cone shape and nine concentric circles, for instance in the following diagram where its design is illustrated with a three dimensional cross-section of the Earth:



By equating of Dante's *Inferno* with the anatomical vagina, Dolph implicitly states to Kevin that the female genitals are a representation of Hell. Dolph's idea is not his own, but a canonical sexual image used by many key writers in literary tradition, who as I shall shortly demonstrate most likely inspired him. Dolph's emphasis on the vagina as being a Hell, and ALP its keeper, relates to his own lustful sins and experiences of intercourse, which cause him mental trauma. In the literature class, Dolph identifies himself with Virgil's shade: 'And i Romain.' (FW 302.25) who wanders the *Inferno* with Kevin, the mortal Dante figure, whilst he is damned and can never leave. Dolph must 'Romain' or 'remain' in the *Inferno* and suffer its torments, whilst the innocent Kevin is granted safe passage into Heaven. To illustrate the vagina as Hell motif in literature, I will give several examples, the first being Book III of Boccaccio's *Decameron*, which Joyce possibly read in full.<sup>28</sup> Here, a story is told about Alibech, the heroine, was tricked into having intercourse with Rustiko, a monk whom she visited for religious guidance. Answering her question: 'How is the best way to serve God?' Rustiko informed her that she should put the devil into Hell, and he subsequently took his clothes off, exposing his penis. He explained to the innocent Alibech that this was the devil, and it made him suffer, to which she queried why she lacked of one of her own. Rustiko tells her that she possesses a Hell, meaning her vagina, and that to punish the devil, and serve God, she must sleep with him. When she returns home, the woman of the village enquire about her religious journey, concluding the tale:

[...] some ladies of the peace asked Alibech in what manner she had served God in the desert. She told them she had done so by putting the devil in hell, and that Neherbale had committed a great sin in taking her away from such service. The ladies wished to know how she had put the devil in hell, and

Alibech explained the process to them by words and gestures. The ladies laughed immoderately, and said to her: “Don’t distress yourself, my dear, they do that here too”.<sup>29</sup>

However, Dolph’s personal interpretation of this concept is also close to that within Shakespeare’s sexual imagery, whose work presents the vagina as a fiery, foul-smelling Hell, with additional connotations of venereal disease representing its corruptive influence on men. In Sonnet 129, Shakespeare calls the vagina a hell, contrasting it with Heaven, to depict the misery which lust brings to an individual: ‘All this the world well knows, yet none knows well/ To shun the heaven that leads men to this hell.’<sup>30</sup> In *King Lear*, the vagina is a hell full of fires and sulphur, making it loathsome and similar to Dante’s vision of the Inferno: ‘[...] there’s hell, there’s darkness./ There is the sulphurous pit-burning. Stench, consumption.’<sup>31</sup> It is unclear exactly where Joyce sourced this sexual symbol of the vagina as Hell, but he was aware of it prior to *Finnegans Wake*, using the concept in *Ulysses* when Bloom describes the Dead Sea, in “Calypso”:

Vulcanic lake, the dead sea: no fish, weedless, sunk deep in the earth. [...].  
Brimstone they called it raining down: the cities of the plain: Sodom,  
Gomorra, Edom. [...]. Dead: an old woman’s: the grey sunken cunt of the  
world. (U: 4.219-228)

Bloom’s hideous vision of the Dead Sea, with its uninhabitable, foul-smelling terrain is defined as a ‘cunt’, a coarse, misogynistic term for the vagina. Bloom imagines the vagina penetrating into the Earth, surrounded by fire and death, not unlike an entrance into Hell. Consequently, Bloom’s ideas about the vagina are close to Shakespeare’s in its associations with horror, corruption and damnation. Dolph’s literature lesson is an extended conceptualisation of Bloom’s statement, building a complete representation of the vagina as Hell, using Dante’s *Inferno* as its model. The section charts in schematic order its system of rings and circles, each one housing a different Sin and allegorical torment. The lesson begins at the entrance to the *Inferno*, at the line AαλL on the FW 293 diagram, which is the Dark Forest in which Dante is lost in canto 1, in this interpretation: ‘[...] the copygink strayed line AL (in Fig., the forest) [...]’ (FW 294.2-3) The line AαλL is a circle on the FW 293 diagram, being the base of a cone. As Dolph and Kevin venture deep into the *Inferno* they pass through a series of nine circles, which narrow in respect to their position on the hollow cone. In a letter to Adaline Glasheen, Thornton Wilder states:

