Winter 1984

Printing as Industry and Craft: Victor Hammer's Example

John Dreyfus

Follow this and additional works at: https://uknowledge.uky.edu/kentucky-review
Part of the Arts and Humanities Commons
Click here to let us know how access to this document benefits you.

Recommended Citation
Available at: https://uknowledge.uky.edu/kentucky-review/vol5/iss2/2

This Article is brought to you for free and open access by the University of Kentucky Libraries at UKnowledge. It has been accepted for inclusion in The Kentucky Review by an authorized editor of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.
Printing as Industry and Craft: Victor Hammer's Example*

John Dreyfus

I met Victor and Carolyn Hammer when they came up to Cambridge to visit the University Press in the mid-nineteen fifties. At the time I was working there full-time as Assistant Printer; my job was mainly to do with the typographical design of books and jobbing printing produced at the press. I was excited to have a chance to meet a man, then in his seventies, who was to me a legendary figure. I was particularly pleased when Victor and Carolyn agreed to come back to my house in Cambridge so that we could talk at greater length. After that visit I was given a fine cross section of his printed work, including in 1957 an inscribed copy of his Four Dialogues.

When Carolyn invited me a few months ago to take part in this seminar, it occurred to me that it was time for a second reading of the Dialogues and of several other pieces in my library written by or about Victor Hammer and his work. Reading them again brought back to my mind that meeting in England. As I have not kept a diary since childhood, I have to rely entirely on my rather erratic memory, but Victor Hammer was not a man you forget. There was about him an authentic air. I have chosen that word carefully, and I will need to explain why. You probably understand it (as I mean you to understand it) in the dictionary sense of a person of authority, a person entitled to obedience and respect. But, more than that, you will find that the word authentic is of Greek origin and that its literal meaning is "one who does a thing himself." And that is the characteristic from which Victor Hammer developed an authoritative and commanding presence. Not only did he do things for himself with great confidence and skill, but he took care in deciding what he regarded as being the right way of doing things. And that is why he could command

*These remarks were made at the Fifth Seminar in Graphic Design at The King Library Press, October 1981, as part of a program anticipating the 1982 centennial of Victor Hammer's birth.
such deep respect.

I remember being impressed too by his remarkably fine complexion, which, in elderly men, may indicate a tranquil spirit and good health. Here was a man who appeared to be at peace with himself and with his Maker. When you encounter such a man, even if you cannot agree with all his views, you are bound to respect them for being entirely valid in guiding his actions, whether they be creative, social, or political.

When I met him he knew where he stood well enough to speak with considerable self-assurance. He expressed his views with firmness and some degree of fervor, but without any rancor towards those who took a different view. When we talked about the way I then worked (within a large industrial printing plant), it became quite clear to me that he found it a little difficult to comprehend how I could ever come to terms with such an environment. To him there could never be any real satisfaction in designing printed matter to be set entirely in types designed by others, or in producing layouts for work that would be carried out by men over whom I myself had no direct control while the work was actually being composed and printed.

At least I had been prepared for a reaction of this kind. I knew that Victor Hammer had met Eric Gill during an earlier visit to England. In many ways the two men had a great deal in common. Both were gifted artists, both were talented engravers, and both devoted a great part of their lives to typography and letter design; they also held similar views of the need for a craftsman to take responsibility for what he produced, and not to be a slave. But what shocked Hammer was to discover that Gill had no interest in cutting his own punches after drawing a new typeface and that Gill was in fact quite willing to take into account the limitations of a pantographic punchcutting machine, as well as the relative ignorance of the people who operated those machines. Gill in fact designed some of his typefaces with a good knowledge of these manufacturing limitations and was content to accept them. Victor Hammer was not.

