# Marks, Spaces and Boundaries 

PUNCTUATION (AND OTHER EFFECTS) IN THE TYPOGRAPHY OF DICTIONARIES ,

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## ABSTRACT

Dictionary compilers and designers use punctuation to structure and clarify entries and to encode information. Dictionaries with a relatively simple structure can have simple typography and simple punctuation; as dictionaries grew more complex, and encountered the space constraints of the printed page, complex encoding systems were developed, using punctuation and symbols. Two recent trends have emerged in dictionary design: to eliminate punctuation, and sometimes to use a larger number of fonts, so that the boundaries between elements are indicated by font change, not punctuation.

## SIMPLE?

We think of the simplification of typographic presentation as a recent development, and this certainly applies to reducing the amount of punctuation in a text: road signs contain no punctuation, and normally only one size of lettering; the title-piece of the Wall Street fournal with its closing period is a quaint nod to a vanished past of metal type and fussy Victorian title-pages; salutations and initials have lost their stops. We are now used to the numerals in lists and newspaper headlines not being followed by full-stops. We expect dashes in text to be regularized to en- or em-rules, and not to have the rhetorical variation in length that we see in eighteenth-century fiction. So to learn that this dictionary entry, with simple un-stopped numerals and lower-case definitions, dates from the eighteenth century may come as something of a surprise.

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SPIRIT, (of fpiritus, L. of fpiro to breathe)
    7. a fubflance diftinct from matter.
    2 virtue, or fupernatural power that ani-
        mates the foul.
    3 foul.
    4 ghoft of a dead body.
    5 genius, humour, or nature.
    6 principle, as to do any thing out of a
        fpirit of charity.
    7 \text { wit, of lizelinefs.}
    8 courage, or pride,
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Figure 1: Benjamin Martin, Lingua Britannica Reformata, 1749
And it is something unusual for its period. Here is a more normally capitalized and punctuated edition of another text of the same period (a condensed edition of Johnson's Dictionary).


Figure 2: Samuel Johnson, Dictionary, octavo edition, 1760

Or more complex still.

[^0]Figure 3: Samuel Johnson, Dictionary, quarto edition, 1777

And if we are expecting punctuation, indeed dictionary presentation as a whole, to get simpler and more open over the centuries, we may be disappointed when we arrive at the early twentieth century, and find an example like this (figure 4).

Note how much typographic coding is applied to an entry such as Puseyism. Almost every word is in a different font (some in more than one), abbreviations are freely used and parts of the entry are bracketed. A plus sign is used. And Figure 5 is an example of almost impenetrable typographic coding from the 1970 s.

So what are dictionary compilers and printers trying to do with punctuationindeed with typography generally? Does complex information have to be presented with a complex typography? And is that complexity always the same as obscurity? Have dictionaries been getting more complex?
porsievre, $f_{.}$L PRO(sequere, -ire, pop. varr. of sequi follow)
pursu*er, $n$. In vbl senses, also: (Civil \& Sc. Law) prosecutor. [-ER $\left.{ }^{1}\right]$
pursui't (-ūt), n. Pursuing, esp. in p. of (animal, person, one's object); profession, employment, recreation, that one follows. [f. AF PURseute, fem. p.p. \& n. as PURSUE]
pur*suivant (-sw-), n. Officer of College of Arms below herald ; (poet.) follower, attendant. [f. OF porsivant (as PURSUE, see -ANT)]
pur"sy ${ }^{1}$,a. Short-winded, puffy ; corpulent. Hence pur'siness n. learlier -ive f. OF polsif (polser breathe with labour as PULSATE)]
pur ${ }^{+}$sy $^{2}$, a. Puckered. [f. PURSE ${ }^{1}+-Y^{2}$ ]
pux'tenance, n. (archaic). Inwards, pluck, of animal. |earlier form of PERTINENCE]
pū${ }^{*}$ ulent, a. Of, full of, discharging, pus.
 lently ${ }^{2}$ adv. [f. Li purulentus (PVS, see-LENT)] purvey* (-và), v.t. \& i. Provide, supply, (articles of food) as one's business; make provision, actas purveyor, (for person, army, \&c.). [f. AF PURveier PROVIDE]
purvey"ance, n. Purveying; right of crown to provisions \&c. at fixed price \& to use of horses \&c. [f. OF porveance, as PROVIDENCE] purvey ${ }^{\circ}$ or, $n$. One whose business it is to supply articles of food, esp. dinners \&c, on large scale, as P. to the Royal Household; (Hist.) officer making purveyance for sovereign. [f, AE purveour (as PURVEY, see -OR ${ }^{2}$ )]
pur"view (-vū), n. Enacting clauses of statute; scope, intention, range (of act, document, scheme, book, occupation. \&c.) ; range of physical or mental vision. [f. AF purveu provided, p.p. as PURVEY]
püs, $n$. Yellowish viscid matter produced by suppuration. [L, gen. puris]
Pü'seyism ( - zì $)$, n. (Hostile term for) TRACTARIANISM. So Pu*seyite ${ }^{1}$ n. [E. B. Pusey d. $1882+-$-1SM]
push ${ }^{2}$ (poo-), v.t. \& i. Exert upon (body) force tending to move it away; move (body up, down, away, back, \&c.) thus; exert such pressure, as do not p. against the fence; (Billiards) make push-stroke ; (of person in boat) p. off, p . against bank with oar to get boat out into stream \&e.; (bibl.) butt (t. \& i.) with the horns; (cause to) project, thrust out, forth, \&c., as plants p. out new roots, cape pushes out into sea; make one's way forcibly or persistently, force (one's way) thus; exert oneself esp. to surpass others or succeed in one's business \&c., whence pu'shing ${ }^{2}$ a., pu'shingly ${ }^{2}$ adv.; urge, impel, (often on, to do, to effort \&c.) ; follow up, prosecute, (claim \&cc., often on); engage actively in making (one's fortune); extend (one's conquests \&c.); p. (matter) through, bring it to conclusion; press the adoption, use, sale, \&c. of (goods \&c.) esp. by advertisement ; press (peron) hard, as do not wish to $p_{i}$ him for payment, esp. in pass., as am pushed for (can scarcely find) time, money; p. pin, a child'sgame. Hence pu'sher ${ }^{1}(1,2) \mathrm{n}$. [f. F pousser as PULSATE] push ${ }^{2}$, $n$. Act of pushing, shove, thrust ; (Billiards) stroke in which ball is pushed, not struck: exertion of influence to promote person's advancement; thrust of weapon or of beast's horn; vigorous effort, as must make a p. to get it done, for home; continuous pressure of arch \&c.; pressure of affairs, crisis, pinch ; enterprise, determination to get on, self-assertion, whence pu'shrul a.; (slang) gang of thieves, convicts, \&c. [f. prec.]
pü'shtōo, -tu ( $-\overline{00}$ ), n. Afghan language. f. Pers. pashto]
pūsilla'nimous, a. Faint-hearted, mean-
spirited, Hence or cogn. pusillani*mity n., pusilla'nimouscy ${ }^{2}$ adv. [f. ecc]. I pusil. lanimis (pusillus petty + animus soul) + ous] puss (poos), n. Cat (esp, as call-name); (quasiproper name for) hare, tiger ; (colloq.) girl, as sly $p_{\text {; }} p_{.-m o t h, ~ l a r g e ~ E u r o p e a n ~ m o t h . ~[c f . ~ D u . ~}^{\text {E. }}$ poes, Norw, puse, perh. orig. a call]
pu'ssy, n. (nursery). $P$ (-cat), cat ; (nursery) soft furry thing, e.g. hazel catkin. $\left[-1^{-3}\right]$ pu'stūlāte, v.t. \& i. Form into pustules. So pu*stulate ${ }^{2}(-a t) a_{n}$, pustula'rion n. [f. LL pustulare, as foll.]
püstule, $n$. Pimple ; malignant p., disease caused by anthrax bacillus; (Bot., Zool.) wart, wart-like excrescence. Hence or cogn. pu"s" tular ${ }^{1}$, pu'stulous, aa. [f. L pustula (PUS)] put ${ }^{1}$ (poot), v.t. \& i. (put). 1. Propel, hurl, (the veight, stone) from hand placed close to shoulder as athletic exercise ; thrust (weapon), send (missile), as p. a knife into, stab, put a bullet through, shoot; (Naut.) proceed, take one's courge, back, forth, in (to harbour \&c.), out, in ship; move (thing \&c., lit. \& fig.) so as to place it in some situation, as $p$. it in your pocket, on the table, up the chimney, down the well, p. (mark, write) a tick against his name, four signature to it, p, the horse to (the cart), harness him, p. bull to cow or cow to bull (for breeding), $p$. (convey) him across the river, $p$. the children to bed, p. him in prison, cannot p. (delivei) Russian stock at present prices, has p. (infused) new life into him, will p. (present) the matter clearly before her, $p$. a sPoKe in his wheel, p. the words into his moU'H ${ }^{1}, p$. one's FOOT in it, one's sHOULDER to the wheel, hand to the PLOUGH ${ }^{1}$; (with less or no idea of physical motion in space) bring into some relation or state, as p. yourself, the matter, in(to) my hands, time he was p. (began to go habitually) to school, $p$. it to (offer it for) sale, on the market, p. Othello on (the stage), produce it, $p$. (add) milk to your tea, should $p$. (price) it at $2 / 6$, puts (estimates) the circulation at $60,000, p$. (translate) it into Dutch, cannotp, it into(expressitin) words. what a way you have of putting things 1 , puts (sets) no value on my advice, Ip. (base) my de cision on the grounds stated, p. (apply) it to a food use, $p$. (imagine) yourself in his place, $p$ (substitute) the will for the deed, p. a good FACE on it, $p$. an end, period, stop, to it, stop it, p. a check or stopper on it, a veto on it, check it, forbid it, $p$. an end to (destroyed) himself or his life, $p$. (stake) money on a horse, $p$. his money into (invested it in) land, $p$. (submit) the case to him, to the rote, Ip. it (appeal) to you, I p. it to you (invite you to acknowledge) that you were after no good, dues were $p$. (imposed) on cattle, every insult was $p$. (inflicted) on him. don't be p. upon (victimized) by him, $p$. (lay) the blame on me, p. him (caused him to be) at his ease, in fear of his life, out of temper, on his guard, on his mettle, p. him (make him speak) on (his) oath, $p$. the servants on (allow them) board wages, $p$, the proposal into shape, p. his NOSE ${ }^{1}$ out of joint, a few words will $p$. (make) the matter right, always manages to $p$. me (make me appear) in the vorong, p. out of COUNTENANCE ${ }^{1}$, must have $p$. (made) the clock fast (by advancing hands), p. (subject) them to death, torture, ransom, expense, inconvenience, the test or trial, the rack, the sword, confusion, shame, land was p. into or under (sown with) turnips, $p$. (set) him to mind the furnace, what has p. him on meddlling (induced him to meddle)?, on this wild scheme ?, p. my horse to or at (invited him to jump) the fence, (of horse \& fig. of person) must be p. through (made to perform) $h$ is paces, $p$, him(make him read) through

