

The Journal of Typographic Research
Volume IV, Number 4, Autumn 1970

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News of Current Letterform Research

Developments in a variety of disciplines are revealing implications for letterform investigation undreamed of only a generation ago, but the Journal must be aware of specific research projects in order to report on them. Without a supporting association, the Journal must rely on reports of letterform research activity from *interested individuals*.

The Journal, therefore, encourages communication from research people, administrators, and students on individual and departmental research projects, theses, research grants, etc. Please send the Journal Editor a copy of any research report or an outline of the study—with the name and address of the people involved.

Joining the Journal Staff

Letterform research being an academic orphan, the Journal has no reservoir of talent to call upon for help in handling the myriad editorial and organizational jobs that need doing. Journal activities that involve communication with an international body of individuals and research groups can be particularly rewarding.

If you would like to join the Journal's staff, please write the Editor—mentioning, if possible, any particular area of activity you are interested in.

Diakritische Zeichen, and, with luck, may stumble upon a treatment that does some justice to the topic, such as the one in the latest *Americana*.²

It seems hardly necessary to document the marginal status to which diacritics have been consigned in Anglo-American orthographic practice. The average educated person is obviously aware of the existence of “accents” in “foreign languages” but tends to regard their use in English as pedantry. This tendency is abetted by *Webster III*, which, for *café*, *coupé*, etc., lists alternate unaccented forms and prefers *facade* to *façade*, as well as the *U.S. Government Printing Office Style Manual*³ which bluntly states that “Diacritical marks are not used with completely anglicized words” such as “*coupe*, *facade*, *fiance* (masc., fem. [sic]), *frappe*, *garcon*, *souffle*” while, on the other hand, considering diacritics to be “an essential part” of the spelling of *cañon*, *résumé*, and *passé*.⁴

No attempt will be made in this paper to give anything approaching an exhaustive inventory of all Latin-alphabet diacritics used throughout the world. Such a long-range undertaking would, of course, be extremely desirable, especially with regard to proper terminology and phonetic value.⁵ At first glance, the Foreign Language Section of the *Government Manual* seems to embark on a complete inventory, but, as languages become “less familiar,” the procedure rapidly reaches the vanishing point. For French, at least, the inventory is all but complete: (p. 405) “French uses the Latin alphabet with the addition of the following special characters: à â ç é ê ë ì î ï ô ù û ü.”⁶

2. *Encyclopedia Americana*, 1969, IX, p. 53. Robert L. Chapman, Drew University.

3. Revised Edition, January 1967, p. 53.

4. Some of these and other examples will be adverted to more fully later on. Given the lack of an *Académie Américaine*, we need, of course, not be surprised by discrepancies between the *Government Manual* and *Webster III*.

5. It should obviously include the phonetic values of all unmodified letters and combinations thereof.

6. “All but complete,” since the digraph œ ought to be considered a “special character.” The last item in the list, ü, might look strangely un-French to some. It is, however, correct (as a *tréma* or dieresis) in the Biblical name Saül and, quite idiosyncratically, in the name Fulgence Bienvenüe (“father” of the Paris Métro). Unfortunately (but understandably, in view of the muteness of the final e), many Frenchmen misuse it in *aigüe*, *cigüe* (for *aiguë*, *ciguë*). French printers are also apt to

It is almost impossible to draw a neat dividing line between the two sets of problems this paper will attempt to deal with in what must needs be a highly selective fashion: on the one hand, there are the technical questions of typeface availability, compositorial practice, typewriter keyboard design, etc.; on the other, more fundamental ones pertaining to linguistics, pedagogy, orthography, orthoepy, and international communication.

To start with technical questions: The *Government Manual* lists no less than 13 “special characters” for French. This seems to impose an additional load of 50% on the normal alphabet! Obviously, this burden can be reduced to just five diacritics: four superscript and one subscript. The problem is that of unit character vs. piece accent. In penmanship, diacritics are handled in the same way as we “dot our i’s and cross our t’s.”⁷ In printing and compositorial practice, however, the recurrent use of piece accents tends to waste time and to produce poor esthetic effects. A good French printing plant therefore keeps the above-mentioned special characters on hand for all its typefaces in both lower- and upper-case.⁸

While one can learn to live with the truncated spellings of such common words as *facade* and *frappe*,⁹ the same cannot be said for the names of persons and places that come to the fore in the march of current events. How do newspapers, how indeed does *the* newspaper handle them? To put it briefly, it is not up to the problem. To quote

transform *Fräulein* into *Fraülein*, and a hypercorrect umlaut is frequently bestowed on the name of the German composer Gluck.

