

By M7 I shall mean the Suspect Document of which I have made a special study, namely page 7 of Baltimore Exhibit 8: I call this M7 because it is page 7 of a report on Manchukuo.

By the notation (x/y) I shall mean that in this place the letter x has first been typed and then the letter y has been typed on top of that letter x.

(2) BM2/3 and M7 have about the same length. Each has 48 lines. Both are from pages after the first of reports in the typing of which no special importance was attached to presenting a good typing appearance. The BM report has an ugly over-typing (of /for) in the very heading at the top of the first page: this over-typing changed the number of letters and must have been done before the next word in the line was begun. Evidently, therefore, Mrs. Hiss did not think it worth while to take the paper off and to make a fresh start, even when there were only two correct words on the ~~BM~~ paper.

(3) Using identical criteria for deciding what is a typing error, I count 57 typing errors in M7, but only 16 in BM2/3.

(4) There are four words in M7 in which the typist has transposed letters and left the error uncorrected: ~~unkonwn~~ unkonwn, compnay, rprofitable, Comapny. There is no example of any ~~un~~ uncorrected transposition of letters anywhere in the Hiss Standards. There is even no example of a corrected error in the Hiss Standards that could be attributed to a transposition of letters and could not be attributed with at least equal probability to other causes. The only Hiss Standard examples of what might possibly have been transpositions of letters are; the two places in the heading and first line of the first page of BM where the word of has been over-typed by the word for (but these seem more likely to have been substitutions of one word for another); and the word alum(a/n)(n/a)e in BM2/3 itself (but here I think it likely that the n was first omitted and then typed over the a, changing aluma to alumni, and that after that a second n was mistakenly typed, which had to be corrected by over-typing with an a: two lines later this same sort of thing evidently did happen in Mrs. Hiss's typing of the word meetings; the t was omitted, and the word proceeded to become meein, then the omission was noticed and corrected by typing ti on top of the in, and then by a second mistake the omitted t was inserted again, which made meetit, and had to be corrected by typing an n on top of this second t before finishing the word with the gs.)

(5) In BM2/3 there are the following errors due to inaccurate finger-aim: M(t/r)s; Moorehe(q/a)d; becau(z/s)e. All these are left-hand errors. In M7 there are the following errors due to inaccurate finger-aim: largel(t/y); (o/l)936. Both these are right-hand errors. (Note: this kind of machine uses the l letter-key for the figure 1). There is no other error in either BM2/3 or M7 that I attribute to inaccurate finger-aim: the BM2/3 error Summ(r/e)r and the M7 errors re(k/m)arkable and ~~univer(a/s)al~~ univer(a/s)al seem to me more probably due to anticipating letters that come later in the words. In the remainder of the Hiss Standards, I find only the following errors due to inaccurate finger-aim: in H, (g/f)ees; in S, (y/t)o; in T, intere(d/s)t; fund(q/a)mentals; (o/i)n; ~~cons(f/c)iously~~ cons(f/c)iously; al(g/t)hough; alon(f/g). Except (o/i)n, all these are left-hand errors, ~~So~~ So, in the whole of the Hiss Standards left-hand mis-hits out-number right-hand mis-hits by ten to one.

(6) Both the Hiss Standards and M7 show a common tendency to anticipate by omitting a letter and typing the next letter in its place: BM2/3 examples are scholar(h/s)hips and Summ(r/e)r; M7 examples are univer(a/s)al, sub(i/s)idiaries, ma(n/i)nly and ye(r/a)rs. Usually in the Hiss Standards, and always in M7, such errors are immediately corrected by over-typing: but, in the Hiss Standards Mrs. Hiss sometimes runs on for two letters

after the omission before noticing the error, and consequently has to go back and over-type two letters, as in the H example trans(ri/cr)ipt. BM2/3 shows a further tendency in Mrs. Hiss, having corrected an omission by over-typing, to make a second mistake by then typing the omitted letter ~~XXXXXXXXXX~~ again in the space after the overtyping: I think this happened in ~~XXXXXXXXXX~~ alum(a/n)(n/a)e, and it evidently did happen in mee(in/ti)(t/n)gs. M7 has no example of such a double insertion of an omitted letter. On the other hand there is no example in the Hiss Standards of a letter wrongly typed through the ~~XXXXXX~~ mind's jumping over and omitting more than one letter or harking back to and repeating a previous letter of the word, as in the M7 examples sal(l/e), ~~XXXX~~ re(k/m)arkable, min(i/e)ral, ~~XXXXXX~~ di(d/v)id(n/e)nds, Kabus(k/h)iki and wheel(l/e)d.