Figure 4: Concise Oxford Dictionary, 1st edition, 1911
gãme ${ }^{2}$ a. Like a gamecock, spirited ( $\mathrm{DIE}^{2} \sim$; as $\sim$ as Ned Kelly, (Austral. colloq.) very brave); having the spirit or energy to do; ready for. [f. GAME ${ }^{1}$ in obs. sense 'fighting spirit'] game $^{3}$ v.i. \& $t$. Play at games of chance for

Figure 5: Specimen page prepared for Concise Oxford Dictionary, 6th edition

Punctuation marks indicate the boundaries in text, and in continuous prose may be the only guide to the reader of the text's structure, dividing sentences into clauses and indicating the rhetorical value of a string of words. Complex typography can indicate structural boundaries in additional or alternative ways, even if the text has to be presented in a linear fashion, and conventional punctuation marks can to some extent be eliminated if the reader can infer how to read from the typographic presentation. In displayed typography, where there is relatively little constraint on the space that can be occupied, vertical space-between heading and text, between different kinds of paragraph-is the most effective form of typographic articulation, partly because it can be carefully graded-so we can tell the difference between the larger space above a heading and the smaller space below, and understand the heading's closer connection with the material that follows. Where space is limited, the paragraph indent allows for segmentation of a column of text without the need for additional vertical space between paragraphs. The standard paragraph indent has come to be the minimum indication necessary of a break in the text's structure in print, one that we can recognize but glide over with ease, one that does not disrupt the reader's sense of the continuity of the text.

In a continuous printed text it is less easy for the reader to infer continuity when paragraphs are set full out and divided by vertical space. The spaced, fullout paragraphs favored by some designers in the mid-twentieth century for books can work in specific contexts where space is not at a premium, and where it is important for the reader to understand clearly the paragraph structure of the text-web pages are a good example of this-but in print such spaces often imply too much fragmentation of a text for continuous reading. They emphasize the unit of the paragraph at the expense of the whole. The indented paragraph minimizes the individual paragraph's status relative to the whole text; vertical space (or a hanging indent) emphasizes the paragraph's separateness. And the hanging indent has greater power to indicate a significant division because of the potential emphasis it places on the first word.

Dictionary entries have experimented with a variety of devices to indicate the whole text's division into entries, and the division of those entries into their constituent parts-headwords, grammatical information, etymology, pronunciation, senses, definitions, examples and notes. As dictionaries have grown in complexity, the need for easy access to component parts of an entry has grown, and the solution to this has been found in the careful mapping of distinctive typography to constituent elements.

Not surprisingly, dictionaries with relatively simple structures can be accommodated by relatively simple typography. The earliest dictionaries were glossaries, essentially simple lists. The conventional use of roman and black letter could be used to separate the Latin (roman) and vernacular (black letter) visually with absolute certainty, removing the need for punctuation (the example is Coote's English Schoole-maister, 1596).

## Englifh Schoole-maiter. 75

ta feeach.
affect carncut ocurte. affinitic tatme by marriasse, affirmatiuc auoucbing. affrance trutt. affianced betrotbeb. agent Doer. aggrauat make gricuous. agilitie nimblenes. agonie g. benufe pation. alacritie checrefulnes. alarum afount to alien aftranger. alienation eftranging. alight. alledge* bzing pzoofe. alliance hinozeoozleague. allufion pointing to. allude to popat to. aliment nourifigment. almes. almightic. alphaber g. apoer of letters. altercation Debate. allegorie g. fimfilube. allegiance obevience. altitude befgbt. allegation allebging. ambafadour * metienger. ambiguous soubtfull. ambition Defire of bonour. amburhmeut pizutetraine. morous tull of lous. amplifie eniarge. anatonsie g. cutting bp. anathema g. accurfor andiron.
anguifh griefe. anchor. animate entourage. annuall peetely. animaduerfion noting. antichrift againtit cbati. antidate a fozerbate. anticipation prenenting. angle coaner. anticke Difguifeo. g.orgr.fanannihilate make bofo. decthor anceftour. Greeke.
annullitie fee ammfoflate. aphorifme generall rule. apoftate g. a backellipar. apoftocic falling alway. amen folbe it. apofle g. ree ambattadour. apolugic g. befence. apocalypie reuelation. alpha g E firt $\mathbb{E}$ ráke letter. apothecaric. ${ }^{\circ}$ apocrypha not of autbazifie. apparant in fifgbt. appeach accurfe. appeale to freke to a bigher 3ubge. appertaine belotrg, $\left.\begin{array}{l}\text { appertinent } \\ \text { appurtenance }\end{array}\right\}$ belongting. appetite bcfire to eate application spplying to. appofe afkequettion. appofition appofing. approbation allofmance. approue alloto. apprech ${ }^{*}$ comentgb. Iz appro

Figure 6: Edmund Coote, The English School-maister, 1596

The work of Robert Estienne (1503-59), who was both a lexicographer and a printer, can be seen as a turning point in using typography effectively to allow complexity in dictionaries.

