APPLIED SYMBOL DESIGN
Graphic Identity Development:  
A Symbol for the Rochester Institute of Technology

A fundamental summarizing result derived from the previous research is that any concept can be symbolized accurately, if the symbolization process is approached in the correct manner. The correct approach has become the symbolization of a function performed with its resultant sociological relationships. It should not be just the visual symbolization of a material object for itself. As we have discovered, the timeless flexibility need for reality, is the ultimate goal sought by these functioning socio-psychological symbols.

We have discovered that, though any function can be symbolized, definite problems, considerations, and requirements come to light when the symbol is to be used in today's environment to create an identity concept. Basic considerations are the character of the organization and the sociological environment in which it functions. In short, we must determine what elements it will take to accurately communicate to function to be symbolized. With this in mind, I would now like to consider the problem of developing a graphic identity symbol for a school, the Rochester Institute of Technology.

Even before I had begun my corporate research, I faced the problem of what was it that I had to capture visually to say, "Rochester Institute of Technology"? To the end of quickly obtaining some answers to this question, I personally interviewed several people directly concerned, either personally or professionally, with the promotion of the true visual reality of the institute. My questions
were three. One, could the institute be symbolized? Two, what did they think was the essential element of the institute? Three, how would they go about visualizing this? The results were quite revealing and are summarized here.

"The creation of such an identity symbol seems to me nearly impossible. A factor that stands in the way is the state of flux that this institution is going through at the present time. The school must determine its direction before we can symbolize it, but there is hope. It lies mainly in looking back. We find a parallel development of the technical and professional with the academic and cultural. This creates a conflict of force, but it also sets R. I. T. apart and above schools offering less.

Let us look at the creative departments, and here. I believe, we will see what has to be symbolized. First, training is directed at the professional level of the outside world: teaching production in that environment. Cultural pursuits delve into the past for background, and creative experimentation reaches into the future to give us a broad base for preparation of things to come. The ideals of schools such as printing, art, and photography seem to be the "ideal" ideals of this institution. To symbolize R. I. T., one must symbolize or link the creative to the communicable today. The school seeks to marry technology and creativity; a symbol must do the same.

In looking to the creation of a symbol, several elements must be kept in mind. We must realize that within this school there is a vast conservative attitude; the areas of art, photography,
and printing are where we find this least. These are where we also find what we desire. We must, however, create a symbol that is in line with all of today's progressive identity theories, hints of those of the future, and is understandable enough to be accepted by the element of which I spoke. I would suggest basically a typographic solution; the color scheme which interests me is possibly orange and brown. The typographic solution seems to be the current clue to a timeless symbol." 12

"The design of such a symbol is fast becoming a must. Our image today is a confusing one and must be clarified. In the design of such a symbol, I feel a bit disturbed over contemplating the 'split personality' of the organization, but a balance is coming. This must be shown.

The symbol itself must be challenging, showing the 'shirt sleeve' image of the Mechanics Institute along with the refined tweed of the Athenaeum. The applicability of modern corporate symbol theories seems like a wise approach, but this should not be allowed to become too 'far out'. We are an academic institution with a tradition; we must not look only to the future. Include a bit of the traditional. I would possibly retain the circular format and method of pictorial creation; but be contemporary.

Pictorial elements are essential, but they must be linked with a logotype and typeface developed solely for this program. We should be contemporary for the sake of the new campus, but let us not foresake our past." 13

"When you ask what to symbolize or what symbolizes the institute, immediately, I can sum it up in

13 Interview with Mr. W. R. Wolf, Assistant to the Vice President in charge of Public Relations and Development, March 11, 1964.
one word: PEOPLE. My comments are a personal responsibility, and as such I make this contribution.

In some way, the people (faculty and students) at R. I. T. are different to the point of being leaders in their educational field. Symbolize for this. This has been a very evolutionary institution; this must be brought to light.

We must primarily remember the concern for the professional. Other schools train creative people to be fine artists. There, in a technical school, we teach this along with the feeling that after being a student you will enter the work-a-day world and have to produce to the needs of others. How this is done is our creative aspect; symbolize this. Relate all of this to the Liberal Arts.

Being a bit of a liberal, I would say that to accomplish all this I would turn to the purely abstract. I would, if skilled enough, not limit my creation; rather, I would make it worthwhile enough to educate the people to it. Why? Well, I predict that the new campus will produce a renaissance of vitality and fresh thinking here; only such a symbol could hope to keep ahead of this. The symbol could represent the 'just out of reach but always strived for.'

The feeling or impact I would look for from such a creation would be one that looks like the inner vitality of people and the inner drives that make R. I. T., shabby buildings of today included, a directive force in its field. Vitality is the key; it must be contemporary to the point that we feel we have never seen it before, but we have lived with it every day."
Mr. Arnold further presented me with the following written statement as to what he thought a symbol for our school should represent.

"It is hard to speak properly upon a college.

On the one hand, the friend who is familiar with every fact of the story, may think that some point has not been set forth with the fulness which he wishes and knows it to deserve; on the other, he who is a stranger to the matter may be led by envy to suspect exaggeration if he hears anything above his own nature.

