

Issues in Captions, Inc. style

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In November 2001, I interviewed Lee Jordan for an article published in July 2002 in *Print*, a graphic-arts magazine, on the topic of captioning and subtitling typography. (The article was a sequel to a similar article in the same magazine dating back to 1989.) I pointed out some inconsistencies in Captions, Inc.'s style to Lee, and he told me he'd bring any documentation of such issues to the attention of Captions, Inc. staff. I sent such documentation to Lee in August 2002 in the form of a letter. The version you are currently reading is slightly edited from the original letter sent to Captions, Inc. in August 2002. However, it retains the voice and style of a letter.

Assumptions

I am providing this not-quite-unsolicited advice because I care – and have cared for over two decades. I try to stay away from arguments along the lines of “I don't like it, so stop doing it.” I prefer an argumentation more like “Here's a good reason not to do it. Here's an alternative without the same problem.” We are all committed to the cause of accessibility, and few, if any, of us are willing to take the expedient path rather than the right one.

But if “I don't like it, so stop doing it” does not cut it as an argument, neither does “I do this eight hours a day, so I must be right.” It is indeed possible to work in a field and not know everything about it – or to work in a field and do things wrong, even for years at a time. Instead of being embarrassed or offended, the response I suggest is “OK, I can live with that. Now how do we fix it?”

Text rendering

Let's start with basic issues related to typing and presenting text in Line 21 and DVD-subpicture formats.

1. Case

There is one *and only one* reason why Line 21 captions were ever set in upper case: Because first- *and second*-generation decoder fonts were ineptly designed by untrained, indifferent American engineers. No characters had descenders, meaning *gypqj* were scrunched into the same height as lower-case letters without ascenders. *g*, *s*, and *e* differed from each other by one or two pixels. This error remained unfixed in TeleCaption II-era decoders, for no credible reason.

Given these facts, all-upper-case captions were deemed merely *less illegible* than mixed-case. But captions must be written in mixed case.

IMPROVED DECODER FONTS The Television Decoder Circuitry Act broke NCI's monopoly on decoder design and, with NCI uninvolved, it finally became possible for halfway-decent decoder fonts to be designed. *No* qualified type designer (and certainly no designer with qualifications to design engineered screenfonts) is known to have designed a Line 21 decoder typeface. The fact nonetheless remains that decoder fonts today are much easier to read than the original two decoder generations' fonts. Even fonts that still lack descenders are working with higher available resolution and are perfectly readable. It is uncommon to find no-descender caption fonts these days. (Ironically, one of

my TVs has such a font. It is no problem to read.) You can prove it to yourself by visiting any electronics store and comparing models.

On the order of 25 million decoder-equipped TVs are sold each year in North America. NCI never sold more than 300,000 set-top decoders with unreadable lower-case fonts. As of July 2002, early decoders are no longer supported (not even TeleCaption II backward compatibility), according to a draft agreement among U.S. captioners that you might not actually have heard of.

There remain no reasons to fold, spindle, and mutilate the English language to compensate for outdated equipment. And there are a host of reasons to switch to mixed case for *all* Line 21 captioning jobs:

- That's how the English language is written. This in itself trumps every counterargument.
- It will save you time and money. No longer are you faced with creating largely-upper-case Line 21 captions (with maddeningly error-prone exceptions, like speaker IDs) but also mixed-case subpictures and Line 22 PAL captions. The base transcription file can be typed in and remain in lower case.
- The Caption Center has been captioning in mixed case only for nearly three years. We are thus able to do real-world comparisons of readability of mixed- vs. all-upper-case captions by simply staying at home and watching a few different TV shows (or just flipping channels). The Caption Center has, in effect, embarked upon a three-year field test of mixed case, and I will tell you from experience that *it works fine* even on a television with a no-descender font. If their viewers can read mixed case, why can't everybody else's?
- Canadian captioners have captioned in French and occasionally English in mixed case for more than five years – and that's while saddled with the (again ineptly designed, compromised, deficient, and maddening) accented character set in Line 21. Not only does it work fine, research into French-language deaf viewer opinions showed a preference for mixed case. They're using the same TV sets Americans are and have exactly the same brains. If they can read mixed case, why can't everybody else?

