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VOLUME III, Number 2.

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dedicated to Patti HeNaughton, Dwid Schuchman, Frank Redenmiller, Jean heolie,

THE AMATEUR SCIENTIST

The lore and aerodynamics of making and flying kites

Conducted by C. L. Stong

Some years ago two boys offered to mow my lawn if I would help them to build and fly a kite. I agreed. The resulting kite performed so nicely that we extended the contract at the rate of one kite for one mowing and spent a memorable summer discovering the joys of designing, building and flying kites. Although one of the boys ultimately became an aeronautical engineer and the other a biochemist, their enthusiasm for kites lives on, as does mine.

What is a good kite? The answer depends on your tastes and interests. To the skillful enthusiasts of the Orient, where the sport of kite-flying predates

recorded history, kites are of three kinds. The first category consists of fighting kites. A good one is so agile and sturdy that it can knock down all competitors in controlled aerial combat. The second category consists of acrobatic kites that can be made to dive, loop, perform figure eights and so on. Designs in the third category appeal primarily to the eye and car. These kites range in form from simple diamond shapes to figures resembling birds, animals and mythological creatures including dragons up to 100 feet long. The kites are usually gaily colored and may carry bamboo pipes and other instruments that cinit musical sounds.

The kites we built belong to still another category: those that reach the highest possible altitude for a given length of string, or, as aeronautical engineers would put it, kites of maximum lift-to-drag ratio. We had fun trying novel designs and contriving jobs for the kites to do, such as measuring the



Elements of a diamond kite

temperature of the air at altitudes up to a few thousand feet and making aerial photographs. We obtained much of the information we needed from the files of the U.S. Weather Bureau, which relied heavily on kites to carry meteorological instruments aloft before the advent of radiosondes, rockets and satellites. At the turn of the century the bureau operated 17 kite stations across the country and set a number of records. For example, on May 5, 1910, the uppermost unit in a train of 10 Weather Bureau kites carried a load of meteorological instruments to an altitude of 24,000 feet. Collectively the kites in the train had a sail area of 683 square feet and exerted a pull of more than 400 pounds on the nine-mile flying "string" of piano wire. The wire was paid out and drawn in by an electric winch.

Our efforts were much less ambitious. Our first kite was a simple diamond formed by a pair of crossed sticks covered with paper. The spline, or vertical stick, was three feet long and the spar, or horizontal stick, was two feet long. The middle of the spar crossed the spline a foot from the top. We fastened the sticks together at the cross with a drop of glue and a binding of string. A siw kerf about a sixteenth of an inch deep was made in the ends of each stick before assembly [see illustration at left].

When the glue had dried, we stretched a string through these kerfs and glued the paper covering to the strings. The kite was then fitted with a bridle, which consisted of a loop of twine tied to the top and bottom of the spline on the papered side of the kite and another loop across the spar. The length of the bridle was adjusted so that the string became taut when the loops were pulled a foot from the paper at a point directly above the cross. The flying string was tied temporarily to the bridle at this point. The point at which the string is attached to the bridle determines the angle at which the air strikes the kite: the angle of attack. Kites, like the mainsail of a sailboat, perform best at angles of attack ranging

B.F.Y. Shree

from about 20 to 25 degrees, greater than the angle at which an airplane wing meets the wind because of the prononneed curvature of the paper. The exact angle of attack at which a kite performs best depends on the strength of the wind and must be determined experimentally. In general the angle must be decreased as the speed of the wind increases. The change is accomplished by shifting the string toward the top of the kite.

Diamond kites are inherently unstable and must be fitted with a tail to hold them upright. Part of the stabilizing force is provided by the weight of the tail, part by friction between the tail and the moving air and part by turbulence generated in the airstream by the tail. The last two forces are known as drag. If the kite is to fly, the downward forces must be exceeded by the lifting force that is developed by the flow of air under and over the paper covering. The tail provides stability but at the cost of lift. The amount of stability required increases with the speed of the wind. A kite that flies nicely with a short tail during a light breeze will spin out of control in a stiff wind. Yet a kite with a long tail that flies well in a stiff wind may not fly in a light breeze.

One solution to this problem is to provide the kite with a tail that consists of a series of wind cones [see illustration on this page]. The cones can be made by removing the bottoms from paper containers, such as paper cups or ice cream cartons. The force developed by air flowing through the cones increases with the speed of the wind and so provides optimum stability through a fairly broad range of wind speeds. Kites with light tails of this kind fly substantially higher than those with tails made of strips of cloth or bundles of paper tied at intervals along a string.

The shape of the diamond kite can be easily modified. For example, three sticks of equal length can be crossed to form a hexagon. A circular form can be made by bending bamboo into a hoop. Combinations of straight sticks and bamboo can be formed into figures of birds. All these shapes fly about equally well when they are equipped with an appropriate stabilizing tail. In the Orient complex designs are often made by stacking a series of kites closely behind one another. The kites are tied together by strings that extend from the corners of the first kite to the comparable corners of succeeding kites. The bridle is attached to the first kite of the series. Succeeding members of the series function both as kites and as the stabilizing tail. To launch a kite of any kind grasp the flying string in one hand and the bottom of the kite in the other. Incline the kite at an angle of about 25 degrees into the wind, with the paper side facing the wind, and let it go. As the kite rises pay out flying string at a rate that allows the kite to continue its ascent. If two people do the flying, let one hold the kite while the other pays out about 50 feet of string. When the string has been pulled snug, the inclined kite is tossed into the air.

