

VISIBLE LANGUAGE

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An "Ikon of the Soul": the Byzantine Letter

A. R. Littlewood

Byzantine epistolographic concepts are a natural development of the concepts of classical antiquity, and especially of the Second Sophistic, that were adapted to fit the requirements of Christian ontology. The surviving letters were intended not always to convey information, for which the courier or "living letter" was often responsible, but usually to fulfil the obligations and genuine needs of friendship and to serve as much prized pieces of literary art in their own right. In the one case the letter was deemed an "ikon of the soul," creating an illusion of the presence of the writer and thereby demanding tokens of his individual characteristics. In the other it was required to be original within the strict framework imposed by the imitation of ancient models; and by adherence to changing stylistic canons it came both to foster obscurity and to embrace subject-matter not commonly associated with the letter.

Surviving Byzantine letters are almost entirely the productions of a small segment of Byzantine society, the upper-class intelligentsia, that were deemed worthy of preservation by sender or recipient: unlike Graeco-Roman Egypt, Byzantium was not permitted by nature to bequeath to us its refuse tips of ephemeral communication. Other limitations on the study of Byzantine epistolography are merely temporary: many letters remain still unread in manuscript, many published texts are poorly executed, most annotated editions scarcely merit the description. Furthermore, Byzantine letters have been used chiefly as source material by historians political, military, theological, and ecclesiastical, while only recently has any attempt been made to analyse them in accordance with Byzantine criteria. Consequently, any survey written in our generation must of necessity be to some degree provisional.¹

The term "Byzantine" is notoriously hard to define. For present purposes it is taken to refer to the East Roman Empire governed from Constantinople (or Nicaea) between 330 and 1453 AD. (The

earlier date involves no cultural discontinuity with the preceding age; it is simply a date of convenience, being the year when Constantine inaugurated the city as a second capital of the Empire. The latter is the year of the city's capture by the Osmanli Turks.) The main governmental language for a little more than the first two hundred years was Latin, but this is of scant literary importance in the East. Byzantine literature, largely through its adherence to an imitation of classical Attic Greek, exhibits a remarkable, though not of course total, homogeneity throughout its history. Its main stages are a period of great activity declining a little before and during the iconoclastic controversy (eighth and early ninth centuries) followed by a series of cultural revivals culminating in a splendid flowering during the Palaiologan age of the last two centuries. Nevertheless, the purpose of this survey is to examine not so much the changes that occurred in Byzantine epistolography, but the underlying concepts that remained true throughout its history. Examples will be drawn from the whole period and, whenever possible, from writers whose letters are accessible in translation. First, however, a brief sketch is required of the history of epistolography in the Greek and Roman worlds up to the fourth century AD.²

In the self-contained Greek city-states there was little need for written communication. Homer, it is true, had mysteriously alluded to a folded tablet bearing ill-omened signs signifying that the bearer was to be put to death (*Iliad* 6.168-170), and the Spartans made use of the skytale, a device that enabled the ephors to send a secret message to a Spartan king abroad,³ but communication was almost exclusively oral at this time. A form of letter that served as a vehicle for chiefly philosophical ideas developed during the fourth century and was partly responsible for the forgery of letters purporting to be of famous men that became popular in the last two centuries BC. Official correspondence became regular in the Hellenistic kingdoms and was greatly increased as the centralised authority of Rome reached ever more remote areas of the world.

Epistolography became the subject of professional interest to scholars such as Artemon, the editor of Aristotle's letters; epistolary characteristics were laid down in the treatise *On Style* by

a certain Demetrios (first century BC or AD?); and the Second Sophistic, a movement that began roughly in the age of Augustus and eventually merged with its Byzantine equivalent, encouraged the analysis and categorization of letters—by the fourth century AD 41 had been discovered, but the number was subsequently to rise to 113. This academic interest fostered the production of imaginary letters from mythological or historical personages, originally as exercises in style and ingenuity and later as examples of literary art in their own right (e.g., the verse epistles of love-lorn heroes and heroines of Ovid's *Heroides*). Later (second century AD) this latter category included letters in exquisite Greek ostensibly written by humble folk such as farmers, fishermen, parasites, and prostitutes.

Meanwhile Cicero had been engaging in his voluminous correspondence with the single aim of communicating ideas and news (it was carried by private couriers or friends going the right way: neither in the ancient world nor in the Byzantine was there any organized postal service for private mail, although abuse of the state courier system was not infrequent). In 44 BC Cicero expressed his intention of publishing a small selection of his letters that he judged worthy of wider dissemination. Although he did not live to carry out his plan, a much larger selection of his letters was subsequently published partly from the copies kept by his secretary Tiro and his brother Quintus. This led through emulation to the writing by others of private letters that were often intended for ultimate publication: those of the younger Pliny are the most famous classical examples. By the fourth century AD—under pressure of the risk, if not always the desire, of publication—letter-writing among the educated classes had become subject to conventions of style and even content. Moreover, it was now an obligation of friendship with the occasions when letters were required formally prescribed. This can well be seen in the letters of the Roman senator Symmachus, which may be regarded to some extent as “a museum of late Roman *amicitia* in all its complacency, with its affected rules of etiquette, its repetitive triviality.”⁴

One element remains to set the stage for Byzantium—the Christian. The Pauline Epistles, themselves in the tradition of the

classical epistolary exposition of (philosophical) ideas, had helped to keep the Church together and were now held as a major part of the divinely inspired scriptures, thereby elevating this particular literary form to a position that it had never enjoyed before. For three centuries other letters also had been a basic source of religious guidance and comfort to scattered communities, and now, as the Church in its successful struggle with paganism based its organisation upon that of the State, they remained vital. Now too the great Cappadocian Fathers—St Basil, his brother St Gregory of Nyssa, and his friend St Gregory of Nazianzos—with their splendid training in the thought and rhetoric of the Second Sophistic, made Christian literature respectable in the eyes of the educated and enabled the traditions of pagan epistolography to be continued in a fervently Christian society.

Virtually every Byzantine letter was intended to be a piece of literary art, to fulfil the obligations of friendship or to convey information. Most letters combined two or even all three functions, but the first was rarely absent (since, however, it was the main criterion for selecting letters for preservation, our surviving corpus cannot be truly representative). In addition, all letters, except sometimes those of officialdom, were believed to bear the impress of their authors' personalities. It will be most convenient, therefore, to examine the Byzantine letter under the broad headings of Artistry, Individuality, and Content.

Figure 1. Cod. Par. gr. 3041, fol. 5 verso. Paper. Early fifteenth century. The emperor Manuel II Palaiologos, in accordance with common practice, possessed his own copy of letters that he had himself sent, though it was, of course, actually penned by a scribe. In the folium illustrated can be seen substantial corrections in the emperor's own hand to a letter (*Ep.* 7) written to Nicholas Kabasilas during the siege of Thessaloniki (1383-1387). The second letter (*Ep.* 8), of approximately the same date, is one of many addressed to Manuel's old friend and mentor Demetrios Kydones. Contained in the same ms. is the emperor's *Dialogue on Marriage* which he personally corrected at length before taking the drastic step of stroking it out entirely.

I. Artistry

1. *Emphasis upon Beauty*

One of the commonest features of Byzantine letters is lavish praise of a correspondent's literary style and doubts of the competence of the writer to match its elegance that are couched in such exquisite language as to elicit similar eulogies.⁵ (The most famous example of such complimentary rivalry is the interchange between Basil and Libanios, his sometime teacher and renowned pagan sophist of Antioch.⁶) The key epithets used to describe epistolary productions are "beautiful," "sweet," "lovely," and "graceful," but more revealing are the supplementary metaphors of feasts, honey, fragrant flowers of divers hues, melodious birds, the bewitching song of the Sirens, and the collaboration of the Muses, all of which allow of elegant elaboration.

Collections were made of these pearls of beauty. In a letter of the Palaiologan era Joseph Bryennios (*Ep.* 2) describes, doubtless with exaggeration, the situation in early Byzantium: "Whenever they sent or received letters, the senders, before giving them into the hands of the bearer, would write them down in a book . . . and the recipients would immediately . . . show them to men of literary interests. The recipients would be the first to repeat them by heart and write them on their own writing-tablets; those who in turn got them from the recipients would themselves too write them down . . . and repeating them by heart as show-pieces would let fall from their lips these useful things . . . at every kind of gathering. For this reason the recipient was admired for being a friend of such a great man, the writer was applauded and praised as an orator. . . ." Libanios is witness to the fact that Basil's letters to him were read out to admiring friends and applauded (Basil,

Figure 2. Cod. Par. gr. 3041, fol. 32 verso. Illustrated here, from the same ms. as Figure 1, is a folium containing the bulk of Manuel's letter (*Ep.* 52), again personally corrected, to Gabriel, Metropolitan of Thessaloniki, in which he discourses on his and his contemporaries need to write even though they cannot hope to attain the style of the ancients (see above. The whole letter is translated in J. W. Barker, *Manuel II Palaeologus: a Study in Late Byzantine Statesmanship*. New Brunswick, New Jersey: Rutgers University Press, 1969, pp. 422sq.). The origin of the mysterious doodle of a drawn bow and arrow is unknown. Secular letters did not merit the attention of the Byzantine illuminator: indeed, with very few exceptions (mainly histories) only sacred books gained this distinction.

Epp. 338, 340), and in Bryennios' own day the emperor Manuel II often complimented his correspondents upon the applause their letters had caused, for their charm alone, when read before himself and his literary friends (*Epp.* 9, 24, 27, 32, 34, 44, 61). Such a circle was often called a "theatron."

A writer would have had little control over the collections of his letters made by friends or admirers, but he frequently made a careful choice of letters for his own collection. Figure 1 shows evidence of Manuel II's proof-reading of the copy of his selected letters written by his scribe; and Figure 3 shows evidence of an alteration made years later by Nikephoros Gregoras to a letter in his own collection when his quarrels had reached a more advanced stage. Scholarly readers sometimes added marginal annotations, as can be seen in Figure 4 showing a manuscript dating from the late ninth or early tenth century, one of our earliest of any Byzantine letter-writer. This example is striking also for its emphasis upon visual beauty both in the hand of the text and in the arrangement of the contemporary notes. Calligraphy was held in some esteem at this period, but later mss. were often abominably written by scribes quite immune to any influence of Persian aesthetics. Marginal annotations on letters are fairly infrequent, although John Tzetzes (twelfth century) went so far as to write verse commentaries on his own letters.

2. *Rhetoric*

To the Byzantines ingenuous naïveté could have no possible claim to literary beauty; this was realized exclusively through the studied art of rhetoric based upon the principles of the Second Sophistic. Some Christian letter-writers did indeed pretend

Figure 3. Cod. Vat. gr. 1086, fol. 151 recto. Paper. Fourteenth century. The folium shows part of a letter of Nikephoros Gregoras to Demetrios Kabasilas from the author's own ms. written for him by a scribe. The interesting feature is the substitution of two lines written by Gregoras himself on a strip of paper glued over the original. It almost certainly represents an attempt by Gregoras to make his remarks relevant to the altered situation of his complicated quarrels. The original letter was probably written in the 1330's, while the "correction" cannot have been made before 1351. See further I. Ševčenko, "Some Autographs of Nikephoros Gregoras," *Zbornik Radova*, 8.2 (1964), 444-446.

ignorance. Even Basil protested to Libanios that he had forgotten what little he may have learned from him—but this in a letter (*Ep.* 339) that not only won the approbation of the sophist and his friends but in which Basil confessed his failure to find any stylistic errors in the other's letter, the self-confessed ignoramus competent to judge the master! (Basil's brother Gregory of Nyssa was equally modest but more honest [*Ep.* 13] in telling Libanios that though he had learned from him only through Basil, the water in his buckets, scanty as it was, "is yet from the Nile.") The pretence can be easily explained: it accords with Christian humility, the Christian content must be given preference to the vehicle, and the stylistic hall-mark of the New Testament is, at best, simplicity. But, as Isidore of Pelusium claimed in a letter (5.281), "The language of the divine wisdom is pedestrian, but its thoughts reach to heaven; the style of pagan knowledge is resplendent, but its matter is lowly. If one could have the thought of the one and the style of the other one would rightly be judged most wise, for sweetness of tongue can be an instrument of the supramundane wisdom." Christian adoption of pagan rhetoric was made possible by the desire to render Christian literature "respectable," by the natural Greek love of rhetoric and, as G. L. Kustas points out, by the widening of the concept of simplicity in the Second Sophistic to embrace the work of Plato that thus "in effect gave a handle to generations of Christian writers who, though embarrassed by the simple style of the New Testament, could escape their dilemma by emulating the classical Platonic model, which now shared a common definition with the language of the Gospel."⁷

Figure 4. Cod. Barocc. 217, fol. 217 verso. Parchment. Late ninth or early tenth century. This ms. of the letters of Photios is perhaps contemporary with the patriarch. Scattered through it are marginal annotations that could conceivably emanate from Photios himself. Those on the illustrated folium indicate allusions to Demosthenes and Thucydides. The text is in somewhat archaic miniscule, the annotations in either miniscule or, as here, basically uncial. Other illustrations of this ms. are given by B. Laourdas, who edited the annotations, in *Athens*, 55 (1951), 125-154; N. G. Wilson in *Mediaeval Greek Bookhands* (Cambridge, Massachusetts: Mediaeval Academy of America, 1973), plate 15; and in *Greek Manuscripts in the Bodleian Library: an Exhibition held in Connection with the XIII International Congress of Byzantine Studies* (Oxford: Bodleian Library, 1966), plate III.

Nobody denies Byzantine literature's dependence upon rhetoric, but critics differ in interpretation of that dependence. The common view is that "the paralyzing grip of Hellenistic rhetoric was a strait-jacket which held fast its prisoner in a state of mental retardation."⁸ A more sympathetic, sensitive (and correct) view is that of Kustas, whose work is based upon "the conviction that Byzantium bestowed upon the art of rhetoric an authority to define its intellectual and spiritual vision which is without parallel in the history of literate societies. Rhetoric did not simply provide the machinery of literary endeavor; it was a key element of the Byzantine *Weltanschauung*. It gave formal structure through the logos to the fundamental characteristics and innermost aspirations of the Byzantine Christian mind. More than a habit of literature, it was an expression of life. Better still, it might be both at once, for it held out a special way of looking at words and how they work which rested ultimately on the claims of Christian ontology. Its fortunes, describing yet another instance of that effort toward synthesis which is the hallmark of the Byzantine achievement as a whole, can therefore best be understood in relation to the trends of Byzantine culture itself."⁹ Kustas' work is of fundamental importance in our appreciation of virtually any Byzantine text written in the "high" language (see below). The subject is too vast for discussion here: the simple statement must suffice that Byzantine literature is the lineal successor of the rhetoric of the Second Sophistic (and in particular of the principles laid down in the second century by Hermogenes of Tarsos) that was understood through and shaped by certain concepts of Neo-Platonism and Christianity.

But what rules did rhetoric lay down specifically for the letter? First, the letter should afford "glimpses of character," a subject that merits separate treatment (below). Second, it should be neither too long nor too short (Byzantine letters sometimes erred in both directions, but the "rule" remained a pervasive pre-occupation, despite the sensible comment of Gregory of Nazianzos [*Ep.* 51] that subject-matter should dictate length). Third, not every topic was held suitable, a limitation originally aimed at preventing letters from becoming treatises but later, under the concept of the letter as a piece of literary art, directed against the

inclusion of ephemeral facts and distressing news (this again could be broken but remained a preoccupation¹⁰). Fourth, the letter, being half a dialogue, should be graceful but simple and plain, a “rule” whose fate must be examined more closely.

3. *Obscurity*

Not only should a letter be simple and plain, but Aristotle had laid down that the chief virtue of any style was clarity. Most letters written before the iconoclastic period bear at least traces of this doctrine, but from the literary revival in the ninth century the majority of letters are of great verbal complexity and often obscurity. Even a Byzantine did not always understand his correspondent: Symeon Metaphrastes claimed (*Ep.* 94) that he could not understand a bishop who, if he intended to be obscure, had certainly succeeded; and our ms. of the “Letter to the Amir at Damascus” of the famous scholarly archbishop of Caesarea Arethas (vol. 1, no. 26) preserves the scribe’s marginal annotation to the effect that it was written “in everyday language so that the Saracens could understand it.” How can this change be explained?

The letter was traditionally and naturally regarded as comparable with the dialogue, and hence was expected to approximate conversational Greek. But since the Byzantines spoke and wrote two increasingly distinct languages, the written (“high”) one being an approximation of classical Attic, the automatic check on non-conversational idiom was removed. Moreover, those capable of writing Attic well were an exclusive minority, and exclusive minorities are prone to have modes of expression (and Byzantine epistolographic obscurity is primarily one of expression rather than one of thought) that are peculiar and often intelligible only to themselves for the very purpose, conscious or not, of preserving that exclusiveness. Indeed Arethas, in a short, bellicose and arrogant tract entitled “To Those Who Have Accused Us of Obscurity, in Which We Discuss also the Forms of Style We Use” (vol. 1, no. 17), accuses his detractors of ignorance. Allied to all this was the natural competitive tendency, that never lies far below the surface of Greek or Byzantine, that urged him to seek ingenious variations of his own within the accepted contours of expression. This inevitably led to obfuscation of meaning.

Christianity too had its effect. In the early centuries it had served as a check on flights of grand rhetoric through the influence of the New Testament's verbal simplicity, in which believers had perforce to take pride, and the necessity for expounding the faith, often by letter, to those without a clear knowledge of it. These reasons, however, disappeared when the New Testament was placed under the same stylistic headings as Plato's dialogues and when virtually every child was brought up in an understanding of the faith. Christianity now began to exert a quite contrary pressure. The Trinitarian and Christological disputes may have sharpened wits, but they hardly fostered clarity, and in addition Christianity began to develop "the principle that obscurity was a mystical means of expressing divine truth,"¹¹ a principle that is in fact common to all religions of initiation and that was not subject in Byzantium to the customary check of secular education since theology so thoroughly permeated intellectual thought. Since the whole cosmos was held to be the work of God, and since the synthesis of rhetorical styles and of literary distinctions between genres, already noticeable in the Second Sophistic, was promoted by this same Christian emphasis upon the unity of things, the Byzantine letter-writer could henceforth on any topic indulge his predilection for the grandeur of obscurity, under whose spell some of his classical forefathers had also fallen. Moreover, grandeur was increasingly promoted by rhetoric as the principal stylistic virtue.

