## WHERE IS THE SHORT IN SHORTHAND - AND IS IT SHORT ENOUGH?

"To brief or not to brief?" That question has been debated since the birth of "shorthand." Are briefs a necessity for writing at verbatim speeds or merely a convenience so our fingers can be a little lazy? Are Mr. Cohen's words of wisdom from 1982 still relevant?
"The established fact is that high verbatim speed is within reach of the average writer without radical stroke surgery." [Arnold Cohen, CSR, RPR; Keep It Simple, NSR/July 1982]

Regardless whether we're talking about the QWERTY or steno keyboard, keyboarding speed is the product of: Strokes per minute X characters per stroke. The QWERTY keyboard limits operators to one character per stroke. The biggest and most obvious short in machine shorthand is the fact that we can depress multiple keys, creating multiple letters - whole syllables! - in one stroke.

When talking about "speed," we have to keep in mind that speech is verbalized at $X$ syllables - not words - per minute. If someone is speaking at 250 syllables per minute, those 250 syllables could represent as many as 250 words or as few as 125 words - or even less. For there to be any consistency, and therefore any real meaning, when talking about the speed at which someone is speaking - or writing steno - it must be based on a standard word count; the NCRA standard being 1.4 syllables equal one standard word.

I suspect that many students have played the same mind game I did as a student: RPR certification speed is 225 wpm , times 1.4 equals 315 syllables, divided by 60 , equals 5.25 syllables per second. And reporters have to write even faster than that on the job! Gulp! I thought I'd just confirmed mathematically that writing at verbatim speeds is physically impossible for the average person! After a few days, common sense resurfaced. Thousands of people have written machine shorthand at verbatim speeds for many decades, ample evidence that it is an achievable skill if you're willing to invest the effort.

The problem with my little equation was that it assumed we only write one syllable per stroke. And that, thank heavens, is far from accurate. After all, we write shorthand. Machine shorthand speed equals the number of strokes per minute times the average number of syllables written per stroke.

So where, exactly, is the rest of the "short" in shorthand? When and how do we write more than one syllable per stroke?

## One-syllable words

The only option for "shortening" one-syllable words is to use one stroke to represent a phrase of two or more words: e.g., are you, did he, can you tell, as soon as, etc. Strokes for high-frequency multi-word phrases can be a tremendous help in shortening the stroking of one-syllable words (provided they are devised with care to avoid using strokes identical to those needed as words/word parts).

## Two-syllable words

Basic shorthand principles naturally reduce a huge number of two-syllable words to one stroke. Examples:

| horrible | HORBL | parent | PAEURPBT |
| :--- | :--- | :--- | :--- |
| payment | PAEUPLT | clearance | KHRAOERPBS |
| journal | SKWRURPBL | thesis | THAOESZ |
| partial | PARLGS | verbal | SRURBL |
| motion | PHOEGZ | famous | TPAEUPLS |
| playful | PHRAEUFL | decide | KPAOEUT |
| chauffeur | SHOEFR | jealous | SKWREUD |
| quiver | KWEUFRB |  |  |

We use the elision principle (omitting an unstressed vowel) to "compress" two beginning syllables, reducing many more two-syllable words to one stroke. Examples:

| pollute | PHRAOUT | commit | KPHEUT |
| :--- | :--- | :--- | :--- |
| select | SHREBGT | suffice | STPAOEUS |
| delete | TKHRAOET | supply | SPHRAOEU |
| corrode | KROED | police | PHRAOES |
| parole | PROEL | collect | KHREBGT |

## Words of three or more syllables

With words of three or more syllables, our options for shortening shorthand expand dramatically. Again, a major contributor is the elision principle, and now we also omit unstressed vowel syllables. This simple technique alone reduces thousands of threesyllable words to two strokes: Examples:

| relative | REL/T-FB | sediment | SED/-PLT |
| :--- | :--- | :--- | :--- |
| register | REPBLG/ST-R | celebrate | SEL/PWRAEUT |
| precedents | PRES/TK-PBTS | remedy | REPL/TKAE |
| villager | SREUL/SKWR-R | diagram | TKEU/TKPWRAPL |
| practical | PRABGT/K-L | egotist | AOEG/T*S |
| liberals | HREUB/R-LZ | prototype | PROET/TAOEUP |
| bulletins | PWUL/T-PBZ | terminal | TURPL/TPH-L |
| maximums | PHABGS/PH-PLZ | canisters | KAPB/ST-RZ |