REAL-TIME CAPTIONING IS NO COUNTERARGUMENT Note that real-time captions can be and are provided in mixed case, but it's usually not worth the bother due to the keystroke overhead involved. But Captions, Inc. does not provide real-time captioning, or anything that uses scrollup. The presence of all-upper-case real-time captions is no argument for preserving upper case in prewritten pop-up captions (or live-display scrollup captions, for that matter).

2. Non-speech information (NSI)

Captions, Inc.'s speaker identifications and indications of non-speech information (NSI) are overpunctuated. It's not a serious problem, but it deserves correction.

HONOURING ENGLISH ORTHOGRAPHY A guiding principle in captioning – one that is honoured more in the breach than in observance – is to hew to the established standards of English orthography unless irrefutable reasons argue otherwise. Such reasons are surpassingly rare; the most common example is multi-caption quotations. (In print: All paragraphs have opening quote; all paragraphs but the last have no closing quote; last paragraph has a closing quote. In captions: All captions except the last have opening quote only; last caption has closing quote only. The discrepancy is due to the fact that

captions are discrete blocks; a caption with quotation marks at both ends is a self-contained quotation, not an extended one, and a caption without surrounding quotes on either or both ends is not a quotation.)

In English orthography, we do *not* typeset spaces inside brackets and parentheses. It just isn't done.

EXISTING CAPTIONING PRACTICE The Caption Center has used (`\non-speech information\`) as its NSI format nearly forever. (I have some early-'80s videos in which they use the NCI-like [NON-SPEECH INFORMATION] format.) Backslash here indicates the italic toggle which, as you know, inserts a blank space (at least when used mid-caption; all-italic lines sometimes lose or elide the initial space). I used to consider the cost of the added spaces reasonable in order to achieve italicized NSI, but that seems unsupportable now.

Vitac (and many Canadian captioners, the less spoken about whom the better) use the [NON-SPEECH INFORMATION] format. Captions, Inc. uses [Non-Speech Information], with every single word capitalized (even prepositions like *to*, short conjunctions like *and*, and articles like *the*).

CONFUSABLE CHARACTERS Brackets look like the letter I in caption fonts. But aren't caption fonts so much better now that we can actually use mixed case? Yes, they are better *for that application*. But spaces inside brackets have *never* been used in English orthography. (Look at very old books, as I specifically have, and you might find a *thin space* used, no equivalent for which exists in Line 21, as we'll get to later. Old books are not, however, relevant.) The word *I* surrounded by spaces is common in English; indeed, the capitalized first person is one of the language's unusual features. Bracket-space and space-bracket look like *I-space* and *space-I*.

NSI like [Franklin Wheezing, Coughing In Distance] can plausibly be read as *I Franklin Wheezing, Coughing In Distance I*. This is not a theoretical complaint; I misread it that way myself. I also sit there puzzling it out by staring at the ambiguous characters until I figure out they are brackets and not *Is*. By that time, the entire caption has disappeared. And with Captions, Inc.'s habit of loading up the screen with text, if I miss a caption, I miss a lot. How do you think the segment of the deaf population with lower literacy levels is faring with this orthography? No better, I suspect.

It Is Against The Rules Of English Orthography To Capitalize Every Word. Newspaper Headlines Rarely Use That Format (Contrary To Popular Belief – It's The Same Kind Of Popular Belief That Allows Apostrophe-s As A Plural For Any Noun). What Few Newspapers That Capitalize Headlines Do *Not* Capitalize Unimportant Words, Including Short Prepositions, Conjunctions, And Articles. Even *German* Does Not Capitalize Every Single Word. Captions, Inc.'s Use Of Capitalized First Letters On All Words Is Illegal In English Orthography – And Tedious To Read.

It Should Be Pointed Out That Reading Does Not Occur Word-By-Word; The Eye Bounces Among *Saccades* Or *Fixations* Across The Line. Generally, Those Unfamiliar With The Psychology Of Reading Have A Hard Time Believing That Saccades Or Fixations Are Real, Because We All Remember Learning To Read Word-By-Word. The Fact Remains That Saccades Have Been Experimentally And Incontrovertibly Verified For Decades (And Can Be Verified Yourself By Simply Watching Someone's Eye Movements During Reading), And We Are Talking About Fluent Readers, Not Learners.

