Art and production problems in an educational film on design elements
by Stanley Edwin Torrence

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of
MASTER OF APPLIED ART
Montana State University
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Abstract:
Several scripts were written in preparation for an educational film on the design elements. Through a series of revisions a final script was narrowed to an introduction of the visual elements.

In preparation for filming over one hundred junior high and fifth and sixth grade youngsters contributed toward the film-making by making costumes, masks, stick sculptures and paintings. They became acquainted with elements of design, learned new ways to use materials, and found a new enjoyment of art.

Composition, animation and special effects were undertaken at the camera while timing, continuity and other effects were accomplished at the editing bench. Voices were added and music has been arranged. Until the release print is returned from the processor final results cannot be evaluated.

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MONTANA STATE UNIVERSITY
Bozeman, Montana

August, 1965

ACKNOWLEDGEMENT

My deepest appreciation to Mr. Tom Veatch, who first encouraged me to do a film, to Mr. Cyril Conrad who gave me much moral support and encouragement, to Miss Senska, who gave much understanding and help, to Mr. Robert DeWeese, who gave generously of his time, to Mr. John Barsness, whose inspiration through Shakespeare left a profound impression on me, and to Mr. John Robinson, my superintendent in Astoria, for his financial aid and co-operation.

This acknowledgement would not be complete without mentioning the wonderful co-operation and help I received from Mr. Jack Stonnell of the Film and TV Department, Mr. Sedivy, who helped me find the musicians John Lingle, Bud Berges and Wesley Myers; Mr. Joseph Fitch, who helped me locate the voices of Carol Richardson, Carol Gilmore, Paula Jermunson, and Stephen Wirfs, the boys and girls of Lewis & Clark School #5 in Astoria, Oregon, and their parents who gave much support and co-operation.

My thanks also to Mr. Richard R. Pfeifer and Mr. Norm C. Dimick for their technical assistance, to Mr. Charles Boer, who proofread the first script and especially to my wife, Evelyn, and two children, Stephen and Karen, who helped me in so many diverse ways.

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ABSTRACT

Several scripts were written in preparation for an educational film on the design elements. Through a series of revisions a final script was narrowed to an introduction of the visual elements.

In preparation for filming over one hundred junior high and fifth and sixth grade youngsters contributed toward the film-making by making costumes, masks, stick sculptures and paintings. They became acquainted with elements of design, learned new ways to use materials, and found a new enjoyment of art.

Composition, animation and special effects were undertaken at the camera while timing, continuity and other effects were accomplished at the editing bench. Voices were added and music has been arranged. Until the release print is returned from the processor final results cannot be evaluated.

INTRODUCTION

Educating children in art has not been consistent, nor has it been adequately stressed. Limited use of art films in the elementary school provided a challenge to do a film project on the visual elements which would appeal to children.

Information was sought from the Eastman Kodak Company, from the Film and TV Department at Montana State College, and from the General Film Laboratories of Hollywood and finally from personal contact with N. C. Dimick 16mm Motion Picture Production Services of Portland, Oregon. A number of books were also consulted, particularly for the use of design in film-making.

To assure the greatest educational value the project was carefully planned from the narrative and selection of props to the use of professional film-making techniques and procedures.

It was necessary before work could begin on the film project to establish some objectives. These were as follows:

1. To develop an educational film for teaching the fundamental elements of design in an entertaining way.
2. To show the relationship between the artist and his work.
3. To involve an actual class in all aspects of creation, development, acting and filming.
4. To relate the elements of design to the story and to

the editing of the film.

5. To provide a framework which would allow ample freedom for creativity.

Early attempts to establish a plot included one in which youngsters would caper through enormous enlargements of their own abstract paintings. This was not technically feasible with equipment that could be secured for filming and had to be abandoned in favor of a new plot.

In this age of space exploration appeal might be achieved by writing a story about a moon rocket. To visualize the story a set of sketches showing each shot was prepared (Figure 1). These were placed on the floor in comic strip fashion. Weaknesses began to appear. The visual element, value, did not work in smoothly. The second half of the story did not use the visual elements enough. The sorcerer, antagonist, was inclined to be a more inspiring creator than the artist, protagonist. Too many things were happening in the story for the short length of the film.

Some changes made were as follows:

1. Introduction, frequent mention, and final summation of the elements was made.
2. The "right and wrong way to art" was changed to "art is fun no matter how you go about it."
3. The plot was rewritten to add strength to the elements.

4. Troll dolls were introduced to symbolize each of the visual elements.[1]

A revised script was prepared with each change of camera view carefully indicated (Figure 2).

The next step was to visualize how the story would go together shot by shot and, if possible, to get some idea of timing.

A technique known by the film industry as checkerboard editing was adopted, but to see more clearly how it worked an editing plan was drawn. A brief description of each shot, its length in frames, in seconds, and in feet was shown as well as lap dissolves and fades (Figure 3).

An allowance for $2\frac{1}{2}$ words per second was made and the pace of silent shots geared to mood, importance, interest, and distance, a close-up shot being generally briefer than a long shot.

As a direct result of the editing plan further script revisions had to be made. A set of index cards, known in the industry as story-board cards, was prepared, one for each shot (Figure 4). The cards were separated into the following groups

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[1]Commercial dolls were used even though art would have been better served to have had the children make them. But as child-made artifacts seldom have appeal for other children this was not felt wise in this case.

