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# **Direction**

Joseph Antinore Jr

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#### DIRECTION

by

Joseph C. Antinore Jr.

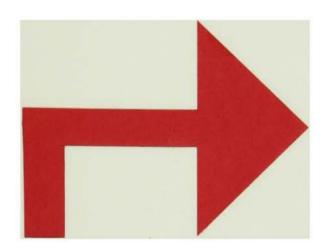
College of Fine and Applied Arts
Rochester Institute of Technology

Submitted: May 30, 1966

Advisor: Hans J. Barachel

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x-photo from Feb.'66 issue of "Life"

1,2-photo by Hans Barschel

3-photo 5th floor 50 Main St. RIT by author

7,8-photo Rochester Civic Center by author

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### INTRODUCTION

The purpose of this thesis is to execute a series of designs intended to direct traffic movement within a building, especially under emergency conditions.

In time of emergency, directionals should be immediately visible to those involved. Who is to say what locations within a building would be most advantageous? People could be everywhere and anywhere. Many locations for directionals are quite obvious and have been used time and time again, however, one must be almost on top of them in order to comprehend them. I propose to design directionals which communicate through visual images; void of verbal instruction. The designs will be constructed in such a way as to allow interpretation from almost any angle of observation.

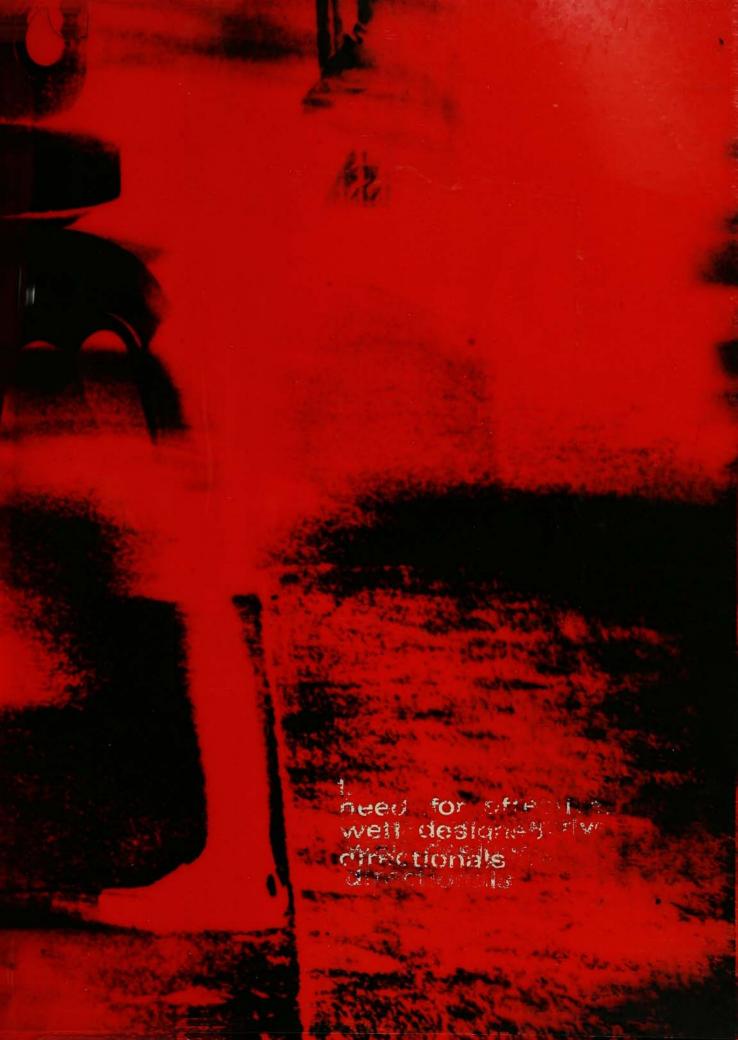
The chief purpose of emergency exit directionals is to aid in quick and orderly removal of all occupants of a building to a point of safety in any emergency situation where masses of people are involved in common danger.

