Chaptr 4
WICH LETRS AR SUBSTITUTED?

1 Pros and cons of letr-substitution.

Th fundmentl principl of Cut Spelng is that it regulrizes ritn English by removing redundnt letrs. Howevr, many defects of TO canot be rectified without actuly substituting mor apropriat letrs for som that ar particulrly aberant in TO. **Chaptr 3** mentiond posbl substitutions to be recmendd in th presnt chaptr, altho th CS systm as a hole is largely self-suficient without any substitutions at al.

Letr-substitution in genrl has two importnt disadvantages as a method of reformng spelng. Th first is that swichng letrs implies a categoricl statemnt as to th corect pronunciation of words (an insertd letr *must* represent th sound), altho th English language has no standrd pronunciation. Cutng redundnt letrs by contrast dos not imply that th remainng letrs acuratly represent a particulr pronunciation, but merely that they ar pronounced. Th secnd disadvantage of substitution is that it altrs th apearance of words much mor radicly than dos merely cutng out redundnt letrs.

On th othr hand, entirely ruling out substitutions limits th potential of CS for econmizing on th cumbrsm bulk of ritn English (many substitutions involv replacing two or mor letrs by just one); and without substitutions it is imposbl to overcom som of th gretst anomlis of TO. This chaptr wil therfor now suggest a smal numbr of letr-substitutions wich enhance both th econmy and th regularity of CS, over and abov th rules for letr-omission alredy described in Chaptr 3.

2 Thre patrns of letr-substitution.

Thre patrns of letr-substitution ar proposed for CS, to acompny th thre cutng rules. They involv introducing th letrs F, J, Y in place of othr letrs, most ofn in place of G, as folos:

1 Exept in th British pronunciation of TO *lieutenant* (CS *leutennt*), th sound of /f/ shal always be spelt F, wich replaces th digraphs GH and PH wher they ar pronounced /f/.

2 Wenevr G (especialy in th digraph DG) has its soft valu, being pronounced like th letr J, it shal be replaced by J.

3 Wenevr th digraf IG has th sound of th long Y in *my* (as in *high, sign*), it shal be replaced by Y. This use of Y to represent th long valu of I also aplys in som othr contexts, such as wher in TO a word havng th endng of *reply* changes its -Y to -IE- in certn inflections (*replied, replies*).

Unlike many othr letr-substitutions that might be suggestd to regulrize TO, these thre entail virtuly no complications, indeed they remove som complications genrated by th cutng rules set out in **Chaptr 3**, and to that extent may be regardd as directly complmentry to CS.

3 Spelng /f/ as F, not GH, PH

This substitution econmizes autmaticly by always replacing two letrs by one. Ther is alredy variation between GH, PH and F in English: for instnce, *dwarf* long ago replaced -GH by -F, and *draught* is ritn *draft*, genrly in Americn, and in th sense 'first ruf version' in British usage; *fantasy* was for sevrl centuris spelt *phantasy*; *phantom, pheasant* wer typicly spelt with F in Midl English and ar *fantôme, faisan* in French; in Americn usage, *sulphur* is normly *sulfur* (cf French *sulfurique*); and inovativ comercial spelngs   comnly replace PH by F, as in *fone* for *phone*. In many languages, F is   always ritn wher TO has PH: among th Germanic languages, Danish, Norwejan and Swedish al rite *fotografi*, Duch has *fotografie* and German *Fotografie*, Czec also has *fotografie*; and among th romance languages Italian and Portugese rite *fotografia* and Spanish *fotografía*; Greek translitrates as *fotografikí*, and Turkish has *fotografya*. CS thus bilds on recent trends and widespred intrnationl practis to regulrize an entrenchd anomly of sound-symbl corespondnce in TO, wich is today shared mainly with French (in 1998 PH is to be widely replaced by F in Germn).