When Victor and Carolyn left Cambridge, I had been injected with a few healthy self-doubts, many of which have remained with me to this day. Let me explain why I use the word healthy in relation to self-doubt. It may astonish you to know precisely how the word healthy is defined by a body whose whole purpose it is to concern itself with health — namely, the World Health
Organization. That body defines a healthy man or woman as “one that seeks and solves problems.” Now if you accept that definition, it follows that it is very important for our health that we seek the right problems, important problems, and that we solve them in the right way. My meeting with Victor Hammer made me think hard about the kind of problems I wanted to tackle, and what criteria to apply in deciding which was the right way to set about solving them. That is why I used the term “healthy self-doubts.”

Let me return to the difference of opinion between Gill and Hammer over the right way of creating new typefaces. Both men loved the roman alphabet. By long familiarity with its structure and evolution, they both understood why it had spread so deep into every continent because of its relative simplicity for recording the spoken word. But you must bear in mind that although Hammer and Gill were almost exact contemporaries (Gill was born in 1881 and Hammer in 1882), Gill grew up reading the roman alphabet and speaking English, while Hammer grew up in Vienna at a time when black letter was extensively used for books and newspapers, as it was in other German-speaking countries and in Scandinavia. Furthermore, having spoken German as a child, Hammer later moved to other countries where he had to speak Italian, French, and English. So Hammer’s attitude to the suitability of typefaces for different languages, as well as his readiness to experiment with uncial, was to some extent conditioned by his personal experiences in reading a far greater variety of letter forms and learning a wider variety of languages than Gill encountered in his development.

Equally important was the difference in the two men’s attitude to industrial society, and to the capitalist use of machinery. Gill was prepared to come to terms with industrial methods: what he detested was the way in which capitalists exploited machinery simply as a way of making larger profits, and regardless of the degradation of craftsmanship and the hard conditions under which the labor force had to work. Gill himself was actually an employer, with a small number of craftsmen and apprentices working for him full-time. With his son-in-law Rene Hague he set up a small printing firm under the name of Hague & Gill. It used power-driven presses, machine-made paper, and mechanically cast type made from pantographically cut punches or matrices. Even the types which Gill designed for use by his own press or
for the Golden Cockerel Press were cut by pantographic machines.

Hammer was determined to live a different life. "I have," he wrote, "always lived in a world of my own, a purely visual world." But his approach to designing type was not purely visual. "Language," he said, "moved me to action." It was the challenge that spurred him to experiment. His primary concern in making type designs was not with aesthetics, but with the problem of making a set of designs for letters that would combine satisfactorily to form the words of a particular language.

At the risk of oversimplifying what is in fact an extremely complicated task, I would say that the art of designing a successful typeface (and by "successful" I mean one that succeeds either in achieving what the designer intended, or in gaining popularity with a substantial group of readers) depends mainly upon the way in which the set of letters combine into words.

The art of making individual letters so that they do combine satisfactorily into words doesn't depend solely on the way in which each letter is drawn. The American artist Ben Shahn, who died twelve years ago, wrote a book called Love and Joy about Letters (1963), in which he gave a wonderfully vivid description of the way he had learnt a vital secret from the foreman of a lithographic studio where Shahn learnt to draw letters. After many months he had mastered the art of drawing their shapes, but when he produced lines of lettering the result seemed to him "awkward and glaringly imperfect." The foreman, wrote Shahn, "criticized my work with that inexorable perfectionism of the true letterer. He made me look past the letters at the spaces around them — a minor theme, one might call it, of shapes and patterns carved out of the background by the letters themselves. How to determine these spaces? I tried measuring, I tried allowing for curves and angles, but no formula that I could devise provided for every shape, so that all the letters might merge into a perfect line."

Then the foreman told Shahn the secret of the glass of water. "Imagine," he said, "that you have a small measuring glass. It holds, of course, just so much water. You have to pour the water out of the glass into the spaces between the letters, and every one has to contain exactly the same amount — whatever its shape. Now try!"

And "that was it," said Shahn. "Letters are quantities, and spaces are quantities, and only the eye and the hand can measure
them. As in the ear and the sensibilities of the poet, sounds and syllables and pauses are quantities, so in both cases are the balancing and forward movement of these quantities only a matter of skill and feeling and art."