7. Some are taught to do it at once, others to go back over the word, which opens up a vexing pedagogical problem, especially in the United States, where i-dots are apt to float in outer space and jumbo line to cross the several t’s (as well as all other ascending characters) of a particular word. The problem can be especially vexing to foreign-language teachers.

8. In French the use of diacritics in upper-case is subject to complicated and fluctuating restrictions and allowances. In display and slick-paper printing a great deal of experimentation, most of it execrable and internationally irresponsible, is carried on with fused or streamlined diacritics (in *Match*, one needs a protractor to tell the acute from the grave!). For a linguist’s eyes, the worst such offense happens not to be French: it is a “macronized” umlaut now prevalent in Switzerland.

9. De Gaulle’s notorious *force de frappe* has not been heard of much lately. Should it come back into the news, one will again have to put up with the naïve mispronunciation *force de frappé*.

from page 31 of the *Style Book of The New York Times* (1950 edition): "The German umlaut (¨) is available, except in agate, for all the vowels, but since *it cannot be used in heads* [italics mine], preference should be given for the sake of uniformity to the use of the additional "e" instead of the mark. Set as follows: Fuehrer (not Führer), Tannhaeuser (not Tannhäuser)." This opens up a Pandora's box of problems: to begin with, how many typesetters are actually aware of the possibility of substituting postscript e for the umlaut? What about long-sanctioned patronymic preferences, the most notorious pair of examples being Goebbels *vs.* Göring?¹⁰ Finally, there is the paradox of "heading *vs.* text." The naïve peruser of *The New York Times* cannot help thinking that more care would be lavished on the "large type" of headings than on the columns of running text and that the spelling of names in these headings should be the "real" one. But it just is not so! In the light of the *Style Book* caution italicized above, whenever names with umlauts or other diacritics appear in the text, these diacritics are invariably absent from these names if they appear in the heading. Some time ago, this writer broke into shouts of amazement when, for the first time, a slightly unbalanced and thus obviously ad-hoc umlaut did appear in a heading over the name of the German clergyman Küng. (Kung would perhaps have looked too "Chinese"?)¹¹

There is one diacritic which is only sporadically used in the text columns of *The New York Times*. It looks like an inverted circumflex (˘), is sometimes so called (or even less felicitously "wedge") but

10. The writer Reinhard Goering died ten years before the suicide of his namesake. In the field of information storage and retrieval, the problem is one of alphabetization. Most German reference works treat umlauted vowels (whether with diacritic or with postscript e) on a par with the non-umlauted ones; American reference works obviously do not. In *Webster VII*, Goebbels thus follows Godunov while in the "little Knauer" Goebbels precedes Godunow by a page. At the other extreme is the Scandinavian practice of putting the diacritic vowels at the end of the alphabet. Czech is somewhere in the middle, with some diacritic letters immediately following their non-diacritic counterparts, others being lumped with them. All this obviously cries out for international standardization.

11. As for the now-defunct program booklet of the radio station of the *Times*, WQXR (with all those "foreign" composers!), it had a lopsided and esthetically monstrous appearance: while all the required diacritics were used, they were God knows how many points larger and heavier than the actual letters which they seemed to crush with their weight.