(7) In BM2/3 there are two letters altogether omitted through failure to hit the key hard enough: they are ~~XXXXXX~~ a g and an m. In M7 the letter i has twice been omitted through this cause. The Hiss Standards show no example of words having been run together by the omission of the space between them: but there are two examples of this kind of error in M7, namely thatlist, which was left uncorrected, and ata, which was x'd out and rewritten correctly as at a. In M7 the word It has also been put for Its, both the final ~~XXXXXX~~ s and the space for it being omitted.

(8) M7 omits one full-stop; replaces another full-stop by a skied colon, leaving the error uncorrected; and ^{the} puts a comma instead of ~~another~~ full-stop, afterwards typing the full-stop on top of the comma. The Hiss Standards seem to be free from errors of punctuation.

(9) Except in S, which has sub-paragraphs using a specially short line, the Hiss Standards avoid the breaking of words by hyphenation at the lines' ends. There is no word broken at a line's end in the whole of H, BM and T, except the word responsibility in T, in the typing of which Mrs. Hiss ~~XXX~~ carelessly ran herself up against the right-hand margin-stop at responsibi, and then went back to over-type hyphens over the last two letters bi, so as to start the next line with bility. But in M7 there are three words broken by hyphenation at lines' ends, and of these two could actually have been finished on the lines on which they began without carrying those lines any further to the right ~~XXXXXX~~ than some of the other lines on the page have been carried. One of these is the word relatively, which was broken at relative- so as to start the next line with the two letters ly, although the whole word could have been written on the line on which it started without carrying that line as far to the right as one of the previous lines had already gone.

(10) In discussing the "skying" of capital letters I shall use two categories of "skied" capitals: ~~XXXX~~ "high sky" will mean that the capital has been printed so high that its foot is above the horizontal level of the horizontal diameter of an o; ~~XX~~ "low sky" will mean that the capital has been printed visibly above the proper ground level but not so high as to be "high sky". Of the 99 capitals in M7, 12 are high sky and 18 are low sky; ~~XXXXXXXXXX~~ the M7 typist has thus skied over 30% of the capitals. Of the 85 capitals in BM2/3, only 1 is high sky and only 4 are low sky; ~~XXXX~~ Mrs. Hiss in BM2/3 has thus skied under 6% of the capitals. The remainder of the Hiss ^{Standards} show even less of a tendency to sky capitals than BM2/3: but many pages of the Suspect Documents show the same tendency to sky capitals as M7. The usual reasons for ~~skying~~ a high frequency of skied capitals are lack of typing experience and unfamiliarity with the particular machine, or make of machine, being used: but the Suspect Documents were certainly typed later than the Hiss Standards. The difference of skying frequency cannot satisfactorily be attributed to any supposed change in the mechanism of the machine: for there are other pages of the Suspect Documents that show no tendency to sky capitals, and there is no skied capital in G.E. 66A, which is a piece of typing done in Court by a competent typist using the alleged Hiss machine.

