

V I S I B L E L A N G U A G E 3 4 . 3

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The Gloss as Poetics

Transcending the Didactic

りかみな

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The Gloss as Poetics Transcending the Didactic

Kyoko Takashi Wilkerson and Douglas Wilkerson

This article examines recent creative uses of the interlinear gloss, or furigana, in Japanese writing. Traditionally used simply to supply pronunciations for Chinese characters, the examples collected and analyzed here make use of several different non-standard script combinations, and provide poetic tropes or subtle alterations of the glossed text. The unique simultaneity of the relationship between gloss and glossed word, the manipulation of symbolic associations of the various notational systems employed in Japanese and creation of distinctive visual patterns lend support to arguments for the autonomy of the written word.

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Introduction

The Japanese script reform of half a century ago aimed to encourage a more rational and efficient use of traditional notational systems, one that would dispense with both the need for and consequently the use of interlinear pronunciation glosses (*furigana*) for unusual characters or difficult combinations. However, the last twenty years has seen a resurgence in the use of such glosses (broadly defined), not so much for didactic purposes as for their poetic potential. The unique, interlinear position of *furigana* and other glosses creates many possibilities for artistic graphic patterning, a kind of "visual poetry," which manipulates Japan's rich notational resources, as well as the stylistic and symbolic dimensions of the various systems. These new visual figurations are dependent on traditional scanning and processing procedures, yet make use of them in innovative ways, playing with the authoritative dimension of the "word-gloss" relationship. This paper examines the historical ground against which these practices figure, the linguistic devices they employ and attitudes toward language and script resources which they evidence. The mere persistence of three distinct but (essentially) phonetically equivalent notational systems in Japan should give pause to those inclined to hold that writing does not operate independently of speech; the creative exploitation of the current and historical linguistic and social functions unevenly divided among Japan's various notational systems should be convincing evidence of the autonomy of the written word.² At the very least this paper proposes a preliminary classification for a collection of creative interlinear glosses.

A Brief History of Interlinear Glosses in Japan

The history of interlinear glosses is interwoven with the development of the Japanese writing system, and with historical changes in writing style. Following the introduction of books from China (between the late third century and early fifth century A.D., according to eighth-century Japanese records), Japanese writing began to develop along several complimentary paths. Several Japanese studied Chinese, and learned to read and write in the Chinese style. A relatively pure style of Chinese was the language of official documents throughout the Nara (710-794) and Heian (794-1185) periods. But those with the resources, freedom and inclination to learn Chinese were relatively few, and even in this period less formal documents were often written in a modified form of Chinese. In adapting Chinese writing to native uses, the Japanese were faced with two problems: the task of making sense of Chinese texts and that of recording Japanese elements in the Chinese script. Let us deal first with the latter task.

In Japan Chinese characters, referred to as *kanji*, came to be read using two types of pronunciation, one borrowed from the Chinese pronunciation (the *on*, or "sound"), the other a Japanese word of equivalent meaning (the *kun*, or "explication").³ Thus Japanese words could be written with Chinese characters of corresponding meaning, or transcribed phonetically, using either the *kun* or *on* reading with little or no regard for the meaning; characters used in this way are referred to as *kana*. Some texts, like the *Nihon shoki* of 720, imitated the syntax and conventions of written Chinese, using phonetic transcriptions primarily for proper names; other texts, such as the *Kojiki* of 712, used a syntax closer to that of Japanese. In order to maintain its integrity, Japanese poetry was written with Japanese syntax and inflections; the great poetry anthology collected in or after 759, the *Manyōshū*, primarily used Chinese characters for phonetic transcriptions or in their *kun* readings; the Chinese characters used for phonetic transcriptions in this way came to be known as *manyōgana* ("the *kana* of the *Manyōshū*").

Manyōgana were written in the same size and style as characters used for their semantic value. The Chinese also used characters in this way (especially to transcribe Sanskrit words), but their use was somewhat limited, and other conventions helped to make it clear which characters were meant to be

read as transcriptions. The situation in Japan was rather more complex, and there soon developed a practice of writing *kanji* in two sizes, the larger characters used for their semantic value (usually with Japanese pronunciation), the smaller characters to write inflections, particles, etc. in *man'yōgana*. This style, called *senmyōgaki*, was used to write imperial rescripts (*senmyō*) and Shinto prayers, both of which were to be recited without alteration. Examples can be found in the *Shoku Nihongi* of 797.⁴

The degree of detail needed to distinguish several tens of thousands of Chinese characters from one another was not necessary for the transcription of the limited Japanese syllabic repertoire. Moreover, a relatively small number of *kanji* tended to be used repeatedly for the same sounds in Japanese. Chinese characters were read with a single syllable in Chinese, though this often became two when accommodated to Japanese phonetic habits. Those *kanji* frequently used for phonetic transcriptions gradually came to be associated with just one syllable in Japanese, their written forms were somewhat simplified, some redundant symbols fell out of use, and there developed two separate sets of syllabic symbols, *kana*, phonetically equivalent, but graphically distinct: *hiragana*, written in a rounded, fluid style, and *katakana*, written in a more angular, detached style.

Not much is known about the early development of the *hiragana* syllabary. It seems to have developed from cursive forms of the characters used in *man'yōgana*. Aesthetic factors played a great part in the development of this style, which was apparently used by the early tenth century to write many of the great literary works of the Heian period, including the influential poetry collection *Kokinshū* (905). In the middle of the Heian period *hiragana* also began to replace the *man'yōgana* of *senmyōgaki* as well, a factor which encouraged the development of *kana-majiribun*, texts composed in a combination of *kanji* and *kana*.⁵

On the other hand, texts written in Chinese could be puzzled out in several ways. One could read them in the

syntactic order of the original, merely accommodating the pronunciation to the Japanese phonetic repertoire. Many Buddhist scriptures are still read in this way, and by all accounts they were equally as unintelligible to most Japanese then as they are now. A more easily comprehensible method was to adapt the word order to that of Japanese syntax, adding inflections and post-position particles as necessary, and substituting in several places a native Japanese word of equivalent meaning. As aids in this practice, marks of various kinds might be added to the text, usually between the lines, but occasionally in the margins or even on the reverse side of the page. These "reading marks" (*kunten*) are generally of three types: punctuation and indications of places where word order needed to be changed; characters used only for their sound to indicate the pronunciation of difficult characters; and simple marks to represent particles and inflectional endings (the interpretation of these marks usually being determined by their spatial relationship to the character in question: upper-left corner, bottom-right corner, etc.). A text to which such marks were added in 828 is still extant.⁶ Space, and perhaps time, limitations encouraged the use of abbreviated forms of characters used for these *kunten*; these abbreviated forms in turn became the major impetus for the development of *katakana*, the angular form of *kana*. These interlinear characters, and their simplified forms (*katakana*), may be considered the earliest forms of *furigana*.

While the Heian period saw the (relative) simplification and codification of the *kana* syllabaries, subsequent developments through the nineteenth century tended to be in the direction of greater and more complicated use of *kanji* even in non-Chinese styles, and the growing necessity for pronunciation glosses. The *kana-majiribun* script mentioned above was used in medieval war tales, such as the *Heiji monogatari* of the late twelfth century. Such tales, written basically in Japanese syntax, employed a highly ornamented style which borrowed heavily on Chinese vocabulary (especially for the terminology of warfare and Buddhist terms) and Chinese rhetoric (parallelism, allusions). This combination of classical Japanese with Chinese, and an admixture of various elements from the vernacular of the time, came to be known as *wakan konkôbun* ("intermixed Sino-Japanese

style"), held by many scholars to be "the foundation of the present Japanese written style."⁷⁷ During the Kamakura period (1185-1333) the purer Chinese style of the Heian period was replaced in official documents by variant forms heavily influenced by Japanese. As more such documents came to be written by warriors lacking the learning or inclination to compose in Chinese, the use of wild and fanciful *ateji* increased dramatically.⁸ *Kanji* used to transcribe Japanese words with little regard for the ordinary meaning of the individual characters are often referred to by the term "(provisionally) applied characters" (*ateji*).⁹ A fairly common example is 目出度 *me-detai* 'auspicious' from 目 *me* 'eye' + 出 *de* 'go out' + 度 *ta* 'occasion, degree' (perhaps employed on the basis of the *on* reading /taku/) + り (inflectional ending of adjectival). Another class of words often referred to as *ateji* uses phrases of two or more characters from Chinese to render the meaning of a native Japanese word without regard to the individual readings of those characters in other contexts: the Japanese adjectival *urusai* 五月蠅 *itsutsu no tsumi* 'noisy, troublesome' from 五 'five' + 月 'month' + 蠅 'fly' + り (inflectional ending of adjectival) is an example of this type, also referred to as *jukujikun* ("kun reading of phrases," as opposed to individual characters), making use of the *kanji* phrase "(like) flies in May" to write a Japanese word of similar meaning.

The use of *furigana* increased dramatically from the late sixteenth century as a result of several factors. Most prominent among these factors are increases in basic literacy (*hiragana*, *katakana* and some *kanji*), the development of commercial printing (following the introduction of the printing press in the 1590s), and new styles of writing, especially fiction, which again borrowed heavily from Chinese works, and employed large numbers of Chinese characters and compounds. Several popular writers of this period are noted for their difficult orthography; Ihara Saikaku (1642-93) and Takizawa Bakin (1767-1848) both indulged in the use of imaginative *ateji* and unusual characters. By the early seventeenth century

works were being published in which *furigana* were printed alongside virtually all of the *kanji* (usually with the exception of numerals), to make them accessible to a wide readership. Many popular newspapers and magazines, not to mention works directed at juvenile readers, were printed in this manner well into the 1940s.

Interlinear glosses were put to a rather interesting use during this period by several scholars and writers associated with *kokugaku*, "native (Japanese) studies." These writers sought to recover the pure spirit of Japan, untainted by foreign influences, such as Buddhism and Confucianism. This movement can be seen in part as a reaction against the active promotion of Neo-Confucian and "Chinese learning" by the Tokugawa shogunate which began early in the seventeenth century (another factor which expanded the use of *kanji* and the need for *furigana*, during this period). Many of the scholars associated with "native studies" wrote commentaries on such early and long-neglected classics as the *Man'yōshū* and *Kokinshū*. Rejecting the use of Chinese vocabulary as a corruption of the Japanese spirit, they also promoted writing in a style modeled on that of the Heian period, with the addition of archaic terms from even earlier. Interestingly they did not reject the use of Chinese characters (and certainly not of the *kana* derived from them); this "Heian-revival" style often contained *kanji* with *furigana* giving a native Japanese equivalent, the *kanji* serving to convey the meaning of the ambiguous or now obscure Japanese term. The great scholar and philologist Motoori Norinaga (1730-1843) occasionally reversed this relationship, using *kanji* as interlinear glosses for native Japanese terms written in *hiragana*.¹⁰

Further steps towards the current style of written Japanese were taken during the Meiji period (1868-1911). Economic and social changes which came in the wake of the 1867 Meiji Restoration encouraged some writers to experiment with written styles somewhat closer to the spoken language of the day. *Kanji* continued to be used extensively, often glossed with words of native origin. The

following two examples show colloquial equivalents of Sino-Japanese compounds given in *furigana* from Futabatei's *Ukigumo* (Floating Clouds) written between 1887 and 1889. Throughout this paper, Chinese characters or *kanji* are transcribed in capital letters, *hiragana* in lower case, and *katakana* in italics; *rōmaji* (romanized Japanese) and English are transcribed in bold face (translations in English are provided for both the main text and *furigana*).

- | | | | |
|-----|------------|--------------------------|-------------------------------------|
| (1) | かほつき
面相 | kaotsuki
MENSŌ | 'look, feature'
'countenance' |
| (2) | なり
衣服 | nari
IFUKU | 'appearance'
'apparel, garments' |

The next example, from the same source, is interesting since the *on*-reading of the Sino-Japanese noun GYŌSHI meaning 'steady gaze' is followed by *-meta* which indicates the inflectional ending of the Japanese verbal mitsumeta 'stared,' instead of by the expected *-shita* 'did' which usually verbalizes a noun. In other words, the *okurigana* 'sending *kana*,' or symbols used to transcribe inflections, are to be understood as following the reading given in the superscript, rather than the reading of the original nominal expression in the main text. From this and many other similar examples, it is clear that the writer had the colloquial expression mitsumeta in mind but chose to supply the Chinese characters for stylistic purposes, instead of the other way around (having the Sino-Japanese compound GYŌSHI in mind and adding a pronunciation gloss for the benefit of readers):

- | | | | |
|-----|------------|------------------------------|---------------------------------------|
| (3) | みつ
擬視めた | mitsu-
GYŌSHI+meta | v. 'stare'
n. 'steady gaze' + '-d' |
|-----|------------|------------------------------|---------------------------------------|

In this period, the Japanese had to coin many terms to refer to new objects and concepts, a large portion of them introduced from the West. The following neologisms consist of morphemes of Chinese origin, their usage being based on that of the Chinese classics or Chinese translations of the Buddhist sutras:

電気 DENKI ('lightning' + 'vital force' --> 'electricity')
 国会 KOKKAI ('nation' + 'meeting' --> 'national
 assembly,' 'Diet'), and 立法 RIPPÔ ('enactment' + 'law'
 --> 'legislation').¹¹

However, English loanwords began to replace older nouns borrowed from Chinese as well as those which consist of Chinese characters in loan-translations. Some even went so far as to claim that Chinese was an inappropriate medium through which to translate English, since Chinese characters fail to "convey the spirit and meanings of the materials."¹² Furthermore, an underlying sense of inferiority pervaded the collective Japanese psyche, and as a result, all things Western, especially English, became symbols of status.

Seeley reports that many uses of Sino-Japanese compounds were accompanied by *katakana* glosses representing a Western loanword of equivalent meaning.¹³ Examples include SHINRI 'truth' glossed with *torûsu*, and SHOKUBUN 'obligation' with *oburigêshon*.

- | | | | |
|-----|----------------|--------------------------------|------------------------------|
| (4) | トルース
真理 | <i>torûsu</i>
SHINRI | 'truth'
'truth' |
| (5) | オブリゲーション
職分 | <i>oburigêshon</i>
SHOKUBUN | 'obligation'
'obligation' |

Both *hiragana* and *katakana* were used for glosses, as well as for writing loanwords. (It was after the Second World War that *katakana* notation was reserved for loanwords and a few other categories.) The following example from Kunikida Doppo's *Shônen no hiai* (1903) consists of a *kanji*-compound glossed with a loanword written, not in *katakana*, as was common for recent, especially non-Chinese, loanwords, but in *hiragana*.

- | | | | |
|-----|-----------|-----------------|--------------------------------------------------------------|
| (6) | きせる
煙管 | kiseru
ENKAN | '(a tobacco) pipe' (from Cambodian khsier)
'a smoke pipe' |
|-----|-----------|-----------------|--------------------------------------------------------------|

In addition to Western loanwords transcribed in *hiragana* and *katakana*, some were written in *kanji* for their sound value only (e.g., 'coffee'), or for their sound value as well as semantic associations (e.g., 'logic' and 'club,' classic *ateji*, the latter, having been exported to China, still enjoys considerable currency).¹⁴

- | | | |
|-----|-----|-------------------------------------------------------------------------------|
| (7) | 珈琲 | /KŌHI/ 'coffee' |
| (8) | 論事矩 | ROJIKU 'logic' =
論 /RO(N)/'debate' + 事 /JI/'matter, affair' + 矩 /KU/'rule' |
| (9) | 俱樂部 | KURABU 'club' =
俱 /KU/'together with' + 樂 /RA(KU)/'enjoy' + 部 /BU/'group' |

We have seen that interlinear glosses are used for various purposes: 1) to aid with the pronunciation of Chinese characters; 2) to provide more colloquial (native Japanese) equivalents of learned Sino-Japanese words and compounds; and 3) to indicate specific, often unfamiliar, non-Chinese loanwords (usually from European languages) as a gloss to Japanese (including Sino-Japanese) words. The first type was used as early as the Heian period, the second became quite common during the Edo period, while the third began to be used in the Meiji period.

Newspapers, popular books and magazines were littered with *ateji* and glossed Chinese characters until the end of the Second World War. For instance, in 1922 the *Tokyo Nichinichi Newspaper* felt the need to gloss well over half (8,011) of the 14,531 Chinese characters used in printing.¹⁵ The post-war orthographic reforms included: the suppression of *ateji* and the idiosyncratic use of interlinear glosses to the extent that they were identifiable,¹⁶ and the issuing of a list of 1,850 Chinese characters to be used for general purpose (*tōyō kanji*), a list which was later revised to contain 1,945 characters for daily use (*jōyō kanji*). The list of *jōyō kanji* was issued in 1981. Most Japanese newspapers and magazines targeted for the "general readership" adhere fairly closely to this list for their typography. Thus, if a draft contains a word not listed in this chart, the publisher usually prints it in *hiragana*, replaces it with a synonym or uses Chinese characters with a pronunciation gloss.¹⁷

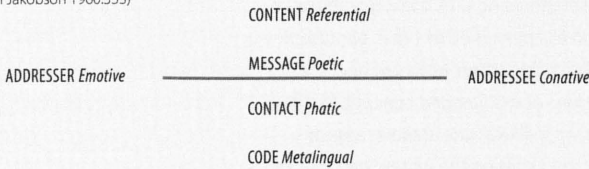
Unger states that, unlike the days when *furigana* were extensively used, the newspapers no longer allocate interlinear margins for *furigana* and instead the clarification or pronunciation gloss is given in parentheses following the unfamiliar characters.¹⁸ In 1967 Miller stated that *furigana* are hardly ever seen today except in technical and scholarly writings, the publishers of such works not limiting themselves to the use of only the *tōyō kanji*.¹⁹ However, a casual glance over a variety of popular contemporary publications reveals that not only does the practice of providing interlinear glosses seem to have survived in a variety of other types of publications, it seems to have flourished with new and innovative extensions of the *furigana* concept. In the following section, we will examine creative uses of glossed words to shed light on the writers' underlying linguistic attitudes that transcend the didactic intent of the post-war orthographic reforms. The following discussion is based on the assumption that standard contemporary Japanese orthography (for the majority of printed and handwritten materials) consists of an intermixture of *kanji*, *katakana* (used for onomatopoeia, the writing of telegrams, the graphic equivalent of italics and most words of foreign origin with the exception of all but the most recent imports from China), *hiragana* (for most words not in *kanji* or *katakana*), and a sprinkling of so-called Arabic numerals and Latin letters, all in approximately the same size (with the exception of certain common units of measure in *katakana*). *Furigana* are *kana* of smaller size placed interlinearly alongside (or above, if the text is printed horizontally) *kanji* to indicate the pronunciation.