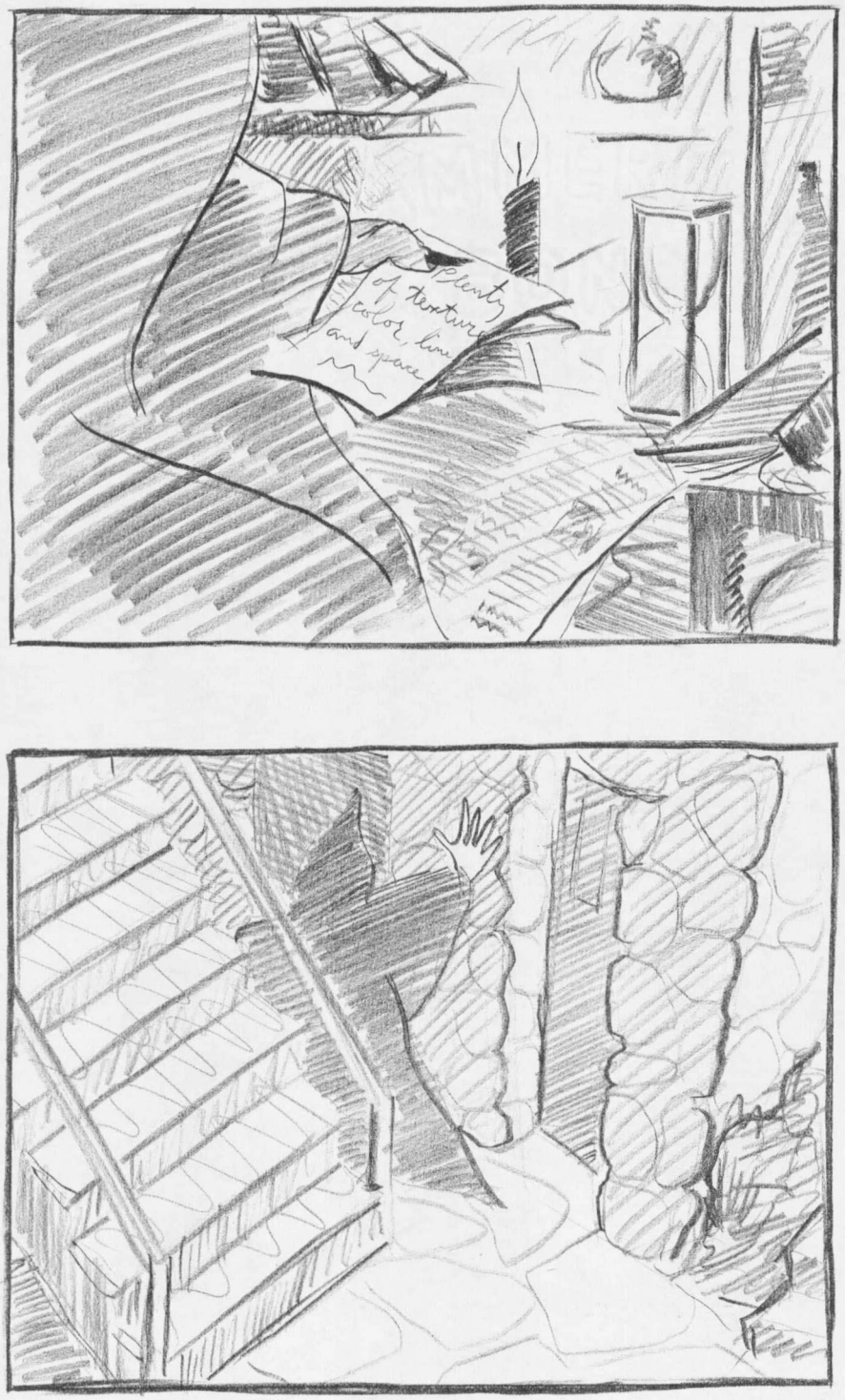

Figure 1. Sketches for Camera Shots

for a shooting schedule:[2]

1. Shots of Zama.

2. Shots of trolls with animation.

3. Shots of set without Zama or trolls.

4. Special effects (titling, moon, sunrise, etc.).

Below is a synopsis of the final script in narrative form:

DESIGN AND ZAMA

A student-made non-objective painting was chosen to use as a background for the title, DESIGN AND ZAMA. One by one the troll dolls, each dressed as an element of design, enter and cause the title to be effected. Then Color causes the letters to become bright magenta, Line causes the letters to have lines through them, Texture allows the texture of the background to come through white letters and Space crowds the letters into a pile and spaces them out again. When that happens, Zama appears.

"So! You dare to dabble in my magic arts?
I cast a spell to still your hearts!"

Zama drops his wand on the table, accidentally getting it into wet paint. While this is happening credits appear superimposed over the action. Zama picks up his wand and --

---

[2]The shooting schedule simplified the task of setting up the camera and lights. All the shots from any one position could be completed which would avoid the need to readjust the equipment. For example, all close-up shots of Zama could be taken from one set-up.

