A CASEBOOK OF MISSPELLINGS, WITH OBSERVATIONS

In each set the first row contains the correct spelling, in full caps, and the number of times the word was spelled correctly out of a leveled total of 100 spelling attempts. Thus, the first word, accessory, was spelled correctly 40 times.

The second row contains the number of mistokens — that is, the number of times the word was misspelled in a leveled total of 100 attempts. Thus, accessory was misspelled 60 times, or, saying it another way, there were 60 mistokens. The sum of the correct spellings in row 1 and the mistokens in row 2 always equals 100.

The third row contains the number of mistypes — that is, the number of different types of mistokens. Thus, the 60 mistokens of accessory were spread over 28 different ways of misspelling the word, or 28 different mistypes.

The mistypes given in the remaining lines of the set are listed alphabetically with the number of mistokens of each mistype given in the right column.

These fifty words were given to college-age students, most of whom were known to have spelling problems. Some were ESL students; some had learning disabilities. The words were given as a pretest with no advance preparation. The list is from the diagnostic test for the program Mechanics of Spelling.

The attempts were arbitrarily leveled to 100 because in the early days of the tally no accurate record was kept of the number of correct spellings. The figures for mistokens and mistypes are accurate. The number of correct spellings, always equal to 100 minus the number of mistokens, simply provides an arbitrary scaling figure.

1	ACCESSORY	40
2	Total mistokens:	60
3	Total mistypes:	28
4	accesary	3

5	accesery	2
6	accesorie	3
7	accesory	11
8	accessary	4
9	accessery	4
10	accessorie	2
11	acessorie	1
12	acessory	4
13	acsesory	2
14	acsessary	1
15	acsessory	2
16	acsessory	1
17	acssorie	1
18	actcecciery	1
19	assesory	1
20	assessory	1
21	axcerese	1
22	axcessorie	1
23	axsesarey	1
24	exceesary	1
25	excesery	1
26	excessary	2
27	excessory	5
28	exsery	1
29	exsesory	1
30	exsessory	1
31	exssery	1

1	ALIGNMENT	49
2	Total mistokens:	51
3	Total mistypes:	16
4	alainment	1
5	aleignment	1
6	alienment	3
7	alighnment	2
8	aligment	1
9	alignement	1
10	aligniment	1
11	aliment	1
12	alinament	1

13 alinement 12
14 alinment 4
15 allienment 1
16 allignment 17
17 allinement 2
18 allinment 2
19 elinment 1

1 AMPLIFIER 48
2 Total mistokens: 52
3 Total mistypes: 25
4 ampaphier 1
5 amperflyer 1
6 amphier 1
7 amphlafier 1
8 amphlifier 1
9 ampifier 1
10 ampiler 1
11 amplafier 2
12 amplaphier 2
13 amplaphire 1
14 amplefire 1
15 amplephier 1
16 amplerra 1
17 amplhipher 1
18 ampliafier 1
19 ampliefer 1
20 amplifer 1
21 amplifire 4
22 ampliflier 1
23 amplifyer 1
24 amplipher 6
25 ampliphiar 2
26 ampliphier 17
27 ampliphire 1
28 amplyfer 1

1 ASPIRIN 37
2 Total mistokens: 63
3 Total mistypes: 14

4	asiprin	1
5	aspain	1
6	asperan	2
7	asperin	4
8	aspin	2
9	aspine	1
10	aspiran	3
11	aspirane	1
12	asprain	2
13	asprian	1
14	asprin	37
15	asprine	5
16	aspurine	1
17	assprin	2

1	BRACKET	91
2	Total mistokens: 9	
3	Total mistypes: 5	
4	brachet	1
5	bracquet	1
6	braket	4
7	braquet	2
8	raquett	1

1	CANAL	75
2	Total mistokens: 25	
3	Total mistypes: 9	
4	canale	1
5	canel	5
6	cannal	8
7	canneal	1
8	cannel	6
9	conail	1
10	conale	1
11	connal	1
12	cunal	1

1	CHROME	59
2	Total mistokens: 41	
3	Total mistypes: 7	

4	chrom	2
5	comb	1
6	croam	1
7	cromb	1
8	crome	34
9	cron	1
10	krome	1

1	CLAIM	97
2	Total mistokens:	3
3	Total mistypes:	3
4	claimed	1
5	clam	1
6	clame	1

1	COMPELLING	84
2	Total mistokens:	16
3	Total mistypes:	6
4	compailing	1
5	compeling	11
6	compleing	1
7	compling	1
8	conpelling	1
9	pumpelling	1