One aspect of obscurity to which the above remarks do not apply is diplomatic obscurity, practised seriously and expressly for utilitarian purposes. Mention should be made here, despite its aspects of frivolity, of one of the strangest exchanges of notes in diplomatic history.¹² This was between the Byzantine ambassador Leon Choïrosphaktes and the Bulgar khan Symeon, who had been

Figure 5. Cod. Barocc. 131, fol. 106 verso. Oriental paper. Thirteenth century. The folium shows the major part of a letter (*Ep.* 1) of Michael Choniates, Archbishop of Athens, to his brother, the historian Niketas. This copy may have been written during the time of the Nicaean Empire. It frequently happened that miscellaneous works of different hands were ultimately bound up in a single volume. Examples of the five principal hands of this ms. are illustrated by Wilson, *op. cit.* (n. on Figure 4), nos. 58-62, who promised a description of the whole ms. in the *Bodleian Library Record*.

educated at Constantinople and now in a game with the hapless envoy proved his scholarly aptitude. The stakes of the game were the possession of certain Byzantine prisoners and the rules were the manipulation of punctuation that allowed differing interpretations of the khan's intentions.

4. *Imitation of Classical Models*

The problem of imitation exercised antiquity for, as the lyric poet Bacchylides sang (fr. 5 Maehler), "As of old so now, one poet is heir to another (for it is not easy) to find the gates of virginal songs." By the time of the Second Sophistic the classical view that a writer should benefit from and improve upon his predecessors had given way to a greater dependence. "Longinos" claimed (*On the Sublime*, 13.2) that imitation was "like taking an impression from . . . moulded figures or other works of art" and was (ibid. 13.4) "a second path to sublimity." The Byzantines eagerly accepted this doctrine,¹³ especially in and after the classical revival of the ninth century by which time the works of the early Church Fathers were being accepted into the canon of classical literature. Moreover, they accepted the doctrine almost entirely without a spirit of emulation, as is well illustrated in a letter of Manuel II (*Ep.* 52; Figure 2), "If someone would legislate that the lesser should be silent because of the greater, no modern, I believe, would dare to open his mouth on account of the vast superiority of the ancients." Horrified, he goes on to add revealingly, "but that would be appalling."

The most striking aspect of this imitation is the very language, a language of Attic diction and grammar divorced from the demotic of quotidian oral communication (imitation of diction extended even to anachronistic geographical and ethnic nomenclature). *Topoi*, style and even phraseology were also zealously imitated with the help of rhetorical hand-books, formularies, and florilegia. Joseph Bryennios described (*Ep.* 2) letter-writers as men

Figure 6. Cod. Barocc. 25, fol. 293 recto. Paper. Early fourteenth century. A damaged—but the sole surviving—witness, written in a minute and scholarly hand, of an elaborate covering-letter in the form of an essay on the symbolism of the apple that accompanied a gift of the fruit from John Geometres, a poet of the tenth century.

who “had a love of learning, a love of beauty and a love of each other,” by which he referred simply to letters of friendship that were artistic through the imitation of classical models.

We must, however, qualify this seemingly complete, arid, and unthinking dependence. First, classical subject-matter was rarely treated *in extenso*, as is so common in modern European literature. Second, quotations and allusions, however numerous, were usually perfectly apposite—the patriarch Nikolaos Mystikos on one occasion (*Ep.* 25) criticized the Bulgar khan Symeon for adducing a faulty biblical parallel. Third, it is becoming increasingly evident that many Byzantines, despite their access to florilegia, remembered many quotations from their own reading. In a recent collection of 384 letters by various authors of the tenth century¹⁴ there are 232 quotations of which repetition accounts for only 16. Personal florilegia could, of course, be made and Gregory of Nyssa complimented Libanios (*Ep.* 14) on a letter of his that was used for this purpose. We must not, however, underestimate the retentive powers of men who personally possessed few books—and those without indexes (the most celebrated exhibition of memory is that of the fourth-century sophist Proharesios for whom two opponents chose a difficult and indecorous topic for an impromptu oration: after a brilliant performance Proharesios asked the short-hand scribes to check him as he repeated his speech¹⁵). Fourth, and most important, as a sixth-century writer on imitation claimed,¹⁶

Figure 7. Bodl. ms. gr. misc. e. 4, foll. 2 verso and 3 rect. Paper, Fifteenth century. Fol. 2 verso shows the conclusion of a fragmentary letter of Manuel Chrysoloras to the Florentine chancellor Coluccio Salutati in answer to a request for information on Greek breathings. Fol. 3 recto shows the beginning of a second letter from Chrysoloras to Salutati. Chrysoloras, sent as an envoy to Italy by Manuel II in 1396, was appointed Professor of Greek at the University of Florence and through the enthusiasm of his students was largely responsible for the spread of Greek studies in Italy, (see G. Cammelli, *I Dotti Bizantini e le Origini dell'Umanesimo*, vol. I, *Manuele Crisolare* (Florence: Vallecchi, 1941). Leaves of manuscripts sometimes became separated from each other: the ten leaves at Oxford were originally part of a ms. now at Naples that contained further letters of Chrysoloras (see B. L. Ullman, *Studies in the Italian Renaissance* (Rome: Storia e Letteratura, vol. 51, 1955), pp. 279-283.

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“it is possible both to preserve one’s own nature and to emulate an ancient model” if one perceives and cultivates one’s natural bent while studying and imitating a kindred model. Byzantine literature is permeated through and through by the attempt to be original within the strict framework of the imitative tradition.

II. Individuality

Demetrios’ natural observation (*On Style*, 227) that everybody shows the image of his own soul in his letters became enshrined as rhetorical dogma in the second century AD, by which time the letter had been officially classified under the heading “Delineation of Character.” G. Karlsson has recently done some valuable work (op. cit., n. 5) on tracing the resultant and concatenate concepts of the letter as an ikon of the soul, as a creator of the illusion of the writer’s presence and as a vehicle for the mystical union of friends’ souls. The former two in particular occur in early Byzantine writers both pagan (Julian and Libanios) and Christian (Basil, Gregory of Nazianzos, John Chrysostomos, Synesios, etc.), the latter of whom were doubtless encouraged by St. Paul’s remark (1 *Cor.* 5.3) that through a letter he could be present in spirit though absent in body. The concepts were never forgotten and from the time of Theodore the Studite (eighth to ninth centuries) they were used with great frequency and elaboration. A typical example may be cited from a letter of the tenth century,¹⁷ “Nature has devised letters as some sort of comfort and consolation for friends who are separated, since they offer, when we read them, an illusion of the presence of our loved ones, and almost produce the bodily presence of what our mind desires. For this reason the man who called letters ‘ikons of the absent’ was perhaps right, since he who reads a letter sent by a friend has at the very moment of receiving and opening it filled his yearning soul with unsullied joy, because of the appearance that he is engaging in converse with his friend.” It is true that the letter was sometimes held to be a “second best” and a request was made for “the prototype of the image,” but Michael Psellos actually claimed¹⁸ that he took more pleasure in letters than in conversation on the ground that the former are more revealing of character.

Our conceits, fostered by both rhetorical theory and the Eastern Church's conviction of the distinctiveness of the individual,¹⁹ accord ill with the prevailing modern criticism of Byzantine letters as impersonal documents. Are these conceits merely a literary tradition or a rhetorical statement of fact? The question deserves some consideration. We could attempt to resolve it by assessing the characters of letter-writers on the basis of their letters, a lengthy procedure vitiated by the subjectivity of the assessment and the writers' desire to project a *persona* (this, I believe, is not as serious a problem with the Byzantines as is often thought). A more profitable method may be to compare the reactions of different men to similar situations, as shown, for instance, in the letters addressed to emperors by men in prison or awaiting trial. To reduce the external variables here are typical extracts from the letters of two men sent to the same emperor, Leo VI (886-912).

Arethas, after thanking his emperor in one letter (vol. 2, no. 72) for not abusing his power but summoning him to trial, claimed that the charge had already been denounced by the bishops as calumnious. He reviewed the history of the case in which at his former trial he had been most distressed by the emperor who had sent a slanderer to the public stables to collect false evidence. He then concluded, "But should wrong triumph over me, should justice have no strength, and give my blood to my enemies to drink, I shall find that tribunal where there is no respect of persons, no shrinking before the mighty, and your Majesty—well I know it—will repent in this case too, as you have regretted other attacks made on me at the instigation of wicked and vain minds . . . and the present proceedings will be reckoned by us and by everyone else childishness, a thing built on sand."²⁰

In contrast is Leon Choiosphaktes, in prison and admittedly suffering more than Arethas, to the same emperor (*Ep.* 22), "Receive, Your Majesty, receive and receive favourably my prayer! Save me, save me alive! . . . Do you not pity my numerous tears frequently flowing? Does not my unkempt hair move you to sympathy? Nor the fact that I have more lice than Kallisthenes? Nor that I am more shrivelled up than Zeno? Nor that through lack of exercise I have dropsy as bad as Philoktetes? Nor that I have lost my salary for so many years? . . ."

Men under duress are apt to reveal their personalities. A severer test must be found. Father G. T. Dennis recently compared²¹ the average Byzantine letter with "the modern, mass-produced greeting card." The closest parallel is actually between the modern card of sympathy and the Byzantine letter of condolence, that are both of necessity heavily dependent upon paramythetic topoi. It is generally conceded that the numerous such letters of the early centuries reveal not only traits of the personalities of their writers but also adaptations to fit the requirements of the recipients, as in many of Theodoret²² and Basil, two of whose letters (*Epp.* 5 sq.) are addressed separately to a father and mother who have lost a son (another good example of such a letter that takes the personality of the recipient into account is *Ep.* 69 of Julian). Does the supposedly more mechanical literature of later centuries afford any parallels to this individuality and sensitivity?

From the tenth century there are three consolatory letters by Nicholas Mystikos who, as patriarch, must have had plenty of practice in this sphere. Yet of one of these letters there exist two versions (*Ep.* 47I and II) that illustrate the patriarch's difficulty in finding the right tone. The first contains a lengthy lamentation on the bitter event that robbed the patriarch of voice, hearing, and even reasoning powers; and it is unfinished. The second is considerably colder and more dignified, being basically a list of the traditional Christian arguments calculated to solace the bereaved. *Ep.* 156 is a hard-hitting exhortation to the emperor Romanos II to put aside his grief for his wife and not be sullen or complain. *Ep.* 46 is addressed to the new king of Abasgia whose father has recently died—it is simply a note of diplomatic sympathy far removed from Nicholas' other efforts. From the same century there are further letters of consolation. One is a beautifully composed note²³ by an anonymous writer to a friend who was brought on a gentle but firm rein from helpless despair, with tears openly encouraged, through bitter-sweet memories to a manly resolve that is forged by his mother's noble end and is perhaps also for her sake. A more highly-flown consolation is that of Philetos of Synada (*Ep.* 4), notable for its emphasis upon the tragedy of his friend's loss. This is not atypical and is probably not, as is often assumed, a triumph of rhetoric over sensibilities as much as an intuitive

understanding of the psychological need for a brief surrender to grief as a means of overcoming it. Notable also in this letter, and again not atypical, is how the first and second persons singular eventually coalesce into a united first person plural. In stark contrast is a blunt letter from Arethas (vol. 1, no. 22), who has little time for sentiment. He gives scriptural and classical authorities for the belief in the superior and blessed state of death and demands that the recipient refrain from lamentation: we can but hope that he knew his man.

Brief mention must be made of one final letter of condolence, written with tongue in cheek by Nikephoros Gregoras (*Ep.* 129) to console a young friend over his beautiful young wife, only just married and already unfaithful.

III. Content

1. *Letters Conveying Information*

Byzantine letters had a tendency to avoid concrete, factual information. Artistic requirements, as has been seen, dictated this tendency, but the rôle of the bearer must not be forgotten. Many letters were simply polite or artistic covering-notes for the real message. This was almost always the case with the innumerable letters of recommendation for young hopefuls who could recite their own qualifications, and often also the case, for security, with governmental as well as with much of private correspondence. The conceit of the bearer as "the living letter" obtains throughout Byzantine history and is solidly based upon actual practice.²⁴

This tendency, however, has been exaggerated. Not only are the surviving letters not truly representative, but also artistic requirements could effect the excision of factual sections from a letter when it was being copied.²⁵ Ecclesiastical history, including relations with the Papacy, is heavily dependent upon the letters of the often feuding hierarchy of the Church who discuss also pastoral affairs, theology, and heresies (our earliest knowledge of Bogomilism comes from a lengthy letter on the subject in the name of the patriarch Theophylact). Political and diplomatic history too would be far more scanty and uncertain without these letters, while social history, as least of the upper classes, is largely dependent upon the correspondence of emperors (including Theo-

dore Laskaris who ruled from Nicaea), court and church officials, and scholars like Psellos, Tzetzes, Planudes, and Demetrios Kydones. For the middle and lower classes, however, we are more dependent upon Saints' Lives, although some letters are of help such as those of certain patriarchs, like Athanasios I, solicitous for the welfare of their flocks. Especial mention should be made of the rather different correspondence of "Anonymus Londinensis," a well educated school-teacher of the tenth century whose methods and tribulations contribute to our picture of everyday life in a Byzantine school.

2. *Literary Essays, etc.*

Although Aristainetos (sixth century?) and the chronicler Theophylact Simokatta (seventh century) continued the classical practice of composing imaginary letters from courtesans and the like and John Chortasmenos actually answered some letters of Libanios written over a thousand years earlier, almost all Byzantine letters were addressed and sent to real and contemporary figures. Nevertheless, there were three types of letter that would hardly be so classed to-day. The first two are those, usually from spiritual or ecclesiastical figures like Basil or Photios, that are virtually indistinguishable from a homily²⁶ or a treatise. The former was descended from the Pauline epistles and the latter was a more direct survival, despite the warning of Demetrios (*On Style*, 228), from the letters of the philosophical schools, but each influenced the other. The third type is rather different.

Description has always had a valid though inessential rôle to play in a letter. Basil once gave a masterly portrait of the ascetic monk:²⁷ "You made your sides hollow by your deprivations, so that they hung flabby even round to the back; and you declined the use of a soft waist-band, but drawing your flanks in tightly, like a gourd, you forced them tight against the region of the kidneys. You rid your flesh of all its fat, nobly drained the channels of your abdomen dry, and by compressing your stomach itself with fastings, you caused your outstanding ribs, like the eaves of a house, to cast a shadow upon the region of your navel. . . ." This had legitimate purpose—to remind a monk now fallen into adultery of the beauties of his former mode of life accurately portrayed. On the

other hand in a letter to Gregory of Nazianzos (*Ep.* 14) a description of the lovely place that he had chosen for his retreat, though based upon reality, owes much to the classical tradition of the ekphrasis of an ideal landscape, complete with pagan mythological allusions. It is a small step from such a letter to one devoted solely to a description and bereft of the customary opening and closing epistolary formulae, especially when it is borne in mind that the letter was commonly regarded as a gift in its own right²⁸ and that in rhetorical theory the ekphrasis and the letter had strong stylistic connexions. Good examples of this extreme form are given by the poet John Geometres who wrote two prose, but often quite poetic, descriptions of his own garden to a friend that are very dependent upon the fused tradition of romantic and eschatological paradises. He wrote also three prose encomia of the apple (see Figure 6), ostensibly covering-letters for gifts of apples that were in effect the excuse for the real gift of these elaborate letters. In one of these he discoursed interestingly on the symbolism, especially the erotic, of the fruit, drawing upon his wide knowledge of classical literature; and in another he continued this theme and expatiated upon the pronunciation of the word for apple before entering the realms of neo-Pythagorean numerology and Trinitarian metaphysics to explain at length his choice of six apples. The first of these covering-letters, in praise of the tree rather than the fruit, gives a further indication of the scope of the epistolary genre in Byzantium. It is based chiefly upon an earlier work (sometimes and probably falsely attributed to Libanios) whose arguments Geometres neatly adapted or reversed; but it opens with a piece of sheer sophistry designed to force an Homeric passage to give primacy to the apple in emulation of a similar covering-letter for a present of figs (in the corpus of Julian but almost certainly spurious) that extracted primacy for its fruit from the same Homeric passage. Full appreciation of Geometres' effort can be gained only with the knowledge of his worsted rivals; and with those he expected his reader(s) to be familiar, for he did not acknowledge his polished games. The letter concludes with a well told and elsewhere unattested little myth on the origin of the apple-tree.

3. *Letters of Friendship*

The vast majority of surviving letters was written by friends, not only to fulfil the obligations of friendship, not only to give aesthetic enjoyment to the immediate recipient and his literary circle, but to meet a real need. Letters, as ikons of the soul, served as a link between those physically sundered and served as emotional comfort, especially to a campaigning general or an ecclesiastic stationed in a remote cultural back-water (and after the Arab conquest few places outside Constantinople were believed to rise above that depressing state), or to one cut off for other reasons, like the lonely and insecure co-emperor Constantine VII Porphyrogenetos kept out of power by the great usurper Romanos I and touchingly grateful for the letters of his friend Theodore, the bishop of Cyzicus.

These letters may not appeal to every taste. Attempts at wit were few and far between, despite the efforts of a tenth-century bishop, Leon of Synada, four of whose letters (17-19, 21) describe a friend in abusive banter as the world's greatest nincompoop. Trivia were relegated to delivery by the bearer and intimate details were omitted completely as is indicated by the emperor Julian (*Ep.* 29), "I should not have objected if someone had made public everything that I ever wrote to my wife: it was all so restrained." But the Byzantines did consecrate much time and care to their letters of friendship, and their pains were worthwhile, as Symeon Metaphrastes bears witness (*Ep.* 89), "When your letter reached me these worries were dissipated like the shadows of dreams after awakening. When I got it into my hands I loosed its fastenings and immediately looked at its length, just as the thirsty gaze at the size of the cup before drinking; then, slowly, dwelling on every syllable, I read it, prolonging for myself the pleasure and desiring not to stop the cause of my pleasure until I was satisfied. . . ."

BIBLIOGRAPHY OF PRINCIPAL EDITIONS
OF LETTERS OF AUTHORS MENTIONED

Preference has been given, wherever possible, to works published in English.

"ANONYMUS LONDINENSIS" (School-teacher). 10th cent. English summaries of all letters and Greek text of 20 in R. Browning, "The Correspondence of a Tenth-century Byzantine Scholar," *Byzantion*, 24 (1954), 397-452. Text of main body of letters ed. Browning and B. Laourdas in *Epeteris Hetaireias Byzantinon Spoudon*, 27 (1957), 151-212, 319sq.

ARETHAS, Archbishop of Caesarea, 9th-10th cent. In L. G. Westerink, *Arethae Scripta Minora*. Leipzig: Teubner, 1968-1972. 2 vols.

ARISTAINETOS. ?6th cent. Ed. O. Mazal. Leipzig: Teubner, 1971.

ATHANASIOS, Patriarch of Constantinople, 1289-1293, 1303-1309. Ed. with English translation and commentary A.-M. M. Talbot (*Corpus Fontium Historiae Byzantinae*), Washington: Dumbarton Oaks, 1975.

ST. BASIL. 4th cent. Ed. with English translation R. J. Deferrari. London: Loeb Classical Library, 1926-1934. 4 vols.

