

Out of the Reading Flow

Footnotes, endnotes and supplementary content

From margin notes to hypertext

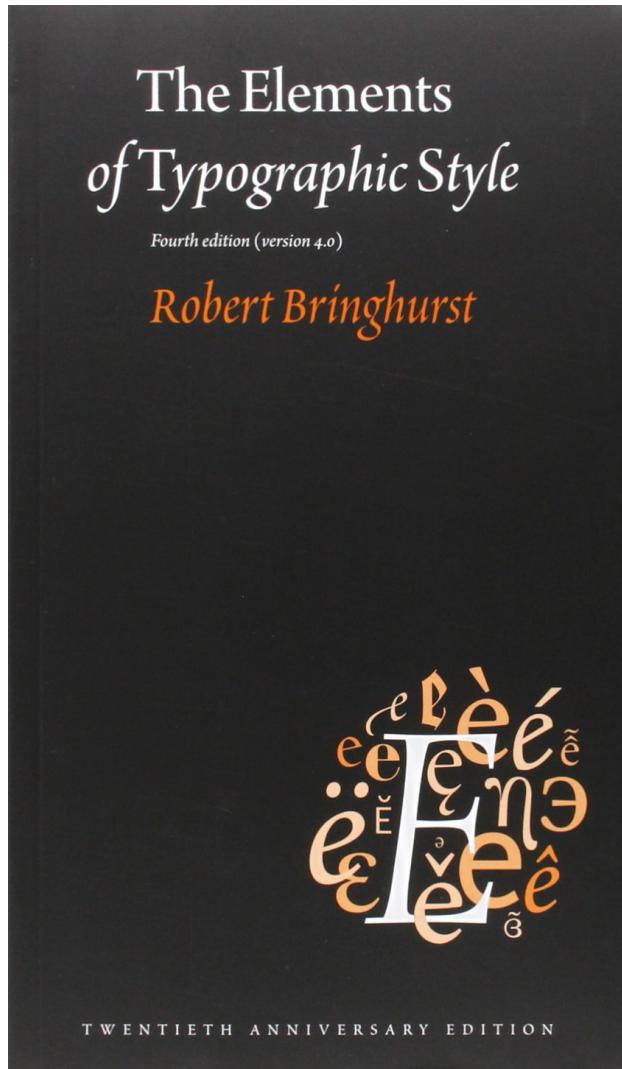
Introduction

- Footnotes & other deviations in print - past & present
 - The Conventions for Supplementary Content in Print
 - Practical Methods - or how can editors add notes
- Screen Based media
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 - Footnotes on the web
 - Popup Notes
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Footnotes & other deviations in print - past & present

We start with a quote from

Robert Bringhurst in his *The Elements of Typographic Style*:



“...the academic habit of relegating notes to the foot of the page or the end of the book is a mirror of Victorian social and domestic practice, in which the kitchen was kept out of sight and the servants were kept below stairs. If the notes are permitted to move around in the margins – as they were in Renaissance books – they can be present where needed and at the same time enrich the life of the page.”

In medieval Europe, the relationship between the shape of the page and text block provided space for notes in the margin. In fact, even before printing margin notes are used to elaborate or further explain details. In this illustration we see a spread from the *Liber insularum Archipelagi*. with notes in the site margins



a leaf from the Chudleigh Bible, in Latin,
illuminated manuscript on vellum - north-
eastern France, c.1220-30



Print

part of a page from *The Geneva Bible* from 1568
(Bishops' Bible)

See here how this page from the Bible has side notes which flood out into the left column of text.

The title page proclaims:
With the Most Profitable Annotations upon all the hard places...

nature, and also there were other betwene him & þ kingdome, and therfore is here called, the litle hornebe cause neither prince lie conditions, nor any other thing was in him, why he shulde obiue this kingdom. ^m That is, tow-
ard Egypt. ⁿ Wherby he meaneth Prolo-
gues. ^o That is, Judea.
^p Antiochus raged against the elect of God, and trod his precions Barres vnder fete which are so called, because they are separated from the worlde. ^q That is, God, who gouerneth and main-
teinch his Church. ^r He labored to abolish all religion, & therefore cast Gods seruice out of his Temple, which God had chosen as a litle corner from all the rest of the worlde to haue his Name there truely called vpon. ^s He sheweth that their sinnes are the cause of these horrible affeckions: and yet comforteth them, in that he appointeth this tyrant a time, whome he woldenot suffer viterly to abolish his religion. ^t This horne shal abolishe for a time the true doctrine & so corrupt Gods seruice.
^v Meaning, that he heard one of the Angels asking this question of Christ whome he calleth a certeine one or a secret one, or a marueilous one. ^x That is, the Lewes sinnes, whiche were cause of this destruction. ^y That is, which suppreßeth Gods religion, & his people. ^z Christ answered me for the cōforte of þ Church. ^a That is, vnto so many natural daies be past, whiche make six yeres three moneths & an half: for so long vnder Antiochus was þ Temple prophane. ^b Which was Christ, who in this maner declared him selfe to the olde fathers how he w olde be God manifest in flesh. This power to commandc the Angel, declareth that he was God.

dure the vision of the dailie sacrifice, and the iniquitie of the desolation to tread bothe the Sanctuarie & the Y armie vnder fote?

¹⁴ And he answered me, Vnto the evening, & the morning, two thousand and thre hūdred, then shal the Sanctuarie be clensed.

¹⁵ Now when I Daniel had sene the vision, and sought for the meaning, beholde, there stode before me ^b like the similitude of a man.

¹⁶ And I heard a mans voyce betwene the bankes of Vlai, which called & said, Gabriel, ^c make this man to understand

²⁵ And through his ^a policie alio, he maileth that dwel about him, and also the Lewes. ^m peace shal destroy many: he shal also stand vp against the ⁿ prince of princes, by his craft, he shal bring it to passe. ^m That is, vnder pretence of peace or as it were in spore. ⁿ Meaning, agaist God. ^o For God welle destroide him with a notable plague, & scōferte his Church. ^{2. Mac. 9, 9.} ^p Read ver. 14. ^q For feare and astonishement.

CHAP. IX.

³ Daniel desyreth to haue that performed of God, which he had promised concerning the returne of the people from their banishment in Babylon. ⁵ A true confession. ²⁰ Daniels prayer is heard. ²¹ Gabriel the Angel expoundereth into him the vision of the seuentie weekes. ²⁴ The anointing of Christ. ²⁵ The buylding againe of Jerusalem. ²⁶ The death of Christ.

¹ In the firstyere of Darius the sonne of ^a Who was also called Ahasuerosh, of the sede of the Medes, which was made King ouer the ^b realme

The History of the Decline and Fall of the Roman Empire by Gibbon, Edward - Warne 1872

When Edward Gibbon published his 6 volumes towards the end of the 18th Century, he included almost 8,000 footnotes and asides.

He wasn't the first to incorporate supplementary information but Gibbon's work established the standard for academic publications.

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THE DECLINE AND FALL

C H A P.
LXIV.

till at length the hopeless monarch, protesting his innocence and accusing his fortune, ascended a funeral pile, and gave orders, that, as soon as he had stabbed himself, the fire should be kindled by his attendants. The dynasty of the *Song*, the native and ancient sovereigns of the whole empire, survived about forty-five years the fall of the northern usurpers; and the perfect conquest was reserved for the arms of Cublai. During this interval, the Moguls were often diverted by foreign wars; and, if the Chinese seldom dared to meet their victors in the field, their passive courage presented an endless succession of cities to storm and of millions to slaughter. In the attack and defence of places, the engines of antiquity and the Greek fire were alternately employed: the use of gunpowder in cannon and bombs appears as a familiar practice²³; and the sieges were conducted by the Mahometans and Franks, who had been liberally invited into the service of Cublai. After passing the great river, the troops and artillery were conveyed along a series of canals, till they invested the royal residence of Hamcheu, or Quinsay, in the country of silk, the most delicious climate of China. The emperor, a defenceless youth, surrendered his person and sceptre; and before he was sent in exile into Tartary he struck nine times the ground with his forehead, to adore in prayer or thanksgiving the mercy of the great khan. Yet the war (it was now styled a rebellion) was still maintained in the southern provinces from Hamcheu to Canton; and the obstinate remnant of independence and hostility was transported from the land to the sea. But when the fleet of the *Song* was surrounded and oppressed by a superior armament, their last cham-

Of the south-
ern
A. D. 1279.