Who is working on the DANTE aspect? All through the book I can “feel”  
the circles and *bolgia*’s of the *Inferno* and the terraces and cornices of the

*Purgatorio*, and I made a try at co-relating sections, but had to give up.  
[Joyce is] too foxy about it.<sup>32</sup>

Indeed, Wilder is correct, since Dolph creates the circles and bolgias of Dante's *Inferno* in the literature class by visually associating them with parts of the female anatomy. The structure of *Inferno*'s bolgias is discussed by Dolph in the line: 'Here where the bolgylines [*bolgia-lines*].' (FW 299.19). The 'bolgia' collectively make circle XIII of the *Inferno*, housing the different types of fraudulent sinners in a concentric series of ten ditches. Circle XIII is titled 'The Maelbolge', or 'evil ditches' in its totality. In anatomy, the 'bolgylines' possibly mean the 'bulgy' stretch-marks curving around ALP's stomach, which are the result of childbirth. Dolph uses the three dimensional bolgia design of circle XIII of the *Inferno* as a visual parallel to explain, on an anatomical level, what a woman's stomach can look like following pregnancy. Dolph also describes the rivers of Hell, circles V and VII in the *Inferno*, to teach Kevin about the interior secretions of the vagina. Dolph uses tidal metaphors wherein water is spinning around, since the rivers are constantly flowing in a three dimensional circle. For instance, 'Whereapool [*whirlpool*] [...]' (FW 300.9) and 'Cartesian [*circular*] Spring' (FW 301.15). The cone in the literature class is full of liquid, although the properties of its rivers and spinning pools can either be made of fire or boiling blood, in an *Inferno* interpretation, like the Styx or the Phlegethon, or vaginal secretions in regards to anatomy. References to liquid fire and extreme heat in "The Triangle" include: 'By the magnasine fall. Lumps, lavas and all.' (JJA 53: 108; FW 294.25-26) and 'Byrne's [*burns*] and Flammings [*flames*] and Furniss's [*furnace*] and Bill Hayse's [*blaze*] and Ellishly Haught [*hellishly hot*].' (JJA 53: 21; FW 289.13-14).

Dolph and Kevin's entrance into *Inferno* leads to a comprehensive pastiche of Dante, which is Joyce's most detailed tribute to him in all his works. The systematic progression through the *Inferno* overwhelms the narrative, so it is essential to chart each of the stages in their journey, starting with the first allegorical torment which they witness. In the vestibule of the *Inferno*, Dolph and Kevin witness those sinners who are guilty of futility and sloth, running eternally in a contrapasso, ironic punishment: '[...] who here hurry he would ever have the lothst word.' (FW 300.11). 'Lothst' is an anagram of sloth, and 'hurry' represents their new state of constant movement. In circle II, the Lustful, sinners are impaled to each other by the mouth, waist and groin, which Dolph describes as 'candykissing' (FW 300.15), perhaps because the couples seem as if they are in an embrace. Lust is given considerable attention by Dolph because it is the sin which the vagina most strongly represents to him, as well as its being the reason for his damnation within the *Inferno*. On two occasions, prior to the literature lesson, Dolph quotes from canto V of the *Inferno*, wherein Dante sees the Lustful, since he, like all the sinners in the *Inferno*, is unrepentant and insists that it is love, not lust, which drives his licentious actions. For instance, quoting the shade of Francesca da Rimini in circle II, Dolph says: '[...] lamoor [*l'amour*] that of gentle breast [...]' (JJA 52: 27; FW 292.1-2) or: 'Love that so soon takes hold in a gentle breast.' (*Inf.* V.100). However, as Glasheen notes, on the previous two pages of