JOSEPH BRYENNIOS. 14th-15th cent. In N. B. Tomadakes, *Ho Ioseph Bryennios kai he Krete kata to 1400*. Athens, 1947.

LEON CHOIROSPHAKTES. 9th-10th cent. Ed. with French tr. G. Kolia in *Texte und Forschungen zur byzantinisch-neugriechischen Philologie*, 31 (1939).

MICHAEL CHONIATES, Archbishop of Athens. 12th-13th cent. Ed. S. P. Lambros, *Michael Akominatos, ta Sozomena*, vol. 2. Athens: Parnassos, 1880.

JOHN CHORTASMENOS. 14th-15th cent. Ed. with commentary H. Hunger, *Wiener byzantinistische Studien*, 7. Vienna, 1969.

MANUEL CHRYSOLORAS. 14th-15th cent. Letter to Coluccio Salutati, ed. F. Novati, *Epistolario di Coluccio Salutati*, vol. 4. Rome, 1965. Pp. 333sqq.

ST. JOHN CHYRSOSTOMOS, Patriarch of Constantinople 398-404. Ed. with Latin translation J.-P. Migne, *Patrologia Graeca*, vol. 52. Coll. 549-742.

CONSTANTINE VII PORPHYROGENNETOS, Emperor 913-959. Ed. with French summaries J. Darrouzès, *Épistoliers Byzantins du X^e Siècle* (Archives de l'Orient Chrétien 6). Paris: Institut Français d'Études Byzantines, 1960. Pp. 317-332.

JOHN GEOMETRES. 10th cent. In A. R. Littlewood, *The Progymnasmata of Ioannes Geometres*. Amsterdam: Hakkert, 1972.

NIKEPHOROS GREGORAS. 14th cent. Ed. with French tr. (many letters only in French summary) R. Guillaud. Paris: Les Belles Lettres, 1927.

ST. GREGORY OF NAZIANZOS. 4th cent. Ed. with Fr. translation P. Gallyay. Paris: Les Belles Lettres, 1964.

ST. GREGORY, Bishop of Nyssa. 4th cent. Ed. (2nd) G. Pasquali (*Gregorii Nysseni Opera*, ed. W. Jaeger, vol. 8.2). Leiden: Brill, 1959.

ISIDORE OF PELUSIUM. 4th-5th cent. Ed. with Latin translation J.-P. Migne, *Patrologia Graeca*, vol. 78. Coll. 177-1646.

JULIAN, Emperor 361-363. Ed. with English translation W. C. Wright, *The Works of the Emperor Julian*, vol. 3. London: Loeb Classical Library, 1923.

DEMETRIOS KYDONES. 14th cent. Ed. R.-J. Loenertz (*Studi e Testi* 186, 208). Vatican, 1956-60. 2 vols. (Some French translations in G. Cammelli, *Demétrius Cydonès: Correspondance*. Paris: Les Belles Lettres 1930).

LEON, Metropolitan of Synada. 10th cent. Ed. with French summaries J. Darrouzès, *op. cit.* pp. 165-210.

LIBANIOS. 4th cent. Ed. R. Foerster, *Libanii Opera*, vols. 10, 11. Leipzig: Teubner, 1921-1922.

MANUEL II PALAIOLOGOS, Emperor 1391-1425. Ed. É. Legrand. Paris: J. Maisonneuve, 1893 (English translations of many letters in J. W. Barker, *Manuel II Palaeologus: a Study in Late Byzantine Statesmanship*. New Brunswick, New Jersey: Rutgers University Press, 1969).

NICHOLAS MYSTIKOS, Patriarch of Constantinople 901-907, 912-925. Ed. with English translation R. J. H. Jenkins and L. G. Westerink (*Corpus Fontium Historiae Byzantinae*, vol. 6). Washington: Dumbarton Oaks, 1973.

PHOTIOS, Patriarch of Constantinople 858-867, 877-886. Ed. with Latin translation J.-P. Migne, *Patrologia Graeca*, vol. 102. Coll. 585-990.

MAXIMOS PLANUDES. 14th cent. Ed. M. Treu. Breslau, 1840.

MICHAEL PSELLOS. 11th cent. Ed. E. Kurtz and F. Drexl, *Michaelis Pselli Scripta Minora*, vol. 2. Milan: Società Editrice "Vita e Pensiero", 1941.

THEOPHYLACT SIMOKATTA. 7th cent. Ed. with Latin translation, R. Hercher, *Epistolographi Graeci*. Paris: Didot, 1872. Pp. 763-786.

SYMEON, Khan of the Bulgars 893-927. Ed. with Leon Choïrosphaktes, q.v.

SYMEON METAPHRASTES. 10th cent. Ed. with French summaries J. Darrouzès, op. cit. pp. 99-163.

SYNESIOS. 4th-5th cent. Ed. with Latin translation R. Hercher, op. cit., pp. 638-739.

THEODORE LASKARIS, Emperor at Nicaea 1204-1222. Ed. N. Festa. Florence, 1898.

THEODORE, Metropolitan of Cyzicus. 10th cent. Ed. with French summaries J. Darrouzès, op. cit., pp. 317-341.

THEODORE OF STUDIUM. 8th-9th cent. Ed. with Latin translation J.-P. Migne, *Patrologia Graeca* vol. 99. Coll. 903-1670.

THEODORET OF CYRUS. 5th cent. Ed. with French translation Y. Azéma (*Sources Chrétiennes* 40, 98). Paris: Édition du Cerf, 1955-1964. 2 vols.

THEOPHYLACT, Patriarch of Constantinople 933-956. Letter in his name written by chartophylax John ed. with introduction I. Dujčev, "L'Epistola sui Bogomili del Patriarca Costantinopolitano Teofilatto," *Studi e Testi*, 232 (1964), pp. 63-91.

JOHN TZETZES. 12th-13th cent. Ed. P. A. M. Leone. Leipzig: Teubner 1972.

1. I am indebted to Dr. W. Haase for permitting me to draw upon my forthcoming article "Byzantine Letter-writing in the Tenth Century" in *Aufstieg und Niedergang der römischen Welt*, pt. 3 (Berlin: de Gruyter, 1978-). The only extended work on Byzantine letter-writing is in modern Greek: N. B. Tomadakes, *Byzantine Epistolografia*, 3rd ed. Athens, 1969. It is in the nature of a practical handbook for the use of students and contains much useful material.

2. A good survey is that of J. Sykutris, "Epistolographie" in *Real-Encyclopädie der classischen Altertumswissenschaft*, Suppl. 5 (ed. A. F. Pauly, G. Wissowa, W. Kroll. Stuttgart: J. B. Metzlersche Verlagsbuchhandlung, 1931), pp. 185-220.

3. A message written on a strip of leather wound round a stick could be read by the recipient only with the help of an identical stick. Ancient descriptions are given by Plutarch, *Life of Lysander*, 19 and Aulus Gellius, *Attic Nights*, 17.9.

4. J. F. Matthews, "The Letters of Symmachus" in *Latin Literature of the Fourth Century*, ed. J. W. Binns (London and Boston: Routledge and Kegan Paul, 1974),

- p. 62. Matthews is at pains to show the limitations of this narrow view of these letters: much of what he says is relevant in general if not in particular to Byzantine epistolography.
5. For a discussion of this theme, see G. Karlsson, *Idéologie et Cérémoniale dans L'Épistolographie Byzantine* (2nd ed. rev.; Uppsala: Acta Universitatis Upsaliensis, 1962). Karlsson deals with the origin and development of certain epistolary concepts in letters of the tenth century.
 6. Basil. *Epp.* 338-345. All epistolary references are to the editions cited in the bibliography.
 7. *Studies in Byzantine Rhetoric* (Thessaloniki: Analekta Blatadon 17, 1973), 35.
 8. R. J. H. Jenkins, "The Hellenistic Origins of Byzantine Literature," *Dumbarton Oaks Papers*, 17 (1963), 52.
 9. See note 7, p. 1. The book is based upon two earlier articles whose value is not thereby obliterated: "The Literary Criticism of Photius: a Christian Definition of Style," *Hellenika*, 17 (1962), 132-169; and "The Function and Evolution of Byzantine Rhetoric," *Viator*, 1 (1970), 55-73.
 10. An interesting example is given by Manuel II who describes at length (in a series of letters to friends) his hardships during his vassalage to the Osmanli emir Bayazid I, but concludes one letter with the remark that they require rather an historian than a letter-writer (*Ep.* 19, to his old mentor Demetrios Kydones, a pro-Latin scholar and theologian and himself an inveterate letter-writer).
 11. Op. cit. (n. 7), p. 27. Kustas devotes a whole chapter (pp. 63-100) to "The Concept of Obscurity in Greek Literature."
 12. Leon Choïrosphaktes, *Epp.* 1-7 (Letters 1, 3, and 5 are by Symeon).
 13. For an excellent survey of the whole question, see H. Hunger, "On the Imitation (mimesis) of Antiquity in Byzantine Literature," *Dumbarton Oaks Papers*, 23-24 (1969-1970), 15-38.
 14. J. Darrouzès, *Épistoliers Byzantins du Dixième Siècle* (Paris: Institut Français d'Études Byzantines, 1960).
 15. Eunapios, *Lives of the Philosophers*, 489.
 16. ?Phoibammon. Ed. H. Rabe, *Prolegomenon Sylloge* (Leipzig: Teubner, 1931), p. 382.1-9.
 17. Complete text and French translation in Karlsson, pp. 26-29.
 18. K. N. Sathas, *Mesaionike Bibliothekē*, 5 (Athens, 1876), pp. 242sq.
 19. On the influence of this, see Kustas, op. cit. (n. 7), pp. 27-62.
 20. The translation is that of P. Karlin-Hayter, *Byzantion*, 35 (1965), 458.
 21. In a paper delivered at the 14th International Congress of Byzantine Studies held at Bucharest in 1971 (to be published in the *Acts of the Congress*).
 22. See Sister M. Monica Wagner, "A Chapter in Byzantine Epistolography: the Letters of Theodoret of Cyrus," *Dumbarton Oaks Papers*, 4 (1948), 157-160.
 23. Ed. S. P. Lambros, *Neos Hellenomnemon*, 21 (1927), 27sq.
 24. See Karlsson, pp. 17-19.
 25. A good example is given by Karlsson, pp. 16sq.
 26. For the close relationship between the homily and the letter, see Kustas, op. cit. (n. 7), pp. 43-48.
 27. *Ep.* 45 (Deferrari's translation).
 28. See Karlsson, pp. 112-117.

Poetry as a Means for the Structuring of a Social Environment

Eugen Gomringer (translated by Mark E. Cory)

From the outset, the movement of concrete poetry has regarded the poet as a conscious participant in a team of designers dedicated to the aesthetic restructuring of society. To participate, the poet had to study fields not normally associated with poetry, e.g., architecture, advertising graphics, and typography. His contribution in turn has been to provide craftsmen in other fields with models for the solution of their own verbal problems. The goal of such a poetry involves entertainment, but goes beyond the immediacy of this game-activity to include an awakening of aesthetic sensibility, especially to the worlds of type, print, and sound. A review of the interrelationships between concrete poetry, industrial design, and the plastic arts over the past fifteen years illustrates the sort of team work necessary if poets are to have an active voice in our contemporary society.

To see poetry proper as a means for the structuring of our social environment, or to even want to conceive of it as such, places great demands on those few who are termed poets and who are typically thought of as shy, complicated people, wrapped up in their own worlds and not particularly gifted at expressing themselves. Poets go their own way as a rule, prefer the arduous company of other poets, have their own source of criticism, namely literary criticism (which I regard as a mistake), and are in general not really on top of issues concerning the structuring forces of society such as industry, product management, retail stock level control, consumption of goods, advertising, industrial design, architecture, city planning, transportation, etc. Since emotions are more their forte than planning and organization, poets are frequently drawn to politics, an area in which—in my opinion—their competence is not very great.

Despite occasional appearances to the contrary, the poet is a solitary figure in a society that can very well do without him; a figure with flaws, yet too, a figure with positive qualities. Having

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said a word about his flaws, it would be appropriate to elaborate on the good qualities which, under certain conditions, he can develop, both realistically and hypothetically. At the outset, however, the question must be raised whether we are justified in investigating the role of the poet in such a broad context—are we not guilty of manipulation in even posing the problem? What follows shall be devoted to rendering this question more and more superfluous.

I must proceed in these reflections from the thoughts and goals which existed at the inception of concrete poetry and which were instrumental in its development; such a glance back upon the early Fifties will serve as a review and perhaps even as a platform for a glimpse of the future. I will have to refer to some of my own early statements in the course of the formulations I offer here, as my thoughts have in fact always been concerned with the topic “poetry as a means for the structuring of a social environment.”

Concrete poetry distinguishes itself decisively from many other attempts to group poets and poetry in that it saw poetry as a great intellectual playing field and the poet as rule maker and umpire. From its very beginnings, concrete poetry saw the poet as a conscious participant in the team of creative builders (“Gestalter” tr.), who, drawn from the most diverse fields and working within and across their own disciplines, work together on the structuring of society. Although schooled in literary history, I myself had to shed that sort of preparation and go to school again, this time in the fields of architecture and business, graphics and typography, advertising and ergonometics. Even while I would try to apply traditional literary concepts—hesitatingly, for I could sense that they were no longer really valid—it became clear from my own work that these new forces could not be considered merely the latest developments of an exclusively literary tradition.

Neither could the poet, I realized, continue in his traditional role as Poet, for as such he remains—despite all the favorable reviews in the world—a lonely, perhaps courageous, asocial figure. The question arises as to whether such a figure can even relate to the language of the other creative builders. Since it has become the fashion to relate and evaluate everything to its social function, it is necessary to review the nature of the team work we were after in those days.

I think the young creative builders of the early Fifties were characterized primarily by their desire to create beautiful and yet functional objects. It was the great period of good form. Form was at that time still the ideal. Good form was recognized quite early in England and Germany (e.g., through the establishment of the *Rat für Formgebung*, Darmstadt, 1951) as being of use in the politics of foreign trade, and was supported as an ethical means for the development of foreign markets.

In general terms, our discussions centered around the CIAM (Congrès International d'Architecture Moderne), for instance the congress held in Hoddesdon, England, in 1951, in which the concept of the city as a community was the center of discussion. At that time reference was made to the Charter of Athens (1933), in which sentences of the following sort are found: "In any case the core (that is, the heart of every community) should attract visitors, and be filled with people and activity, and have an atmosphere of general spontaneity and relaxation." Three years later, at the CIAM congress in Aix-en-Provence in 1954, the English architects Alison and Peter Smithson saw the goal of city planning as lying in a simple, comprehensible orderliness; i.e., in the clarity of organization. They spoke of the "creation of points of juncture in the structure of human society." Accordingly, my own conception of the ideal meeting place of our polyglot society was the airport. Airports I saw as those places in which only a limited number of necessary and unambiguous instructions, signals, and signs were tolerated, so that they could be understood by everyone, regardless of his mother tongue. The airport played the role of an ideal model.

Another stimulus for us at that time was the concept of "Functionalism," by which we understood something quite different from the modern corruption of the term which often means precisely the opposite of the original. Unfortunately, the over-dependence on entirely smooth façades has strongly discredited Functionalism, at least in architecture. We understood it as an inner necessity which expressed itself in a true and natural beauty. For this reason one of the most important books for us was the book *Form* by Max Bill, published in 1952 and studied by only a small circle at the time. Nevertheless, it was precisely this circle

that later gathered from many countries in the Hochschule für Gestaltung in Ulm and then spread year by year with ever-increasing impact throughout the world to provide a not insignificant core of activists for the restructuring of our social environment. Max Bill took stock of the development of form at the midway point of the twentieth century in his book. In this survey he collected and juxtaposed works of art, optical instruments, everyday appliances, furniture, toys, technical structures, houses, schools, and gardens. All these objects, large and small, were visible proof of the possibilities which exist for the structuring of the human environment with the means, and in the spirit, of the times.

Only one voice was missing from this positive statement on the restructuring of society—the voice of literary man, of the poet. Curiously, the poets, because of a preoccupation with novels, short stories, and the integration of the experiences of recent history, failed to recognize that developments had been underway since the Twenties which could have permitted the craftsman of language to join the international team of creative builders. I'm thinking here about linguistics, neopositivistic and behavioristic philosophy, and the new disciplines of semantics and semiotics—both well suppressed in the depths of philosophy in this country and hardly accepted as competent subjects for study in the universities. Ezra Pound—the only modern poet *digne de ce nom*—was without disciples and generally unknown in German-speaking countries.

Searching for the place of the poet—who was, to be sure, a student of the Glass Bead Game, but someone who had to create his means anew in order to be understood by the team of creative builders and to participate in the structuring of the modern world—we seized upon the technique of visualizing language. Advertising graphics and typography began to control the everyday surroundings of people as individuals and as a society. Where this occurred with artistic responsibility and understanding of the universal principles for the structuring of society, this visualization was a wonderful (and unobtrusive) exercise in the democratic building of good taste. Posters, brochures, advertisements—

weapons in the struggle of free enterprise—all yielded a measure of aesthetic sense gratis.

Again in conversation and discussion with graphic designers, the poet could learn something: about paper quality, format, proportion, and technique. From typographic experts he could learn about the forms of individual letters, the qualities of various type sets and presses. Questions such as whether all written or printed material has the same weight and value and should therefore be represented in only one type face, or whether certain material requires special emphasis were encountered daily and called for important decisions.

Of course some poets in every century—most recently in Symbolism, Jugendstil, Expressionism, and Dada—have been interested in the pictorial aspects of language. But it was our task to expand this narrow development (which incidentally had never been taken really seriously by literary criticism) and to join or influence the world-wide tendency towards visualization. I believe that this has been accomplished, by and large. The poet, and I speak now of the so-called concrete poet, not only sat at the feet of the graphic designer and typographer, but has influenced them, too. If the text is good, if the poet can really participate in the visual realization, then the graphic designer must take this into consideration in his design. The shape of letters is for typographer and poet alike an exciting material with which to work, and the expression which can be conveyed by the tiniest curve deserves much more respect and attention in the evaluation of poetic texts.

In the field of painting, the rise of concrete poetry coincided with a revitalization of constructivist art, which then soon slid over into op art. This school works with a relatively small supply of raw materials and is characterized rather by a highly inventive production of new and varied forms, compositional techniques, schemata, combinations, modules. At the same time new ways of looking at things were developed, which led to a school of visual formalism whose societal importance lay in the creation of a broad basis for communication. Concrete poetry developed at this time the multidimensional poem—a poem which like an ideogram could be read simultaneously on semantic and semiotic levels. As

a shape visualized on a plane, the concrete poem is no longer necessarily read in the traditional left-to-right manner. It becomes more like a picture, one formed by unconventional means, a surveyable macroform with a visual statement. Even more profusely than constructivist art, concrete poetry introduces new forms and methods.