The materials for kite making are readily available. Our sticks came mostly from a local lumberyard. We selected clear, straight-grained spruce 3/4 inch thick, six inches wide and six feet long and had the yard saw it into strips from 3/16 inch to 1/4 inch in width. We also made kite frames of wooden dowel stock 1/4 inch in diameter. Dowel stock is heavier than spruce, bends rather casily and is more difficult to assemble than flat sticks. On the other hand, it is available ready-made in most hardware stores.

We used nylon flying string. The breaking strength of nylon is high in proportion to its weight and thickness, and it develops less drag in the wind than other strings we tested, particularly the fuzzy cotton string known as butcher twine. Do not use piano wire for the flying string or any other material that conducts electricity. Kite-fliers have been electrocated by electrically conducting "string" that made accidental contact with high-voltage power lines. Never fly a kite with a string that is wet or attempt to duplicate Benjamin Franklin's experiment of drawing "the electric fire" from a thunderstorm. Franklin was lucky. A European scientist who followed his instructions for performing the experiment was killed by a bolt of lightning that traveled down the wet string.

Kites up to four feet in diameter can be covered with paper, even newspaper. Light, closely woven silk is better and stronger and develops less drag, but it is expensive. The strongest and aerodynamically most efficient material is Mylar, a plastic sheet that is available from mail-order firms that cater to farmers. The sheets are used to protect grain and hay from the weather.

We next made and flew several Malay kites. Essentially they are diamond kites that achieve stabilization through their shape and therefore need no tail. They fly much higher than kites with tails and are more maneuverable. Stability is achieved by bending the spar back-



Wind-cone tail

ward with a bowstring [see top illustration on next page]. Stability increases with the depth of the bow. In the case of a spar two feet long the bow is typically made about four inches deep. When the kite faces squarely into the wind, the force of the wind acts equally on the left and right sides of the surface. When a puff of wind turns the kite so that one side faces more squarely into the wind than the other, the forces are unbalanced. The side facing into the wind then experiences greater force, which rotates the kite to restore the balance. Airplane wings are similarly joined to make a shallow V, known as the dihedral angle, that provides lateral stability. Again, stability is gained at some cost in lift. Malay kites of minimum bow fly higher than those of maximum bow but tend to dart back and forth, to loop and spin. Kites of maximum bow fly steadily but lower. The paper covering of Malay kites should be slack, like the sails of a boat, so that the wind can bend the surface into a uniform curve. A Malay kite has a single bridle string that is tied to the spline.

By fitting a Malay kite with two or more flying strings and a crossed bridle the flight pattern can be controlled from the ground. Two bridle strings of equal length are tied to the top and bottom of the spline and a third string is tied to the ends of the spar. The vertical strings are separated to the left and right and tied symmetrically to the horizontal string [see bottom illustration on next page]. The flying strings are attached to the points at which the bridles cross. During flight the kite will drift sideways, toward the string that is pulled most, and at a speed that increases with the amount of pull on the string. At the



By DR. GEORGE W. CRANE, Ph.D., M.D.

CASE L-515: Bob D., aged 19, TF (1) Hippies carned their is a college student.

Recently I addressed a Farm Bureau banquet where Bob was present.

For he had been given scholarship aid by the Farm Bureau to study at Purdue University.

Bob was a handsome, cleancut fellow, with a mature male haircut and no show-off clothes, beards, sideburns or beads and other "jungle" decorations.

In my address I lauded his brief "Thank you" talk to the crowd and held him up as a sample of the 95 per cent of college youth today who are working hard to attain a marketable skill for use when "free enthey enter our terprise" system.

"Dr. Crane," Bob mentioned afterwards, "I was talking to a hipple a few days ago.

"He said he was having to head home this weekend to see his old man and get some more cash.

"For he grumbled that he was running short of money and his old man hadn't sent him his allowance check as yet."

Test for Hipples

t

Which brings out the obvious facts that hippies are "kept" youth who wouldn't even be able to eat their next meal if it weren't for the subsidies from hard working parents.

For hippies contribute nothing more to our productive system than wood ticks offer the farm animals whose blood they suck.

You readers have enough practical experience with life to make a perfect score at diagnosing the usual make-up of hippies as per this true-false test:

own spending money throughout childhood. TF(2) Hippies carried a

newspaper route for at least a year.

TF (3) Hippies attained First Class rating in the Boy Scouts.

T F (4) Hippies are members of their school athletic teams.

TF (5) Hippies are accomplished pianists. T F (6) Hippies belonged to

their school Glee Club. TF (7) Hippies are former

farm boys.

T F (8) Hippies are on the scholastic honor roll at school. T F (9) Hipples are of the

rugged, virile type. T F (10) Hippies are emotionally retarded.

The first nine items above are to be answered with "False," but the 10th one is "True."

For the typical hipple is emotionally back at the kindergarten level where he resented Mamma's orders to wash his face and hands.