Saccades Are Influenced By Word Shape (Not Letter-By-Letter Spelling, Save For Ambiguous Cases), Including Spaces Between Words. Capitalizing Every Word Forces An Unnatural Word-By-Word Reading, As You Are Experiencing Here. So Do Not Do It.

The argument can be made in either direction for case of the first word in an NSI caption. CaptionMax and the Caption Center use lower case. One could hold that NSI is essentially a sentence fragment, and sentences, whether fragmented or not, begin with capitals.

RECOMMENDATION: NSI Do not typeset spaces inside brackets. Use mixed case; limit upper case to the first letter of an NSI and proper names.

3. Speaker IDs

Speaker identification should not be typeset in brackets. It isn't parenthetical information. It's part of the living flow of the dialogue as rendered in type. Bracket-space orthography, as used by Captions, Inc., puts IDs in the same category as non-speech information, which they are not.

The issue here is distinguishing the speaker identification from the uttered dialogue and other captions. The ID cannot be *too* distinct or the viewer fixates on it, trying to figure out what it is. But it cannot look like regular caption text, either, or it is mistaken for uttered dialogue.

The existing English orthography (as seen in *typeset* film scripts; plays; and transcripts) sets the speaker's name on the same line, usually but not necessarily followed by a colon, or en or em dash, or at least an em space, with no parentheses or brackets. The orthography used in *typewritten* film scripts uses a separate line for speaker ID, but no parentheses or brackets.

Case difference and a colon have proven to be sufficient differentiators in captions created by the Caption Center, NCI, and Vitac, among others. The ID becomes *just different enough* to be instantly and transparently understood without the conscious effort and unpacking required by Captions, Inc.'s current approach.

Compare the complexity:

Seven and five apparent words for three words and one word of uttered dialogue	- [Janet] YES. IT'S RAINING. - [Brad] YES.
Four and two apparent words	JANET: Yes. It's raining. BRAD: Yes.
Five and three apparent words	- JANET: Yes. It's raining. - BRAD: Yes.

And those aren't even the most complex cases – speaker IDs on their own line (desirable whenever possible in captioning for clear but unobtrusive differentiation) add another layer of complexity when brackets and spaces are involved.

RECOMMENDATION Use all-upper-case speaker IDs without brackets or spaces. Obligatory lower case used in names must be preserved (de MAUPASSANT, MacEWEN).

4. Errant spaces

We are stuck with monospaced typefaces in Line 21. It's a glorified electronic typewriter, albeit one that prints in reverse and lets us use italics and a scant few other features. Cues of width and horizontal emphasis found in print typography are absent or heavily compromised in Line 21. What are we missing?

- **Spaces:** There's exactly one space character (actually two, if you include transparent spaces), unlike the four *typically* used in print typography. (More than a dozen are defined in Unicode and have antecedent uses.) Those four are: Word space (of specified but malleable width; word spaces expand and contract in justified text but are typically the width of an *l* in unjustified text); em space (as wide in points as the point size of the font); en space (half an em space); thin space (1/5 an em space). In Line 21, *all* those characters collapse onto the one and only available word space or multiples of it.
- **Hyphens and dashes:** Exactly one character compared to the enormous range available in print typography, including hyphen, dash (can be same width; used in numbers), em dash (equal in width to the size in points), en dash (half as wide as em dash), and three-quarter em dash (three-quarters as wide as em dash).

SENTENCE DIVISIONS I suppose it is defensible to caption two spaces between sentences. The history of one vs. two spaces between sentences in print typography is contentious. In Victorian days, a full em space could even be found after end punctuation, in part because type houses were paid according to the total number of lines set, offering an incentive to make lines as wide as possible. In any case, the current standard in print typography is one and only one word space after a sentence (actually between sentences, if you think about it).

Two-space divisions between sentences are an artifact of *typewriting*, not typesetting. The habit was devised to reduce ambiguity in the case of sentences that ended and/or began with acronyms or the word *I*. The case can be made that, using monospaced fonts as we are, the two-space division of glorified typewriting is OK. Note that an artifact of original-decoder fonts made single-space divisions more palatable given that the period character sat on the left side of its bounding box, increasing apparent empty space on the right side.