(11) The commonest sequence of three consecutive letters in English is the. This sequence (without capitals) occurs 106 times ~~in~~ in the Hiss Standards and 43 times in M7. Wherever the sequence occurs, I have arranged the three letters in the order of the strength of the letter's impression in the facsimiles before me. I put the letter with the strongest impression first and the letter with the faintest impression last. I then counted the number of examples of each of the six possible orders the, teh, nte, het, eth, eht. I have done this for each of the Hiss Standards H, S, BM page 1, BM2/3, and T, separately, and for the whole of the Hiss Standards taken together, and also for M7. The ~~XXXXXX~~ following are my results:

Order of strength (strongest first)	H (G.E.34)		S (G.E.36)		BM (G.E.36)		T(G.E.46B)		Total Hiss Standards.			
					Page 1		BM 2/3					
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
the	1	10.0	0	0.0	4	13.3	9	18.4	2	15.4	16	15.1
teh	6	60.0	2	50.0	16	53.3	25	51.0	6	46.1	55	51.9
hte	0	0.0	0	0.0	0	0.0	0	0.0	1	7.7	1	0.9
het	0	0.0	0	0.0	2	6.7	2	4.1	0	0.0	4	3.8
eth	3	30.0	2	50.0	8	26.7	12	24.5	3	23.1	28	26.4
eht	0	0.0	0	0.0	0	0.0	1	2.0	1	7.7	2	1.9
Totals	10	100.0	4	100.0	30	100.0	49	100.0	13	100.0	106	100.0

M7 (Baltimore Exhibit 8, p.7)

	Number	%
the	19	44.2
teh	12	27.9
hte	5	11.6
het	0	0.0
eth	6	14.0
eht	1	2.3
Total	43	100.0

The Hiss Standards thus show a firm statistical consistency: in every subdivision taken separately, as well as in the total, the order teh is always the commonest order, accounting for between 46.1% and 60.0% of the occurrences; in every subdivision taken separately, as well as in the total, the next commonest order is always eth, accounting for between 23.1% and 50.0% of the occurrences; and in every subdivision taken separately, as well as in the total, the order the is always the third commonest, accounting for between 0.0% and 18.4% of the occurrences. With this consistent Hiss Standard pattern the M7 frequency distribution disagrees violently. The M7 frequency for the order the is away over double the maximum for that order found anywhere in the Hiss Standards; and the M7 frequencies for the orders teh and eth are not much over half the minima for those orders found anywhere in the Hiss Standards. If we take the sum of the percentages of the orders the + hte + het, we get only 19.8% for the Total Hiss Standards, but 55.8% for M7: this implies that throughout the Hiss Standards Mrs. Hiss hit the h harder than the e less than once in five times in the occurrences of this sequence, whereas the M7 typist did so more than eleven times out of twenty.

(12) There is no example in all the Hiss Standards of what we may call a "delayed correction", that is to say a correction made after the paper ~~XXXXXXXXXXXX~~ has been loosened and needs to be ~~XXXXXXXXXX~~ fitted back into the required position by approximation. But there is a curious example of this ~~XXX~~ in M7. The words ... on page 12 ... were originally typed; then, before the paper was loosened, the typist ~~XXXXXXXXXX~~ went back and crossed out the ... page 12 ... by typing four x letters ~~XXX~~ on top of the four letters of page and two x letters on top of the two figures of 12; later, after the paper had been loosened, it was apparently found that the word ... on ... still stood undeleted; the paper was then put back to approximately the proper position, and an x letter was typed approximately on top of the o; but this x was too far to the left; so a more exact adjustment ~~XXXXXXXXXX~~ of the paper was made, and finally three x letters were typed on top of the two letters of ... on ... and the space between ... on ... and ... page...; these three x letters are not quite collinear with the line of the original ~~X~~ typing, and have been thrown slightly too far to the right, so that the last of them touches the ~~XXXX~~ ~~XXXX~~ x letter typed on top of the p of page. The whole process of making this simple deletion must have been a laborious and time-consuming operation. It might be interesting to discover the reason for the typist's taking such unusual trouble over it, but for present purposes it is enough to point out that there is here a deviation from the practices exemplified in the Hiss Standards.

the	1	10.0	0	0.0	4	13.3	9	18.4	2	15.4	16	15.1
teh	6	60.0	2	50.0	16	53.3	25	51.0	6	46.1	55	51.9
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(13) ~~XXXXXXXXXX~~ For these reasons, I conclude that M7 was not typed by Mrs. Hiss.