Conduco, condûcis pen. prod conduxi, sooduâum,con-
dücere Plaut. Emmener, Mener ouce foy.
©Conducers, Congregare.Cic. Virgines in vnum Loeza conduxerunt $O x$ afimblien un ticu.
Exercitusin vnum conducere. Tacis.
Partes conducere in vnum. Lucres.
CConducere. Plaut Achster.
Nimium magno conducere. Cic. Ashter trop chrr.
© Códucere aliquem. Pleut. Louer aunun a fare quelqua theq. Aliquern ad cxdem faciendam conducere.Cic.
Hortum conducerc.Cic. Domum conducere.Cie.
Alscui locum in proximo conduccre.Cic.
Nauigium conducere. Horat.
Conducere merede Cic.
Conducerc nauem. Plaub. Loure, ou prendres slouage.
©Conducere, etian dicitur is qui pretiuns accipit prore. ahqua factenda Iulianus Iureconfulus. Entrequendregobque befongne a fure pour qualque quis.
Ad pecuntam numcratam conducere. Caies a laģun.
Redenıptor qui columnamillam de Cotta \&ede Torquato conduxerat faciendam. Cic.ld eft,à Cotta,\&e.
Multitudo conducta.Cic.Afemblee de merrenaires.
©Conducrt, in tertiis porfonis, pro Vtilcett. Plaus, Cis,

- vale ve proufuablejtl dort, il pf dufans.

Ea maximé conducune, que funt rectıflima. Cic.
Nequehomintinfantuaut impotenti inıuftè facacosducunt.Cic.
Conducte hoc tus laudi. Cic.
Propofito conducere res dicitur. Horse. Quis consint a propor.
Rationbus noftris conducit id fieri.Cic.
Conduciz hoc Rcip.ratiombus.Cic.
Saluti tua conducunt.Cic.
Conducunt hac ad ventris viłtum. Plaut.
In rem quod rediè conducat tuam. Plaut.

Conclaino, as,are, a.p.Simul clamare, clamare. $\boldsymbol{\mu \mu \beta e q u y}$. \{ Ital. Gridare infleme, gridare. Gall. Crier enfemble, sefcrier. Hifp. Liamar dindo thoces. Germa. Miffhicien, zifamenfchreien. \} Cic. 6. Phil. Quum nos uniuerfi una mente ato uoce iterum à me conferaztam effe Rempub.conclamaftis. Tacit.lib. Conclarnant patres, cor pus ad rogum humeris Senatorum feretdum. ¢f Conclamare, pto fimplici Clamare. Cerfar r.bel. Gallic. Qnos quarh apud fe in car ftris Ariouiftis confpexiffer, exercitu fuo praferite conclamauit quid ad fe uenitent. TConclamare usfa, militarls eftlocdtio, pró denunciare inter millites, ut uxfi colligant:quöd fiebat quam exercitos moturus crat caitra. vivajuyin sяu diveep. Cxfar lib.i. bell. Ciu. Quo cognito, fignum dart iubet, \$̌ uafa militari more concla mari. ¢Cöclamatum eft, hoceft, tranfaturn \& finitum eft. ж simpe $\pi \tau \kappa \pi$. \{ Ital. Egh̀ finito. Gall. Tout eff feit. Hifp. Le cofa effe dcdbde da. Germ. Diefachifffchon vber hin,esiff fhon befchehen. \} Quod locutionis genus ab ijs trittam putatur, qui morieritibüs amfintur Solent enim illi cadaucrum recens exanimitorum faciem identidem frigida ablucre, nomen's corum clara uoce inclamare, ne fortè fyncope correptos pro mortuis funerarent. Nam qui animi deli quium pìtiuntur, mortuis fimilimi fant:unde \& nonnullos pro mortuis claros, \& a rogo relatos accepinus. Quurn itag affufa fob inde frigida,riomine'g fapius inclamato nihil proficeretur, poff al cimam conclanatiohem re iam defperata comburebätur. §Hine corpora conclatmata dicuntur, hoceft, deplorata, quibuf\$ extremum hoc conclamationis praftitum eft officiurn. Luca. -corporz nondum Conclamata iacent.
Conclamatio, onis, uerbàle naтébò̀,vazaßónotя. ई Ital. Cridodi piu genti.Gall. Cri de plufieurs dems. Hifpan. Aquello Ilamado con bo zes. Ger.Das jüfammen fohreieriviler. $\}$ Clamormultorum Seneca quam aliquaz conclamatio eft quomodo exeat, hôn quuld efferat, quirrit.

Figure 7: Robert Estienne, Dictionarium Latino-Gallicum, 1552
Figure 8: Ambrogio Calepino, Dictionarium, Basel edition, 1550

The clarity of Estienne's entries is achieved by the use of three sizes of type, and his contrast of roman and italic fonts (here, roman for Latin and italic for French), but punctuation plays its part, with the paragraph mark being used to indicate the main sense divisions. When a printer has to make his entries more compact, as in Calepino's multilingual dictionary where the entire entry is set as a single paragraph, the boldness of the paragraph mark becomes an even clearer organizing principle in the entry.

Because we can easily discriminate different tonal values within a block of text, bold marks and bold letters are the most effective way of picking out a section or a word for our attention; they act as a form of visual punctuation. We might even perceive italic as a variant (as in the examples above) because we perceive the tonal and rhythmic disruption of the text rather than because we perceive the type as sloped.

A-băn'don, n. 1. The act of abandoning or deserting; relinquishment. [Obs.]
2. One who abandons, or who is abandoned; one forsaken. [Obs.]
-I-ban-don' (a-ban-dong'), n. [Fr. See supra.] A complete giving up; hence, an utter disregard of self, arising from absorption in some favorite object or emotion, and sometimes a disregard of appearances, producing either careless negligence or unstudied ease of manner.
A-băn'doned, p. a. Given up, as to a vice; hence, extremely wicked, or sinning without restraint; irreclaimably wicked; as, an abandoned youth; an abandoned villain.

Syn.-Forsaken; deserted; destitute; abject; forlorn; profligate; corrupt; vicious; depraved; reprobate; wicked; heinous; criminal; vile; odious; detestable. Abandoned, Profligate, Reprobate. These adjectives agree in expressing the idea of great personal depravity. Profigate has reference to open and shameless immoralities, either in private life or political conduct; as, a profigate court, a profigate ministry.

You are so witty, proflogate, and thin,
At once we think thee Milton's Death and Sin.

Figure 9: Webster's Dictionary of the English Language, 1886

Up to the nineteenth century only roman, italic and small-capital fonts were available to printers; the only bolder letterforms were black-letter, which had a distinct rhetorical meaning: that the text was in the vernacular, in English, not in Latin or another of the international languages of learning. The English Schoolemaister is a book of hard words, that is it introduces the reader to an aspirational vocabulary of Latinate and French forms: Latinate 'active' for the Anglo-Saxon 'nimble,' French 'affianced' for 'betrothed.' Black-letter could therefore be useful for headwords and other emphasis, but only where its use coincided with its association with the vernacular; headwords are shown in black-letter as late as Kersey's 1706 edition of Phillip's World of Words. In Francis Junius's etymological dictionary (published 1743) the different Germanic languages are set in different black-letter fonts to identify them, and the visibility they achieve through their boldness is accidental. Black-letter was replaced by headwords in capitals or a combination of capitals and small capitals. The introduction of bold styles of type in the nineteenth century allowed clear articulation of entries on the page, and headwords achieved a new prominence. Bold type (shown above in an 1886 edition of Webster's) would become the main visual punctuation of the page for the reader, and the main signal of the start of a new entry.

The structure of a dictionary entry is essentially a list with nested sub-lists, and this is clearly revealed in the presentation of Johnson's Dictionary. Each entry consists of a headword section (including grammatical and etymological information), then one or more definitions, each followed by one or more illustrative quotations (figure IO).

The text of Johnson's dictionary was relatively unmarked, as paragraphing, indenting and alignment did the work of articulating the structure of an entry. Robert Hunter (Encyclopaedic Dictionary, 1879) and James Murray (Oxford English Dictionary, 1884-) (see figures II, 15 and 16) added a range of typographic cues for various elements, but these were large format dictionaries, and were able to retain spatial organizing features.
> 4. Civil; according to the friit rules of civility; formally reo fpeefful.
> They have a fet of ccremonious phrafes, that run through all ranks and degrees among them.
> 5. Obfervant of the rules of civility.