“The Triangle”, there are references to five out of the eight lustful sinners which Dante meets in circle II of the *Inferno*, namely Dido, Helena, Cleopatra, Tristan and Sicheo.<sup>33</sup> This is suitable since Dolph will join these figures later when he is imprisoned in the *Inferno* for his sins. In circle III, Dolph and Kevin see the gluttons, who are being torn apart by the mythical beast Cerberus. They are the ‘Hyenesmeal’ (JJA 53: 116; FW 301.29) or proverbial ‘meal’ of the ‘hyena’, which is a type of wolf. The gluttons eat copious amounts of mud and excrement, represented by the ‘bounty of food’ (FW 300.22-3) which Dolph sees, and its surrounding digestive imagery: ‘[...] to ate by hart [...] want to with nebbleh [*nibble*] ravenostomoriously [*ravenously*].’ (FW 300.16-18). In circle V, Dolph comments that a member of the ‘Black and Tans’, a notorious auxiliary police force employed in Ireland during the “Troubles”, is submerged in the Styx, which is a river of boiling blood. His sin is Wrath, and he is being punished for his involvement in the first ‘Bloody Sunday’ of 1920, when a dozen people were killed by the Black and Tans, in a revenge attack, at Dublin’s Croke Park Stadium. The individual is: ‘[...] laying low on his laughside, [*for*] laying sack to croakpartridge [*Croke Patrick Stadium*].’ (JJA 53: 84cf; FW 301.29-30) In this instance, ‘laughside’ means ‘loch-side’, the Irish word for lake. Incidentally, Capaneus, a warrior killed by Jove’s thunderbolt during the battle of Thebes, is quoted by Dolph prior to the literature class, perhaps to state again that the sinners in the *Inferno*, like himself being lustful, are unrepentant of their acts, and hence rail against God because of their punishments. Capaneus proudly says that he will continue his wrathful behaviour in Hell, and that being damned has not changed him: ‘That which in life I was, in death I am.’ (*Inf.* XIV.51) In “The Triangle”, Dolph adapts these words<sup>34</sup> to demonstrate that he will remain a lustful sinner in Hell also: “[...] and in truth as a poor soul is between shift and shift ere the death he has lived through becomes the life he is to die into [...].’ (JJA 53: 249; FW 293.2-3) In a continuation of the Irish historical theme within the literature class, the architecture of Dis, the city which encloses circle VII, is talked about by Dolph in terms of an attack on Dublin Castle: ‘How dismal [*Dis/dismal*] he was [...] laying siege to Goblin [*Dublin*] Castle.’ (FW 301.26-7) Presumably, ‘Goblin’ references the demons in the *Inferno*. In circle VI, Dolph shows Kevin the Heretics, who are locked inside coffins, which are eternally on fire: “‘Er war itwas in his priesterrite. O He Must Suffer! From this misbelieving feacemaker to his non-credible fancyflame.’ (FW 301.2-6) and in circle VII, the Wood of Suicides, two damned souls are found encased within trees: ‘[...] he would pine for her.’ (FW 301.12) and ‘He was quisquis, floored on his plankraft of shittim wood.’ (FW 301.23-4) In circle XIII, Dolph and Kevin witness an original figure from Dante’s *Inferno*: Guido da Montefeltro, who is being punished by fire for advising Pope Boniface to commit evil: ‘[...] and [*he*] again begs guerdon [*pardon*] for bistrispissing on your bunificence.’ (JJA 53: 116; FW 302.6-7) ‘Binificence’ is a combination of ‘magnificence’ and ‘Boniface’ and it seems that Montefeltro is attempting to show penance for his act. However, this is Dolph’s personal observation, since in the original *Inferno* Montefeltro is unrepentant of his sin, telling Dante that he wants Pope Boniface to ‘rot in Hell!’ (*Inf.* XXVII.70). The marginalia note: ‘ALL SQUARE AND ACCORDING TO COCKER’ (JJA 53: 263; FW 303r1), a sentence added



during the late draft 9.0\*, probably written in 1934,<sup>35</sup> defines the final part of Dolph's literature lesson as being circle IX of the *Inferno*, collectively titled: 'Coctyus Lake'. The name 'COCKER', alluding to 'Coctyus', is positioned to the right of the narrative where Dolph and Kevin witness the traitors of Ireland being punished. The figures of Sir Richard Steele, Edmund Burke, Lawrence Stern, Jonathan Swift, Oscar Wilde, George Bernard Shaw and W.B Yeats are witnessed by Dolph and Kevin in this circle of the *Inferno*, in keeping with the literature theme of this lesson, but the reason for their damnation remains unclear: 'This is Steal, this is Barke, this is Starn, this is Swhipt, this is Wiles, this is Pshaw, this is Doubllinnbbayates.' (FW 303.5-8) These Irish writers are not noted traitors, circle IX's area of punishment, so their positioning here is difficult to determine, and they are being collectively whipped: 'Bould [*bold*] strokes [*of the whip*] for your life!' (FW 303.5), which is not accurate to Dante's schema, since they should be totally encased in ice. The other figures Dolph and Kevin see in circle IX are Charles Stewart Parnell and Daniel O'Connell: 'And this regard! And this, regard ! how Chawleses Skewered parparaparnelligoes between brave Danny boy and the Connolly. Upanishadem!' (FW 303.10-13) Parnell is being impaled, or 'skewered', and O'Connell is 'wiping his hearth with Brave Danny' (FW 303.5; cf. JJA 53: 76a), which indicates fire as his punishment. To Nationalists in Ireland, Parnell and O'Connell are political heroes, the leaders who brought Catholic Emancipation to the country, so it seems that their classification as traitors within the *Inferno* has been judged by an outside force, which has not been explicitly named in Dolph's narrative.