Analysis and Discussion

Before discussing the poetic function predominant in the Japanese gloss, the term "poetic function" needs to be clarified, particularly in relation to other functions of language. Language may be said to fulfill a variety of functions including expressive, referential and

metalingual functions. A message can fulfill all of these functions simultaneously, although all of these functions cannot be foregrounded at the same time. In other words, each instance of word use may reveal a different “hierarchy” of these separate functions, rather than the consistent domination of one function; this variety results in a diversity of styles.²⁰ Take a glossed word

Figure 1
 Functions of Language
 (adapted from Jakobson 1960:353)



such as ENKAN/kiseru (see [6] above) for example. It has a REFERENTIAL meaning, indicating the association between the linguistic sign, the Sino-Japanese compound 煙管, and what is signified, a tobacco pipe. *Furigana* often fulfill a METALINGUAL function, allowing the writer to confirm that the reader is using the same language or dialect (reading these symbols as /kiseru/ and not as /enkan/), and understands the expressions in the way intended by the writer (i.e., a pipe used for inhaling tobacco smoke, and not, say, an exhaust flue for a stove). A written word can be said to have a channel-oriented PHATIC function,²¹ contributing to the establishment and maintenance of communicative contact: the use of the familiar and colloquial /oshaberi/ for the more academic /kaiwa/ (in [10] below) imparts a feeling of intimacy and collusion. As we will see later, an innovative gloss may fulfill an addressee-oriented CONATIVE function invoked in the reader, just as the use of the vocative form does. Different scripts may be employed to indirectly reveal a writers’ attitudes and feelings, and conceptions of desired identity, thus performing an EMOTIVE function, as in the use of /shinguru/ ‘single’ to gloss /hitorimono/ ‘unmarried,’ thereby expressing the copywriter’s view of the adult unmarried state (see [25] below).

Finally, language is said to have a POETIC function when the writer places an emphasis on language “for its own sake” rather than for that of communication per se.²² Mukarovsky explains the functional difference between poetic language and standard language: “The function of poetic language consists

in the maximum of foregrounding of the utterance“to the extent of“pushing communication into the background as the objective of expression and of being used for its own sake.”²³ In other words, it is the art of communication rather than the act of communication that interests the writer.

Different types of discourse tend to make greater use of distinct functional possibilities of language. Technical descriptions tend to emphasize the referential potential, and scientific discourse makes claims to have all but eliminated the poetic and emotive functions. Back channel responses and tag questions function almost exclusively to maintain communication in a conversation, often having little or no referential meaning. Hortatory speeches are often quite expressive, and must make effective use of the metalingual power by carefully selecting the proper register and tone for a given audience, but by nature must emphasize the conative function of discourse as a whole. However, when all of these functions are subordinated to an intentional manipulation of the language to draw attention to itself, the poetic potential is foregrounded.

We will now show how this foregrounding is achieved in the innovative glosses in Japanese. Here we are interested primarily in idiosyncratic glosses, rather than the “standardized” readings provided by writer or publisher. By analyzing non-standard uses of interlinear glosses involving the selection and production of unique lexical phenomena, we will examine the heightened metalinguistic awareness of novelists, copywriters, journalists, technical translators and contributors of creative slang. Just as pronunciation glosses were not the only function of the earliest interlinear symbols, the provision of accepted readings for infrequently encountered *kanji* and *kanji* compounds is not the only use of *furigana*. In fact, in several types of

publications, *furigana* rarely perform this function. Figure 2 lists the most interesting alternative uses observed by the authors in contemporary Japanese. Graphic variations and their functions are discussed later.

Figure 2
Observed Poetic Uses of Innovative Glosses

1. As canonical poetic tropes

metonymy

word play

onomatopoeia (giseigo) and mimetic words (gitaigo)

visual rhyme

2. To foreground certain elements,

usually by providing native synonyms or the original/donor word(s)

a feeling of intimacy, through the use of more colloquial equivalents

local, technical or social flavor

positive aspects of referent (while backgrounding negative aspects)

arcane knowledge of foreign languages, Chinese characters

(to enhance one's identity, to gain social prestige or status)

The following examples may appear to be nothing more than texts glossed with more colloquial equivalents, a common practice in Meiji writing. However, the poetic use of these words becomes apparent when we consider the relationship between the poetic language and the standard. As Mukarovsky argues, poetic use of language is the "intentional [and systematic] violation of the norm of the standard."²⁴ It is against the background of the standard language that the poetic use of language occurs.

Accordingly, "the more the norm of the standard is stabilized in a given language, the more varied can be its violation, and therefore the more possibilities for poetry in that language."²⁵ The apparently arbitrary provision of

colloquial equivalents as glosses for Chinese characters was a common practice in the Meiji period; writers and editors were free to use various means to introduce new ideas and fresh nuances to old words. But this practice was suppressed after World War II. The reformed post-War script was, in contrast to pre-War practice, a marvel of efficiency, and most textbooks, newspapers, magazines and popular books quickly adopted the new, more rigid standards. Although the words provided with glosses in the texts below are not archaic, the writers have glossed them with even more familiar words, but words which would not be listed as a “correct” or “accepted” reading. The bleakness and inflexibility of post-War practice redefines the nature of “poetic language,” and allows the gloss to impart even to these not unfamiliar terms an unfamiliar distance.²⁶ Most of the following examples come from magazines and popular novels read predominantly by younger women. That similar examples can be found in the works of writers (both male and female, such as Ariyoshi Sawako) of more “serious literature” is not surprising, since innovations of this sort were first introduced by “literati” and such writers make a profession of exploiting the poetic resources of the language.

- | | | | |
|------|-------------|----------------------|-----------------------------------|
| (10) | おしゃべり
会話 | o-sha-ber-i
KAIWA | 'a chat'
'conversation' |
| (11) | たか
高価い | taka-
KÔKA-i | 'expense-'
'valuable' + '-ive' |

(As in example 3 above, the stem /taka-/ in the gloss takes the adjectival ending /-i/, which would not be appended to the nominal KÔKA.)

Words are sometimes, as in examples 10 and 11 above, glossed with native synonyms, including those from non-standard dialects, or words from the original/donor language to foreground a particular local, technical or social flavor. Ariyoshi Sawako's *Hishoku* (Not Because of Color, 1963-1964), which focused on racial tension in the United States, is rich in the use of interlinear glosses in order to foreground local flavor. This is done by glossing some of the words in dialogue with the "original" English expression. The story begins in Japan where Emiko meets Thomas Jackson, an American GI and her future husband. Emiko says that Jackson uses "big words" such as "peace" and "equality." Here, a literal translation of 'big word,' "Ōki na KOTOBA," is used in the Japanese text, but it is glossed with the English expression *biggu wādo* 'big word' (see example 12). When Ariyoshi has Jackson say that "it is the heart (rather than words)" that is important in communication, she uses the Japanese word for 'heart' (*kokoro*) glossed with the English word 'heart.'

- | | | | |
|------|--------------------------------|------------------------------------|-----------------------------------|
| (12) | <small>ビッグワード</small>
大きな言葉 | <i>biggu wādo</i>
Ōki na KOTOBA | 'big word'
'large-sized words' |
| (13) | <small>ハート</small>
「心です。」 | <i>hāto</i>
"KOKORO desu." | 'heart'
'(It) is heart.' |

The story moves to New York, where Emiko and Jackson reside. The following use of interlinear glosses is intriguing in that it attempts to render English spoken with a Brooklyn accent in contrast to that of the standard (American) accent.²⁷

- | | | | |
|------|--------------------------------------------|-------------------------------------------------|---------------------------------|
| (14) | <small>サーティスリ</small>
Emiko: 「33番地なのよ。」 | <i>'sā ti suri</i>
"sanjūsan BANCHI nanoyo." | 'thirty three'
'It's No. 33' |
|------|--------------------------------------------|-------------------------------------------------|---------------------------------|

Passerby: ""

- | | | |
|--------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Emiko: | <small>スリスリ</small> <small>ダブルスリ</small>
「33よ。3が2つ。」 | <i>suri, suri daburu suri</i> 'three, three, double three'
"san, san, yo. san ga futatsu." 'three, three; two threes.' |
|--------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|

- | | | | |
|-----------|-----------------------------------|------------------------------------|-----------------------------------|
| Passerby: | <small>トオティトオ</small>
「ああ33か。」 | <i>tōtītō</i>
"aa, sanjūsan ka" | 'toety toe'
'Oh, you mean 33.' |
|-----------|-----------------------------------|------------------------------------|-----------------------------------|

The following examples reveal the cognitive process of the Japanese readers in forming metonymic connections between the text and the gloss. Such connections are formed between two entities because readers “use one well-understood or easily perceived aspect of something to represent or stand for the thing as a whole.”²⁸ Many metonymies are culturally conventionalized, such as using an “object for the user” (*We need a better glove at third base*); “controller for controlled” (*Nixon bombed Hanoi*); or “the place for the event” (*Watergate changed our politics*).²⁹ The metonymic use of language expresses “stands-for” relationships between two things; for example, inventor-invented (“She was listening to Bach”) as in example 15 below. Here, the name of a well-known composer is used to refer to his creation. In example 16, the institution (taxation office) is glossed with the word for the act of investigation (*marusa*). Nowadays these two words are used interchangeably and people regard *marusa* as a nickname for the Japanese equivalent of the IRS.

- | | | | |
|------|-------------|--------------------|---------------------------------------------|
| (15) | バハハ
演奏 | bahha
ENSŌ | 'Bach'
'performance' |
| (16) | マールサ
税務署 | marusa
ZEIMUSHO | 'act of investigation'
'taxation office' |

Closely related to the notion of metonymy is synecdoche, as both of these exploit relationships of (figurative or literal) contiguity. However, synecdoche is understood as the substitution of the part for the whole as in the following examples. These examples show a synecdochic use of interlinear glosses, with the part given in the gloss and the whole in the text. Here, the Japanese word for a natural spring with a large amount of magnesium sulfate is used, but it is glossed as simply magnesium sulfate in example 17. Likewise, in example 18, the word for a natural spring containing a large amount of sodium sulfate is used, but it is glossed as simply sodium sulfate.³⁰ One might also note that the

text is written in Chinese characters associated with traditional Chinese medical thinking and practices (one example has the easily decipherable implication 'bitter-tasting springs,' relating it to everyday sensory experience), while the glosses employ the more abstract terms of Western science, completely divorced from the experiences of ordinary life.

- | | | | |
|------|------------------|-------------------------------------------------|----------------------------------------------------------|
| (17) | マグネシウム硫酸
正苦味泉 | <i>maguneshiumu</i> RYŪSAN
SEIKUMISEN | 'magnesium sulfate'
'magnesium sulfate spring' |
| (18) | ナトリウム硫酸
芒硝泉 | <i>natoriumu</i> RYŪSAN
BŌSHŌSEN | 'sodium sulfate'
'sodium sulfate spring' |

The intriguing thing about these examples is that the average reader of *More*, the women's magazine in which these words appeared, has probably never set eyes on the Chinese names of these compounds, especially the first one. The readers can only speculate on the meaning of the word on the basis of the meaning of the components, just as in deciphering English compounds one might make use of Latin and Greek roots. Because etymology is often insufficient and/or sometimes even misleading, the writer probably wrote them in this way to imply the effectiveness of these minerals in recreating the atmosphere of a European-style spa, the unfamiliar chemical names being included to add an aura of scientifically authenticated efficacy. In other words, Japanese readers are conditioned to form synecdochic connection between the text and gloss when necessary. Below is another example which glosses one's entire (household) budget as 'wallet.'

- | | | | |
|------|-----------|-------------------------------|----------------------------|
| (19) | サイフ
予算 | <i>saiifu</i>
YOSAN | 'purse'
'budget' |
|------|-----------|-------------------------------|----------------------------|

The writer sometimes invites the readers to form a metonymic connection between two events or entities which seem to be in arbitrary or unconventional relationships. In the following example (20) the writer uses the container for the contained, mentioning the bowls of varying shapes and sizes to refer to a variety of appetizers.

- | | | | |
|------|----------------|---------------------------------------------|---------------------------------------------|
| (20) | オードブル
不規則な器 | <i>ôdoburu</i>
FUKISOKU na UTSUWA | 'hors d'oeuvre'
'unmatched bowls' |
|------|----------------|---------------------------------------------|---------------------------------------------|

An extended use of metonymy can be seen in the following examples. The gloss is used to foreground certain aspects of the referent by using one part to represent the whole. The *kanji* 女 ‘woman’ can be read as /onna/ alone and /jo/ or /nyo/ when combined with another character, as in 女性 JOSEI ‘female,’ and 女人 NYONIN ‘woman.’ In examples 21 and 22, 女性 ‘women’ is given different readings, /hito/ ‘person’ and /onna/ ‘women.’ In both examples 21 and 23, two distinct *kanji* notations are given the same reading, /hito/ ‘person,’ in spite of the different Chinese characters used. An analysis of such variations reveals the influence of the writer’s conscious choice. Nakamura examined the connotative differences in the four terms referring to women in Japanese, two of which are relevant here. Although the term ONNA denotatively means “the sex which possesses the [child-bearing] organ,” unlike the male equivalent OTOKO ‘man,’ it implies the negative ‘sex object.’³¹ For this reason, JOSEI is used euphemistically in newspapers and magazines. As one can see from the context, there is no reason to emphasize female sexuality in examples 21 and 23. The woman depicted in example 21 is intelligent looking (and not necessarily sexy); example 23 describes the female audience who were moved by Tina Turner’s live concert. In contrast, example 22 appeared in an advertisement for plastic surgery with a focus on a woman’s physical beauty from a man’s perspective.

- (21) きれいに年を重ねてきた女性の自信に満ちていました。
- ひと
- kirei ni TOSHI o KASAnetekita JOSEI no JISHIN ni Michiteimashita
- ‘beautiful’ ‘-ly’ ‘age’ OM ‘multiply’ ‘woman’ POS ‘confidence’ ‘with’ ‘fill’-PAST
 ‘She was filled with the confidence of a woman who was aging beautifully.’
 (--->‘She was filled with the confidence of one who was aging beautifully.’)
- (22) あんな女性に誘われたい
- おんな
- anna onna JOSEI ni SASOware tai
- ‘that kind of’ ‘woman’ ‘by’ ‘invite’-PASS ‘want to’
 ‘I’d like to be propositioned/asked out by that kind of woman.’
 (--->‘I’d like to be propositioned/asked out by a fox like that.’)
- (23) 生き生きとした躍動感にはげまされた女も多かった。
- ひと
- Ikilki toshita YAKUDÔKAN ni HAGEmasareta ONNA mo Ôkatta
- ‘vivacious’ ‘liveliness’ ‘by’ ‘encouraged’ ‘woman’ ‘too’ ‘numerous’-PAST
 ‘There were many women who were encouraged by the sense of vivacious liveliness.’
 (--->‘There were many who were encouraged by the sense of vivacious liveliness.’)

The metonymic use of language is motivated by our conceptual ability to use one well-understood aspect of some domain to stand for the domain as a whole, or to use the mention of a whole domain to refer to one salient subpart. Examples of the former type effectively focus attention on a limited number of characteristics. Even good foreign translations of Japanese words usually have slightly different connotations from the original when borrowed into Japanese, thus their use as glosses can effectively foreground positive aspects and background negative aspects of the referent. Related to the three previous examples (21-23), the loan *guddo ūman* 'good woman' was used to gloss *ii ONNA* 'good/desirable woman' in the young women's magazine *More* [see (24) below]. This is attributable to the loan's neutral connotation.³² While the expression 'a good man' in Japanese can be both a sexually attractive man, when said by a woman, or a socially competent or reliable man, when spoken by a member of either sex, *ii ONNA* 'good woman,' which is used only by men, connotes only a sexy woman. Thus the gloss forces a reevaluation of the term *ii ONNA*, returning to it the social and moral approbation it had before this was suppressed by sexist usage.³³

- (24) グッドウーマン *guddo ūman* 'good woman'
- いい女 *ii ONNA* 'good woman'

As mentioned before, loanwords can be used to de-emphasize undesirable behavioral patterns. While the native Japanese word for a single person *hitorimono* has the nuance of 'spinster' when used to refer to women, the English loan *shinguru* 'single' lacks such connotations and implies 'someone who chooses to remain single.' Here are additional examples of this kind (25-28).

(25)	シングル ひとりもの	<i>shinguru</i> hitorimono	'single' 'unmarried'
(26)	コンプレックス 劣等感	<i>konpurekkusu</i> RETTÔKAN	'[inferiority] complex' 'a feeling of inferiority'
(27)	タブー 禁忌	<i>tabû</i> KINKI	'taboo' 'forbidden'
(28)	ジャンク 偽物	<i>janku</i> NISEMONO	'junk' 'fake'

In example 26 RETTÔ has the unmistakable meaning of 'belonging to an inferior class, of a deficient type,' whereas the more ambiguous konpurekusu avoids the offending 'inferior' all together, and puts one in mind of a contemporary urban professional for whom a 'complex,' the necessary price for success in today's world, may be a badge of honor rather than something of which to be ashamed and even allows one to imagine one of the other less offensive complexes currently fashionable in Japanese pop-psychology (Peter Pan, Cinderella, mother-, father-, etc.). A tabû, (27) deriving as it does from Polynesian usage, carries the image of an exotic superstition, not to be taken seriously by members of more advanced societies, while KINKI, though originally almost identical with 'taboo,' now carries the force of something to be avoided because of scientific or legal reasons (as pharmaceutical contraindications). The Japanese use of 'junk' (28) takes on special connotations in a highly disposable society, where storage space is unaffordable to most and even houses have an average life-span of about fifteen years; anything from an earlier production cycle may be somewhat rare and even chic, something to be "discovered" in a second-hand shop or flea market and shown off to acquaintances. NISEMONO, on the other hand, is a cheap imitation meant to deceive someone hunting for valuable 'junk.'