We shall begin with our history.

Our campus was handed down free, and our inheritance which we now possess has been augmented to the history of the achievements.

Our college does not copy the colleges of our neighbors; we are rather a pattern to others than imitators ourselves.

Our admissions favor the many instead of the few; this is why we are called a community college.

The college affords equal justice to all in their academic differences and in the students' reputation for capacity, class considerations not being allowed to interfere with merit; nor again does poverty bar the way, if a student is able to learn, he is not hindered here by the obscurity of his condition.

The freedom which we enjoy in our government extends also to our college life.

We provide plenty of means for the mind to refresh itself from studies...

The elegance of our campus forms a daily source of pleasure and helps to banish the spleen.

We throw open our community to the world, and never exclude foreigners from any opportunity of learning or observing.

Our city is worthy of admiration.

We cultivate refinement without extravagance and knowledge without effeminacy; wealth we employ more for use than for show.

Our students have, besides studies, their private affairs to attend to.

Our citizens in the community, though occupied with the pursuits of industry, are still fair judges of public matters.
Instead of looking on discussion as a stumbling block in the way of action, we think it an indispensable preliminary to any wise action at all.

In our enterprises we present the singular spectacle of imagination and delivery, each carried to its highest point, and both united.

The palm of courage will surely be adjudged most justly to those who best know the difference between hardship and pleasure and yet are never tempted to shrink from danger.

In short, I say that as a city we are a school; as a school we are a city.

Our community college is graced by a happy versatality."

I hope that my reader is as pleased as I was to find such a statement so truthful as to the very meaning which is our school. I further hope that my reader is as surprised as I was to learn that this was written more than 3000 years ago and is "Pericles' Funeral Oration." This document opened my eyes to what I really had to say with my symbol. The comments submitted by these sincere people were all quite relevant. All that was necessary was to pick the one all-powerful common denominator to be stressed and put the other elements in their proper perspective. People, buildings, traditions, vitality, and curriculums were all essentials to be represented; but the ultimate reality that had to be symbolized was again a function. The function was simply education but more specifically the type offered at the Rochester Institute of Technology. It alone has been the common denominator since 1829.

With the preceding research as background, I proceeded to spend two complete days, April first and second, in the R. I. T. room of the library rummaging through the complete range of historical references. My purpose was to come to grips with the ever present traditional aspect that is not as vital a factor in a business
identity concept. My historical research along these lines proved to be rather worthless to my thesis in that it supplied me with only names, dates, and at best statements of purpose and photographs of buildings. Regarding what was valuable and to be symbolized, history simply confirmed the conviction that the symbol should not be based on any material concept and that the educational one was the true reality. I, therefore, decided to base my symbol on the non-material, philosophical trends which had come to light as a result of my interviews and personal experience.

As for a tradition of symbol for the institute, I discovered that there never has been a clear cut symbol and that at all times there have been several different ones in use. These were always of the type found in any printing house catalog. Secondly, lacking a seal and having a lengthy name, the present institute has always been referred to colloquially by its initials. Consequently, a pictorial foundation for the development of recognition is either nonexistent or must be based on these initials; therefore, I found the following solutions to be possibilities:

1. A strictly typographic solution.
2. A typographical picture based on the initials of the institute.
3. A pictorial symbol with accompanying logotype.

We must now concern ourselves with the mechanics and requirements for the creation of a contemporary identity symbol. The primary tenent to which we must adhere is that, at all cost, we must strive to represent the true functional reality in its proper perspective. To do this we must come to grips with the fact that education is a highly personal function of great refinement at the college level. This in itself would seem to suggest that a
temperate European approach to the problem would be highly desirable; this is more so when we remember how such approaches mirror the inner meaning of an organization and do not try to blindly sell it. Conflict arises when we consider the environment in which our symbol has to compete, the United States; it will be in contention with many more boisterous elements and must equalize or overcome them. We might, therefore, consider the definite possibility of an American approach; and if tempered, it could be quite attractive in its straightforward attitude. This becomes even more attractive when we think of the centralization required for both of these approaches.

The problem is to symbolize an organization which functions in one cultural and philosophical environment and at the same time teaches elements of all cultures. Consequently, universality is a mandatory requirement. The solution to this conflict of thought seems to lead to the act of compromise; we do not fit clearly into either the European or American school of thought. The roads to philosophical solution seem to be two: we can either bolster refinement or restrain the temptation to sell by force. Such a compromise must take place in the designer's mind and his visual creation; it can not be verbally calculated. We must remember that our goal is ultimately the expression of an invisible process; therefore, we must raise our design to the realm of an aesthetic experience.

Our symbol should have meaning for the uninformed; but it should also inate all those coming into contact with it to inquire as to its further meaning. It must be challenging and dynamic, therefore stimulating education; and its very presence must imply quality,
character, and our leadership educationally.

The symbol will be our first and probably only constant identity factor; therefore, proper emphasis must be placed upon it. Such emphasis is necessary for it to develop a personality, and this personality will only arise if the symbol is flexible enough to develop it. The fact to be understood here is that flexibility will allow us to mirror the diversity of our function; and with this accomplished, the symbol will take on the responsibility of being a socio-psychological function itself. In short, the symbol must not be a materialistic image used solely as a tool for the attraction of attention.