Mount Purgatory, the cone shaped mountain which Virgil and Dante scale in the *Purgatory* on their way to Paradise, is the final Dantean structure within the architectonics of the FW 293 diagram. It does not feature within Kevin's sex education classes as it does not visually represent any anatomical part of ALP's vulva, essentially because it is an erect, phallic object, more male than female. Mount Purgatory was incorporated during the late drafts of "The Triangle" with its structure formed by the inclusion of a small number of quotes, visually representing parts of the FW 293 diagram, with its Dantean schematic design. It also incorporates the theme of redemption and purity into "The Triangle", represented by Dante's gradual purging of his sins as he climbs it seven terraces, entering the 'Earthly Paradise', or Garden of Eden, at the top. The idea that Mount Purgatory could be a part of the FW 293 diagram originates in the first draft of "The Triangle": 8AC.\*0, when a section from Dante's *Purgatory* constructs one of the steps in the geometry lesson. In draft 8AC.\*0, Dolph's instruction for Kevin to draw a  $\pi$  and a P is simplified: 'I'd like to pore a capital pee there for Pride and you go and muck a modest pie up your end for humbles.' (JJA 53: 4; cf. FW 296.5-10) which makes it easier to source its content to the *Purgatory*. In this step, Dolph asks for a 'capital pee for Pride' to be added to the diagram, but the letter P's close association to 'Pride' references canto IX of the *Purgatory* when Dante has a 'P' for 'peccatum', or sin, burnt seven times into his forehead:

Devoutly falling at the holy feet  
I prayed him let me in for mercy's sake,

But first against my breast three times I beat.  
Then did he write with his sword's point, and make  
Upon my brow the mark of seven P's;  
Wash thou these wounds within there"; thus he spake.'  
(*Purg.* IX.106-114)

The seven 'P's' represent the 'capital' (FW 296.5) sins of Pride, Envy, Wrath, Sloth, Greed, Gluttony and Lust, although Dolph notes that he specifically wants his 'P' to represent Pride, perhaps because this is the sin he would most like to have purged from his soul. The 'P' is burnt onto Dante's head with a sword, which implies that the 'P' Kevin draws is also a wound, and that it is not simply a letter within a geometric diagram. In 1929, Joyce would return to integrate Mount Purgatory into his FW 293 diagram, doing so by representing it as a solid, three dimensional cone situated above the *Inferno*, which he had already created. This cone ascends off the page the same theoretical distance as the *Inferno* underneath it descends, representing the 'daintical pair of accomplashes' (JJA 53:186; FW 295.26-7) described prior to the literature class, anticipating the diagram's Dantean interpretation. 'Daintical' references Dante implicitly, so the 'pair of accomplashes', or 'complementary pair' are the structures of the *Inferno* and Mount Purgatory respectively. 'Daintical' also includes the word 'identical' which references how their conic dimensions are the same, save that the former is hollow and the latter a solid. The FW 293 diagram shows how the architecture of Dante's *Inferno* and Mount Purgatory share the exact same dimensions. The hollow cone of the *Inferno* is the result of Satan's fall from Heaven, and when this excavated land inside the Earth broke through onto the other side of the globe, Mount Purgatory was constructed with a solid shape:

This side of the world from out high Heaven [*Satan*] fell;  
The Land which here stood forth fled back dismayed,  
Pulling the sea upon her like a veil,  
And sought our hemisphere; with equal dread,  
Belike, that peak of earth [*Mount Purgatory*] which is still found  
This side, rushed up, and so this void [*the Inferno*] was made.  
(*Inf.* XXIV.121-6)

In early 1937, in draft 8.13+ of "The Triangle", Joyce incorporated the line: 'The Turnpike under the great Ulm with Mearingstone in Foreground.' (JJA 53: 249; FW 293.13-15) positioned directly underneath the FW 293 diagram, completing Mount Purgatory's visual interpretation. The 'great Ulm' represents a tree since 'ulmus' is the genus name for 'Elm', and its identity is most likely the  $\pi$  at the top of the diagram, since it is arguably shaped like one, with its two vertical lines like a trunk and an additional horizontal top. If  $\pi$  is a tree at the top of the FW 293 diagram, it may visually represent the