²³ I depend on the knowledge and fidelity of the Pere Gaubil, who translates the Chinese text of the Annals of the Moguls or Yuen (p. 71. 93. 153.); but I am ignorant at what time these annals were composed and published. The two uncles of Marco Polo, who served as engineers at the siege of Siengyang-fou (l. ii. c. 61. in Ramusio, tom. ii. See Gaubil, p. 155. 157.), must have felt and related the effects of this destructive powder, and their silence is a weighty, and almost decisive, objection. I entertain a suspicion, that the recent discovery was carried from Europe to China by the caravans of the xith century, and falsely adopted as an old national discovery before the arrival of the Portuguese and Jesuits in the xvth. Yet the Pere Gaubil affirms, that the use of gunpowder has been known to the Chinese above 1600 years.

pion

OF THE ROMAN EMPIRE.

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tion leaped into the waves with his infant emperor in his arms. C H A P.
LXIV.
“ It is more glorious,” he cried, “ to die a prince, than to live a slave.” An hundred thousand Chinese imitated his example; and the whole empire, from Tonkin to the great wall, submitted to the dominion of Cublai. His boundless ambition aspired to the conquest of Japan: his fleet was twice shipwrecked; and the lives of an hundred thousand Moguls and Chinese were sacrificed in the fruitless expedition. But the circumjacent kingdoms, Corea, Tonkin, Cochinchina, Pegu, Bengal, and Thibet, were reduced in different degrees of tribute and obedience by the effort or terror of his arms. He explored the Indian ocean with a fleet of a thousand ships: they failed in sixty-eight days, most probably to the isle of Borneo, under the equinoctial line; and though they returned not without spoil or glory, the emperor was dissatisfied that the savage king had escaped from their hands.

II. The conquest of Hindostan by the Moguls, was reserved in a later period for the house of Timour; but that of Iran, or Persia, was achieved by Holagou Khan, the grandson of Zingis, the brother and lieutenant of the two successive emperors, Mangou and Cublai. I shall not enumerate the crowd of sultans, emirs, and atabeks, whom he trampled into dust: but the extirpation of the *Affassins*, or *Ismaelians*²⁴ of Persia, may be considered as a service to mankind. Among the hills to the south of the Caspian, these odious sectaries had reigned with impunity above an hundred and sixty years; and their prince, or Imam, established his lieutenant to lead and govern the colony of mount Libanus, so famous and formidable in the history of the crusades²⁵. With the fanaticism of the Koran, the *Ismaelians* had blended the Indian transmigration, and the vi-

²⁴ All that can be known of the *Affassins* of Persia and Syria, is poured from the copious, and even profuse, erudition of M. Falconet, in two *mémoires* read before the Academy of Inscriptions (tom. xvii. p. 127—170.).

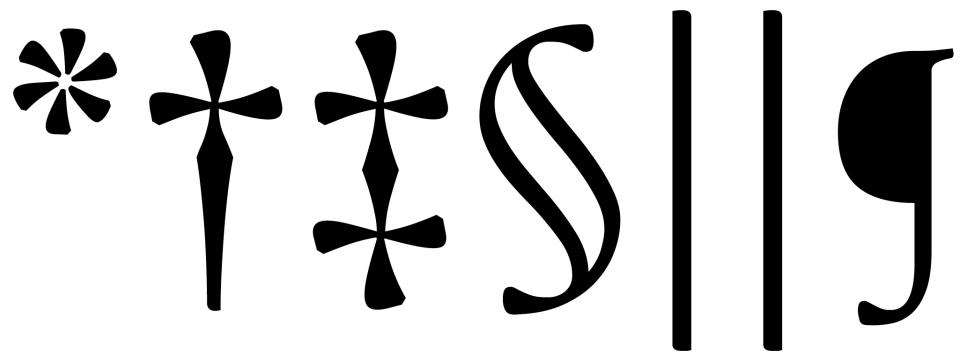
²⁵ The *Ismaelians* of Syria, 40,000 *Affassins*, had acquired or founded ten castles in the hills above Tortosa. About the year 1280, they were extirpated by the *Mamalukes*.

Q q 2

sions

The conventions used for supplementary content in print

Wherever the note is deposited it needs a number or symbol reference set as superscript within the text and where endnotes are used the references will be numbers set in superscript to the right of the last word in reference context. Like this⁵



- ious to meet the new governor and pay him all due honour. The council's members represent each of the *civitates*,
* Evidence from excavations of the Leadenhall Court site was sufficient to identify many features of a building site, including workers' huts, mixing pits and hoof prints of pack animals bringing ragstone rubble from the quarries at the foot of the hill.
† By comparison, St Paul's Cathedral is some 174 metres (574 feet) tall. Corinium (Cirencester) held the prize for the second-largest portico in Roman Britain.
‡ It is speculative that the statue of Hadrian was in the forum and not in the temple of Mithras, though both scenarios are possible – the headless torso of the emperor was found in the River Thames.
§ No details about the London council are known.

The convention is to use these symbols in a particular order on the page as seen in this example.

part of a page from *Journey to Britain*, Bronwen Riley

Unusually, both symbols and numbers can be used as in this example

In this case, symbols are used for general notes and the numbers are used for citations.

part of a page from *The Devils Details - a history of footnotes*, Chuck Zerby

* The reviewer is full of admiration for *Ba*
Unfortunately, he appears to place respons
footnotes upon Heron-Allen instead of up
properly belongs. See George Sarton, "Edw
(May 1929), pp. 340-1.

51. Hilaire Belloc, *On* (New York: George H

† The simplicity of many of Belloc's titles
tion to *On*, he published *On Anything, On E*
Nothing & Kindred Subjects. A general disdai
kind may account for his particular dislike

52. Hilaire Belloc, *On* (New York: George H

53. Ibid.

54. Ibid., p. 43.

Sidenotes may not need the reference numbers or symbols as long as they can be near to the context within the text block.

Here as a sample spread from *The Book of Barely Imagined Beings*, Casper Henderson.

In both radiolaria and another group of plankton called Foraminifera, writes Thompson, 'we seem to possess [a] nearly complete picture of all the possible transitions between form and form, and of the whole branching system of the evolutionary tree: as though little or nothing of it had ever perished, and the whole web of life, past and present, were as complete as ever'.

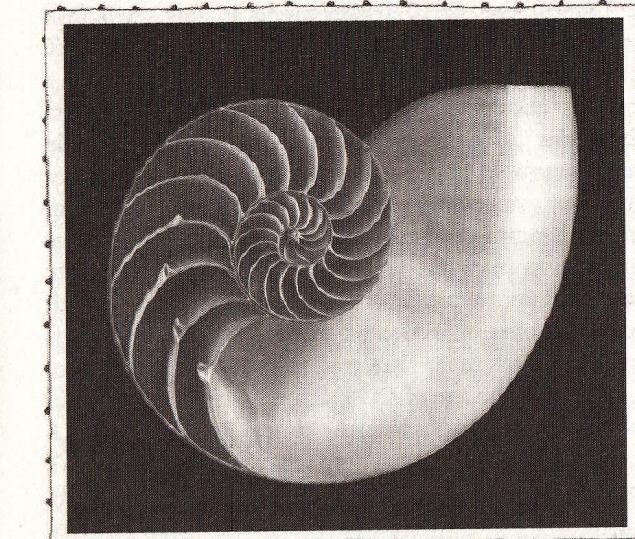
from the florets of a sunflower to the coil of an elephant's trunk and even in animal behaviours such as the flight path of a moth around a flame. Particularly striking is the sheer diversity and near geometrical perfection in the shells of molluscs. From the Queen conch to the nautilus, these grow in equiangular and logarithmic spirals of almost every conceivable angle and pitch. Here, Thompson suggested, was a supreme example of 'the great variety of nature at play' (*magna ludentis naturae varietas* as Pliny had called it); a world not of grim competition but endless creativity, counterpoint and fugue:

It leads one to imagine that these shells have grown according to laws so simple, so much in harmony with their material, with their environment, and with all the forces internal and external to which they are exposed, that none is better than another and none fitter or less fit to survive.