(11) SHOT OF SPACE. "YOU NEED MORE SPACE."
(12) SHOT OF ZAMA. "WHAT DO YOU KNOW ABOUT SPACE?"
"I AM SPACE." (13) SHOT OF SPACE
ZAMA (OFF CAMERA) "WHAT'S THAT?"
"I'LL SHOW YOU." (FADE AND DOUBLE EXPOSE)
(14) MOON IN SPACE, (15) THEN BOTTLES ON A SHELF

Figure 2. Work Script

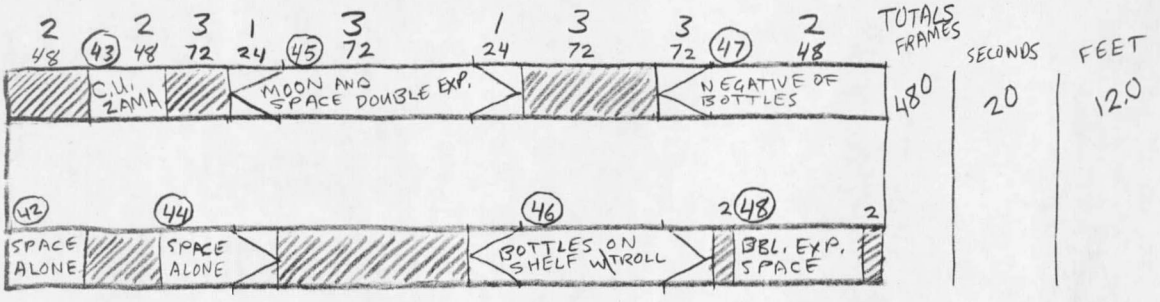

Figure 3. Editing Plan

45 FULL VIEW OF SPACE ALONE
- ENTERS FROM THE RIGHT
DOES A FULL CLOCKWISE
TURN, EXITS OUT RIGHT
DOUBLE EXPOSE WITH C.U. OF MOON
TOTAL 5 sec.
5/28

Figure 4. Storyboard Card

"Ardi, zari, clear all away.

Leave me room for work today."

Nothing happens. Zama, in a fit of anger, strikes the wand against a mug on the bench. A bright flash results and the Narrator speaks for the first time, "Dropping his wand has broken the spell. The elements of design are set free."

Zama exits, the trolls leap down from the shelf, the remaining credits appear on the screen and the trolls begin all manner of mischief.

The Narrator speaks, "Knowing Zama as I do, I am afraid of what may happen -- fellows, girls, settle down; settle down!"

The Narrator, unseen, addresses the viewer. "Zama has been trying to prove magic will do anything. He denies that such a thing as elements of design even exist."

At that moment Texture and Line are pushing a bottle of ink off the table.

"You shouldn't be doing that," says the Narrator. "Now you've done it!" The ink spills out and Zama, who has witnessed the mischief, is unable to control his anger.

The Narrator says, "Cover your ears!"

The trolls quickly scatter out of sight, but not in time. Zama snatches Line by his hair and says,

"Now you irascible maker of trouble,

A spell shall I cast over you!

Izwa, zardi, azwa--oo-oo-oo-oo!"

Nothing happens. As Zama throws another fit, he mumbles,

"Ungrateful, bothersome, nuisance creatures, I say,
Why must they act in such spirit this way?"

Zama releases Line and removes a book from the shelf (Figure 5). We see him open it to a page on which the heading appears, "Banishment by Rocket Ship to the Moon and Planets."

A variety of materials are selected by Zama and he begins work. The trolls come out of hiding and begin to discuss his work.

"No sense of design,"[4] says Color.

"Not at all," replies Line.

Value speaks, "No rhythm, it doesn't even come close."

A series of close-up shots point out the speaker as comments continue in a derisive manner, now that the trolls know they are out of harm's reach.

"What colors will save that awful thing?" asks Color.

Value replies, "Who wants to save it?"

Suddenly Zama shouts, "Be gone!" Silence follows and all the trolls, except Space, retreat.

Zama says, "Well?"

---

[4]In this and subsequent speeches terms are used which may not be familiar to the young viewing audience. Though no attempt was made to clarify them in the film, they were used so children might hear them. They are also intended to be a useful tool for points of discussion by the teacher.

Space replies, "You need more space."

"What do you know about space?" asks Zama.

"I am Space." Space continued.

Zama asked, "What's that?"

I'll show you. I'm emptiness." Space is seen out in space with the Moon very large behind her.[5] Suddenly Space appears on a shelf with a group of vessels. "I'm between these bottles. I'm in the bottles and on them too, see?"[6] (Figure 6).

"Enough!" cries Zama.

"Why?" asks Space

Zama retorts, "That surely must not be!

All magic is done by me!"

"That's not magic, it's trick photography."

Zama returns to work and is seen removing sticks to enlarge the small open spaces in his rocket construction.

Again the trolls move out from behind things to watch Zama. They begin to talk all at once to each other and we hear the Narrator speak, "Here comes more trouble I'm afraid. A magician without his magic is a very touchy fellow."

---

[5]It is expected that Space will appear transparent as this portion will be double exposed in the final film print.

[6]In a double exposure Space becomes two troll dolls and also should appear transparent in front of a white pitcher on the shelf.

Figure 5. Zama Removes a Book

Figure 6. Space Among the Bottles

Zama is trying to hold a stick very still but drops the piece he has been holding. "Be off with you !" Zama cries, addressing Line who has remained as the others withdraw behind things once again.