3.1 F for GH: *laugh/laf*   Th foloing ar th mor comn TO forms containng GH pronounced as F: *laugh, laughter, chough, clough, cough, enough, rough, slough* (=shed snakeskin), *tough, trough*. Aftr removing th silent O from *chough, clough, enough, rough, slough, tough* by **Rule 1**, §O.4.3, and th silent U from *cough, trough* by Rule 1, §U.3.3, CS respels these words *laf, laftr, chuf, cluf, cof, enuf, ruf, sluf, tuf, trof*. **Rule 3** ensures that th final F is not dubld in any of these words (eg, CS *lafng, cofng, rufng* rathr than **laffing, *coffing, *ruffing*).

3.2 F for PH: *philosophy/filosofy*   Most TO forms using PH ar of Greek derivation, as in th roots *philo-, phono-, photo-, physi-, -glyph -graph, -soph*. But a few hav aquired PH in English by asociation, for instnce *nephew* (wher th PH may be pronounced /f/, as in Germn *Neffe*, or /v/, as in French *neveu*) and *sulphur*. Th PH digraph arose as a Latn transcription for th singl Greek letr *phi* (φ), but it can hav no justification in terms of sound-symbl corespondnce in th twentieth century: th singl Greek letr *fi* shud be representd by th singl letr F in English.

CS spelngs ilustrating th abov roots, aplyng th PH > F substitution, ar therfor *fonografic, fotografic, fysiografic, hiroglyfic, filosofic, nefew, sulfr, fesnt*. Othr forms with F for PH include *alfabet, esofagus, falanx, falus, fantasm, fantm, Faro, farisee, farmaceuticl, farynx, fase, fenomnn, filanthropy, filatly, filrmonic, Filip, flebitis, flem, flox, fenix, fonetic, fosfrus, frase, frenology, fthisis, fyloxra, fytology, safire, sofisticated* (aftr G > J substitution, th sufix *-ology* becoms *-olojy*, givng final CS *frenolojy, fytolojy*).

4 Spelng soft G as J

Th widespred use of G to spel th sound of J is a serius, yet esily remedid, defect in TO, causing both mispelng and mispronunciation.   Seen in a historicl perspectiv, it is remnisnt of th confusion of th sound valus of I, J and of U, V that prevaild until around th 17th century (for instnce, modrn TO *alive, journey, uncovered* wer comnly ritn *aliue, iourneye, vncouered*). For sevrl centuris now a clear fonografic distinction has been made between th vowl I and th consnnt J, and between th vowl U and th consnnt V, and it wud be equaly simpl and helpful to make such a distinction in futur between th consnnts G, J as wel.

4.1   Problms of G/J confusion in TO. Th use of G for th sound of leads to confusion in English on a numbr of levls, both systemic and practicl.

4.1.1 Systemic problms.
1) Related words somtimes difr in ther use of G, J, as in *jelly/gelatine, jest/gesture, jib/gibbet*.

2) Som words ar spelt alternativly with G or J, for instnce *gaol/jail, gibe/jibe, Geoffrey/Jeffrey, Gillian/Jillian*.

3) Th soft or hard valu of G is indicated in TO very inconsistntly, somtimes with and somtimes without an extra letr, typicly a foloing H or U to sho th hard valu befor one of th front vowls E, I, Y, as in TO *gherkin, guerilla*, or a foloing E to sho th soft valu, as in TO *singeing* versus *singing*. TO is consequently ridld with err-prone anomlus patrns such as:
gem/get/jet, gin/begin/jinn, Gillingham (Dorset)*/Gillingham* (Kent),
changed/hanged, ageing/raging, jerkin/gherkin, garment/guardian, guess,
gild/guild, lung/tongue, yogurt/yoghourt, fatigue/indefatigable,
suggest/nugget, exaggerate/dagger, George/gorge, margin/margarine,
mortgagor/rigor, pigeon/pidgin, selvage/selvedge, cabbage/spinach,
wastage/vestige, college/knowledge. judge/judgment, bridge/bridgeable.
Furthrmor, th hard valu of final G apears difrntly in British and Americn spelling of words such as *catalogue/catalog*.