The human fascination with spirals is old and enduring. They appear, albeit quite rarely, among symbols painted on cave walls more than 20,000 years ago, and are a common motif in many later cultures of the prehistoric and historical periods. Early depictions are often variations on the 'simple' (Archimedean) shape. The parabolic, or Fermat, spiral decorates objects about 6,000 years old including the buttocks of a clay female figure from the Danube Valley civilization. Triple spirals were etched on a great entrance stone at the Newgrange complex in Ireland, which was built around 5,000 years ago. One of the most remarkable man-made structures of all time is the 52-metre (170-foot) high Malwiya Minaret at Samarra in Iraq, built between the years 848 and 852 and not significantly damaged until US forces arrived after the invasion of 2003. It takes the form of a conic spiral – so it is partly a helix, partly a spiral.

There are probably several reasons why we are drawn to spirals. One may be that, even before science showed just how widespread they are, people intuited that they were a manifestation of forces at work in the natural world: spirals as constant forms appearing in what is always moving, approximating Carl Woese's metaphor for life itself: 'organisms [as] resilient patterns in a turbu-

'Imagine a child playing in a woodland stream, poking a stick into an eddy in the flowing current, thereby disrupting it. But the eddy quickly reforms. The child disperses it again. Again it reforms, and the fascinating game goes on. There you have it! Organisms are resilient patterns in a turbulent flow.' (Carl Woese)



A Nautilus shell

lent flow'. Whether or not this is the case, once you do have the maths and the evidence before you, the presence of self-similar forms such as logarithmic spirals in everything from cauliflowers to cyclones and from marine shells to star formations is astonishing. We now know that spirals and helices exist where they cannot be directly seen; there are, for example, Ekman spirals in the winds and in deep waters under sea ice, and Langmuir circulations beneath ocean surface waters. At least one of the rings of Saturn is actually a spiral.

Thompson's *On Growth and Form* greatly enriches the reader's appreciation of the range of spirals and other forms that arise in living things. As a work to arouse wonder it has few equals. As an explanation for how life evolves and develops, however, it is inadequate. Thompson acknowledged as much, writing that his work took us 'only to a threshold'. But even as in the years up to his death in 1948 Thompson was preparing an expanded edition, other scientists were starting to understand metabolism, photosynthesis, heredity and development in new ways: molecular biology was being born.

The geneticist Jack Szostak (2010) has suggested that 'simple physical forces' such as those that cause cell membranes to form and divide may yet play a role in attempts to reconstruct the origins of life.

On the other hand Edward R. Tuft~~e~~ is well known for his beautifully designed books about the display of information.

We can see in this example from *Visual Explanations*, that he uses numbers for the margin notes.

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one's lecture work.”³¹ Magicians practice in front of a mirror, friend, or video camera; when you practice, work on what your audience sees and also hears. To detect mannerisms of speech, turn off the video and listen to the audio only.

Finally, plan your arrival and departure so as to make a difference:

5. Show up early. Something good is bound to happen.

6. Finish early.

By arriving early, you can look the place over, have time enough to recover from a problem (for example, the room is already occupied; or the projector is missing), check the lights, and greet people as they gradually arrive to await your performance.³² Give the talk and finish early: “People will be pleased with a nice short speech. I believe that Paul Halmos, a very great lecturer, noted that in a lifetime of giving and attending mathematics lectures he had never heard complaints about a seminar ending early.”³³ Even magicians are urged to get on with their entertaining performances: “Always leave them wanting more. Get to the point. Be brief. Keep interesting them. Quit before they've had enough.”³⁴

Conclusion

The techniques of disinformation and the pseudo-explanation of the automaton chess-player illustrate once again the supreme and enduring test of all information design, the integrity of the content displayed:

Is the display revealing the truth?

Is the representation accurate?

Are the data carefully documented?

Do the methods of display avoid spurious readings of the data?

Are appropriate comparisons and contexts shown?

Sometimes we have a clear empirical test of visual truth-telling: Was a wise decision made and prudent action taken on the basis of the displayed information? Thus, in our examples, the epidemic ends or persists, the space shuttle survives or explodes, the stairs escort us safely or trip us up, the map efficiently guides us to our destination or it confuses and misleads us.

Also professional standards of quantitative and graphical integrity point the way. For example, economists agree that graphs depicting money over a period of time should show inflation-adjusted (constant) monetary units.³⁵ To use undeflated monetary units is to distort the evidence, mixing up changes in the value of money with real changes in the data, just as rainbow color-coding of quantitative data confounds what happens in a color scheme with what happens in the data.

³¹ Frederick Mosteller, “Classroom and Platform Performance,” *The American Statistician*, 34 (February 1980), p. 14. See Judith M. Tanur, “Fred as Educator,” in *A Statistical Model: Frederick Mosteller’s Contributions to Statistics, Science, and Public Policy* (New York, 1990), ed. S. E. Fienberg, D. C. Hoaglin, W. H. Kruskal, and J. M. Tanur, pp. 111–129.

³² Joseph Lowman, *Mastering the Techniques of Teaching* (San Francisco, 1984), p. 49.

³³ Mosteller, “Classroom and Platform Performance,” p. 16.

³⁴ Dariel Fitzkee, *Showmanship for Magicians* (San Rafael, California, 1943), pp. 78, 91. Similarly, Henning Nelms, *Magic and Showmanship: A Handbook for Conjurers* (New York, 1969), p. 229: “Stop before the audience has had enough; a wise showman always sends them away wanting still more.” Recall Samuel Johnson’s famous comment on Milton’s *Paradise Lost*: “None ever wished it longer. . . .” *The Lives of the Most Eminent English Poets* (London, 1783), volume 1, p. 249.

³⁵ Paul A. Samuelson and William D. Nordhaus, *Economics* (New York, 1983), pp. 104–105, 226–228; Edward R. Tufte, *The Visual Display of Quantitative Information* (Cheshire, Connecticut, 1983), pp. 64–68.

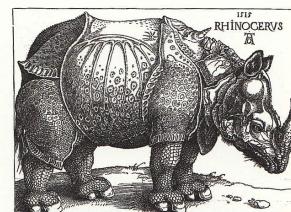
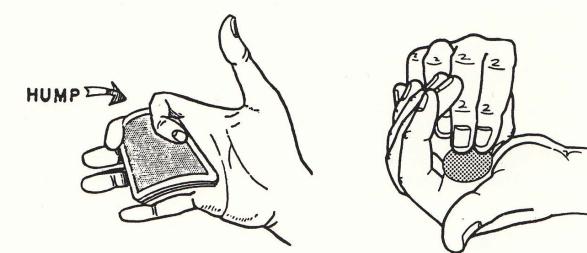
EXPLAINING MAGIC 71

³⁶ R. V. Tooley, *California as an Island* (London, 1964); John Leighly, *California as an Island* (San Francisco, 1972); Glen McLaughlin with Nancy Mayo, *The Mapping of California as an Island* (Saratoga, California, 1995). The map shown here is from Nicolas Sanson, *Cartes générales de toutes les parties du monde* (Paris, 1658).