> Then let us take a ceremomious leave,
> And loving farewel of our feveral friends. Shatep. R. III.
> 6. Civil and formal to a fault.

> The old caitiff was grown fo ceremonious, as he would needs accompany me fome miles in my way. Sidney, b. ii.
> Ceremo'niously. adv. [ffom ceremonious.] In a ceremonious manner ; formally ; refpectful.

> Ceremoniouffy let us prepare
> Some welcome for the miftrefs of the houfe.
> Shate/p. Two Gentlemen of Verona:
> Ceremo'niousness. n. f. [from ceremonious.] Fondnefs of ceremony; ufing too much ceremony.
> CEREMONY. n. f. [ceremonia, Lat.]
> 1. Outward rite ; external form in religion.

> Bring her up to the high altar, that fhe may
> The facred ceremonies partake. Spenfor's Epitbalamium.
> He is fuperftitious grown of late,
> Quite from the main opinion he held once
> Of fantafy, of dreams, and ceremonies. Sbakeff. F. Cafar. Difrobe the images,
> If you find them deck'd with ceremony. Sbakep. F. Cafar.
> 2. Forms of civility.

> The fauce to meat is ceremony;
> Meeting were bare without it. Shakefp. Macbeth.
> Not to ufe ceremonies at all, is to teach others not to ufe them
> again, and fo diminifh refpect to himfelf.
> Bacon.
> 3. Outward forms of flate.

> What art thou, thou idle ceremony?
> What kind of god art thou, that fuffer't more
> Of mortal grief, than do thy worfhippers?
> Art thou aught elfe but place, degree, and form ?
> Sbake/p. Hery V.


#### Abstract

$\dagger$ Brigander 2 . App. corrupt f. Beigadier. 1647 Haward Crown Rev. 22 Brigander. Fee, $£ 10$. Brigander, obs. f. Bergander, sheldrake. Brigande'sque, $a$. [f. Brigand sb.+-esque, after arabesque, etc.] After the style of a brigand. ${ }^{1883}$ Gd. Words July $42 \mathrm{I} / 2$ Now a shepherd would appear with his brigandesque hat. Brigandess (brirgăndés). rare. [f. Brigand + -Ess.] A female brigand. 1865 Moens Eng. Trav. \& It. Brigands, Here I discovered that five of the band were brigandesses. $\mathbf{1 8 6 9}$ Echo 6 Feb., Women with black brows and harsh voices-brigandesses by appearance. Brigandine, brigantine (brigăndīn, tīn). Forms: 5 brigantyn, (bregandyrn, -ardyn), brig-, bryga(u)ndyn(e, (Sc. brikcane-, brekanetyne), 5-6 brigandyne, 6 bregendine, (? 7 brigintine), 6-brigandine, -tine. [Late ME., a. OF. brigandine ( 15 th c . in Littré) : i. e. armour for a brigand (in the original sense): see -INE.] 1. 'Body armour composed of iron rings or small thin iron plates, sewed upon canvas, linen, or leather, and covered over with similar materials, (Planché Cycl. Cost.); orig. worn by foot-soldiers and at first in two halves, hence in early quots. in plural or as pair of brigandines; less strictly perh. $=$ 'coat of mail, corslet'. See Brigander. c 1456 Eng. Chron. (Camden) 66 Armed in a peire of brigaundynez. 1465 Paston Lett. 99 I. 134, J peyr of Bregandyrns kevert with blew fellewet and gylt naile, with legharneyse, the vallew of the gown and the bregardyns viijl li. 1489 Acta Dom. Concilii 132 (JAM.) The said Schir Mongo haid the brikcanetynes contenit in the summondis. $\times 548$ Udall, etc. Erasm. Par.Mark Pref. 4 They haue theyr brigandyne, theyr souldiers girdle. ${ }^{1567}$ Lauc. Wills II. 86 A payre of bregendines. x59I GARRARD Art Warre 9 The Halberdier, who is armed either with Brigandine or Corslet. $x^{\text {rux }}$ Bible fer. xlvi, Furbish the speares, and puton the brigandines [WYCLIF habiriownus; Coverd. brestplates; Vulg. Loricis]. 167 m Milton Samson 1120 Put on all thy gorgeous arms, thy helmet And Brigandine of brass, thy broad habergeon. 1808 Scott Marm. v. ii, Their brigantines, and gorgets light. 1825 - Talism. (1854) 337 He had finished adjusting his hauberk and brigandine. 1874 Boutell Arms \& Arm. viii. 146 A brigandine .. which is covered over with small iron plates of various forms, and mav be called a studded tunic.


Figure 10: Samuel Johnson, A Dictionary of the English Language, 1755
Figure 11: The Oxford English Dictionary, 1884-1933

The need to save space in printed dictionaries means that the linear separation of elements below the level of the entry is not always observed; in compact dictionaries senses and illustrative quotations are generally run on. Compact dictionaries began to appear at the end of the nineteenth century with the publication of Chambers's Twentieth Century Dictionary (1901), and titles such as the Concise Oxford Dictionary (19II) came to dominate the popular market. They contained huge amounts of information, but the need to compress this volume of material, and the decision to make every entry, however complex its structure, into a single paragraph compromised accessibility. These run-on dictionaries removed the overall visual structuring that had oriented the reader within the entry, and meant that the reader had to rely on decoding the increasingly complex coding of typography and punctuation in which they were set. The need to rely on typographic coding rather than spatial organization was compounded by the introduction of mechanical typesetting, which placed a limit on the number of different fonts that could be set at any one time. The example in Figure 12 is from the COD 6th edition (1976 ).

With space no longer an option, modern compact dictionaries would have to rely on typographic cues-font changes and graphic marks-to do this articulation.

[^1]Figure 12: Concise Oxford Dictionary, 6th edition, 1973

## DIVIDING ENTRIES: [BRACKETS] AND (PARENTHESES)

Brackets and parentheses can be used to divide an entry into component parts, or to indicate a special status for the surrounded word, usually it is an example, or some kind of coded information. In many dictionaries, brackets have a catch-all function for any annotation or categorization of the definition, for example editorial comments ('Not in use') or subject field labels ('Botany,' 'Pharmacy'). An early user of such labels was Nathan Bailey and his Dictionarium Britannicum (1730) (left) that uses square brackets for these and exactly the same style for etymologies. Noah Webster's American Dictionary of the English Language (1828) (right) also uses square brackets indiscriminately for etymologies, simple annotations and cross-references.

Anger, a Gold Coin, in Value Ten Shillings, having the Figure of an Angel ftampt on it.
Angel shot, Chain Shot, being a Cannon Bullet eut in two, and the Halves being joined together by a Chain.
ANGEL Bed, an open Bed without Bed-pofts,
Angélica [Botany] an Herb.
Angélical " [ázancxn', Gr.] a famous Dance among the Greeks.

Ang gilical [angelicus, L.] pertaining to, partaking of the Nature of Angels.
Angelical Garment, a Monkifh Garment wlich Men put on a little before their Death, that they may receive the Benefit of the Prayers of the Monks.
Angesicalness [of angelique, F. angelicus, L.] the being angelical, angelical Nature, ©o.

ABBREUVOIR, $n$. [Fr. abreuvoir, from abreuver, to water; Sp. abrevar, id.; from Gr. Bp $\chi \omega$.]
Among masons, the joint between stones in a wall, to be filled with mortar. Dict. [I know not whether it is now used.]
ABBRE'VIATE, v. $t$. [It. abbreviare; Sp. abreviar ; Port. abbreviar ; from L. abbrevio, brevio, from brevis, short; contracted from Gr. Bpaxus, from the root of ${ }^{*}$ break, which see.]

1. To shorten ; to make shorter by contracting the parts. [In this sense, not much used, nor often applied to material substances.]
2. To shorten ; to abridge by the omission or defalcation of a part ; to reduce to a smaller compass; as to abbreviate a writing.