4) A furthr valu (wich one myt cal super-soft, in that it laks th initial /d/ plosiv of th norml soft, africat valu of G) is found in modrn French loans, such as *beige, bourgeois, genre, regime, rouge, barrage, fuselage*. In practis these ar ofn pronounced as with ordnry English soft G, and it wud apear unecesry to distinguish them in spelng.

5) Th two valus of G in TO ar an obstacl to th genrl aplication of CS **Rule 2**, §1.6.2.X. For instnce, altho **Rule 1** cuts TO *imagine* to *imagin*, th norml Rule 2 cut canot then oprate, as th resultng form, **imagn*, wud apear to rym with TO *wag(g)on*, CS *wagn*; simlrly, Rule 2 canot aply to TO *cudgel, dodgem, pageant, sergeant, detergent, indigent, religion, dudgeon, dungeon, lodger, merger*, unless th soft G is respelt as J.

4.1.2 Practicl problms.

Wen a systm of sound-symbl corespondnce is so confused, readrs and riters inevitbly make mistakes, of wich th foloing ar particulrly comn:

1) Speakrs somtimes mispronounce words containng G, for instnce givng TO *ginger* one or both of th hard G valus found in *ganger* or *finger*, or givng th liquid mesur *gill* th same pronunciation as th *gills* of a fish.

2) Speakrs may be uncertn how to pronounce G wen it fluctuates between hard and soft valus in related words such as *misogyny/gynecology, analogy/analogous, pedagog(ue)/pedagogical*. Simlr altrnation ocurs in Latn-derived words such as TO *allege/allegation, purge/purgatory*, tho not in *renege/renegade*. Ther is also uncertnty about how to pronounce G in *longevity, longitude, hegemony*.

3) Mispelng of th soft/hard distinction is endemic, typicly by omitng letrs needd to sho th hard valu of G (**vage*), or its soft valu (**gorgous, *negligable, *vengance*); but J is somtimes also substituted for G (or vice versa) as in **majic*.

4) Frequent errs arise from th difrnt spelng of th identicly pronounced final sylabl in such words as TO *spinach, manage, college, knowledge, vestige*. Altho they ar al pronounced as with soft G, it is clear that substitution by J wud be a helpful regulrization. (Regulrization of th preceding vowl letr wud also be helpful, producing perhaps *spinej, manej, colej, nolej, vestej* [cf Welsh *garej* for TO *garage*] but such a drastic variation on th TO forms is not envisaged for CS.)

4.2 Th CS solution with J: *judge/juj*

By riting soft DG and G (including th super-soft French pronunciation as in *genre*) as J, CS resolvs much of th abov confusion, as wel as acheving considrbl econmis. Th CS forms with G > J substitution ar now givn for al th problmatic exampls listd in 4.1.1 and 4.1.2 abov.

(From §4.1.1)

1 *jelly/jelatine, jest/jestur, jib/jibet*.
2 *jail, jibe, Jefry, Jilian*.

3 *jem/get/jet, jin/begin/jin, Jilngm/Gilngm, chanjed/hangd, ajing/rajing, jerkn/gerkn, gess, garmnt/gardian, gild, Jorj/gorj, lung/tong, marjn/marjrine, morgajr/rigr, pijn* (for both *pidgin, pigeon*), *yogrt, fatige/indefatigbl, sujest/nuget, exajrate/dagr, selvej, cabaj/spinach* (exeptionly, perhaps CS *spinaj*, tho this form is not provided for by th norml CS substitution rules), *wastaj/vestij, colej/nolej, juj/jujmnt, brij/brijbl, catlog*.

4 *beij, bourjoi, jenre, rejime, ruje, baraje, fuselaje*.

5 *imajn, cujl, dojm, pajnt, serjnt, deterjnt, indijnt, relijn, dujn, dunjn, lojr, merjr*.

(From §4.1.2)

1 *jinjr, jil, gils*.

2 *misojny/gynecolojy, analojy/analogus, pedagog/pedagojicl, alej/alegation, purj/purgatry, renege/renegade, longevity, longitude, hejmny*.