I am impressed by the fact that two artists whose creative work with letters differed as sharply as Shahn’s and Hammer’s did both felt so acutely the need to relate the designs of their letters to the languages they knew and loved. I gather that Eric Gill took a more simplistic view of his work as a letter designer, but he too could express himself on the subject in clear, pungent terms. “Letters,” said Gill, “are things, not pictures of things.” To make his point clear, Gill remarked that you don’t draw an A and then stand back and say: There, that gives you a good idea of an A as seen through an autumn mist, or: That’s not a real A but gives you a good effect of one.

People have argued that Gill’s assertion was too facile, but you must bear in mind that Gill loved a good argument. And one important feature of a good argument is that it obliges you to make distinctions. When he wrote that “letters are things, not pictures of things,” I believe that he was trying to draw an important distinction between a thing on the one hand, in the sense of that which exists individually, or which may be an object of perception, knowledge, or thought, and a picture, which signifies on the other hand a representation of what can be perceived, or which is known or imagined. Gill wanted to avoid confusion about the nature of letters; because they’re known to be created by drawing, he was worried that undue emphasis would be placed on their artistic character. Like Hammer and Shahn, he knew perfectly well that their prime function was to represent language, by conforming to recognizable and therefore acceptable shapes.

A type designer has to draw many more characters than the twenty-six letters of the alphabet. Most of the languages spoken in Europe require the addition of accents or diacritical marks. So a typeface must include punctuation marks, numerals, and the more commonly used symbols such as the dollar sign and the asterisk. Victor Hammer observed that when the Romans took most of their alphabet from the Greeks, they discarded forms for which they had no use in Latin, and introduced tails to the letters C, G, and Q. But the Romans wisely abstained from using other diacritical marks. Hammer’s method of publishing his digressions
on the roman letter in the form of a dialogue gave him the opportunity to make a friend say to him: "There was regret in your voice when you spoke about diacritical marks. You implied that they were a cheap device, designed to cope with a problem that should be solved slowly and patiently." To which Hammer replied that he had been guilty of cutting diacritical marks for his uncial types, and added, "We all act as fools one time or other, very much to the amusement of those who are wise at the moment. I am older now and perhaps a little wiser."

The English-speaking nations are lucky to be able to print their common language without accents. Unlike the French, we do not use the same letters to spell out the words for fishing and sinning. Normally the context in which the word *pecher* occurs in French is quite enough to indicate in which sense the word is to be understood; context is also enough to avoid confusion over the word *ou*, which can mean *where* but which can also mean *or*. For practical reasons the French often omit accents from capital letters because the height of a capital may otherwise have to be shortened in order to make space for the accent above it, and this would reduce its legibility.

Research into the legibility of type has proved very little of value that printers have not already discovered by experience. But it has shown that as we read lines of writing or printing, our eyes travel along the top of the letters. The disturbance of accents above letters, at the critical level along which the eye travels, has led type designers to reduce the weight of accents to a minimum. Unfortunately, in recent years a growing concern for consistency in type design has also led to the reduction in weight of commas, and to the substitution of a light wedge-shaped or tapering stroke in place of the traditional dot with a curl added to it.

A relatively low position of punctuation marks makes it easy for the reader to miss them if they are reduced severely in weight. And punctuation marks, like the far more emphatic break created by a new paragraph, can make a great deal of difference to the immediate intelligibility of a text. But in this matter, as in all typographical matters, a sense of balance and proportion is needed. The great printer Giovanni Mardersteig hit this problem while printing the works of Gabriele D'Annunzio. On the opening page of one particular text, the printer was bothered by too many commas, which made it look as if the text had been chopped to pieces. Mardersteig knew that the author was quite
open to suggestions for typographic improvements, so he gave him a proof with comments for D'Annunzio to consider. The author scanned them quickly, then after a short silence exclaimed: "But of course, out with all these ugly little worms!" (The story loses a little in translation, because the word the Italian writer used was vermicelli.) Mardersteig then had some difficulty in restraining D'Annunzio from deleting even those commas which were absolutely necessary for the meaning.