Figure 13: Nathan Bailey, Dictionarium Britannicum, 1730
Figure 14: Noah Webster, An American Dictionary of the English Language, 1828

Etymologies, conventionally placed immediately after the headword or at the very end of the entry, have been surrounded by brackets from the earliest printed dictionaries. A Table Alpbabeticall (1604) includes single-letter codes in parentheses such as (g) for a word of Greek origin. Nathan Bailey's Universal Etymological Dictionary of English (1727) and Dictionarium Britannicum use square brackets around etymological information, and these become the norm, used by Johnson (1755) exclusively for etymologies. Noah Webster (1828) uses square brackets for any editorial note, but the association of square brackets with etymologies was reinforced and improved by James Murray's use in the OED (1884-) (figure 15).

Murray's OED layout features were prefigured by Robert Hunter's Encyclopedic Dictionary (1879), including the use of bolder square brackets to surround etymologies (figure 16). Hunter and Murray both used bold slab-serif type for headwords to

Brigandine，brigantine（bri găndīn，tīn）． Forms： 5 brigantyn，（bregandyrn，－ardyn）， brig－，bryga（u）ndyn（e，（Sc．brikcane－，brekane－ tyne），5－6 brigandyne， 6 bregendine，（？ 7 bri－ gintine），6－brigandine，－tine．［Late ME．，a． OF．brigandine（ 15 th ch．in Littré）：i．e．armour for a brigand（in the original sense）：see－INE．］
1．＇Body armour composed of iron rings or small thin iron plates，sewed upon canvas，linen，or
āid，＊āyde，s．［From the verb．In Fr．aide； Sp．ayuda；Port．ajuda；Ital．aiuto；Lat． adjutus．］
A．Ordinary Language：
I．The act of helping or assisting．
II．The state of being helped．
If In aid：To render assistance．
＂Your private right ahould implous power invade The peers of Ithaca would arm in aid．＂

Figure 15：The Oxford English Dictionary，1884－1933
Figure 16：Robert Hunter，The Encyclopœedic Dictionary， 1879
contrast with the lighter roman used for text；the bolder square brackets give clear boundaries to the etymology which，in these dictionaries，can include many different fonts，and run on for several lines within the headword paragraph．The bold square brackets have a unifying as well as delimiting function．

Parentheses can be used to indicate examples，either to indicate usage options within a definition，or to separate off illustrative quotations．The use of parenthesized words in a definition is intended to offer the reader the opportunity to substitute any appropriate word（＇abandon ．．．to yield（oneself）without restraint＇）， or indicate a specifier or modifier of some kind（＇pitch ．．．To hit（a golf ball）in a high arc ．．．＇）．The parenthesized words may themselves be highlighted by a font change．

Merriam－Webster＇s Collegiate uses angle brackets to distinguish illustrative examples from the parenthesized modifiers（figure ${ }_{77}$ ）；this is necessary because the illustrative examples are set in roman，and therefore have to be set off from the definition．Collins English Dictionary（2000）simply italicizes the examples（figure 18），introducing them with a colon，a much less fussy and more elegant solution．（Colons in the Collegiate and other Merriam－Webster dictionaries have a special function：to introduce the senses and sub－senses of a definition．This allows unnumbered sub－sub－senses to run on．）
pitch $v b$［ME pichen］$v t$（13c）1：to erect and fix firmly in place＜～a tent＞ 2 ：to throw usu．with a particular objective or toward a partic－ ular point＜$\sim$ hay onto a wagon＞：as a ：to throw（a baseball）to a bat ter but aside or discard by or as if by throwing＜$\sim$ ed the trash into the bin put aside or discard by or as if by throwing＜～ed the trash into the bin〉＜decided to～the whole idea〉 $3:$ to present or advertise for sale esp．in a high－pressure way 4 a（1）：to cause to be at a particular level or of a particular quality（2）：to set in a particular musical key $\mathbf{b}$ ：to cause to be set at a particular angle ：SLOPE $5:$ to utter glibly and in－ sincerely 6 a ：to use as a starting pitcher $b:$ to play as pitcher $7:$ to hit（a golf ball）in a high arc with backspin so that it rolls very little af ter striking the green $\sim v i \quad 1 \mathbf{a}:$ to fall precipitately or headiong $\mathbf{b}$（1） of a ship ：to have the bow alternately plunge precipitately and rise abruptly（2）of an aircraft，missile，or spacecraft ：to turn about a later al axis so that the forward end rises or falls in relation to the after end c：BUCK 1 2：ENCAMP 3：to hit upon or happen upon something ＜～upon the perfect gift〉 $4:$ to incline downward ：SLOPE 5 a ：to throw a ball to a batter $b$ ：to play ball as a pitcher $\mathbf{c}:$ to pitch a golf ball 6：to make a sales pitch syn see THROW－pitch into 1：AT－ TACK，ASSAIL 2 ：to set to work on energetically
losing（＇lu：zm）adj unprofitable；falling：the business was a losing concern． losings（＇lu：zinz）pl $n$ losses，esp．money lost in gambling．
loss（lps）$n 1$ the act or an instance of losing． 2 the disadvantage or deprivation resulting from losing：a loss of reputation． 3 the person，thing，or amount lost： a large loss． $4(p l)$ military personnel lost by death or capture． 5 （sometimes pl） the amount by which the costs of a business transaction or operation exceed its revenue． 6 a measure of the power lost in an electrical system expressed as the ratio of or difference between the input power and the output power． 7 Insur－ ance．7a an occurrence of something that has been insured against，thus giving rise to a claim by a policyholder， 7 b the amount of the resulting claim． 8 at a loss． 8 a uncertain what to do；bewildered． 8 b rendered helpless（for lack of something）：at a loss for words． 8 c at less than the cost of buying，producing， or maintaining（something）：the business ran at a loss for several years． ［C14：noun probably formed from lost，past participle of losen to perish，from Old English lösian to be destroyed，from los destruction］
loss adjuster $n$ Insurance，a person qualified to adjust losses incurred through fire，explosion，accident，theft，natural disaster，etc．，to agree the loss and the

Figure 17：Merriam－Webster Collegiate Dictionary，10th edition， 1998
Figure 18：Collins English Dictionary，5th edition， 2000
countries for teaching children to count.


Figure 19: Collins CobuIld English Language Dictionary, 1987

Parentheses can be avoided if the writing style of the dictionary is changed from a telegraphic one to one that is more expansive. The Collins cobuild dictionaries (figure 19) pioneered this approach. All the contextual information is contained within the narrative definition, and the illustrative quotation runs on directly, introduced by EG.

## CUSTOMIZED PUNCTUATION:

BULLETS, WINGDINGS AND ARROWS

If we think of a punctuation mark as an indicator of a text element's boundary, then we can consider bullets and other arbitrary marks as a form of punctuation. Meaningful graphic devices that categorize entries or senses, such as the pictograms in the Oxford Dictionary of New Words (figure 20) and the Oxford Starter Dictionaries, are substitutes for subject field labels and are visual text rather than punctuation, despite their prominence. Similarly, the dash, either swung (COD, MerriamWebster's Collegiate) or plain (Concise Cambridge Italian Dictionary), as a marker for the headword, is a text symbol, not punctuation (see figures I7, $2 I$ and 24).