That is also evident from the negative attitude toward parents (and thus, law in general), for toddlers chronically develop a "No, No," negative protest.

Hippies also are sexually below par, despite some of the lewd stories about their sexual orgies in basements and school sit-down strikes. For they are an effeminate, eunuchoid group who crave quick headlines and TV spotlight, without having to earn such attention.

For it takes stamina and half a lifetime to "win" legitimate fame, but an inconociast or hippie may rate "notoriety" in a few minutes just by breaking laws' The hippie movement is thus a shortcut to the limelight without elbow grease and disciplined study.

Send for my 200-point "Tests for Sweethearts," enclosing a long stamped, return envelope, plus 20 cents, and see how hippies also rate as "Very Door" thereon.









Configuration of a Malay kite

limit of the lateral drift the kite will loop, dive and reverse its lateral direction. The maneuver will twist the flying strings together. They can be unwound by pulling the slack string, which will cause the kite to perform the same maneuver in reverse. The art of making the kite perform other acrobatic stunts can be learned by practice.

For lifting a load such as a thermometer, a barometer or a camera we prefer the French war kite, a triangular box kite that has a pair of triangular wings [see top illustration on opposite page]. The framework consists of five sticks. In a design of modest size four of the sticks may be three feet long and the fifth one

double-string bridle for maneuvering Malay kite

Control of a Malay kite

14 inches long. Two of the long sticks are used for parallel splines, spaced 12 inches apart. The spar crosses the splines a foot from the top. The short stick crosses a foot below the spar and parallel to it. All of the crosses are cemented and bound with string. The completed frame is covered with paper, as in the case of a hexagon kite. The paper is then slit diagonally in the square center space bounded by the splines, the spar and the short stick. The resulting flaps of paper are folded over the adjacent wooden strips and comented in place. The structure is now a hexagon kite with a square hole in the middle.

The triangular box section is made by equipping the edges of two paper strips with cover strings. Drive four nails partway into a bench top to mark a rectangle a foot wide and three feet long. Stretch a cover string snugly around the four nails and tie the ends together. Cut two strips of paper 14 inches wide and 26 inches long. Slide one of the strips under the rectangular loop of cover string and center it with respect to the nails. Fold an inch of the paper over the string at the sides and cement it in place. Cut the loop of string at the ends midway between the nails. The sides of the strip are now reinforced with strings, the ends extending from the four corners of the strip.

Slit an inch of the paper, close to the string, at the four corners and bend the edge up into one-inch flaps. Prepare the second strip in the same way. To

assemble the strips to the body of the kite, first make four small holes in the paper of the body at the outer edge of the splines, where they cross the spar and the short stick. Thread the strings of the paper strips through the holes and tie them securely to the splines. Cement the one-inch flaps of the strips to the body covering. Finally, slip the remaining spline into the bands of paper, center it and cement it to the paper strips. Centering is easy if the paper strips have been marked with a rightangled crease across the middle. The kite can be suspended upside down by strings attached to the ends of the center spline while the cement dries.

Just before the kite is launched the spar is bowed and fastened with a bowstring, as in the case of a Malay kite. The bridle is attached to the center spline of the triangular section. When a French war kite of these proportions is flown in a wind of 15 miles per hour, it will lift a payload of about two ounces per square foot of sail area and will exert a pull on the flying string of about a pound per square foot.

The amount of lift a kite develops in relation to the force of drag that tends to pull it downwind-the lift-to-drag ratio-increases within limits as the width of the kite is increased in relation to its length, a proportion known as the aspect ratio. The aspect ratio of airplane wings is about seven to one; they are long and narrow. The French war kite can be regarded as a triangular box kite with triangular wings of comparatively low aspect ratio. The aspect ratio can be increased by using a spar that is longer than the splines. This improves the lift-to-drag ratio. The modification, when carried to the extreme, results in instability and also in structural weakness unless the spar is made in the form of a truss. We had great fun constructing kites of various proportions and observing their performance.

To achieve maximum altitude we would launch a kite and pay out as much flying string as it would support. When a pronounced sag developed in the flying string, we would attach a secoud kite and let it rise until the flying string sagged again. A third kite was then attached, and so on. The number of kites that can be flown as a train is limited only by the strength of the flying string. Occasionally the top kite of the train is caught in an updraft and lifted into a wind that blows in a direction that differs from the wind at the surface. The entire train is then carried skyward. On one occasion the upper-

B.F.P. Sive

most kite in one of our trains reached an altitude of more than a mile. The string spiraled downward so that the top kite was directly above our heads. It remained there for about an hour.

We fitted kites with various payloads that could be dropped by parachute or otherwise manipulated. For example, a parachute can be attached to the kite by a simple wire hook that has an extension to serve as a trigger for releasing the load. The trigger can be operated from the ground by placing a paper cone, called a messenger, around the kite string and letting the wind carry it up to the kite, where it strikes the trigger and releases the hook [see bottom illustration at right].

It is also possible to release loads and operate camera shutters by means of a fuse. To prepare the fuse soak ordinary cotton twine in a solution made by dissolving as much saltpeter (potassium nitrate) as possible in a cup of water. Let the string dry. When the string is lighted, it will burn without flame at about three inches per minute.