The accuracy of visual representations can be checked against the real thing, if someone is willing to do the work. Errors do persist, however. A 1622 map depicting California as an island was reproduced in 182 variants, as the distinctive mistake traces out a disturbingly long history of rampant plagiarism. The last copyist published in 1745, after which California cartographically rejoined the mainland.³⁶ Then there is Albrecht Dürer’s gloriously wrong engraving of 1513 that portrays a fanciful two-horned, armor-plated rhinoceros. Copied repeatedly in guides and textbooks and even made into a monument, the bogus rhinoceros, along with a fable about its battles with the elephant, was taken as real for some 200 years until finally confronted with too many sightings of actual rhinoceros.³⁷

AND for the world of magical illusions, standards of truth-telling in illustration should at least rule out six-fingered conjurers, two of whom apparently perform below:³⁸

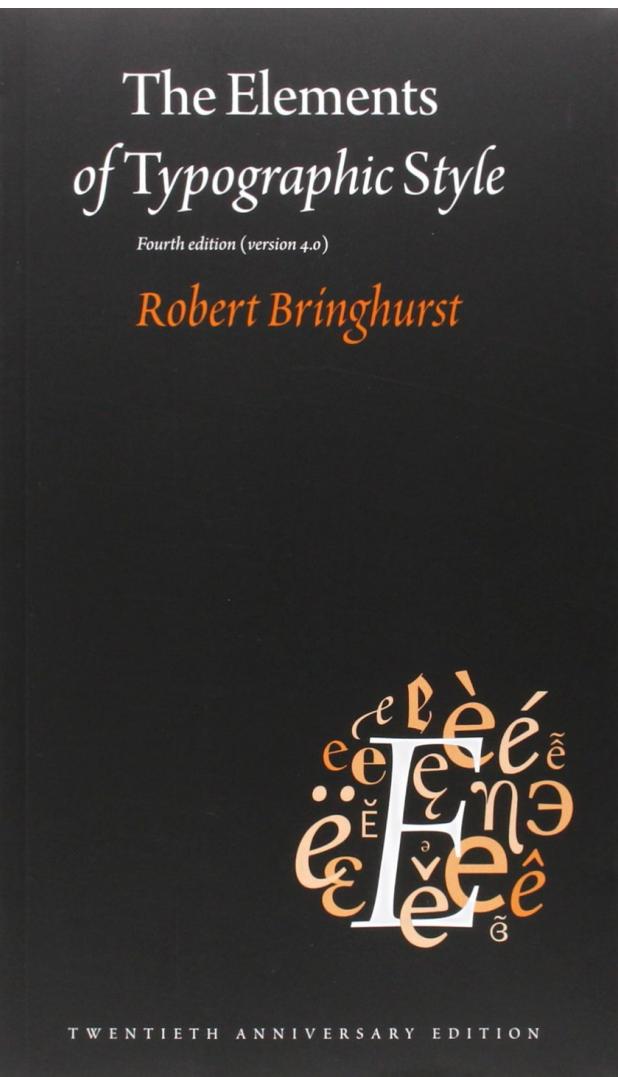


³⁷ F. J. Cole, “The History of Albrecht Dürer’s Rhinoceros in Zoological Literature,” *Science, Medicine, and History: Essays on the Evolution of Scientific Thought and Medical Practice* (London, 1953), ed. E. Ashworth Underwood, pp. 337–356.

³⁸ At far left, Cliff Green, *Professional Card Magic* (New York, 1961), p. 128, showing an error by the well-known illustrator, Edward Mishell. The extra finger is not needed in performing the depicted manipulation. Unnoticed for years, the slip was spotted by Richard Kaufman, who then drew a homage to Mishell’s sixth finger—at near left, Richard Kaufman, *Coinmagic* (New York, 1981), p. 260.

Robert Bringhurst uses both side notes and footnotes.

The Elements of Typographic Style



TWENTIETH ANNIVERSARY EDITION

The text on this page is set in ITC Mendoza 10/13 with 12 pt New Hellenic. On the facing page, the roman and italic are Figural 10/13; the Greek is 10.5 pt Porson. The caps in both Greek fonts have been resized. (The original edition of Cornford's book, printed in 1912, was set in the curious combination of Century Expanded and Porson Greek.)

ΦΥΣΙΣ AS THE SOUL / THE SOUL AS ΓΝΩΣΙΣ.
The second proposition of Thales declares that the All is alive, or has Soul in it (τὸ πᾶν ἔμψυχον). This statement accounts for the mobility of φύσις. Its motion, and its power of generating things other than itself, are due to its life (ψυχή), an inward, spontaneous principle of activity. (Cf. Plato, *Laws* 892c: φύσιν βούλονται λέγειν γένεσιν τὴν περὶ τὰ πρῶτα: εἰ δὲ φανήσεται ψυχὴ πρῶτον, οὐ πῦρ οὐδὲ ἄλλο, ψυχὴ Δὲ ἐν πρώτοις γεγενημένη, σχεδὸν ὀρθότατα λέγοιτ’ ἂν εἶναι διαφερόντως φύσει.) ...

It is a general rule that the Greek philosophers describe φύσις as standing in the same relation to the universe as soul does to body. Anaximenes, the third Milesian, says: οἷον ἡ ψυχὴ ἡ ἡμετέρα ἀλλὰ οὖσα συγκρατεῖ ἡμᾶς, καὶ δλον τὸν κόσμον πνεῦμα καὶ ἀλλὰ περιέχει. "As our soul is air and holds us together, so a breath or air embraces the whole cosmos."¹ ...

The second function of Soul – knowing – was not at first distinguished from motion. Aristotle says, φαμέν γάρ τὴν ψυχὴν λυπεῖσθαι χαίρειν, θαρρεῖν φοβεῖσθαι, ἔτι δὲ δργίζεσθαι τε καὶ αἰσθάνεσθαι καὶ διανοεῖσθαι· ταῦτα δὲ πάντα κινήσεις εἶναι δοκοῦσιν. Θεν οἰηθείη τις ἂν αὐτὴν κινεῖσθαι. "The soul is said to feel pain and joy, confidence and fear, and again to be angry, to perceive, and to think; and all these states are held to be movements, which might lead one to suppose that soul itself is moved."² Sense-perception (αἴσθησις), not distinguished from thought, was taken as the type of all cognition, and this is a form of action at a distance.³

¹ Frag. 2. Compare Pythagoras' "boundless breath" outside the heavens, which is inhaled by the world (Arist., *Phys.* 213b22), and Heraclitus' "divine reason," which surrounds (περιέχει) us and which we draw in by means of respiration (Sext. Emp., *Adv. Math.* vii.127).

² *De anima* 408b1.

³ *De anima* 410a25: Those who make soul consist of all the elements, and who hold that like perceives and knows like, "assume that perceiving is a sort of being acted upon or moved and that the same is true of thinking and knowing" (τὸ δὲ αἰσθάνεσθαι πάσχειν τι καὶ κινεῖσθαι τιθέασιν· ὅμοιώς δὲ καὶ τὸ νοεῖν τε καὶ γιγνώσκειν).

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All such action, moreover, was held to require a continuous vehicle or medium, uniting the soul which knows to the object which is known. Further, the soul and its object must not only be thus linked in physical contact, but they must be alike orakin....