Victor Hammer got round the problem of the comma by designing for his uncial font a short, light oblique stroke, not quite as tall as his lowercase e, and lighter in weight than the main stems of his letters. It works very well with his uncial, but I doubt whether it would be acceptable, or even adaptable, for use with a traditional roman or italic type.

I owe it to you to explain what I mean by acceptable or adaptable in the context of type design. This has to be made clear before I go deeper into the relevance of Victor Hammer's type design, typography, and printing to the present generation, and to future generations.

From a remark I made earlier about the results of research into the legibility of type, you will have gathered that I am very disappointed with most of the investigations made so far. The basic truism which research reveals is that we read most easily the types that we are most used to reading. Beyond that, rather to my own surprise, there is often no statistically significant difference between our ability to read typefaces seriffed or sans serif. On the other hand, investigations by my Swedish friend Bror Zachrisson have shown that there are significant differences between what he calls the congeniality factor in different types. Briefly, this means that although we are perfectly capable of reading most varieties of type design, without being slowed down in our reading or in our understanding through the oddities of a typeface, we instantly react strongly to the impression — or, if you prefer, the prejudice — which we form the moment we look at any type.

The implications of these findings are that advertisers need to study carefully market reactions to their advertisements by trying out alternative styles; but if you have a captive audience, as do for example the gentlemen who send us tax returns to fill up, then there is really no need to bother about the choice of type very much — although one does need to take great care with the choice of words and the way in which they are placed on the page.
The implications of legibility research findings could be very dispiriting if we were meekly to accept that we read most easily the types which we are most used to reading. What of course we need to know is how quickly we can become used to reading a different style of type. And we need to know how quickly we can adapt at different ages — in childhood, in our youth, in middle age, and in old age. I am not going to argue that we should adopt a completely new set of alphabetical letters, for to do that would be to place beyond the immediate comprehension of future generations a great deal of printed matter that ought to remain readily accessible. But if we knew more about the adaptability of our reading habits at various ages, then we would be in a much better position to decide how great a degree of change we could easily accept, and what benefit might flow from making such a change.

In drawing your attention to the need to investigate the extent to which we might benefit at various ages from making the effort to adapt ourselves to innovations in type design, I do not for one moment assume that the results of such an investigation would make the reading public at large eager to adopt the unusual forms of uncial type, for example, which Victor Hammer chose to use in so much of his own printing. Even if it were possible to adapt quickly to reading them they have the serious disadvantage for commercial use that they are much less economical of space than the roman alphabet to which we are accustomed. To switch over to the uncial forms of the kind used by Hammer would increase paper and printing costs by about twenty-five percent, and therefore would present a serious obstacle to their general use.

In a few moments I will turn to what I regard as the relevance of Hammer’s type design and printing to present-day practice, but first I need to deal briefly with a fundamental change in typographical practice which had its beginnings long before Hammer died, but which has extended with remarkable speed in the last decade. Probably he would have regarded it much as he regarded the movies, which he called “an uninteresting and short-lived affair.”

Nobody can regard printing as a passing fancy, but it certainly has changed in the last thirty years. In earlier times the word printing implied the making of an impression of an image or a letter into a piece of paper. Note that I say “into” and not “onto.” The art of printing from moveable type invented by Gutenberg
more than half a millenium ago consisted of casting metal types in an adjustable mold, assembling them into texts, and transferring the ink impression of those types into paper. The traditional form of winepress used in the Rhineland was adapted by Gutenberg to exert the necessary amount of pressure to transfer the impression of the inked type into the dampened handmade paper. Careful damping of each sheet made the paper more receptive to the inked impression of the type. This process of printing had long been known as letterpress printing because the letters were pressed into the paper.