To make a photograph by this technique tie the shutter release of a camera in its closed position with a short length of fuse. Stretch a rubber band over the shutter release from the opposite side, so that it exerts an opposing pull on the release. Fasten the free end of the rubber band to a convenient point on the body of the camera.

Cut a length of fuse for the desired time interval. If you want the shutter to click in 10 minutes, make the fuse about 32 inches long. Thread two inches of this length through the fuse that ties the shutter release and secure it with a knot [see top illustration on next page]. The shutter will operate 10 minutes after you light the free end of the 32inch fuse. The camera can be kept pointed in any direction by fitting it with a wind vane.

The angle at which the kite meets the wind can be increased or decreased during flight by inserting in the bridle a loop of string held closed by a triggered book or a fuse. When the loop is released, it opens, increasing the length of the bridle and so altering the angle of attack. The modern kite-flier could perform these and other operations by radio control. Versatile radio receivers that weigh less than an ounce and are capable of obeying a number of commands can be built with transistors.

The approximate height of a kite above the ground can be determined by multiplying the length of the flying string by the trigonometric sine of the



A French war kite



with gummed paper tabs



Fuse release for camera shutter

angle made between the kite, the end of the string and the point directly helow the kite. We marked the string with dabs of colored paint at 100-foot intervals: red, yellow, blue, green and black through the first 500 feet, then red-red, red-yellow, red-blue and so on for the next 500 feet. Thereafter we used combinations of three colors, four colors and so on. To measure the angle we fastened a protractor and a plumb bob to a stick with a pair of sights on it [see illustration below]. Multiply the calculated height by .96 to correct for the error caused by sag in the flying string. For example, how high is a kite that flies at an angle of 30 degrees on a 500-foot string? The sine of 30 degrees is .5, and 500 times .5 times .96 is 240 feet.

The aerodynamic features of kites invite innovation. We made several designs, one of which gave us great satisfaction until we learned that it had been invented independently several times. It occurred to us that the lift of a kite might be improved by borrowing a trick from the designers of racing sloops. These boats have both a jib and a mainsail. Aerodynamically the jib makes only a small direct contribution to the forward motion of the boat, but by directing a jet of air at the proper angle behind the mainsail the jib increases the effectiveness of the mainsail about threefold, according to the German yacht designer Manfred Curry. The "wing slat" of high-lift airplane wings is another application of the jib principle. Why not fit a kite with a pair of jibs? We decided to do so.

The frame of our jibbed kite resembles that of a Malay kite, consisting of a crossed spline and spar. A strut extends vertically from the cross to leeward and



Instrument for measuring angles



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is braced at the outer end by a pair of bowstrings attached to the spline and spar. The sails are made of thin, closely woven nylon. A triangular keel sail resembling a pennant is tied between the strut and the bottom end of the spline [see illustration below]. The triangular mainsail is tied to the ends of the spar and the bottom end of the spline, and it loops over the keel. Two corners of each jib are tied to the ends of the spar and the top of the spline. The third corner of each jib is tied loosely to the cross of the frame. The jib sheets are adjusted so that air flows over the lower surfaces of the jibs and passes over the leading edge of the mainsail. As in the case of a sailboat, the optimum adjustment of the jibs varies with the strength of the wind and must be altered experimentally for maximum lift. The kite appears to develop about twice the lift of a French war kite at wind velocities up to about 12 miles per hour. We had been planning to make a series of wind-tunnel tests of the jib kite, but our memorable summer ended before the tunnel was ready, and my collaborators returned to school.

A note of caution: Always wear leather gloves when you hold a kite string, particularly if you use nylon. A running string can burn and cut your hand. Never fly a kite above the heads of a crowd or on more than 100 feet of string within a mile of an airport.



A jib kite

B.F.P. Sight LISTEN

Faculty Committee Minutes, April 1, 1971, 3:30 p.m. 161 LHH.

Present

Dan Andersen, Steve Brown, Dan Clock, G. Davis, T. Dan Gilmore, Bud Haggard, Earl Heuer, W.Z. Iron, Lee Kaufman, Don Klein, Betty Ryan, Mary Sonneborn, Mary Te Pastte, Cam Wilson, and several TJC students.

17.01 Approval of Minutes #16.00, March 17, 1971. Deferred.

17.02 Election of Chairman for Faculty Meeting for Spring term 1971

It was decided by consensus that Earl Heuer be re-elected Chairman

of the Faculty Meeting for the Spring 1971 term. So ordered.

17.03 Announcements

JLK - Re Spring registration - Students enrolled to date number 232.

Some seminars have more than 20 students and others are low.

Exams have low registration.

Trying to close seminars at a certain level wasn"t too successful. It did not achieve the desired goal of bringing up attendance in the low seminars.

The reaction to closing of seminars seemed to result in a sharp increase (172) in contract studies.

Faculty Personnel Committee Minutes.

17.04 Task Force Recommendations on Promotion and Tenure

After considerable discussion on the recommendations submitted by the task force and some additional and/or alternative propsals submitted by Don Klein and Bud Haggard, it was decided to ask the Task Force to re-writ the proposals with the corrections and additions voted.

17.05 Adjournment

Meeting adjourned at 4:45 p.m.