3 *vage, gorjus, neglijbl, venjnce, majic*.

Othr exampls of G > J substitution in words listd in Chaptr 3 ar:

(from **Rule 1**, Redundnt D) *baj, lej, loj, buj, gajet, porij*.

(from Rule 1, Redundnt E) *waje, enraje, beseje, oblije, huje, languaj, vilaj, privilej, ajing, singng, sinjng, swingng, swinjng, rajing, advantajus, courajus, outrajus, paje*.

(from Rule 1, Redundnt I) *contajon, contajus, lejon, rejon, relijn, relijus*.

(mislaneus) *geldr, gerila, gest, gide, gile, gilotine, gilt, ginea, (dis)gise, gitar, gy, jenrl, hydrojn, jymnast, aknolej, wajer, ajent, cojent, rejent, cajy/cajir*.

5 Substituting Y for IG and elswher

This substitution is less centrl to th opration of CS than th G > J substitution abov, but it ofrs considrbl econmis and removes som strikingly unfonografic spelngs from English, notebly th only remainng GH patrn and th IG digraf in *sign*, etc. Furthrmor, it represents a first tentativ step towards th systmatic regulrization of a major problm-area in TO, th spelng of long vowls, and as wil be explaind in **Chaptr 6**, §1.3.2, it has th potential for much wider use than is sujestd in CS.

5.1 Y for IGH: *flight/flyt*

5.1.1 Th problm of IGH Many instnces of silent GH in TO ar cut out by **Rule 1**, G.2, as servng no fonografic purpose (*tho, thru*, etc), wile som othrs pronounced /f/ ar replaced by F, as described undr §3.1 abov (eg, CS *enuf* for TO *enough*). This leves a sizebl set of GH words containng th string IGH, somtimes folod by T (th word *highlight* combines patrns with and without T). Simpl omission of GH is imposbl in these words because th IGH has th sound-valu of long I, wich wud othrwise not be indicated; thus TO *sign, sight* canot be cut to **sin, *sit*.

Th -IGH set includes th foloing TO forms: *bight, blight, bright, delight, fight, flight, fright, height* (cut to *hight* by Rule 1, E.2.1.4), *high, light, might,*

nigh, night, plight, right, sigh, sight, sleight (cut to *slight* by **Rule 1**, E.2.1.4), *slight, sprightly, thigh, tight*. If CS is to rid ritn English of th GH spelngs entirely, we hav to considr how best to deal with th IGH forms. Th G alone might be cut, givng *hihliht*, in itself a practicl posbility (indeed TO *light* and simlr words tendd to be spelt *liht*, etc in Old English), but th   digraf IH for long I wud constitute a completely new sound-symbl corespondnce in English, somthing that CS jenrly atemts to avoid;   furthrmor, th digraf IH is not redily aplicbl to th *sign* patrn, th form **sihn* requiring letter substitution and apearng almost unrecognizebly difrnt from *sign*.

5.1.2 Historicl perspectiv   A historicl perspectiv, howevr, sujests Y as a natrl, evlutionry solution.   Most words containng GH (exeptions ar *delight, distraught, haughty, inveigh* and probbly *caught*) derive from erlir pronunciations in wich GH was spoken as a velar fricativ (rufly th sound wich, with difrnt spelng, is herd in Scots expressions like *a braw bricht munelicht nicht*). Th GH in *delight* on th othr hand was insertd in such erlir forms as *delyt, dellytte*, etc by false analojy with *light*, and a reversion to th etymlojicly mor 'corect' form *delyt* therfor cud hav som traditionlist apeal. Mor to th point, som othr words replaced an erlir GH by Y: erlir forms of *dry, fly* for instnce include *drigh, fligh*, hos GH we se preservd in ther related nouns *drought, flight*. Th 'modrn' forms *dry, fly* then ofr a modl for cutng th open monosylabls *high, nigh, sigh* to *hy, ny, sy*. (For a posbl reasn wy such a substitution was erlir made in *fly* but not in *high*, se Rule 3, §1.1, on th spelng of monosylabls.) By extension, if erlir *fligh* became *fly*, then it is only lojicl for TO *flight* to becom CS *flyt*, wich   in turn provides a modl for al othr words with th -IGHT endng in TO.