We use one-stroke shortcuts for numerous multi-syllable word endings, reducing three-, and even four- and five-syllable words, to two easy strokes:

| fabulous | TPAB/KWR-LS | potentially | PO/TAELGS |
| :--- | :--- | :--- | :--- |
| speculate | SPEBG/KWR-LT | plagiarism | PHRAEUPBLG/R-FPL |
| evacuate | E/SRABG/KWRAUT | perpetrator | PURP/TRAEURT |
| mandatorily | PHAPBD/TOEURL | fabricate | TPAB/R-BGT |
| primarily | PREU/PHAERL | fabrication | TPAB/R-BGZ |
| manageable | PHAPB/SKWR-BL | supplements | SUP/HR-PLTS |
| irritably | EUR/TAEBL | detriment | TKET/R-PLT |
| eligibility | EL/SKWR-BLT | seismologist | SAOEUZ/PHAULGS |
| vacancy | SRAEUBG/AEPBS | musicology | PHAOUZ/KAULG |
| virtually | SRUR/KHAEL | vociferous | SRO/SEUFRS |
| thoughtfully | THAUT/TPAEL | posthumous | PAUS/KH-PLS |
| historic | HEUS/TOERBG | sensitivity | SEPBS/TEUFBT |
| affluent | AF/HRAOUPBT | laminectomy | HRAPL/TPHOEUBGT |
| secular | SEBG/KWRARL | hysterectomy | H*EUS/ROEUBGT |
| startling | START/-LG | pleurotomy | PHRAOUR/OEUPLT |
| hurrying | HUR/AEG | lobotomy | HRO/PWOEUPLT |
| potential | PO/TELGS | tracheotomy | TRAEUBG/KWROEUPLT |

We use one-stroke shortcuts for multi-syllable word beginnings. Examples:

| interview | TPH-RT/SRAOEU | autograph | AOT/TKPWR-F |
| :--- | :--- | :--- | :--- |
| intromit | KPWRO/PHEUT | upperclass | URP/KHRASZ |
| antedate | AEPBT/TKAEUT | hypermorph | HAOEURP/PHOFR |
| polymer | POEUL/PH-R | homophone | HAOPL/TPOEPB |
| microphone | PHAOEURBG/TPOEPB | hologram | HAOL/TKPWR-PL |
| hydroplane | HOEURD/PHRAEPB | metabolic | PHA*ET/PWAUL/-BG |

Just by using these very basic shorthand principles, we increase our average syllables per stroke rate substantially. The following reflects the multi-syllable words included in the 5,000 most-frequently-used words (Brown Corpus) and the average syllables per stroke.

| 2-syllable words | 1,852 (3,704 syl); 3,657 strokes; 1.02 syllables per stroke |
| :---: | :---: |
| 3-syllable words | 967 (2,901 syl); 2,363 strokes; 1.23 syllables per stroke |
| 4-syllable words | 365 (1,460 syl); 1,046 strokes; 1.40 syllables per stroke |
| 5-syllable words | 109 ( 545 syl); 338 strokes; 1.61 syllables per stroke |
| 6-syllable words | 12 ( 72 syl); 43 strokes; 1.67 syllables per stroke |

The first, and perhaps most important, step for anyone who wants to shorten their shorthand is to make sure they're using shortcuts that are an integral part of shorthand. For example:

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AP/PAR/RAT/TUS
TPHOBG/TURPB/TPHAL
HERPL/PHAT/TAPBLG
AOEG/TKPWOE/T*EUS
TKAOEU/KWRAPL/PHAOET/ER
HEUFT/KWRAOR/EUBG/AL/HREU
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are steno but it's a bit of a stretch to call them shorthand. Using basic shorthand principles, they would be more easily stroked - and read! - as

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AP/RAT/US
TPHOBG/TURPBL
HERPL/TAPBLG
AOEG/T*EUS
TKEU/APL/TER
HEUS/TOR/KHRAE.
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Also, one-stroke shortcuts for frequently encountered multi-syllable word endings, cutting several words "down to size" in one easy step, contributes more to writing comfort and speed than memorizing briefs for the individual words.

After eliminating unnecessary overstroking and/or doubling of consonants, making certain you're writing shorthand and not just steno, the question remaining is: Do you need even shorter shorthand in order to write at graduation or verbatim reporting speeds? Whatever your present speed may be, there are only two options for increasing speed: (1) Increase the number of strokes you write per minute; or (2) Shorten your shorthand further with the last remaining option: Brief forms.

The most appealing choice for many students in their effort to build speed is to shorten their shorthand by memorizing briefs. Briefs are "instant gratification": You memorize a brief, you save a stroke(s) - at least you save a stroke every time that particular word comes up, which could be the next sentence, next paragraph, next take, next job, next day, next week, next month. Unfortunately, eliminating a stroke doesn't necessarily increase speed. Replacing a two-stroke word with a one-stroke brief increases speed only if the stroke for the brief is (a) so simple that it can actually be stroked faster than the two strokes to write it out; and (b) if you make it such an automatic part of your writing that it can be recalled and stroked at the speed needed for verbatim reporting; i.e., at the rate of three to five per second. If that brief which seems so helpful at 150 or 160 wpm requires such complex fingering or there's enough hesitation recalling it so
that you can't stroke it at the rate of three to five per second, it actually reduces speed at the higher speed levels.

