CALIFORNIA INSTITUTE OF TECHNOLOGY

DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES 228-77

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To: Members of the CIT Art Program

From: Lukas Van Vuuren

Subject: Two Year Report on the Development of the Workshop and Gallery

Introduction:

The intention of this report is to update the members of the Art Committee on the development of the workshop and exhibition programs at Caltech. This will include (a) student participation, (b) artists in residence, (c) exhibitions and (d) general problems.

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THE FIRST YEAR 1969-70

A. The Workshop in Earhart Laboratory

Dr. Kent Clark and I spent several weeks, in meetings and tours of the campus, investigating vacant buildings for the workshop area. We eventually decided upon the vacated Earhart Research Laboratory, kindly offered by Dr. Sinsheimer, and we occupied the building in late August. The Art Program was allocated the four rooms on the western side of the building, two offices in the front, and the room on the southeast corner.

I held back in ordering equipment at this time, until from talking with students and faculty, I could determine what classes to offer at registration. As a result of these discussions, I decided to offer Drawing, Painting, Printmaking and Sculpture, as well as independent study work on Art Related to Technology. I then proceeded to equip classrooms for each course, relevant to twelve students per subject.

Registration for the fall term of 1969 proved, to our pleasant surprise, that our original plans were inadequate. Instead of the 25-50 students we expected, we were swamped with the registration of (see attached list). This large interest created a new outlook for the organization of the workshop. Obviously it was impossible for me alone to handle four classes and the large number of students.

With the approval of Dr. Clark, I decided to hire two part-time teachers to handle Printmaking and Sculpture. Mr. Paul Darrow, Chairman of the Art Department at Scripps College, accepted the Printmaking position. Mr. Ferenc Csentery, a Los Angeles sculptor, agreed to

handle the sculpture class. I taught Painting and Drawing, and encouraged students to undertake Art and Technology projects.

B. Observations on Student Participation

We were aware, of course, that there would be drop-outs as the year progressed because of student involvement in academic subjects and research. There were, however, students who participated more or less regularly, and students who participated actively throughout the year.

Two interesting and perhaps surprising developments emerged during this time. One was the comparative lack of interest by students in technological applications to creating art. The other was that some students preferred to take art courses at Pasadena City College, where they could receive grades and academic credit for the work involved.

There proved to be several simple reasons for the comparative lack of interest in Art and Technology. Many faculty members and students did not want to approach art from a technical viewpoint; they wished to approach the subject traditionally and academically as a change from their daily occupation in technology and science.

Of the students who were interested in art technology programs, several were frustrated for economic reasons. On the average their ideas for projects would have cost more than $1000 each to execute. It also proved difficult to get permission to use laboratories and equipment [available] where priorities were already firmly established. For example, the computer used by Mr. John Whitney, computer artist in residence, was available for Art Program use only at 4 a.m., and light sources, lazers, and other technical equipment were almost impossible to come by.

Another problem with Art and Technology projects came from some students' inability to differentiate between "magical gadgetry" and genuine work in art and science. Instead of seeing such things as lazer beams, electrical phenomena, and computer images as tools with which art can be created, they seemed to feel that a lazer beam, an electrical discharge, or a computer image is itself a work of art. This mistake is roughly analogous to considering the oil used in oil paintings as art.

To avoid students' using the "gadgetry" approach to art, I would suggest that we cultivate a taste and sense for the visual experience, since some mastery of technology already exists for the Caltech student. I do not mean to suggest that Art and Technology projects do not belong in the program (quite the contrary), but I do believe that artistic integrity must enter into the execution. This integrity must be the essence of an approach to Art and Technology.

Integrity in art is mastered by means of art structure course work, consisting of identification of style, concepts of two and three dimensional design, and general art theory. Such a course, if any, should be offered for credit, since it encompasses the essence of art and is the key to sophisticated taste and honest creativity.

C. The Art Program Teaching Staff.

In evaluating the work of the teaching staff, including the caliber and the results of the instruction, the following observations are pertinent to the 1969-70 school year.

Print-making, taught by Mr. Paul Darrow, was an immediate and tremendous success. Mr. Darrow's wide knowledge and his vibrant

personality catalyzed a great deal of interest and some excellent work. Using a press, kindly loaned by Mrs. Jean Bacher, students learned techniques of etching, lithography and block printing. Classes were well attended and highly enjoyed. The success of print making was evident in the show of student prints exhibited last summer in the Athenaeum basement.

On the other hand the sculpture class, taught by Mr. Ference Csentery, was in general unsuccessful. A great number of students came to class expecting to work with wood, clay and plaster. Although Mr. Csentery is competent in these media, he preferred to emphasize metal and plastics. This choice alienated many students and the classes diminished to five. Even the production of these students was not entirely satisfactory and a change was obviously needed, especially since sculpture is the most expensive kind of instruction. The following year Mr. David Elder, Professor of Sculpture at Cal State, Los Angeles, and an eminent artist, replaced Mr. Csentery.