QUESTION MARK AND BANG But Captions, Inc. commits a serious error in setting a space before question mark and exclamation point. Such *is not done* in the English language.

Even in other languages where it is permissible (like French), a thin space or another space character narrower than a word space is used. (Now, do secretaries using the defaults in Microsoft Word bother with such niceties? No. They're also doing it wrong. The fact remains that even the *French* do not authorize the use of a full word space before ? and !.)

Lee tells me that some deaf viewer or other had complained about question mark and bang in a focus group. Where do we start here?

- You can't trust focus groups. They tell you what either you or the rest of the group wants to hear. (*Of course* deaf focus groups convened by Captions, Inc. tell you Captions, Inc. is the

best captioner. They'd tell any postproduction house that offered them free coffee the same thing.)

- If there's an issue with readability of ? and !, you need to consider the available evidence on caption readability. Two research papers by a deaf optometrist *who used to work in captioning* (Sandy Thorn, whom I corresponded with at WGBH as a teenager) demonstrate that even slight amounts of blur, corresponding to bad vision or simply the wrong eyeglass prescription, dramatically impair the ability to read captions correctly. Small amounts of blur make it essentially impossible to read even a single *fast* caption correctly. Further, evidence from Thorn and other sources indicates that both deaf and visually-impaired viewers (and probably nearly all viewers, actually) sit too far from the TV screen to read any type displayed there.

So when deaf informants tell you they have a hard time reading captions, try getting their eyes checked, updating their glasses, and sitting them closer to the screen. Then have them report back. My prediction? Problem solved – without contorting the rules of English orthography.

REPEATED WORDS Again, Lee tells me that some malcontent in some focus group reported having misread subsequent lines that started with the same word. Thus began the Captions, Inc. perversion that insists every line beginning with the same word as the previous line be indented one more space. In theory, that policy is supposed to apply even to a third such line (with two added spaces), but it never is.

Rereading the same line is related to the interaction between linespacing or leading (over which we have no control in captioning) and line length. This is one of the many issues that require years of practice to get right in print typography. Still, it is generally true that longer line lengths require more letterspacing. Prove it to yourself: Type several paragraphs in nine-point type in a decidedly antitypographic program like Microsoft Word, whose default margins are too wide and default leading too small. You'll be doubling back on lines in no time.

If doubling back were really a problem in captioning, we would not only have heard about it by now, we'd have lived it ourselves. Your cure is vastly worse than the disease: Not only is it (yet again) illegal in English, it causes *more* reading disruption, because it interferes with saccadic reading and looks like what it is: A flat-out mistake.

RECOMMENDATION Do *not* pervert the rules of English orthography because some individual deaf person (or five, or ten, or fifty) somewhere along the line issued an offhand complaint. Remove the spaces before question mark and exclamation point (and after inverted question mark and, where it exists at all, inverted exclamation point). Cease indenting words repeated in previous lines by additional spaces.

COMBINATIONS When you put Captions, Inc.'s unsupportable, incorrect, and viewer-confusing use of space characters together, the result is a disaster:

OH ! [Giggles]
OH !

(An actual unaltered caption.) Just how many words is that? Seven, by my count, but only two were uttered (another could be assessed as NSI). Now, please explain to me how the following, which violates no orthographic rules and follows common sense, is not in fact worlds better:

Oh! [Giggles]
Oh!

5. Use of dashes

I have a small complaint about Line 21 usage of dashes chez Captions, Inc. As with the discussion of spaces, however, some understanding of English orthographic usage is necessary.

The use of a dash to introduce a direct quotation – as a replacement for quotation marks, in other words – is rare in English. James Joyce was big on it; I checked three editions of *Ulysses* (1997, 1986, 1937), and quotations *all* seemed to be introduced with em dash, even within a paragraph. (The consistency across decades suggests faithfulness to Joyce’s original manuscript; James Joyce is a kind of sacred text.) *Pilgrimage Interim*, a novel by Dorothy M. Richardson (Knopf, 1970), uses the form. M.B. Parkes, in *Pause and Effect: An Introduction to the History of Punctuation in the West* (Scolar Press, 1992), cites only the Richardson novel; the usage is so rare that a survey of punctuation cannot come up with a range of examples. (*Oxford Companion to the English Language* [1992] does cite Joyce, “who disliked what he called ‘perverted commas.’ ”)