1	CONSCIENTIOUS	12
2	Total mistokens:	88
3	Total mistypes:	54
4	con	1
5	conceicse	1
6	conceinious	1
7	concenation	1
8	concences	1
9	concencicous	1
10	concencious	1
11	concensious	1
12	concensous	1
13	concheanch	1
14	conchienchus	1
15	conchientious	1

16	conchientsus	1
17	conchinious	1
18	conciances	1
19	conciencious	9
20	conciencous	2
21	concienious	1
22	concienous	1
23	conciensious	1
24	conciensous	2
25	concientious	4
26	concientous	1
27	concietious	1
28	concinious	1
29	conciouises	1
30	conciousious	1
31	concisious	1
32	conncciouss	1
33	consceince	1
34	conscience	2
35	conscienceous	2
36	consciences	2
37	consciencess	1
38	consciencious	8
39	consciencous	8
40	consciensious	1
41	conscientous	1
42	conscientus	1
43	conscieous	1
44	consciesious	1
45	consciouness	1
46	consensious	1
47	conshenshius	1
48	conshiences	1
49	consicenous	1
50	consienious	1
51	consiensus	1
52	contenious	1
53	contiencious	1
54	contientant	1
55	contientious	3

56	contientous	1
57	contintious	1

1	DEFYING	67
2	Total mistokens:	33
3	Total mistypes:	12
4	defeing	3
5	defeying	1
6	deffine	1
7	deffing	2
8	defied	1
9	defieing	4
10	define	1
11	defing	10
12	defining	5
13	deflying	3
14	dephying	1
15	difying	1

1	DISMISSING	90
2	Total mistokens:	10
3	Total mistypes:	3
4	dismising	1
5	dissmising	4
6	dissmissing	5

1	DREDGER	72
2	Total mistokens:	28
3	Total mistypes:	11
4	dreader	1
5	dreadger	5
6	dreager	1
7	dregder	1
8	dreger	5
9	dreggar	1
10	dregger	9
11	dreudger	1
12	drigger	1
13	grader	1
14	greder	2

1	ELIGIBLE	29
2	Total mistokens: 71	
3	Total mistypes:	25
4	elagable	2
5	elageble	1
6	elagible	1
7	elegable	3
8	elegiable	1
9	elegible	1
10	eleigeable	1
11	elible	2
12	elidgable	1
13	eliegiable	1
14	eligable	21
15	eligble	1
16	eligeale	1
17	eligelable	1
18	eliglable	2
19	ellageable	1
20	ellagiable	1
21	elledible	1
22	ellegable	3
23	ellible	1
24	elligable	16
25	elligeable	1
26	elligible	5
27	ilegable	1
28	uliable	1

1	EXPLOIT	79
2	Total mistokens: 21	
3	Total mistypes:	9
4	expliot	1
5	expliote	1
6	exploight	1
7	exploite	5
8	explot	3
9	explote	6
10	exployt	2
11	exployte	1

12	expoit	1

1	FORGOTTEN	87
2	Total mistokens:	13
3	Total mistypes:	6
4	foregotten	1
5	forgetten	1
6	forggoten	1
7	forgoten	9
8	forgotton	1
9	fourgoton	1

1	FREIGHT	59
2	Total mistokens:	41
3	Total mistypes:	12
4	feight	1
5	fieght	1
6	flate	1
7	fraet	1
8	fraght	1
9	fraight	3
10	frait	2
11	frate	5
12	fraught	1
13	fretgh	1
14	frieght	21
15	phrate	3

1	FURLOUGH	26
2	Total mistokens:	74
3	Total mistypes:	18
4	berlow	1
5	ferlo	2
6	ferloe	1
7	ferlow	14
8	fero	1
9	ferrlow	1
10	fourlo	1
11	furllow	2
12	furlo	5

13	furlow	38
14	furough	1
15	furow	1
16	furrlow	1
17	pherlo	1
18	pherlow	1
19	phurlo	1
20	thorolo	1
21	thoughool	1

1	GLARED	81
2	Total mistokens:	19
3	Total mistypes:	6
4	garrled	1
5	glair	1
6	glaired	2
7	glarded	1
8	glarred	13
9	glear	1

1	HALVES	80
2	Total mistokens:	20
3	Total mistypes:	6
4	half's	1
5	halfs	11
6	halfves	1
7	halve	1
8	haves	5
9	havles	1

1	INTRIGUE	43
2	Total mistokens:	57
3	Total mistypes:	19
4	entigek	1
5	entreage	2
6	entrege	1
7	entrique	4
8	interge	1
9	intery	1
10	intreag	1