It follows from this principle that, if the Soul is to know the world, the world must ultimately consist of the same substance as Soul. *Φύσις* and Soul must be homogeneous. Aristotle formulates this doctrine with great precision:

ὅσοι δὲ ἐπὶ τὸ γῆγεν καὶ τὸ αἰσθάνεσθαι τῶν ὄντων, οὗτοι δὲ λέγουσι τὴν ψυχὴν τὰς ἀρχάς, οἱ μὲν πλείους ποιοῦντες, ταύτας, σοιοὶ δὲ μίαν, ταύτην, ὥσπερ Ἐμπεδοκλῆς μὲν ἐκ τῶν στοιχείων πάντων, εἶναι δὲ καὶ ἔκαστον ψυχὴν τούτων, λέγων οὕτως

γαίη μὲν γάρ γαμανεύσαστα παμεν, ὕδατι δὲ ὕδωρ,
αιθέρι δὲ αἰθέρα διδιδειν, ἀτὰρ πυρὶ πῦρ αἰδηλον,
στοργῇ δὲ στοργήτην, νεῦκος δέ τε νείκει λυγρῷ.

τὸν αὐτὸν δὲ πρόπον καὶ Πλάτων ἐν τῷ *Τιμaeus* τὴν ψυχὴν ἐκ τῶν στοιχείων ποιεῖ· γιγνώσκεσθαι γάρ τῷ ὁμοίῳ τῷ ὁμοιον, τὰ δὲ πράγματα ἐκ τῶν ἀρχῶν εἶναι.

Those who laid stress on its knowledge and perception of all that exists, identified the soul with the ultimate principles, whether they recognized a plurality of these or only one. Thus, Empedocles compounded soul out of all the elements, while at the same time regarding each one of them as a soul. His words are,

«With earth we see earth, with water water,
with air bright air, ravaging fire by fire,
love by love, and strife by gruesome strife.

In the same manner, Plato in the *Timaeus* constructs the soul out of the elements. Like, he there maintains, is known by like, and the things we know are composed of the ultimate principles....⁴

⁴ *De anima* 404b8–18.18.

The texts on this spread are adapted from F.M. CORNFORD's *From Religion to Philosophy: A Study in the Origins of Western Speculation* (London, 1912). Some of the Greek quotations have been extended, and some have been moved from the footnotes into the main text. This makes Cornford's prose seem more pedantic and less lucid than it really is, but it poses a harder test for the type and permits a more compact typographic demonstration.

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Side or Margin Notes in InDesign

There are no direct options for creating side notes in InDesign.

Peter Kahrel has created a set of InDesign scripts that will take footnotes and put them wherever you decide, and however you like them to appear.

The Life of Shakespeare

misread the motives of the man who makes a will. Such omissions have been made when no slight was intended, sometimes because of previous private settlements, sometimes because a wife is always entitled to her dower rights. The evidence is thus too slight to be of value.³

Some other motive, then, than unhappiness in married life ought to be assigned for Shakespeare's departure to London. No doubt, the fact that his father was now a discredited bankrupt, against whom suits were pending, had something to do with his decision to better his family fortunes in another town. Traveling companies of players may have told him of London life. Possibly some scrape, like that preserved in the deer-stealing tradition and the resultant persecution, made the young man, now only twenty-one, restive and eager to be gone.⁴

Early Life in London

The earliest known reference to Shakespeare in the world of London is contained in a sarcastic allusion from the pen of Robert Greene, the poet and play writer, who died in 1592. Greene was furiously jealous of the rapidly increasing fame of the newcomer. In a most extravagant style he warns his contemporaries (Marlowe, Nash, and Peele, probably) to beware of young men that seek fame by thieving from their masters. They, too, like himself, will suffer from such thieves. "Yes, trust them not; for there is an upstart crow beautified with our feathers that with his Tygers heart wrapt in a Players hide, supposes he is as well able to bumbast out a blank verse as the best

of you; and being an absolute Johannes Factotum, is in his owne conceit the onely Shakescene in a countrie ... but it is pittie men of such rare wit should be subject to the pleasures of such rude grooms." The reference to "Shakescene" and the "Tygers heart," which is a quotation from *III Henry VI*,³ makes it almost certain that Shakespeare and his play are referred to. Greene's attack was, however, an instance of what Shakespeare would have called "spleen," and not to be taken as a general opinion. His hint of "Johannes Factotum" (Jack-of-all-Trades) probably means that Shakespeare was willing to undertake any sort of dramatic work. Later on in the same letter (*A Groatsworth of Witte Bought with a Million of Repentance*)⁴ he calls the "upstart crow" and his like "Buckram gentlemen," and "peasants."⁵

Henry Chettle, a friend of Greene's, either in December, 1592, or early in 1593,⁵ published an address as a preface to his *Kind-Harts Dreame*, making a public apology to Shakespeare for allowing Greene's letter to come out with this insulting attack. He says: "With neither of them that take offence was I acquainted, and with one of them I care not if I never be. The other [generally taken to be Shakespeare] whome at one time I did not so much spare as since I wish I had, for that, as I have moderated the heate of living writers, and might have usde my owne discretion -especially in such a case,

³"O tiger's heart wrapped in a woman's hide." This line is also in the source of Shakespeare's play.

⁴Printed first in 1596, but written shortly before Greene's death in 1592.

⁵Registered Dec. 1592, but printed without date.



Screen Based Media

Before the internet there was Hypercard

Hypercard on the MAC was able to create linking of pages but also making references and glossary items popup on mouse click.

Seen here in the Voyager publication on CD-ROM of *Macbeth*.

The screenshot shows a window titled "Macbeth" with a decorative Celtic knot border on the left. The top bar includes "MACBETH", "Act 1, Scene 2, lines 13–29", and "The Tragedy of Macbeth". The main text area contains a speech by Macbeth:

Of kerns and galloglasses is supplied,
And Fortune on his damnèd quarrel smiling,
15 Showed like a rebel's whore. But all's too weak,
For brave Macbeth - well he deserves that name -
Disdaining Fortune, with his brandished steel
Which smoked with bloody execution,
Like Valor's minion carved out his passage
20 Till he faced the slave,
Which ne'er shook hands, nor bade farewell to him,
Till he unseamed him from the nave to th'chaps
And fixed his head upon our battlements.

DUNCAN
O valiant cousin, worthy gentleman.

CAPTAIN
25 As whence the sun 'gins his reflection,
Shipwrecking storms and direful thunders,
So from that spring whence comfort seemed to come,
Discomfort swells. Mark, King of Scotland, mark,
No sooner justice had, with valor armed,

A small number "4" is visible at the bottom center of the border.

Hypertext

Hypertext

The term hypertext was coined first by Ted Nelson in 1963.

For a history of hypertext see Jacob Nielsen's book, *Hypertext and Hypermedia* (later re-issued as *Multimedia and Hypertext: The Internet and Beyond*, Morgan Kaufmann Publishers, 1995).

Time since you were here: NEVER

Hypertext systems

Classifying hypertext systems (Frank Halasz)

Frank Halasz from MCC gave the last talk at the workshop. He and the organizing committee should be criticized for not making it the first talk AND the last talk: Part of the talk was a very good survey of what HT really is and a classification of current systems. This material could have filled a whole talk with no problems but was presented with such speed that it left the audience breathless. It would also have made a good platform for the discussions during the conference if it had been presented at the beginning instead of at the end.

Definition of HyperText

HT systems can be divided into on the one hand the "original" generation of Memex [Vanavar Bush], NLS/Augment* [Engelbart], Xanadu [Ted Nelson], etc. and on the other hand the "current" generation consisting of e.g.

- Research systems: Intermedia [Brown University], NoteCards [Xerox]
- PC Products: Guide [Owl], HyperCard [Apple]
- Workstation products: Document Examiner [Symbolics].

Current report overview map

```
graph TD; Root[HyperTEXT '87 Workshop] --- People[People]; Root --- Literature[Literature]; Root --- Systems[Systems]; Root --- Applications[Applications]; Root --- ResearchIssues[Research issues]; Root --- Definition[Definition]; Root --- CSCWReport[CSCW '86 Trip Report];
```

Current chapter overview map

```
graph TD; Root[✓Classification of HT systems] --- HTsystems[✓Hypertext systems]; HTsystems --- NoteCards[NoteCards]; HTsystems --- DE[Document Examiner]; HTsystems --- HC[HyperCard (Apple)];
```

Navigation

Quit | Top | Front cover | History list

The World Wide Web

The first iteration of HTML ensured that it was possible to navigate through **hypertext** links.