My actual creative process began upon my return to the institute for the Spring Quarter on March 30, 1964. After two intensive days of sketching preconceived ideas that I had formulated in my mind at home, I had developed two primary symbol concepts. I want to make mention of these, for they served to illustrate visually what not to do. Preoccupied at that time with the concept of symbolizing a new campus by utilizing the recognition quality of the school initials, I created a linear symbol by designing the three letters to hopefully perform visually as an architectural structure. The surprising result was the development of a symbol with a definite human or figurelike connotation. Two variations of this concept can be seen in figures one and two. It seemed distinctive for a school, but it was also far from the essence of the Rochester Institute of Technology.

My next step was to try a complete removal of my thoughts from the area of architecture and concentrate on the use of the
initials. This approach proved to be a decorative one as figures three and four will show. It became a failure when I discovered that it was causing me to design letter shapes for themselves with a total lack of significant meaning other than the colloquial one. Lacking any indication of the function performed, the type of education offered, the philosophy, the character of the individual produced, or the responsibility of the institute to society, this symbol was virtually worthless. It contained the added restraint of being even visually confusing. My final attempt along these lines was to take just the letter "r" and try to create from it a technological symbol. Figure five is one result of this endeavor.

The following general section will cover the creative period from April 2, 1964 to April 16, 1964, and will basically analyze the development of my final solution. Upon the completion of my original concepts, my thoughts as to symbol design were becoming more unified. The symbol developed roughly thus far each contained an element or area of consideration which I felt necessary, but these areas were yet to be unified as one symbol. The reader will note that some of my first statements regarding the analysis of my preliminary symbol concepts will not be wholly in agreement with the conclusions drawn from my research. The reason is that at the time the initial sketches were rendered my research had not been completed or analyzed.

Beginning with strictly typographic elements, I looked mainly for interesting shapes which could be designed and carry impact. Interestingly enough, a human element appeared along with the R. I. T. verbal one (See fig. 6.) This should hopefully be retained; for though many people see a direct relationship between typography
and architecture, it is not a relationship that I hope to foster here. Figure seven was a return to the more literally typographic to see if the human element would hold up. Figure eight was developed to try and take the first two farther. I believed them to be too narrow in scope, to say R. I. T. and people was not enough. The large circle in figure eight was to be developed as an element that could be abstracted and thus grasp the diversification of the school and denote education.

This procedure of delving into the more abstract line of thinking was then carried farther by developing the symbols of figures nine and ten. The sociological function of a school came to light as a conceptual idea here. The concept is that education is a two way function. The school interprets the needs of the world and educates for them; the educated person then contributes his learning to the force behind the community. It seemed to be a circular function. The symbols I have developed in this step carry some of these qualities. The idea is a series of arrow shapes working from a hexagon; half point inward and half point outward. The sociological function is evident here, but the fault lies in the fact that the symbol is somewhat impersonal or too coldly calculated. The element I do like as a design function is the way the emphasis of inward or outward arrows can be made to vary or vibrate when the shapes become carefully calculated; this carries unity with impact.

The symbol created in figure eleven was an attempt to combine the elements of those previously developed. A circular format was chosen, and the letters "R.", "I.", and "T." were taken as thematic elements. There was then an attempt to design these shapes as I
had in figures eight and nine to produce a compact image visually one, symbolic of some type of mechanistic shape, technically professional, and yet remotely human. The result was the symbol of figure twelve which did not read distinctly as anything; therefore, a clarification of the "r" and "t" was undertaken. The result was a loss of the abstract pictorial quality of the previous concept. It became necessary to read the symbol (See fig. 12.)

At this point, I saw the element of a profile face in the typographic elements; and looking for some light humor which would give the symbol a personal aspect, I decided to develop this (See fig. 13); and I concede that it is too humorous to ever be applicable to a professional school. The facial elements haunted me though; and they turned into a linear form that could be designed to represent a technical personality (See fig. 14).

I would like to mention that up to this point the aspect of color has not been considered. I intend to use it as the element tying together the various feelings symbolized and symbolize areas not possible through the manipulation of shapes. The element of color is to be used as an emotion emitting one similar to that of General Dynamics.

Upon consultation with Mr. Barschel, my advisor on April ninth, my direction and thinking was approved; and he made suggestions as to going deeper into various ideas about a symbol representing an inner philosophical notion. Education had to be shown functioning on a person; and he had to function inside of it. With this in mind I returned to the last step of my symbol creation process; I saw a spark here that I thought caught the essential element. A mercurial line ending in a straight direction, a dot connected to
the path of the mercurial line, these elements barely missed the desired concept. Environment was the element yet needed to clarify their hazy meaning and give it the impact of a picture. What environment was needed? What was this symbol trying to say? Had I caught some element that expressed this school?