But let's assume you have all your briefs absolutely mastered and you can recall/stroke them fast enough. How much do they actually contribute to overall speed? Let's do the math. Our high-frequency word list actually contains 4,822 words ( 10,199 syllables). Using only the basic shortcutting principles we've talked about which are a natural part of shorthand - no briefs -- they require 9,189 strokes ( 1.11 syllables per stroke). To write the entire list of 4,822 words at 180 wpm requires stroking 3.8 strokes per second.

How many of these 4,822 words would you have to write as one-stroke briefs to reduce the number of strokes required to just three strokes per second? It depends on how many strokes each brief actually saves. Using briefs available for these high-frequency words, averaged out over the two- through six-syllable words, each use of a brief saves an average of 1.25 strokes. To eliminate enough strokes to reduce your stroking rate from 3.8 to 3 strokes per second when writing this list of high-frequency words would require writing 1,407 words as one stroke briefs - roughly every third word.

Let's do the math from the other direction. Say your present speed is an average of $X$ strokes per minute and you want to increase your writing speed the equivalent of 30 strokes per minute. You can do that (a) by increasing your stroking speed by one-half stroke per second ( 30 strokes per minute); or (b) by adding an average of 24 new onestroke briefs per minute of writing.

An important point to consider: Increasing your stroking speed increases the speed at which you write everything. Increasing the number of briefs you use increases your speed only for segments of writing in which the specific briefs you've memorized occur - and occur in sufficient numbers.

How many briefs is enough? Is it sufficient to memorize briefs just for the 3,305 words of two syllables or more on the high-frequency word list? What about every word of two syllables or more in the $30-35,000$ words in the average adult's word recognition vocabulary? You're bound to run across most, if not all, of them on the job. Plus, of course, all the phrases and the briefs for specific subject matter or jobs.
> "Shortcutting to the reporter is what alcoholism is to the bartender: an occupational hazard to be guarded against at all costs." [Arnold Cohen, RPR, Writing Long, Unusual Words, NCR/February 1977]

Mr. Cohen's quote succinctly describes how addictive briefs can become. They're almost like eating potato chips or popcorn: Once you start, it's hard to stop. If your first reaction to every word you encounter of more than one syllable is to think "brief" rather than just stroking the word out naturally, you've become a "briefaholic."

The neophyte tends to devise or borrow shortcuts for every word that gives him the least trouble. The result is that the mind is so clogged with shortcuts that the writer's speed is actually reduced, because the mind cannot feed the outlines to the hand; and the overloaded mind is too busy trying to recall the appropriate shortcut. [Martin J. Dupraw (NSRA Gregg Speed Champion, 19251927), The True Secret of Shorthand Speed, The NSR/November 1973]

Some of you are undoubtedly asking, "But how can I force my fingers to move faster!"

It's not your fingers which need to work faster; it's your brain! Remember Mr. Cohen's advice: "The established fact is that high verbatim speed is within reach of the average writer without radical stroke surgery." Lacking some unusual physical limitation, the average steno writer's fingers can physically stroke the keys at ample speeds. It's your brain you have to train to work faster in comprehending, processing, and responding to incoming data in order to eliminate the hesitation between strokes!

Everyone has a photographic memory...some of us just don't have any film. (Unknown)

Yes, some days I feel like my "film" is in pretty short supply; but in truth, we all have an adequate amount of "film." It's your choice as to whether it's best to use your "film" to: (a) Train your brain to work more efficiently to eliminate hesitation between strokes so you can stroke faster; or (b) To memorize more and more and more brief forms.

Common sense tells me that the best choice for most people is a combination of increased stroking speed and judicious use of briefs. If your goal is court reporting, master those briefs for ladies and gentlemen of the jury, preponderance of the evidence, vague and ambiguous, after the accident, is that right, is that correct, etc. By all means, use briefs for high-frequency words where the brief saves two or more strokes or where stroking the word out is unusually awkward because of the structure of the word or the fingering involved. Use briefs that add to your writing comfort and confidence. But be realistic about how much briefs contribute to overall speed.

Keep in mind that no matter how much of your "film" you use memorizing briefs, there are still a few hundred thousand English words you may need to be able to write on the job - especially if you opt to become a closed captioner, CART captioner, or realtime reporter. Don't use so much of your "film" on briefs that you don't have enough left over to process all the other words you'll need to write.

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