Dictionaries use square, round and triangular bullets, both solid and open, to draw attention to the start of some sub-sections, but there is no standard convention between dictionaries to assign these to any hierarchy. Not quite symbols (because they do not categorize) and not quite abbreviations (although they are compact

graphics card $\square$ see $C A R D^{2}$<br>gray economy $\mathbb{W}$ see GREY ECONOMY graymail $W$ see GREENMAIL graze/greIz/ intransitive verb 发学<br>To perform an action in a casual or perfunctory

bright adj. lucido, risplendente; vivido; - red, rosso vivo; - and early, di prima mattina; gioioso; vivace; intelligente; $a-\mathrm{girl}$, una ragazza sveglia; the - side of things, il lato buono delle cose; to look on the - side, vedere tutto rosa, essere ottimista; adv. luminosamente; allegramente. -en intr. brillare; things are brightening up, l'avvenire si annuncia più sereno; tr. far
compound ${ }^{1}$ noun /'kompaund/a thing that is composed of two or more separate elements; a mixture of two or more things: the air smelled like a compound of diesel and petrol fumes.
-(also chemical compound) a substance formed from two or more elements chemically united in fixed proportions: a compound of hydrogen and oxygen | lead compounds. a word made up of two or more existing words.
$\rightarrow$ adjective /'kompround/ [attrib.] made up or consisting of several parts or elements, in particular:

- (of a word) made up of two or more existing words or elements: a compound noun. $\mathbf{m}$ (of interest) payable on both capital and the accumulated interest: compound interest. Compare with SIMPLE. $\quad$ Biology (especially of a leaf, flower, or eye) consisting of two or more simple
enough e det. \& pron. as much or as many as is necessary or desirable. adv. 1 to the required degree or extent. 2 to a moderate degree.
- PHRASES enough is enough no more will be tolerated. enough said all is understood and there is no need to say more.
- origin OE genōg, of Gmc origin.
en papillote / $\tilde{\mathrm{D}}$ 'paprjpt/ © adj. \& adv. (of food) cooked and served in a paper wrapper.
lovely /lúvli/ adj. (-lier, -liest) 1. beautiful and pleasing beautiful and pleasing, especially in a harmonious way 2. DELIGHTFUL very enjoyable or pleasant 3. CARINg loving or friendly and caring 4. attracting love attracting or inspiring love in others $n$. (plural -lies) SB OR STH GOOD-LDOKING sb who or sth that is very good-looking, especially a woman (often used in the plural; sometimes considered offensive) o Farewell, my lovely! [Old English luflic. The word originally meant 'affectionate' and 'lovable'; the modern sense 'beautiful' did not develop until the late 13 thC.] -loveliness $n$.
a-ban-don ${ }^{1}$ (a ban/dan), v.t. 1. to leave completely and finally; forsake utterly; desert: to abandon one's home; to abandon a child; to abandon a sinking ship. 2. to give up; discontinue; withdraw from: to abandon the cares of empire; to abandon a research project. 3. to the cares of empire; to abandon a research project. 3. to 4. to yield (oneself) without restraint or moderation; give (oneself) over to natural impulses, usually without self-control: to abandon oneself to grief. 5. Law. to cast away, leave, or desert, as property or a child. 6. Insurance. to relinquish (insured property) to the underwriter in case of partial loss, thus enabling the insured to claim a total loss. 7.Obs. to banish. [ME abando (u)ne < MF abandon (er) for OF (mettre) a bandon (put) under ban, equiv. to $a$ at, to ( $<\mathrm{L}$ adt; see AD-) + bandon $<\mathrm{LL}$ ban, dum, var. of bannum interdict $<$ Gme; see baN ${ }^{2}$ ]-a-ban'don-a.ble, $a d j$. -a•ban/don•er, $n$. -a•ban/donment, $n$.

Figure 20: Oxford Dictionary of New Words, 1991
Figure 21: Concise Cambridge Italian Dictionary, 1975
Figure 22: New Oxford Dictionary of English, 1998
Figure 23: Encarta Concise English Dictionary, 2001
Figure 24: Concise Oxford Dictionary, 10th edition, 2000
Figure 25: The Random House Dictionary of the English Language Unabridged Edition, 1966
substitutes for a word), arrows and directional markers are used to indicate derivatives, variant forms and cross-references.

The Random House Dictionary of the English Language (1966) uses a less-than sign to introduce an etymological formation, to imply 'formed from'; because the most recent form is given first, the arrow direction is right to left, indicating the development of the etymology (figure 25 ).

## TECHNICAL PUNCTUATION: PRONUNCIATIONS

Various forms of respelling the headword are used to indicate pronunciation. For English language learners' dictionaries, transcription using the International Phonetic Alphabet is standard, but respelling systems using length signs and stress marks are used for 'home market' dictionaries in the US and UK. There are conventions that the slash is used to surround phonemic transcriptions and that square brackets are used for phonetic transcriptions, but publishers seem to choose their own styles. Oxford uses slashes, Merriam-Webster's Collegiate uses backslashes, Collins English Dictionary uses parentheses.

## TRANSLATION AND COMBINATION:

## SYMBOLS AS VISUAL PUNCTUATION

While the plus sign has regularly been used in etymologies and to explain compound forms, the use of the equals sign to indicate a translation was pioneered by the Oxford Starter bilingual dictionaries (1997) (figure 26). This decision faced some opposition, as it can be argued that a translation may not be the exact equivalent

```
fall
1 verb
- (if it's a person) = tomber (! + être)
    she fell to the ground = elle est tombée
        par terre
- (to come down, to be reduced) = baisser
- (other uses)
    to fall asleep = s'endormir (! + être)
    to fall ill = tomber malade (! + être)
    to fall in love with someone = tomber
        amoureux/amoureuse de quelqu'un
2noun
- (in prices, temperature)
    a fall = une baisse
    a fall in prices = une baisse des prix
- (US English) (autumn)
    fall = l'automne (masculine)
fall down
- (if it's a person) = tomber (! + être)
- (if it's a building)= s'effondrer (! + être)
fall off = tomber (! + être)
    to fall off a chair = tomber d'une chaise
fall out
- (from somewhere) = tomber (! + être)
    the letter fell out of his pocket = la lettre
        est tombée de sa poche
- (to quarre) = se brouiller (! + être)
```

Figure 26: Oxford Starter French Dictionary, 1997
that the equals sign implies. But for a range of simple dictionaries with vocabulary stripped down to what was essential for the school language curriculum, the clarity of the symbol seems entirely appropriate. The Starter French shows extreme paragraphing, no abbreviations, the use of bullets to identify different translation contexts and the equals sign to reinforce the start of the translation; parentheses surround the contextualizing information in the original language, and grammatical information in the target language. The bold exclamation mark functions as a warning code that the verb in the translation takes être rather than avoir.

## ARE DICTIONARIES ABANDONING PUNCTUATION?

More recent dictionaries such as the Longman Dictionary of Contemporary English (2001), the Collins English Dictionary (2004, below), and the Oxford Compact English Dictionary (2008, below) have significantly reduced the amount of punctuation on the page. End of sentence full-stops have been abandoned at the end of senses (except in the Oxford), and full-stops avoided after abbreviations and sense numbers; the articulation depends almost entirely on font changes.
keynote ('ki;nəut) n $\mathbf{1 a}$ a central or determining principle in a speech, literary work, etc $\mathbf{1 b}$ (as modifier): a keynote speech 2 the note upon which a scale or key is based; tonic $\triangleright$ vbkeynotes, keynoting, keynoted (tr) 3 to deliver a keynote address to (a political convention, etc)
keypad ('ki:,pæd) $n$ a small panel with a set of buttons for operating a teletext system, electronic calculator, etc
key punch $n 1$ Also called: card punch a device having a keyboard that is operated manually to transfer data onto punched cards, paper tape, etc $\triangleright v b$ key-punch 2 to transfer (data) by using a key punch
keyring drive $n$ computing another name for pocket drive
key signature $n$ music a group of sharps or flats appearing at the beginning of each stave line to indicate the key in which a piece, section, etc, is to be performed
key ${ }^{1}$ noun (pl. keys) 1 a small piece of shaped metal which is inserted into a lock and turned to open or close it. 2 an instrument for grasping and turning a screw, peg, or nut. 3 a lever pressed down by the finger in playing an instrument such as the organ, piano, or flute. 4 each of several buttons on a panel for operating a typewriter or computer terminal. 5 a means of achieving or understanding something: discipline seems to be the key to her success. 6 an explanatory list of symbols used in a map or table. 7 a word or system for solving a code. 8 a group of musical notes based on a particular note and comprising a scale. 9 roughness on a surface, provided to assist adhesion of plaster or other material. - adjective vitally important: he was a key figure in the civil war. • verb (keys, keying, keyed)

Figure 27: Collins English Dictionary Desktop Edition, 2004
Figure 28: Compact Oxford English Dictionary, 3rd edition, 2005

Digital text composition has removed the constraint that existed throughout the period of mechanical and photomechanical composition: the limit on the number of fonts that could be set together economically. Hand-setting had no such constraint; the $O E D$ 's rich typography might not have existed had its composition started some
twenty years later, after the introduction of the Monotype machine. A wider range of typographic resources, such as the ability to use both a serif and a sanserif typeface family in several weight and width variants means that dictionary designers can contemplate a one-to-one relationship between text element and typographic presentation. This was simply not possible in earlier times, when the same italic had to do service for a variety of functions. Multi-font dictionaries can eliminate inter-element punctuation because the mapping of typography to structure is clear. Typically designers can allocate sanserif fonts to the metalanguage of the dictionary, and serif fonts to the plain text of definitions, adding a separate dimension to the weight axis that can indicate headwords, derived forms, phrases and crossreferences. Careful use of type designs that can stand extreme degrees of condensing allows grammatical and subject labels to be spelled out in full, and not be reduced to abbreviations. Types (typically sanserif) with extreme tonal ranges (extra bold to extra light) can provide color contrast. A comparison of a limited typographic range and an extended one are shown in the Shorter Oxford English Dictionary's 4th and 5th editions (figures 29 and 30). In the 4th edition, a single italic font has many functions; in the 5th edition these functions are differentiated by font.