In the area of industrial design there were lively discussions among workers and designers during the post-war years. The subject of these discussions concerned the precise definition of what constitutes good form, and further, the definition of the role of the industrial designer in the international challenge of structuring our world. The various methods and themes worked out in these congresses and discussions are perhaps less important than the efforts expended on clarifying terms and concepts, on articulating those problem areas involved in the future development of design. The many-sided aspects—technical, productional, business, aesthetic, psychological, and general human aspects—which converge in industrial design demand in their verbal articulation a clarity, an objectivity and an ease of understanding found only in a simple but precise language.

I saw the equivalent to these requirements in the realm of poetry as the ability to formulate processes capable of handling all subjects with a combination of vivid precision and meditative concentration. For instance this simple description of a simple process:

from the rim	von rand
inward	nach innen
inside	im innern
to the middle	zur mitte
through the center of the middle	durchs zentrum der mitte
outward	nach aussen
to the rim	zum rand

For many designers concrete poetry has become an analogy for the solution of their own verbal problems. There are designers who we could say express themselves in concrete poetry when faced with a problem requiring verbalization. And in addition to this metalinguistical analogy, there is an analogy in the preparation and use of raw materials, just as existed between concrete poetry and constructivist art. The adaptation of design to industrial processes of production corresponds to the attention paid by the concrete poet to the requirements of typeface and printing processes. Furthermore, there is a similarity in the gradual winning over of the poet and the designer—traditionally both artists and individualists—to the rational work processes and teamwork found in industry.

Above and beyond this participation, the poet had, perhaps for the first time, the opportunity to be an important, if not in fact a leading, member of this new team—a team whose creative efforts were all in some respect or other concerned with verbal communication. Concrete poetry saw itself for this reason as the aesthetic chapter in the development of a universal language. Concrete poetry afforded a comprehensive intellectual playing field in which, as was indicated earlier, the poet functioned as rule maker and umpire. By the concept of a universal language we did not mean a new version of Volapük or Esperanto, nor merely the selection of some existing language (despite how well English serves this purpose practically speaking anyway); rather we meant a conscious approach to the visual and acoustical potential for communication in language—an approach which would draw from all existing languages and yield a new language easily comprehensible in its signs and syntax. The resultant new language would be nourished from the most diverse sides, not the least of which could be that of dialects—an early source to which concrete poets turned both instinctively and consciously. Concrete poetry saw itself as the core of such a universally understood language in that it sought to construct its models from the objectified elements of many different languages.

But in order to assume his place in the teamwork described here, the poet had not only to risk changing his traditional attitudes, but to shed his entire former role as aesthete on the edge of society

and become a direct participant in that society. He must neither be a tragic figure who cannot understand the world—indeed, our challenge to him is that he try to understand the world with all his might—nor can he assume the role of the jealous, compulsive, destructive genius. And there are many other roles he must abandon, roles which no longer have any part in the enlightened, elemental, constructive world of the rational creative builders. He who ought to participate in the very core of the restructuring, ought also to be able to hold his own when measured against the leading creative geniuses like Le Corbusier, Mies van der Rohe, Gropius, Max Bill, and others.

How do things stand then today with concrete poetry? What has become of the idealistic beginnings? What is the current image of the concrete poet? Has concrete poetry actually become a means for structuring our social environment? Such a series of speculative questions has a natural place in this report.

During the period in which concrete poetry was conceived and began to develop, a counter-movement in poetry was formed. This was an emotional and realistic poetry. It is not yet clear however to what extent this reaction against concrete poetry might have been influenced by the very thing it was seeking to discredit. It sought to set itself off so frantically from the functionalistic concrete poetry, that it failed to sufficiently define itself in a positive sense. It was not really a return to reality, nor is it realistic, unless one seeks realism in one's daily bread, in the world of the worker, in the trivia of everyday life. You may make poems out of such material, but you would hardly escape the scepticism of concrete poets towards traditional language materials and their value as signs in the communicative process. It is, in fact, significant to note how often these so-called realistic poems have as their foundation a model derived from concrete poetry.

Of course within concrete poetry itself an unexpectedly large number of variations has emerged. The anthologies of concrete poetry have become veritable picture books. Concrete poetry—or, more precisely, the methods of concrete poetry—have extended themselves to social-critical arenas, to discussions of Vietnam and Biafra, to hippie phenomena, to graphical analogies with computer

design, to the design of letters, to the naked, unartistic presentation of typography, and finally to pure graphic materials themselves. Concrete poetry is the joy and delight of fans who see in Barbarella the epitome of poetry.

This variety, reflected especially in the field of visual poetry, has its justification. Through concrete poetry the worlds of type and print and letters were implanted into the consciousness of broad masses of people. It also succeeded in many cases in undermining the division between the esoteric literature of the feuilleton and that of the real world of signs and meaningful communication. It has even been picked up in schoolbooks, and the great increase of correspondence between concrete poets and teachers and students is further proof that the reality of concrete poetry is of contemporary significance.

What strikes me as a great failure, however, is the almost total absence of careful criticism of both concrete poetry, and of those who exploit it. Almost anything consisting of letters and print is accepted as unique and creative and then published or included in an exhibition. Simple typographical mistakes are uncritically accepted and evaluated as concrete poetry. After all, not everyone who responded to concrete poetry was a genius. But I want to concentrate on two points. I believe there are poets who are poor graphic designers and typographers, and typographers and graphic designers who are poor poets in the sense that they cannot order material in the spirit of a synthesizing experience. Sometimes the requisite teamwork is absent or the mutual ability to understand two or more languages is not present. I am sure that the modish fascination with letters and typography will subside and the thread of development in concrete poetry will emerge once again. But it would be a great shame if the hypertrophy of the movement—which has produced outgrowths that can no longer be really considered concrete poetry—should result in a reaction of repugnance. Now as before, however, I remain convinced that the future of visual communication belongs to the press, to signs in movement, to the meditation object, mystery novels, scientific professional literature, to game-forms of concrete poetry—and all this on a worldwide, polyglot basis.

If on the one side concrete poetry can be seen as a function—albeit not always a very successful one—of the plastic arts, on the other side it can be readily seen that not a few artists have availed themselves of concrete poetry. The task of articulating the extent of this reciprocal influence must be left for the art historians of the future.

In the fields of industrial design and architecture, the last fifteen years have seen a clear transformation. Interest in the perfection of single entities (i.e., interest in good form) has weakened in favor of posing questions for their own sake. Thought and discussion about problems of creating individual objects have yielded to discussion of broader questions and problems of the structure of our social environment—truly threatening problems whose solution may not lie merely with the perfection of good form. In industrial design there is a crisis for many designers of the old school, in that while the creation of individual objects still poses challenging problems, these problems have become much less important in view of our changing attitudes towards such individual objects. It is significant that recently there was an exhibition in Germany with the title “Tried and True.” This exhibition—competently enough executed—was meant as an admonition; and yet the signs of the times point not backwards in this direction, but in quite another. Our relationship to objects has lost some of the idealization of the post-war years, yet gained a certain intensity because of their limited life-expectancy. Things are there to be used, and once their usefulness has passed they are thrown away without a second thought. The one-way bottle is an effective symbol for this change in attitudes. At the same time, the visual aspect of design, which dominated the early Fifties, has given way more and more to the haptic. A corresponding shift has occurred in art, where tactile forms were almost unknown in the Fifties, yet now constitute the most sought-after class on the market. To think ahead for a moment, it seems only logical that the functional-visual forms will cease to be produced when the attitudes sustaining them cease to exist. In their place is emerging a new metaphysical understanding for things in their entirety, for the way in which things function together in our world, for the way in which we must deal with them. The accent today in industrial design is on

systems analysis; i.e., there is less interest in the plate from which we eat and more in the process of eating, of food acquisition and preparation. The plate is merely the optimal solution to a chain of interwoven problems. It is a point of juncture in a whole field of inquiry.

In architecture it has been realized that while the single-family house serves as an exercise in the study of the deportment of a small group of people, it cannot be the ultimate task of architecture in a century of exploding population. As with industrial design, the large-scale problems of structuring our environment have become very complicated. Symptomatic of this change could be the contrast between two huge housing projects—one quite modern and one from the Fifties. The Hansa Quarter in Berlin, a perfect example from the Fifties of a joint effort of many prominent architects and a combination of various realizations, is a collection of structures without any city-planning mission or reference. It is an open-air architectural exhibition. The housing developments underway everywhere now, on the other hand, are agglomerations of visionary scope. An example might be the Märkische Quarter of Berlin. The question of which type of housing better serves the well-being of its inhabitants must remain suspended for the moment (although a considerable difficulty has been experienced in the Märkische undertaking). We must only realize that this new type of housing on this new scale calls for architectural systems analysis and a programming of the efforts of many talents—all of which is in sharp contrast to the uniquely individual achievement of Le Corbusier's *unité d'habitation*.

So once again the question is raised as to the place of the poet in this metaphysical, technical-visionary world born of computers and characterized by bigness and masses. If we glance again at the multilateral development of concrete poetry or examine the products and books of concrete poets over the past fifteen years, we see that it, too, has changed along the lines of industrial design and architecture. Concrete poetry began with singular, self-contained forms, which by my own definition were to be so short and simple as to be memorizable. These were in a way comparable to single-family dwellings; I have always perceived the essential value of a poem and that of a sketch for a single-family house to be

equal. Yet I think the best work of the latest concrete poets consists of poem cycles, systems of poems, text groups, and collections. Personally I, too, felt the urge to depart from the individual poem and form "text books," which however were not to be anthologies or collections of single texts, but rather text syntheses of pages, paper, and verbal material. This is not to say that the concrete text should be burdened with superfluous material. A great economy of information was one of the achievements of concrete poetry. So while these superstructures might initially seem too complicated in construction, each must remain simple and concentrated. That which can seem monotonous yet intellectually agreeable—like a several-hour-long Andy Warhol film—can be a text in which the smallest detail conveys information. But in language and poetry, as in design and in the plastic arts, it is chiefly the programming of the structure which has come to fascinate us.

With such statements as this, one of course again runs the risk of seeming to seek a discourse only with other artists and to abandon problems of communication in everyday life. And I believe, in fact, that anyone who looks at language only as metalanguage, programmed language, and target language is working unconsciously to broaden the gulf which threatens to separate programmed results from the intuitive clarity of our natural tongues. I believe, therefore, that we must recognize and esteem words with multiple semantic levels—words like "love"—as values in themselves. By the way, it takes presently about ten years for programmed forms in our environment to be accepted and for the adaptations to become functional; soon it will probably take less time.

I have tried so far to sketch the connection between certain current or expected movements towards a structuring of society and movements in concrete poetry. I would like to summarize by outlining what I imagine the form and purpose of future poetry to be. Poetry is rooted in acoustical and written language. The phenomena of the times however are sound, color, and texture. Without question concrete poetry has experimented creatively in the phenomenon of sound—I think that some of these experiments

must be considered to rank among the best work of the most recent years. I simply cannot conceive how poetry can survive in the future if it ignores acoustical texts. That is, it will survive, but only in a museum. As we can see from many examples, concrete poets have written not only rationalistic texts of interest from the standpoint of semiotic and information theory, but have also captured noises, sounds, patterns of sound in verbal signs—that is to say, they have captured existential signs in objectively communicable written forms. In so learning to transmit concrete sound events through equally concrete verbal signs, the concrete poet opens to the people of a polyglot world an enormous, inexhaustible treasury of previously unavailable communicative elements. Initially he sets to work like a linguist, but in the second phase he engages in a sort of game-activity whereby new combinations of the concrete acoustical and written verbal signs he derives constantly allow new associations and meaningful relationships to arise. Whether he works according to a program or by allowing the “rules of chance” to function is unimportant. His results would be not so much conceptual abstractions, which at the most could function as the mere map to a concrete verbal world, but a new version of the concrete world itself. Interpretation would be superfluous, for the sound structures created would be in every aspect tokens of events extant in the concrete world.

Naturally an examination of the characters and signs used so far (e.g., our current alphabets and their associated sounds) would indicate that yet other signs must be created, but the fact is that sound exists in concrete poetry, and the possibilities for the poet excited by acoustical phenomena are boundless. Surely this is the beginning of a development whose goal, in my opinion, is not that of entertainment (which can at best be a side goal), but that of an awakening of sensibility. A sensitizing of our perception and imagination could be achieved through an acoustically ordered poetry in a manner similar to that now effected through some jazz and electronic music (e.g., Zaffiri, Nanucci). Of course, one could object that better poetry has always involved a certain acoustical sensibility and sensitivity—which explains why these terms have often been applied in speaking of traditional poetry. The difference is that we must create a sound poetry on a methodi-

cal and universal basis for our times, our society, our "world." The signs and symbols for the sounds of our age concern all peoples and must be either initiated, influenced or created by poets. Acoustical signs constitute a large measure of our environment. It is the task of the poet to use them to structure our world today and the world of tomorrow.

There are, on the other hand, poets who can participate in the communication processes via visual signs. The extent to which this is already the case today has been mentioned. A limited number of picture books and exhibitions and, of course, also the influence on graphics and the plastic arts are worthy of mention, but here, too, the concrete poet stands merely at the beginning of his development. The city of tomorrow, regardless whether under water or high above the earth, will be a challenge for visual communication and consequently for the poet stimulated by concrete poetry.

But will our familiar way of writing, our various alphabets or even an ideogram system as in Chinese suffice in the future? I have suggested here that this is very much to be doubted in the case where letter and sound should conform. As we can observe in our own language today, writing changes readily and without conscious direction. The reading speed required by electronic devices is so high that our traditional alphabets (which are after all descendants of our handwriting) are definite obstacles to communication. The question arises whether traditional alphabets are still usable as media of communication. Points and lines are easier for machines to read and still faster when arranged at right angles. Curves and slanting lines and similar details will disappear. Graphologists will die out. The conception, the rational component of information is becoming ever more important.

If the poet does not want to be put back into a museum, he will have at the very least to address himself to the question of the sufficiency of the written language and of possible replacement systems. In the structuring of the world of tomorrow, visually transmitted verbal communication will have to find its place next to problems of climate control, housing and transportation, colors and sounds. I believe that the poet has a great opportunity in the

sort of world sketched here to fulfill himself as a human being, and as a full human being to fulfill himself as a poet. It has been some time since the single-minded technocrat enjoyed a position as the most important member of society. Now a sense of play, an appreciation of game activity ("Spieltrieb" tr.) is being required of managers, indeed of all the leading organizers and shapers of the world. Formerly this was only attributed to artists. Now the poet who has the courage to take risks, who needs this element of risk and who therefore does not want to retreat to the literary museum can take his place next to the manager.

Let us therefore no longer consider merely the listener, the reader, the observer in a person, but concern ourselves as poets with the total existence of man, perhaps even with the vital force he represents. It is not enough that we may contend with this force—contend with it we must.

This article has been adapted from a lecture originally delivered in April 1969 at Innsbruck. This translation follows the published German text—which is accompanied by a set of illustrations: Eugen Gomringer, *Poesie als Mittel der Umweltgestaltung*. Itzehoe: Hansen & Hansen, 1969.

Statements 76

Jack Weiss

To honor the American Bicentennial, the Society of Typographic Arts in Chicago organized the exhibition Statements 76 "to revitalize the words that inspired the American Revolution." Appropriate quotations from that historic period were the dominant element in a wide variety of media—from sculpture to a patchwork quilt.

During the nation's bicentennial year, activities, events and objects of all kinds were produced by multitudes of inspired individuals and organizations. Few, it seems, dealt specifically with aspects of visible language. One exception was Statements 76, an exhibition sponsored by the Society of Typographic Arts which opened in Chicago at the Ryder Gallery on July 1.

In honoring America's 200th birthday, the STA gave members of the graphic arts community an opportunity to contribute their particular talents to Illinois' bicentennial celebration. The purpose of Statements 76 was to revitalize the words that inspired the American Revolution. Letterforms—taken from any part of the spectrum: from type to calligraphy to handwriting—became the subject matter to make visible appropriate quotations from the historical period.

There were no limitations on media or method. Posters, lithographs, serigraphs, bas-reliefs, patchwork quilts, photographs, sculptures, and collages were suggested. Only two criteria were stated. First, the entry had to be hand-carried without assistance. Second, the basic quotation was to be the dominant element, with

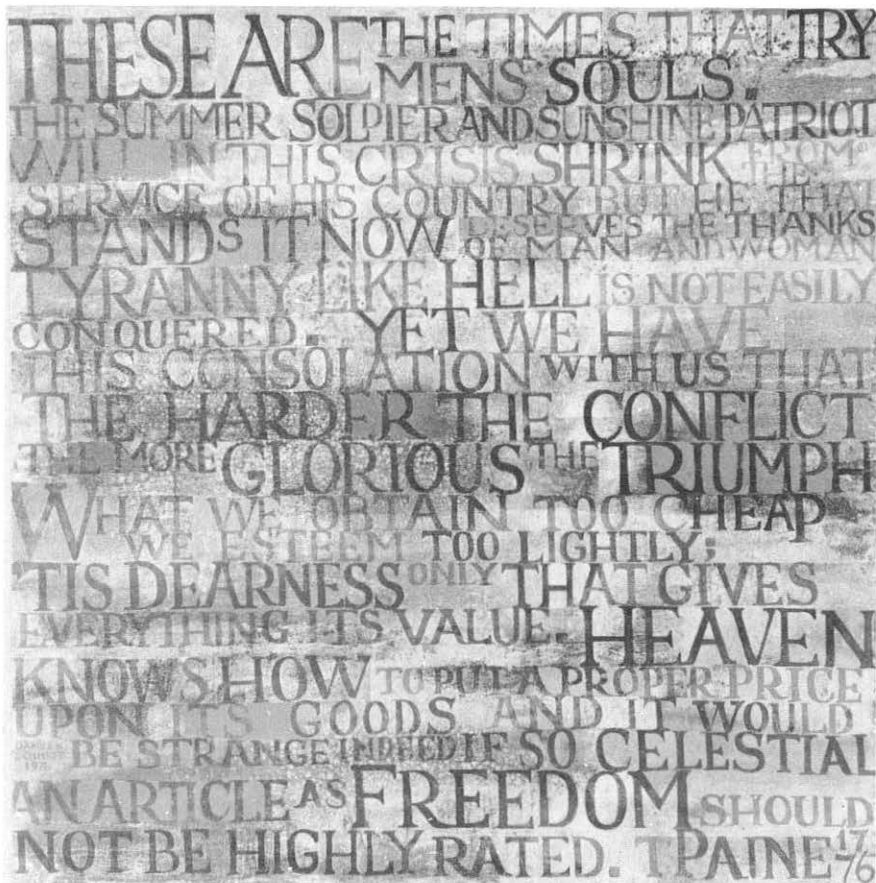
Opposite: Ed Panian, *Untitled*. Calligraphy, 19 x 24 inches.