B.F.P. gine

Faculty Personnel Committee Minutes, April 5, 1971, 2:45 p.m. 161 LHH

PRESENT

Earl Heuer, (Chairman), Dan Andersen, Lee Kaufman, Don Klein, Kathi Gatov, Bud Haggard.

18.01 Minutes of the April 1 Faculty and Personnel Committee Meeting will be considered at the scheduled April 8 meeting.

18.02 Agenda

- E.H. Announced that this brief Personnel Committee meeting was being held now because of the heavy agenda at the Thursday meeting, at this meeting, today, the applications of Merrill Rodin and Christine Loizeaux for faculty positions at TJC will be considered.
- Merrill Rodin (Philosophy) The Faculty Personnel Committee voted to offer Mr. Rodin a position on the TJC faculty.
- Christine Loizeaux (Dance and Visual Arts) The Faculty Personnel Committee voted to offer Miss Loizeaux a position on the TJC faculty.

18.03 New Business

Several; members of the faculty suggested that we keep Wayne Huber(Art) in mind for a possible opening this year or next.

18.04 Adjournment

Meeting adjourned at 3:00 p.m.



D.F.T. IVEN

be likely to lessen the conflict between the generations?

Plaget: I would think so. Children often must discover the idea of justice at the expense of their parents. From about the age of seven or eight, justice prevails over obedience. But this theory should be studied experimentally.

Hall: You would have to go out into the field and test it.

Plaget: I have other ples in the oven. Hall: I'm interested in the implications for education of the ples you've already baked. In the United States we have a concept called reading readiness. Some educators say that a child cannot learn to read until he has reached a mental age of six years and six months.

Plaget: The idea of reading readiness corresponds to the idea of competence in embryology. If a specific chemical inductor his the developing embryo, it will produce an effect if the competence is there, and if it is not, the effect will not occur. So the concept of readiness is not bad but I am not sure that it can be applied to reading. Reading aptitude may not be related to mental age. There could easily be a difference of aptitude between children independent of mental age. But I cannot state that as a fact because I have not studied it closely.

Hall: In recent years the new mathematics has come into American schools. Along with a new vocabulary we introduced new concepts like set theory.

Plaget: Seven years would be perfectly all right for most operations of set theory because children have their own spontaneous operations that are very akin to those concepts. But when you teach set theory you should use the child's actual vocabulary along with activity — make the child do natural things. The important thing is not to teach modern mathematics with ancient methods.

As for teaching children concepts that they have not attained in their spontaneous development, it is completely useless. A British mathematician attempted to teach his five-yearold daughter the rudiments of set theory and conservation. He did the typical experiments of conservation with numbers. Then he gave the child two collections and the five-year-old immediately said those are two sets. But she couldn't count and she had no idea of conservation.

Hall: But she had the vocabulary.



Plaget: That's the point. You cannot teach concepts verbally; you must use a method founded on activity.

Hall: If you had the power in your hands, would you make any changes in the school curriculum?

Plaget: We spend so much time. teaching things that don't have to be taught. Speiling is a good example. One learns to spell much better just by reading; teaching spelling is a waste of time. And history. We should reduce the amount of time we spend making people disgusted with history. We should concentrate on giving them a taste for reading history which is not the same thing at all.

There is one addition I would like to make to the curriculum. So far as I know the experimental method is not taught in any school and it is a way of checking your hypotheses. If we can teach this method to children they will learn that it is possible to check their thoughts.

Hall: How would you go about teaching this?

Plaget: In the experimental method you have the problem of what causes a given effect. A certain number of factors intervene and—in order to discover the cause—you must keep all factors constant except one.

Hall: As when you gave the children five flasks of colorless ilquid and asked them to produce yellow.

Plaget: That's right. One of the flasks contained only water, another flask contained bleach, and the other three liquids that when mixed together turned yellow. We showed the child the color but not how to make it. The child also had to determine just what sort of liquid was in the flasks that held bleach and water. Not until a child reaches the age of 12 does he test all possible combinations of fluids and solve the problem.

Hall: What if the teacher were to demonstrate this experiment to the class? Plaget: it would be completely useless. The child must discover the method for himself through his own activity.

Hall: That sounds very much like John Dewey's concept of learning by doing.

Plaget: Indeed it does; John Dewey was a great man.

Hall: Now that we've mentioned an American educator, may I ask what you have called "the American question"? Is it possible to speed up the learning of conservation concepts?



Structuralism is so heavy. - Nub

"But at this point a second, and much more serious problem springs up, the really central problem of structuralism: Have these composite wholes always been composed? How cun this be? Did not some one compand them? Or were they initially (and one they still) in PROCESS of composition? To put the question in a different way: Po structures call for Fore MATION, or is any some sort of ethical Prefore MATION compatible with them?"

- Jean Praget





Garrett Hardin Science, 162:1243-1248'Titicut Follies is a film that tells ou more than you could possibly a thoughtful article on the future of nuclear war. erbert York' concluded that: "Both sides in the 1968 hould know-but no more than you

Frederick Wiseman wering, haunting, overpoweral document. A searing of any individual vilclety that condemns reatment en

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Insion.

walls of one of those institutions where we file and forget the criminal insane. In this instance it is the state prison hospital maintained at Bridgewater, in Massachusetts. The novle avoids nothing as it relent-

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"For all the fuss that was made over Marat-Sade, the self-consciousness of that representation of life in a 19th Century French madhouse diminished its force. It was always careful at dangerous moments to remind us of its artificiality, of the fact that these were just actors miming craziness and not to worry about them.