"But you must not do that," says Line.

Zama replies by asking, "Who says I must not? Who be you?"

Line simply answers, "Line."

Zama snatches his wand from the floor and tries to work magic. "Radazi, adza, egam, zaloo! Vanish, vanish!"

"It won't work," says Line, "You can't get rid of me. I'm always around to separate one space from another."

The Narrator speaks at this point while a wide green paper is filling one half the screen. "Look at Color get into the act." The white side bends to create a rounded form as the Narrator continues, "and Value, you can't keep them apart."

Line continues, "You need more vertical lines."

"Vertical lines need I? And be they what, pray tell?" asks Zama.

"I'll show you, see?" A view is shown of a pillar.

"I understand you, nay!

Had I my wand, I'd have my day!"

Color says, "You don't need it. We'll help you, won't we kids?"

The Narrator identifies each of the five elements of design in the following speech:

"Such a noisy group, but you know that fellow, Zama, ought to listen. He doesn't need magic, but he should know something about line, space, color, texture and value, the elements of design."

Texture, referring to Zama's rocket ship construction, asks, "What's it for?"

"Leave me be!" says he. "Somewhere else! Go there! Now get out of my hair."

So bold have the trolls become that Space has even climbed up on Zama to have a look at his book. At Zama's command Space slides down and out of his beard and retreats with his friends out of sight behind books, bottles, and boxes.

Texture asks, "What is he doing?"

Space answers, "Shh! I saw what was in that book, and I think he plans to send us to the Moon, one way!"

Value, relieved, says, "Whew, for a moment I was worried. I thought a sorcerer was supposed to be a learned man. Doesn't he realize it isn't possible to banish us? Why, look at the line of his beard, the texture of his cloak, the color of his lips, the space between his eyes...."

Texture interrupts, "...and you give him form, Value, with your light and shade."

Color says, "Now, let's figure how we're going to help him."

Conversation becomes quiet as Space is heard to say, "I think we should use fewer diagonal lines and more horizontal lines. Since we are to be banished to the Moon it might as well be a restful trip, you know what I mean."

A rocket ship is seen made up of horizontal lines with Space in a hammock.

Color argues, "True, but diagonal lines give a feeling of action and speed. I get rocket ship sick and I'd just as soon get there as quickly as possible."

"I'd like it to be beautiful because people may be watching through their spy glasses and lots of curves would make us look graceful," says Texture.

Color interrupts, "Graceful and curvy like Space?" Space has come out of her shower and is not wearing any clothes.

Value asks indignantly, "Where are your clothes?"

Line whispers to Texture, "Too much space between the buttons, tee, hee, hee."

Zama retires.

A dream sequence allows an opportunity for the trolls to work on the Moon rocket.

Texture awakens from her sleep and says, "Idea! The rocket ship needs something soft - like wool. Something rough, o-o-oh!" She has felt sandpaper and has cut her finger. She

fades out and Color awakens in blue light.

He declares, "It (rocket ship) needs color!" He tries several, naming them as they occur.

Value comes in and suggests pink. "Stick to your light and dark," says Color as he pushes her out.

Value mutters, "Well, I declare!"

The colors fade out in a lap dissolve and black and white film shows value alone.

Colors return and Color decides on blue for the rocket ship.

During the next part of the film an attempt was made to again identify each of the design elements. They leave the rocket ship where they have been working and fly low over the sleeping Zama manifesting their respective elements upon his face, in the form of a mask, giving him bad dreams.

He rises in a nightmare trance, sees himself still sleeping and flees.[7] (Figure 7). Line appears in that dream, too, and Zama, having worn himself out, returns to bed.

Dawn arrives and Zama awakens to discover his rocket ship finished and his wand restored. Seizing his wand, he waves it and the rocket ship begins to rotate magically.

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[7]Watching five masks in succession became too long to watch. It was felt that some variety would offer a change, create some excitement, and build toward a climax.