should properly be referred to by its Czech name, viz., háček ("little hook"). It goes back all the way to Jan Hus, but one had to wait until *Webster III* to find its proper name in an American dictionary. It is also used in all other Balto-Slavic languages using the roman alphabet, with the exception of Polish which has clung to postscript z. In the light of international reluctance to its use, one cannot help wondering whether the Czechs at least might not, in retrospect, wish they had stuck to the additional z. L. L. Zamenhof correctly gauged its unfamiliarity to Westerners and boldly replaced it by an actual circumflex, so that Esperanto ĉ and ŝ are equivalent to Czech č and š. For reasons of typewriter-oriented symbol economy and the favoring of the unit-phoneme hypothesis for affricates, American linguists such as Gleason prefer š ž č j to the corresponding single or multiple IPA symbols. But while one additional dead-key symbol on their typewriters thus accommodates four phonemes, their textbook presentation treats these symbols as four separate units. To come back to the function of the háček in Czech: its presence or absence makes all the difference in the world. To explain it in simple terms: c, s, z stand respectively for the *ts* in *tsetse fly*, the *s* in *seal*, and the *z* in *zeal*; č, š, ž for the *ch* in *chin*, the *sh* in *shin*, and the *zh* in *zhukov*. The events of 1968 and their aftermath have filled our papers with new and unfamiliar Czech names. If one reads about Dr. Ota Sik, one has no way of knowing whether it is Sik or Šik or Śik or Šík, in other words whether it is homophonous with sick or Schick or seek or sheik. All one can hope for is that Joseph Wechsberg will mention the name in one of his ever rarer reports in *The New Yorker*.¹² Better known names, such as Dubček, usually get their háček also in *Time*, *Life*, *Newsweek*, etc., but of late it has been absent from the *Times*. The /ts/-value of plain c in such names as Václav or Polish Wrocław ("rock law" to some of those who know of it in the first place) is something few

12. This magazine is the last bastion of diacritics. It can usually be taken as the last word in the spelling of foreign names. It will not tolerate a *facade* and it stubbornly clings to such spellings as *coöperation*, *reëstablish*, *reëntry*. In *coöperation*, the hyphen often replaces the dieresis, but a case could be made for *coöperation* "collaboration" *vs.* *co-operation* "joint operation." In teaching the virtues of the dieresis, this writer has been wont to say that, without it, some one might be /neyv/ enough to think that /rayz/ Stevens was singing in /éydə/. He actually heard *Aida* pronounced as though she were "from Decatur."

Americans are aware of. Thus, the sadly notorious place name Lidice is usually mispronounced as though either the spelling were Lidiče or Czech were Italian. During the Austro-Hungarian tutelage, Austrians and Germans did not bother with “Bohemian” spellings, but used German orthographic equivalents. Some of these became standard, e.g., Tscheche, etc., Hradschin. About 20 years ago, the West Bohemian town of Aš or Asch was in the news as the departure point of what would now be called a train hijacking. The German form *Asch* is obviously preferable to a háček-less *As*. One sound for which no German orthographic equivalent exists to this day is /ž/. In one of the editions of Marie von Ebner-Eschenbach’s short story “Božena,” a háček could actually be found adorning a Fraktur z (a typographical misdemeanor in German typesetter’s code!) for whatever good it might have done the uninitiated German reader, who might have made a mistaken association with Bolzano (ex-Bozen) in South Tyrol. While we in English can make a clear distinction between two Russian names such as Shukov and Zhukov,¹³ a German encyclopedia would have them both as *Schukow*. The “soft” or voiced pronunciation of the “sch” in the second name might then be parenthetically indicated by a thin horizontal bar running the length of the trigraph. This writer’s Silesian idiolect has a few Slavic words with /ž/ that are practically unspellable in German. The Germans continued their respelling practice beyond 1918. When Hitler was ranting against him, the name of Eduard Beneš always appeared as *Benesch* in German publications. Nowadays, German encyclopedias use *Beneš*, the pronunciation of which then has to be explained. But present-day German newspapers are as guilty as the American ones in their disregard of the háček and other diacritics (unless they happen to coincide with umlauts: Ismet Inönü—a *capital* dotted I is of course beyond most printers’ capabilities!). A respelled *Dubtschek* might be preferable to the *Dubcek* presently seen in these German publications. But respelling has not yet run its course: Jaroslav Hašek’s brave soldier Švejk is found as *Schwejk* in recent German encyclopedias,

13. This *zh* has been enshrined for generations in the pronunciation keys of dictionaries and is also found in countless French phrase books for travelers. Yet, most Americans seem strangely unfamiliar with it, and making them see the proportion “s : z :: sh : zh” is quite a teaching problem.

mistakenly as *Tchweik* in the 1955 edition of the *Nouveau Petit Larousse*, and will appear as *Chvěik* in a new French translation about to be published. The only way out of this morass seems to be adherence to the native spelling, diacritics and all, leaving respelling problems—and they are legion—to the transliteration of languages that do not use the roman alphabet.