‘The Tree of Knowledge of Good and Evil’ which Dante finds at the summit of Mount Purgatory, in the Earthly Paradise (*Purg.* Canto XXVIII). Additionally, the ‘turnpike under the great Ulm’ may be the pathway which Dante and Virgil used when climbing up Mount Purgatory. A parallel with Heaven already exists with the  $\pi$  symbol, since in the completed *Finnegans Wake*, Dolph identifies Kevin with St. Michael when instructing him to draw it on the diagram: ‘[...] and [*Saint*] mick [*Michael*] your modest mock pie out of Humbles up your end.’ (FW 296.7-8). St. Michael is the guardian of Heaven, and he is ‘humble’ or penitent, to God as well as being a symbol of purity, like Kevin.

In conclusion, Dolph teaches Kevin using three perspectives of the vulva, not to demonstrate his knowledge about geometry, physics and literature implicitly, but to provide him with a sex education which incorporates all the complexities of life. The Euclidian part of class shows Kevin how to draw the vulva from its exterior, which is important knowledge for him, being virginal and totally ignorant of its appearance. Dolph’s lessons collectively teach Kevin about what the vulva, using three different perspectives, using three dimensional cross-sections to show the interiority of the vagina in the physics and literature classes, in addition. But Dolph educates Kevin about much more than the anatomical dimensions of the vulva, which although important does not encapsulate sex, being disconnected from the physical experience of coitus itself, as well as its associated emotional aspects of love, lust and desire. In order to teach Kevin about the physical act of sex, Dolph bases the design of the Newtonian optics diagram upon an intimate liaison, wherein an eye, represented by  $\pi$ , is looking into a vagina. This diagram interpretation educates Kevin about how the vulva is an object of desire, and how it plays a role in the act of coitus. Finally, in the literature class, Dolph teaches Kevin about the consequences of Lust upon the soul. Using Dante’s *Inferno* as a parallel image for the vagina, Dolph demonstrates his own spiritual damnation, brought upon by his deviant behaviour and carnal desires. This lesson is a warning to Kevin, teaching him that on a theological level that the vulva, as a biological organ, is strongly associated with sin. Like the *Inferno*, the vagina in Dolph’s interpretation contains all the sins of mankind in its structure, to emphasise this point. Indeed, Dolph is an unrepentant Lustful sinner, but he does not deprive Kevin of the knowledge that the vulva could cause him spiritual corruption if he becomes a deviant or libertine. In one final point, Dolph’s simultaneous presentation of the three vulva interpretations within one diagram demonstrates that all its aspects; biological, coitus, Lust, and sin, are all interconnected. If Kevin was taught about the vulva using three separate diagrams he would fail to understand its totality, in this respect.

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**Notes:**

1 I have chosen to abbreviate it as the 'FW 293 diagram' in this essay.

2 Margaret C. Solomon, *Eternal Geometer: The Sexual Universe of Finnegans Wake*, (London and Amsterdam: Southern Illinois University Press, 1969), 105.

3 Ibid., 120-129.

4 See Jonathan McCreedy, "Everyword For Oneself But Code for Us All!": The Shapes of Sigla in *Finnegans Wake*, *Genetic Joyce Studies*, Issue 10, Spring 2010, edited by Dirk Van Hulle.

5 For a complete analysis of Joyce's use of *Grands Fleures Historiques* in VI.B.1 see Vincent Deane's introduction in *The Finnegans Wake Notebooks at Buffalo VI.B.1*, edited by Vincent Deane, Daniel Ferrer and Geert Lernout, (Brepol Publishing: Turnout Belgium, 2002).

6 Ibid., 59.

7 Ibid., 103.

8 On page 74 of *A Vision* by W.B Yeats there is a diagram exactly the same as this siglum, only drawn on a grand scale. It, like many shapes with this design in geometry, represents a cone. However, this diagram is not the genetic source for Joyce's siglum since *A Vision* was not published until 1925, one year after the composition of the notebook VI.B.1. See, W.B Yeats, *A Vision*, (Hong Kong: Macmillan, 1981), 74.