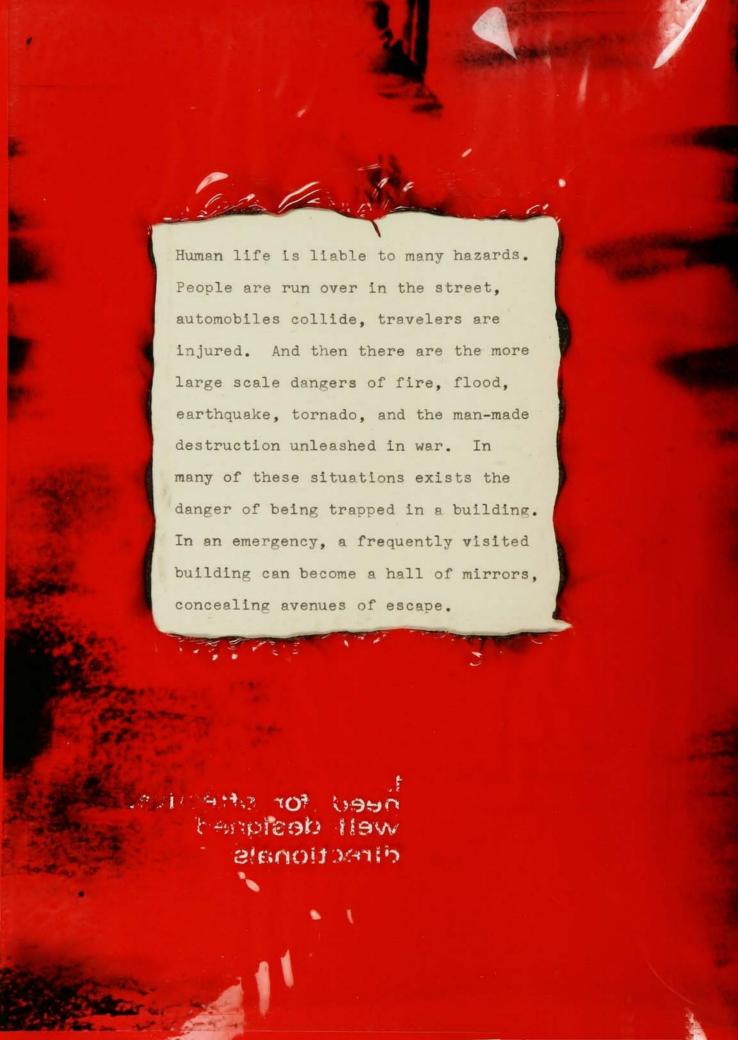
Human life is liable to many hazards.

People are run over in the street,
automobiles collide, travelers are
injured. And then there are the more
large scale dangers of fire, flood,
earthquake, tornado, and the man-made
destruction unleashed in war. In
many of these situations exists the
danger of being trapped in a building.
In an emergency, a frequently visited
building can become a hall of mirrors,
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"ART is the spearhead of human development, social and individual. The vulgarization of art is the surest symptom of ethnic decline." "SCIENCE is not likely to beget a culture unless, and until, a truly universal artistic imagination catches fire from its torch and serves without deliberate intent to give shape to a new feeling, such as generally initiates a new epoch of Society." "Our technological civilization seems to overtake and overwhelm us ... it makes all our traditional institutions seem inadequate, so that we tend to abandon them." SUSANNE K. LANGER

A. D. Trottenberg, Assistant Dean, Faculty of Arts and Sciences, Harvard University comments: "The American public prefers its visual arts tidily isolated in museums for Sunday viewing and seems relatively unconcerned with its day-to-day surroundings. There has developed a curious imbalance between a growing appreciation of the arts and an increasing imperviousness to the quality of our daily visual environment. Education has had a highly beneficial effect on the first but either has not been applied or has failed miserably on the second. The improvement of our visual world remains one of the prime concerns of an enlightened citizenry, and this in turn makes it a responsibility of the educational community. Our cities and countryside, afflicted with commercial blight and planning chaos, constitute a visual environment of unsurpassed ugliness. It is obvious that wellmeaning exhortations from the White House can accomplish little. An annual art exhibit on the lawn of the White House and an invitation to plant flowers by the wayside do not constitute a program promising substantial relief from visual anarchy. The ineffectiveness of the government in these matters is best reflected in the design of the new House Office Building in Washington and the rapidly lanquishing proposal for the esthetic improvement of Pennsylvania Avenue."1

I was pleased and impressed with Dean Trottenbergs views on our visual environment. I promptly wrote him this letter:

Dear Dean Trottenberg:

I am presently engaged in a Graduate Graphic Arts Program working toward a Master of Fine Arts Degree.

I am writing you as a result of having read your article in the February 19, 1966 issue of "Saturday Review" en-titled, "Colleges Graduate Visual Illiterates".