11	intreage	2
12	intreague	2
13	intreg	5
14	intrege	8
15	intregu	1
16	intreque	9
17	intriege	3
18	intriegh	1
19	intriegue	1
20	intrig	2
21	intrige	12
22	intriuge	2

1	ITEMIZE	83
2	Total mistokens: 17	
3	Total mistypes:	13
4	atomized	1
5	autmise	1
6	idemize	2
7	idimize	1
8	idomise	1
9	idumize	1
10	itamize	2
11	iteamize	1
12	itemes	1
13	itemise	1
14	itemmize	1
15	itimize	3
16	itomice	1

1	JARRING	79
2	Total mistokens: 21	
3	Total mistypes:	4
4	garring	3
5	jaring	16
6	jarying	1
7	jouring	1

1	KNACK	51
2	Total mistokens: 49	

3	Total mistypes:	10
4	knac	1
5	knak	1
6	knake	1
7	knath	1
8	nac	2
9	nache	1
10	nack	36
11	nak	4
12	naqack	1
13	neck	1

1	NEUTRAL	64
2	Total mistokens:	36
3	Total mistypes:	11
4	neautral	1
5	netral	1
6	netrul	1
7	netural	2
8	neutear	1
9	neutrale	1
10	neutrile	1
11	newtro	1
12	nuetral	15
13	nuetrall	1
14	nutral	11

1	OPAQUE	54
2	Total mistokens:	46
3	Total mistypes:	22
4	opac	3
5	opacac	1
6	opace	1
7	opacet	1
8	opack	2
9	opague	1
10	opaic	1
11	opake	11
12	opaqe	2
13	opate	1

14	opauqe	1
15	opeac	1
16	opeak	2
17	opec	2
18	opeck	3
19	opeique	1
20	opeque	5
21	opique	1
22	oplate	1
23	oppeac	1
24	opque	3
25	oqupac	1

1	ORIENTATION	71
2	Total mistokens:	29
3	Total mistypes:	12
4	oreantaion	1
5	oreantation	1
6	oreintation	2
7	orentation	9
8	oriantation	4
9	orientionn	1
10	orination	1
11	oringtation	1
12	orinitation	2
13	orintation	3
14	orrientation	3
15	ortaction	1

1	PARALYZED	24
2	Total mistokens:	76
3	Total mistypes:	17
4	pairalized	1
5	pairized	1
6	paralised	1
7	paralize	6
8	paralized	51
9	paralizzed	1
10	parallized	4
11	paralyed	1

12	paralyized	1
13	paralyse	1
14	paralysed	1
15	parazled	1
16	parelized	1
17	parilized	2
18	parolized	1
19	parralize	1
20	parrelized	1

1	PATROLLING	48
2	Total mistokens:	52
3	Total mistypes:	9
4	controling	1
5	partrolling	1
6	patroling	43
7	pattroling	1
8	pattrolling	1
9	pedtrolling	1
10	petroling	2
11	petrolling	1
12	portaling	1

1	PHONOGRAPH	85
2	Total mistokens:	15
3	Total mistypes:	8
4	phograph	1
5	phonagraph	5
6	phonegraph	3
7	phoneograph	2
8	phonoghraph	1
9	phonogragh	1
10	phonograth	1
11	photograph	1

1	PICNICKING	21
2	Total mistokens:	79
3	Total mistypes:	10
4	picincing	1
5	picinicing	1

6 picknecking 2
7 pickneking 1
8 picknicing 5
9 picknicking 6
10 pickniking 8
11 picnicing 52
12 picniking 2
13 pinicing 2

1 RECEIPT 54
2 Total mistokens: 46
3 Total mistypes: 10
4 receit 4
5 recept 6
6 recieped 1
7 reciept 24
8 reciepts 1
9 reciet 1
10 recipet 1
11 recipt 6
12 reicit 1
13 reicpt 1

1 RESIDUE 70
2 Total mistokens: 30
3 Total mistypes: 15
4 re'sude 1
5 resadew 4
6 resadue 8
7 resedue 2
8 residew 5
9 resiudu 1
10 ressedue 1
11 restado 1
12 resude 1
13 resudue 1
14 rezadew 1
15 rezedew 1
16 rezedue 1
17 rezidue 2