I began with a circular line with my previous curvilinear one connected to it, and this produced a surprisingly technical solution. The circular enclosed area was here to stay, though it did not yet denote a known function. The element thus far had succeeded in representing the technically professional element inherent in the school. They echoed the ideals of the founding of the Mechanics Institute. This symbol brought me historically on so far; the school has evolved for sixty years since this stage of development.

With this technical or professional "outlook" in mind, I decided that it was necessary to add the colors that would finish the task and tie all of my feelings together. The colors themselves were required to symbolize or give the emotional response of several notions. They had to show the old and the new: either one symbolizing the old and the other the new or the combination doing it. The latter solution was the road taken. The two colors chosen are not new; both represent singly somewhat antique color feelings. Yet, when they are combined, they appear a new vibrant combination of intense impact. The second function the colors had to perform was to marry the technical aspect with the academic as it is in our educational philosophy. This would have to be done by the color harmony method stated above. They had to represent the hard and soft approaches and the desire for practicality. They must imply that one could go exploring beyond practical ends, that though a person was
being trained to function in a work-a-day world his education was inciting in him the desire to always experiment beyond these boundaries for the betterment of all. These colors had to represent a sphere of influence functioning on an individual at a very critical time in his life.

A sphere of influence and a circle, I have a circle in line form. No, what I want is an area to produce more of the sphere of influence feeling. Replace the circle with a color area. Now, is this education symbolized? We already have a technical appearing symbol, and is not education a process that starts one out vibrating among many areas? My mercurial line seems to do this. If I offset this direction giving element so that it appears near the outer part of the color area, this would seem to imply the same function education performs on us. We explore many areas; but as we end our course of inquiry, we all develop a very special direction as to our desires in the life beyond our educational world.

I then asked myself if the dot of the "i" could be made to conceivably represent an individual. The thought occurred that everyone would have to be educated to this entire symbol concept; therefore, why not? My thoughts began to ponder colors again and I asked myself is not our educated individual still an unknown quantity until proven in the field? What color will tell this? Unknown, dark, human, and warm — the search was narrowing. These thoughts determined my first color, the purple. The second had to say technical, cool, education, pleasant and light. Together they had to imply not a playful combination; they had to imply the practicality of a professional institution and the dignity of a technical university educational philosophy. The colors chosen I believe accomplish these
The reader will immediately notice that the two colors chosen are quite similar on the color scale; this is definitely a departure from the usual concept of school colors. Then too, is this not true of their method of choice and the symbol they form? This similarity has an unexpected development, for truly expected to choose to distinctly different colors. The results are due to my developmental process which saw the need for colors which would unify and harmonize our concept: the individual linked to education, the technological linked to the academic, the educational linked to the professional. Quite simply and all reasoning aside, these colors seem clear, crisp, firm, and still human. In conclusion, it is my feeling that they emit a color sensation representative of the general impression worked by the school.

The process which followed these thoughts was a typical one for an artist, trial and error. A final solution as to form and color was reached and is represented in figure fifteen. I want to say that the statements here are not a rationalization of a tricky happening. They are my actual thoughts and considerations as I felt them in my creative process, as my advisor will testify. Some might not agree with the color combination alone; some might not agree with the adjectives and thoughts presented here. All I ask is do you not feel that this symbol does capture accurately the concept of the Rochester Institute of Technology? I do.

Another symbolic concept incorporated here is in terms of a prophecy. From my research, I discerned that each designer has taken it upon himself to investigate in just what direction the institution he is symbolizing is headed in the not too distant future.
This is a wise idea; for if these trends can be visually captured, the symbol will become that much more a permanent part of the timeless organizational philosophy. When speaking of the selection of colors, I mentioned the concept of a "technical university." To me, this indicates academic diversity with a professional outlook. After studying R. I. T. and living it for one year, I find this to be reality. It is a concept which I believe will be further enhanced by the new campus. With this in mind plus the growing dislike by many of the word institute and the school's rise in leadership, I foresee a change in our name to the Rochester University of Technology. If you will now look at my final symbol solution (fig. 15), you will find that this has not only been accounted for but that the symbol is clarified because of it. (Note the close resemblance to the initials r. u. t.)

The term flexibility was mentioned here as a prime prerequisite for any successful symbol; and to illustrate this final point before setting into a concentrated series of applications, I present in figure sixteen, three simple black and white renderings. These allow the viewer to visualize the effect limitations as to reproduction technique will produce upon the impact, legibility, and meaning of our symbol. Thus, size and color do not become problems. One might also note that these show the positive and negative relationships available in applications where the school colors might not be desirable.

You have just been presented with the thoughts that created this symbol, but what does it visually denote upon first impression? To answer this question for myself, I presented this symbol to several students of various curriculums and asked their reaction.
Engineering students invariably said that the symbol appeared quite representative of a technical concept by remarking about its similarity to electrical wiring diagrams, vacuum tube symbols, or surveyor's marks. A printing student was pleased when he seemed to see a press in operation as the paper was fed through it. Students in the School of Art and Design believed in this new approach, for it artistically represented their feelings on the subject. A librarian gave the surprising reaction of seeing the dot and linear elements as a person studying at a desk. This pleased me, for I thought that the entire concept of the symbol representing education would have to be taught. Apparently, I have already developed some basis for the realization of this. The result of these inquiries was that those interviewed first saw a symbol representative of the whole institute; and secondly, they hastened to find elements for their individual departments.