May I refer to the paragraph ... "Our visual center will accept as an additional obligation the responsibility to bring its talents and point of view to bear on every aspect of university life. Why should not the signs marking roadways, buildings and offices be well designed, with contemporary lettering organized to provide a maximum of information?"...

I have felt very strongly toward this point of view for some time. I have enclosed a copy of my thesis proposal to show you the close relationship in our thinking.

I would appreciate your sending me any literature or information which might be of help in writing my thesis book. I would be more than happy to pay any postage necessary. I anxiously await your reply.

Sincerely yours:

Joseph C. Antinore Jr.

I was pleased and impressed with Dean Brottenbergs views on our visual environment. I promptly wrote him this letter:

Dear Mr. Trottenberg:

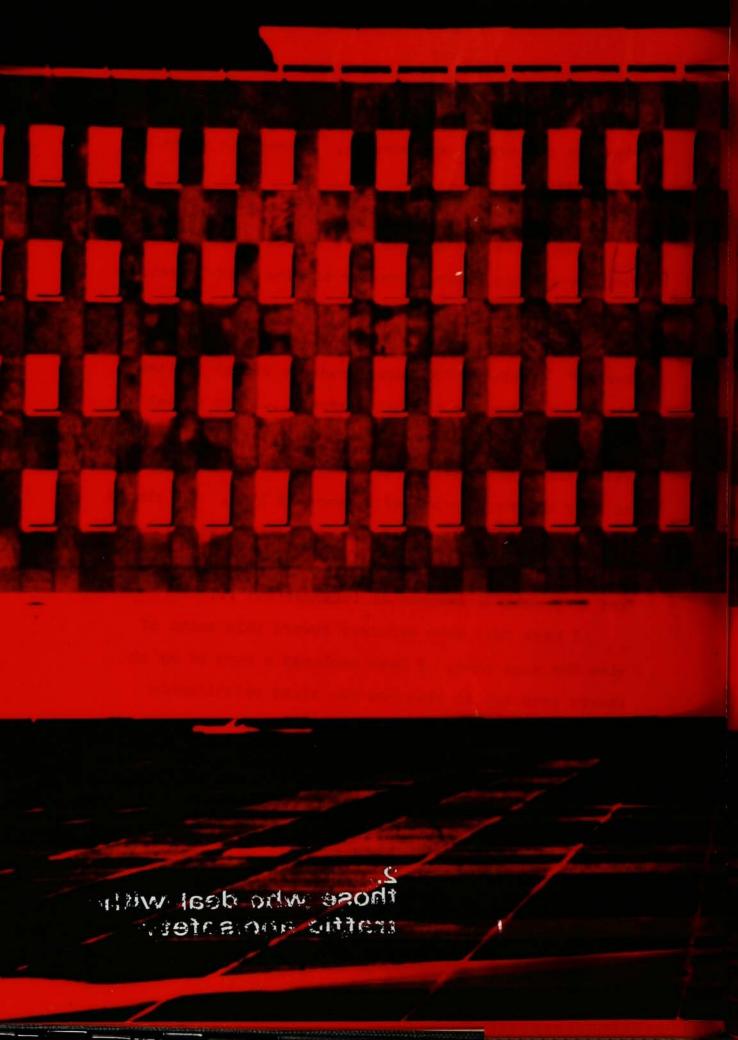
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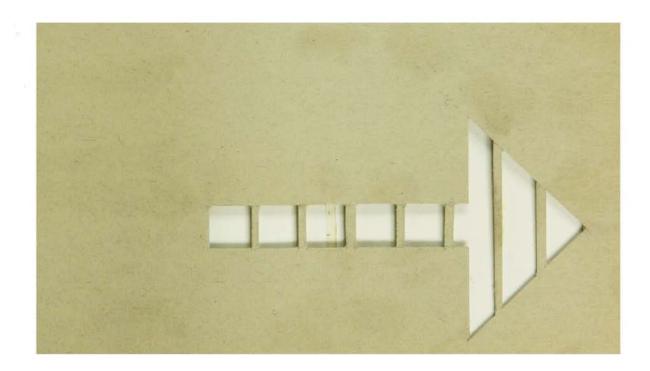




The misconceived notion that a good deal of research assistance could be obtained from those who deal with traffic and safety, both highway and building, led me to several people. I made an appointment to talk with Mrs. Ann Taylor, Director of the Department of City Planning located in the Rochester Civic Center. Mrs. Taylor was quite pleasant in greeting me, however, without question or inquiry hastily transferred me to one of the employees within her department, Mr. Al Russell. Mr. Russell seemed enthusiastic toward the design layouts and ideas but felt his area of involvement was not quite related to the thesis project. His advice was that I see Mr. Hudson of the City Fuilding Bureau.