Usage guides confirm the rareness of this feature:

- *The King’s English* by Fowler and Fowler (Oxford, 1931) permits the usage “[w]ith colon or stop before a quotation” (e.g., *Hear Milton:—How charming is divine Philosophy!*).
- Robert Bringhurst, the biggest typographic pedant in Vancouver (and I say that affectionately), in *The Elements of Typographic Style* (Hartley & Marks, 1996), declares: “The em dash, followed by a thin space (M/5) or word space, is the normal European method of marking dialogue, and it is much less fussy than quotation marks.” Note very well that he says *the em dash*; we’ll come back to that later.

So: While rarely found in printed English, dashes can be used as quotation indicators. As with multi-caption quotations, occasional innovations in English orthography are necessary. Perhaps their usage in subtitling is the true antecedent here, especially given the fact that Captions, Inc. also does subtitling. So let’s check the book, shall we?

Subtitling by Jan Ivarsson and Mary Carroll (TransEdit, 2002; ISBN 91-971799-2-2; info@titelbild.de) tells us: “The clearest solution for open subtitles seems to be taking a new line for each speaker and starting each line with a dialogue dash.... If the subtitles are centred, for optical reasons it is best to left-centre the lines, starting both at the same horizontal position.”

OK. So what do I have to complain about? In your Line 21 captioning, consider the case of a long utterance that starts on one caption and ends on a second caption that also includes someone else’s utterance. The current style –

There were large concentrations
of a chemical

- which we determined
was luciferin.
- Which is what?

- looks like three speakers. Dash obviously introduces a new speaker; it does not merely separate speakers. Even if it did, the separation would only need to occur at the second speaker's utterance. The correct method, then, is:

There were large concentrations
of a chemical

- which we determined
was luciferin.
- Which is what?

(You can and should retain the hung punctuation, which I haven't discussed yet.)

RECOMMENDATION Use a dash to indicate a new speaker or source, not a continuation of a previous one.

6. Music

American captioners are quite conscientious in researching song lyrics for captioning. (NCI is, perennially, the exception. They couldn't even get rhyming couplets right in the *Buffy* musical episode.) Captions, Inc. does as good a job as anyone in strict accuracy of transcription. The problem is that accuracy of transcription, while it is the only thing captioning neophytes focus on, is merely the first prerequisite of many in good captioning.

My complaints about Captions, Inc. music captioning are two:

- **Insupportable use of staffnotes:** I know NCI has done it for years, but ending each song with two staffnotes unduly attempts to collapse complex auditory events onto simple punctuation. (The Canadians do unimaginably worse things, but use of || is still pretty bad.)

If singing stops (one justification for the usage), we know it does because subsequent dialogue is no longer surrounded by staffnotes. If a song changes, as in a medley or in the closing credits of a film, *write it out in words: [Song ends]* or, in your orthography, something like || ["Don't Fear the Reaper"] or || ["Don't Fear the Reaper" plays].

I am not wild about the use of // stuck in the upper-right corner to indicate the presence of otherwise-undescribed music. [*Music continues*] or even || [*Music continues*] is much clearer, not to mention easier to spot.

- **Absence of line-ending punctuation:** There seems to be a misunderstanding about the meaningful use of linebreaks in English orthography. In poetry, for example, it's not often

clear if the end of the line is a soft linebreak caused because the text on that line cannot fit the measure or if it is a hard linebreak inserted there as a divider by the author. To overcome the ambiguity, we use hanging indents:

When to the sessions of sweet silent thought	And moan the expense of many a vanish'd sight:
I summon up remembrance of things past, I sigh the lack of many a thing I sought, And with old woes new wail my dear time's waste:	Then can I grieve at grievances foregone, And heavily from woe to woe tell o'er The sad account of fore-bemoaned moan,
Then can I drown an eye, unused to flow, For precious friends hid in death's dateless night, And weep afresh love's long since cancell'd woe,	Which I new pay as if not paid before. But if the while I think on thee, dear friend, All losses are restor'd and sorrows end.

Captions, Inc. shows commendable and near-unique sophistication in the use of hanging indents (for quotations and song lyrics, and mixtures of the two). The fact that your shop has that much sophistication is one of the key reasons I given a damn about improving what few problems you have.