A notable feature of letterpress printing has been its three-dimensional nature. The letters used for this form of printing were first cut on the end of a short bar of steel to form a punch, and after this had been completed to the satisfaction of the punchcutter, the piece of steel was hardened under exposure to intense heat, and could then be used to strike a matrix, from which letters could be cast. So the entire operation of creating and casting type was conceived in three dimensions. Subsequently, the method of transferring the inked image of the type into carefully prepared sheets of paper required very great skill and judgment on the part of the pressman, who had to make sure that the amount of pressure he applied created a clean and even impression. As paper was a relatively expensive commodity, sheets had to be printed on both sides, just as scribes had written on both sides of the leaves of manuscript books. The pressman therefore had to take great care to avoid driving the impression of inked type too deep into the paper. And to mitigate the distraction of lines of type showing through from one side of the paper to the other, the pressman was as careful as a scribe to back up his printed sheet so that the lines on one side matched in position those on the other side. The texture of letterpress printing varied according to the type used, the surface of the paper, and the depth of the printing — that is to say, the amount of impression.

A new form of printing was introduced in the nineteenth century by combining the two then recent inventions of lithography and photography. The common characteristic of these processes was that an image was transferred to the surface of a sheet of paper with virtually no pressure. By the early years of the nineteenth century, it was possible to make paper mechanically and with such a smooth surface that the image of the type could
be transferred almost by contact with an inked photolithographic plate.

Although photography was invented early in the second quarter of the nineteenth century, photocomposition was not successfully applied to text typesetting until shortly after the Second World War. Today the combined use of phototypesetting and photolithographic (or offset) printing is so widespread that letterpress printing is fast becoming industrially obsolete. The combination of these new processes in place of the old letterpress method of printing means that nearly all commercial printed matter today is two-dimensional. No longer is the impression of inked type sunk just below the surface of the printed page: the typographical message now appears entirely on the surface of a paper that is normally very smooth and often lacking in character. Consequently there is a tendency for printed matter to lose the liveliness which used to be one of the pleasant qualities of letterpress printing.

Where then can we expect to find any relevance to present-day type design and printing in the work of Victor Hammer? Was he not an artist-craftsman who was determined to preserve the intellectual independence that he regarded as indispensable to his creative work, even at the cost of economic insecurity? What can the philosophy and output of such a man offer to a world obsessed by high technology and cost-effectiveness?

I believe I can show you that even those of us who lack Victor Hammer's range of artistic talents and the courage which he showed in living according to his own uncompromising convictions can still find many pointers in his philosophy and his work which can enrich our own lives and work. I believe this is possible even if we accept the need to make use of high technology and to work for a profit. I do not delude myself that our printing will then reach a standard which Hammer himself would have found acceptable; but I firmly believe that a deeply critical and analytical study of Hammer's typographical work can help many of us to improve the quality of our own work, and thereby to increase the satisfaction which it will give to others, and to ourselves.

My belief is held all the more firmly because of a passage written by Hammer in the dialogue he devoted mainly to digressions on the roman letter. There he asserted that "industry, as a rule, prostitutes the creator for the sake of profit." But he
went on to give one exception to this rule, an exception from his own experience. One of his students had been employed in the old and established Leipzig printing house named Haag-Drugulin, a large firm which specialized in learned printing and was exceptionally well equipped with what printers call exotic founts, needed for printing foreign or dead languages. Hammer's student was Fritz Arnold. The director of the Haag-Drugulin firm arranged for Arnold, trained in his craft by Victor Hammer, to be installed with his simple handpress in that huge printing house. Much to Hammer's delight, the printers there often went to Arnold for advice and help. The reason why this happened was (according to Hammer, and I now quote his own words) because Fritz, "as a craftsman still, had not lost sight of the essentials and was this industry's 'spiritual' core." Hammer thought Arnold's place was unique. He, "as a creator, was in his right place and gave creativity back to the industry itself."

So far so good. But what were those essentials of which Arnold had not lost sight? To find out, you must read Hammer's writings and study his printing. Your conclusions may then turn out to be slightly different from mine, but I will try now to epitomize what I believe the essentials to have been.