Online dictionaries are absolved of the fundamental constraint of a printed dictionary: space. There is no need for elements in an entry to be run on to save space, and a return can be made to text articulated by space; less dependent on
vastidity /'va:strti/ n. rare. EI7. [Irreg. var. of vastity, after wds in -idity.] Vastness.
Shakes. Meas. for M. A restraint, Though all the world's vastidity you had, To a determined scope.
vector /'vekta/ $n$. EI8. $[\mathrm{L}=$ carrier, traveller, rider, from vect- pa. ppl stem of vehere carry, convey: see -or.] $\dagger 1$ Astron. $=$ radius vector s.v. Radius $n$. Only in 18. 2 a math. A quantity having direction as well as magnitude, denoted by a line drawn from its original to its final position. Cf. Scalar n. MI9. b Math. An ordered set of two or more numbers (interpretable as the coordinates of a point); a matrix with one row or one column. Also, any element of a vector space. e20. c Aeronaut. A course to be taken by an aircraft, or steered by a pilot. M2O. d Computing. A sequence of consecutive locations in memory; a series of items occupying such a sequence and identified within it by means of one subscript; spec. one serving as the address to which a program must jump when interrupted, and supplied by the source of the interruption. m20. 3 a Med. E Biol. An organism, esp. an
vastidity/va:'stidrti/ noun rare. E17. [IIreg. var. of VASTITY, after wds in -idity.] Vastness.
$\square$ Shakes. Meas. for M. A restraint, Though all the world's vastidity you had, To a determined scope.
vector /'vekta/ noun E18.
[Latin = carrier, traveller, rider, from vect- pa. ppl stem of vehere carry, convey: see-OR.]
$\dagger 1$ ASTRONOMY = radius vector s.v. RADIUs noun Only in 18.
2 a math. A quantity having direction as well as magnitude, denoted by a line drawn from its original to its final position. Cf. scalar noun m19. Db math. An ordered set of two or more numbers (interpretable as the coordinates of a point); a matrix with one row or one column. Also, any element of a vector space. E20. - aeronautics. A course to be taken by an aircraft, or steered by a pilot. m20. Dd computing. A sequence of consecutive locations in memory; a series of items occupying such a sequence and identified within it by means of one subscript; spec. one serving as the address to which a program must jump when interrupted, and supplied by the source of the interruption. M20.
3 a medicine \& bIoLOGY. An organism, esp. an insect or other arthropod, which causes the transmission of a pathogen

Figure 29: Shorter Oxford English Dictionary, 4th edition, 1993
Figure 30: Shorter Oxford English Dictionary, 5th edition, 2002
visual punctuation by change of font or special character. Indeed, the (continuing) lack of a wide range of standardly available fonts for online browsing militates against over-complex typography (Apple's on-screen implementation of the New Oxford American Dictionary is shown). Webfonts accessed from a server and not dependent on the reader's browser, may provide the solution. When dictionary websites can efficiently use webfonts to render their contents as subtle and effective as the best of those used in print, the typography of the online dictionary will have come of age.

| 000 |  | Dictionary |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 4  |  |  | Q abandon | (3) |
| All Dictionary | Thesaurus | Apple | Wikipedia | 》 |

a•ban•don |a'bandən|
verb [ trans.]
1 give up completely (a course of action, a practice, or a way of thinking) : he had clearly abandoned all pretense of trying to succeed. See note at relinguish .

- discontinue (a scheduled event) before completion : against the background of perceived threats, the tour was abandoned.
2 cease to support or look after (someone); desert : her natural mother had abandoned her at an early age.
- leave (a place, typically a building) empty or uninhabited, without intending to return : derelict houses were abandoned.
- leave (something, typically a vehicle or a vessel) decisively, esp. as an act of survival : he abandoned his vehicle and tried to flee on foot.
- (abandon someone/something to) condemn someone or something to (a specified fate) by ceasing to take an interest in or look after them : it was an attempt to persuade businesses not to abandon the area to inner-city deprivation.
3 (abandon oneself to) allow onself to indulge in (a desire or impulse) : abandoning herself to moony fantasies.
noun
complete lack of inhibition or restraint : she sings and sways with total abandon.

PHRASES
abandon ship leave a ship because it is sinking.
DERIVATIVES
abban-don-ment noun
ORIGIN late Middle English : from Old French abandoner, from a-(from Latin ad 'to, at') + bandon 'control,' based on late Latin bannus, bannum (see BAN ${ }^{1}$ ). The original sense was [bring under control,] later [give in to the control of, surrender to] (sense 3 ).

Figure 31: New Oxford American Dictionary, Apple OS 10.6 implementation, 2011

## ACKNOWLEDGEMENTS

Figure I is reproduced from a book in the English Faculty Library, University of Oxford: XWI [1749]. Figures 2, 3, 6 and I6 are reproduced from books in the Bodleian Library, Oxford: Figure 2: Vet. A5 e.6554; Figure 3: Don. d.224; Figure 6: 3021 e.307; Figure 16: 30254 d.19. In general, entries from contemporary dictionaries are reproduced as near to actual size as is practicable, and those from earlier dictionaries are reduced to fit. I would like to thank Patrick Hanks for pointing me to the examples shown in Figures 7 and 8, and to John Simpson for access to the OED library, where several of the items shown were photographed by Paul Lucas.

## REFERENCES

Dictionaries discussed (publications after 1850 are arranged by title)
Bailey, N. 1730. Dictionarium Britannicum. London, UK: T. Cox.
Bailey, N. 1727. The Universal Etymological English Dictionary. London, UK: T. Cox.
Calepino, A. 1550. Ambrosii Calepini Dictionarium linguarum septem. Basel, SW: Ex officina HenricPetrin.

Cawdrey, R. 1604. A Table Alphabeticall. London, UK: Printed by I.R. for Edmund Weaver.
Chambers's Twentieth Century Dictionary. 1901. T. Davidson, editor. Edinburgh, UK: W. \& R. Chambers.

Collins COBUILD English Language Dictionary. 1987. J. Sinclair and P. Hanks, editors. London, UK: Collins.

Collins English Dictionary, 5th edition. 2000. D. Treffry, editor. London, UK: Collins.
Collins English Dictionary: Desktop Edition. 2004. S. Anderson, editor. London, UK: Collins.
Compact Oxford English Dictionary, 3rd edition. 2005. C. Soanes and S. Hawker, editors. Oxford: Oxford University Press.

Concise Cambridge Italian Dictionary. 1975. B. Reynolds, editor. Harmondsworth, UK: Penguin Books.
The Concise Oxford Dictionary, 1st edition. 1911. F.G. Fowler and H.W. Fowler, editors. Oxford: Clarendon Press.

Concise Oxford Dictionary, 6th edition. 1976. J. Sykes editor. Oxford: Clarendon Press.
Concise Oxford Dictionary, 10th edition. 2000. J. Pearsall, editor. Oxford: Oxford University Press.
Coote, E. 1596. The English School-maister. London, UK: Widow Orwin.
Encarta Concise English Dictionary. 2001. K. Rooney, editor. London, UK: Bloomsbury.