A source anchor, leads to a destination, that could be elsewhere on that page or, to another web page altogether. The browser back button reverses the step.

The image here shows the first standard way to show a hypertext link with blue underlined text.

[Cristoforo Buondelmonti 'The Book of the Islands of the Archipelago'](#)

Juan de Bermudez (Spain) discovered Bermuda
Discovery of [Tristan da Cunha](#)

First Voyage Around the World - Magellan

Richard Eden's translation of:
"The Decades of the Newe Worlde"

Birth of Shakespeare

Raleigh's attempt to colonise Virginia

Defeat of Spanish Armada

Raleigh's Expedition to to Guiana

1480	Expedition from Bristol to find the Island of Brazil
1490	
1492	Christopher Columbus 'discovers' West Indies
1501	Joao de Nova (Portugal) discovered Ascension Island
1503	Joao de Nova (Portugal) discovered St Helena
1506	
1513	Vasco Balboa discovered Pacific Ocean (by crossing at Panama)
1516	Thomas More: 'Utopia' in Latin
1522	Antonio Pigafetta published account of Magellan's Voyage
1551	Thomas More: 'Utopia' translated into English
1555	included a translation into English of Pigafetta's "Voyage"
1564	
1574	Discovery of the Juan Fernandez Islands
1585	
1588	
1595	The search for 'El Dorado'
1601	Shakespeare's 'Twelfth Night'
1609	The wreck of the 'Sea Venture' on Bermuda

The First Popups on the Web

With javascript we can make the link popup the supplementary information.

Javascript was not available until 1995.

This opened up the possibility to use an overlay of information.



Treasure Island

.....with its grey, melancholy woods, and wild stone spires, and the surf that we could both see and hear foaming and thundering on the steep beach--at least, although the sun shone bright and hot, and the shore birds were fishing and crying all around us, and you would have thought anyone would have been glad to get to land after being so long at sea, my heart sank, as the saying is, into my boots; and from the first look onward, I hated the very thought of Treasure Island.

▲ big text

Explore Islomania

Robert Louis Stevenson began writing 'Treasure Island' when holidaying in Scotland. With his twelve-year-old stepson, Lloyd, he drew and annotated a coloured map of an island. The book was published in book form in 1883.



[RLS drew the map](#)

[Lost map](#)

[Stevenson's other islands](#)

[Full text of Treasure Island](#)

[Some other island narratives](#)

[Where is Treasure Island?](#)

[Ben Gunn](#)

[Some real treasure islands](#)

Footnotes on the Web

Footnotes on the Web

HTML pages have no limits to their vertical dimension so footnotes on a long scrolling page will need a hypertext link made from the reference to the footnote.

In this example it is difficult to target the correct point with mouse or finger.

Sidenotes (sometimes called Margin Notes)

Clearly the page layout needs to provide the space in the margins for this to be an option. Unless this is a large-format book, the measure of the notes (width of the text), is likely to be narrow, so don't design for this option if the notes are long or there are lots of them and, the book is small.

Sidenotes fall outside the text block unlike footnotes that will be inside the text block.

Sidenotes do not necessarily need superscript numbers within the text (and they themselves do not need to be numbered), if it is obvious what the sidenote refers to.

Footnotes with InDesign

InDesign will help us build footnotes and the software will even import the footnotes from Microsoft Word. InDesign users get their very own configuration panel seen in the image alongside here. In this we can set the way the references are displayed in the text (superscript etc), and how the footnotes appear at the bottom of the page. We need a paragraph style set up for the display of the footnotes themselves and we can (optionally), use a character style for the reference figure in the text.

As you can see from the first example spread the footnote list figure is aligned to the left edge of the text box. You will often see this in the books on your shelves, however, a more attractive arrangement is to 'outdent' these listed figures so that the footnotes are aligned to the text and the number figures are offset from this text box.

InDesign does **not** provide the means to set footnotes outside the text box, so we need to plan for this by indenting all of the text inside the text box by an amount that we then remove from the left margins. This way we can outdent the footnote numbers. You will see from the image provided here that we are using guides to make sure that these items align. My footnote style is using a 4mm offset for the numbers and my paragraph styles are using a 4mm indent.

Footnotes on the Web

The reference or source anchor no longer needs to be *after* the reference, but can be *within* the reference.

In this changed version we see that the whole phrase is the link.

text itself:

Sidenotes (sometimes called Margin Notes)

Clearly the page layout needs to provide the space in the margins for this to be an option. Unless this is a large-format book, the measure of the notes (width of the text), is likely to be narrow, so don't design for this option [if the notes are long or there are lots of them and, the book is small.](#)

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Footnotes on the Web

Footnotes can be converted to side notes with Javascript/jQuery.

Andrew Clark has created a very elegant way to convert footnotes into side notes when the width of the page allows for it.

Although the side notes are converted the footnotes still remain.

jQuery.sidenotes

By Andrew Clark

¹ Wanna see something cool? Resize this page and watch how this note adapts to different screen sizes. ↵

² Useful for floated sidenotes. ↵

Transform [Markdown](#) footnotes into superpowered¹ sidenotes.

Try it out now by changing the size of your browser window. At full width, notes on this page are rendered as sidenotes. At medium width, they are placed directly after their reference in the text. At small widths, they are rendered as normal footnotes.

You can also use this page's [key bindings](#) to experiment with the API. For example, press **h** and watch what happens. (Press **s** to reverse the change.)

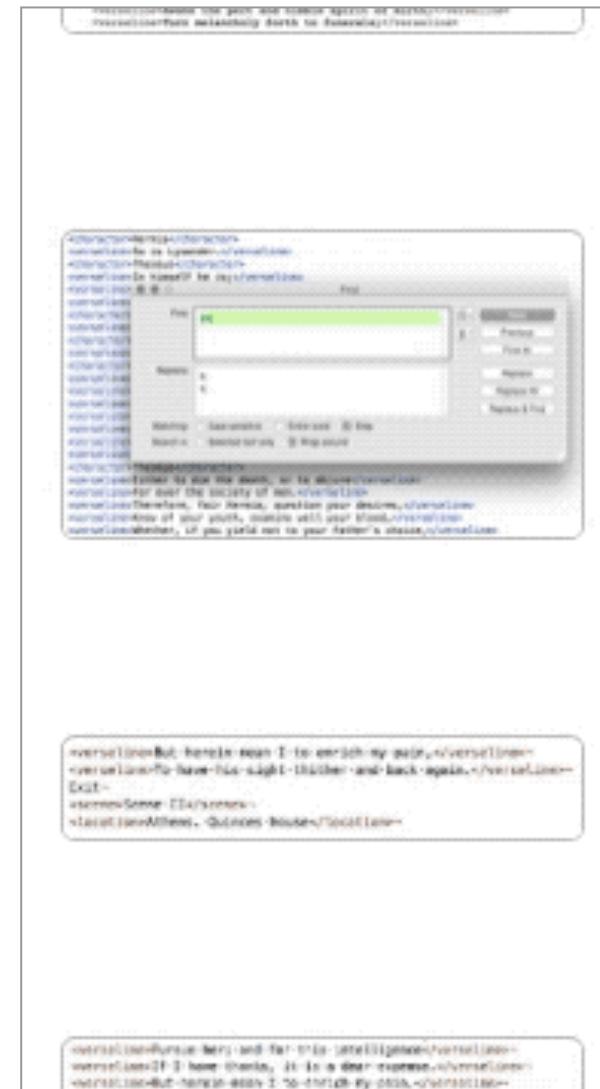
Features

- Transform your footnotes into sidenotes. ↵
- Toggle between footnotes and sidenotes, for instance, in responsive designs.
- Toggle between placing the sidenotes before² or after their reference in

Popup Notes

Popup Notes

With some elegant javascript we can turn these footnote references into popup links and this means we need never lose our place in the reading flow.