With the preceding solution, I feel that I have proven the hypothesis of my thesis. Corporate theories are applicable to the creation of a symbol for an educational institution. The possibility of the acceptance of my solution at this time is another question. It is a very trite fact that as a designer, I have to produce for others; hopefully, the designer tries to educate his client to the basis for acceptability. This educational process can be accomplished in this case through a series of sound fundamental evolutionary steps, the end result of which in time would be the acceptance of the symbol proposed as my ultimate solution. To accomplish this, it has been proposed by my advisor that instead of submitting three totally different concepts, I should submit three similar ones leading to my
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goal.

The process is a simple one; I will translate the ultimate elements back into forms more readily apparent, creating a basis for acceptable understanding. I would like to say that the primary problem here is that of translation; the evolutionary symbols must carry the same impression as my final solution or an equivalent degree of it. The explanation of this process will be step by step backward. In practice these steps would be in the reverse order.

Step one constitutes a reverting back to the concept of the institute today. This necessitates a clear definition of the letters "r", "i", and "t". This is accomplished by the addition of the complete top portion of the "r", the left portion of the crossbar of the "t", and the squaring of the top of the "i". This can be graphically seen in the scaled painters diagram of figure seventeen. Note that none of the proportions or letter placements have been changed.

Immediately, the result of this clarification, as figure eighteen will show, is that the symbol begins to lose its pictorial quality. This suggests that the viewer should read it instead of visually associating it as a picture. Even with this readable element, the symbol is quite up to date, and it is still far ahead of any school concept.

With the addition of these elements, some of the departmental symbolization has become lost; but because I was able to clarify the letters and still maintain their method of connection, much of the flow of the former solution is withheld and the "look" continued. Submitted with the symbol itself are three methods of black and white representation: line, white on black, and black on white.
(See fig. 19). These are presented to further illustrate the similarity of "look" between our initial solution and step one. They demonstrate this symbol's continued flexibility when reproduction limitations of size or color are in effect. These black and white renderings should be compared with those of our first symbol to determine the effects of our clarification process in simplified renditions.

One final step remains in our symbolization process; it is to take one more evolutionary step back. To do this, I have separated, thus further clarifying the letters, yet still keeping them in close proximity at their old connection points (See fig. 20). This separation created the necessity of squaring the letter forms in several places and this proved disastrous. The result has been the destruction of our "look" through the interruption of our mercurial line. The shapes between the letters have begun to compete to the point that the symbol becomes less legible and takes on the look of a stencil. These detrimental results are amplified and can be further noted in the simplified black and white renditions (See fig. 21).

The following period in my creative process partially overlaps the former one by starting on April 12, 1964 and terminating on April 23, 1964. In this period, I was concerned with the design of a logotype to harmoniously accompany my symbol. The procedure of developing three symbols and the requirement that a logotype must harmoniously echo the symbol now necessitated the design of a logotype for each of my symbols that were similar to each other to the same degree that the symbols are. The design of a logotype is a very critical undertaking and requires that one constantly think of it not as a design in itself but always in the light of its relation-
ship to the symbol. The reason for this is that whenever the logotype appears, the symbol will be present; the reverse is not the case.

I have set several requirements for my logotype solutions in the hope that I can echo the same timeless flexibility I believe I have accomplished in my symbol. First, each logotype must be a unitary concept. By this I mean that even though the text, Rochester Institute of Technology, is lengthy, I want it to be one compact unit. Secondly, the logotype must be highly legible and, therefore, serve to symbolize an institution clarified as to its responsibility. Third, the logotype must echo the symbol visually by supporting some fundamental element of typography or graphics. Echo but never overpower!

To begin my logotype design I first settled on one particular typeface which to me was symbolic in itself of the institute's attitude. The face is that of Bauer's "Folio", and I have used the extended variety while varying between medium and light weight. This face is new; it is crisp, uncluttered, legible, and firmly based on proven typefaces. The generally single line weight and open, extended character were the points that basically related it to my symbol. The more subtle points that attracted me were the small rounding variations of certain letters, most distinctively of which is our essential "R". Note the way the diagonal leg is curved to meet the horizontal member creating a flow. I primarily chose this face for its clean flow and legibility and not for the tricky character which some see in it. A final factor was that in this face the designer has the freedom to use certain lower case letters of the same size in connection with the upper case alphabet.
In my first solution, designed for the last symbol discussed, my basic ambition was to design these three cumbersome words into a form that could be manipulated as a unit and whose impact could be more readily calculated (See fig. 22). To this end, I connected, thus conserving space, the "HE" and "TE" combinations. This had effect of creating small letter symbols similar to the interior elements of the symbol itself. I noted at this time that the essential characteristic of my symbol was the off-center nature of its interior elements. This determined the placement of the preposition "of". To further echo the spatial quality of the symbol and enhance the flow of typography inside the logotype, I settled on the use of the lower case "N" in the words "Institute" and "Technology".