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figurative or other visual support elements subordinate. The exhibition was open to STA members, other professionals and to any Illinois resident or student.

Although entries were initially slow in coming in, they did in fact arrive in quantity: an array of shapes, sizes, colors, and materials. It was apparent then why the work was delayed. Unlike a professional show where designers, art directors, and printers could easily pull samples from their past year's work, this show required personal commitment. It necessitated the development and execution of a one-of-a-kind idea, and very likely a not-for-profit idea; only one piece had been produced commercially. Of the others, the hand-sewn quilt by Louise Scire Tessing epitomized the high degree of personal commitment called for. Louise, current

James K. Schmidt, *Bicentennial Offering*. Oil and acrylic, 50 x 50 inches.



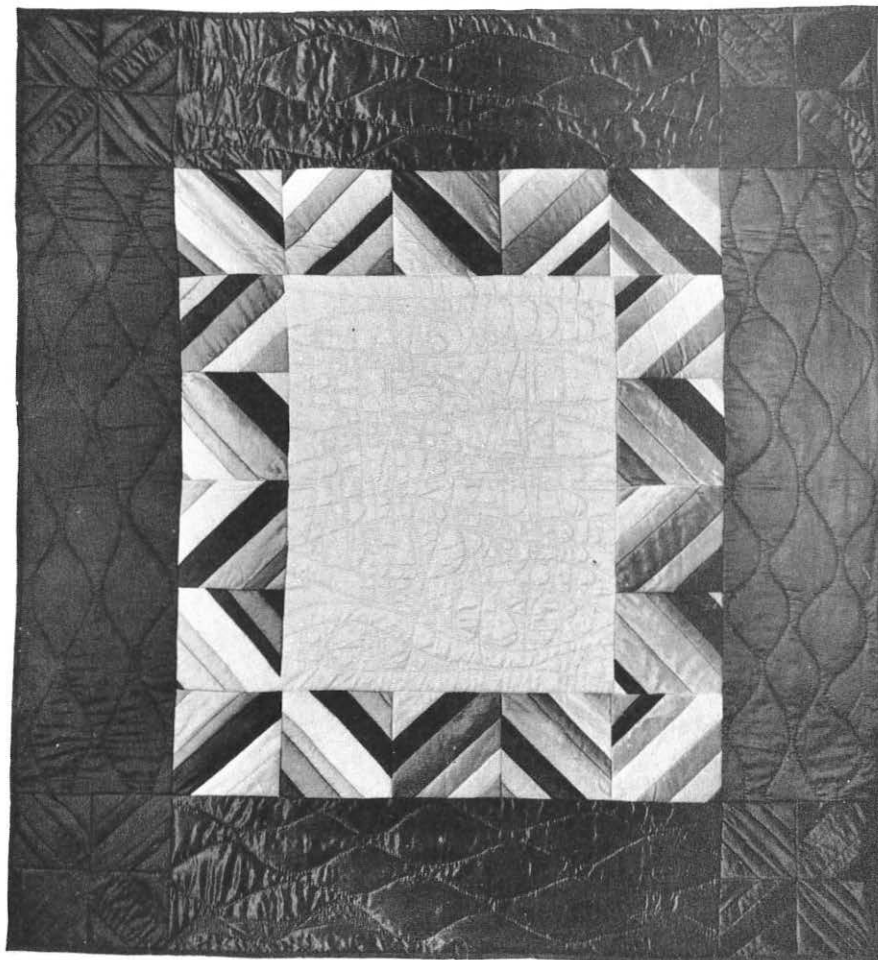
president of the STA, spent 500 hours completing her entry which features a white-on-white, stitched quotation by Abigail Adams.

Over fifty-seven students and professionals submitted work which was juried by Robert Amft, Rhodes Patterson, and Arthur Paul. Forty-six were selected for the exhibit.

The accompanying examples were selected to illustrate the great variety of letterform interpretations which appeared in the exhibit. The work speaks (literally) for itself, but the accompanying credits disclose the broad range of media and scale which resulted from the open framework of the exhibit's entry criteria.

Catalogs are available to interested persons by writing to the Society of Typographic Arts, 228 North LaSalle Street, Chicago, Illinois 60601. Please include \$1.00 for postage and handling.

Louise Scire Tessing, *Quote Quilt 1976*. Quilt, 90 x 100 inches.





Gloria Jean Ammons, *Freedom of the Press*.
Poster, 16-1/2 x 24 inches.

Mary Gehr, *E Pluribus Unum*. Batik, 37 x 36 inches.



Hayward R. Blake, *No Right Turn*. Assemblage, 2 x 9 feet.



One Hundred Essential Sight Words

Wayne Otto and Cathy Stallard

Sight word lists have been used since before 20 BC and have changed forms many times. Today sight word lists are numerous and are widely and variously used. They differ in terms of source, intended purpose and/or audience, and criteria for including specific words. Despite these differences, there is much agreement that they do reflect the most basic words in our language and that there is a high degree of commonality among them. This report identified the one hundred sight words which appeared in sixteen major sight word lists.

Sight words have been used for over two centuries as tools for teaching reading. In the nineteenth century sight words were used mainly in beginning reading instruction. Today sight words are used as instructional aids in teaching reading to audiences ranging from preschool children to adults.

Sight word lists are created from frequency counts of words that occur in printed materials and in the oral and/or written samples of children's and/or adults' communication. Some lists include only the base form of frequently occurring words while other lists include all words regardless of their form. Some lists include while others exclude numerals, proper nouns, abbreviations, alphabet letters, onomatopoeic words, compound words, and/or affixes. Despite the variance in origin, in the specific purposes for which they are intended and in the criteria employed to select the words in the first place, there is much overlap among lists. The work reported here was an attempt to demonstrate the overlap by identifying the words common to sixteen major sight word lists. The outcome is a list of one hundred words that can be accepted as *essential* sight words with some confidence.

Sight words are used in a variety of ways in teaching reading. Being high frequency words, teachers can use them with con-

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confidence that the words will appear in printed materials and that learners will have meanings to associate with them. Most important, then, well selected sight words can be used early in instruction to put the focus on deriving meaning from printed material. Also important is the fact that sight words can serve as a basis for early word attack instruction. If, for example, words with soft *c* and *ng* (e.g., *city*, *thing*) were added to the one hundred words reported here, all of the vowel sounds as well as the major initial and final consonants would be represented. Thus the words on the list can provide a meaningful context for teaching word attack skills.

The most essential criterion of quality for a sight word list is the demonstrated high frequency of the words listed.

Procedures for Identifying One Hundred Essential Sight Words

Sixteen sight word lists were selected and compared. The lists (a) were judged to be in common use today by a panel of six reading specialists, (b) were derived from the frequency counts of oral usage, general samples of written words, or words used in basal readers, (c) represent selections from a range of sources from preschool to adult, and (d) range in date of collection from 1928 to 1973. All of the lists are published¹ and are readily available. The lists are:

1. *A Basic Word List From Basal Readers*. This list includes 100 pre-primer, 225 primer, 455 first-reader, 1,101 second reader, and 1,916 third-reader words common to five 1950 basal series (Stone and Bartschi, 1963).

2. *Dale's List of 3,000 Familiar Words*. Although this list represents only 2,946 words, it is commonly labeled *Dale's List of 3,000 Familiar Words*. Words included on the list were known by eighty percent of the children in a sample of fourth graders (Dale and Chall, 1948).

3. *Dolch 220 Basic Sight Vocabulary*. This list is a combination of the 193 words common to the *International Kindergarten Union Vocabulary List* (Horn, 1928); *Gates Primary Word List* (Gates, 1935); *The Wheeler-Howell First Grade Vocabulary List* (1920, as cited in Dunn and Laffey, 1969); and Dolch's twenty-seven self-selected words.

Two of the lists used to generate the Dolch list were included in this study as independent lists (Dolch, 1955).

4. *Durr's 188 Frequency List*. This list was derived from a computerized analysis of 80 library books frequently chosen by elementary children. The words were selected from a 105,280-word sample (Durr, 1973).

5. *Ernest Horn's Vocabulary of Adult Writings*. This list includes the 1,187 most frequently recurring words in the "Letter to Editor" sections of adult magazines and newspapers (Horn, E., 1926).

6. *Fry's 300 Instant Sight Words*. This list is composed of 100 frequently used first-grade words, 100 frequently used second-grade words, and 100 frequently used third-grade words (Fry, 1960).

7. *Gates Primary Reading Vocabulary*. This list of 1,811 words is presented in three 500-word groups. The groups are presented in order of highest frequency. Children's vocabularies and samples from basal readers were used in the initial frequency count (Gates, 1935).

8. *Great Atlantic and Pacific Sight Word List*. This list includes the 500 most frequently occurring words in selections from 215 reading materials of third-grade readability. An 840,875-word corpus was the basis for the list (Otto and Chester, 1972).

9. *Harris-Jacobson 333 Core Vocabulary for First Grade*. This list is from a computerized analysis of 4,500,000 words from fourteen elementary content field textbooks. If a word appeared in at least three series it was included on the core vocabulary list (Harris and Jacobson, 1973-1974).

10. *Horn Kindergarten List of the Most Frequently Spoken Words of Preschool Children*. This list was taken from a frequency ranking of most commonly spoken words of children, three to six years of age (Horn, 1926, as reported in Fitzgerald, 1963).

11. *Johnson's Basic Vocabulary List*. The 244 words on this list are the words from the Kucera and Francis, *A Computational Analysis of Present-Day American English*, list of words frequently spoken by a random sample of young children (Johnson, D., 1971).

12. *Johnson's Core Vocabulary for Elementary Grades*. The 200 words selected for this list were those appearing in five or more of the basal reader series Johnson surveyed (Johnson, G. R., 1962).
13. *McKee-Fitzgerald List of Child-Letter Writings*. This list ranks the 2,836 words most frequently used by children in their own informal writings (Fitzgerald, 1963).
14. *Newman and Bailey Speaking Vocabulary of Preschool Children*. The compilation of eight preschool oral word-frequency counts is represented in this list with the dates of collection ranging from 1928-1971 (Newman and Bailey, 1973).
15. *Rinsland's Basic Vocabulary of Elementary School Children*. A list of 14,571 words used by children in formal school writing, grades one through eight, is represented in this list (Rinsland, 1945).
16. *Thorndike-Lorge Reading Vocabulary*. This is a list of 10,000 words representing a frequency count of children's and adults' reading materials (Thorndike and Lorge, 1944).

The sixteen lists vary in length so the shortest list—the *Durr 188 Frequency Count*—was established as the criterion for comparison and only the 188 most frequent words from eleven lists arranged by frequency were considered. All of the words in four lists not arranged by frequency were considered. The words in Table I appeared on all sixteen lists.

Some salient observations from the process of identifying these basic words follow: (1) Words that occur frequently in children's speech also tend to be frequent in adults' speech. (2) Most of the words used frequently in modern basal readers were used in earlier basal readers. (3) The core words from adult writing are also the core words in children's writing.

1. The only exception to this standard was the unpublished Newman and Bailey *Speaking Vocabulary of Preschool Children*. The study was presented at the American Educational Research Association conference, 1973. The authors will make it available on request and they project a publication in the future. The analysis of two million spoken words was considered valuable to this study.

Table I. One Hundred Essential Sight Words

a	down	it	out	three
about	for	just	over	to
after	from	know	put	too
again	get	like	right	two
all	go	little	said	up
an	good	look	saw	us
and	got	made	say	want
any	had	make	see	was
are	has	me	she	we
at	have	my	so	went
away	he	new	some	were
be	her	no	take	what
big	here	not	that	when
but	him	now	the	where
by	his	of	them	who
came	how	off	then	will
come	I	old	there	with
could	if	on	they	would
did	in	one	think	you
do	is	our	this	your

REFERENCES

- Dale, E., and Chall, Jeanne S. A formula for predicting readability. *Educ. Res. Bull.* (Ohio State University), Jan. 21 to Feb. 17, 1948, 27, 11-20, 37-54.
- Dolch, W. *Methods in reading*. Champaign, Illinois: Garrard Press, 1955.
- Dunn, Mary K., and Laffey, J. L. *Research on reading: Word lists*. ERIC/CRIER Reading Review Series, Bibliography No. 18, 2, September, 1969.
- Durr, W. K. Computer study of high frequency words in popular trade juveniles. *The Rdg. Tchr.*, 1973, 27(1), 37-42.
- Fitzgerald, J. A. An integrating basic communication vocabulary. *Elem. Engl.*, 1963, 40, 283-289.
- Fry, E. B. Three hundred instant words. *Elem. Engl.*, 1960, 37, 39-42.
- Gates, A. I. *A reading vocabulary for the primary grades, Revised and enlarged*. New York: Bureau of Publications, Teachers College, Columbia University, 1935.
- Harris, A. J., and Jacobson, M. D. Basic vocabulary for beginning reading. *The Rdg. Tchr.*, 1973, 26(4), 392-395.
- Horn, E. A basic written vocabulary. *University of Iowa Monographs in Education, First Series, 4*. Iowa City: University of Iowa Press, 1926.
- Horn, Madeline D. *A study of the vocabulary of children before entering the first grade*. Washington, D.C.: International Kindergarten Union, 1928.

- Johnson, D. A basic vocabulary for beginning reading. *Elem. Schl. J.*, 1971, 72(1), 29-34.
- Johnson, G. R. A core vocabulary study in the elementary grades. *Elem. Engl.*, 1962, 39, 470-473.
- McKee, P., and Fitzgerald, J. A. Child-written vocabulary. Unpublished thesis, as cited in Fitzgerald, J. A., An integrating basic communication vocabulary, *Elem. Engl.*, 1963, 40, 283-289.
- Newman, M. A., and Bailey, B. E. A compilation of preschool children's word frequency counts. Paper presented at American Educational Research Association annual meeting, New Orleans, 1973.
- Otto, W., and Chester, R. Sight words for beginning readers. *J. Educ. Res.*, 1972, 65(10), 435-443.
- Rinsland, H. D. *A basic vocabulary of elementary-school children*. New York: MacMillan Company, 1945.
- Stone, D. R., and Bartschi, V. A basic word list from basal readers. *Elem. Engl.*, 1963, 40, 420-427.
- Thorndike, E. L., and Lorge, I. *The teacher's word book of 30,000 words*. New York: Bureau of Publications, Teachers College, Columbia University, 1944.

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have petitioned for redress...."*

*"They, too, have been deaf to the voice
of justice and consanguinity."*

And that Perennial Favorite,
*"We hold these truths to be self-evident
...."*

And Many, Many More!

HERE'S WHAT YOU GET:

(TURN PAGE)

Models for Predicting How Adults Pronounce Vowel Digraph Spellings in Unfamiliar Words

Dale D. Johnson and Richard L. Venezky

This study explored relationships between type and token frequencies and contextual position effects in pronunciations of written English. Specifically, the major question was whether or not vowel cluster pronunciation preferences of adult readers were more affected by frequency of occurrence than by graphemic environment. Two opposing hypotheses were tested regarding four vowel digraph spellings. Six synthetic words were constructed for each vowel cluster according to contextual and word position constraints. The subjects were 51 undergraduates whose task was to read the synthetic words and note how they pronounced the underlined vowel cluster. Three models were constructed to assess the hypotheses and to predict responses for each vowel cluster. The models were a final consonant model, a variant type-token model, and an invariant principal response model. Several data analysis techniques were used. The final consonant model was superior to the other two models, but it was found that other factors, not yet assessed, were present in the results.

English letter-sound correspondence patterns fall into three distinct categories (Venezky, 1974). Some are invariant or nearly invariant ($b \rightarrow /b/$, $k \rightarrow /k/$, and $m \rightarrow /m/$), some are variant but predictable ($c \rightarrow /s/$ before e , i , or y , but $c \rightarrow /k/$ otherwise), and others are variant and unpredictable ($ch \rightarrow /č/$, $/š/$, or $/k/$ as in *church*, *chef*, *chorus*; and $ea \rightarrow /i/$, $/ɛ/$, or $/e/$ as in *team*, *bread*, *great*). Recently several studies have examined the pronunciation strategies of good and poor readers for both invariant and variant-predictable letter-sound correspondences (Venezky, Chapman, & Calfee, 1972; Venezky & Johnson, 1973). Only one major study, however, has reported on variant-unpredictable correspondences (Johnson, 1970).

Johnson (1970) compared the relationships of type and token pronunciation frequencies of real words that contained vowel digraphs to the pronunciations by elementary school children of synthetic words that contained the same digraphs. Johnson com-

piled word type frequencies from a list based on the 20,000 most common words in the *Thorndike Century Senior Dictionary* (1941), and he tabulated word token frequencies from the top 1,000 words in the Brown University corpus (Kucera & Francis, 1967).¹

Johnson's results showed that subjects' responses were much more closely related to word type proportions than to word token proportions. The most common (principal) pronunciations based on word types appeared to be the best predictors of vowel cluster pronunciations by children. Furthermore, (1) good readers consistently gave more principal pronunciations than poor readers; (2) the percentage of principal pronunciations increased from second, to fourth, to sixth grade; and (3) suburban children scored higher on principal pronunciations than urban and rural children.

Since previous research had indicated that contextual features may influence pronunciation preferences (Calfee, Venezky, & Chapman, 1969), these features were also examined by Johnson (1970). The pronunciations of some vowel clusters, although considered unpredictable, were indeed affected by contextual features or by the cluster's position within the word. For example, when *ie* preceded *s*, it received the /ai/ pronunciation more frequently than the principal /i/ pronunciation. The reverse was true when *ie* preceded *k* and when it was in final position. Likewise, *oo* was more often pronounced /u/ when followed by *t*, but received the /ʊ/ pronunciation more frequently when followed by *k*. Similarly, *ow* usually received the /au/ pronunciation, but was more likely to be pronounced /o/ when in final position. These contextual-positional effects seemed to be highly related to real word occurrences.

The present study was designed to explore further the relationships between type and token frequencies and contextual-positional effects. The basic question being asked was whether the vowel cluster pronunciation preferences of adult readers are more affected by frequency of occurrence features than by graphemic environment. Based upon earlier findings, the specific environmental feature selected for examination was the following consonant. Two opposing hypotheses for how adult readers would pronounce vowel clusters in synthetic English words (i.e., in English-like words) were postulated:

- H₁. The pronunciations will vary according to the number of real words that have the same clusters in the same graphemic contexts (i.e., the same following consonant and position).
- H₂. The pronunciations will vary according to the type or token counts of real words with the same clusters, regardless of graphemic context.