On the whole the drawing class, which I taught myself, was successful and productive. It began with a tremendous attendance and settled down to a stable class of between ten and fourteen members, four being faculty or wives. The initial interest was perhaps due to the novelty of the class, the lure of the models, and the mistaken assumption that drawing is easy. When the class shook down, however, the work done was often surprisingly good and several students, through hard work, showed significant development. On the other hand, the painting class, which I also taught, had little attraction for Caltech students. It was chiefly populated by faculty

and faculty wives, some of whom made very good use of their instruction. Perhaps the students were frightened away by the apparent difficulty of painting. Of the three Caltech students who did attend regularly, all produced some excellent work. This is particularly true of one student who has continued to spend great amounts of time in the painting studio and who has reached a high level of competence.

D. The Artists in Residence

From the beginning of the art program we hoped to attract other artists in residence. This we have been able to do. The following discussion will cover the evolution of this development.

When the word got out that Caltech had started a small art program, I received many calls and visits from artists interested in the program. Art and Technology as a new development in art is perhaps most evident here in Los Angeles. Many well known artists such as Oldenburg, Raushenberg, Lichtenstein and Newton Harrison, previously based in New York, have come out here to work with Los Angeles industry and university programs. Maurice Tuchman, Curator of Modern Art at the Los Angeles County Museum of Art, also started an Art and Technology Program. Those inquiring about us had heard of the excellent Art Program at M.I.T., that provides funds to prominent artists to work and do research with technology. They often asked if Caltech would be following a similar pattern. This to many seemed a "natural," since Caltech is a science and technology school, starting a new Art Program, in the cultural milieu of a Los Angeles responsive to this new art.

Although we had no money to subsidize artists who wished to come

and work at Caltech we did have Earhart Laboratory with its equipment for accurate environmental control. Using this facility as a strong inducement I invited Helen Pashgian and Robert Bassler to join our group. Both had worked successfully and gained recognition for their work in plastics and both were anxious to improve their work. Earhart provided them with the accurate temperature control which work in plastic demands; and Caltech could offer them a chance for collaboration with interested scientists on technical problems. After I installed an outlet fan (at the cost of $1200 taken from the workshop budget), Bob and Helen started to work hard, on a daily basis. Dr. Nicholas Tschoegl, Professor of Chemical Engineering, and Mr. Sol Giles of Geology, gave them a great deal of technical help. The excellent results of their work will be demonstrated at the first artists in residence exhibition, scheduled for May 21, 1971.

About the time Helen Pashgian and Robert Bassler arrived, Dr. Fred Thompson expressed a great interest in bringing Mr. John Whitney to the campus. Dr. Thompson believed that he could collaborate very successfully with Mr. Whitney in producing a computer language that would facilitate Whitney's already famous computer graphics studies. After a discussion with Dr. Clark and a formal vote by the art committee we added Mr. Whitney as a full time member of the C.I.T. program in cooperation with I.B.M. where he had been conducting computer cinematographic research. During his year of residence Mr. Whitney not only produced an elegant computer graphics film but also worked closely with graduate students Doug Reese, Norton Greenfield and Steven Nowland. As a result of this program, Nowland

was accepted by the California Institute of the Arts as a graduate student in design.

Another interesting project in art and science began as a result of Mr. Desmond Armstrong's interest in glow-discharge sculpture. (It should be noted in passing that Mr. Armstrong, who works in electrical engineering, has attended classes throughout and has collaborated with me in art-science lectures at various colleges and at the Pasadena Art Museum. His help indeed has made such demonstration lectures possible.) Dr. Fred Shair, Professor of Chemical Engineering, joined Armstrong and artists Melvin Liaw and Caroline Hinkley in working toward a joint project on glow-discharge sculpture. Unfortunately the project, after much initial good work, had to be halted for financial reasons. Although great efforts were made, particularly by Dr. Clark, to obtain outside financial support, the sums involved for effective large scale experimentation were not forthcoming. I felt at the time that the group's cost estimates were too high and that some effective work can be done in the $3000 range as opposed to the $5000 to $10000 range which the group had in mind. At any rate the work is now at a stand-still and can only be reactivated with substantial financial support.