Loanwords are often used to foreground sophisticated or modern images of what is described, due to the symbolic associations of the English language, an unspoken belief that English words are more “international” and “cosmopolitan.” Research has shown that viewers are led to feel that they can lead a more egalitarian or sophisticated life, free from various social obligations related to traditional values, if they associate with such objects (e.g., clothing, cosmetics, food, furniture as well as things related to travel and leisure).³⁴ The following glosses are used to invoke a metaphoric process whereby the viewers transport themselves into the desired state, location or situation offered by the advertised commodity (29-32).

(29)	ミステリアス 神秘的	<i>misuteriasu</i> SHINPITEKI	‘mysterious’ ‘mysterious’
(30)	アイディア 発想	<i>aidia</i> HASSÔ	‘idea’ ‘conception’
(31)	アクティブ 活動的	<i>akutibu</i> KATSUDÔTEKI	‘active’ ‘active, energetic, dynamic’
(32)	モノトーン 白黒	<i>monotôn</i> SHIROKURO	‘monotone’ ‘black and white’

Takashi’s examination of loanwords in 506 television commercials and 413 print ads has revealed that the word *nyû* ‘new’ was the most frequent loanword which did not serve to fill a lexical gap.³⁵ This substantiates the fact that advertisers employ loanwords to appeal to the audience’s desire for an up-to-date and cosmopolitan image. As one might expect, in ads for traditional Japanese products, by contrast, the Japanese adjective *DENTÔTEKI na* ‘traditional’ was used instead of *toradishonarū na*. However, in advertisements for ‘traditional’ and ‘orthodox’ British fashion and European-style watches, loanwords such as *toradishonarū* ‘traditional’ or *ôsodokkusu* ‘orthodox’ were employed.³⁶ The same phenomenon is observed in the use of interlinear glosses. Example 33 is used to describe a V-neck sweater and example 34 refers to Chanel

accessories. All of these examples clearly illustrate how foregrounding increases and refines “the ability to adjust more flexibly to new requirements [arising in a given culture] and it gives it a richer differentiation of its means of expression.”³⁷

(33)	オーソドックス 正統的	ósodokkusu SEITÔTEKI	‘orthodox’ ‘orthodox/legitimate’
(34)	トラディショナル 伝統的	toradishanaru DENTÔTEKI	‘traditional’ ‘traditional’

A glance at example 35 gives the impression of *furigana* providing a more colloquial expression of what is expressed in the Sino-Japanese compound. However, there is an additional motivation for this particular combination. This word appeared in an advertisement for AWASH, a washing machine which uses a stream of air bubbles to provide part of the cleaning action. While the use of the word *KIHÔ* ‘air bubbles’ is more appropriate semantically, the copywriter wanted this word to be read /awa/ ‘bubble, foam’ as a play on the product name AWASH. Thus, it is similar to example 36 which uses a French loanword to create what we might term a visual rhyme. Here the French loan *vie* ‘life’ is given as a gloss, so as to “rhyme” with the Japanese /bi/ ‘beauty.’ But since the difference in [v] and [b] in Japanese is not phonemic, and [v] is usually replaced by [b], the two words would be virtual homonyms in the speech of most Japanese: “*Bi* (beauty) is *bi* (life).”

(35)	あわ 気泡	awa KIHÔ	‘bubble, foam’ ‘air bubble’
(36)	ヱイ 美は生	vi BI wa SEI	vie ‘Beauty is life.’

Although it is not clear when writers began using interlinear glosses for this purpose, bilingual puns are not a recent phenomenon. Examples can be found in Tsubouchi Shōyō's *Tōsei shosei katagi* (1886), which describes the lives of university students in the Meiji Period.³⁸

The following section discusses the poetic use of interlinear glosses to enhance vividness and attract the reader's attention by maximizing visual effects. The use of onomatopoeia is an effective way to bring up a vivid image of an action or situation. In the text of (37) the uninflected onomatopoeia *boko*, the sound of hitting someone, written in *katakana* is followed by the verbal ending *-ru* (as in the verb *nagu-ru* 'to hit') in *hiragana*. The highly colloquial *boko* is made even more active and dynamic by being cast in the written form of a verb, then glossed with the more commonly used term *naguru*, 'hit,' in *hiragana* to make this unusual construction comprehensible. Example 38 is the title of Shimizu Hiroko's book (1996), which can be translated as "Husband Retires, Wife Gets Stressed." The nouns rendering 'retirement' and 'stress' are glossed with the onomatopoeia for 'not knowing what to do' and 'irritated' respectively.

(37) グーでボコる時 ^{なぐ} ^{nagu-} ^{punch}
 gū de boko-ru TOKI 'when you pow someone'
 'fist' 'by' 'hit' 'time'

(38) 夫は定年 妻はストレス
^{おろおろ} ^{いらいら}
 OTTO wa TEINEN TSUMA wa sutoresu
 'husband' TM 'retirement' 'wife' TM 'stress'
 'Husband retires, wife gets stressed'

An effective use of different scripts is another way of foregrounding the visual aspect of language for its own sake. Elements written in the squarish *katakana* or the roman alphabet stand out in Japanese texts filled with Chinese characters and *hiragana* notation. Sentence 39 is a good example. We find here, in the middle of the sentence, the capitalized English word STYLE glossed with a loanword 'fashion' in *katakana*:

(39)

ほんの少し ^{ファッション}STYLE を変えるだけで...

fashion
hon no SUKOshi STYLE o KAerudakede....
'just' 'little' 'style' OM 'change' 'only'
'just a small change in style will....'

"Words originating in ... foreign languages, are... often taken over because of their novelty and uncommonness, that is, for the purpose of foregrounding in which esthetic valuation always plays a significant part," says Mukarovsky.³⁹ This, in addition to their connotations of modernity, explains the high frequency of Western loanwords in Japanese magazines for young people and in advertising in general. However, the use of foreign words ceases to be effective when overused, since it is by this route that words are standardized and stripped of their poetic value. This is the process of gaikokugo 'foreign words' becoming gairaigo 'loanwords' in Japanese.

The following section discusses how a maximization of visual effects can still be achieved in our own time, which we term the "post-*katakana* era." As we mentioned earlier, the relationship between poetic language and the standard language, their mutual approximation or increasing distance, varies from period to period. "But even within the same period, and with the same norm of the standard, this relationship need not be the same" for all writers who create with language.⁴⁰ We have identified four possible strategies to combat the overuse of foreign words transcribed in *katakana*: 1) In a text inundated with Western loanwords written in *katakana*, *kanji* now stand out, in particular if Western loans are written in Chinese characters used for their phonetic value rather than for their semantic value. This is sometimes done to give a more dignified image of the object under discussion, or to evoke nostalgic feelings of the time period in which the particular *kanji* were used before being replaced by *katakana* [e.g., 'coffee' in the Taisho Era (1912-1926)].⁴¹ 2) In order to fulfill the poetic function, the writer may use *hiragana*

instead of the conventional *katakana* to write Western loanwords.⁴² Words such as *foramu* 'forum' or *supotto* 'spot' are sometimes written in *hiragana*.³ The writer may use a combination of different scripts in a glossed word. Although the most numerous are Sino-Japanese compounds glossed with *hiragana* or *katakana*, other combinations have been observed (see examples 40 and 41). Because the writers are taking advantage of the appearance and symbolic associations of different scripts, one rarely finds an entire word and gloss in the same script (see figure 3).

- | | | | |
|------|-------------|----------------------------|--------------------------|
| (40) | 青銅
レブロンズ | SEIDŌ
<i>re buronzu</i> | 'bronze'
'le bronze' |
| (41) | 不思議
マジカル | FUSHIGI
<i>majikaru</i> | 'marvelous'
'magical' |

4) Other methods include, but are not limited to, the use of an initial letter or acronyms taken from loanwords. This type of foregrounding achieves maximum intensity by pushing the objective of expression, communication (the original word), literally into the background (to the top or the side of the word) and using symbols for their own sake.

- | | | | |
|------|-------------|------------------------------|--|
| (42) | ワンピース
OP | <i>wan piisu</i> 'one piece' | |
| (43) | ウエスト
W | <i>uesuto</i> 'waist' | |
| (44) | スカート
SK | <i>sukāto</i> 'skirt' | |

Figure 3
Combinations of Different Scripts in Glossed Words*

Gloss Text	Hiragana	<i>Katakana</i>	RŌMAJI/ ENGLISH	KANJI
Hiragana		<i>single</i> hitorimono		
<i>Katakana</i>	iraira <i>stress</i> nagu <i>boku-ru</i>		<i>LINE</i> <i>line</i>	FUSHIGI SEIDŌ <i>magical</i> <i>le bronze</i>
RŌMAJI/ ENGLISH		<i>fashion</i> STYLE <i>one piece</i> <i>OP</i> <i>waist</i> W <i>skirt</i> <i>Sk</i>		KURI no mousse MOUSSE DE MARRON KANJIŌCHISŪ EQ
KANJI	oshaberī KAIWA taka - KōKA - i	<i>active</i> KATSUDŌTEKI <i>in</i> NAKA	KOCHAKADEN KOCHAKADEN	

*For the purpose of quick reference loanwords written in katakana (according to the Japanese phonology) are spelled as in English or French (e.g., shinguru --> single, re buronzu --> le bronze) and English/French words and acronyms are written in italicized capital letters in bold face (STYLE--> **STYLE**, Mousse de Marron --> **MOUSSE DE MARRON**). Several historical (kanji glosses of hiragana, kanji glosses of kanji) and pedogogic (hiragana glosses of Latin script) combinations have not been included here.

The choice of scripts can be a powerful tool not only in attracting the reader's attention, but also in foregrounding the writer's desired identity and knowledge of Chinese characters and foreign languages for social prestige. As poet Kôra Rumiko points out, the use of *hiragana* is still generally associated with feminine language and the women's literature of the Heian Period. Thus, regardless of the writer's sex, *hiragana* can be used to emphasize femininity in poems and/or prose; and Chinese characters can be employed to highlight masculinity. She also claims that, with the emphasis on unified language and universal education which is part of the modernization process, a masculinization of the language has taken place "under the rubric of standardization."⁴³ Such a strong claim needs validation. However, it is true that as a result of the post-war orthographic and educational reforms, "the burden of learning thousands of Chinese characters, once shouldered by only a small virtually all-male fraction of the school-age population, must now be borne by nearly all Japanese children."⁴⁴ Unger argues that although Japan has achieved an extremely high rate of minimum literacy (one's ability to read and write *kana*), when it comes to "literacy as a vehicle for full and free participation in society," it is a different story, since "all literacy... and education is grounded in *kanji*."⁴⁵

Students who cannot make the grade, once a minority within a small minority, now constitute, in absolute numbers, a substantial group. What is more, the level of literacy that these students are having a hard time reaching no longer commands the kind of respect it once did.⁴⁶

Due to the nine years of post-war compulsory education, the knowledge of *kanji* may not be as prestigious as it once was. On the other hand, if many students are having a hard time mastering all the required *kanji*, the use of difficult *kanji* or those not listed as a *jôyô kanji* would be a sign of personal accomplishment. Accordingly, one may argue that the recent use of innovative glosses, as well as the use of archaic *kanji*, may be a reaction to the standardization. Alternately, one might argue that the poetic use of language has become more visible as a result of the post-war standardiza-

tion, since it was difficult to differentiate the devices intended to shape the norm from those intended to violate the norm before the standardization took place.

Our analysis thus far has focused on the level of the individual word. However, because the value of each linguistic element can only be determined relative to the whole structure, the extent to which a gloss fulfills a poetic function must be examined in a larger context. This should include the relationship between the subject matter of the sentence and its component words; the semantic interrelationships of words in the sentence including foregrounded and unforegrounded elements, as well as words with figurative and basic meaning. Only then will the effect of the subject matter on the words and that of the words on the subject matter be revealed. Let us look at examples 45a through 45e. All of them mean 'the modern line is charming,' but the copywriter chose 45c. The glossed word jumps out of the sentence before the eyes of the readers, just as words succeed each other with semantic "jumps" or "breaks" in poetry.⁴⁷ The natural flow of sentence processing is interrupted when a non-standard use of language intersects with a standard use: one script embedded in a different script, words carrying dual meaning and glossed words appearing in front of the reader. It takes longer to process a glossed word if for no other reason than that it has two "words" in one.

(45a)	現代な線が魅力	GENDAITEKI na SEN ga MIRYOKU
(45b)	モダンな線が魅力	<i>modan</i> na SEN ga MIRYOKU
(45c)	モダン ^{ライン} な線が魅力	<i>modan</i> na ^{rain} SEN ga MIRYOKU
(45d)	モダンなラインが魅力	<i>modan</i> na <i>rain</i> ga MIRYOKU
(45e)	モダンなラインがチャームिंग	<i>modan</i> na <i>rain</i> ga <i>châmingu</i>

This is similar to the cognitive processes employed in the reading of Japanese poetry. Pivot words, double entendres and stock epithets ("pillow words") disrupt the reader in moving forward into a poem or sentence by carrying them back into what has already been read.

Jakobson contends that the poetic function projects the principle of equivalence from the axis of selection into the axis of combination.⁴⁸ In selecting words from a list of synonyms to be combined to make a larger unit in the Japanese context, the visual quality of the calligraphy, and the effect of the presence or absence of Chinese graphs and Japanese *kana* must also be considered, since they are crucial to the meaning of the poem.

If verse can be defined as “speech wholly or partially repeating the same figure of sound,” as Gerard Manley Hopkins says,⁴⁹ it may be reasonable to regard the following examples as “visual verse” since the written code evidences visual rhythm by wholly or partially repeating the same type of script. The use of *katakana* in the gloss cited as example 46 adds visual interest to a phrase otherwise entirely in *kanji* and *kana*. Likewise, in 47, which consists predominantly of *katakana* loanwords, a break is given by the addition of a *kanji*-gloss on the second word. In example 48, the *katakana* word *fâmingu* ‘firming’ pops out of this *kanji*-dominant phrase, partly because this is the only *katakana* word (and a non-nativized one) and partly because it is given a *kanji*-gloss. Also, the *katakana* script used in the first word is used again to gloss the second word in example 49, while in example 50 the *katakana* script in the second word is foreshadowed by the *katakana* gloss of the first word.

- (46) アイディア
 小さな努力と大人の発想で
 CHllsana DORYOKU to OTONA no HASSÔ de
 ‘small’ ‘effort’ ‘and’ ‘mature’ ‘conception’ ‘with’
 ‘with small effort and mature conception/idea’
- (47) 青銅
 メタリックな“レブロンズ”とクールな“レピエール”
SEIDÔ
metarikku na “reburonzu” to kûru na “repîêru”
 ‘metallic’ ‘le bronze’ ‘and’ ‘cool’ ‘le pierre’
 ‘metallic “le bronze” and cool “le pierre”’
- (48) 引き締め
 肌を活性化し、ファーマーミング機能を高める美容液
HikisHime
 HADA o KASSEIKAshi, *fâmingu* KINÔ o TAKAmeru BIYÔEKI
 skin’OM ‘vitalize’and’ ‘firming’ ‘function’ OM ‘increase’ ‘beauty lotion’
 ‘beauty lotion which vitalizes and increases the firming action of the skin’

(49) スポーティ & ^{アクティブ}活動的に決めるなら
supôti & *KATSUDÔTEKI* ni *Kimerunara*
 'sporty' 'active' 'on' 'decide-if'
 'if you're going for a sporty and active (look)'

(50) ^{クラシック}古風とモダンを融合して作り出す斬新なスタイル
kurasshiku
KOFÛ to *modan* o *YÛG*o*shite* *TSUKU*r*i**D*Asu *ZANSHIN* na *sutairu*
 'classic' and 'modern' OM 'mix, fuse' do' 'create' 'novel' 'style'
 'novel style created by mixing the classic and modern (style)'

Conclusion

An analysis of innovative glosses has revealed the predominance of a poetic function. Some examples exhibit characteristics "typical" of poetry, such as metonymy, including synecdoche (examples 15-20), and extensions thereof (examples 21-24), as well as visual rhyme (examples 35-36). Others display more generally the "poetic function" as defined by Jakobson and Mukarovsky: a focus "on the message for its own sake" instead of techniques confined to conventional poetic forms. When the poetic function is defined as a systematic deviation from the norm of the standard language, foregrounding certain elements to the extent of subordinating the subject matter may be considered poetic. This can be done by bringing out local flavor (examples 12-14); foregrounding positive aspects and backgrounding negative aspects of the referent (examples 25-34); enhancing vividness by the use of onomatopoeia (examples 37-38); and maximizing the visual effect by a strategic combination of different scripts (examples 39-44). Innovative or poetic strategies cease to be effective however, when the devices are no

longer perceived as rare or unique, or once they gain acceptance as an extension of the norm of the standard language. Thus, to remain “poetic,” writers must continually seek out unexpected, uncommon and unique devices by distorting conventions without vitiating the aesthetic value of the language, a practice which often initiates an unconventional convention.

The innovative and poetic glosses examined here have recently come into prominence partly because the background against which distortion is projected has become more rigidly standardized. This may reflect the writers’ conscious rebellion against the post-war orthographic reforms, or simply their disregard thereof. Since what is considered innovative and uncommon at present will lose its effectiveness once it, too, has become conventionalized, it will be interesting to see how these poetic uses of the interlinear gloss fare during the coming years. What is not likely to change, however, is the persistent and deeply rooted distinction between visual and aural components, and the ability and, more importantly, the inclination to separately manipulate the semantic and phonetic dimensions of the Japanese language. Reforms aimed at “rationalizing” the Japanese script temporarily increased the degree to which the written language could be made to conform to the spoken language, but subsequent developments have made it very clear that the written language can perform many functions other than simply record speech. ■

Resource A

List of Abbreviated Terms

TM = topic marker OM = object marker
 POS = possessive PASS = passive
 PAST= past tense

Resource B

Examples are taken from the following sources; a brief description of the magazines and their target readerships (as given by the publishing house) can be found below.