Estienne, R. 1552. Dictionarium Latino-Gallicum. Geneva, SW: R. Estienne.
Hunter. R. 1879. The Encyclopadic Dictionary. London, UK: Cassell, Petter, Galpin \& Co.
Johnson, S. 1755. A Dictionary of the English Language, folio ist edition. London, UK: W. Strahan.
Johnson, S. 1760. A Dictionary of the English Language ... Abstracted from the Folio Edition, octavo '2nd' edition. London, UK: Printed for J. Knapton.

Johnson, S. 1777. A Dictionary of the English Language, quarto 4th edition. Dublin, IR: T. Ewing.
Junius, F. 1743. Francisci funii Francisci filii Etymologicum Anglicanum. Oxford: E Theatro Sheldoniano.

Longman Dictionary of Contemporary English, 3rd edition. 2001. D. Summers, editor. Harlow, UK: Pearson Education.

Martin, B. 1749. Lingua Britannica Reformata. London, UK: Printed for J. Hodges.
Merriam-Webster Collegiate Dictionary, 10th edition. 1998. F.C. Mish and others, editors. Springfield, MA: Merriam-Webster Inc.

New Oxford American Dictionary, 2nd edition. 2005. E. McKean, editor. New York, NY: Oxford University Press. Apple Macintosh OS io.6 implementation, 2011.

The New Oxford Dictionary of English. 1998. P. Hanks and J. Pearsall, editors. Oxford: Oxford University Press

The Oxford Dictionary of New Words, 1991. S. Tulloch, editor. Oxford: Oxford University Press.
The Oxford English Dictionary, 12 vols. 1933. J.A.H. Murray, H. Bradley, W.A. Craigie and C.T. Onions, editors. Oxford: Clarendon Press

The Oxford Starter French Dictionary. 1997. M.-H. Corréard, editor. Oxford: Oxford University Press.
Phillips, E. 1706. The New World of English Words: Or, a General Dictionary. 6th edition, J. Kersey, editor. London, UK: Printed for J. Phillips.

The Random House Dictionary of the English Language: Unabridged Edition. 1966. J. Stein and L. Urdang, editors. New York, NY: Random House.

The [New] Shorter Oxford English Dictionary, 4th edition. 1993. L. Brown, editor. Oxford: Clarendon Press.
Shorter Oxford English Dictionary, 5th edition. 2002. W. Trumble and A. Stevenson, editors. Oxford: Clarendon Press.

Webster, N. 1828. An American Dictionary of the English Language. New York, NY: S. Converse. [Webster's] Dictionary of the English Language. 1886. Springfield, MA: G. \& C. Merriam.

## Other reading

Corréard, M.-H. 2002. Are Space-Saving Strategies Relevant in Electronic Dictionaries? In Braasch, A. and C. Povlsen, editors. Proceedings of the X Euralex International Congress, Copenhagen, Denmark, 2002. Vol. 2, 463-470.

Hanks, P. 2010. Lexicography, Printing Technology, and the Spread of Renaissance Culture. In Dykstra A. and T. Schoonheim, editors. Proceedings of the XIV Euralex International Congress, Leeuwarden, The Netherlands, 2010.

Landau, S.I. 2001. Dictionaries: The Art and Craft of Lexicography, 2nd edition. Cambridge: Cambridge University Press.

Luna, P. 2000. Clearly Defined: Continuity and Innovation in the Typography of English Dictionaries. Typography Papers, 4, 5-56.

Luna, P. 2004. Not Just a Pretty Face: The Contribution of Typography to Lexicography. In Williams, G., editor. Proceedings of the XI Euralex International Congress, Lorient, France, 2004. Vol. 3, 847-858.

Luna, P. 2005. The Typographic Design of Johnson's Dictionary. In Lynch, J. and A. McDermott, editors. Anniversary Essays on Fohnson's Dictionary. Cambridge: Cambridge University Press, 175-197.

Starnes, D.T. 1963. Robert Estienne's Influence on Lexicography. Austin, TX: Texas University Press.
Svensén, B. 1993. Practical Lexicography: Principles and Methods of Dictionary-Making. Oxford: Oxford University Press.

Thomson, M. 2005. Microtypography, Designing the New Collins Dictionaries. http://www. typotheque.com/articles/microtypography_designing_the_new_collins_dictionaries (accessed I May 20II).

Twyman, M. 1993. The Bold Idea: The Use of Bold-Looking Types in the Nineteenth Century. fournal of the Printing Historical Society, 22, 107-143.

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[^0]:    To CA'RRY. v. a. [charier, Fr. from currus, Lat.] 1. To convey from a place; oppofed to bring, or convey to a place : often with a particle, fignifying departure; as, arvay, off. 2. To tranfport. 3. To bear; to have about one. 4. To take; to have with one. 5. To convey by force. 6. To effect any thing. 7. To gain in competition. 8. To gain after refittance. 9. To gain ; with it ; that is, to prevail. [le porter, Fr.] 10. To bear out ; to face through : with it. 11. To continue external appearance. 12. To manage; to tranfact. 13. To behave; to conduct ; with the reciprocal pronoun. 14. Sometimes with it; as, fle carries it high. ${ }^{15}$. To bring forward; to advance in any progrefs. 16. To urge ; to bear forward with fome kind of external impulfe. 17. To bear; to have; to obtain. 18. To exhibit to fhow ; to difplay on the outfide; to fet to view. 19. To imply; to import. 20. To contain ; to comprife. 21. To have annexed; to have any thing joined: with the particle with. 22. To convey or bear any thing united or adhering, by communication of motion. 23 . To move or continue any thing in a certain direction. 24. To pufh on ideas, arguments, or any thing fucceffive in a train. 25. To receive; to endure : not in ufe. 26. To convey by means of fomething fupporting. 27. To bear, as trees. 28. To fetch and bring, as dogs. 29. To carry off. To kill. 30. To carry on. To promote ; to help forward. 31 . To carry on. To continue; to put forward from one flage to another. 32. Fo carry on. To prolecute; not to let ceafe. 33. To carry through. To fupport; to keep from failing, or being conquered. (1.) When be dieth, he fhall carry no:hing away.

    And devout men carried Stephen to his burial. Pf. xilix. 18. I mean to carry her arway this evening, by the help of thefe two Soldiers. Aive's vimineous dome, Dxyden's Spanifb Fryar. As in a hive's vimineous dome, Ten thoufand bees enjoy their home ; Each does her ftudious action vary, To go and come, to fetch and carry. Prior. They expofed their goods with the price marked, then retired; the merchants came, left the price which they would give upon the goods, and retired; the Seres returning carried off either their goods or money, as they liked beft. Arbutbnot. (2.) They began to carry about in beds thofe that were fick.

    Mark, vi. 55 .

[^1]:    ~ point, state of game when one side needs only one more point to win it; ~-preserver, landowner etc. who breeds game and applies game laws strictly; ~-tenant, lessee of shooting or fishing; $\sim(\mathbf{s})$ theory, mathematical analysis of conflicts in war, economics, games of skill, etc.; ~-warden, person locally supervising game and hunting. [OE gamen, $=\mathrm{OS}, \mathrm{OHG}, \mathrm{ON}$ gaman] gāme ${ }^{2}$ a. Like a gamecock, spirited ( $\mathrm{DIE}^{2}$ game; as $\sim$ as Ned Kelly, (Austral. colloq.) very brave); having the spirit or energy to do; valiantly ready for; hence $\sim^{\prime} \mathrm{LY}^{2}(-\mathrm{mlĭ})$ adv., $\sim^{\prime}$ 'NEss ( $-\mathrm{mn}-$ ) $n$. [f. GAME ${ }^{1}$ in obs. sense 'fighting spirit']
    gāme ${ }^{3}$ v.i. Play at games of chance for money, gamble; gaming-house, -table, (frequented for gambling) ; hence $\sim \sim_{\text {STER ( }}$ (-ms-) $n$. [ME, f. GAME $^{1}$ ]
    gāme ${ }^{4}$ a. (Of leg, arm, etc.) lame, crippled. [18th c. dial., of unkn. orig.]
    gă'melăn $n$. E. Ind. orchestra, mainly of percussion instruments; kind of xylophone used in this. [Jav.]
    gā'mes|man (-mzm-) n. ( $p l$. ~men). Exponent of gamesmanship; hence $\sim$ manship $n$., art or