"There are no such easy outs for us in Titicut Follies. We cannot forget that its 'actors' are there to stay,

With Senne to the follow
that kind of the senne to the senne to the senne to the novel to the sended as art, however to the senne to the novel to the sended as art, however even crudely, it - sente to the novel to the sente to the sente to the sente to the novel to the sente to the s trapped in their own desperate Inventions. When a work achiev that kind of power, it must " 28 mins-Chieched by Andre Delvaux. Daisne Winduet. From the Delvaux. With Senne Routine Note Phologram. Sing States and With English Subfrage Burnaku (Internet States) and the States and With English Subfrage Burnaku (Internet States) and the States and With English Subfrage Burnaku (Internet States) and the States and With English Subfrage Burnaku (Internet States) and the States and With English Subfrage Burnaku (Internet States) and the States and Where (Internet States) and the Count of the States and Where (Internet States) and the Count of the States and Where (Internet States) and the Count of the States and Where (Internet States) and the Count of the States and the Burnaku (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the Count of the States and the Andre (Internet States) and the A These Bunnaku theatre, the unique puppet theatre in which large dolls are handled on stage by puppet manipulators. Sycreating an almost perfect lifusion of life. The film includes Multipling and the Delvaux. In Flemme Rome the Phologinal and the Pho

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A 28-minute color film outlining the latest frends in school design. Available on loan without 27 Vi, charge from EFL in care of Association Films, Inc., 600 Madison Avenue, New York, N.Y. (1022, 7) and for purchase at \$93.45 from EFL. Aur & Arra Room to Learn. Any & Arra Room to Le And the leaf Sritual Mexico The ceren Imed Peyote 0 Journey A 28-m rule color alim on inner-sity and ghetto schools and school building problems. Avail-able on loan without charge from Modern Taiking Picture Service, Inc., 2323 New Hyde Parket and The anthropolog les mentary Hunt of film recorded 0 And the charge from Assoure The Early Leg. And the charge from Assoure the charge from Assoure from taking Picture Service. And the charge from Assoure the charge from Assoure from the charge to And which the charse at \$125.00 from the charse at \$125.00 from the charse at states of the charse at the char the Iollows obt 0 the Huichols of Huichol the Ist 5 Peter annual the Indians field T. Furst, peyote 3 Mexico 0 December this hunt and western S the

B.F.P. 144000 MOSTER FREEDOM COLOR

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A film by

William Klein

"A savage cartoon on American intervention abroad in the name of freedom. It hits home all too often..., The frequent resemblance to our role in Vietnam is more than incidental."—New York Post

"A sledgehammer spoof of American conservatism. Many of the blows land on target, aided immensely by imaginative art direction and costuming."—Show

Is it a plane? Is it a bird? It's Mr. Freedom, doing battle with the evil monsters of communism wherever they rear their ugly heads. Out of the myths of America's mass culture— Superman, Batman, the Supercomics—William Klein has fashioned a devastating satire of

"Silent Majority" America that can be viewed as a political poster as much as a flamboyant pop cartoon. **Dispatched to save France from the** Red Menace, Mr. Freedom acts out the infantile dreams of America's political, sexual and military omnipotence that views the final Big Bang as the fitting climax of a weekly television series. With Donald Pleasance, Delphine Sevria. John Abbey, Philippe Noiret, A French film with English dialogue. TJC FORUMS - SPRING 1971 2 P.M. 132-HURON 4-22 Movie, MR. FREEDOM 4-29 Movies

> 1. NORMAN O'BROWNS BODY.

2 Short Play, THE GREAT LIBERATION

- 5-6 Movie TITICUTT FOLLIES US22 - PLAY
- 5-13 Educational Facilities Lab. Films
- 5-20 Gerrit Hardin (Speaker) TRAGEDY OF THE COMMONS.
- 5-27 Movies
 - 1. THE MAN WHO HAD HIS HAIR CUT SHORT.
 - 2. Short movie by TJC students.

The Creative Education Foundation and Buffalo State University College are sponsoring the 17th Annual Creative Problem-Solving Institute — a program emphasizing creative methods and approaches — June 20-25, 1971. The Institute is designed to offer the widest and deepest spectrum of creative studies possible within a week-long program, including intensive instruction and practice at three different levels of sophistication. Strong emphasis is placed on (a) sensing and defining problems, (b) developing ideas, (c) implementing solutions, (d) leadership, and (e) teaching.

The Institute's three levels of participation are geared to satisfy needs and interests, ranging from those of leaders with extensive experience in the nature and nurture of creativity, to those of individuals desiring to learn basic fundamentals about these areas. Each year, individuals attend from throughout the United States and Canada, as well as from several foreign countries. This provides a great diversity of participants who are dedicated to the enhancement of creative behavior and thus contribute to a unique creative climate at the Institute. They represent all fields of business and industry, all levels of education and government, and various community services. The C.P.S.I. is particularly well attended by those with backgrounds in . . . Management . . . Engineering . . . Education . . . Personnel . . . Training . . . Marketing Research and Product Development . . . Church, Civic and Social Service Health Sciences Value Analysis and Value Engineering.