5.1.3   Part of a larjr stratejy   But it is not only such historicl perspectivs wich sujest Y for IGH. It may at first apear that th letr Y by itself is insuficient by TO patrns of sound-symbl corespondnce to represent th long vowel wen folod by T as in *flyt* (myt it be misconstrud, by analojy with *myth*, as *flit*?). Howevr, we shud remembr that CS has been stedily extendng th patrn of sound-symbl corespondnce /ai/ = Y: **Rule 1**, E.1.2.5, cut TO *bye, dye, eye, rye* to *by, dy, y, ry*, and Rule 1, E.1.2.6, cut TO *gybe, pyre, rhyme, style, thyme, type, tyre* to *gyb* (final CS *jyb*)*, pyr, rym, styl, tym, typ, tyr*. In TO I, Y hav thre standrd valus (se **Chaptr 2**, §2.2.1, §2.2.2), for al of wich both letrs ar somtimes used as alternativs (TO *gipsy/gypsy, tiro/tyro, laniard/lanyard*), but Rule 1, Y.3, states th CS prefrnce for I with short valu (CS *jipsy*) and for Y with long valu (CS *tyro*). Th presnt proposal for an importnt new set of spelngs with long Y (*flyt*, etc) furthr strengthns this emerjng regularity. In th confusion of I, Y wich is so widespred in TO, we se yet anothr exampl of th inadequat fonografic distinction between letrs observd in §4 abov between G and J, and in past centuris between I and J, and between U and V, and so th use of Y in *hylyt* contributes furthr to this historic tendncy to disambiguate

letr-valus in English. In othr words, stranje tho *flyt* may at first apear, it is part of a wide-ranjing, long-term stratejy. Furthr steps along this path ar sujestd in Chaptr 6 (tho they ar not included in CS).

Th IGH > Y substitution thus produces th CS forms *byt, blyt, bryt, delyt, fyt, flyt, fryt, hyt, hy, lyt, myt, ny, nyt, plyt, ryt, sy, syt, slyt, sprytly, thy, tyt*. In simplistic fonografic terms, th -YT forms may also be justified as folos: TO *might* is foneticly just *my* + T; and it is therfor only lojicl to respel it MY + T. Two consequences of th IGH > Y substitution ar that th comparativ form TO *higher* becoms CS *hyr*; and th form *thy* for TO *thigh* has th same spelng as th arcaic persnl pronoun *thy* (this is not considrd an unacceptbl ambiguity for modrn English).

5.2 Substituting -YN for -IGN: *sign/syn*

A secnd promnnt TO patrn involvng IG, pronounced as long I, is seen in th set of words of th typ *sign*. Silent G befor N also ocurs mor widely, but **Rule 1** (especialy §G.1.3) was able to remove it from *foreign, sovereign*, *arraign, campaign, champagne, deign, feign, reign* by cutng these words to CS *foren, sovren, arrain* (by **Rule 3**, *arain*)*, campain, champane, dein, fein, rein*. We ar here concernd just with th TO set *align, assign, benign, consign, design, ensign, malign, resign, sign*, in wich th G canot simply be omitd (othrwise TO *sign* wud be reduced to **sin*). Th stratejic argumnts in favorof CS Y for TO IG, givn in §5.1 abov, can be aplyd again to this set of words, givng th CS forms *alyn, asyn, benyn, consyn, desyn, ensyn, malyn, resyn, syn*. Som latent ambiguity arises with th Greek-derived prefix SYN-, but ther is no danjer of confusion in practis between initial SYN-, as in *synthesis*, and final -SYN, as in *desyn* because they ar positionly distinct.

TO *paradigm*, with its final -IGN, paralels th abov -IGN endngs, and can be treatd in th same way, givng CS *paradym*.