And one of those problems is the removal of necessary end punctuation from lines when those lines are within staffnotes. It's as though linebreaks suddenly become meaningful punctuation. But they're don't! Easy example from *Moulin Rouge*:

| *Spectacular, Spectacular*
No words in the vernacular |

| Can describe this great event
You'll be dumb
with wonderment |

What happened to the commas, folks? What makes musical speech so very special that rules of orthography are suspended?

Obvious counterargument: At caption-end, we elide periods and commas (and presumably semicolons and colons, not that they come up much, but not question marks or bangs, and probably not em dashes or their equivalent, dash-dash-space). But such elisions have historical precedent in other English musical-transcription forms, and in any event, the break between captions disambiguates the absence of period or comma. Words running together within a caption do no such thing.

RECOMMENDATION In musical utterances, use unaltered English punctuation. Do not remove line-ending punctuation inside a sung caption block.

7. Italics

Captions, Inc.'s policy that an entire caption must be set in italics if no part of the speaker or source is visible when the utterance commences is a bit *de trop*. This just does not correspond to the way television and film are cut these days; absolute correspondence between sound and vision disappeared in the 1980s. Check for yourself: How many captions would otherwise be set in roman if you changed the rule to "All-italic captions are used only when the speaker or source is *never* seen during the *entire* utterance of the words depicted in the caption"?

Answer: Most.

Moreover, italicization indicates narration or outright offscreen dialogue in other captioners' work. Viewers spend more time watching the competition than they do watching you. While this is not an argument to do everything the competition does, it *is* an argument for understanding how common usage *elsewhere* will cause confusion. Captions, Inc.'s style leads people to believe that every third caption is the result of somebody narrating or somebody talking through a bathroom door.

RECOMMENDATION Use all-italic captions only for speakers or sources never seen during the entire utterance of the words depicted in the caption, as with narration, thinking, or inner voices.

8. Ellipses

I cannot figure out why Captions, Inc. adds an ellipsis to the end of every caption that does not otherwise end in punctuation. I think we understand that a caption with no end punctuation will be continued by a future caption. I think we've figured that out. It *has* been 20 years, and nobody else does that.

Subtitling again: "Using the suspension dots to indicate sentence continuation over more than one subtitle – which is the policy in some companies – seems a wasteful use of restricted space for conveying information."

And how! In roughly three cases out of four, a caption ending in an ellipsis that is not set at the left margin must be moved to the left by one tab stop (keeping in mind Captions, Inc.'s refusal to use transparent-space positioning):

1234123412341234123412341234**41234**

Line will terminate at stop **1**... *Fits within tab stop*

Caption ends further, at stop **2**... *Requires new tab stop*

Later words terminate at stop **3**... *Requires new tab stop*

Fourth line endeth at stop **4**... *Requires new tab stop*

1234123412341234123412341234**41234**

(I say "roughly three cases out of four" because the exact distribution of ending column of caption lines is unknown. But let's speak in averages.) If Captions, Inc. used transparent-space positioning, this argument would evaporate, though the argument that caption-ending ellipses are unnecessary would not.

Also, just as the use of a linebreak in meaningless *and* meaningful contexts in music captioning causes confusion, the use of ellipsis to signify a pause or trailing off *and* to signify nothing more than “Hey! Wait for another caption!” causes further confusion.

RECOMMENDATION Use caption-ending ellipses only to indicate pause, trailing off, or other uses consistent with English orthography.

9. Outright errors

Every captioner makes mistakes, *even Captions, Inc.* I find mistakes – that is, errors of transcription, the sort of thing that captioning neophytes obsess over – in roughly half your productions. Some mistakes are so ridiculous they make inept Canadian captioning look good by comparison (like misspelling band names in *High Fidelity*, a movie all about popular music).

I get the impression that Captions, Inc. feels it is the absolute best captioner there is, and that mistakes simply do not happen. Well, *they do*. The issue here – one for which I am not making a recommendation – is: What are you going to do about it? What will Captions, Inc. do to reduce its proportion of outright errors?



DVD subpictures

The conversion of Line 21 captions to DVD subpictures leaves a great deal to be desired.