- (10)(19) Kelly, 1990, 9, cited in Harada, Kunihiro. 1993. "Use of Loan Word as Additional Tool For More Efficient Communication." Unpublished Manuscript, 3.
- (11) Tanabe, Seiko. 1990. *Yume no yôni hi wa sugite*. Tokyo: Shinchô, 121.
- (12)(13) Ariyoshi, Sawako. 1968. *Hishoku. Ariyoshi Sawako shû*. Shinchô Nihon bungaku 57. Tokyo: Shinchô, 345.
- (14) Ariyoshi. *Hishoku*, 489.
- (15) *Classy*, Jan. 1987, 201.(16)
- (16) Tanabe. *Yume no yôni hi wa sugite*, 260.
- (17)(18) *More*, Jan. 1997, 372.
- (20) *25ans*, Jan. 1995, 390.
- (21) *More*, Nov. 1986, 314.
- (22) *Fine*, Aug. 1995, 76.
- (23) *More*, Nov. 1986, 339.
- (24) *More*, Nov. 1986, 395.
- (25) Tanabe. *Yume no yôni hi wa sugite*, 252.
- (26) *Can Can*, Sept. 1994, 219.
- (27) *More*, Jan. 1986, 389.
- (28) *More*, Jan. 1987, 10.
- (29)(41) *More*, Nov. 1986, 39.
- (30)(46) *Clique*, Jan. 20, 1994, 24.
- (31)(49) *With*, June 1995, 83.
- (32) *More*, Nov. 1986, 396.
- (33) *More*, Jan. 1987, 103.
- (34) *More*, Nov. 1986, 76.
- (35) *Mangajin*, 1992:2, 7.
- (36) *More*, Jan. 1987, 373.
- (37) *Can Can*, Sept. 1994, 225.
- (38) Shimizu, Hiroko. 1996. *Otto wa teinen, tsuma wa sutoresu*. Tokyo: Aoki shoten.
- (39) *With*, June 1995, 8.
- (40)(47)(48)(50) *More*, Nov. 1986, 396.
- (42/44) *With*, Aug. 1997, 304.
- (43) *More*, Nov. 1986, 75.
- (45) *More*, Nov. 1986, 301.
- CanCan** Fashion magazine; coeds and clerical workers, aged 20-25.
- Classy** Fashion magazine; working women around 25.
- Clique** Fashion magazine; working women around 25.
- Fine** Sports/Fashion; young people around 20, slightly more women than men, interested in outdoor sports (skiing, scuba diving, etc.).
- Kelly** Nagoya metropolitan area entertainment/shopping/restaurant information; women in their 20s.
- Mangajin** American publication for learners of Japanese, primarily through illustrated stories (manga); extensive coverage of popular Japanese culture.
- More** Fashion magazine; women (especially clerical workers) in their 20s.
- 25ans** Fashion magazine; "material girls" (including working women), 20s and 30s.
- With** Fashion magazine; single working women (clerical workers) 22-24.

Endnotes

¹ The authors would like to express their gratitude for the many helpful and detailed suggestions made by several anonymous readers, suggestions which resulted in substantial changes and improvements in this paper. For any remaining inaccuracies the authors must, however, take full responsibility.

² Those interested in this debate may benefit from the trenchant analysis of Roy Harris presented, among other places, in his volumes *Signs of Writing* (1995. London: Routledge) and *Signs, Language and Communication* (1996. London: Routledge).

³ Many characters have two or more readings, reflecting regional differences and changes in Chinese pronunciation over time; quite a few have several different, often etymologically unrelated, *kun* readings as well.

⁴ Habein, Yaeko Sato. 1984. *The History of the Japanese Written Language*. Tokyo: Tokyo University Press, 18.

⁵ Habein, *Japanese Written Language*, 39.

⁶ Seeley, Christopher. 1991. *A History of Writing in Japan*. Leiden: E. J. Brill, 62-63.

⁷ Habein, *Japanese Written Language*, 41.

⁸ Habein, *Japanese Written Language*, 55.

⁹ All of the *man'yōgana* would fit this category, as would the current rendering of many proper names, but the term is usually reserved for a class of more common words so written, the name *ateji* implying that the characters were used as a stop-gap measure because of ignorance or lack of appropriate alternative. As this use of *kanji* runs counter to the general principles governing the most common uses and readings of *kanji*, *ateji* tend to be rather difficult to decipher.

¹⁰ Habein, *Japanese Written Language*, 84.

¹¹ Seeley, *History of Writing*, 136.

¹² Sonoda, Kooji. 1983. "Japanized English." *Geolinguistics* 9, 34.

¹³ Seeley, *History of Writing*, 137.

¹⁴ Seeley, *History of Writing*, 137.

¹⁵ Scharschmidt, Clemens. 1924. "Schriftreform in Japan. Ein Kulturproblem." *Mitteilungen des Seminars für Orientalischen Sprachen*. Berlin: Universität Berlin 26-27:1, 189. Cited in Unger, J. Marshall. 1987. *The Fifth Generation Fallacy: Why Japan Is Betting Its Future on Artificial Intelligence*. Oxford: Oxford University Press, 34.

¹⁶ In 1948, the *Tōyō kanji on-kun hyō* (List of Sino-Japanese and Japanese Readings for Kanji for Temporary Use), which lists accepted readings of each character of the *tōyō kanji*, was issued. Only those readings considered especially necessary were included; those considered less "useful" were eliminated. This strict limitation was later partially relaxed.

¹⁷ Unger, *Fifth Generation Fallacy*, 41.

¹⁸ Unger, *Fifth Generation Fallacy*, 34.

¹⁹ Miller, Roy Andrew. 1967. *The Japanese Language*. Chicago: The University of Chicago Press, 136.

²⁰ Jakobson, Roman. 1960. "Closing Statement: Linguistics and Poetics." Sebeok, Thomas A. *Style in Language*. Cambridge, Massachusetts: The Technology Press of Massachusetts Institute of Technology, 350-377.

²¹ This is Jakobson's modification of the term "Phatic Communism" coined by Malinowski (1930).

²² Jakobson, "Closing Statement," 356.

²³ Mukarovsky, Jan. 1964. "Standard Language and Poetic Language." Garvin, Paul L., translator. *A Prague School Reader on Esthetics, Literary Structure, and Style*. Washington, D.C.: Georgetown University Press, 19.

²⁴ Mukarovsky, "Standard Language," 18.

²⁵ Mukarovsky, "Standard Language," 18.

²⁶ The sources for these and subsequent examples may be found in Appendix B.

²⁷ The intention behind the glosses here seems to be clear, but the rendition of a Brooklyn accent seems to be at odds with the main text. We would expect the passer-by's pronunciation of "33" to be something like *toiti tori*, but, as it stands, it reads more like "32."

²⁸ Gibbs, Raymond W., Jr. 1994. *The Poetics of Mind: Figurative Thought, Language, and Understanding*. Cambridge: Cambridge University Press, 320.

²⁹ Gibbs, *Poetics of Mind*, 324.

³⁰ These glosses were mistakenly reversed in the text (see *More*. Jan. 1987, 372). Also, magnesium sulfate and sodium sulfate are ordinarily rendered *RYŪSAN maguneshiumu* and *RYŪSAN natoriumu* in Japanese; however, the word order is reversed in these glosses, perhaps to increase the contrast between the Chinese characters and *katakana*.

³¹ Nakamura, Momoko. 1990. "Woman's Sexuality in Japanese Female Terms." Ide, Sachiko and Naomi H. McGloin, editors. *Aspects of Japanese Women's Language*. Tokyo: Kuroshio Publishers, 149.

³² Research has shown that loanwords are sometimes used to express or neutralize new values and behavior patterns in Japan. See Passin, Herbert. 1980. *Japanese and the Japanese*. Tokyo: Kinseidō; Takashi, Kyoko. 1990. "A Functional Analysis of English Borrowings in Japanese Advertising: Linguistic and Sociolinguistic Perspectives." Unpublished Dissertation, Georgetown University.

³³ Endo, Ori. 1995. "Aspects of Sexism in Language." Fujimura-Fanselow, Kumiko and Atsuko Kameda. *Japanese Women: New Feminist Perspectives on the Past, Present, and Future*. New York: The Feminist Press, 30.

³⁴ Takashi, Kyoko. 1992. "Language and Desired Identity in Contemporary Japan." *Journal of Asian Pacific Communication*, 3, 133-144.

³⁵ In order to examine fairly representative popular trends, this research examined advertisements broadcast by major television stations in the Osaka area during prime-time, and print advertisements in periodicals and newspapers of large, national circulation. Details may be found in Takashi. "Language and Desired Identity."

³⁶ Takashi, "Language and Desired Identity," 139.

³⁷ Mukarovsky, "Standard Language," 29.

³⁸ In this novel, students refer to a pawn shop as /seibun/, since *shichi* 'pawnshop' is homophonous with the Japanese word for 'seven.'

seibun (<--seven) e pon (<--paw) shita ka
'pawn shop' 'to' 'paw' 'did' qm
'Did he pawn (it)?'

³⁹ Mukarovsky, "Standard Language," 29.

⁴⁰ Mukarovsky, "Standard Language," 28.

⁴¹ Some *kanji* are used for western loanwords in a form of verbal art. The name of a liner that fits into the collar of white shirts to absorb perspiration is called *ERĪTO* 'elite' written in *kanji* *ERI* "collar" and "[H]ITO 'person,' with a *katakana* vowel-lengthening mark in between. See Wilkerson, Kyoko T. 1997. "Japanese Bilingual Brand Names." *English Today* 52, 9-14.

⁴² For instance, *YUrakku*, a combination of *YU* 'hot water,' written in *kanji*, and *rakku* written in *hiragana* from *rerakku* 'relax' is "Hot Spring Relaxing." *Hiragana* has been cleverly chosen over *katakana* because the fluid, rounded *hiragana* gives a more relaxing impression than the angular *katakana*, as in the Japanese onomatopoeia (written in *hiragana*) *yura-yura* used for the image of something floating or flickering. See Wilkerson. "Bilingual Brand Names," 11-12.

⁴³ See Kōra Rumiko's interview in Buckley, Sandra. 1997. *Broken Silence: Voices of Japanese Feminism*. Berkeley: University of California Press, 109.

⁴⁴ Unger, *Fifth Generation Fallacy*, 93.

⁴⁵ Unger, *Fifth Generation Fallacy*, 84-85.

⁴⁶ Unger, *Fifth Generation Fallacy*, 93.

⁴⁷ The terms "semantic jumps" and "semantic breaks" are used by Mukarovsky in "Standard Language," 29.

⁴⁸ Jakobson. "Closing Statement," 358.

⁴⁹ Hopkins, G. M. 1959. *The Journals and Papers*. House, H., editor. London. Cited in Jakobson. "Closing Statement," 359.

A Typo *graphy* of *Impoverishment*:

*D.C. McMurtrie's Reception of European
Modernist Typography and an American Economic Depression*

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This paper pries into the disclosures of design history by addressing the question of American modernist typography from the blind side as it were. One possible source of leverage, the one I choose for this brief and modest article, is to simply ask the question: What was the temper of typography in light of an economic and social debacle? That it took a modernist cast is significant, therefore the queries raised from the nexus of American modernism and economic depression generates a particular course of inquiry beginning with location — McMurtrie, typography and Chicago.

Language is the amber in which a million subtle and precious thoughts are safely embodied and preserved – a storehouse in which is contained the incarnation of the thoughts and feelings of a nation.

Frederick W. Goudy¹

Goudy remarked on language as it related to typography. He wrote of an arrangement of alphabetic letter forms, the materialization of language composed, ordered and set. These modest marks gracing the pages of magazines, newspapers, billboards, etcetera, for Goudy, reflected the ideological state of the nation. Goudy wrote his introduction to Douglas C. McMurtrie's unassuming *Type Design* in the late 1920s, two years prior to this nation's downward slide into economic depression. In the 1920s the American economy was on a rapid and steady rise. A boom in advertising matched the country's prosperity; and advertising grew in response to an affluent public's purchase power. As a greater demand for promotional vehicles arose, primarily in the form of magazines, so too did the need for a diversity of typographic forms and layouts designed to capture the public's attention. But this would soon change, for by 1929 the stock market crash radically pitched the economic climb, and suddenly the nation's well-being took a calamitous dive. The 1929 collapse of financial markets effectively shattered the economy and the public's confidence in their country's financial institutions.

As Goudy would have it, the language of the day, circa 1929 and after, would have to store the nation's despondency, its destitution; while at the same time language would hold some glimmer of hope, a desire for a return to a lost prosperity. In light of an imminent depression, Goudy's articulation of language as specular, as mirroring the nation's sentiments, would take an apodictic turn. The auratic glow of language (like the glow of gold from which the nation's economic stability then depended upon), as Goudy would have it, soon faded into the semi-opaque veil of delusion. Indeed, by

the 1930s, language's teleology, made manifest in advertising through typography, was economic resuscitation and national preservation. As the depression era came to a close, Goudy's "storehouse" of language was packed with failed dreams and dashed hopes. The swift, and in its own way efficient, economic crash saw to this state of affairs.²

Despite national calamity, out of the depression's rubble rose a black cloud of typefaces and typographic production.³ I say "black" because typographic production for advertising partially obscured the social and economic problems of the decade. Throughout the 1930s, a massing of typography in advertisements hawking various products seemed to be at odds with the public's conservatism in their resistance (or in many cases inability) to purchase goods. And while advertising layout was fast becoming more reliant on visual images,⁴ the copy attached to ads suggested through what could be understood as obstinate language that the world was quite different than the public's Depression era experience.

The deliberate nature of this concealment is difficult to pry into, nonetheless, as it is historically apparent, one possible source of leverage is to simply ask the question: What was the temper of typography in light of an economic and a social debacle? That it took a modern cast is significant; therefore, the queries raised from the nexus of modernism and depression generates a particular course of inquiry that begins with location and proceeds as a mapping of the complexities and contradictions of the history of a depression era typography.

*McMurtrie
and Depression Era Typography*

The eye of this depression era typographic storm was the city of Chicago, then the printing capital of the United States. The person stirring up this storm was Douglas C. McMurtrie (1888-1944) publicist for the Ludlow Typograph Company.⁵ McMurtrie's *Modern Typography and Layout* (1929), *Some Modern Ludlow Typefaces* (1929), *The Fundamentals of Modernism in Typography* (1930), *Structure in the New Typography* (1930) and *Typography*

Overseas (1932) promoted European modernism in this country.⁶ Prior to his relocation to Chicago, McMurtrie had designed a typeface for *Vanity Fair* and the format of the *New Yorker*, and had imported a number of European typefaces into the American market as a founding member of the Continental Typefounders Association. While his work at that time (the early to mid-1920s) was more traditional in its appearance, Chicago seemed to have altered his vision. I can only speculate as to how this change took place. What is certain, however, is that McMurtrie was exposed to the European strain of typographic experimentation. Certainly he read *Advertising Arts, Commercial Art and Industry* and *Gebrauchsgraphik: The Monthly Magazine for the Promotion of Art in Advertising* (all publications which introduced the then current European trends), and he was in touch with the German scene. In fact, in 1926 McMurtrie contributed an essay entitled "Die Ersten Drucke im Englischsprachigen Nord-America (The First Printer in English Speaking North America)" to the German *Sonderabzug aus dem Gutenberg-Jahrbuch*. And since McMurtrie imported type from Europe he certainly was in contact with those who were commissioning the new styles.

McMurtrie's efforts corresponded to, and in some instances predate, the arrival of the better known European emigres, Alexy Brodovitch, Herbert Matter, Georgy Kepes and László Moholy-Nagy⁷ to name but a few, who were to impact the typographic arts and graphic design in America.⁸ McMurtrie's un-apologetic affirmation of the stripped-down, asymmetry of the "New Typography" was intended to establish an American brand of typographic modernism.⁹ McMurtrie's activities, however, were far from an unquestioning embrace of this foreign import. Acutely aware of the effect the European avant-garde had on modern typography, McMurtrie nonetheless downplayed the artistic experiments of the then new "socialist" style and instead opted for that which appealed to business. He wrote, "Needless to say, the expression of the modern spirit does not demand that we [Americans], too, adopt this [European radical] mental attitude."¹⁰ Denying the collective impulses of the Europeans, McMurtrie suggested that the American typographer need only strive for a unique brand of individualism.¹¹

European modern typography's radicality was predi-

cated, in part, on a position that viewed the United States as exemplary in technological progress, while at the same time European modern typography underlined the social and economic disharmony of the European continent. The forms rendered by artists, designers and typographers practicing overseas were significantly tied to a biased account of the American scene as much as these forms also mirrored a state of European post World War I malaise. That is, in the early 1930s, American industrial advances were mythologized and were held in contrast to European economic and industrial stasis regardless of the available facts regarding the American depression.

Across the Atlantic, McMurtrie proposed an American style of typography that mimicked the very pace of his nation. Yet, like his European counterparts, his assertions took for granted a vital social and economic environment; for McMurtrie, progress was a foregone conclusion. He maintained an attitude that assumed eternal forward movement. The formal tensions he underlined in European modern type and layout were, by his own account, well suited for America's industrial and economic progress (which was paradoxically in accord with the European proposals). But the era to which this body of work belonged was economically, and to a lesser extent, socially stagnant.¹² Therefore, the form and content of his propositions were coincidental only on an ideological level, for the radically shattered nature of European modernist typography was repressed by McMurtrie's attempts at de-radicalizing his version of modern typography. His typography was, like Goudy's language, reflective of desire rather than actual conditions. Where the European brand of typographic composition reflected a social and political milieu (the influence of dadaist and futurist poetry being a primary source), McMurtrie's version was geared toward the recalibration of a faltering American economy; his propositions were not representations, rather they were prescriptions.

Contrary to McMurtrie's proposals, the inherent discord of modernist typography — a trope used in advertising, as Roland Marchard suggests,¹³ to revitalize products

and to compel the consumer toward purchase thus resolving initial tension — mirrored that of the American economy in the 1930s. It is my contention that McMurtrie's introduction of modern typography to the United States was tacitly linked to the decline of the nation's wealth and spirit. Where McMurtrie saw richness in form, the historical record shows desolation in content. As an alternative, consider modern typography's stripped down and unbound character being an analog to the state of the nation — economically depleted and emotionally stressed. Further complicating matters, if modern typography was formally active, as McMurtrie asserted, then it was thought to possess the potential to activate the then dormant consumer, a task essential to the economy's recovery. That the consumer did not respond due to lack of disposable income and confidence in financial institutions underlines an inherent contradiction in McMurtrie's campaign. If typographic character, as McMurtrie stated, signaled the consensus of the social milieu, if an American style of modern typography exposed the concerns and rituals of the American nation, if one were to develop a style "that will best express the spirit of his own time and people,"¹⁴ if all these statements were historically accurate then one would expect a typographic style other than the so-called dynamism of the "New Typography." The key here, however, is to understand the nature of this dynamism, to consider it as active without activating any significant response.