Having already thoroughly explained my thesis project once that morning I entered Mr. Hudsons office and began again. Mr. Hudson was the man to see all right, but he could be of no help. Seated at his desk, surrounded by files of regulations regarding building safety and evacuation, he explained to me that no laws existed regulating the type directional I was designing. He could only tell me that if no exit light could be seen in a corridor within five

feet of a room door, then directionals were to be provided which would indicate the direction to an exit. This in a way was good news because it afforded no hampering boundaries to design or color scheme of the thesis project. Although he seemed interested in my concepts and expressed a desire to review the finished project, his narrow viewpoint and lack of concern for graphic design prevented any light from being shed on the subject. His approach to safe building evacuation was highly technical. If an exit sign is electrically lighted, how is it wired, how many feet should it be from an exit and is it fabricated of a non-combustible material? These seemed to be Mr. Hudsons major concerns.



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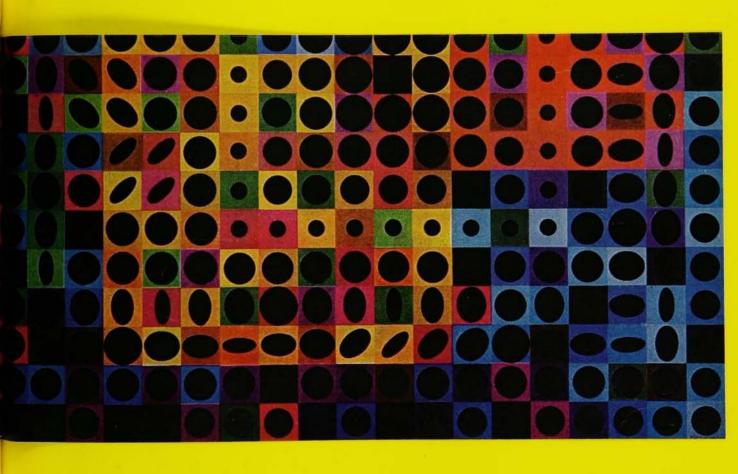


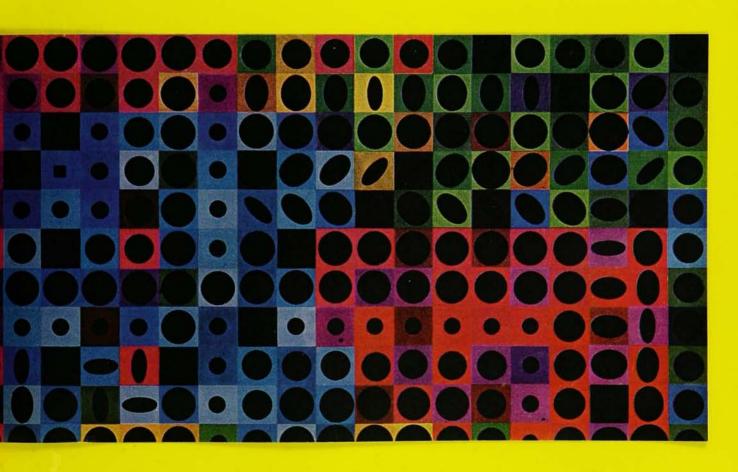
It is not easy to find out how disasters affect people. In the best of times our observations of human nature are rather rarely intensive or systematic. In the alarm, disorder, pain and grief created by large scale catastrophes, there have been too many more urgent things to do. It is only recently that research teams have been going into the field to interview victims of disasters, and to observe some of the consequences of such events.2

Of particular interest. I think, are the predictions of penic and madness in time of emergency. There was no panic flight from London or any other city during the German bombing in 1940. Evacuation was orderly due to reasonable government policies, of sharing information with the public, and leaving the possibility for evacuation always open. Among recent researchers on reactions to disaster it has become a commonplace that panic is the most often expected and least often occurring event in such situations. Like most grossly mistaken predictions, the forecast of panic in disaster expresses an important fantasy. Reality, as is often the case, is poor in comparison with fantasy. Disaster-stricken populations are apt to be quiet, stunned, and dazed. But in fantasy the idea of disaster evoked recurrently images like that in the film, Quo Vadis, where the desperate and shrieking populace of a Rome on fire flees like a wild herd through narrow passageways. bodies colliding and being trampled under foot, while each thinks only of saving himself. In the fantasy of panic there is the mob who have lost all regard for one another, the violent swful sense of disappearance of the benevolent and protective aspects of the world.