Of prime importance are the approximately one-hundrd-fifty nationallyknown leaders who serve as faculty and general leadership personnel. Their participation enables the *Institute* to provide an over-all ratio of one resource-leader to two enrollees.

Beginning Program

The basic or beginning program, for those who have had little or no previous experience in the field of creative problem-solving, offers in effect a capsulized version of the semester courses conducted on many campuses throughout the country. In "learning-by-doing" sessions, skilled leaders personally assist participants in becoming more aware of their own creative processes, in nurturing their personal creativity, and in better understanding how they may help to nurture it in others. Participants are encouraged to express creative decisions while processing problems of their own choosing.

The ratio of faculty to enrollees is approximately one to five in these sessions. Course groups are organized on an interdisciplinary, interprofessional basis, for maximum cross-fertilization of ideas. There are ample opportunities, however, for participants to meet those with similar professional interests. Some of the sessions are titled: Sensing Problems and Challenges... Recognizing the Real Problem ... Creative Experiences, Process Emphasis ... Encouraging the Creative Process ... Idea-Finding by Forming New Associations ... Evaluating Ideas ... Preparing to Put Ideas to Use ... Fact-Finding, Problem-Finding, Idea-Finding, Solution-Finding and Acceptance-Finding — Applying the Total Process ... Observation and Fact-Finding ... Creative Experiences, Product Emphasis ... Idea-Finding by Means of Checklists ... Making Unusual Ideas Useful ... Applying the Total Creative Problem-Solving Process to Participant's Own Problems ... Preparing to Stimulate Creative Behavior in Others ... Anticipating Challenges in the Participant's Work and Life ... Making "Snap" Decisions Creatively ... Sensitivity to Group Dynamics.

Intermediate Program

The intermediate program, which is built upon the fundamentals of the basic program, is designed as a bridge for strengthening those fundamentals and for preparing enrollees for later participation in the advanced program. It is geared to those who have previously achieved some understanding of creative problem-solving methods, either at an earlier C.P.S.I. or elsewhere, but who recognize the need for a review and strengthening of the material before participating another year in the advanced program.

Its two main points of emphasis are: (1) review, reinforcement and internalization provided by the continued study of techniques and methods beyond those introduced in the basic program and (2) leadership and 'or teaching in the field of creative problem-solving. While participation in this program presupposes awareness and intellectual understanding of the basics of CPS, it is designed to provide for deeper internalization of these fundamentals through extensive application. <u>Reinforcement</u>, and <u>internalization</u>, then, are achieved by applying diverse techniques to the solution of real problems in an exemplary climate and using the numerous resources of the *Institute*, including its variety of resource personnel.

For the participant who wishes to strengthen his skills and internalization of the basics by practice in <u>leadership</u>, particularly if he anticipates teaching courses in creative decision-making, practice students are provided. Leadership practice may likewise involve the use of problems suggested by the enrollees.

A high ratio of faculty and resource leaders to enrollees again provides for a program which is especially tailored to the needs and interests of the participants, and in which each enrollee may develop and proceed at his own rate. Opportunities are provided for making available to enrollees in this program many of the advanced sessions mentioned below. Thus, this intermediate program serves as an actual bridge between the basic and advanced programs, with the emphasis placed upon tools, methods, procedures, techniques, etc.

Advanced Program

The advanced program is for those who have completed previous courses or institutes in creative problem-solving and are prepared to concentrate on advanced study of theories and practices of creativity, especially in the fields of education and industry. Participation in this program presupposes not only understanding, but also internalization of the basic procedures of Creative Problem-Solving.

The varied resources of the *Institute* offer here such week-long specializations as creative management, innovation in industry, general semantics, synectics and creative problem-solving, human relations and group creative processes, educational innovation for creative teaching and learning, sensitivity training in relation to creativity, community innovation, etc. Opportunity is provided for research into the development and organization of new creative material and techniques, as well as the integration of these with other subject areas and procedures. Principles and processes are stressed as applied to problems with personnel, with "hardware" (products) and with "software" (systems).