*Active Type
for an Inactive Nation*

What of this reflectivity? What was it that the plastic character of typography should represent? Echoing Jan Tschichold's pronouncements, McMurtrie's attitude weighed more on the side of production.¹⁵ The typographer was not to be a slave to tradition, but to function:

*Form follows function. The application of this law to typography means simply that the inherent purpose of printing alone determines the form it shall take.*¹⁶

McMurtrie's adds to this in another text:

*That printing strikes the modern note, in the United States as well as elsewhere, which is simple, direct, clear, stripped of all purposeless accessories, unaffected.*¹⁷

What McMurtrie neglected to add to these assertions was that the function of printing was to aid business in creating demand for product (a position he would take in subsequent publications). Printing was a primary vehicle for advertising. The ideological utopianism of the Europeans transfigured by McMurtrie's texts into the ideological consumerism of American capitalism — both proclaiming their own brand of torqued vigor — simply did not represent the destitution of the depression era. And yet the formal qualities of McMurtrie's modernist typography did reflect a very real impoverishment; it was a manifest manic-dynamism fueled by (and despite) social and economic disintegration.

It appears that McMurtrie's modernist rhetoric was, whether intentional or otherwise, a convenient illusion aligned with business' ambition to jump start the economy. It was thought that active type made active ads, which in turn induced consumer spending. "It is preeminently the typography of business and industry, of the active life."¹⁸ The "active life" of business and industry may have been in vain, however, since the consumer was anything but active. The top heavy structure of over production and waning consumption created an imbalance that was expected to correct itself, but never did. Modern typography's inherent tensions, an unease affected through asymmetric composition, matched the nation's economic and social anxieties due to a sustained

depression. In both typographic and economic instances resolution was deferred and at the time was never certain. And American business' failure to enact such a redemptive scene is a matter of economic history:

*The failure of the capital markets after 1929 virtually halted the transition in economic structure that had been in progress over time. Poor sales and a short-run lack of investor confidence slowed the movement of capital out of old and into new industries. High rates of unemployment and of deflation, after the 1929 crash, biased effective demands so as to bolster more affluent consumption patterns, and dramatically weaken middle- and low- income demand.*¹⁹

Business' longing for a return of consumer spending was indicative of a "wait and see" attitude, one that allowed the depression to run its course in the hopes that the economy would miraculously recover.²⁰

Business' deferment was the hallmark of an idealism that proposed ultimate and inevitable rewards, and postponement was a main ingredient. Delay would heighten the anticipated resolution. The sparten nature of modern typography made an immanent teleology material while it simultaneously foregrounded the ever present tension exhibited both in concrete form and in desire. Thus it follows that a private sector faced with a country in the midst of economic ruin increased the promise of recompense through advertising in order to stem the possibility of consumer disobedience.

McMurtrie's Crusade

Regardless of the realities and eventualities, McMurtrie tirelessly crusaded throughout the 1930s to establish the "New Typography" in the United States. As the "Director of Typography" at Ludlow — a company offering slugline composition for display jobs — McMurtrie was for the most part in charge of promoting the company.²¹ Many of his essays and articles included a byline that indicated the author's affiliation. If modern typogra-

phy was called for in advertising then surely an ad agency or newspaper should purchase type from Ludlow. This sales pitch was often inferred, and many times it was made explicit. For example, in *Some Modern Ludlow Typefaces* McMurtrie wrote:

It is believed the modern types produced during the past two years by the Ludlow Typograph Company more nearly meet these specifications [simplicity, dynamism, and sans-serif] than those produced by any other American organization.²²

In fact, Ludlow boasted Stellar and Tempo, both designed by R.H. Middleton, as being well suited for modern style layouts. An acknowledged expert in the field, McMurtrie's judgment carried an impressive weight. It was not by accident that Ludlow supported his literary and research pursuits.

I am not so cynical to conclude that McMurtrie was simply a mouth-piece for Ludlow. His concerns were broader in their implications. Nevertheless, in reviewing all of his written work on the subject of modern typography I am struck by its redundancy. Early on he reflected on typography and printing in the age of capitalism:

For printing today is fully as active in "creating demand" for things new and truly wonderful as it is in preserving records of the past. [And]...typography is a typography of an active age. It is young, vigorous, athletic, swift.²³

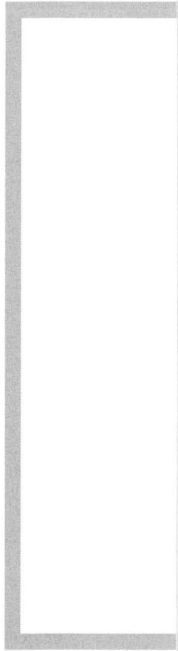
Rarely does he diverge from comments on clarity, functionalism and speed. His notion of speed was especially revealing, for it suggested that things were moving too fast, as if the world were getting ahead of itself. "It is always losing its balance because that is the way to keep moving"²⁴ Later, McMurtrie would assert the importance of rapidity and legibility, for "business men have more to do than they can crowd into a day." Therefore, "...we should plan printing to meet the fast-moving tempo of prospective readers."²⁵ The form of type should be in

accord with its function, that was to catch the always moving reader's eye:

*Above all, let us who set type make sure that when a reader once favors us with a moment's attention, there will be no question in his mind as to what our customer has to sell.*²⁶

The modernist typographic style signaled an accelerated society, one that had achieved such a momentum that it was, as McMurtrie described, tripping over itself. The quick read then led to an even quicker sale.²⁷ The advertiser had only moments to catch the consumer since the ad-man could never be sure of his or her state of ambulation, that is, whether he or she was smoothly on the go or stumbling to keep the pace. The sales of goods had to be in sync with a rapidly lurching consumer.

It was McMurtrie's articulation of speed that inadvertently corresponds to my inquiry into the interrelation of a modern typography that was "always losing its balance" and a depleted American economy. Was the dynamic of modern typography a dynamic of impoverishment that reflected a spiraling downward dive toward economic destitution? The idea of such a downturn would have been difficult to come to terms with, thus the consumer would expect a more positive spin. That is to say, the faltering economy would be countered by a typography of gains, not of loss, a typography of recovery. Given all of the above — McMurtrie's import of European modern typography, his subsequent promotion of an American brand of modern typography, and the economic circumstances that background his activities — this paper's proposed triangulation is admittedly simple: McMurtrie sold modern typography to ad agencies, who in turn created advertising for corporations, who in the 1930s were selling both goods and a hoped for revitalized market, hence modern typography and economic recovery were on one level coequal. In problematizing this equation, however, the notion of faltering typography for a faltering economy



has come to the fore. This necessitates an important alteration: Modern typography reflected a present state of imbalance, as well as a desired future state of recovery. This may have been the dynamic of a modern typography.

The Ups and Downs of Economies

There are many theories (far too many to list in a modest paper such as this) that account for the longevity of the depression. One in particular, what Michael Bernstein calls the "consumer wealth and spending" thesis, proposes that after the crash there was a pronounced decline in consumer confidence, thus came a reduction in consumer wealth and income.²⁸ Production continued, and the public's no-purchase power burdened the economy with superfluous goods due to low demand. Paradoxically, business raised prices and generated, by 1937, an increase in the public's resistance to spending thereby sustaining the depression.

As the theory of a cyclic economy was popular at the time, the downward slide would have soon transformed into an upswing. It was thought that the populace was conditioned to respond to advertising, thus if ads became clearer, more efficient, as McMurtrie's rhetoric suggested, consumers would indeed spend. As stated above, by the very nature of any cycle, however, a periodic decline was imminent. Business was not interested in curing once and for all the country's financial ills. On the contrary, the goal was to induce an upsurge, which would eventually segue into a fall. And it is by no coincidence that I use the words "cure" and "ill" to describe the symptomatic eternal return of an economic plunge. In fact, J.J.B. Morgan remarked in an address to the Midwestern Psychological Association in 1934 that

it is apparent that business has gradually been developing a functional instability which is growing into more and more clean-cut demonstrations of psychotic symptoms which are strangely similar to the symptoms of manic-depressive psychosis in the individual.²⁹

And yet, unlike manic-depression, which is a very real psychological and biological condition, the cycle theory was just that, a theory and therefore artificial. It was taken as a natural condition by business who, instead of radically challenging this ideology, affirmed it by doing business as usual. Business opted for a general state of repression by not addressing the social and economic problems at hand. There was only the blind confidence in the *natural* cure provided by consumer spending.

I would like to suggest that McMurtrie's modernist propaganda — his dynamic age reflected in asymmetrical typography — corresponded to business' eagerness for a cyclic turn. Indeed, his introduction of the "new" suggested a wish for the old, the return of a steady growing economy. Not that typography was to be stable, on the contrary, the very instability of modernist typography, its sparseness and rejection of fuss, maintained the possibility of eventual resolution. Its impoverished state, like that of the country, implied denouement, if not that then interminable stasis — death. McMurtrie's modernist typography's *gestalt* on the horizon functioned both materially and ideologically, for it created the illusion of the possibility of wholeness both in terms of an eventual coming together of fragmented parts (the lines and letter forms in modern ads) and the desired coherence of a nation in the act of consuming (the populace descending on department stores). Both the material character of modernist typography and the ideology of capitalism intrinsically telegraphed the coming of a better state (or Nation) of being. Nevertheless, McMurtrie's desire for a dynamic age remained an ideal due to the nation's sustained fiscal funk.³⁰

He may have simply made the best of a bad situation. Knowing the country was in for an excruciating stretch of hard times, McMurtrie might have preferred idealism over realism. As a man of conscience, I assume he did do his part. In fact, he was named editor of the Works Progress Administration's American Imprints Inventory,³¹ but this position would not affect any social change and achieved little more than bolstering his bibliography.

There is no question, however, that McMurtrie's modern typography reflected the depression era. And it did so in ways not anticipated by its most heart felt propagandist.³² One should not assume that the simplicity and clarity espoused by McMurtrie when declaring his allegiance to the new age of typography was unproblematic. That is, simplicity and clarity do not necessarily signify simple and clear circumstances of production when both may be indexical of impenetrable complexities and ungovernable decay. Indeed, Goudy's "storehouse" was more a labyrinth than a safebox. As such it deterred definitive resolution, thus the language of advertising made manifest via typography reflected, in this case, not the present, but the longed for future that was identical to a once prosperous past. ■

Endnotes

- ¹ Goudy, Frederick W. 1927. Introduction. In McMurtrie, D.C. *Type Design: An Essay on American Type Design with Specimens of the Outstanding Types*. Pelham: Bridgman, 3.
- ² For two views of this "swift" decline see Bernstein, Michael A. 1988. *The Great Depression: Delayed Recovery and Economic Change in America, 1929-1939*. Cambridge: Cambridge University Press. Also Hall, Thomas E. and J. David Ferguson. 1998. *The Great Depression: An International Disaster of Perverse Economic Policies*. Ann Arbor: University of Michigan Press.
- ³ The Ludlow Typographic Company's output of typefaces grew from forty-two fonts available in 1930 to fifty in 1940. *Ludlow Typefaces*. 1930. Chicago: Ludlow Typographic Company. *Ludlow Typefaces*. 1940. Chicago: Ludlow Typographic Company.
- ⁴ Printing had advanced to such an extent that by the 1930s, half-tone photographs and color reproductions allowed advertisers to foreground the visual over the verbal. Marchand, Roland. 1985. *Advertising the American Dream: Making Way for Modernity, 1920-1940*. Berkeley: University of California Press, 153.
- ⁵ No doubt many readers will be struck by this essay's neglect of the numerous typographers working between the wars in Chicago. Better known practitioners readily come to mind, Oswald Cooper and Robert Hunter Middleton, for example. My focus on McMurtrie is not a matter of recovering a marginal figure from the sediment of history. On the contrary, it is Cooper and Middleton that I confine to the margins. While both typographers' contributions are readily acknowledged, it is McMurtrie who endeavored to alter typography as a practice beyond the design and manufacture of typeface.
- ⁶ McMurtrie, D.C. 1929. *Modern Typography and Layout*. Chicago; 1929. *Some Modern Ludlow Typefaces*. Chicago: Ludlow Typograph Company; 1930. *The Fundamentals of Modernism in Typography*. Chicago: Encourt Press; 1932. *Typography Overseas*. Chicago: [Printing Industry Reprint]; 1930. *Structure in the New Typography*. Chicago: Encourt Press. For a complete bibliography of McMurtrie's work see Heartman, Charles F. 1942. *McMurtrie Imprints*. Hattiesburg: Book Farm.
- ⁷ Brodovitch arrived in 1930, Matter in 1936 and Kepes and Moholy-Nagy in 1937.
- ⁸ Lorraine Wild addresses the issue of European influence. She writes, "What is striking about Bayer and Art Squad articles [*PM* (December 1939-January 1940)] is that, taken together, they vividly represent that moment when Modernism, as a conceptual premise and a visual style, began to take hold in American Graphic Design." Wild, Lorraine. 1989. "Europeans in America." In *Graphic Design in America: A Visual Language History*. New York: Abrams, 154. Wild's assertions appear overdetermined in light of McMurtrie's efforts on behalf of "modernism."
- ⁹ McMurtrie himself uses the term "New Typography." McMurtrie, Structure in the New Typography. Given the uncataloged state of the McMurtrie archive (held by the Newberry Library), it is difficult to say whether McMurtrie had read Jan Tschichold's *Die neue Typographie* (Berlin: Verlag des Bildungsverbandes der Deutschen Buchdrucker, 1928). As Ruari McLean states, Tschichold was not well known to Anglo and American typographers until 1935. McLean, Ruari. 1995. "Translator's Foreword." In Tschichold, Jan. *The New Typography*. Berkeley: University of California Press, ix.
- ¹⁰ McMurtrie, *The Fundamentals of Modernism in Typography*, 10.
- ¹¹ McMurtrie's disregard for historical models corresponded to Tschichold's avant-gardism. The notion of individualism, however, would be at odds with the German typographer's system. Also, it seems that McMurtrie changed his attitudes toward the traditional typeface as Goudy remarks on his typographic achievement being sensitive to history. Goudy, Introduction to *Type Design*, 4.
- ¹² Progressive social changes would not be instituted until the second phase (1935) of the Roosevelt administration's "New Deal."

¹³ Marchand, *Advertising the American Dream: Making Way for Modernity, 1920-1940*, 145.

¹⁴ McMurtrie, *The Fundamentals of Modernism in Typography*, 10.

¹⁵ Tschichold's *The New Typography* transformed avant-garde artistic production into business communication and advertising. A brief discussion of Tschichold's neutralization of avant-gardist negativity is found in my review of the translation of *The New Typography*. See *Design Issues* 13:2, 81-82.

¹⁶ Golec, Review of *The New Typography*, 81-82.

¹⁷ McMurtrie, *Structure in the New Typography*, 16.

¹⁸ McMurtrie, D.C. 1930. *Active-Age Typography*. Chicago: [Printing Industry Reprints], 7.

¹⁹ Bernstein, *The Great Depression: Delayed Recovery and Economic Change in America, 1929-1939*, 46-47. Instability is the nature of capitalist economics and cycles and swings are also common characteristics, thus Bernstein concludes that crisis is an expected result of a dynamic economy. Bernstein, Michael A. 1994. "Understanding American Economic Decline: The Contours of the Late-Twentieth-Century Experience." In Bernstein, Michael A. and David E. Adler, editors. *Understanding American Economic Decline*. Cambridge: Cambridge University Press, 5-8.

²⁰ The Roosevelt administration's New Deal (phase I established March 1933 and phase II implemented in January 1935, the latter being explicitly anti-business) would endeavor to rectify the nation's economic decline. See Couch, Jim F. and William F. Shughart. 1998. *The Political Economy of the New Deal*. Cheltham and Northampton: Edward Elgar.

²¹ Founded by William A. Read in 1906, the Ludlow Typograph Company originally supplied typesetting to small newspapers. By 1912, Ludlow retooled and devoted itself to the production of display jobs.

²² McMurtrie, *Some Modern Ludlow Typefaces*.

²³ McMurtrie, *Active-Age Typography*, 5.

²⁴ McMurtrie, *Active-Age Typography*, 5.

²⁵ McMurtrie, D.C. 1939. *Present and Future Trends in Typefaces and Layouts*. Chicago: [Printing Industry Reprints], unpaginated.

²⁶ McMurtrie, *Present and Future Trends in Typefaces and Layouts*.

²⁷ Marchand, *Advertising the American Dream: Making Way for Modernity*, 40.

²⁸ Bernstein, *The Great Depression: Delayed Recovery and Economic Change in America, 1929-1939*, 4-7.

²⁹ Morgan, J.J.B. 1935. "Manic-Depressive Psychosis of Business." *Psychological Review* 42 (January), 91. Morgan proposed the correlation of the up- and downswing of business cycles and the mood oscillations of manic-depression. The inability of business to "cure" or level off the unhealthy dynamic of the economy led Morgan to conclude, "Since this looks like an impossible utopian idea in the present state of affairs, the only alternative is to adopt a defense mechanism different from the manic defensive episodes." Morgan, 107.

³⁰ It was the United States' participation in World War II that resolved the nation's economic problems. See Bernstein, "Understanding American Economic Decline: The Contours of the Late-Twentieth-Century Experience," 14-15.

³¹ The Works Progress Administration or W.P.A. was established in 1937 as a part of the New Deal (version II). See Couch and Shughart, *The Political Economy of the New Deal*, 97 and 223.

³² On the other hand, I might speculate on McMurtrie's knowledge of the social implications of typography. Given examples of his earlier writing, it is possible that he had a great appreciation of the interrelations of typographic production and history. See McMurtrie, D.C. 1928. *The Pacific Typographical Society and the California Gold Rush of 1849: A Forgotten Chapter in the History of Typographical Unionism in America*. Chicago: Ludlow Typographic Company. Any speculation on this point, however, does not discount the unintended afterlife of McMurtrie's writing during the depression.

USING LISTS TO IMPROVE TEXT ACCESS:

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Seki, 280-295

This paper describes two experiments that explore the effects of different ways of presenting a list in text on readers recall and reading processes. In the first experiment, participants read one of four styles of a list and then

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were asked to recall the content. The results showed that recall for the separately arranged lists was better than that for the continuously arranged lists, and that there was a difference in reading patterns between the two layouts. The second experiment examined individual reading processes for both separated and continuous layouts with the text presented by computer. It was found that the separated list allowed readers to reread the points selectively, while the continuous list made readers reread the text sequentially. Consequently, readers of the separated list understood the content faster than did those of the continuous list. These findings indicate that the layout of a list affects the way that it is read and understood.