The result of this first solution was about as satisfactory as that of the symbol itself. Basically, the interior typographic design is satisfactory; but the placement of the word "of" nullifies the flexibility desired of a unitary concept and dictates that the logotype be placed as I have illustrated or not used at all.

Our second symbol is closer to the final solution; and therefore, it dictates a similar degree of achievement for its logotype. In this solution, I sought a refinement of the unitary concept; and to this end, I began exploring the possibilities offered by varying the letter spacing. My solution was a simple one (See fig's. 23 and 24), arrived at by extending the words "Rochester" and "Technology" and changing the placement of the "of". This, quite nicely, satisfied the flexible unitary requirement as the illustrations prove. This solution left but one element still lacking, extreme legibility. Everything looks too much alike and reads at one mono-
tonous level of intensity. It simply does not echo the fresh living character of the symbol.

With the completion of my third logotype design, I believe I have found a successful solution to harmoniously complement my third symbol creation. It is successful not simply as accompanying typographic design but more so because it further reveals the basic relationships and philosophy already symbolized. I began by telling myself that I had to maintain my unitary concept while breathing life into my work. After deliberation, I decided that to fill these requirements I would have to stress one all important element and subordinate the others to it. At this point, I mentally notice that it would be nice if I could somehow prepare even my logotype for the day when this will be the University of Technology. This thinking brought to light the element of continuity to be emphasized, the city of Rochester. It is a quite natural solution and one which should be developed to advantage. By emphasizing the word "Rochester", we bring a bit of the traditional up into the contemporary. I would like to interject here that whenever the word "Rochester" appears on any official material as a heading, either as the name of the school or the city, both should be identically reproduced. This will emphasize an important interrelationship and add another element of continuity to our program.

Inside the element "Rochester", one will be quick to see the use of the lower case "e". Its use is rather advantageous for several reasons. First, it strongly relates the logotype to the symbol through the high degree of similarity seen between its circular shapes and construction and that of the symbol. (Note how and where the horizontal element attaches to the perimeter.) Secondly, the use of the circular lower case "e" establishes both a shape and spatial
pattern which become pleasing and operate harmoniously with the symbol. Inspection will reveal that I have retained the elements previously developed to condense the other two words.

With this solution a high degree of harmony and flexibility has been attained. Figures twenty-five through twenty-eight will show that the logotype functions as planned when seen in color, with both symbol and logotype in black, with both in reverse, and with both in varying positions and proportions. The latter will be more extensively explored in the application campaign. Rochester was the key. It gave life to the school, and it becomes only fitting that it give life to its symbol and logotype.

I began the development of my applicational philosophy when I concluded that my first evolutionary step was not a true representation of the image I hoped to foster of the Rochester Institute of Technology. At this point, I decided that the true value of this thesis would be seen if I could present one highly unified concept which represented as full an applicational range as was possible in the time remaining. To this end and with the consent of my advisor, I decided to apply only one of my symbols but apply it in the manner prescribed above. This was only possible because of the high degree of similarity between my remaining two symbols, and I firmly believe that either symbol would have produced the same applicational philosophy and hence the same applied personality. To note the degree of similarity between the two symbols, I have supplied previously (See fig. 17) a scaled painter's diagram showing in transparent blue the areas that would have to be altered to produce the symbol not applied.
With the design of my symbol and the basic considerations connected directly to it completed, I next turned by attention to what should have been stated as problem number two of my thesis, the application of my symbol in practical use. By this time, I had discovered, through my research, that any symbol is only as good as the philosophy of application that applies it. The point to be stressed here is that battle for symbol recognition and value is either won or lost in this phase of the creative process, no matter what the artistic excellence the symbol possesses itself. In the ultimate sense, the creative process that develops a symbol is not terminated until the symbol is applied in the manner intended by the designer and client. Thus, to ensure the correct presentation of the symbol's personality, hence the organizational function which it symbolizes, the conscientious designer must develop a strong applicational procedure. The odd phenomena here is that the end result of such a philosophical approach is visual, but the visual unity is developed from yet another invisible one. The designer must come to grips with the invisible organizational trends which created his symbol and develop these into a structured method of presenting this true reality in symbol form. The problem stated simply is presentation.

The primary consideration foremost in my mind at this time was the development and communication of the institute's personality in the manner prescribed by my research, that of starting on the inside and working out. This developmental process was to take from April 23, 1964 to the completion of all visual material for this thesis on May 12, 1964. From the beginning, the apprehension and challenge created by a diversified yet unitary application program
spelled confusion for my mind. It simply takes time to train my mind to think in terms of all applications at once and to determine the true image that I was creating.

The confusion can be seen in my method of approach to the problem. I began quite naturally and correctly by selecting a variety of applications which, when unified, would create my image. My original pitfall was that I designed each application as if it were an entity unto itself. Upon the completion of the sketches for my first campaign, this fundamental lack of continuity became brutally apparent, causing the symbol to become simply a decorative element.