Such a scene makes a strong appeal to the imagination, which accounts for its being anticipated so much more often than it actually occurs.<sup>3</sup>

The internal bodily changes involved in emotion prepare the individual for intense muscular activity. In primitive societies, where a man's life often depended upon his ability to run fast or fight hard, these internal changes provided him with the extra energy needed to survive in an emergency. Although modern society is very different from these primitive cultures man's original nature remains very much as it was thousands of years ago. Man still is subject to intense emotional upheavals which provide him with an abundance of ready energy even though he seldom meets an emergency which calls for great physical strength. is a matter of fact. most of the emergencies in this the machine age demand motor skill rather than brute strength. As a result, intense emotional states tend to reduce the effectiveness with which man handles himself in an emergency. 4 Realizing the existance of this emotional state and because the prediction of panic in times of emergency is believed by experts to be in great part fantasy, it would seem safe to conclude that where emergency directionals were provided a faster more orderly evacuation of an area could be anticipated and confusion reduced to a minimum.





4. color psychology

Colors have very real effects on the mind.

They act very much in the same manner as do drugs.

They may be stimulating or calming.

and passive experience than form perception, requiring less in the way of perceptual tools or organizing capacity. It is associated with a passive perceptual mode in that it becomes more dominate, more compelling in quality, and perhaps even antagonistic to form articulation in conditions in which active perceptual organizing capacity is impared or is only rudimentary; at the same time, under optimal conditions, color becomes integrated with form perception, is itself modified in subjective experience, and acquires new functions of economy and enrichment.

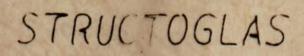
In legibility of colors, black and yellow holds first place, then green and white, red and white, blue and white and black and white. In strong illumination light colors on dark are superior: in dim illumination the light background seems essential, with dark characters clearly contrasted on it. Visibility depends almost entirely on contrast, with yellow superior to white as a background because it produces less blur and compels attention.

Assuming that most building hallways and rooms are flourescently, or by some other lighting system, illuminated, I elected to design directionals with white symbols on a red background. I realize that Faber Birren, as previously mentioned, lists this color combination as third in legibility, however, it is my opinion that its impact is far superior to the other color combinations. Psychologically, red infers danger. We have been taught that red means danger. In an emergency I feel that red and white directionals would immediately be considered the ones that would lead to safety.



Plastica, Nuc.