INTRODUCTION

It is fairly common in many kinds of text to find lists of information. In each list, a number of items are arranged in a parallel or sequential structure. For example, the following is a piece of text containing a short list:

Scientific reports often have a structure called IMRAD, which consists of four components: introduction, method, results, and discussion.

In this example, the items listed are embedded within a sentence. The same text can be written as below:

Scientific reports often have a structure called IMRAD, which consists of four components:

1. Introduction
2. Method
3. Results
4. Discussion

In this list, each item is separated vertically and marked with a number.

Another style of arranging the list is as follows:

- Introduction
- Method
- Results
- Discussion

In this format, each separated item is marked with a 'bullet' instead of a number. Style manuals typically advise the use of numbers when there is an implied order in the sequence of the points and bullets when the order of the items is not important (e.g., Hartley, 1994).

It has been reported that readers prefer a vertically separated list to a continuous run-on list (Carliner, 1987; Hartley, 1994). Such separated lists seem to provide readers with visual cues to group and separate information in text; thus readers might read and understand the text more easily. However, there have been few empirical studies on the effectiveness of the format of presenting lists within the body of text, except for lists of contents, indexes and references (see Hartley, 1985; 1994).

Lorch and Chen (1986) examined the effects of numbering items on text recall. They found that number signals made items easier to recall. In their

experiment, however, sentences were displayed on a computer screen one by one, and the participants were allowed to read text only once. That is, the participants could not see the layout of the whole text, nor could they reread the text. The results, therefore, are not applicable to normal reading conditions in which we can see the whole page and reread text at will.

The purpose of the present research was to investigate empirically the effects of the format of presenting lists on reading and recall. Two experiments were conducted. Experiment one compared four styles of presenting a list in terms of readers recall. Experiment two examined the influence of the format of a list on reading processes.

EXPERIMENT 1

The aim of Experiment 1 was to explore the effects of the format of a list on readers recall.

Method

Materials. A passage, based on a book by Neustupny (1982), was prepared in Japanese discussing the purposes of language learning and teaching. This passage contained a list of information that explained the purposes of studying or teaching a foreign language in six items. The passage was seventeen sentences long in Japanese. Of this passage, four versions were prepared which were the same in every way except for the layout and the beginnings of each item. These four versions were as follows:

- text in which six items were preceded by bullets and were vertically separated (*bullet version*)
- text in which six items were preceded by numbers and were vertically separated (*number version*)
- text in which six items were preceded by ordinals and were continuously arranged within a paragraph (*ordinal version*)
- text in which six items were preceded by transitional phrases and were continuously arranged within a paragraph (*transition version*)

In the bullet and the number versions, each item started on a new line just as the list above; whereas in the ordinal and the transition versions, items were arranged in a continuous run-on format within a paragraph. In the ordinal version, each item was preceded by an ordinal, i.e., "first" "second" "third" etc.; while in the transition version, each item was preceded by a

transitional phrase such as “to begin with” “next” “in addition” “moreover” “then” and “finally” (see *appendix*). Each version of text was printed on a single page so that readers could see the layout of the whole text at a glance.

Participants. The participants were 78 college students enrolled in an educational technology course. The experiment was run in class.

Procedure. First, the participants were told that they were to read the text and then would be given a test on its content. Following these instructions, four versions of text were randomly assigned to them. They read the text for one minute. This reading time was deemed enough for them to read through the text based on a pilot study. After reading, text materials were collected and mathematics quiz sheets were given out. This quiz was interpolated for two minutes to reduce the effects of residual short-term memory for textual content. Then the recall test was administered. The participants were asked to write out the purposes of studying or teaching a foreign language based on the text. They were allowed three minutes to do this. Finally, the participants answered a questionnaire on the experiment.

Scoring. Each participant’s recall was checked with the six items explained in the text. For each item, two points were given when the main idea of it was recalled, and one point was given when only less important ideas (e.g., incidental elaborations) of the item were recalled. For instance, when a participant recalled that a foreign language was the means of communication, two points were given. In contrast, when a participant merely recalled that a foreign language was helpful in travel, one point was given. Substitutions accurately representing the text ideas were accepted as correct recall. A set of criteria for scoring participant’s recall was especially prepared and employed.

Results and discussion

The mean recall scores for the four conditions are shown in Table I.

	Separate layout		Continuous layout	
	Bullet	Number	Ordinal	Transition
M	6.6	7.1	5.8	5.4
SD	2.1	2.5	2.3	1.5
N	20	19	20	19

Table I.
Mean recall scores for the four text versions

First, to analyze the recall data, a one-way analysis of variance was performed for the four conditions. The results showed that there was a marginally significant effect for the conditions ($F(3,74) = 2.37, p = 0.077$).

Then, in order to examine the effect of the layout types on recall, four text versions were grouped into two types of layout: the bullet and the number versions were collapsed into the separate layout; the ordinal and the transition versions into the continuous layout. The mean recall score for the separate layout was 6.8 (SD 2.3), and that for the continuous layout was 5.6 (SD 1.9). A two-tailed t-test performed on this data revealed that the recall score for the separate layout was significantly better than that for the continuous layout ($t(76) = 2.54, p = 0.013$). Thus, the separate layout enabled readers to recall better than did the continuous layout.

The participants were also asked about their reading patterns in the questionnaire. They answered it by choosing one from the following choices:

1. I did not read through the text completely.
2. I read through the text just once.
3. I read through the text once and then reread a portion of it from the beginning.
4. I read through the text once and then reread the main points of it in particular.
5. I read through the text twice or more.

	Separate layout	Continuous layout
Less than once	2	4
Once	11	20
Once and a portion	2	1
Once and main points	22	13
Twice	2	1
N	39	39

Table II.
Reading patterns of participants for the two types of layout (in number)

The results are shown in Table II. Interestingly, more than half of the readers in the continuous condition read through the text only once; while more than half of those in the separate condition read through the text and then reread the main points of it. The mean recall score calculated for 31 readers who had only read through the text once was 5.6 (SD 1.8), and that for 35

readers who had read through the text and reread the main points was 7.0 (SD 2.4). A two-tailed t-test performed on this data indicated that the latter group recalled significantly better than the former ($t(64) = 2.72, p = 0.008$). Clearly, the participants reading patterns affected their recall.

In summary, Experiment 1 showed that the layout of a list affected readers recall and reading patterns. The vertically separated list was recalled better than the continuous list. Additionally, the separated list was read more efficiently in a limited time than the continuous list. The efficiency in reading seemed to have largely contributed to the difference in recall. Therefore, the reading processes for both layouts were further examined in the next experiment.

EXPERIMENT 2

The aim of Experiment 2 was to investigate the effects of the layout of a list on reading processes. In order to examine the reading process of each individual reader, this experiment employed a computer with a program devised for this purpose.

Several techniques have been developed to measure reading processes with a computer (e.g., rapid serial visual presentation, and moving window). Yet these techniques allow readers to see only a small portion of the text at a time and readers cannot see the layout of the whole text. In contrast, this study required that readers could see the layout of a page and could also have free access to any part of the text. Therefore, a computer program was devised for this experiment.

Figure 1 illustrates a screen of this program displaying an experimental text. The text on the screen was subdivided into small segments; only a segment selected with a mouse operation was clearly displayed, while the other segments were dimmed and shaded. Readers could read the selected segment but could not read distinctly the other segments. Nevertheless, they could see the layout of a page, and could read text freely jumping from one segment to another. When any segment was selected to read, the program recorded the time and its segment number. Thus reading processes could be measured sequentially.

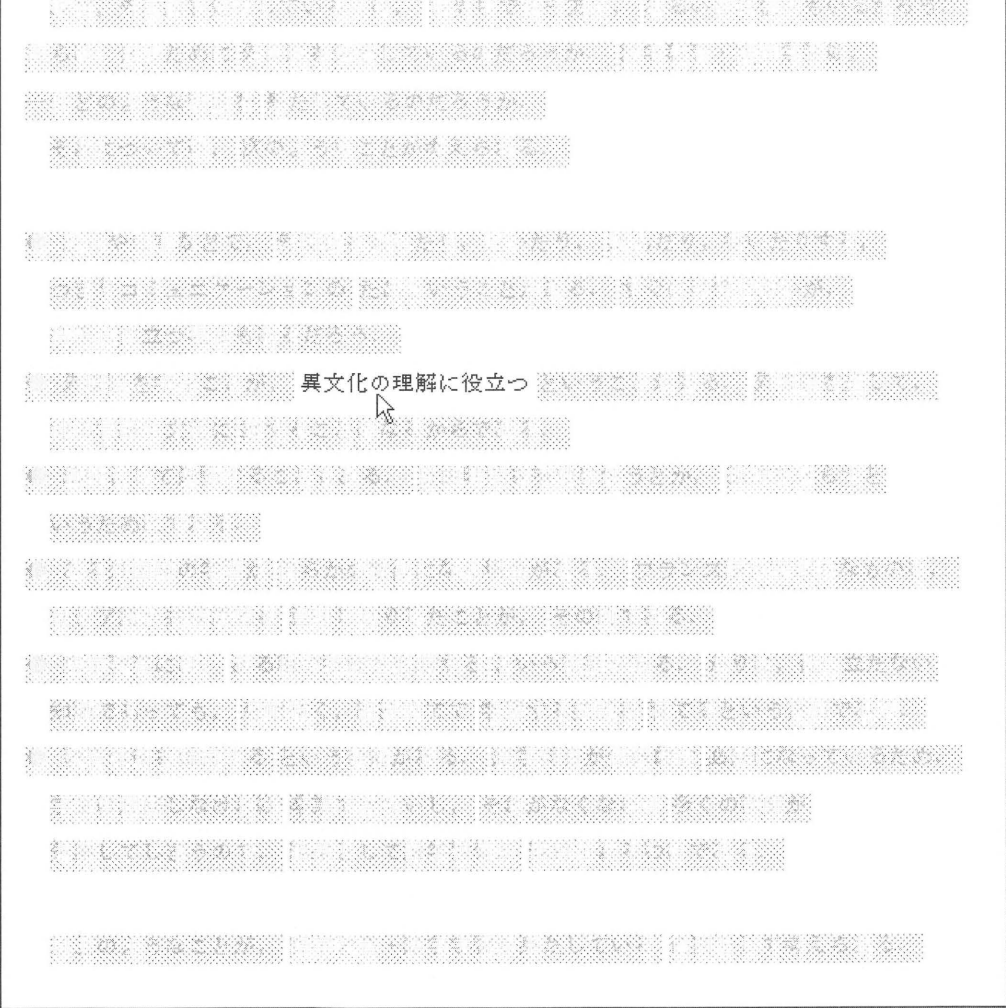


Figure 1
Screen of the experimental program
displaying the bullet version text

Method

Materials. Two versions of the text - the bullet and the transition versions - used in Experiment 1 were chosen to represent the two different styles of layout (i.e., separate and continuous) and used again in Experiment 2. Both versions of text were subdivided into 55 segments so that segment breaks came at the same places in the two. The positions of the breaks were determined by syntactic considerations. The average length of the segments was approximately 11 Japanese characters.

The bullet version text had 21 lines including two line spaces: one before and one after the list section. The transition version had 18 lines with no line spaces included. Both versions of text were displayed in a single page as a whole, with no justification (*see figure 1*).

To read the text on the screen, readers had to point to a segment with the mouse cursor and press the mouse button. Then, a selected segment turned distinctly legible in black characters on a white background. While they held down the mouse button, the selected segment kept legible. When they released the button, the segment turned dim in gray characters and shaded again. As participants read the text with mouse operations, the time of each operation and the serial number of the selected segment were recorded as a pair by the program. Thus the reading process of each participant was recorded sequentially.

The text was displayed in a window positioned on the center of a 17-inch diagonal screen with a resolution of 1024 x 768 pixels, and a Japanese font in a size of 11.5 point was used. The dimness of characters in unselected segments was adjusted so that readers could partly discern them, based on a pilot study. Thus even dimmed segments could act as marks in a way for rereading parts of the text.

Participants. The participants were again 20 college students. All of them used computers on a regular basis, and none of them had participated in Experiment 1. They were randomly assigned to either the bullet or the transition version of text.

Procedure. The participants were tested individually in an experimental room. First, an experimenter explained the task and demonstrated how to read a text on the computer screen with mouse operations. Then, the participants were allowed to familiarize themselves with reading in this manner using two practice texts. When they expressed confidence with reading, the experiment commenced. The participants were told that they

would be given a test on the content after reading. Then, each participant read one of the two versions of the experimental text on the screen. They were allowed to read and reread the text freely within five minutes. The time was set based on a pilot study to be enough for participants to read the text for understanding. After reading, they were administered a simple math quiz as an interpolated task. Then, they were asked to recall the purposes of studying or teaching a foreign language based on the text. Participants were given as much time as they needed for their recall. Finally, each participant was interviewed on the reading process by the experimenter.

Results and discussion

The participants recalls were scored in the same way as in Experiment 1. The mean recall score for the bullet version was 9.5 (SD 2.0), and that for the transition version was 9.6 (SD 2.0). Thus there was no difference in recall between the two versions. This was deemed to be due to the ample time the readers could take to read and reread text, in contrast with time pressure in Experiment 1. This result indicated that both versions of text were equally understood.

As for the reading processes, it was observed that the participants generally read through the text first, and then reread it as they wished, regardless of the text versions. Therefore, the reading times were examined in two ways. One was the time taken first to read through the text (initial reading time), and the other was the total time taken to read and reread it (total reading time). The results are shown in Table III.

		Separate layout	Continuous layout
Initial reading time	M	86.8	100.3
	SD	21.0	23.3
Total reading time	M	180.9	262.3
	SD	69.5	44.7
N		10	10

Table III.
Mean reading times for the two conditions (in seconds)

There was no significant difference between the initial reading times ($t(18) = 1.36, p = 0.190$; two-tailed). However, a significant difference was found between the total reading times ($t(18) = 2.27, p = 0.035$; two-tailed). The separated list was read and understood faster than the continuous list.

Next, the readers access to the text was compared between the two

conditions. Since there was no apparent difference in the initial reading patterns, the rereading patterns were examined. It was observed that basically the continuous list was reread sequentially, whereas the separated list was reread fairly selectively. To examine this difference, the readers text access was categorized into *sequential access* and *selective access*. Here, when an adjacent segment (i.e., a segment immediately after or before the one selected at the moment) was accessed, it was regarded as a sequential access. In contrast, when a segment other than adjacent ones was accessed, it was regarded as a selective access. The proportion of selective access in rereading was calculated for each reader by dividing the total frequency of access in rereading into that of selective access in rereading.

Table IV shows the mean proportions of selective access in rereading for both text versions. There was a significant difference between the two conditions ($t(13) = 2.23, p = 0.044$; unequal variance two-tailed test). Thus, the separated list was reread more selectively than the continuous list.

	Separate layout %	Continuous layout %
M	32.0	17.5
SD	18.3	9.5

Table IV.
Mean proportions of selective access in rereading for the two text versions

The typical reading patterns for both text versions are illustrated in Figure 2. This graph demonstrates that a reader of the bulleted list selectively reread the points skipping from one item to another, while a reader of the continuous list reread the text mainly in a sequential manner. In addition, total reading time of reader A of the separated list was much shorter than that of reader B of the continuous list.

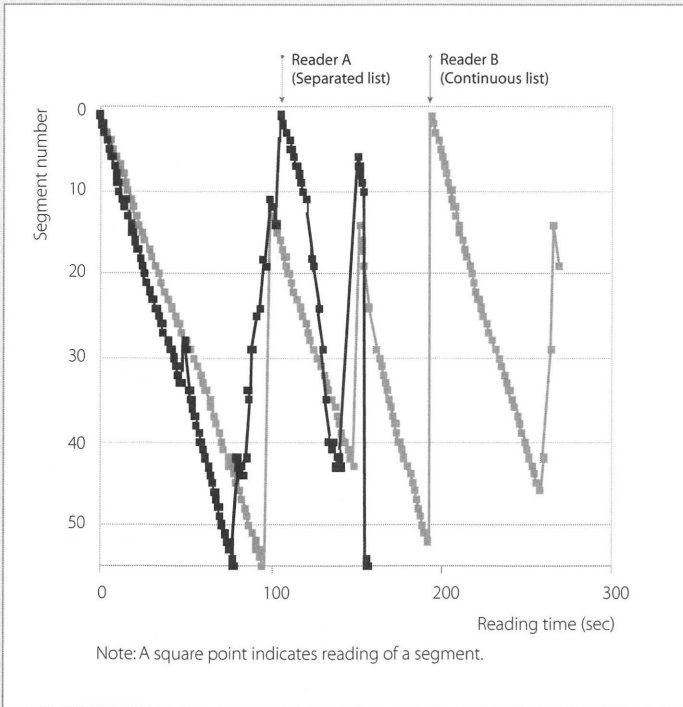


Figure 2
Typical reading patterns for the two layouts of the list

In the interview, many readers of the separated list reported that space and bullets in the text acted as landmarks for rereading. Clearly, these layout features guided readers through the text.

In summary, Experiment 2 showed that there was a notable difference in reading patterns between the separated list and the continuous one. Both lists were initially read through in a sequential manner. However, the separated list was reread more selectively than the continuous list. As a result, the separated list was read and understood faster than the continuous one. There was no difference in recall between the two layouts, which indicated that both lists were understood equally. These results showed that the separate layout allowed readers to access the points more easily and to understand the content faster than the continuous layout.

GENERAL DISCUSSION

The results of this research confirm the critical role of the layout of lists in reading and understanding them. In Experiment 1, participants read one of four styles of a list and recalled. It was found that a separately arranged list was recalled better than a continuously arranged list and that the former was read more efficiently than the latter. The efficiency in reading was deemed to have affected the recall. Experiment 2 further examined reading processes for both text layouts. It was found that the separated list was reread more selectively and was thus understood faster than the continuous one. The layout of a list clearly affected readers access to information in text.

One of the advantages of a separately arranged list is that it displays the internal structure of the text explicitly to readers. For example, when readers see a bulleted or a numbered list on a page, they immediately know that a series of points is presented at that point before they begin reading the words. That is, such a list provides readers with a visible structure of the text and this allows them to assimilate the information smoothly. In contrast, when a list is embedded within a paragraph, readers cannot see its underlying structure until they read the words. Therefore, the readers of such a list need more time to understand it than do those of a separated list.