Empty Tags

If you find an opening and closing tag with no content between those tags, then you have empty paragraphs.

This section of XML shows that there must have been an empty paragraph before the stage directions.

Fixing Errors

Of course you can edit the XML, but it is better to go back to InDesign and make these corrections there and then re-export.



Forced line breaks

Force line breaks (sometimes called 'softbreaks') are achieved by using **SHIFT-RETURN**. They are sometimes used to keep text within a paragraph or

This jQuery converts the footnote into a popup box for the destination and also provides the standard footnote at the bottom of the web page.

Tool Tips

This is a block of text that will appear as the mouse cursor **hovers** over the reference point in the text.

Responsive web sites that work well on mobile devices can't rely on the hover action to invoke these popups, since **hover** is not an option on devices that use **swipe** as a default action.

Tight pants next level keffiyeh [you probably](#) haven't heard of them. Photo booth beard raw denim letterpress vegan messenger bag stumptown. Farm-to-table seitan, mcsweeney's fixie sustainable quinoa 8-bit american apparel [have a](#) terry richardson vinyl chambray. Beard stumptown, cardigans banh mi lomo thundercats. Tofu biodiesel williamsburg marfa, four loko mcsweeney's cleanse vegan chambray. A really ironic artisan [whatever](#)  keytar, scenester farm-to-table banksy Austin [twitter handle](#) freegan cred raw denim single-origin coffee viral.

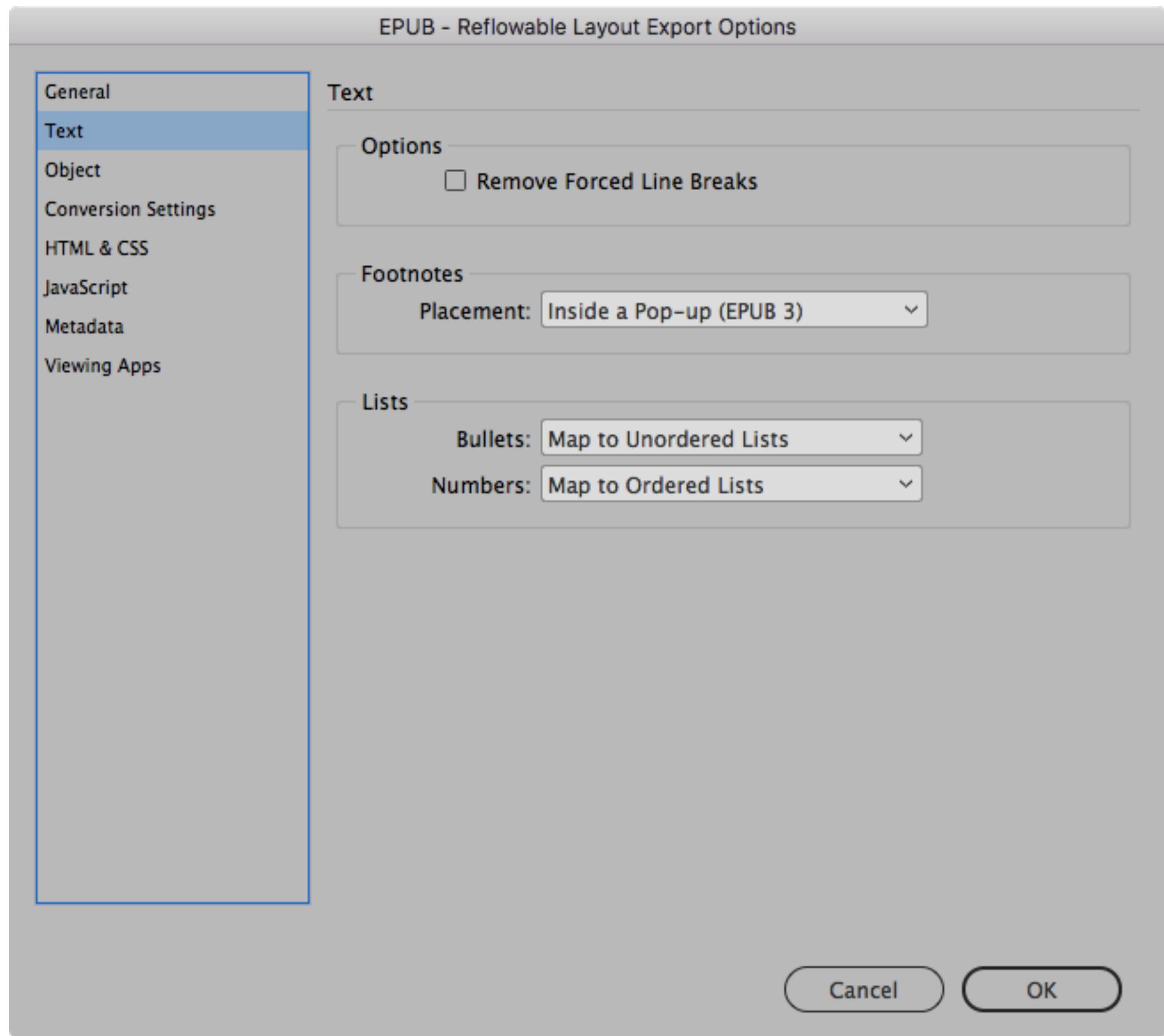
Footnotes in eBooks

For the reflowable eBook

The reflowable ePub3 format does support popup notes.

When you export from **InDesign** to ePub (reflowable), you have an option to convert your footnotes to pop-up notes.

This will take the notes from the foot of the page, wrap them in an HTML tag **<aside>** and add the necessary ePub3 classes in the HTML code. In fact you will get an attribute added to the hyperlinked number



The reflowable eBook

The pop-up note reference is supported by Apple in their iBooks app for MACs and iOS on tablets etc.

Adobe Digital Editions 4.5 support popup notes.

The later versions of the Kindle also support popup notes from footnotes.

You can no longer use *ibid*

Birth and Parentage

The record of baptism of April 26, 1564 is the only evidence we possess of the date baptised when only two or

1

This reference was discovered among the Plume MSS. (1657-1663) of Maldon, Essex, by Dr. Andrew Clark, in October, 1904. Sir John Mennes was, however, not a contemporary of John Shakespeare, but doubtless merely passed on the description from some eyewitness.

cheekt old man, that's ..., 'Will was a good honest fellow, but he durst have crackt a jesst with him att any time.'

John Shakespeare's father, **Richard Shakespeare**, was a tenant farmer, who was in 1550 renting his little farm at Snitterfield, four miles north of Stratford, from another farmer, Robert Arden of Wilmcote. John Shakespeare married Mary Arden, the daughter of his father's rich landlord, probably in 1557. He had for over five years been a middleman at Stratford, dealing in the produce of his father's farm and other

Here is what the popup looks like within Apple iBooks

The fixed-layout eBook

- There is no automatic way to get notes to be interactive.
- No conversion of footnotes to popup notes will be found as an option.
- Getting interactive supplementary information to display on the fixed layout ePub page needs extra work
- We can use InDesign's buttons and animation feature to achieve this.

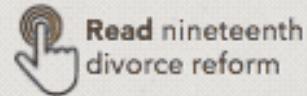
What we can achieve with fixed-layout ePub.

Here is the ePub version of Medea, a performance history for the APGRD (The Archive of Performances of Greek and Roman Drama)

Objects can be made to animate onto the page

Legouvé, Médée (1856)

However, the New Woman, who emerged at the end of the nineteenth century, did have forebears on the stage, especially in mid-nineteenth-century burlesques. Here the figure of Medea, as the abandoned wife and mother, was adapted to address the debate about divorce legislation (mid-1840s onwards) and to provide a sharp critique of the patriarchal system.