To test these hypotheses, four vowel digraph spellings were selected on the basis of their variant, but seemingly patterned, pronunciations in a corpus of high frequency words. The digraph spellings selected were *oo*, *ou*, *ea*, and *ow*; their pronunciations in common monosyllabic and disyllabic words are summarized as follows.²

- oo* is usually /u/ before *n*, *m*, or *l* (*moon*, *broom*, *fool*) and /ʊ/ before *k* or *d* (*book*, *good*), but about equally /u/ and /ʊ/ before *t* (*boot*, *foot*).
- ou* is usually /au/ before *n*, *t*, and *d* (*ground*, *trout*, *loud*) and /ʌ/ before *p*, *b*, or *ch* (*couple*, *trouble*, *touch*).
- ea* is usually /i/ before *k* or *t* (*beak*, *heat*) and /ɛ/ before *th* or *l* (*heather*, *wealth*), but about equally /i/ and /ɛ/ before *d* or *n* (*plead*, *dead*, *mean*).
- ow* is usually /o/ in final position (*grow*, *slow*, *snow*) and /au/ before *d* (*chowder*, *crowd*), but about equally /o/ and /au/ before *n* (*grown*, *crown*).

Table I presents the principal pronunciations of each of the four vowel clusters by word type frequency and by word token frequency. This table shows that for two of the selected vowel clusters, *ou* and *ea*, the principal pronunciations for word types and word tokens are the same, while for the other two, *oo* and *ow*, the principal pronunciations for word types and word tokens are different.

Method

Stimuli

For each of the four selected vowel clusters six synthetic words were constructed according to the contextual and word position constraints discussed previously. Each stimulus was then matched with four real word alternatives; one alternative contained the principal pronunciation of the vowel digraph in the synthetic word, and the other three contained frequently occurring pronunciations of this digraph. The 24 test items were then randomized and printed on an 8-1/2 x 11 sheet of paper (see Appendix).

Subjects

The 51 subjects were undergraduates at the University of Wisconsin. Twenty-seven were enrolled in a beginning course in computer programming and 24 were enrolled in a beginning course in elementary education.

Procedure

Subjects were told to read a synthetic word to themselves and to note how they pronounced the underlined vowel digraph. They then were to circle the real word in the same row that contained the same vowel sound. The test was group administered (separately to the two groups), and subjects were encouraged to work as quickly as they could.

Results

A summary of the responses of each group to each digraph, summed across test items for each digraph, is shown in Table II. Separate chi-square analyses of the digraph responses comparing the total number of principal responses to nonprincipal responses by group showed a significant group difference for *oo*, but no significant group differences for the other three digraphs. Consequently, the two groups were combined for subsequent analyses.

The responses to each test item, summed across the subject groups, are shown in Table III. For all six *ea* test items, a single pronunciation (/i/) dominated; there was only a slight deviation in the responses to *theat*. The response /u/ dominated for all *oo* items except *yook*, which received twice as many /v/ responses as /u/ responses. (*Plood*, although assigned the dominant pronunciation

TABLE I. *Word Type and Word Token Principal Pronunciations and Percentages for the Vowel Clusters OO, OU, EA, and OW **

	<i>Word Types</i>		<i>Word Tokens</i>	
	<i>Principal Pronunciation</i>	<i>Percentage</i>	<i>Principal Pronunciation</i>	<i>Percentage</i>
<i>oo</i>	/u/	62.2	/ʊ/	50.0
<i>ou</i>	/au/	50.1	/au/	36.4
<i>ea</i>	/i/	53.1	/i/	57.4
<i>ow</i>	/o/	51.2	/au/	51.4

*Data from Johnson (1970).

TABLE II. *Percentages of Responses by Subject Group and Digraph*

	<i>ea</i>			
	/i/	/ɛ/	/ʌ/	/e/
Group 1 (Edu.)	86.8	11.8	0.7	0.7
Group 2 (C.S.)	93.2	5.6	0.0	1.2
Total	90.2	8.5	0.3	1.0
	<i>oo</i>			
	/u/	/ʊ/	/a/	/o/
Group 1 (Edu.)	66.7	16.7	6.3	10.4
Group 2 (C.S.)	82.7	11.1	2.5	3.7
Total	75.2	13.7	4.3	6.9
	<i>ou</i>			
	/au/	/u/	/ʊ/	/ʌ/
Group 1 (Edu.)	74.3	14.6	5.6	5.6
Group 2 (C.S.)	64.6	24.2	6.2	5.0
Total	69.2	19.7	5.9	5.3
	<i>ow</i>			
	/au/	/o/	/a/	/ʌ/
Group 1 (Edu.)	70.1	25.7	2.1	2.1
Group 2 (C.S.)	63.6	31.5	3.1	1.9
Total	66.7	28.8	2.6	2.0

by 64 percent of the subjects, received a relatively high number of /ʊ/ responses—10 of 51.)

Both *ou* and *ow*, although assigned dominant pronunciations (/au/ for both) in 69 percent and 67 percent of the cases, respectively, showed more variation in response patterns than did the other two digraphs. For *ow*, an /o/ pronunciation was selected by

TABLE III. *Total Responses to Each Test Item by Vowel Pronunciation (N=51)*

<i>ea</i>	/i/	/ɛ/	/a/	/e/
yeath	45	4	0	2
brean	48	3	0	0
theat	38	13	0	0
pleal	48	1	1	1
glead	48	3	0	0
feak	49	2	0	0
<i>oo</i>	/u/	/ʊ/	/o/	/ʌ/
foon	50	0	0	1
nool	46	2	3	0
toom	46	2	2	1
yook	16	32	3	0
plood	32	3	6	10
doot	40	3	7	1
<i>ow</i>	/au/	/o/	/a/	/ʌ/
smow	9	41	1	0
bown	44	7	0	0
drow	32	19	0	0
trowd	41	6	1	3
towd	36	11	4	0
pown	42	4	2	3
<i>ou</i>	/au/	/u/	/ʌ/	/ʊ/
doub *	33	4	8	5
frou	49	1	0	1
thoup	19	27	1	4
loun	33	14	3	1
rouch	41	6	0	4
soud	36	8	4	3

*One subject did not respond to this item.

80 percent of the subjects for *smow*, by 37 percent for *drow*, and by 21 percent for *towd*. In all, the /o/ pronunciation accounted for about 29 percent of the responses to *ow* words. For *ou*, an /u/ pronunciation was selected by 53 percent of the subjects for *thoup*, by 27 percent for *loun*, and by 16 percent for *soud*. In all, the /u/ pronunciation accounted for about 20 percent of the responses to *ou* test items.

For assessing the various hypotheses stated earlier, three models were constructed and then used to predict the number of principal responses to be expected for each vowel digraph. The models tested were:

TABLE IV. *The Number of Predicted and Actual Principal Responses to Each Test Item*

<i>Word</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Actual</i>
foon	51	32	51	50
nool	45	32	51	46
stoom	51	32	51	46
yook	5	32	51	16
plood	23	32	51	32
doot	40	32	51	40
smow	21	26	51	9
bown	26	26	51	44
drow	21	26	51	32
trowd	51	26	51	41
towd	51	26	51	36
pown	26	26	51	42
froot	51	26	51	49
thoup	0	26	51	19
loun	51	26	51	33
rouch	38	26	51	41
soud	51	26	51	36
yeath	41	29	51	45
brean	51	29	51	48
theat	43	29	51	38
pleal	51	29	51	48
glead	18	29	51	48
feak	44	29	51	49

1. *Final consonant model.* For each test item, all of the monosyllabic words in the Thorndike word list (see Johnson, 1970) that had the same vowel and consonant ending as the test item (or vowel plus juncture in the case of *smow* and *drow*) were listed by vowel pronunciation. The percentage of these words that contained principal pronunciation for the test word digraph was then used to predict the number of principal responses that would occur for the test item.

2. *Variant type-token model.* The higher of the type and token percentages for the principal response for each digraph was used to predict the number of responses to all stimuli within a digraph group. Token percentages were based upon the top 1,000 words in Kucera and Francis (1967), while type percentages were based upon the Thorndike list mentioned previously.

3. *Invariant principal response model.* This model assumes that all responses to a digraph will be the principal response for that digraph.

The predictions made by each model for each stimulus item are reported in Table IV, which also shows the actual responses made by the combined subject populations. (Since no English words end in -oub, the test item *doub* was eliminated from the comparison of models, leaving 23 stimuli in four digraph groups.)

To compare the three models, several different measures were used. The following were used in the analyses.

x_{ik} the response of the i th student to the k th word. (x_{ik} is 1 if the principal response is given, and zero otherwise.)

y_{km} the predicted number of principal responses to the k th word under the m th hypothesis.

y_k the actual number of principal responses to the k th word
($y_k = \sum_i x_{ik}$).

The measures used to compare the three models were as follows:

1. Sum of absolute values of differences, based on group scores. This required the computation of

$$A_m = \sum_k | \hat{y}_{km} - y_k |$$

for each of the three models and was probably the weakest test that was run. The resulting values were $A_1=218$, $A_2=314$, and $A_3=287$. According to these results, model 1 (final consonant) had the least amount of error, followed by model 3 (invariant principal) and then by model 2 (variant type-token).

2. Sum of squares of absolute differences, based on group scores. This was similar to analysis 1, but gave higher weight to the more deviant results. For

$$S_m = \sum_k | \hat{y}_{km} - y_k |^2$$

the resulting values were $S_1=3338$, $S_2=4982$, and $S_3=6283$.

Model 1 thus remained in the same position as in analysis 1, but models 2 and 3 changed places.

3. Analysis of variance—sum of differences. This required the computation of

$$Z_{1mi} = \sum_k | W_{ikm} |$$

where $W_{ikm} = x_{ik} - \hat{y}_{km} / 51$.

Z_{1mi} was a measure of the error made under the m th hypothesis for the i th student. Then, an analysis of variance was performed to test the hypothesis that $U_{11} = U_{12} = U_{13}$, where $U_{1m} = E Z_{1mi}$.

This comparison, using repeated measures, showed a significant difference among the means [$F(2/49) = 128.6508$, $p < .0001$]. Pairwise contrasts showed that model 3 was superior to model 1 and that model 1 was superior to model 2.

4. Analysis of variance—sum of squares. This was analogous to analysis 3, but was based upon

$$Z_{2mi} = \sum_k | W_{ikm} |^2.$$

Once again, a significant difference between the means was found [$F(2/49) = 15.4$, $p < .001$]. At the .05 level, model 1 was significantly better than model 2 and model 3, while model 2 was better, but not significantly better, than model 3.

Several other analysis techniques were attempted. Two of these analyses were similar to analyses 3 and 4, but included the random assignment of the subjects into 17 groups of three subjects each. These latter two analyses both showed model 1 to be superior but were not consistent in the ordering of models 2 and 3.

Discussion.

That the responses to certain words such as *yook*, *thoup*, and *smow* deviated from the principal responses in a manner that tended to be predictable on the basis of following consonant indicates that the simple type/token models in which all test items in a digraph class are assigned the same expected frequency for the principal response are inadequate. Following consonant had a definite influence over the responses that the subjects gave, even though it is evident from this study that final consonant is not the only factor that influences pronunciation. The final consonant model was superior in both comparisons based on deviations of group scores from predicted scores (analyses 1 and 2) and in the analysis of variance based on the square of the individual variations from the predicted scores (analysis 4). Only in the analysis of variance based on absolute values of individual deviations (analysis 3) was the final consonant model not superior to the other two. The change in the position of the final consonant model from analysis 3 to analysis 4, however, implies that the final consonant model has less variance than the other two models.

We conclude from these analyses that the final consonant model is indeed superior to the other two models, but that other factors which have yet to be assessed also are present in the results. A model that might provide a higher degree of predictability than the models used here is a final consonant model based on token counts rather than on type counts. This model would be especially effective if the final consonant influence derives from analogy with a few high frequency words rather than from a generalization based on all real words that contain a particular spelling. At the same time, the influence of initial consonant cannot be rejected, especially in light of the different response patterns that *smow* and *drow* elicited.

1. Word types are distinct words, so that each different word has the same weight regardless of its frequency of occurrence in speech or print. Word tokens are distinct occurrences of a word, based upon total occurrences in printed texts or in speech.

2. This summary is based upon unpublished data on the letter-sound correspondences of the 20,000 most common words in English.

APPENDIX. Pronunciation Test

1.	<i>yeath</i>	<i>meet</i>	<i>bed</i>	<i>ton</i>	<i>play</i>
2.	<i>smow</i>	<i>about</i>	<i>boat</i>	<i>ton</i>	<i>mop</i>
3.	<i>bown</i>	<i>ton</i>	<i>about</i>	<i>boat</i>	<i>mop</i>
4.	<i>foon</i>	<i>put</i>	<i>blue</i>	<i>ton</i>	<i>boat</i>
5.	<i>doub</i>	<i>put</i>	<i>ton</i>	<i>cow</i>	<i>blue</i>
6.	<i>brean</i>	<i>play</i>	<i>bed</i>	<i>meet</i>	<i>ton</i>
7.	<i>theat</i>	<i>bed</i>	<i>ton</i>	<i>play</i>	<i>meet</i>
8.	<i>frouf</i>	<i>blue</i>	<i>put</i>	<i>cow</i>	<i>ton</i>
9.	<i>drow</i>	<i>boat</i>	<i>ton</i>	<i>mop</i>	<i>about</i>
10.	<i>trowd</i>	<i>ton</i>	<i>mop</i>	<i>about</i>	<i>boat</i>
11.	<i>thoup</i>	<i>ton</i>	<i>cow</i>	<i>put</i>	<i>blue</i>
12.	<i>loun</i>	<i>cow</i>	<i>ton</i>	<i>blue</i>	<i>put</i>
13.	<i>pleal</i>	<i>bed</i>	<i>meet</i>	<i>play</i>	<i>ton</i>
14.	<i>towd</i>	<i>boat</i>	<i>about</i>	<i>mop</i>	<i>ton</i>
15.	<i>nool</i>	<i>ton</i>	<i>boat</i>	<i>put</i>	<i>blue</i>
16.	<i>stoom</i>	<i>blue</i>	<i>ton</i>	<i>boat</i>	<i>put</i>
17.	<i>rouch</i>	<i>blue</i>	<i>cow</i>	<i>ton</i>	<i>put</i>
18.	<i>yook</i>	<i>blue</i>	<i>put</i>	<i>boat</i>	<i>ton</i>
19.	<i>pown</i>	<i>mop</i>	<i>boat</i>	<i>about</i>	<i>ton</i>
20.	<i>glead</i>	<i>ton</i>	<i>meet</i>	<i>bed</i>	<i>play</i>
21.	<i>plood</i>	<i>boat</i>	<i>blue</i>	<i>put</i>	<i>ton</i>
22.	<i>feak</i>	<i>play</i>	<i>meet</i>	<i>bet</i>	<i>ton</i>
23.	<i>doot</i>	<i>ton</i>	<i>put</i>	<i>blue</i>	<i>boat</i>
24.	<i>soud</i>	<i>ton</i>	<i>blue</i>	<i>put</i>	<i>cow</i>

REFERENCES

- Calfee, R. C., Venezky, R. L., & Chapman, R. S. *Pronunciation of synthetic words with predictable and unpredictable letter-sound correspondences*. Technical Report No. 71. Madison: Wisconsin Research and Development Center for Cognitive Learning, 1969.
- Johnson, D. D. *Factors related to the pronunciation of vowel clusters*. Technical Report No. 149. Madison: Wisconsin Research and Development Center for Cognitive Learning, 1970.
- Kučera, H., & Francis, N. W. *Computational analysis of present-day American English*. Providence, R. I.: Brown University Press, 1967.
- Thorndike, E. (Ed.) *Thorndike-Century Senior Dictionary*. New York: Appleton-Century-Crofts, 1941.
- Venezky, R. L. Theoretical and experimental bases for teaching reading. In A. Sebeok (Ed.), *Current trends in linguistics*. Vol. 12. The Hague: Mouton, 1974. Pp. 2058-2100.
- Venezky, R. L., Chapman, R. S., & Calfee, R. C. *The development of letter-sound generalizations from second through sixth grade*. Technical Report No. 231. Madison: Wisconsin Research and Development Center for Cognitive Learning, 1972.
- Venezky, R. L., & Johnson, D. D. Development of two letter-sound patterns in grades one through three. *Journal of Educational Psychology*, 1973, 64, 109-115.

“Correspondences”

Jane Greengold and Chris Tanz

“Correspondences” explores the correspondence between concrete poetry and conceptual art; between postal language and ordinary language; between sending/receiving letters and private theater. The article presents part of an actual correspondence between friends/poet-artists attending to the act and experience of corresponding, and making the language of correspondence visible.

“Correspondences” is an art work/visual essay that takes place at the juncture of conceptual art and concrete poetry. Visual art and poetry have been thought of in the recent past as distinct art forms. Now, by moving in opposite directions, they have come together. Conceptual art sought to “dematerialize” the art object,¹ and concrete² and visible³ poetry to objectify the poem. The art object grows more and more verbal, and the poem more and more visual. Matter converts to energy, energy to matter.

Concrete poetry is made of words used as visible objects, not as ideas. Conceptual art uses words, because the words carry ideas and ideas are the material of the art. “The concrete poet is concerned with making an object to be perceived rather than read; . . . the visual poem is a material object in space.”⁴ Conceptual artists aim toward the “progressive elimination of the object” and its replacement with ideas (expressed in language).⁵

Very little explicit exploration has been done of the convergence of these art forms. “Correspondences” is not a critical discussion of the phenomenon but was done with it in mind and bridges whatever gap remains between the two enterprises.⁶ Many of the pieces of correspondence are themselves concrete poems; the correspondence as a whole is a conceptual art work of which “correspondence” is both the form and the substance.

In the individual pieces we are exploring the correspondence

not only between concrete poetry and conceptual art but between postal language and ordinary language. We are looking at these languages and finding the poems visible in them. We are toying with the conventions of letter writing imposed by the post office and by general habit and expectation. Spoken language has changed; literary conventions have died; paint has edged off the two-dimensional surface of a rectangular canvas. But correspondents are still writing “sincerely” and “cordially” on the bottom lines of their letters, and putting their stamps on the upper-right corner of their envelopes.

We are exploring the drama of corresponding. Opening a letter involves suspense. It is private theater. When someone speaks to you, the message unfolds gradually. But inside the envelope the message is already fully formulated, whole.

We are testing limits of the postal system: will there be a successful passage between the mailing and the receipt of the letters? In some of the pieces the work consists of the relationship between the envelope and its contents; in others it is simply the envelope itself, or the relationship between several envelopes; and in still others it lies inside the envelope.