First, the craftsman was responsible for the quality of his own work. He was a man trained to use his own eyes and judgment, and to coordinate his faculties to produce what his observation and training led him to believe was the right way of exercising his craft. The craftsman could not be the servile copier of another man's ideas, nor could his life be entirely subordinated to the need to produce a certain quantity of work within a strictly limited amount of time, in order to meet predetermined production schedules or manufacturing costs.

Second, the work of the craftsman had a quality of "life" which Hammer believed could only be conferred by the intervention of the human hand. Machines could make objects that were more perfect in the sense of being without irregularities, but in Hammer's view only the hand of a craftsman could confer life on a product.

Third, the craftsman concerned himself as a responsible person with all of the aspects of the articles he produced. In this he differed fundamentally from the specialized workmen employed for example on the production line of a highly mechanized factory. Their sole concern was with one extremely limited
operation which had to be repeated with such deadening regularity that they could neither maintain any pride or interest in their work, nor confer any life on their small contribution to the factory's production. Factory workers did not know what Hammer called the secret of the *craftsman's* procedure, which was always to see details and distinctions in connection with the whole form on which he worked. The craftsman did not know beforehand exactly how his work would look — that he would know only when it was finished.

One of the passages which I found most moving when I recently read another of Hammer's dialogues occurs at the end of a discussion on punchcutting. The passage has nothing to do directly with any aspect of printing, but has everything to do with Hammer's view of craftsmanship. It describes how he trained a nineteen-year-old peasant lad to design and build a traditional Austrian wardrobe. The passage is far too long for me to quote to you now, but the reason why I commend it to you is that it demonstrates Hammer's approach to craftsmanship better than any other piece that has come to my eyes. The essence of it is that the young peasant was quite unable to design the wardrobe by making a design on paper; but with proper guidance from Hammer, he was perfectly capable of making all the right decisions about its function and structure, and its proper ornamentation with moldings that the young craftsman worked out for himself. He also realized that moldings added light and shadow to his work, for, as Hammer put it, "the sole purpose of drawing attention to the visual relation of its parts to the whole."

What Hammer managed to do was to teach the young peasant how to approach his craft, how to choose his materials and tools, how to handle them, and how to judge the total effect. In other words, Hammer taught him how to become a *responsible* craftsman.

Unfortunately, the price which our industrialized society has to pay for the benefits of mass production and lower prices has been the virtual extinction of the responsible craftsman. This trend can be traced back to 1776, when Adam Smith formulated his principle of the division of labor. Taking ordinary household pins as an example he pointed out that to make them employed eighteen separate operations. Now if ten men each devoted his labor to only one of those eighteen operations, the team of ten could produce 48,000 pins in a day, or 4,800 per man; but if one man
worked alone performing all the eighteen operations involved in making an ordinary household pin, he would be lucky to produce a single pin in one day.

I suspect that Victor Hammer might have argued that the solitary craftsman who managed to produce a single pin all on his own would gain greater satisfaction from his work than any one of the men working in the team of ten. And even Adam Smith would not have found himself totally disagreed on that point with Victor Hammer. Because Smith, writing in *The Wealth of Nations*, had this to say:

The man whose life is spent in performing a few simple operations, of which the effects too are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him, not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble or tender sentiment, and consequently of forming any just judgment concerning many even of the ordinary duties of private life.

I see the value and relevance of Victor Hammer's typographical work and writings as providing us with standards and values by which to judge our own contributions to the art of printing. Few of us have the artistic abilities, the will power, or even the desire to emulate his own example. But even those of us engaged in the printing industry can gain a great deal by looking analytically at the way Hammer approached the craft of printing.

Within minutes of setting foot in any printing house, I can sense whether work is being done with an eye on the clock or with an eye on the quality of what is being produced. It is still possible to train people to appreciate the satisfaction of producing good work, and to help them to understand how their own particular contribution fits into the various stages through which work in an industrialized printing house must pass. Where this is done, the result can be sensed very quickly. There will be intelligent and whole-hearted cooperation between the different
people involved. And there will be eagerness to look critically at the finished work, and to learn what the customer thought of it.