Read nineteenth century
divorce reform

Mark Lemon's *Medea: or, a Libel on the Lady of Colchis* and Robert Brough's *Medea: or, The Best of Mothers, with a Brute of a Husband* premiered in 1856, at London's Adelphi and Olympic Theatres respectively.

Both burlesques were in response to a radical feminist French *Médée* by Ernest Legouvé, which was concurrently appearing on the London stage with the Italian actor Adelaide Ristori in the title role.

In the last part of Legouvé's play, there is never any doubt that Medea's love for her children exceeds her hatred for Jason; she is driven to infanticide only when surrounded by a mob of Corinthians determined to kill the children.



FRANCO-HISPANO-AMERICANO

Above: Postcard, by Franco-Hispano-American company, showing Adelaide Ristori as Medea, embracing her two children.
©MNAC The Museu Nacional d'Art de Catalunya CC BY-NC-SA

One of my MA students created this enhanced eBook of Mozart's *Magic Flute*.

The eBook by MA student Maria Hock included music and narrated popup notes.



One day, Soferl overhears a conversation between two men. The taller one complains: »Listen, Mozart, you really have to finish your music. It's only two months until the *premiere*, and still, some major parts are missing!« - »Don't bother me, Schikaneder«, grumbles the other one. »I'll *compose* the music as soon as you write a decent story.« The men get on a carriage and drive away.



Soferl wonders: »Who were those men? And which premiere were they talking about?«

iBooks Author

- This Apple only authoring tool creates, what Apple call multi-touch books.
- There are many features that make it possible to add supplementary content.
- I shall show some of my student's work on their Shakespeare plays that demonstrate some of these features.

Here we see the glossary used to provide extra information for these geographical locations within the play *The Comedy of Errors*.

Created by MA student Sam Ashcroft

SCENE 1

A hall in the Duke's palace

ENTER THE DUKE OF EPHESUS, AEGEON, THE MERCHANT OF SYRACUSE, GAOLER, OFFICERS, AND OTHER ATTENDANTS

AEGEON

Proceed, Solinus, to procure my fall,
And by the doom of death end woes and all.

DUKE

Merchant of **Syracuse**, plead no more;
I am not partial to infringe our laws.
The enmity and discord which of late
Sprung from the rancorous outrage of your ~~duke~~
To merchants, our well-dealing countrymen,
Who, wanting guilders to redeem their lives,
Have seal'd his rigorous statutes with their bloods,
Excludes all pity from our threat'ning looks.
For, since the mortal and intestine jars
'Twixt thy seditious countrymen and us,
It hath in solemn synods been decreed,
Both by the Syracusians and ourselves,
To admit no traffic to our adverse towns;
Nay, more: if any born at **Ephesus**
Be seen at any Syracusan marts and fairs;
Again, if any Syracusan born

Come to the bay of Ephesus—he dies,
His goods confiscate to the Duke's dispose,
Unless a thousand marks be levied,
To quit the penalty and to ransom him.
Thy substance, valued at the highest rate,
Cannot amount unto a hundred marks;
Therefore by law thou art condemn'd to die.

AEGEON

Yet this my comfort: when your words are done,
My woes end likewise with the evening sun.

DUKE

Well, Syracanian, say in brief the cause
Why thou departed'st from thy native home,
And for what cause thou cam'st to Ephesus.

AEGEON

A heavier task could not have been impos'd
Than I to speak my griefs unspeakable;
Yet, that the world may witness that my end
Was wrought by nature, not by vile offence,
I'll utter what my sorrow gives me leave.
In Syracuse was I born, and wed
Unto a woman, happy but for me,
And by me, had not our hap been bad.
With her I liv'd in joy; our wealth increas'd
By prosperous voyages I often made

In this version of
Twelfth Night MA
student Alicia Ballard
has used both
glossary and popup
notes.

BIRTH AND PARENTAGE

The record of baptism of April 26, 1564, is the only evidence we possess of the date of Shakespeare's birth. It is probable that the child was baptised when only two or three days old. The poet's tomb states that Shakespeare was in his fifty-second year when he died, April 23, 1616. Accepting this as strictly true, we cannot place the poet's birthday earlier than April 23, 1564. There is a tradition, with no authority, that the poet died upon his birthday.

John Shakespeare, the poet's father, sold the products of near-by farms to his fellow-townspeople. He is sometimes described as a glover, sometimes as a butcher; very likely he was both. A single reference, half a century later than his day, preserves for us a picture of John Shakespeare. The note reads:

He was a glover's son. Sir John Mennes saw once his old father in his shop, a merry-cheekt old man, that said, Will was a good honest fellow, but he durst have crackt a jesset with him att any time.



John Shakespeare's father, **Richard Shakespeare**, was a tenant farmer, who was in 1550 renting his little farm at Snitterfield, four miles north of Stratford, from another farmer, Robert Arden of Wilmcote. John Shakespeare married **Mary Arden**, the daughter of his father's rich landlord, probably in 1557. He had for over five years been a middleman at Stratford, dealing in the produce of his father's farm and other farms in the neighbourhood. In April, 1552, we first hear of him in Stratford records, though only as being fined a shilling for not keeping his yard clean. Between 1557 and 1561 he rose to be ale tester (inspector of bread and malt), burgess (petty constable), affeorer (adjuster of fines), and finally city chamberlain (treasurer).

Eight children were born to him, the two eldest, both daughters, dying in infancy. William Shakespeare was the third child, and eldest of those who reached maturity. During his childhood his father was probably in comfortable circumstances, but not long before the son left Stratford for London, John Shakespeare was practically a bankrupt, and had lost by mortgage farms in Snitterfield and Ashbies, near by, inherited in 1556 by his wife.

EDUCATION

William Shakespeare probably went to the **Stratford Grammar School**, where he and his brothers as the sons of a town councillor were entitled to free tuition. His masters, no doubt, taught him Lilly's Latin Grammar and the Latin classics, — Virgil, Horace, Ovid, Cicero, Seneca, and the rest, —and very little else. If Shakespeare ever knew French or Italian, he picked it up in London life, where he picked up most of his amazing stock of information on all subjects. Besides Latin, he must have read and memorised a good deal of the English Bible.

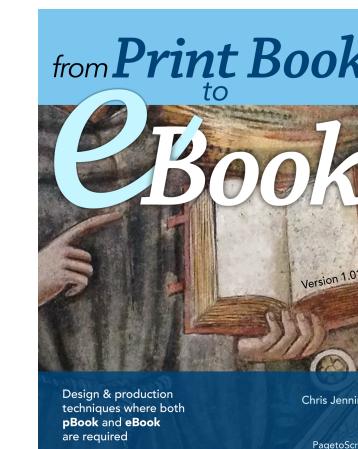
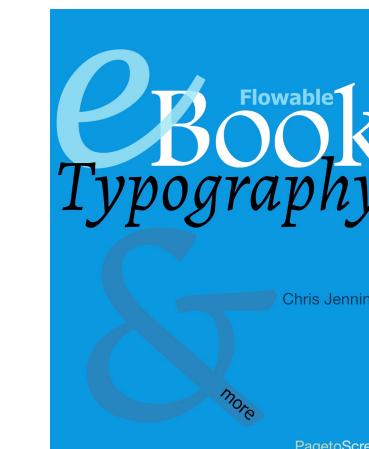
Concluding

- Supplementary information has been used in documents for centuries and even before Gutenberg
- Footnotes & Endnotes are a burden for the reader, and with our screen reading experience, the popup note makes navigating this information so much more usable and compelling.
- Digital publishers should convert their **out-of-the-flow** content to be interactive through click or touch.



Thank You

Chris Jennings 2018



publisha.github.io

@pageboy

publisha.github.io/papers/footnotes/