At the outset of the foregoing lengthy discourse on the háček, Polish was mentioned as using a postscript z instead. Its spelling is encumbered by the worst of both the extra-letter and the diacritic system: unwieldy combinations of letters such as *szcz* and internationally unreproducible diacritics such as the dotted z, the barred l, and the nasalization hook under a and e. The four letters *szcz* would be reduced to two in Czech (*šč*) and of course to one in Cyrillic (щ), but our own transliteration of the Cyrillic symbol has four letters (*shch*) as in Khrushchev, not to mention the seven required in the German Chruschtschow. A German “phonetic” respelling of Szczecin (ex-Stettin) would have to look like this: *Schtschetchin*. The accumulation of consonants may look awful, but it is not the real problem. That is found not only in the unfamiliar diacritics but also in the use of the acute over letters that normally do not have it: *c n s z*. Of the unfamiliar diacritics, the worst is the nasalization hook, called “inverted cedilla” by the U.S. Government *Style Manual*. This writer is not sufficiently grounded in Polish to say whether the Poles themselves might not advantageously replace it by a bona fide postscript n. As it is, its presence is mostly ignored by non-Polish printing presses. In modern Polish printing, the combination *ą* sometimes looks like an underdeveloped *q*; no problem to the Poles, since *q* is not part of their alphabetic inventory. To those not familiar with the problem, the situation can become totally confusing when they attempt to check reference works for the spelling and pronunciation of certain place names. Take the city spelled Tschenstochau in German and Chenstokhov in our transliteration of Russian. Between *Webster VI* and *Webster VII*, the nasalization hook of Cześćochowa got lost, but the N of the former’s pronunciation indication is still reflected in the *n(t)* of the latter. The *American Heritage Dictionary* does again have something under the e, which, on close inspection, reveals itself as a non-inverted cedilla. As for Oświęcim (Auschwitz), it lost both its acute and its inverted cedilla in *Webster VII*, so that the pronunciation

indication \øsh-ʹvyeⁿ(n)-tsēm\ must be especially puzzling to those (unfortunately few) who would want to be guided by it.¹⁴

There is no point in further expanding this catalogue of international confusion. Before coming to some utterly tentative conclusions and recommendations, something more should be said about the problems of the typewriter. Linguists, such as this writer, are wont to have their machines "altered" by sacrificing commercial symbols and redundant punctuation marks (if the letter l does for the figure 1, so can a capital o for zero!) and having appropriate keys "deadened." Sometimes they may hanker for the double-shift models of their grandmothers. So-called international keyboards are usually deficient. Of late, changeable type has been introduced, and the available symbols could be expanded. But the use of such floating accents creates problems of proper alignment and excessive impact (the other side of the sheet is apt to have a Braille-like appearance!). For this reason, and probably even more for reasons of speed, the various national keyboards go in for fixed combinations. Thus, the standard German keyboard wastes three full keys for Ä ä Ö ö Ü ü, but then has no floating dieresis for such items as *Aëro-* or *Alëuten*. To say nothing of *Aïda* or *Haïti* (no wonder *we* pronounce it as we do!), because in the absence of a dotless i, the attempt to superimpose a dieresis on an i, is foredoomed. Even the French keyboard does not allow for it, although î is quite frequent in French, even in common words, as is î which will always appear as a legible but somewhat ludicrous î. The French keyboard has a fixed ç, but only in lower-case, although the cedilla is the one diacritic which can never be left off a capital. Again, this list could be continued ad nauseam. While this is an area where individual resourcefulness can produce remedies, the condition of 99.9% of the typewriters in use is obviously a potent factor in the progressive disuse of diacritics, as is the increasing use of automated equipment in the production of printed output.