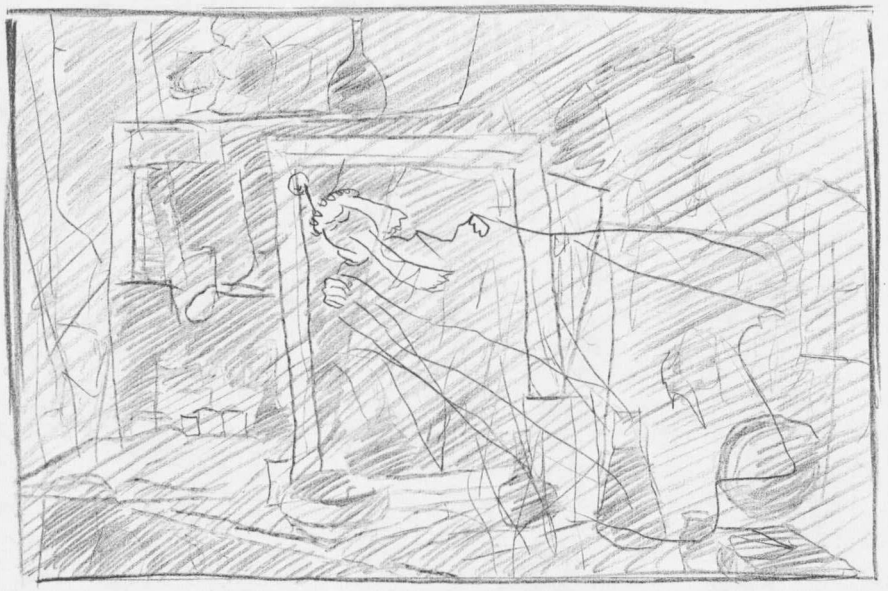

Figure 7. Zama's Nightmare

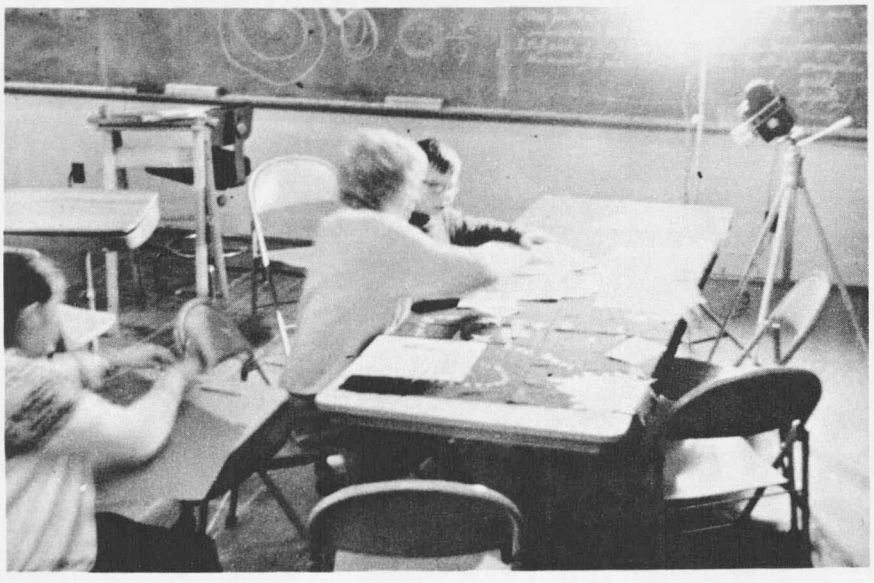

Figure 8. Thesis Group at Work

The Narrator speaks, "And there you are, Zama; the elements of design; good fellows to have around after all -- (quietly) He's entranced."

As a conclusion the trolls appear one by one in Zama's arms signifying that Zama has at last accepted the elements of design.

The Narrator, for the last time names each element as he says, "Thank you, Color, Value, Texture, Line and Space."

The film ends.

PREPARATIONS

In early October, volunteers were sought from my junior high art class to serve as a crew to work closely with me in the various aspects of production. The initial group consisted of seven seventh and eighth graders. The group came to be known as the Thesis Group (Figure 8). To help develop the script two seventh grade girls, strong in creative writing, were also enlisted. This did not work out well. It seemed too difficult for them to apply their creative writing skill to so specific a problem. Checking into the backgrounds of the group it was found that art consisted primarily of valentines and May Day baskets. It appeared that the youngsters had been allowed very little opportunity in art for creative self-expression.

Just after Christmas a contest was held among approximately two hundred fifth through eighth graders, for the purpose of designing suitable costumes for the troll dolls[8] (Figure 9). The five most appropriate entries were selected for use in the film.

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[8]Troll dolls were found to have a great amount of appeal, and camera experiments proved that they could appear to have a wide variety of expressions as well.

A study of costume during the Elizabethan period suggested the style of hat for Zama, particularly the slashing around the brim and the plume.[9] The robe was sewn from a pattern designed to fit the youngster who would play the part. Zama's wand was painted gold and the tip was set with glass jewels.

A mask of paper maché was started by the Thesis Group and further developed by myself (Figure 10). In trial use it proved hot, heavy, and difficult to wear with the hat. To remedy the situation the junior high crafts class and my junior high art class went to work to make masks for the sorcerer. They were instructed to choose an element of design and follow through with the final surfacing to be in effect a "disease" of color, line, texture, etc (Figure 11). Because they were still uncomfortable to wear,[10] I constructed a mask to fulfill the following criteria:

1. As lightweight as possible.
2. A sinister but more human face.
3. A close fit to allow the eyes of the wearer to be seen.
4. Contoured over the head to allow a better fit for the hat.

---

[9]It was the hat that led to using poetry after the manner of Shakespeare for Zama's speech.

[10]Several of the students' masks were used in the dream sequence.