At this time, it was felt that there was a spark of truth in one or two of the applications, and Mr. Barschel suggested that I investigate what had caused the success. The applications noted were those of the automotive vehicles used by the institute. These solutions have remained the same with only minor changes throughout the application process. I will be first to admit that the success of these applications was basically due to requirements inherent in their particular design situation. In the case of the trucks, the position of the symbol was dictated by the necessity for instant recognition and unhindered legibility. This caused me to elevate the symbol above the general flow of traffic making it appear off center. The solution to the symbol application at the rear of the vehicles is a result of designing it to be seen basically by other drivers and the fact that it can not be split by cracks or seams and still remain legible (See fig. 29). Intuitively, I still did not know what had made these a success, though practicality did.
In the preceding applications, note that the symbol is not represented in its full color version. This was basically for utility purposes; and as a general rule, when the exact colors representing the institute can not be obtained, then the person making the application should resort to rendering the symbol in either black or white. The procedure will eventually enhance the degree of accurate symbolic color recognition and thus clarify our image one step further.

The next act in my search for the elusive invisible was to turn to applications of an architectural nature. I felt that the structural problems present in this area might lead me to my goal. Passing over applications strictly for buildings (I believed these contained too many confusing elements to allow me to think clearly), I turned to the problem of creating signs of both a directional and a nomenclatural nature for the campus. If the reader will look at my final solutions, he will note that there are two supporting verticles for each sign (See fig's. 30 and 31). While sketching, I casually put my symbol atop one of these; and it visually began to speak. I then asked myself the question, "what did this have in common with the applications to the trucks?" After long deliberation, it dawned on me; the symbol was simply off center. "So what?" Then, I remembered that the basic linear elements of the symbol were also off center inside the color area. With some additional sketching, involving other diverse applications, this off center compositional technique proved to be the long searched for coordinating element. I was also to learn that this technique could be applied either vertically, as with the signs, or horizontally or both and still create my "look".

The design of the two signs also served to clarify my thoughts
as to the application philosophy of yet another element, color. Up to this point, there had been no set coordinated thought. The first problem was that I had chosen two colors to represent definite aspects of the institution; and for their meaning to become apparent, they both had to be rationally applied. The second problem was that neither was a color legible as mass text or even titling; therefore, to represent both on the same application with text required the addition of yet a third neutral color. As we know, this would have greatly hindered the symbol's flexibility. The solution arrived at was again a simple one. The purple had been used symbolically to represent the academic and the human with his place in education. The blue had been thought to symbolize the technological or the professional relationships. The decision was made to use the purple as the primary color for all applications of a basically academic nature. These would be primarily applications on the campus or more fundamentally all stationary applications. The blue, on the other hand, would be applied to all moving applications or basically to bonds with the outside world, as has been the case.

A further notion to be mentioned is the design of elements required by specific applications to accompany the symbol. I was confronted with this problem when designing my directional sign; I had to develop an arrow shape that worked harmoniously with the symbol. The considerations here were very similar to those concerning the relationship between the logotype and the symbol.

I have presented an enlarged rendition of the arrow I developed (See fig. 32), scaled to the same proportions as the painter's diagram of the symbol. This is to be the only arrow shape consistently
used for directional purposes throughout the institute. Furthermore, when used with the symbol, the width of the linear elements of the arrow must be the same as those of the interior elements of the symbol. Again, the reason for setting such requirements for such an apparently insignificant element is to create a consistent appearance of rationality aimed at promoting quality through clarity. This consideration of all elements is thought to instill in the viewer, upon repetition, a feeling of security, honesty, trust, and confidence in what is symbolically represented.

Having determined these basic rules for the application of the symbols, I next concentrated on developing this personality or "outlook" through applications at all levels of visual communication. Not producing a consumer product and not being one to avidly advertise, the institute is hindered as to the number of applications open to it for the enhancement of symbol recognition. This necessitates that the designer take on the not so pleasant task of giving visual life to all levels of the standard authoritarian forms. It is at this level that the invisible organizational element developed thus far will either be proven or disproven, for here, only this organizational unity can create the clarity and vitality necessary in a personality concept. There are simply no other visual crutches present to accomplish this at such a level.

The smallest, most often neglected, application I found to be the insignificant metal identification tags applied to all official equipment; therefore, I started here (See fig. 33). The application is a simple one with limitations of extreme reduction and single color reproduction. An application such as this is thought to be reproducible simply by the same means that the numerals are applied
to the tag, or they could be printed when the tags are produced. Even though the numerals are the element of primary concern, the symbol establishes the aspect of "property of" or "belonging to". Though a small application, its meaning and use of the symbol to visually communicate it make it quite a significant factor.

A name card and a mail tag were my next consideration (See fig's. 34-35) and were designed together because of their similarity in size, text, necessity of having elements typed in, reproduction limitations, and degree of quality required. Both of these applications are vital ones in the subtle advertising campaign of our Public Relations Department. My off center element is highly emphasized: vertically in the name card and horizontally in the mailing tag. Please note the subtle two color variation intended to relate symbol, institute, and city in the mail tag and symbol, individual, and department in the name card. Here we also see our first example of the use of the typeface developed for the logotype along with a variation of the logotype that can be safely performed, yet which I do not recommend. I rationalize by saying that I take the European standpoint of believing that this solution is best here. This same solution will prove valuable in several other instances because by assembling the text on one line I am able to enhance the off center element desired and emphasize the symbol, rather than the logotype. In conclusion, please note that I have adhered to the rule of representing the two words "Rochester" in the manner prescribed by Burke's Law.