9 The apex of this interior cone, the dot in the centre of this siglum, arguably represents the cervix.

10 Danis Rose, *The Textual Diaries of James Joyce*, (Dublin: The Lilliput Press, 1995), 91.

11 *Tales Told of Shem and Shaun*, is an amalgamation of "The Mooske and the Gripes" (FW 152.18-159.18), "The Ondt and the Gracehoper" (FW 414.22-419.8) and "The Muddest Thick That Was Ever Heard Dump" (cf. FW 282.7-304.4) sections of *Finnegans Wake*. See A. Nicholas Fagnoli and Michael Patrick Gillespie, *A-Z of James Joyce*, (New York: Facts on File, 1995), 213.

12 Which sounds like, with a Scottish accent: 'Can you nae do her, nome?' To 'do' someone is a vulgar term for coitus.

13 This is again Scottish dialect: 'Och! Tell it to me, do, Shem!' Incidentally, this is the only line in "The Triangle" where Dolph is identified with Shem.

14 James Joyce, *A Portrait of the Artist as a Young Man*, (England: Penguin, 2000), 141.

15 The diagram is complete in all markings and essentially it is the same as the final version, except for one minor detail, which was added in 8(ABC).\*1, the third draft of "The Triangle", composed in July 1926. This addition is the marking of dots on the southern triangle on the diagram. This addition happened after a very short period of time, maybe only a week after the completion of 8AC.\*0. See, James Joyce, *Finnegans Wake: Book II, Chapter 2, A Facsimile of Drafts, Typescripts and Proofs, Vol. 1*, edited by Michael Groden, James Joyce Archive, Volume 53, (New York: Garland, 1978), 29. Hence, 'JJA: 53'.

16 See, McCreedy.

17 Euclid, *The Elements of Euclid For the Use of Schools and Colleges*, edited by Isaac Todhunter, (London and Cambridge: Macmillan, 1869), 7.

18 Ibid., 7.

19 John Casey, *The First Six Books of the Elements of Euclid and Propositions: I-XXI of Book XI etc.*, 17<sup>th</sup> edition, (Dublin: Hodges, Figgis & Co., 1902). For more information on this genetic source see, Luca Crispi, "Storiella as She Was Wryt: Chapter II.2", *How Joyce Wrote Finnegans Wake: A Chapter-by-Chapter Genetic Guide*, edited by Luca Crispi and Sam Slote, (USA: University of Wisconsin Press, 2007), 243 n19.

20 See JJA 53:1.

21 Euclid, 7.

22 See *How Joyce Wrote Finnegans Wake: A Chapter-by-Chapter Genetic Guide*, edited by Luca Crispi and Sam Slote, (USA: University of Wisconsin Press, 2007), 487.

23 For a visual source of the anatomy of the labia, see: Henry Gray, *Gray's Anatomy*, (Great Britain: Bookmart Limited, 1991), 682.

24 Sir Isaac Newton, *Opticks*, (New York: Prometheus Books, 2003), 9.

25 The earliest draft of "The Triangle" (8AC.\*0) anticipates the miniaturisation of the *Inferno* in FW 300.9-304.2. Constructing this section was gradual for Joyce, with accretions building up Dolph's descent into Dante's Hell, concluding in the twelve draft of "The Triangle": '8.7 +', which was written in April-May, 1929: JJA 53: 98-119.

26 See, Dante Alighieri, *Inferno*, edited by Dorothy Sayers, (USA: Penguin, 2001), lxii, 14, 52, 70, 105, 112, 126, 158, 197.

27 *Ibid.*, lxii.

28 There are a few references to Boccaccio's *Decameron* in *Finnegans Wake*. The most detailed quote, from III.2, illustrates Joyce's knowledge of its twelve part structure: '[...] plus the usual bilkers dozen of dowdycameramen.' (FW 435.9)

29 Giovanni Boccaccio, *The Decameron, or Ten Day's Entertainment of Boccaccio*, translated by W.K Kelly, (London: Henry G. Bohn, 1855), 196.

30 William Shakespeare, *Shakespeare's Sonnets*, edited by John Kerrigan, (England: Penguin, 2005), 129.

31 William Shakespeare, *King Lear*, (Great Britain: Wordsworth, 1994), VI.vi.126.

32 *A Tour of the Darkling Plain: The Finnegans Wake Letters of Thornton Wilder and Adaline Glasheen*, edited by Edward M. Burns and Joshua A. Gaylord, (Ireland: University College Dublin Press, 2001), 181.

33 *Ibid.*, 226.

34 Dolph incorporates the following quote from Yeats' *A Vision* into Capaneus' words from the *Inferno*: '[...] the third state [*after death*] which corresponds to Gemini, called the Shiftings, where the Spirit is purified of good and evil.' *A Vision*, 297

35 See Groden's note on JJA 53:265.