Figure 9. Color, Texture Space, Line, and Value

Figure 10. Zama's Original Mask

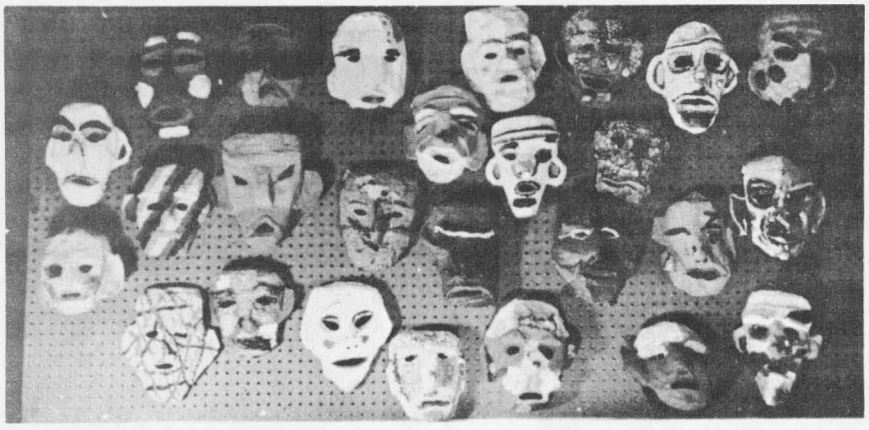

Figure 11. Masks by the Students

Volunteers from my painting class built five rocket ships, each in a different stage of completion. This was done to facilitate out-of-sequence filming. All were constructed with split bamboo sticks.

Because particular book titles were needed by Zama, book jackets were made and gold lettering was applied.

The living room of my apartment served as the most practical location for filming as no one could disturb things between filming sessions.

To provide a suitable background in keeping with the character of a sorcerer, and to provide a non-distracting light and dark pattern with the element, value, in mind, a 3-D paper maché rock wall was constructed by the Thesis Group. This was made in several sections and included one long strip to be placed inside the window casement.

An attempt was made to establish an area of emphasis for each visual element. The texture troll could thus be filmed against texture surfaces around her, line against a background of lines, etc. As each troll was to be animated and would move around to a variety of positions it became increasingly difficult to adhere to that idea. Still, it was hoped, the viewer would soon associate the troll with the element he represented (Figure 12).

Close attention was paid to balance, rhythm and emphasis in placing the many objects to establish the set. A picture

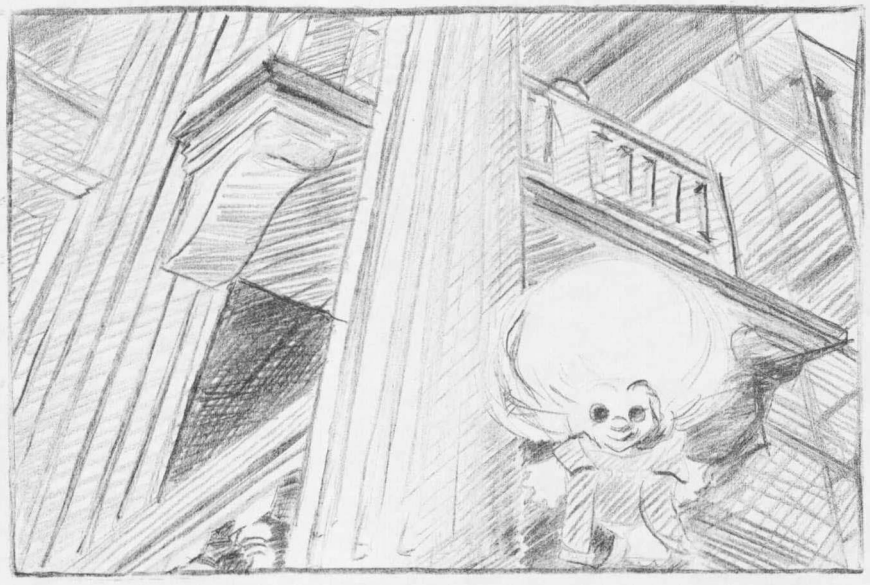

Figure 12. Line Against Line

Figure 13. Zama's Studio

frame, with a painting[11] hanging only partly within its border, allowed a division between the two main parts of the set without completely dividing it. In this way action could be either contained in one area or be continuous between areas. A world globe was placed at the right hand side of the table to offer a background for the various stages of the rocket ship construction which would dominate the area (Figure 13). Foreign coins, which were generously scattered about by the trolls, would unite the two main areas. Other paintings done by the Thesis Group and the art class were incorporated into the set.[12] Some were used inside the bookcase to offer a background for the books. Bottles were carefully chosen and placed on the top shelf of the bookcase to form the area of emphasis for Space.

In final preliminary preparation to filming, a temporary studio background was created by the Thesis Group for the purpose of giving screen tests. As a result of the tests a girl was chosen to act the part of Zama.

Literature was also consulted on film-making, camera composition, color, special effects, design and editing.

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[11]The painting had been done earlier by a member of the Thesis Group.

[12]This painting project was the most successful, providing the best work to be offered by the students.

FILMING AND EDITING

With the Thesis Group for a crew, filming began. Camera composition, special effects, and animation problems were undertaken.

The Golden Mean, being the format of the projected image, formed a basis for composition. Its use was limited when movement within the area changed and when it restricted the freedom of selecting camera viewpoints.

Compositional considerations had to be based upon action. Movement must remain consistent from shot to shot if action is to be followed without confusion. Extra shots were filmed from a variety of angles to be used later in editing to assure a smooth transition from shot to shot.

The use of lighting to control composition was very effective. By using a lighting ratio of 2-1 on the main point of attention darker surrounding areas would not tend to detract nor would the contrast be too great.

The camera was used to create special effects in four ways. First, used upside down, reverse action could be accomplished where it proved too difficult to handle in any other way. Second, apparent movement of fixed objects could be done by careful movement of the camera. Third, by shooting one frame at a time inanimate objects could appear to move under their own power. Finally, by double exposing the film, live action and animation could be shown simultaneously.