Rule 1, C.11, discusd wethr TO *indict* cud be simlrly respelt, as *indyt*. Since an aditionl substitution rule wud be required for this isolated case, it is felt to be a complication scarcely justifyng th benefits, tho a mor radicl reform than CS (se **Chaptr 6**) cud esily make such a chanje.

5.3 Inflectng -Y-endngs: *replied/replyd, replies/replys*

Wile th CS forms *hylyt, syn* arise from a strait IG > Y substitution, CS can use Y to improve sound-symbl corespondnce in a less radicl way in anothr spelng patrn, namely th verbs and nouns that end in consonnt + Y. In terms of ther sound-symbl corespondnce, these words fal into two distinct groups, those hos final Y is pronounced mor or less (th precise valu dependng on accent) like short I, and those hos final Y is pronounced as long I, th two valus being seen in *pity* and *reply* respectivly, wich both function as nouns and as verbs.

It is clear that in an ideal spelng systm, these two endngs wud be difrntly spelt, perhaps as in *piti, reply*. Th unsatisfactry natur of th TO patrns is reflectd in th many mispelngs they giv rise to (including quite comnly th

proposed CS forms *replyd, replys*). For th purposes of CS it is felt to be too drastic a chanje to th apearance of text to substitute I for final Y in th base form of evry word of th typ *pity* (wich then ot presumebly to be extendd to include al adverbs endng in -LY and numerus comn ajectivs of th typ *happy*). A mor limitd oprtunity for regulrizatiin of this endng is, howevr, ofrd by th fact that th *pity/reply* words alredy substitute I for Y in som of ther inflectd forms in TO, ie, in th -D and plural/presnt tense -S inflections (th -ING and posessiv -'S forms ar unafectd by this substitution):

TO *pity, pitied, pities, pitying, pity's*
TO *reply, replied, replies, replying, reply's*.

CS proposes to exploit th substitution that ocurs in TO partialy to regulrize th sound-symbl corespondnce of these endngs.

This is don not by substitution as such, but rathr by retainng in th inflectd forms th -Y of th base form in words of th typ *reply* (as alredy mentiond undr Rule 2, §2.D), givng:

CS *pity, pitid, pitis, pitying*
CS *reply, replyd, replys, replyng*.

Here we se that words of th typ *reply* hav acheved abslute regularity of inflection, wile th TO inflections in words of th typ *pity* ar only simplifyd to th extent of cutng E from th TO endngs -IED, -IES (this cut was alredy made by Rule 1, §E.3.3). A useful consequence is that th misleadngly paralel TO forms *deviant/defiant, variable/reliable* ar clearly distinguishd in CS as *deviant/defynt, variabl/relybl*.

A slyt awkwrdness arises with th posessiv form TO *pity's.* As explaind in **Chaptr 5** belo, CS proposes to abolish th posessiv apostrofe, wich in th case of *reply's* usefuly alyns TO homofones *replies/reply's* as CS *replys*. Howevr, in th case of *pity*, th disapearance of th apostrofe leves th form *pitys*, wich remains, as in TO, awkwrdly difrnt from its homofone, th basic -S-inflectd *pitis*, so preservng th confusing discrepncy between *a thousnd pitis* and *for pitys sake*. Th question arises wethr CS shud merj th two forms, riting *pitis* for th posessiv as wel as for th plural. If a later spelng reform rote base forms such as *piti* (thus also givng *pitiing*)*, societi*, CS wud hav no hesitation about acceptng *pitis, societis* as both plural and posessiv forms; but pendng such a reform, it is thot wiser to keep *pitys, societys* as th posessiv forms in CS, so that th posessiv is formd in al cases by just adng S to th base-word.

Furthr exampls of th new CS forms wud include:

CS *copid/copis*
CS *denyd/denys, relyd/relys,*
multiplys/multiplyd, simplifyd/simplifys

and aftr ablition of posessiv apostrofe (**Chaptr 5**), also

in societis of evry kind, in societys intrests.