Is the use of diacritics then doomed in English? To the person who knows that items such as *resume* (noun!), *fiance*, *facade*, *naive*, etc.,

14. In *Webster III* the first of the two place names is listed (without inverted cedilla) by virtue of that work's tortured "of or from" policy. But the n of the pronunciation indication has been left out by typographical error, the parenthesized t attesting to its intended presence.

"ought" to be spelled with the relevant diacritics, their absence actually is no great problem and is easily compensated for by a built-in margin of safety that has come to be called "redundancy." But the person who meets these words for the first time and wants to learn them seems to be at a great disadvantage. And if that person's teacher does not know her diacritics, this can only abet the deleterious and growing distrust of any fit between spelling and pronunciation. Here then is a very simple plea: as long as these diacritics still exist and function in English, they ought to become part of the curriculum. They might even give a reprieve to the spelling bee.

To what extent can we get along without diacritics? Of the major language using the roman alphabet, English has practically reached that stage. It might be more correct to say that a comparatively brief vogue of naturalizing foreign diacritics has just about run its course. German *can* also be spelled with nothing more than the unmodified 26 letters. Every literate German has learned to accept, and on occasion use, postscript e as a substitute for the umlaut. Where possible, the cedilla problem has been eliminated by respelling: *Fassade*, *Fasson*, but not in *Garçon*! Non-existent alternatives such as **Garßon*, **Garsson*, or even **Garszon* point up the one remaining problem, viz., ß and its total abandonment, whose historical, phonetic, and graphic aspects are outside the scope of this paper. Italian manages with *one* "accent" whose graphic realization accordingly is allowed to fluctuate from grave to acute to apostrophe. So could Spanish where ñ could become nh as in Portuguese or even ñ as in Polish. Major reforms would be required for French, Balto-Slavic, and Scandinavian.¹⁵ As for Vietnamese, all this writer can do is mention it as an untouchable *non plus ultra* of diacritics.

The foregoing should not be construed as haphazard and half-baked suggestions for international spelling reform. All that is meant to be suggested is the presence of such a possibility. In our common heritage of 26 letters, there are obviously scores of potential digraphs which could take the place of diacritics. Their confusion with sequences of discrete symbols (a confusion which has already led to

15. Were the Danes on the right track when they replaced aa with å in 1948? In all of these languages, the dieresis would have to be preserved on an optional and pedagogic basis.

many “false” spelling pronunciations in English) could be obviated by optional italicization or actual underscore (sheepshead as against sheepshearer). To the users of the roman alphabet in this shrinking world, two courses seem to be open: international standardization and mutual acceptance of diacritics or a common endeavor toward their progressive elimination.

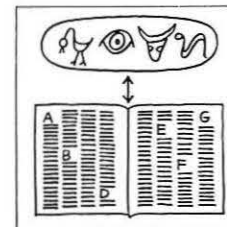
Letterforms in Photo-typography

Adrian Frutiger

The accelerated flow of information in today’s world demands that our typography be of maximum utility and comfort to the reader. There is a trend toward universal usage of fewer text faces and toward larger sizes of reader typefaces. Differentiation must be made between material designed for sustained and for reference reading. The two basic photo-composition generation systems—projective exposure and CRT generated—are compared.



Philosopher and scribe
(Pythagoras, Cathedral
of Chartres).



3000 years of writing.

I. Obligations Toward the Reader

Two thousand years ago reading and writing were the privileges of an extremely small class of people. Today the right to education belongs to the broadest masses of the world’s population. The reasons for the constantly mutating forms of our alphabet lie anchored to some degree in that perpetual drive toward the widest possible dissemination of human knowledge.

The written word has always been a binding force between two worlds: those of human ideas and of human deeds. Putting a thought into writing is obviously nothing more than a physical act, whether it is accomplished by hand with a chisel or pen, or whether in today’s technology it is accomplished by activating a composing machine. However, the actual letterform has always constituted a mirror image of the writer’s intellect. The spirit of a century, of a historical era, has never found a more explicit form of expression than in the art and technique of its style of writing or its typography.

In the dawn of history a strong hand chiseled pictorial symbols into stone—perhaps three, perhaps four during the course of an hour. Today electronic machines compose millions of letters in the same lapse of time.