It was found that by advancing the troll dolls 1/12th of an inch per frame a walking speed could be effected. Other ways to control movement involved direct handling when close-up shots allowed grasping of the dolls. Because the arms of the dolls are stationary such effects as seeing one rub his head with his hand, putting his hand to his mouth or looking directly at his finger, was done by manipulating the hand of a second doll in a close-up shot. They were sometimes suspended and moved by black threads. In one shot they were lowered from a shelf one doll length per frame in an attempt to effect a jump. When this portion was projected they had vanished. Conclusion: Overlapping in sequence framing is necessary for the object to remain visible.

Slides were taken along with the movie filming and served to record the setup more accurately, offer an opportunity to analyze shots, composition, color reaction and lighting, and to serve as a slide version of the film to be presented to the Lewis & Clark #5 School District in appreciation for their support in this project.

The film was spliced into a single 800' reel and sent to Portland, Oregon for reprint in the form of a "one light" work print. It was edited into a facsimile of the finished product.

During editing a number of problems arose. Major among them was one of restricting the length of the film to 400 feet.[13] Other problems were primarily technical ones. Each shot of the film had to be identified by its position in the story, cut, and labeled to be assembled into what is called a "rough editing". It was then projected and studied for its sequence. Some slight revisions were made and work on the "fine editing" was begun. That consisted of cutting out all excess footage to effect a smooth transition from one shot to another and to shorten those that threatened to slow up the pace of the story.

A complication was introduced by a sincere effort, on my part, to keep each shot an exact number of seconds in length or at least an even part of a second. The problem occurred when certain actions by the actor were not finished in a

---

[13]The length was decided upon at the outset primarily for two reasons.

The first reason was cost. It was recommended that 3 to 4 times as much film be shot as was to be used in the final product, or release print, most of which was to be copied in the form of a workprint. Sound, after being recorded on tape, has to be printed on film. The release print thus brings the total footage of film to somewhere in the area of 3200 to 3600 feet or more. Black leader for editing and tape for recording also costs by the foot and must be considered. Further costs are to be found for reels, cans, and mailing cartons which increase rapidly as they go into the larger sizes.

The second reason was the limited time to work on the project which generally fell between teaching responsibilities. To do the best job it was felt that the shorter the film the better the chance for quality. To do a film any shorter would be inadequate to cover the chosen subject area.

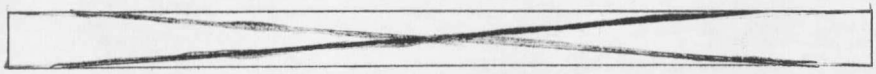
certain time. This usually fell short by only a few frames, perhaps four or five. To cut back to the closest full second would interrupt the action. In such cases, thirds of a second could be used to solve the difficulty. The idea of keeping to such strict timing was in an effort to establish a rhythm which would strengthen the picture unity. It was felt that the musicians could more easily play to suit the film and thus greatly improve the unity of the whole.

Special effects were next to be considered. Lap dissolves in which one shot fades out at the same time the following shot fades in had to be carefully measured and marked with a grease pencil directly onto the film. Special markings were used to indicate the various other effects as well (Figure 14).

Voice recording was done during the viewing of the film. No great effort was made during the session to adhere strictly to the timing of the film. That is more easily accomplished on a piece of editing equipment called a "Moviola", which is designed to match the sound to the picture.

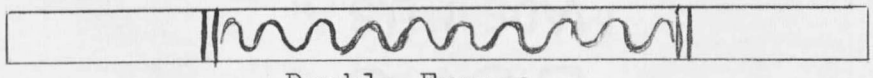
Recording the music will be more critical because pauses will be few. The musicians are to play spontaneously in the jazz tradition.

Once the two sound tapes are properly cued to match the picture they will be combined electronically onto a new tape and be set aside until the original film can be put together



Fade out - Fade in

Lap Dissolve



Double Expose

Figure 14. Special Markings

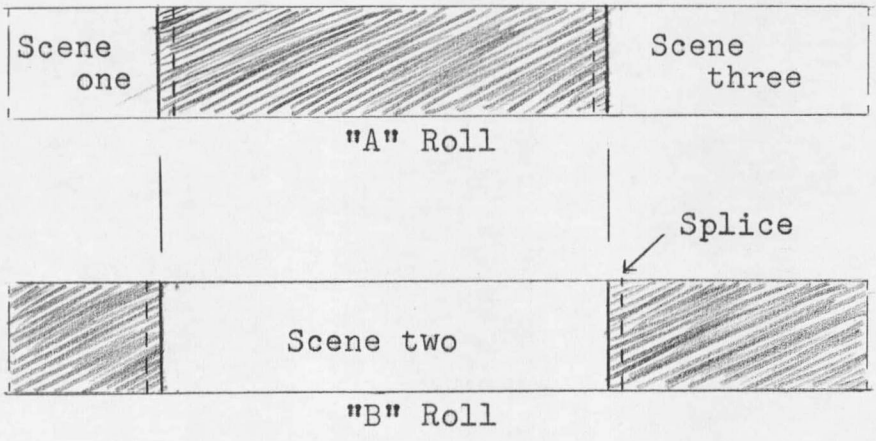


Figure 15. Checkerboard Editing

into the "A" and "B" rolls in preparation to the final processing.