18 riesdew 1

1 REVERSIBLE 28
2 Total mistokens: 72
3 Total mistypes: 8
4 revearsable 1
5 revercable 2
6 reverisable 1
7 reversable 51
8 reverseable 13
9 reverseble 1
10 reversiable 2
11 revreable 1
1 SEPARATE 44
2 Total mistokens: 56
3 Total mistypes: 7
4 separte 1
5 seperat 1
6 seperate 49
7 seporate 1
8 sepperate 2
9 sepreat 1
10 serparate 1

1 SERVICEABLE 49
2 Total mistokens: 51
3 Total mistypes: 14
4 cervisable 1
5 servable 1
6 servasable 1
7 servesable 1
8 servicable 36
9 serviceble 1
10 servicible 3
11 servisable 1
12 sevasabale 1
13 sevicible 1
14 survicable 1
15 surviceable 1
16 survisable 1

17 suvisable 1

1 SHOVELING 76
2 Total mistokens: 24
3 Total mistypes: 12
4 sholvling 1
5 shouveling 1
6 shovelling 8
7 shoving 1
8 shovling 3
9 shufling 1
10 shulving 1
11 shuveling 3
12 shuvelling 1
13 shuvleing 1
14 shuvling 3
15 sovelling 1

1 SKIP 100
2 Total mistokens: 0
3 Total mistypes: 0

1 SPACING 87
2 Total mistokens: 13
3 Total mistypes: 2
4 spaccing 1
5 spaceing 12

1 SPAGHETTI 36
2 Total mistokens: 64
3 Total mistypes: 22
4 sfagetti 1
5 spagehetti 2
6 spageti 1
7 spagette 1
8 spagetti 21
9 spagettie 3
10 spaggetti 4
11 spaggitti 1
12 spaghate 1

13	spagheti	3
14	spattight	1
15	spegetti	9
16	spegettie	2
17	speggehti	1
18	speggetti	1
19	speggittie	1
20	speghetti	5
21	spegitti	1
22	spegtti	1
23	sphgatti	1
24	spigetti	1
25	spugetty	2

1	SPINY	49
2	Total mistokens:	51
3	Total mistypes:	6
4	spiney	27
5	spinie	3
6	spining	4
7	spinney	5
8	spinning	1
9	spinny	11

1	THOROUGH	39
2	Total mistokens:	61
3	Total mistypes:	24
4	thero	2
5	therough	2
6	tho	1
7	thogh	1
8	thorou	1
9	though	1
10	thoural	1
11	thourgh	2
12	thourgho	1
13	thourogh	5
14	thourough	10
15	thourow	2
16	throrough	1

17	throu	1
18	through	13
19	throughal	1
20	throughero	1
21	throughow	1
22	throught	1
23	thuro	2
24	thuroght	1
25	thuroue	1
26	thurough	9
27	turough	1

1	TREK	79
2	Total mistokens:	21
3	Total mistypes:	4
4	track	5
5	trec	1
6	treck	14
7	truek	1

1	UNIQUE	87
2	Total mistokens:	13
3	Total mistypes:	11
4	eunique	2
5	u	1
6	uneack	1
7	uneck	1
8	uneque	1
9	unicke	1
10	unicuqe	1
11	unik	1
12	uniqe	1
13	uniquie	1
14	unquie	2

1	VACUUM	30
2	Total mistokens:	70
3	Total mistypes:	11
4	vaccoom	1
5	vaccum	18

6	vaccume	19
7	vaccumme	1
8	vaccumn	1
9	vaccuum	2
10	vacoom	1
11	vacum	8
12	vacume	18
13	vacumn	1
14	vacumum	1

1	WASTEFUL	72
2	Total mistokens:	28
3	Total mistypes:	6
4	waisteful	2
5	waistful	6
6	waistfull	1
7	wastefull	10
8	wastful	8
9	wastfull	2

Some Miscellaneous Observations on Misspellings and Difficulty

1. The empirical ideal would be to give the entire English lexicon to the entire group of English-literates, tallying their various misspellings. This would give (a la the Iowa Spelling Scale) an empirical index of difficulty: The higher percentage of people who missed a word, the harder the word would be to spell..