Letterhead design was next on the agenda, and it was emphasized that this simple application is one of the institutes foremost advertising elements, usually first in establishing personal contact
(See fig's. 36-37). The applications were to be simple yet distinctive; these, more than any considered previously, had to be unmistakably the Rochester Institute of Technology. There were to be no limitations as to reproduction technique. To this end, I again used the previous method of enhancing the off center formula of our symbol. I further decided on the placement of the address at the bottom of the page on the off center axis for very definite reasons. Clarity of the letterhead was my first, but my second consideration was that of convenience for the reader. Most letters are a single page with the signature near the bottom, and it is bothersome to search most headings for the address, which is usually concealed. Here, I have presented this information distinctively and in close proximity to the individual concerned. The letterhead reproduced in full color is meant for general usage by all offices and all departments. The embossed rendition is meant for the use of only the office by the president of the institute.

The envelope designs are simplifications of the general letterhead concepts. Each matches its letterhead exactly as to symbol placement and reproduction technique. The address has been deliberately eliminated so that the practice of typing over or between already printed matter, as it is practiced now, is avoided. Here, a simple crisp continuity can be achieved by the use of a clean modern electric typewriter.

The design of the "News Release", another letterhead concept, was undertaken to show that the symbol can and does maintain its legibility and essence under extreme reduction and when used in conjunction with other competing pictorial elements (See fig. 38). The composition of this design is basically that of the letterheads
previously discussed; the aspect to be judged here is can the sym-

bol be used as almost a decorative element?

The utility jeep application next designed (See fig. 39), was
done to show that when other elements, here the rear tires and en-
closed area, already perform and emphasize the necessary off center
motif, the symbol can function most efficiently as a centralized
compositional element. Furthermore, the shapes inherent in this
vehicle were so irregular that only a centralized application
created the clarity and order necessary.

The final series of applications became the most visually
stimulating, if not challenging. The first were to be two proposals
for catalog covers for the institute dealing with the years of the
opening of the new campus. It was stressed that these brochures
were prime advertising material even though they were conceptually
of an informative nature. Their importance was derived from the
fact that they are usually the second element of our image to be
seen by one very important group, students attracted to the in-
stitute. This dictates that these applications represent our most
challenging and dynamic character, while beckoning the individual
with a clarity of visual approach.

The cover for the 1966-67 issue was conceived as a formal ap-
lication of the symbol and its "look" in its introductory year
(see fig. 40). Compositionally it complies with all previously
mentioned principles. I have even taken the liberty of choosing a
more appropriate set of format dimensions to immediately begin our
off-center image projection. The embossing used should be of the
square cross sectional variety, creating a sharp crisp outline in
any light, rather than that of a rounded nature which is too subtle
The second cover was an attempt to visually create, using an ink painting as a background, the dynamic, vibrant environment of the new campus area. The symbol was then incorporated in this concept to develop the impelling relationship between the school and the professional world and the school and the new untrodden non-city environment (See fig. 41). The basis format and titling material are standardized this time.

In these two applications, the symbol has not been represented in its two official colors; and it has had to meet the further complications of being reproduced in a demanding technique (embossing) and has had to act in conjunction with other quite dominant pictorial elements. All this had to be accomplished while complying to the visual requirement that the symbol maintain its true identity at all times.

For my final application, I chose an arbitrary architectural one for the new administration building. It had to be arbitrary for the building itself was not yet designed. The goal here was to show that the symbol could be rendered in a highly creative and visually unique manner and that this could be done by the architect for the enhancement of both the building and the symbol. My primary concern was to make this application the focal point of the administration building, which I believe is going to be the focal point of the new campus. This would entrench the symbol deep in the very heart of the institute's visual and philosophical spirit, bearing, and scope. The application should be made on a scale and in a position visibly discernable from a great distance, while supporting our occult application philosophy. I have presented a photograph (See fig. 42)
of a model designed to show the impact created by a crude sheet steel symbol applied to a simple brick facade. The concept is a sculptural one with the artistic use of a hammer and cutting torch enhancing the already inherent challenging and vibrant character of the symbol.

Having now completed my symbol creation and the development of its applicational philosophy, I must state that my thesis is at its end; but before I do this, I must point out that such a symbol campaign is not complete, if only carried to this stage. To validly judge and prove this symbol's inherent worth, after approving its artistic merit, the client is exposed to only one course of action, that is to adopt the symbol and put it to the test of mass usage over an extended period of time. Only then, will either the client or I know if the decisions made here as to my creative process and philosophy were valid and valuable. Complying with the results of my research forces me to make the following statement. The vitally basic and ultimate conceptual requirement for any such symbolic endeavor is that the symbol first must capture and communicate an essential socio-psychological function. Upon fulfillment of this concept, it must advance one step further and take on the mature responsibility of becoming, in itself, a directive function strengthening society.