Assembling the original film is the same as for the work print with two differences. The attaching of each shot to black leader on alternate "A" and "B" rolls in a checkerboard fashion, is to hide the splices (Figure 15). The second difference is in the special care with which the film has to be handled. White cotton gloves will be worn so that fingerprints, scratches and abrasions will not mar the surface. The original film has a soft emulsion surface which makes it ideal for reprinting but difficult to handle.

The processor will put the "A" roll through his printer with new film. The new film will be passed through the printer for a second printing, this time with the "B" roll. For a third, and final time, the new film will be passed through the printer, this time to receive the print of the sound film which will be "light printed" onto film of its own from the master tape described above.

LITERATURE CONSULTED

Bulleid, H.A.V., Special Effects in Cinematography, Fountain Press, London, 1954.

Eastman Kodak Co., Industrial Motion Pictures, Eastman Kodak Co., Rochester, 1957.

Graves, Maitland, The Art of Color and Design, McGraw-Hill, New York, 1941.

Nilsen, Vladimir, The Cinema as a Graphic Art, Hill and Wang, New York, 1959.

Reisz, Karel, The Technique of Film Editing, Focal Press, New York, 1959.

Sewell, George H., Making and Showing Your Own Films, Pitman Publishing Corp., New York.

Society of Motion Picture and Television Engineers, Elements of Color in Professional Motion Pictures, Smith-Hart Printing Corp., New York, 1957.

Strasser, Alex, Amateur Movies and How To Make Them, Studio Publications, London, 1949.

Thomas, Bob, Walt Disney, The Art of Animation, Simon and Schuster, New York, 1958.

CONCLUSION

Until the film has been returned from the processor and put to use in the classroom it is not possible to evaluate the extent of its use as an educational tool. The children who contributed in manifold ways will not be able to fully realize the value of their individual contributions until they can see the fruit of their collective endeavors. Their enthusiasm, imagination, and interest in the film-making has made art exciting to them.

It is hoped that the film will prove to be of value, particularly to the inexperienced teacher and her students, that through an awareness of the visual elements they will find inspiration for costuming, stick sculpture, painting and mask-making.

SUPPLEMENT

Design and Zama was shown to grade school children from grades one to six. Their reactions were carefully observed and recorded by their teachers and by myself. Fifth and sixth grade youngsters were picked at random to answer a questionaire to get further insight into the film response.

Motivation prior to viewing the film was purposely varied. One school saw Zama (myself in costume) on Halloween six months before viewing the film. Another school was given no forewarning prior to the day of showing. Still another school was motivated through a careful study of the visual elements, the film to serve as a final review. Design and Zama was given to teachers to show their classes without my presence. Some classes saw the film knowing I had been instrumental in its making. Still others were motivated by a discussion of what an artist uses to create design, and urged to pick out as many ways as possible from the film.

Although it was a simple matter to explore the reactions of a wide range of youngsters from grades one to six it was more difficult to ascertain the response of those youngsters who were so helpful in the making of the film. Design and Zama was sent to the Lewis and Clark #5 school in Astoria, Oregon where it was shown by teachers there. Their response was very similar to the response I have gotten here.

The general attitude of teachers not strong in art is that it is too difficult for them on the basis of one showing. Some did respond to possible projects to try. Most noteworthy of these were the masks.

The following chart gives a graphic breakdown of response by fifth and sixth graders who were picked at random:

1. How did you like the film?
   - Not at all 2
   - Some 13
   - Quite a bit. 18
   - Very much. 31

2. Name design elements
   - Color. 48
   - Value. 34
   - Texture. 36
   - Line 40
   - Space. 42

3. Did the film give you any art project ideas?
   - Abstract Design. 2
   - Rocketship 3
   - Make a mask. 7
   - House of sticks. 3
   - Stick figure 2
   - Costume. 2
   - None 17

4. What did you like or not like?

Likes:	Dislikes:
Dolls	Changed too fast
Whole film	Couldn't understand words
The color	Hurt eyes
Structure of rocket	Didn't explain enough
The dream	Face changes
Background	Didn't like at all
Masks	It was boring
Old Man	Background too messy
Troll coming out of hair	

My own reaction to the film is that it does not achieve all that I had hoped for. Too much was left unsaid. I had felt that the picture itself should do the talking. Reshowing gives the onlooker a better chance as he realizes he has to be alert to the picture. The introduction is too brief, the music perhaps a little loud, the voice quality poor.

The quality of the sound suffers mostly because it is printed on the reverse side of the film as opposed to production films. Thus it is slightly out of focus on the sound drum of most projectors. One projector had a device for focusing the sound. The film was shown and some improvement was noted as the adjustment was made. More important is a lack of coherancy. It should be possible to rewrite the script making it all narrative. Everything that can be explained narratively should be explained to emphasize the picture shown. As it is the voice and music vary too much in volumn, and leave too much to picture alone.

The youngsters who were involved in the making of the film responded very favorably to it and seemed to feel most of the criticisms were exaggerated, or unfounded.

The film-making gave me a wealth of experience well worth the disappointments and shortcomings of the final result. My next film venture should benefit in manifold ways from this experience.

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