A precondition for this kind of industrial cooperation is an appreciation of quality and craftsmanship that can rarely be inculcated without thorough training. If, for example, a machine minder has looked carefully at the presswork achieved by Victor
Hammer on a handpress, and is told about his experiments with different inks, made with lamp black or vine black, the machine minder can hardly fail to look more critically in future at his own work, and to become more curious about the effects of the different ingredients used in ink made for industrial printing.

I believe that type designers too can gain a great deal by examining Hammer’s uncials, even if they have no inclination whatsoever to make type design of that kind. The fact that a type designer engaged nowadays in industrial typography will have to design types suitable for photocomposition does not mean that he cannot learn a great deal of value from the types which Hammer designed for printing with a handpress. In fact, I would even go so far as to say that they might find his uncial types particularly rewarding because of three characteristics to be found in them.

One problem that has to be solved in type designs created specifically for photocomposition and offset printing is that such letters will lack the bite into the surface of the paper that is a characteristic of letterpress printing. Faced with this difficult problem, many designers resign themselves to producing bland types that look dull and lifeless. But if they look carefully at Hammer’s uncials they will observe with what remarkable skill he handled the transition from thin to thick strokes. This he did in a way that accentuates the three-dimensional effect of the uncial types when they are printed. Just as a good draughtsman can create the effect of relief in a sketch by his knowledge of perspective drawing, so a skilled type designer can compensate for the lack of the third dimension in printing by the dexterity with which he manages the transitions from thick to thin strokes. Hammer was particularly aware of the problems involved in perceiving and recreating the effect of the third dimension. The theme often occurs in his writings. He pertinently remarked in one of his dialogues that “depth, though it may be known, cannot be seen.” This knowledge, plus his familiarity with the effect created by writing with an edged nib, gave him great insight into the ways in which the illusion of a third dimension can be created in type design.

Before I come to the other two characteristics, I think it is relevant for me to add that the widespread use of ballpoints in place of the old edged pen, and our consequent familiarity with monotonously even handwriting instead of the contrast between thick and thin strokes produced by a pen with an edged nib, has
softened up many readers to accept bland, dull, and lifeless types.

The other two characteristics of Hammer's uncials that will repay close study by designers at work on types for photocomposition are the fit and alinement of these unusual letter forms. Even the most beautifully drawn set of letters will make an unsatisfactory type unless they are perfectly alined and given the ideal amount of inter-character spacing. Hammer said of his types that he tried to avoid holes in the line by arranging his letters like a string of pearls. The care he gave to their exact alinement and their perfectly even spacing will repay most careful study by any type designer, regardless of the style of letter he has in mind. If he can make them match the standard of alinement and spacing attained by Hammer, his set of letters will have a very good chance of turning out to be highly readable and agreeable. Victor Hammer was too modest, and too well aware of the unique qualities latent in every responsible craftsman, for him to claim that he knew what to advocate as the "right" thing to do. I greatly respect the way he put his view. In the dialogue where he explains punchcutting, he writes that he was afraid of preaching the gospel of right-doing because that would involve him in a definition of "right." "Sometimes," said Hammer, "one can do right, but one hesitates to set a rule for others: the example carries the conviction."

Hammer's printed dialogues provide powerful support for the conviction carried by his examples of printing and type design. Several times I have been surprised to find myself totally convinced by assertions made in those dialogues, even when he provides no arguments to support them. For example, when he talks about the "mystical" quality of handiwork, I am totally won over by his asserting that "it is the trace of life which lingers on in things made entirely by the human hand." And to end my talk I will explain to you why that phrase carries such conviction with me. It is because what Hammer did with his hands, and what he communicated by his words, were a vital part of his own exceedingly rich culture. How truly has it been said that culture is what remains after everything else has been forgotten. And as a final link between that concept of culture and the way it was understood by Hammer, let me quote one sentence he wrote in 1957: "As a patron, or as an artist and craftsman, you may be able to contribute to the spiritual life of mankind — for which we have a good though nowadays deflated word: human culture."