Another advantage of a separated list is that it explicitly divides or chunks information into meaningful units with space and markers. This feature enables readers to easily discern the units or items of a list, and to access information in each item easily and selectively. This is consistent with readers comments in Experiment 2 indicating that space and bullets acted as landmarks for accessing information.

In addition, a better understanding of text structure may enable readers to review the text faster and more selectively (Dee-Lucas and Larkin, 1995; Hartley, 1993). This could be another reason for the efficiency in rereading the separated list, as it allows readers to easily grasp the internal structure by its appearance.

Clearly, the appearance of text itself communicates as much information as its words (Schriver, 1997; Waller, 1982; Winn, 1993). The ease of reading and understanding text seems to depend on how well the appearance or layout reflects its internal structure. Moreover, it could be that the text layout induces readers to read in a specific manner, to some extent. This notion seems to offer an interesting view, yet it needs further research.

Finally, more studies are needed on the effectiveness of lists in text. For example, the number of points presented in a bulleted list could be an important element. Carliner (1987) suggests that when a bulleted list grows beyond about five points, they should be further chunked into main points and subordinate points, and then subordinate points into sublists. Similarly, the length of each item in a list might be an influential factor. Its effects on reading and understanding should be examined. In addition, while the studies presented here used a list with a parallel structure, other types of lists including sequential ones explaining step-by-step procedures should also be studied. These lists are often found in technical instructions such as software manuals. Further empirical research on the effectiveness of lists in such a context would be useful. ■

Acknowledgements

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References

- Carliner, Saul. 1987. "Lists: the ultimate organizer for engineering writing." *IEEE Transactions on Professional Communication*, 30:4, 218-221.
- Dee-Lucas, Diana and Jill H. Larkin. 1995. "Learning from electronic text: effects of interactive overviews for information access." *Cognition and Instruction*, 13:3, 431-468.
- Hartley, James. 1985. *Designing instructional text* (2nd edition). East Brunswick, New Jersey: Nichols.
- Hartley, James. 1993. "Recalling structured text: Does what goes in determine what comes out?" *British Journal of Educational Technology*, 24:2, 84-91.
- Hartley, James. 1994. *Designing instructional text* (3rd edition). East Brunswick, New Jersey: Nichols.
- Lorch, Robert F. and Audrey H. Chen. 1986. "Effects of number signals on reading and recall." *Journal of Educational Psychology*, 78:4, 263-270.
- Neustupny, Jiri.V. 1982. *Gaikokujin tono communication* (Communication with foreigners). Tokyo: Iwanami Shoten.
- Schriner, Karen A. 1997. *Dynamics in document design*. New York: John Wiley & Sons.
- Seki, Yusaku and Kanji Akahori. 1994. "The effects of presenting lists on textual learning." *Japan Journal of Educational Technology*, 17:3, 141-150.
- Seki, Yusaku and Kanji Akahori. 1997. "Measurement of reading process of itemized text using computer display presentation." *Transactions of Japanese Society for Information and Systems in Education*, 13:4, 213-222.
- Waller, Robert. 1982. "Text as diagram: using typography to improve access and understanding." In Jonassen David H. editor. *The technology of text*. Englewood Cliffs, New Jersey: Educational Technology Publications, 137-166.
- Winn, William. 1993. "Perception principles." In Fleming, Malcolm and W. Howard Levie, editors. *Instructional message design* (2nd edition). Englewood Cliffs, New Jersey: Educational Technology Publications, 55-126.

Resource A

Bullet version text (translated from the original Japanese text)

Today, millions of people are studying a foreign language in the world. What is the purpose of their study, and what is the role of language teaching and language learning?

The following are considered as the answers to the questions:

- Language is the means of communication in travel and business, including speaking, listening, reading, and writing. Even though the language is not currently useful, it may be helpful in the future.
- Language learning helps us to understand a foreign culture, because we can experience other cultures as well as languages through it.
- Learning a foreign language can be a pleasure. In doing so, people make good use of their leisure time or sometimes get their mind off their loneliness.
- Studying a foreign language becomes a symbol of some sort. For example, French is associated with something artistic, and Russian reminds us of communistic ideology.
- Language education plays a role in skill building. Even the acquisition of useless knowledge helps us to grow skills by systematic and patient study.
- Language education contributes to the maintenance of the school system. Since foreign languages have traditionally been required courses, students cannot graduate without credits in them. A number of language teachers will lose their job if those courses are abolished. For these reasons, language education has been maintained.

They are considered as the roles of language teaching and language learning.

Resource B

Transition version text (translated from the original Japanese text)

Today, millions of people are studying a foreign language in the world. What is the purpose of their study, and what is the role of language teaching and language learning?

The following are considered as the answers to the questions. To begin with, language is the means of communication in travel and business, including speaking, listening, reading, and writing. Even though the language is not currently useful, it may be helpful in the future. Next, language learning helps us to understand a foreign culture, because we can experience other cultures as well as languages through it. In addition, learning a foreign language can be a pleasure. In doing so, people make good use of their leisure time or sometimes get their mind off their loneliness. Moreover, studying a foreign language becomes a symbol of some sort. For example, French is associated with something artistic, and Russian reminds us of communistic ideology. Then, language education plays a role in skill building. Even the acquisition of useless knowledge helps us to grow skills by systematic and patient study. Finally, language education contributes to the maintenance of the school system. Since foreign languages have traditionally been required courses, students cannot graduate without credits in them. A number of language teachers will lose their job if those courses are abolished. For these reasons, language education has been maintained.

They are considered as the roles of language teaching and language learning.

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Portrait or

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Hartley & Johnson, 296-309

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Landscape?

Typographical layouts for patient information leaflets

Most text is presented either in a “portrait” style (where the height is greater than the width) or in a “landscape” one (where the width is greater than the height), but no researcher to our knowledge has compared the effects of these different typographic layouts on readers’ comprehension and preferences. The aim of the present study was to assess, in a preliminary way, how patients would respond to a patient information leaflet (PIL) printed in these two formats. The results showed that both leaflet designs were equally effective in conveying their information. However, as the different layouts might support different features within PILS differently, further research is needed to explore the relative virtues of each layout in a variety of different contexts.

Both the Food and Drug Administration (FDA) in the United States and the European Economic Community (EEC) in Europe require that patient information leaflets (PILS) should be included with all medicines and numerous guidelines have now been published on how to write them, both in the United States and Europe (e.g., Buck, 1998; Hartley, 1999; Kitching, 1990; Newton, et al 1998; Raynor, 1998; van der Waarde, 1998; Wright, 1998; 1999). The task is complex, involving attention to the language, the layout, the purpose and the legal necessities of such texts. (Indeed, when we began our research back in August 1998 the EEC was working on its sixteenth draft of its guidelines on how to do it.)

Patient information leaflets come in a variety of shapes and sizes, as is graphically shown in the Association of the British Pharmaceutical Industry's (1999) *Compendium of Patient Information Leaflets*. However, one major division lies between 'portrait' versions (where the height is greater than the width) and 'landscape' ones (where the width is greater than the height). It appears (see table I) that landscape layouts are used more frequently when there is a need to insert diagrams or pictures and when there is a felt need for two or more columns of print.

	Portrait style (75 %)	Landscape style (25 %)
1 column	48	0
2 columns	50	83
3 columns	2	5
4 columns	0	10
More than 4	0	2
justified text	74	62
unjustified text	26	38
left-ranging headings	86	65
centered headings	14	35
headings in lower-case	82	48
headings in capitals	18	53
diagrams included	16	35
no diagrams	84	65
photos included	10	8
no photos	90	92
boxed in text	10	15
no boxed in text	90	85

Table 1.
The typographic features of patient information leaflets. The figures are based on sampling from the *Compendium of Patient Information Leaflets, 1999-2000*.

In this study we set out to compare one particular patient information leaflet printed in these two layouts. Surprisingly enough we were unable to find in the literature on text design any previous research contrasting the effects of these major layout styles on readers' comprehension and preferences.

Method

The original source of the text material for our study came from a study by Dickinson (1998). Dickinson had taken a 'model leaflet' presented by the EEC as an illustration of what a PIL should contain. Dickinson had revised this leaflet to show that it could be improved markedly by user-testing.

In the present study we used Dickinson's revised leaflet as the basis for our work. First of all we revised it further in the light of the guidelines mentioned above and then reprinted it in either a landscape or a portrait fashion. Figure 1 outlines the changes we made to Dickinson's text. Figures 2 and 3 show examples of the final text in portrait and landscape style.

Figure 1
Changes made to Dickinson's leaflet.

Stage 1

The text was re-sequenced to match user requirement (e.g., *see tables II and III*):

The headings used in the original were: What Burofen does; Before you take Burofen; Taking Burofen; Possible side-effects; Other ingredients; Storing Burofen; and Makers of Burofen. These were followed by a footnote on what to do if you wanted to obtain a large print or audio version of the leaflet.

The headings used in the first revised version were: What Burofen does; Taking Burofen; Before you take Burofen; Possible side-effects; Storing Burofen; and Makers of Burofen. The footnote was placed at the head of the leaflet.

Three 'boxes' were introduced to highlight selected sections of the text (*see figures 2 and 3*).

New sentences within paragraphs were made to start on a fresh line — making the text more 'open' (see Hartley, 1994).

Some points were emboldened to highlight them — e.g., if you **get worse**...

Some technical wording was simplified — e.g., 'feeling sick' for 'vomiting'; 'use by date' for 'expiry date.'

The word sequence in some phrases was altered to place simpler terms before technical ones — e.g., milk or lactose; nerve pain or neuralgia.

Some wording was amplified to make the text clearer — e.g., ‘take them back to a pharmacy (the chemist’s)’ became ‘take out-of-date tablets back to your pharmacist.’

Two versions were then produced — one set ‘portrait’ and one set ‘landscape.’ The main body of the text was printed in 12 point Arial on an A4 page. This was then reduced in size to A5.

Stage 2

The type-size of the original text was increased from 12 to 16 point so that when it was reduced it would approximate 12 point — the minimum recommended typesize for medical leaflets (Hartley, 1999; RNIB, 1998).

The typesize of the main headings was increased to 24 point so that they would be reduced to approximately 18 point.

The main headings were re-written in the form of questions rather than statements — e.g., ‘What Burofen does’ became ‘What does Burofen do?’ Some guidelines suggest that questions are more motivating for users of this kind of information (Raynor, 1998; Osman, 1998).

Some technical/medical text was deleted, and some moved to form a note at the end of the leaflet.

Some of the text was further clarified/simplified — e.g., ‘For adults and children over 12 **the usual dose is 1 or 2 tablets 2 or 3 times a day**’ became ‘For adults and children over 12 **take 1 or 2 tablets with food 2 or 3 times a day.**’

Burofen

Please read this leaflet carefully before taking any tablets

Phone 0845 123 456(local call) if you need a large print or audio version of this leaflet

Keep this leaflet and read it again if you need to

1. What does Burofen do?

- Burofen is a pain killer. It eases rheumatic, or muscle pain, backache, nerve pain (neuralgia), migraine, headache, tooth ache, period pains, feverishness and symptoms of cold and flu
- It works by damping down inflammation, which is often the cause of pain and fever

2. How do I take Burofen?

For adults and children over 12
take 1 or 2 tablets with food 2 or 3 times a day

*Do not take more than 6 tablets in 24 hours
Leave at least 4 hours between doses*

Do not give Burofen to children under 12

Do not take Burofen during pregnancy
It may delay labour, or make it last longer

Figure 2
A page from the portrait style leaflet
(original size: 148 X 210 mm.)

Take Burofen with food or after food

Burofen tablets are designed to be swallowed whole
There is no need to cut out any particular food or drink

If you forget to take Burofen

it doesn't matter if you miss a dose, but **Do not take a double dose** to make up for it
If Burofen feels too **strong** or **too weak**, ask your doctor or your pharmacist for advice

If the tablets don't make you feel better, or **if you get worse**, talk to your doctor

Use as little Burofen as you need to get rid of a pain or to feel better, for as short a time as possible

This will help you to avoid reactions or side-effects

If you take too many Burofen tablets you may

get headaches, feel drowsy, or be sick

If you or someone else has taken too many tablets, talk to a doctor or a pharmacist at once

Burofen has no effect on your ability to drive or to use machines

3. Take care

If you are taking any other medicines tell your pharmacist or doctor.

Burofen may affect:

- **Drugs that thin the blood**
Burofen may make the blood thinner still
- **Drugs for high blood pressure**
Burofen may work against them
- **Aspirin** (or other pain killers)
If you take these at the same time as Burofen, you are more likely to get a bad reaction
- **Water Tablets**
Burofen may work against these

Do not take the tablets...

If you have a stomach ulcer
(or used to have one)
If you react badly to milk or lactose
(If you are lactose)
If you are or have been allergic to:

- aspirin
 - ibuprofen
 - or other similar pain reducing drugs
- (the reactions may include symptoms of asthma, rash or runny nose)
- If you are allergic to:
- Lactose
 - Magnesium stearate
 - Modified cellulose gum

In these situations taking Burofen may make things worse.

Please talk first to your doctor or pharmacist

Take special care with Burofen tablets...

- **If you have kidney, liver or heart problems** (or if you used to). If you do have kidney problems and you have to take Burofen, your doctor may test your kidneys before and after you take the tablets
- **If you have asthma** (or used to). Burofen can bring on an attack
- **If you are breastfeeding.** You can take the tablets when you are breastfeeding. A little ibuprofen does get into breast milk, but it is unlikely to do your child any harm
- **If you are over 60.** Older people are more at risk from the serious effects of any reactions. If you are over 60, take just enough Burofen to make you feel better
- **Again, please talk first to your doctor or pharmacist**

Burofen

Please read this leaflet carefully before taking any tablets

Phone 0845 123 456(local call) if you need a large print or audio version of this leaflet

Keep this leaflet and read it again if you need to

1. What does Burofen do?

- Burofen is a pain killer.
It eases rheumatic, or muscle pain, backache, nerve pain (neuralgia), migraine, headache, tooth ache, period pains, feverishness and symptoms of cold and flu
- It works by damping down inflammation, which is often the cause of pain and fever

2. How do I take Burofen?

For adults and children over 12 take 1 or 2 tablets with food 2 or 3 times a day

*Do not take more than 6 tablets in 24 hours
Leave at least 4 hours between doses*

Do not give Burofen to children under 12

Do not take Burofen during pregnancy
It may delay labour or make it last longer

Figure 3

A page from the landscape style leaflet

(original size: 210 X 148 mm.)

2. Taking Burofen (continued)

Take Burofen with food or after food

Burofen tablets are designed to be swallowed whole

There is no need to cut out any particular food or drink

If you forget to take Burofen it doesn't

matter if you miss a dose, but

Do not take a double dose to make up for it

If Burofen feels **too strong** or **too weak**, ask your doctor or your pharmacist for advice

If the tablets don't make you feel better, or if you get worse, talk to your doctor

Use as little Burofen as you need to get rid of a pain or to feel better, for as short a time as possible

This will help you to avoid reactions or side-effects

If you take too many Burofen tablets you may get headaches, feel drowsy, or be sick

If you or someone else has taken too many tablets, talk to a doctor or a pharmacist at once

Burofen has no effect on your ability to drive or to use machines

3. Take care

If you are taking any other medicines tell your pharmacist or doctor.

Burofen may affect:

- **Drugs that thin the blood**

Burofen may make the blood thinner still

- **Drugs for high blood pressure**

Burofen may work against them

- **Aspirin** (or other pain killers)

If you take these at the same time as

Burofen, you are more likely to get a bad reaction

- **Water Tablets**

Burofen may work against these

Do not take the tablets...

- If you have a stomach ulcer (or used to have one)
- If you react badly to milk or lactose (If you are lactose intolerant)
- If you are or have been allergic to:
 - aspirin
 - ibuprofen
 - or other similar pain reducing drugs (the reactions may include symptoms of asthma, rash or runny nose)
- If you are allergic to:
 - Lactose
 - Magnesium stearate
 - Modified cellulose gum

In these situations taking Burofen may make things worse. Please talk first to your doctor or pharmacist

Figure 3 continues

Care was taken to ensure that the type-sizes in the body of the text in both versions were approximately 12 point — as this is the type-size recommended by the United Kingdom's Royal National Institute for the Blind for materials of this kind (RNIB, 1998). This type-size, of course, is much greater than that traditionally used in many PILS. There were five pages of text in the portrait version and six in the landscape one.

Twenty householders (10 men and 10 women) were each assigned in turn to study one or other of the two versions. The participants ranged in age from 19 to 72 years of age. They were all responsible for taking their own medication, they understood the nature of the research and, if they used glasses for reading, they wore them for the study.

Each person was asked, following an initial collection of demographic data, to use their leaflet to answer a series of fifteen test questions about the information contained within them. These fifteen questions used the same format as that used by Dickinson (1998) but they were not exactly the same. (It appeared to us that some of Dickinson's questions could be answered from general knowledge and without reference to the leaflet.) The first three questions we asked followed the sequence of the material presented in the leaflet but, after this, the questions were in random order — the purpose was to make the participants search through their leaflets to find the appropriate answers.

Each person was questioned individually, and their answers to the questions, whether or not they could find the appropriate piece of text to answer them, and how long it took them to answer each question were all recorded. This procedure is based upon that designed by the Communication Research Institute in Australia and is recommended by the EEC (EMEA, 1999).

Results

Table II summarizes the demographic data obtained. The participants were asked to indicate in which age group out of seven groupings they fell (less than 20 years; 20-29; 30-39; 40-49; 50-59; 60-69; and more than 69 years). It can be seen that people in the Landscape group were slightly younger than those in the Portrait one. However, these age differences were not statistically significant.

Table II also shows the median test scores (i.e., the average number of questions answered correctly out of fifteen) for each group and the median overall times taken by both groups. The data show that the participants had little difficulty with either version of the leaflet, and that the search times recorded (for answering all fifteen questions) were similar for both groups.

An error analysis showed that every participant answered five of the fifteen questions correctly, that most of them made only one or two errors on the remaining questions and that only one person made as many as five errors.