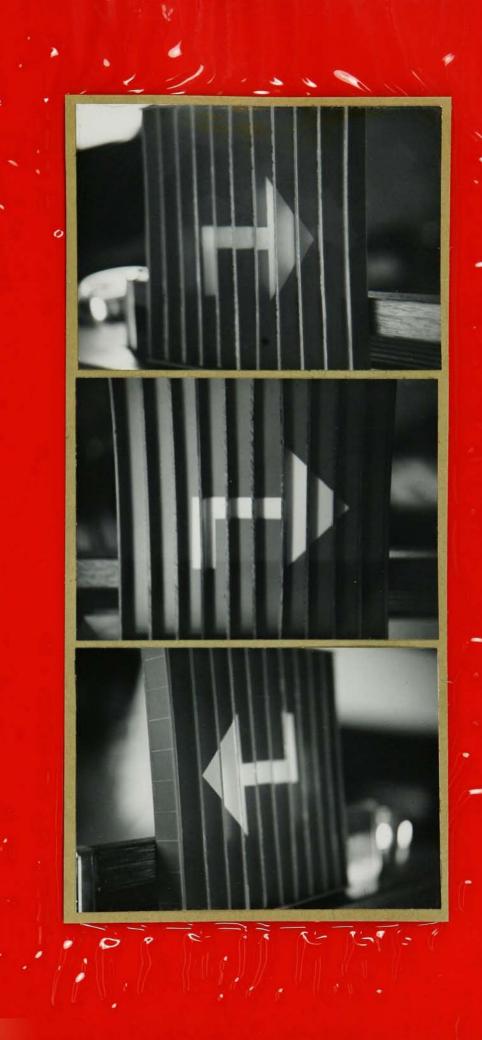
SIGNS AND NAMEPLATES

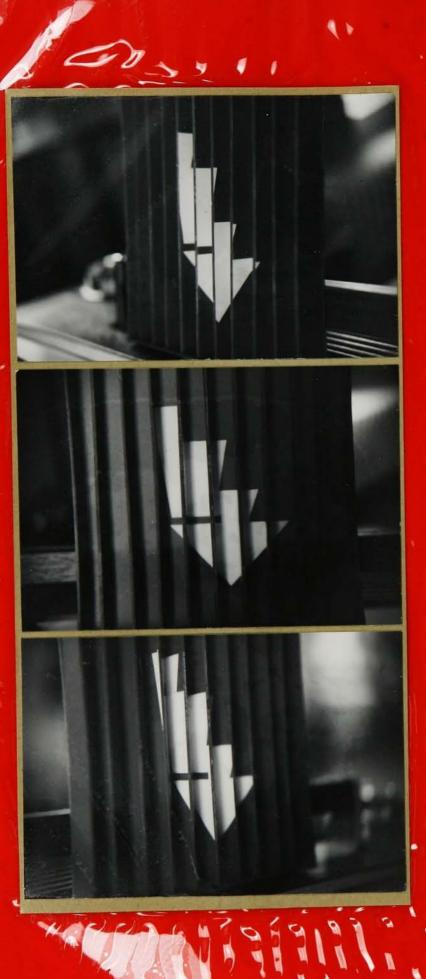
> 5. fabrication, placement and size testing

I have heard it said, "walk through life and be scared." It somehow seems right to fear each new experience we encounter. To approach a factory manager and pose him with the problem of fabricating a new design concept was to me, one of these fearful experiences. So much can de gained or lost in the transition of a design from drawing board to finished product.

Much consideration had to be given to fabrication media for the directionals. Cost had to be kept minimal, but materials had to be durable. Paper products, of course, were out of the question. Aluminum was considered but disregarded because of anticipated numerous steps in construction. Plastic seemed to be the most advantageous and workable media. Designs could be quickly stenciled with spray enamels, easily cut and simply constructed.

I contacted Mr. John Proctor, of W.F. Decker, Ridge Plastics Incorporated, and asked his advice concerning the use of plastic to construct the directionals. He agreed that plastic seemed the most economic media, and was more than willing to cooperate with me in carrying out the final steps in fabrication. Mr. Proctor made both himself and his shop available to me for my work.





No rule book could be utilized concerning overall size or placement of designs. A series of experiments had to be conducted in order to determine these factors. The designs were tested at various levels on walls in the 50 Main Street Building, Rochester Institute of Technology. I decided that at an average eye level the directionals were most effective and most readily visible.

Directionals placed on walls oppisite room exits tested to be the most successful placement.

Rooms at ends of halls and other locations where no wall exists opposite an exit, directionals proved to be effectively visible directly inside the room affixed to the wall on the locking side of the door.

A questionnaire was prepared to obtain opinions for statistical purposes and handed to students and faculty passing through the halls at Rochester Institute of Technology. The questions asked pertained to the effectiveness or ineffectiveness of the directionals. A copy of the questionnaire showing total pro and con answers has been included as a conclusion to this thesis.

### QUESTIONNAIRE

prepared by Joseph C. Antinore Jr.

for purposes of gathering public opinion toward thesis project "Direction"

*	Do you feel there is a need for improved, abbreviated emergency directionals?	yes <u>35</u> no <u>0</u>
ĺ	Is the directional message com- unicated quickly and clearly?	yes <u>32</u> no <u>3</u>
•	Do you feel the color selection is the most effective for this type of directional?	yes <u>35</u> no <u>0</u>
•	Do you feel the directionals would clearly communicate to children as well as adults?	yes <u>33</u> no_2
	Any further comments:	

#### NOTES

- 1. A. D. Trottenberg, "Colleges Graduate Visual Illiterates", Saturday Review, (Feb. 19, 19-66), pp. 73, 104.
- 2. Martha Wolfenstein, Disaster: A Psychological Essay, Glencoe, Ill., The Free Press, 1956, pp. ix.
- 3. <u>Ibid</u>, pp. 13-14.
- 4. W. W. Cruse and L. P. Thorpe, <u>Developmental</u>
  Psychology, N.Y., The Ronald Press Company,
  1956, pp. 231.
- 5. Maria A. Rickers-Ovsiankina, ed., Rorschach Psychology, N.Y., John Wiley, & Sons, Inc., 1960, pp. 171.
- 6. Faber Birren, Color A Survey in Words and Pictures, N.Y., University Books Inc., 1963, pp. 211.

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Doubleday Anchor Books, Doubleday & Co. Inc., 1955, pp. 10-11, 16.
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