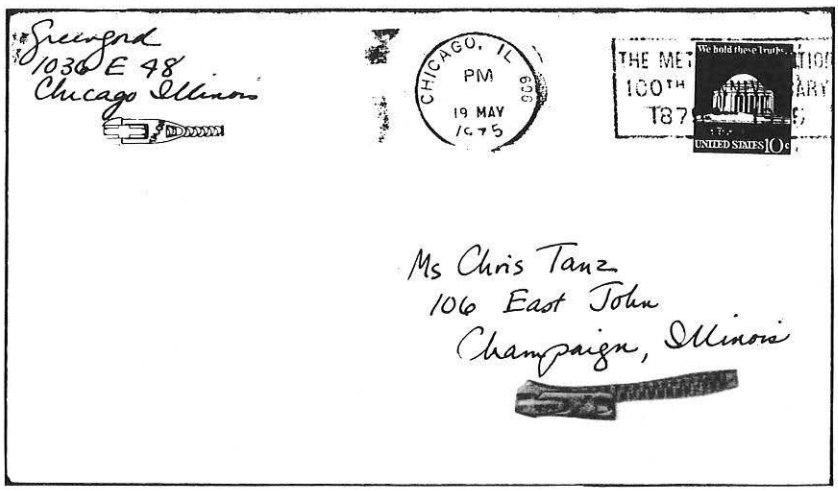
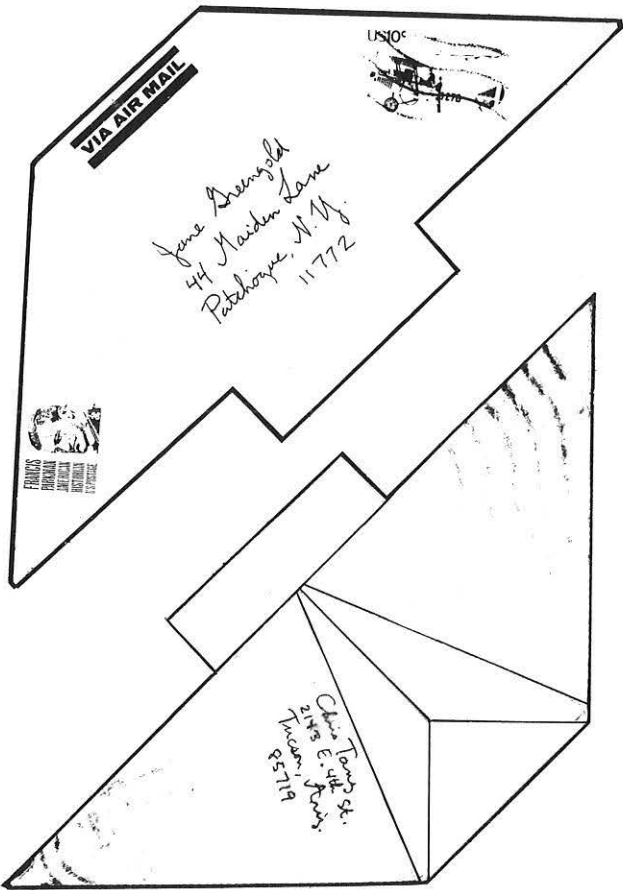
Some, who have classified themselves or been identified with conceptual art, have used the postal system as their vehicles: Ray Johnson's myriad mailings from the New York Correspondence School; On Kawara's "I got up" postcards;⁷ Douglas Huebler's *42nd Parallel*, which in his words "used an aspect of the United States Postal Service for a period of time to describe 3,000 miles of space" by sending letters to and retaining receipts from fourteen locations on the 42nd parallel;⁸ Nam June Paik's postal event in which he mailed pennies to many friends;⁹ and Craig Del Gaudio who tested the postal system by mailing theoretically unmailable objects and then exhibited evidence of their mailing and receipt.

But none of these works has been about the words and the language and the experience of corresponding. None has been about the poetry of the words and the events. "Correspondences" draws attention to the postal language we accept without thinking. It finds the poetry in the material of our mail—without having to take it out of context and move it into the rarefied atmosphere of a poetry manuscript. The poems take place where

they are in life and their publication only helps the reader to see that the poems are there—in his or her mailbox. To paraphrase John Cage, a leading conceptualist of music/theater: “Theater takes place all the time wherever one is and art simply facilitates persuading one this is the case.”¹⁰ Letter writing itself was once an art form—“Correspondences” finds the art left in the form, and makes it visible.

The illustrated pieces represent only a small percentage of the correspondence that has passed between us to date.

1. The phrase “dematerialize” comes from critical writing about the “conceptual,” “idea,” “process,” “anti-form” art movements. See especially Lucy Lippard, *Six Years, The Dematerialization of the Art Object from 1966 to 1972*. New York: Praeger Publishers, 1973; and Ursula Meyer, *Conceptual Art*. New York: E. P. Dutton, 1972.
2. A primary anthology of concrete poetry was originally published by the *Chicago Review* in 1967, edited by Eugene Wildman, and reissued by Swallow Press, Chicago, 1970. Also see, *Concrete Poetry: A World View*, edited by Mary Ellen Solt, Bloomington: Indiana University Press, 1970; and *Imaged Words & Worded Images*, edited by Richard Kostelanetz, New York: Outerbridge & Dienstfrey, 1970.
3. For a discussion of visible poetry, or Poesia visiva, see *Chicago Review*, vol. 26, no. 3, 1974; and *Italian Visual Poetry 1912-1972*, edited Luigi Ballerini, Finch College Museum, 1973.
4. Solt, p. 7 & 60.
5. Meyer, p. xii.
6. The exhibition Language and Structure in North America (November 1975) presented by the Kensington Arts Association, Toronto, and self-styled “The first large definitive survey of North American Language Art,” brought together works previously described as concrete poetry (or word-imagery as Richard Kostelanetz, the curator of the show prefers) and conceptual art, under the umbrella “Language Art.” This show and its catalogue (published by the Kensington Arts Association, Toronto, Ontario, Canada, 1975) do bring the two arts together and reveal their striking resemblances, but still without critical discussion of the process of the convergence.
7. See *Artforum*, VI (October 1967), 50-55.
8. Lippard, p. 49; Meyer, p. 147.
9. Lippard, p. 61.
10. John Cage, *Silence*. Cambridge: M.I.T. Press, 1961, p. 174.



GREENGOLD
1036 E. 48
Chicago Ill
60615



SURFACE MAIL

Ms Chris Tanz
106 East John
Champaign, Ill
61820



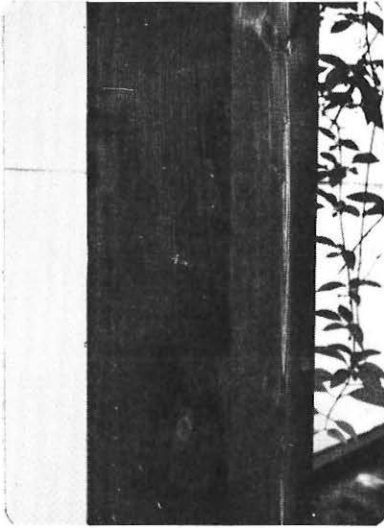
USIO 200 Years of Postal Service

Jane Greengold
44 Maiden Lane
Patchogue, New York 11772

FRANCIS PARKMAN
AMERICAN
HISTORIAN
U.S. POSTAGE

AIR MAIL

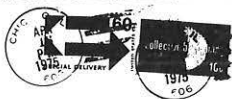
A rectangular envelope with a postage stamp and a photograph. The stamp features a biplane and a portrait of Francis Parkman, with the text "USIO 200 Years of Postal Service" and "FRANCIS PARKMAN AMERICAN HISTORIAN U.S. POSTAGE". The photograph shows a dog's head. The words "AIR MAIL" are printed at the bottom.



SPECIAL DELIVERY

Cesarean section: the operation by which the fetus is taken out of the uterus by an incision through the parietes of the abdomen and uterus, when the obstacles to delivery are so great as to leave no alternative.

Stevens
1036 East 48th St.
Chicago, Illinois 60615



SPECIAL DELIVERY

Ms. Chris Tanz
106 East John Street
Champaign, Illinois 31820

**SELECTIVE SERVICE SYSTEM
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THIS IS TO CERTIFY THAT IN ACCORDANCE WITH THE SELECTIVE SERVICE LAW

KENNETH VICTOR STEVENS

SELECTIVE SERVICE NO. 30 F 67 103 1123

RESIDENT REGISTRATION
Ontario (Wayne) New York
April 8, 1964 Rochester, NY

THIS WAS REGISTERED FOR THE 19 April 60

LOCAL BOARD NO. 83
2ND FLOOR, ROOM 4
COUNTY OFFICE BUILDING
LYONS, NEW YORK

REGISTRATION DATE
REGIONS
CLASS
107

ANY PERSON WHOSE STATUS OR CLASSIFICATION IS CHANGED OR WHOSE STATUS IS CHANGED FROM UNCLASSIFIED TO CLASSIFIED OR WHOSE STATUS IS CHANGED FROM UNCLASSIFIED TO UNCLASSIFIED SHALL BE RECLASSIFIED AS A DEFERRED FOR POSTAL SERVICE PURPOSES.

ALL DEFERRED FOR POSTAL SERVICE PURPOSES SHALL BE RECLASSIFIED AS UNCLASSIFIED AT THE END OF THE DEFERRED PERIOD UNLESS THE DEFERRED FOR POSTAL SERVICE PURPOSES IS EXTENDED BY THE LOCAL BOARD OR THE DEFERRED FOR POSTAL SERVICE PURPOSES IS EXTENDED BY THE DEFERRED FOR POSTAL SERVICE PURPOSES.

Tringard
1036 E 48
Chic Ill 60615

RECEIVED
MAY 13 1964

REGISTERED
860730

DAWREN
5-22-64
MS
Ms. Chris Tanz
106 East John
Champaign, Ill
61820

FINAL NOTICE
MAY 27 1975

(3)

Correspondence

To the Editor:

I found your excellent "A Manifesto for Visible Language (X, 1, 1976) very concordant with my own ideas about writing, language, and speech. I was especially pleased with your statement about how recent linguistic science has downgraded the importance of written forms of language and minimized the effects of literacy on language usage, just when research in cognitive psychology seems to be turning up good evidence for major differences in cognitive style between fully literate and semi-literate populations using the "same" spoken language.

I hope you can send off reprints of your paper to linguists, psycholinguists, and others—many of whom remain comfortably ignorant in their Saussurian convictions about the absolute primacy of spoken language. Indeed, I think a very interesting case could be made that some of the difficulties we have gotten into in our educational system over the past half-century stem from disenchantment with or reaction against the study of the Classical written tradition (with its necessary built-in "elitist" assumptions, as they would now be termed in some circles) and the fact that just about this time—the mid-1920's—scientific linguistics seemed to be coming to the support of the "oralists," represented in this country by Leonard Bloomfield. The precipitous jettisoning of what remained of the Western *paideia* led eventually to the position that in language usage anything goes as long as it is the genuine spoken vernacular or argot, and that maybe reading isn't very useful except for a handful of specialists.

What those who sought to abandon the visible language tradition did not realize was that with the rise of civilizations—starting about 5,000 years ago, and for a long time before that in some parts of the world—language and other forms of coded understanding of the world had been embodied in visible media as well as in oral forms with their well-known instability. Obviously, in the history of civilization there have been numerous instances of the positive values of vernaculars, leading to the creation of new literary traditions and philosophical or scientific informa-

tion vehicles, but these vernaculars in turn become new *paideias*, as loyal to the written record as their predecessors. This happened to Latin when it replaced Greek in some areas, with Aramaic, Arabic, and eventually languages like English, French, Italian, German, etc. (or, in the Far East, to Japanese when it began to be substituted for written Classical Chinese).

Speech suffices for the small-scale, face-to-face primitive societies and for much of the everyday life even in great civilizations, but for long-lived and sophisticated civilizational systems, writing seems to have become essential. The New World civilizations with either very cumbersome scripts (such as Mayan) or none at all (as in Peru) or civilizations in the non-Muslim portions of West Africa disappeared more completely as much, perhaps, because of their virtual non-literate character as because of their inferior military technology.

Educators and psychologists seem to have absorbed the doctrines of the linguists who followed Bloomfield (in this country) and more remotely, Ferdinand Saussure, et al., abroad, and applied to the educational system the notion that a formalized knowledge of the high literary tradition—the Western *paideia* which had included Latin, and since the Renaissance, also Greek—was superfluous. In only a few decades there were professional educators telling us that it was not really important to teach children to read and write, and acquiescing in production of high school graduates who were functionally illiterate—not only in reading and writing in the strict sense, but in mathematics, map-reading, and so on.

Not all of the blame for this rests with linguistic doctrines, to be sure. But I suspect that less of the blame really lies with television (the commonest scapegoat) or with display advertising, etc. If literacy had not been allowed to decline in the past four or five decades, these visual media should have enhanced rather than detracted from it.

I did not mean to get so carried away by the matter of declining literacy and the role of linguistic science in developing the intellectual basis for not worrying about it!

Gordon W. Hewes, Professor of Anthropology
University of Colorado, Boulder

To the Editor:

I found your Manifesto very stimulating, and am pleased to be quoted in it. There are various traditionalist positions you still hold, however, which seem to me to block the possibility of a total breakthrough.

“Meaning is the thread that holds all of our communication effort together. . . .” Here Birdwhistell’s great finding gives perspective as he shows that the maintainance of inter-personal, ongoing contact—the continuous checking and recalibration process that maintains the communication system itself—fills ninety percent of any communication channel. Talk—linguaging—is social, a shared inter-act; it deals with gender, age, culture, what is happening, what needs to be done, the rules governing the inter-human synchrony, etc. On top of all this redundancy rides the *meaning*. As you know, I have been able to make good classifications of communication systems by looking at this, their major characteristic: the principal zones of redundancy. *Language and Society* is about to publish a piece where speaking is treated in the way I’ve treated singing and dancing. The result is a developmental view of para-linguaging that is analogous to the evolutionary pictures of the other expressive acts.

What you have left out of your piece is the culture idea—the notion of the learned behavior pattern, co-transmitted generationally on all the channels. Here the brain, its structure and possibilities, may provide some of the motive power, but only one part of it. The linguaging, singing, dancing, art of all the world’s cultures shows that all are equally expressive; all evidence the same order of brain and manipulative capacity. The difference between them depends on the outlets which the cultural, technological, and societal traditions provide. The most striking event we know about is the progress of human culture during the last, say, fifty thousand years—the increase of productivity, of technology, of population, of size of polity, of reach, of capacity of information storage and speed of information transmission. All this is an inter-actional achievement (where single brains function) but where the final answer lies in the successful enlistment of ever larger groups of people in ever more costly enterprizes (getting to the moon). One man sitting in a room can think of getting there and write the formulas but he depends on an accumulation by his culture for his ability to put the problem together and on his entire society for the implementation. Without each of these socio-cultural webs, the outcome of his logic would be as empty of result as is Zen.

“Language is of a piece with human development”—agreed, but then you discuss only the neuro-psychological base (the special physical capacities of the hominids and the like) while man’s most extraordinary devel-

opment is in the growth of culture. Here is where you could, I think, find the history of breakthrough in the development of visible techniques (of course, this is most vivid in the recent spiraling growth of mathematics, physics, computers, etc.) paralleling the evolution of culture. Cultural evolution, which was put out of fashion by Boas and others, is now seen to be linked to the spiraling climb of productive capacity, tied to orderly, cyclic inputs from organizational and integrative aspects of the cultural system. The human capacities are there all through—thinking, interpersonal support, creativity, the neuro-physiological equipment, etc.—but there has been steady build-up. I think you have put your finger on the spot where the build-up in communication systems has been most spectacular and I think you have sketched the framework in an extremely stimulating way, but without the context of cultural evolution you leave the story empty of meaning—special pleading for attention to another aspect of an infinite subject matter.

Alan Lomax, Director, Choreometrics Project
Department of Anthropology
Columbia University in the City of New York

To the Editor:

Those of your readers who are linguists as well as students of graphic communication will surely take exception to Philip Gaskell's perpetuation of a popular misnomer in his prescription in his Glossary ("A Nomenclature for the Letterforms of Roman Type"; X, 1, p. 43) of the phonetician's term "diphthong" for two particular pairs of letter-symbols that are historically compound characters. The application of the phonetician's term to letterforms is not only inappropriate but actually misleading: in general, the European languages that use æ, œ, as letters of their alphabets represent simple vowels with them (the use of æ in Icelandic is an exception). It would be inconsistent to use æ, œ, to spell the diphthong-vowels in printing Latin, as no compound characters are available for the two other diphthongs in that language (au, eu).

The word "ligature" is a useful term for *any* combination of letters on a single piece of type (or for simultaneous exposure in a film matrix) used as an element in building up a word. (This definition could no doubt be improved upon: I am trying to exclude Gaskell's whole-word "contraction"—&; also @—and what he calls "logotypes.") I would propose three categories.

1. Orthographic ligatures—compound characters forming part of a language's standard orthography: æ, œ; ß in German; ij in Dutch; ll in Catalan. It does not matter that ij and ll do not look like ligatures: they are single pieces of type. As it happens, the Dutch also consider ij a single letter, but that is not relevant here: Czech ch, Danish aa, Spanish rr, Welsh th, are treated as single alphabetic characters by users of those languages,¹ but they are normally two separate sorts for the typesetter. The importance of keeping phonetic terminology out of printing terminology is driven home by the Catalan example: a linguist and a typesetter would have opposite opinions over which of the digraphs ll and ll was single and which double!

The elements in an orthographic ligature must be coördinate. Where one is subordinated to the other we have not a ligature but an accented letter (ã from a + o, ç from c + z, ñ from n + n).

2. Typographic ligatures—characters combined in response to the exigencies of composition with single pieces of type (and to some extent preserved by tradition, rather grudgingly, in slug- and photocomposition): in addition to the familiar ff, ffi, ffl, fi, fl, some hot-metal Monotype italics need gg, Baskerville and Garamond italic also gy, and Garamond italic also zy (note that here again the letters do not touch); a whole host of combinations are needed with the long s; Scandinavian languages need fj, gj; Gaelic needs fh. In this category of ligatures should probably be placed Linotype's special two-character matrices (Mergenthaler called them "logotypes"), some of which serve to overcome one of the drawbacks of slug-composition by providing an overhanging f, the others of which combine letters for just the opposite reason to that of the traditional ligatures—not because the letters would otherwise collide, but because they would otherwise be too far apart.

3. Calligraphic ligatures—characters linked for decoration only: notably ct, st, Qu; Germans like an ft; Monotype Garamond italic has a glorious proliferation of double characters reproducing sorts from the days before the typesetter had forgotten his scribal past:

Ex Qu
as et et fr is ll nt sp st ta tt us

German typesetters' ch, ck, probably belong here, the remnants of a much longer inventory of compound characters used in setting black-letter (Fraktur or Schwabacher—which had no italic or small capital

alphabets to fill up their type-racks and matrix-cases). It is perhaps worth noting that these two ligatures not only represent a single sound each but also do genuinely simplify the typesetter's or keyboard-operator's task, as they need to be used frequently, while except in these digraphs *c* is very rare in German orthography. (This argument is, however, never accepted when it is suggested that ligatures should be made available for pairs or groups of letters just because they occur frequently next to each other: typesetters always seem to prefer smaller typeracks or keyboards, and the blocks of frequently combined letters that Stanhope called "logotypes" were a failure.) The old German handwriting, that died out with black-letter, had a *c* of a different shape when followed by *h* or *k* from the one used elsewhere.