- **Editing:** Since we’re using smaller, proportionally-spaced fonts, there is no reason why the same Line 21 edit of dialogue must be recapitulated in subpictures. Of course, I have seen some wildly divergent editing cases (e.g., *American Movie*, where neither the Line 21 nor the DVD edit of the dialogue reads properly, not to mention the many typos and outright errors involved). The fact remains that, if Line 21 captions cannot be exactly verbatim because of buildup and other issues, DVD subpictures often *can* be, or much closer *to* verbatim, at least.
- **Fonts:** As I explained in the *Print* article, the font Captions, Inc. typically uses is inappropriate for the display characteristics of DVD subpictures. *This is not a twee aesthetic opinion*; I am not saying “It does not suit my taste, so you shouldn’t use it.” I refer to the *functional characteristics* of the typeface:
 - No italic. Sloped romans use distorted and unreadable character shapes.
 - Small stroke widths. My TV set isn’t big enough for me to tell if you’re using single- or double-pixel stroke widths, but strokes are too thin to show a *distinction* between thick and thin strokes. The font is essentially monoline – every stroke has the same width.
 - Too-small punctuation.
 - Confusable characters (all the usual ones – *Il1, o00, S568, rm*).
 - Characters used extensively by your shop are either too hard to distinguish (like brackets, which are far too narrow) or misused (like dashes).
- **All-centred setting:** I have a few DVDs in which subpictures are located in exactly the same relative positions as Line 21 captions. Later DVDs seem to be *entirely* centred. This *is not sufficient* for speaker identification. Subpicture tracks take up next to no space on a DVD (typically 10 kbps). There is no reason why your clients’ DVDs cannot include an all-centred

English-language subpicture track with no NSI or speaker IDs (or even *with* those features) and *another* track with correct positioning. The only overhead then is menu creation, which isn't much of a burden at all. (It takes next to no time for your shop to convert a positioned subpicture file to an all-centred one, right? It obviously mustn't, because that's all I see these days.)

- **Mangled typography:**

- The character sequence dash-dash-space, used in Line 21, must always be replaced by space–en dash–space, but never is.
- Neutral quotation marks are not replaced by curled quotation marks.
- Initial dashes used for speaker identification *must* be at least an en dash (em dash, according to Bringhurst), but instead we witness that dead giveaway of careless, uninformed Windows typography, the spindly, too-narrow hyphen character dragged out of the crypt when you hit the hyphen key on a Windows keyboard. (I cannot emphasize this enough. *Nothing* brands you a typographic amateur faster than incorrect dashes and hyphens and neutral quotation marks. This isn't *typewriting* anymore.)

- **Reiteration of Line 21 eccentricities:** Line 21 forces spaces around italicized words; they are reiterated in subpictures, as are the mistakes I have identified in this document, like errant spaces added to the beginnings of lines (quite visible in all-centred captions – affected lines *no longer are centred*).

We are blessed with a medium-resolution typesetting system in the DVD subpicture definition. Even with the limitations on colour (not really worse than Line 21 colour limitations), we *finally* have something better than the crude engineering boondoggle known as Line 21. Yet absolutely *everybody* is fumbling the ball. Neither Captions, Inc. *nor any of the competitors considered inferior* lifts a finger to create good subpicture typography, let alone *excellent* typography. No, it is *not* that difficult to create good typography.

Do you want to be demonstrably better than your competitors – consistent with your higher fees – or don't you? The typography of Captions, Inc.'s DVD subpictures requires urgent improvement. You can start by commissioning the design of a full family of custom-engineered screenfonts that nobody else can use. Then you can improve your DVD style guide.

Note that counterarguments like "I can read it," "It seems 'clean' and 'simple' to me," and "We haven't had a complaint" are beside the point. I am talking about *functional performance*, not the reactions of staff who are too close to, and too vested in, the current system.

The absence of complaints is no proof that everything works, either. How do average people, who have no typographic vocabulary, put into words the inchoate discomfort and confusion they experience in struggling through unsatisfactory subpictures? And whom do they complain *to*? How *would* they complain, exactly? Try this experiment: Give your next-door neighbour a DVD with Captions, Inc. SDH. Tell the neighbour to give the DVD to someone else on condition that the third person file a complaint about its DVD subtitles – any complaint, whether valid or not. Give no other instructions. Let me know if anybody manages it.