During this time I pursued my own special interest in holography in collaboration with Dr. Nicholas George, Professor of Electrical Engineering. We explored the possibility of producing large scale holograms dealing with outdoor subject matter. In order to support this project I went to Rochester, New York, and had interviews with Eastman Kodak. It was not difficult to convince the research staff at Eastman that our Caltech techniques were more advanced than theirs; and they agreed, in exchange

for information, to supply us with holographic plates at absolute cost. A much more serious problem was that of obtaining the lasers, hologram tables, and optical equipment. Dr. George and I estimated that by doing all the work ourselves and buying secondhand materials we could produce several holograms 3-1/2' x 6' at a cost of $9000. These holograms were planned as the largest ever constructed; they were to deal with outdoor or live subjects. We felt they would be of obvious interest to the public in any museum of art. I approached Mr. Robert Rowan and Mr. Thomas Terbell, Chairman of the Board and Directors, respectively, of the Pasadena Art Museum for financial support in exchange for a major exhibition. Although they were enthusiastic about the idea of a major hologram show they were not in a position to aid us financially. After trying another six months for financial support we were obliged to halt the project. This of course is a great disappointment.

E. The Exhibitions in Dabney

An important part of the total art program at Caltech is the exhibition of significant art and artists. To make such exhibitions possible, the Art Committee constructed, through the planning of Dr. David Smith and Dr. Robert Rosenstone, a demountable gallery in Dabney Lounge. From the very first, even before I came to Caltech, I have been involved in hanging the shows and in helping Dr. David Smith in arranging them.

The first show at Caltech, arranged by Drs. Smith and Rosenstone, was the "Four Printmakers" exhibit. Although still on the faculty at Scripps College, I was asked to hang and arrange the prints. This exhibition proved the attractiveness of the new gallery arrangements

and set a standard of tone for future exhibitions.

The next exhibition arranged by Dr. Smith and me was a showing of David Elder's non-figurative plastic sculpture and my own stylized landscapes on reflective metal surfaces. This show introduced me as future artist in residence at Caltech. It also introduced to Caltech David Elder, who has since been given the position of teaching sculpture in the art program. In the fall of 1969, Dr. Smith decided that a joint exhibition of Corda and Jack Zajac would be an appropriate show for the launching of the academic year. Dr. Smith and I arranged the show and presented Corda and Jack Zajac together for the first time.

We next arranged for a showing of the works of the art program faculty. Paul Darrow presented several new and retrospective prints, and Ferenc Csentery exhibited his latest works in perforated metal sculpture. After the success of this show, I suggested that we ask the Thomas Terbells for an exhibition of their family collection of contemporary American art. They kindly agreed to this arrangement. Dr. Smith and I cooperated in presenting another successful Dabney showing.

Another opportunity for a high caliber show arose when Mr. Fred Parker, curator at the Pasadena Art Museum, approached me with an already compiled collection of well-known Gemini prints. Dr. Smith enthusiastically concurred in presenting this exhibit, which was shown from October 29 to November 19, 1970.

It should be noted that in addition to arranging and supervising the exhibitions, Dr. Smith has written and designed the catalogs for the

shows. These have been received with great commendation and appreciation from the artists and the gallery public. He has also arranged for the lively and successful openings.

In addition to the formal exhibitions in Dabney Lounge, the Art Committee has also staged a number of informal exhibits in the Athenaeum basement, which was especially altered and lighted for this purpose. Among these exhibits have been drawings by Richard Feynman, Japanese prints from the collection of Virginia Scott, prints from the collection of Paco Lagerstrom, prints loaned by local artists, modern tapestries from the collection of Paul Hurschler, and Indian cave paintings from the collection of Virginia Scott. Exhibits were temporarily suspended towards the end of 1970 by the revision of the basement bar. They will proceed again now that these alterations have been completed. In general, I have supervised the hanging, or have, myself, hung, the Athenaeum exhibits.

THE SECOND YEAR 1970-71

A. The Workshop Classes

The class situation did not change drastically from the previous year. The veterans returned and we accepted a few new students. Since Mr. Darrow was too burdened by his duties at Scripps to continue teaching at Caltech, we hired Mr. Connor Everts, who was recommended by Darrow, to replace him. This change was accompanied by the replacement, previously mentioned, of Mr. Csentery, by Mr. David Elder. With the appointment of Mr. Elder, sculpture became very popular. Printmaking, on the other hand, was poorly attended. This situation reversed the relative popularity of the two classes established the previous year. One workshop innovation was a small class in serigraphic printing which I have been conducting. This group has produced some heartening results.

B. Artists in Residence

During the 1970-71 season, Helen Pashgian and Bob Bassler have continued their work as artists in residence. We also added Mr. Peter Alexander, a nationally known sculptor, to the staff for a period of 6 months. Unfortunately, a shift in Caltech's computer program made the computer John Whitney had been using unavailable. His work in conjunction with Dr. Fred Thompson had to be suspended.

To summarize, our teaching staff for the year has consisted of David Elder, Connor Everts, and me, and our staff of resident artists of Peter Alexander, Robert Bassler, and Helen Pashgian. John Whitney was employed by us through December. I, of course, have been working continuously on my own artistic projects.