Strictly speaking, I suppose that any defined categories of ligatures are only points on a continuum. The *raison d'être* for the Catalan *ll* is largely "typographic." The German *ch*, *ck*, are scarcely "decorative"—indeed, the fact that they are ligatures at all is normally imperceptible to the untrained eye; but nor are they considered essential for setting German correctly. For that matter, the distinction between a ligature and a single letter is not altogether clear-cut either. Your contributor Earl Herrick ("Taxonomy"; VIII, 1, p. 29) proposed the term "generic ligature" for the situation where two characters are completely fused into one, giving *w* as an example (but also *æ* in Danish); others would be the Greek lower-case omega and probably the Cyrillic Ю, while in the Serbian compound letters Љ, Њ, the separate components are phonetically recognizable.

It will be noticed that the term "ligature" has little meaning outside metal typesetting: in photocomposition—as in handwriting—it should be possible to make any suitably shaped characters touch or overlap (and indeed to design the characters so as to facilitate this), and pairs of characters can collide inadvertently without doing more than æsthetic harm.²

Martyn Hitchcock

The University of Georgia Press, Athens

1. As demonstrated by such usages (not all of which prevail in each case) as: when the digraph occurs at the beginning of a capitalized word, both letters are made capitals; the digraph has its own name; the digraph has its own place in the alphabet.

2. Editor's note: Ligatures in photocomposition are considered in Joseph S. Scorsone, "Ligature Design for Contemporary Technology," *Visible Language*, IV, 1, 39-50.

A reply from Philip Gaskell

“Diphthong” is British printers’ usage for the æ and œ sorts (and their cap forms); but it would probably have been better to include them under the term “ligature” in my vocabulary.

Although “ligature” is indeed a useful term for *any* combination of characters, my nomenclature was devised for the specific purpose of describing the letter-forms of roman type; for which purpose Mr. Hitchcock’s three categories of ligature—though admirable in themselves—seem to me to be unnecessary.

Trinity College, Cambridge, England

Statement Required by the Act of October 23, 1962: Section 4369, Title 39, United States Code Showing the Ownership, Management and Circulation of

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Known bondholders, mortgagees, and other security holders owning or holding one percent or more of total amount of bonds, mortgages or other securities: None.

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Single issue nearest to filing date: (A) Total No. copies printed: 1,254; (B1) Paid circulation through dealers and carriers, street vendors and counter sales: 0; (B2) Mail subscriptions: 1,052; (C) Total paid circulation: 1,052; (D) Free distribution (including samples) by mail, carrier, or other means: 54; (E) Total distribution: 1,106; (F) Office use, left over, unaccounted, spoiled after printing: 148; (G) Total: 1,254.

I certify that the statements made by me above are correct and complete.

(signed) Merald E. Wrolstad
Publisher

Résumé des Articles

Traduction: Fernand Baudin

L'épître byzantine en tant qu'icône de l'âme
par A. R. Littlewood

Les conceptions épistolographiques des byzantins sont le prolongement naturel des conceptions de l'antique. C'est surtout vrai pour celles de la Nouvelle Sophistique qui les adaptait aux besoins de l'ontologie chrétienne. Les lettres qui nous sont parvenues n'ont pas toutes l'information pour objet. Ce rôle incombait plutôt au courrier ou "lettre vivante". Elles servaient ordinairement à remplir des obligations sociales ou amicales et constituaient des oeuvres d'art épistolaire fort appréciées. Tantôt la lettre se voulait une icône de l'âme, prétendait créer l'illusion de la présence de l'épistolier et devait porter les marques de sa personnalité. Tantôt elle devait être originale dans les strictes limites imposées par l'imitation de modèles antiques. La conformité à des canons stylistiques très divers favorisait l'obscurité et l'évocation de sujets que n'appelaient pas normalement le contexte de la lettre.

Statements 76 *par Jack Weiss*

Pour célébrer le Bicentenaire, la Society of Typographic Arts de Chicago a organisé une exposition: "Statements 76", destinée à ré-animer les mots qui ont animé la Révolution Américaine. Des citations empruntées à cette époque historique étaient l'élément prédominant que l'on retrouvait dans les matériaux les plus disparates: depuis les sculptures jusqu'à un couvre-lit.

Cent mots élémentaires essentiels *par Wayne Otto et Cathy Stallard*

Des listes de mots élémentaires (sight word lists) étaient en usage dès avant l'ère chrétienne. Elles ont souvent changé de formes. Elles sont actuellement très nombreuses et d'un usage très répandu, très diversifié. Elles diffèrent par leurs sources, par les buts, par les publics et par les critères d'inclusion. En dépit de ces différences on est généralement d'accord pour y voir les mots les plus fondamentaux d'une langue et pour reconnaître leur caractère extrêmement populaire. L'article a pour objet d'identifier les cent mots élémentaires figurant dans seize listes importantes.

La poésie comme moyen de structurer le milieu social *par Mark E. Gory*

Depuis l'origine, le mouvement de la poésie concrète considère le poète comme un membre dans une équipe de concepteurs qui a pour objet la réforme esthétique de la société. Pour participer au travail commun, le poète est tenu d'étudier des matières qui ne sont pas couramment associées à l'idée de poésie: architecture, graphisme publicitaire, typographie. En revanche, il apportait aux praticiens des autres disciplines des solutions à leurs problèmes d'expression verbale. L'objet de ce genre de poésie est de divertir, mais il dépasse ce stade purement ludique, pour devenir une initiation à la sensibilité esthétique, particulièrement dans le domaine de l'imprimé, de l'estampe et du son. L'article passe en revue les relations entre la poésie concrète, l'esthétique industrielle, et les arts plastiques au cours des quinze dernières années et montre bien la nature du travail d'équipe qui sera nécessaire si les poètes veulent jouer un rôle actif dans la société actuelle.

"Correspondences" *par Jane Greenfold et Chris Tanz*

Les auteurs étudient les correspondances entre la poésie concrète et l'art conceptuel, entre le langage épistolaire et le langage ordinaire, entre l'échange de courrier et le théâtre intime. L'article reproduit des fragments d'une correspondance entre amis/poètes-artistes avertis, attentifs et s'efforçant délibérément de visualiser le langage épistolaire.

Modèles pour prédire la prononciation que les lecteurs adultes donneront aux diagrammes de voyelles dans des mots peu familiers
par Dale D. Johnson et Richard L. Venezky

L'étude portait sur les relations possibles, dans la prononciation de l'anglais écrit, entre la fréquence des caractères et symboles, et le contexte dans lequel ils figurent. Plus précisément, la question était de savoir si oui ou non les lecteurs adultes sont davantage affectés par la récurrence d'un même signe que par sa position dans un graphème. Deux thèses opposées concernant quatre diagrammes de voyelles ont été étudiées. On a formé six mots à partir de ces diagrammes en tenant compte des positions graphiques aussi bien

que grammaticales. Les sujets étaient 51 lycéens. Ils devaient lire ces mots et noter la prononciation qu'ils donnaient aux diagrammes soulignés. A partir de là, trois modèles ont été constitués pour vérifier les hypothèses et pour prédire la prononciation des diagrammes. Modèle 1: une consonne finale. Modèle 2: une variante lettre-symbole. Modèle 3: un invariant de la réaction principale. Plusieurs méthodes d'analyses ont été appliquées aux données. Le modèle 1, consonne finale, est apparu supérieur aux deux autres; mais les résultats ont révélé la présence d'autres facteurs qui n'ont pas encore été évalués.

Kurzfassung der Beiträge

Übersetzung: Dirk Wendt

Eine "Ikone der Seele": der Byzantinische Brief von *A. R. Littlewood*

Byzantinische epistolographische Kategorien sind eine natürliche Entwicklung aus der klassischen Antike, besonders aus der zweiten sophistischen Periode, die den Erfordernissen der christlichen Ontologie angepaßt wurden. Die erhalten gebliebenen Briefe waren nicht immer dazu bestimmt, Informationen zu übermitteln, wofür oft der Bote oder "lebende Brief" zuständig war, sondern gewöhnlich dazu, die Verpflichtungen und Bedürfnisse der Freundschaft zu erfüllen und als hochgepriesene literarische Kunstwerke eigener Art zu dienen. In einem Falle wurde der Brief als "Ikone der Seele" angesehen, welche die Illusion der Anwesenheit des Schreibens hervorrief und daher besondere Zeichen seiner individuellen Eigenart erforderte. In einem anderen war es erforderlich, neuartig zu sein innerhalb des strengen Rahmens, der durch die Nachahmung des klassischen Modells gesetzt war; und da man versuchte, an sich wandelnden stilistischen Regeln festzuhalten, kam es zur Entwicklung von Obsküritäten und zum Einschluß von Themen, die gewöhnlich nicht mit Briefen verbunden sind.

Statements 76 von *Jack Weiss*

Zu Ehren der amerikanischen 200-Jahr-Feier organisierte die Society of Typographic Arts in Chicago die Ausstellung Statements 76, "um die Worte, welche die amerikanische Revolution begeisterten, wieder ins Leben zu rufen". Entsprechende Zitate aus dieser historischen Zeit stellen das beherrschende Element in einer breiten Vielfalt von Medien dar—von der Bildhauerei bis zur Flickendecke.

Einhundert wichtige Grundwörter-Listen von *Wayne Otto und Cathy Stallard*

Grundwörter—Listen (sight word lists) sind seit dem Jahre 20 vor Christus in Gebrauch und haben oft ihre Form verändert. Heutige Grundwörter—Listen sind zahlreich und weitverbreitet und vielfältig im Gebrauch. Sie unterscheiden sich je nach Quelle, beabsichtigtem Zweck und/oder Zielgruppe, und Kriterien zum Einschluß besonderer Wörter. Trotz dieser Unterschiede herrscht große Einmütigkeit darüber, daß sie die meisten Grundwörter unserer Sprache wiedergeben, und daß unter ihnen ein hohes Maß an Gemeinsamkeit besteht. Dieser Bericht identifiziert diejenigen einhundert Grundwörter, welche in sechzehn größeren Grundwörter—Listen auftraten.

Dichtung als Strukturmitte des Gesellschaftlichen Milieus von *Mark E. Cory*

Von Anfang an hat die Konkrete Poesie den Dichter als bewußten Teilnehmer an einem Team von Gestaltern aufgefaßt, die sich der ästhetischen Wiedergabe der Gesellschaft widmen. Um teilzunehmen, muß sich der Dichter mit Gebieten beschäftigen, die normalerweise nicht mit Dichtkunst assoziiert sind, beispielsweise Architektur, Anzeigengrafik, Typographie. Sein eigener Beitrag wiederum muß Handwerkern anderer Gebiete Modelle für die Lösung ihrer eigenen verbalen Probleme liefern. Das Ziel solcher Dichtung ist auch Unterhaltung, geht aber über die Unmittelbarkeit dieser Spielerei hinaus, um ästhetische Sensibilität zu wecken, besonders für die Welt der Buchstaben, des Druckes, des Klanges. Ein Überblick über die Wechselbeziehungen zwischen Konkreter Poesie, industrieller Gestaltung und Bildhauerei in den letzten fünfzehn Jahren zeigt die Art von Team-

Arbeit, die erforderlich ist, wenn Dichter in unserer gegenwärtigen Gesellschaft aktiv mitreden wollen.

“Correspondences” von *Jane Greengold & Chris Tanz*

“Correspondences” untersucht die Entsprechungen zwischen konkreter Poesie und begrifflicher Kunst, zwischen Briefsprache und Umgangssprache, zwischen dem Abschicken und Empfangen von Briefen und privatem Theater. Der Aufsatz stellt einen Teil eines tatsächlichen Schriftwechsels zwischen Freunden/Dichtkünstlern dar, die der Handlung und Erfahrung des Korrespondierens beiwohnten und die Sprache des Schriftwechsels sichtbar machen.

Modelle zur Vorhersage der Aussprache von Doppelvokalen in unbekanntem Wörtern bei Erwachsenen von *Dale D. Johnson und Richard L. Venezky*

Diese Untersuchung erforscht Zusammenhänge zwischen Buchstaben und Zeichenhäufigkeiten und Kontexteffekten bei der Aussprache des geschriebenen Englisch. Insbesondere war es die Hauptfrage, ob die bevorzugte Aussprache von Vokalhäufungen mehr durch die Häufigkeit des Auftretens oder mehr durch die benachbarten Grapheme beeinflusst wurde. Für vier Doppelvokal-Schreibungen wurden zwei gegensätzliche Hypothesen geprüft. Für jede Vokalhäufung wurden sechs synthetische Wörter mit entsprechenden Kontext- und Wortstellungsbedingungen konstruiert. Versuchspersonen waren 51 Studienanfänger, deren Aufgabe es war, die synthetischen Wörter zu lesen und zu beachten, wie sie die unterstrichenen Vokalverbindungen aussprachen. Es wurden drei Modelle zur Herleitung der Hypothesen und zur Vorhersage der Reaktionen auf jede Vokalverbindung aufgestellt. Diese Modelle waren ein Endkonsonanten-Modell, ein variables Buchstaben-Zeichen-Modell, und ein invariables Haupt-Reaktions-Modell. Verschiedene Techniken der Datenanalyse wurden benutzt. Das Endkonsonanten-Modell war den beiden anderen Modellen überlegen, aber es wurde auch gefunden, daß auf das Ergebnis noch andere Faktoren einwirkten, die noch nicht erfaßt waren.

Resumen de los Arículos

Traducción: Ana Fisch

Un “ícono del alma”: la carta bizantina
por *A. R. Littlewood*

Los conceptos bizantinos epistolográficos son un desarrollo de los conceptos de clasicismo antiguo y especialmente del Segundo Sofístico que fueron adaptados para acomodar los requerimientos de ontología cristiana. Los caracteres que sobrevivieron tuvieron no siempre como propósito el comunicar información por la cual el correo o “letra viviente” era a menudo responsable pero frecuentemente para cumplir con las obligaciones y genuinas necesidades de amistad y para servir propiamente como cotizados trozos de arte literario. En un caso se consideró a la carta como “ícono del alma” creando una ilusión de la presencia del escritor y por lo tanto demandando señales de sus características personales. En el otro se requirió ser original dentro de un estricto marco impuesto por la imitación de modelos antiguos; y por adherencia a cánones estilísticos cambiantes vino a favorecer obscuridad y a abrazar un tema no asociado comunmente con la carta.

Declaraciones 76 por *Jack Weiss*

Para honrar el bicentenario americano la Sociedad de Artes Tipográficas en Chicago organizó la exposición *Declaraciones 76* “para revitalizar las palabras que inspiraron la Revolución Americana”. Citas apropiadas a ese período histórico fueron el elemento dominante en la amplia variedad de medios de expresión desde escultura a acolchados de retazos.

Cien palabras esenciales a primera vista
por *Wayne Otto y Cathy Stallard*

Listas de palabras a primera vista se han venido usando desde alrededor del siglo 20 antes de cristo han cambiado muchas veces. Hoy las listas de palabras a primera vista son numerosas y se utilizan amplia y variadamente. Ellas difieren con respecto a la fuente de origen y/o al público y al criterio de incluir palabras específicas. A pesar de estas diferencias se está de acuerdo que reflejan las palabras más básicas en nuestro lenguaje y

que hay un alto grado en común entre ellas. Este trabajo identifica cien palabras a primera vista que aparecen en las dieciséis listas principales de palabras primera vista.

Poesía como medio para estructurar el ambiente social *por Mark E. Cory*

Desde los comienzos, el movimiento de poesía concreta ha considerado al poeta como un participante consciente en un grupo de diseñadores dedicados a la reconstrucción estética de la sociedad. Para participar, el poeta tenía que estudiar materias no asociadas normalmente con la poesía, por ejemplo, arquitectura, gráfica publicitaria y tipografía. A su vez, su contribución ha sido de proveer a artesanos en otros campos con modelos para la solución de sus propios problemas verbales. La meta de una poesía tal contiene entreteneamiento pero va más allá de lo inmediato de esta actividad-juego, para incluir un despertar de sensibilidad estética, especialmente, al mundo de caracteres tipográficos, imprenta y sonido. Una revisión de las interrelaciones entre poesía concreta, diseño industrial y las artes plásticas en los últimos quince años ilustra el tipo de grupo que hace falta si los poetas van a tomar parte activa y hacerse oír en nuestra sociedad contemporánea.

Correspondencias *por Jane Greengold y Chris Tanz*

'Correspondencias' explora la correspondencia entre la poesía concreta y el arte conceptual; entre el lenguaje postal y el ordinario; entre el enviar/recibir cartas y el teatro privado. El artículo presenta una parte de la misma correspondencia entre amigos/poetas-artistas que asisten al acto y a la experiencia de corresponderse haciendo visible el lenguaje de la correspondencia.

Modelos para predecir de que manera los adultos articulan deletreos digráficos de vocales en palabras desconocidas *por Dale D. Johnson y Richard L. Venezky*.

En este estudio se explora las relaciones entre las frecuencias de caracter-señal y los efectos de posición contextual en la pronunciación del inglés escrito. Específicamente, la cuestión principal que se trata es si las preferencias de lectores adultos en la pronunciación de grupos de vocales se ve más afectada por la frecuencia en que ocurren que por el medio

ambiente grafémico. Dos hipótesis opuestas se ponen a prueba con referencia a deletreos digráficos de vocales. Seis palabras sintéticas se construyeron por cada grupo de vocales de acuerdo a limitaciones de contexto y de posición de palabras. Los sujetos a prueba fueron 51 estudiantes universitarios cuya tarea era de leer palabras sintéticas y notar como pronunciaban los grupos de vocales subrayadas. Se construyeron tres modelos para valorar las hipótesis y predecir reacciones para cada grupo de vocales. Los modelos fueron un modelo final de consonante, un modelo caracter-señal y un modelo invariante de reacción principal. Varias técnicas de análisis de datos se usaron. El modelo final de consonante fue superior a los otros dos modelos, pero se encontró que otros factores aún no evaluados estaban presentes en los resultados.

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Mark Cory is associate professor at the University of Nebraska (Lincoln, NE 68588), where he teaches 20th-century Germany literature. Dr. Cory's research area is post-modern literature, especially experimental forms of drama and poetry.

Jane Greengold (728 Carroll Street, Brooklyn, NY 11215) is an artist interested in using ideas as materials for art. She is currently working on a major art-project centered on the idea of time, incorporating verbal and visual materials.

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