		Portrait group N=10	Landscape group N=10
Age Group	Median Range	40 - 49 20 - 29 - 60 - 69	30 - 39 <20 - >70
Test Score	Median Range	15 8 - 15	14 11 - 15
Search Time (secs)	Median Range	125 77 - 368	132 88 - 223

Table II.
Demographic data and results

At the end of their test session each participant was shown the alternative version of their leaflet and asked which one they thought that they would prefer and why. Table III shows the results. Most participants preferred the version of the leaflet that they had worked with and thus there were no significant differences between the overall preferences obtained. Some typical comments were:

- The landscape version is easier to read. The portrait version has sections which are too long.
- The portrait version is more straightforward. It explains it better.
- The landscape version is more spread out: the information is not squashed up on every page.
- The portrait version is more compact: it is easier to read at a glance.
- The portrait version is easier to handle. The landscape one is too long to hold comfortably.

Worked with:	Leaflet preference		
	Portrait	Landscape	No preference
Portrait	5	2	3
Landscape	2	6	2

Table III.
Preferences for different layouts (classified according to which layout the participant worked with).

Discussion

The results obtained in this preliminary enquiry are clear. Both of the leaflet designs were equally effective in conveying their information. There was no difference between the accuracy of information retrieval and between the times taken to find the information, and the preferences for the different designs were equally divided.

It would be unwise, of course, to conclude from these results that it does not matter what kind of layout is used for PILS. Several issues must be considered further.

- First of all, the number of people involved in this study was very small — only ten in each group. More needs to be done with larger — and older — samples.
- Second, only one leaflet was used as the basis for comparison. The data shown in table 1 suggest that portrait and landscape styles might suit different sorts of pamphlets in different ways and these need to be explored more systematically.
- Third, both versions were printed in a double-column format and in a readable type-size — unlike many of the leaflets printed today — so it is perhaps not surprising that the participants found them equally easy to use.
- And finally, the idea — that it does not matter what kind of layout is used for PILS — ignores the different costs involved in the preparation of such leaflets. In this study, for instance, both versions of the leaflet took up the same amount of paper after they were folded appropriately, but there was room for additional text in the portrait version. Some layouts, therefore, might be more cost-effective than others.

These considerations suggest that there is room for further research. Two other particular observations stood out. First of all, despite the fact that the content of the leaflet was supposedly fictitious, it was closely based upon existing leaflets (for Ibuprofen, for example). Thus one or two of the participants relied upon their prior knowledge in this respect when answering the questions. Likewise, when answering some of the later questions in the test sequence, some participants relied upon their memory for what they had read earlier, rather than search the text again.

In applied work of this kind decisions have to be made about the validity of the methods used. These findings suggest that there may be an argument for working with actual PILS rather than fictitious examples, and for accepting that prior knowledge and memory will affect search and retrieval. Whatever the case, more needs to be done to assess some of the more obvious differences in the typographic layouts of PILS. It would be interesting, for example, following George, Waters and George (1987), to compare portrait and landscape versions of one- or two-sided single-page PILS. But best of all would be to explore how different text designs can best suit particular textual features — such as illustrations, diagrams and boxed information. Indeed, further research is needed to explore the relative virtues of portrait and landscape layouts in a variety of different contexts. ■

References

Association of the British Pharmaceutical Industry. 1999. *Compendium of Patient Information Leaflets, 1999-2000*. London: Datapharm Publications (12 Whitehall, London SW1A 2DY).

Buck, M. L. 1998. Providing patients with written information. *Annals of Pharmacotherapy*, 32, 962-969.

Dickinson, D. 1998. *Testing the guidelines: User-testing the European model pack leaflet against an alternative format*. London: Consumption (53 Hosack Road, London SW17 7QW).

European Agency for the Evaluation of Medical Products (EMA). 1999. "QRD Group guidance on user testing of package leaflets for centrally authorised products for human use." *EMA Document 88/00*. (7 Westferry Circus, Canary Wharf, London, E14 4HB, UK).

George, C. F., W. E. Waters and C. F. George. 1987. "The design of prescription information leaflets and feasibility of their use in general practice." *Pharmaceutical Medicine*, 2, 23-33.

Hartley, J. 1999. "What does it say? Text design, medical information, and older readers." In Park, D. C., R. W. Morrell and K. Shifren, editors. *Processing of Medical Information for Aging Patients*. Mahwah, New Jersey: Erlbaum, 233-247.

Hartley, J. 1994. *Designing Instructional Text* (3rd edition). London: Kogan Page.

Kitching, J. B. 1990. "Patient information leaflets — the state of the art." *Journal of the Royal Society of Medicine*, 83, 298-300.

Morrow, D. and V. Leirer. 1999. "Designing medical instructions for older adults." In Park, D. C., R. W. Morrell and K. Shifren, editors. *Processing of Medical Information for Aging Patients*. Mahwah, New Jersey: Erlbaum, 249-265.

Newton, L. et al. 1998. "Patient information leaflets: Producing understandable PILS." *Journal of Information Science*, 24, 167-181.

Osman, L. M. and F. Nicol. 1998. "Developing asthma information material for patients: How to ensure that it is useful, readable and in an appropriate medium." *The Asthma Journal*, December, 162-165.

Raynor, D. K. 1998. "The influence of written information on patient knowledge and adherence to treatment." In Myers, L. B. and K. Midence, editors. *Adherence to Treatment in Medical Conditions*. Amsterdam: Harwood, 83-112.

Royal National Institute for the Blind. 1998. *See It Right: Clear Print Guidelines*. London: RNIB (224 Great Portland Street, London W1N 6AA).

van der Waarde K. 1998. "The graphic presentation of patient package inserts." In Zwaga, H., T. Boersema and J. Hoonhout, editors. *Visual Information for Everyday Use*. London: Taylor and Francis, 75-81.

Vigilante, W. J. and M. S. Wogalther. 1997. "The preferred order of over-the-counter (OTC) pharmaceutical label components." *Drug Information Journal*, 31, 973-978.

Wright, P. 1999. "Comprehension of printed instructions." In Wagner, D., R. Venezky and B. Street, editors. *Literacy: An International Handbook*. Boulder, Colorado: Westview Press, 192-198.

Wright, P. 1998. "Writing and information design of healthcare materials." In Candlin, C. and K. Hyland, editors. *Writing: Texts, Processes and Practices*. London: Addison Wesley Longman, 85-98.

Design
in British
publishing
since 1940 5/

range as shown → Alan Bartram → align → remove to 18pt → 8 1/2 pt → improve space as indicated → will overlap slightly → hair space / hair space

making books

5 1/2 pt → THE BRITISH LIBRARY & OAK KNOLL PRESS → 5 pt

Design in British Publishing Since 1945

Alan Bartram

London: British Library and Oak Knoll Press, date???

ISBN 1 8847 18 93 0

160 pages, 10 x 11 inches, illustrated, \$39.95



Making Books: A Review and Critical Commentary

Colin Banks

This book aims to hold up a mirror to the best typographical practice of the time; Alan Bartram is a distinguished typographer, who both wrote and designed it. It is when wearing his designer's hat I note that, not just the layout of the cover text, not just to the first word but the very first letter, an italic 'D' is badly set out. The initial letters in these lines of type are carefully placed 'optically' aligning left in a vertical arrangement: however that 'D', the 'A' in Alan and the 'T' in The British Library stretch out desperately with the tips of their serifs but can't make the line up. That off my chest, I found this a very personal and enjoyable memoir in which this reader's recollections are prompted by the books that illustrate it and their thoughtful commentary. I felt more comfortable with its style than the prevailing smart-arse swipes at design by 'can't do themselves' media pundits, who see book design as a subset of marketing.

We start in 1942 with the author Ralph Tubbs, who was also the designer of the 1951 *Dome of Discovery*. (Not to be confused with the magnificent tent that now sits on the south bank of the Thames. The two buildings perhaps have their contemporary counterparts in books, the first contained a vision of national consensus, the second is about presentation but a bit short on content.) Tubbs speaks to us with shining eyes, brimming with optimism for a new world order (isn't that what *design* meant then?) but also warns that the future is not separate from the present. Bartram takes this message from the shilling Penguin book *Living in Cities* in which words and rough-edged pictures are integrated like a war-time documentary film.

The chronicle of the '40s and '50s continues with high culture, austerity production and popular prices: notably poetry books. We see 'London Poetry Editions' illustrated by Graham Sutherland, and Adprint's (an early packager) *Excursions into English Poetry*. This last was the great monument to these aspirational postwar years, seven anthologists published by Frederick Muller, each with sixteen autolithographs by John Piper, Michael Ayrton, William

Scott, Edward Bawden and Robert Colquhoun and lithographed cloth bindings; all printed by the exemplary W.S. Cowell who was concurrently printing ration books!

The series started in 1944 with *The Poet's Eye* illustrated by John Craxton, edited by Geoffrey Grigson. This set the agenda for the rest of them and indeed for the British arts of the next decade: A reinvigorated romantic pastoralism drawing on Samuel Palmer in his Shoreham period. I do not know what commercial success these books had but I bought my set new, one at a time for pennies in the mid-1950s, the jackets state 10/6 (old money), remainder books were with us then.

The neoromanticism reached out into the postwar re-discovery by British artists and authors of seductive Southern Europe: Elizabeth David on cookery illustrated by John Minton and Montin's embellishment of Alan Ross' Corsican journal *Time was Away* (John Lehmann, 1948).

At the end of the '40s the baton was taken up by Paul Elek who published the 'Camden Illustrated Classics' whose artists included Edward Burram, Anthony Gross and Barnett Freedman. Peter Ray was the designer, he was a beacon of sound typography for many years after. All this was to fall before the CIA promoted abstract impressionism. Bartram observes there was an improbable path to an 'Oxford Book of Incoherent Verse' illustrated by Frank Auerbach (I hasten to add it did not happen).

One of the many pleasures offered in these pages are the reproductions of those other pages, leaves from a past half remembered: John Minton's illustrations to *Le Grand Meaulnes*, all of which felt then like personal discoveries.

Book designers (as against artist-illustrators) are named throughout when known, but usually they are not credited. The first book designers I met in a great publishing house, were laboring in a stone-flagged passage behind a green baize door.

The actual look and feel of the print is difficult to convey and here the reproductions cover a great number of sins. Typography then was far from good — even within the limits of metal type; ‘fi’s’ not ligatured, ugly em-dashes, ‘widows’ that head up a page; but Bartram doesn’t smooth this over with nostalgia. The 1940s were not a golden age of the compositors’ art, but then came Tschichold in 1947 and after him Schmoller and from then until they went to the great composing room in the sky, Penguin style and standards ruled.

The book tells how Tschichold got a grip on the design of Penguins in a remarkably short time, first the title pages and margins only, then the typographical graces of tight word spacing, single quotes, en-dashes, etc. Bartram shows as ‘high’ Tschichold, the title page of *Romney Marsh*, (King Penguin, 1950); but this was after Tschichold had returned to Switzerland in 1949. I suspect the design had a little to do with his assistant, Erik Ellegaard Fredriksen, for as Schmoller would remark when such books came up for reprint “that damned Dane again, borders too close to the trimmed edge.” With Tschichold’s work and the Schmollers and their assistants, EEF, Ruari McLean, John Miles, Gerald Cinemon, etc., UK twentieth-century commercial book design moves, perhaps for the first time, in the Premier League.

In my view the physical production of English books now are sadly nothing to be proud of: thin paper covered boards, poor text paper, glued bindings; they have long been taken over by the best of the American, Swiss, German, Dutch, Italian presses and most others on the international stage. The miserable parsimony of mainstream British publishers has not seen the commission of an illustrator for a standard novel, or verse or essays for many years that I have seen. Long gone are the days of Fredrick Muller and the artists who did so much for ‘Excursions into English Poetry.’

Alan Bartram says that Tschichold’s impact and Schmoller’s twenty-five year reign, brought a quality to the text design of British books not approached before or after their work, “1950-70 saw the most civilized period of British book design and production for almost two-hundred years.” Although

newer technologies have brought with them the *potential* for better standards, as far as text setting is concerned, I would not quarrel with his judgment.

Half-way through the examples, we come across another Grigson book *An Englishman's Flora*. This was in the 1975 edition, beautifully produced and detailed and as Bartram points out there was still a harmony with the sixteenth-century woodcuts that illustrate it and the letterpress impression. It was designed, I think, by John Ryder but it is a book forever marred for me by the use of a sans serif copyright © in an otherwise serified setting; such is the pernicketyness of our calling.

By 1980 we have an example of what the author calls 'book engineering,' a packaging publication by Rainbird *The Shell Encyclopedia of Sailing*. This combines a hierarchy of headlines, cross references, tables, photographs, graphs and diagrams: altogether a complexity of make-up far removed from a prose novel.

With such material book design *has* to move into another gear; it is information design with a longer lineage than 1980, and its many precedents include Florence Nightingale's charts of statistical analysis, railway timetables and the Baedekers, all from before the First World War.

Bartram gives a faint nod of approval to a Dorling Kindersley book *Wild Flowers of the Mediterranean* (1995): ending "without refined definition of photographic images, the use of a computer screen for design and page make-up, offset printing and international publishing, a production of this kind would have been well-nigh impossible — certainly at a popular price — forty years ago." (It is worth comparing this with the Collins 'New Naturalist' series that celebrated its one-hundredth title two years ago.)

However my 'Do it yourself' manual was doing all that Dorling Kindersley now does thirty years ago and I seem to remember others in these complex formats even earlier from Readers Digest; sneered at then as now by the book purists. But Readers Digest books, I believe, spilled over into DK.(?)

I have two editions of John Summerson's *Georgian London*. The original (1945) a straight text in letterpress; the revised edition (1988) supplemented with informative pictures and their captions, a more 'articulated' layout and all the other skills of the information designer. But what I miss in the second heavily illustrated, diagrammed and cap-tioned edition is the uninterrupted voice of the author, the knitted together mellifluous argument: It should not be so, I don't know why this happens. This I think is the nub of my problem with most of today's information books, there is not someone there behind the text with a clearly recognized voice and point of view and this knocks on into the pre-formatted specifications for such books as they are produced in this new millenium.

Guide books have special problems that show this well. One of the most professional shown here is from the hand and type scale of Gerald Cinamon. But also in complete contrast we are invited to study Wainwright's *Pictorial Guide to the Lakeland Fells*. There is nothing else quite like this series of seven hillwalker pocketbooks. All pages were drawn by the Borough Treasurer of Kendal, same size, with text hand-lettered. They are arrogantly opinionated, but completely amateur in conception and production. In their first thirty years, they sold one-million copies and march on even more determinedly and curmudgeonly now, some forty-five years later.

An altogether gentler but similar approach has recently appeared, *The Heart of Oxford*, designed, illustrated and published by Phillip Atkins and Michael Johnson, who are well trained in their arts. Clued-up foreign visitors I have enjoyed giving copies to have described it as "a typographical pearl" and "a treasure." Get it, the ISBN is 0953443809 and it costs eight pounds.

The growth of the exhibition catalog is charted, from the eight-page Arts Council pamphlet of the 1940s to today's exhaustive pictorial, sociological and bibliographical apparatus, sometimes weighing 2.5 kg. There is a nod to the consistently good (throughout this period) Royal Scottish Academy productions (design by HMSO and others). But the best catalog around in the '50s and '60s came from the Stedlijk museum via its typographically

concerned director Willem Sandberg; these may be thought outside the remit of this book, however, the long, long series of excellent catalogs from Marlborough Fine Art designed from 1950 to the 1990s by Gordon House should certainly have been noted, they established more than any others a mainstream Swiss modernist pattern for art catalogs in the UK.

It is a comfortable step from here to look at what was going on at the Architectural Press in the 1950s and 1960s. Bartram puts it well "vivid sketches....tinted paper....richness and variation....clarendon (typeface) headings....the work of fully paid-up members of the human race."

Refreshingly, honor for good progressive design is shared with individual, small publishers, Alan Ross, John Evelyn, John Lehmann, Lund Humphries, Adprint and Paul Ereš. The author compares the integrity of their production to the mechanical processing of books by publishing conglomerates "moneymen....insist that cash flow governed all things."

Well one aspect of this multi-national marketing is the illustrated book, compressed to a pre-digestible formula. There is a similar editorial problem in the non-illustrated book also; my friend Donal Thomas' novel about Lewis Carroll *Belladonna* was dumbed down to *Mad Hatter Summer* for the stateside co-publisher, and again in the States the book *Schindler's Ark* was filmed as "Schindler's List."

Bartram is a reluctant admirer of the Dorling Kindersley guides, while still acknowledging their need for straight-jacketing the text, illustrations, diagrams and format before a word has been written. He deplores as I do their "post modern strangely old-fashioned detailing"; dropped initials, borders, run-around captions.

Book Design, would have been a better balanced history had more text-only books been included, but on a superficial level all the action has been in the illustrated book, while the great benefits that come from computer typesetting are just not obvious and sexy enough to look for. The author tries to redress this balance on one last page as he moves our attention to a

familiar litany of overlarge type, too little interline spacing, the designer's fear of incorrect hyphenation, wide word spacing, inter-letter spacing, and I would add the great solecism of computer-compressed characters. It is here that a plug for Jost Hochuli's *Designing Books* (Hyphen Press, 1996) may have been a benefit to someone.

Jacket designs accompanied by Bartram's consistently pungent comment, fill the last seven pages: Bartram lays at the feet of publishers' salesmen, the blame for jackets being from a different hand from the designer of the book (and too often divorced from the story they contain). Bartram points out the similarity between a book jacket and the poster, but regrets the absence of the modern Tom Eckersly, Abram Games and Hans Schleger who could do them with wit and imagination; I suspect that the publishers now as then would scarcely make it worth a poster designers while. Interestingly he posits, that if books are sold directly over the net all that will be necessary on the jacket is author and title.

The reproduction of the illustrations here, do what can be done to overcome the absence of the scale, texture and weight of the original book; but replace this with all the compulsive attraction of turning up lino to find an old newspaper underneath. It is difficult then to obey the calls to supper until every last paragraph has been read: so it is with this book. ■

Alan Bartram is a freelance typographer (as is his brother Harold). He wrote a key book on his subject *Lettering in Architecture* in 1975.

Colin Banks is design adviser to Oxford University Press and advisory board member for *Visible Language*.

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Volume 34.1, a special issue, Words in Space, contains pages 1-96;

Volume 34.2, also a special issue continuing Words in Space, contains pages 97-222;

Volume 34.3, a general issue, contains pages 225-320.

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