2. However, there is the question of the nearness of the miss. Some spellings are just barely wrong; some are massively wrong. One could argue that words that generated massively wrong misspellings are in some sense more difficult than words that generate several near misses. This, of course, gets us into the question of how we measure the nearness of the miss. Empirically, if informed readers find it difficult to figure out what the word was supposed to be by looking at the misspelling, we could argue that that misspelling is a further miss than one in which they could tell immediately what the intended spelling was. Thus *suffitiently is a very near miss of *sufficiently*. *Undaughtably (for *undoubtedly*) could be seen as a further miss. On the other hand, *sufishuntly seems somehow a further

miss than does *suffitiently, even though, being relentlessly phonetic, it is fairly easy to identify. Some words seem to generate a lot of far misses, way out, unintegrated misspellings.

3. Another dimension in all of this is something we can call spread, which refers to the number of misspelling types a word will accumulate, with or without many tokens of each type. Some words accumulate very few misspelling types but a lot of tokens of those few types. Thus *reversible* comes out *reversable or *reverseable about two and a half times as often as the correct *reversible*, with very few other misspelling types. *Reversible*, then, is a word with a narrow spread of misspellings. Other words have immense spreads, generating many different misspelling types, sometimes with very few tokens per type.

Further, we can talk about not just narrow vs. wide spread, but also about quick vs. slow spread. A word with a quick spread will accumulate many different misspelling types in sometimes surprisingly few total misspelling tokens. The "Casebook of Misspellings" contains words with quite wide, quick spreads — *conscientious*, for instance.

The type/token ratio seems important here, too. Notice *amplifier*'s 25/52 (48%), *spaghetti*'s22/64 (34%), and *unique*'s 11/13 (85%!). This suggests another dimension that might be called thin vs. thick spread. The spread gets thinner as the type/token ratio goes down; it gets thicker as the ratio goes up. A thin spread has very few tokens in each type on average; a thick spread averages many tokens per type.

4. All of the foregoing have been essentially empirical, inductive observations — or at least observations based on data arrived at empirically and inductively. You could get at the questions of nearness of miss and of orthographic difficulty in a more deductive way, a way that is more system-centered than use-centered. Thus, given a catalog of procedural and tactical rules, you could analyze a misspelling in terms of the number of such rules to which it does violence. Thus, we could say that *suffitiently is a very near miss indeed. *Sufficiently* is orthographically a complex, though tidy, word: ‹su/b + f + fic/e + ient› + ly›. It contains the ‹*suf*- assimilation of the prefix ‹*sub*-, plus the terminative bound base +*fice*, plus an instance of silent final <e> deletion, plus the selection of the -*ient*› expansion of -*ent*› consistent with the palatalization rule for the [sh] = <c> correspondence, plus the suffix -*ly*›, affixed via simple addition. Again,

complex, but tidy — or regular and ruly.

The misspelling *suffitiently gets all of this complexity right — except that it includes (apparently) the terminative bound base +fit, as in *profit*. And +*fit* is cognate with +*fice*, both deriving from Latin *facere*. The misspelling *suffitiently thus has all of the rules and patterns correct, and three of the four elements properly selected. It simply contains a cousin of the correct base — or another way of putting it would be to say that the speller missed the helpful connection between *sufficiently* and its prime *suffice*, in which the spelling <fit> would be clearly inappropriate.

Because of its fundamental correctness in terms of elements, procedures, and rules *suffitiently also gets the sound-to-spelling correspondences correct, too. In fact, it does better here than in the selection of elements, rules, and procedures, because although <fit> is an inappropriate spelling for the base of a word that derives from *suffice*, <t> is a perfectly acceptable spelling of [sh] in this palatalized setting. Indeed, [sh] = <t> more times than [sh] = <c>. In fact, according to Hanna et al's *Phoneme-Grapheme Correspondences as Cues to Spelling Improvement* (pp.1028-29), [sh] is spelled <t> more often than it is spelled any other single way. On the basis of this systematic analysis, then, we can say that *suffitiently is a near miss indeed, regardless of what we may or may not know about the ease with which informed readers recognize it as an attempt at *sufficiently*.

5. The foregoing analysis suggests another set of dimensions for discussing misspellings and orthographic difficulty, all of which are bound up with *American English Spelling*'s distinction between well- and ill-formedness (pp. 26-27). Well-formedness involves concurrence with the following types of ruliness: Procedural ruliness, as in getting right the assimilation in the prefix, final <e> deletion, and the simple additions of the two suffixes. Selective ruliness, as in selecting the correct elements, except for the cognate form +*fit* in place of +*fice*. Sound-to-spelling ruliness, as in getting the sound-to-spelling correspondences right, or at least always plausible. And there must be tactical ruliness involved here, too. Tactical ruliness follows as a concomitant to all of the ruliness described so far. No violence is done to any of the known graphitactical rules or patterns.