C. My Work as Artist in Residence

After having failed to gain financial support to make holograms, my interest shifted to a logical alternative. I set out to coat glass and plastic, with a 50% mirror coating, that could be used in controlled environments. After several meetings with those in charge of the space at Jet Propulsion Laboratory, I was given permission to use the space simulator, vital to the project. I was also allotted appropriate time and the assistance of the simulator technicians. I am glad to report that I have already completed five works since February. During September, I will be given use of the large simulator (27' x 90'), and hopefully will be able to complete works for a one-man exhibition, scheduled by Dr. Smith for the new Baxter Gallery. I am privileged as the first artist as well as one of the few people outside the space program to use these remarkable facilities.

D. The Baxter Gallery

The art program at Caltech has received an invaluable addition with the completion of the new Humanities building, Baxter Hall. This includes an excellent gallery, which will accommodate a wide range of shows and which will enable us to present larger and more significant exhibitions.

The evolution of the new art gallery is probably worth reviewing. Toward the beginning of 1970, I was informed that the art program would be allocated workshop and lecture room space in the new building. After reviewing the plans with the architects, Dr. Clark and Dr. Smith as well as Virginia Kotkin, administrative assistant to the Humanities Division, I suggested that we use the space for a large gallery rather than for studios. My reasoning was that workshop activities would involve toxic

fumes and perhaps ear-splitting noise. It would have been virtually impossible to install a successful workshop without serious disruption of the other activities in Baxter Hall. After some preliminary confusion about the revised plans, Dr. Smith made the final plans and arrangements for gallery space. The results of his work were immediately evident. Already the first show in the new gallery, Victor duBois' collection of African art, has shown how beautiful and effective gallery exhibitions at Caltech can be.

RECOMMENDATIONS FOR CHANGE

In reviewing the workshop program, we find that one of the most significant facts is that more graduate students participate than undergraduates. The reason for this is not lack of interest on the part of the undergraduates but the academic pressures upon them. As the term goes on, they find themselves overwhelmed with work and, as many of them have told me, they cannot continue spending time on a subject for which they do not get credit. The graduate students, whose time is more flexible, are not so heavily pressured and consequently find themselves able to spend more time. I suggest that we should seriously consider offering credit for undergraduate workshop classes. I would further suggest that Dr. Clark, Dr. Smith, and I discuss this problem with Dr. Huttenback.

Another addition to the program will be a series of talks by artists. We hope to engage our own artists in residence for the remainder of the year to talk with students and faculty. As for the workshop, David Elder, whose work has been eminently successful, should be invited to resume his position as instructor in sculpture (he is willing to do so if his plans go well). Connor Everts, on the other hand, should be replaced in printmaking.

In the coming year I suggest we introduce a fee for classes--to be paid by non-student participants. This will cover the cost of material and allow us to use our money more effectively. I would also suggest that we work out a more effective form of advertising the workshop on campus. Perhaps Dr. Smith can think of a way of doing this.

Our most serious problem is the necessity we will soon face of moving from Earhart. This problem must be reviewed as soon as possible.

If there is a possibility of obtaining space in Dabney, we must begin effective planning. No doubt we will have to reequip and design the rooms to be occupied, but this we can discuss with the campus architect and I can make many of the non-structural changes myself.

So far our offerings in the workshop have been limited by our budget of $25,000 a year. Painting, drawing, sculpture, and print-making were natural subjects to begin with, since they are regarded as the more serious subjects in visual art and they do not require a great deal of money. As soon as funds become available, we might think of adding ceramics, although this is relatively costly. Other possible areas for expansion would be classes in history of art and architecture, theory of art and museum study, art structure, and three-dimensional design. Needless to say, film making and photography will be an enormous addition and will also make the marriage between art and science easier at Caltech.

I would also suggest that any appointment of a teacher or artist in residence should be reviewed by the Art Committee and also perhaps by Dr. Huttenback. I will be happy to gather résumés and information about possible artists, but the decision should be made by the Committee. This will eliminate any imputation of arbitrariness or favoritism.

Obviously we have reached the time when we must decide the fundamental level on which the workshop will operate. It seems to me we must move away from "dabbling" or "mental therapy" and toward more serious regular work. In this connection, it is obvious that the help of every Committee member is needed, not only to give advice, but to

provide true interaction and direction. This means more meetings and perhaps a reshuffle of the Committee. Dr. Smith has suggested the addition of Dr. Rosenstone, which I feel is a brilliant thought.

One further thought in closing. The formation of an art support group presents some dangers as well as opportunities. Dr. Smith will need the help from every member of the Committee in keeping the gallery a Caltech art program facility and not a place where outsiders can exert pressure for their particular artistic ideas. I do not mean to offend any individual, but the danger of outside pressure should be recognized. I have seen serious problems from this source develop at other institutions and museums, where groups have given financial aid.

I hope this report is helpful to everyone concerned and I will be glad to elaborate my ideas or answer questions at the next Committee meeting.