Some of the specific sessions in which enrollees may choose to participate are: Creative Education In Progress: A Practicum ... Advanced Matrix Charting ... How to Use Diagrams to Teach Creative Problem-Solving ... How to Develop "Opportunity Awareness" ... A New Teaching Tool for Acceptance-Finding ... Force Field Analysis ... Non-Verbal Communications as Related to Creativity... Creative Problem-Solving Clinic; Company Problems ... Deferred Judgment - Nature and Nurture, as an Integral Part of Everyday Life ... Creative Imagination Games for Children ... The Creative Semantics of Scientists ... Shaping Creative Behavior ... The Value Concepts ... Creative College Concepts ... Stimulating Organizational Creativity: A Case Study ... Group Creative Procedures ... Creative Synergetic Laboratory ... Creative Approaches to Instruction Through Media ... How to Get Your Ideas Accepted and Used ... Unusual Industrial Creative Practices ... Space Visualization . . . Using the Creative Problem-Solving Process in Criteria Setting --Evaluation and Acceptance Finding ... Combining the Creative Problem-Solving Systems for Use in the Classroom, Home, Business Department, Church or Civic Areas ... In-Depth Experiences in Sensing, Analyzing & Restating Problems ... How to Use the Creative Process to Demonstrate What Creative Thinking Is All About ... Creative Group Dynamics ... Brainstorming ... Force-Fit ... Solid Human Relations: Creative Leadership as Cement Among People ... Creative Communications ... Creative Engineering Design ... Developing Human Potential Through Creative Thinking ... The Here and Now Experience ... Concentration and Relaxation . . . Manipulating Space Substance Via Imagination . . . Game Invention for Reinforcement of Creative Process ... Tools for Change ... Brief Experiences in Guided Fantasy as an Aid to Innovation and Invention ... Experiences with Modification of Language or Symbols - Internal Dialogue Externalized ... Creativity & Engineering ... Community Idea Squads ... A Supermarket Case History ... How to Relate Creative Problem-Solving to a "Management by Objectives" Program ... Creative Administration ... Structure of the Intellect ...

Organizational Creative Climate ... Incorporating Principles of Applied Imagination into the Training of Helping Persons ... Creative Sales and Marketing ... Toy Designing as a Hobby ... Creative Problem-Solving for Lawyers ... An Opportunity for a Personality Profile Analysis and its Interpretation re Creativity ..., Creativity Research ..., Creative Writing ..., Classroom Strategies for Cueing Creative Expression ... The Creative Personality ... Classroom Strategies for Cultivating Intellectual Talent ... Creativity Tests ... Theory into Practice: Problem-Solving Modes of Classroom Instruction . . . Seminar on Current Controversy on Public Education . . . Basic Parameters for Developing Curricula for Creativity Development ... Barriers to Curricula for Creativity Development The Multiple Talent Approach to Teaching ... A Theory of Developmental Stages ... Value Engineering . . . Implementing Curricula for Creativity Development . . . Patents ... Futuristics: Technology ... Futuristics: Value Systems ... Futuristics: Health & Quality of Life ... Futuristics: Government & Economics ... Futuristics: Education ... New Product Development ... Creativity and Intelligence ... Creativeness and the Processes of Innovation and Change Creativity in Religion . . . Creativity in Banking . . . Creativity in Nursing . . . Creativity in Insurance . . . Creative Selling . . . Creativity with Senior Citizens . . . CPS as Applied to Fund Raising ... Creativity in Problems of Urban Affairs (such as Ecology, etc.) ... Creativity in the Now Generation.

Evening Sessions

The presentations, demonstrations, and discussions cover such areas as: new developments in research on the nature and nurture of creative behavior... experiences in heightening awareness and spontaneity in the creative process... developments in creative education... philosophical. psychological, and sociological aspects of creativity and innovation... organizational innovation.

Special Sessions

Considering the emerging interests and needs of participants, faculty will arrange special sessions in the early mornings or late evenings, drawing upon the total resources of the *Institute*, including personnel, library, and other media.

Creative Studies Library

Perhaps the most comprehensive collection of books, microfilms, articles, reports and other related materials dealing with creativity is housed at Buffalo State University College. These more than 1.700 books as well as other items, are available throughout the *Institute* for use by participants.

Other Institute Facilities

Sessions will be held in a new Campus School, which is a model of "now-age" electronic facilities for multi-media learning. The complex allows for the wide variety and flexibility of sessions and participative learning methods of the *Institute*

Announcement: Filk Dencing Every Wednesday gam sharp - 102-103 LHII Listening Center containing 24 four-channel wireless tape units (receiver, playback). Extensive exposure will be provided to the most pertinent audio-visual materials including 16 mm films, strips and slides. A modern Communication Center and modern Residence Halls with Dining Rooms comprise the balance of the Institute facilities for housing, meals and some evening sessions. Institute Fee The Institute fee of \$195.00 includes all luncheons Monday through Friday, dinners Sunday through Thursday (except Tuesday), all refreshment breaks, texts, and other materials. Rooms with connecting baths are available in the residence halls at modest rates. no tv Can 0 theory show your and bying turn t,0 0 the society' mental .right quì. U. Mddd6 like 15 share this damn world philosophy.. enses... Bud af Car action..sometime embarra need sincerity. 900 the -unicp just t want Forced . nd tha tv 601 * * * . . Inu bur . . the find. to. VP.FV + . nreater. lips. oame feel 7m tin C . hann stunidi . dammi . that to things..when [qoaq 4 . . . simply. "SULUM ..napalm explosions > 366 . a anainst def trying never . Rel nahu. neonle. angril nob someone. checkmated..by livinn need • o f BUR Can te.. . with one-another. the age..old poker say..and..a cautious 1 4.9 turn... . uhen..i 4 And ·• uhen bue .. . to...hen -eat-don 1 sel . .for . 1 O "...you rooftops.. to..when goor-morning on nahu meet . .for pol. . . to when when to when £. 10 . beings. BUL · VEUIE towhin aves that . EXDTR. SOTTOM. OT. itics...or 1D ently . silences. beat towards honesty. naivety PUE DF. to . to to unpleasant to 4 . . Apuona. . without lying to inner i end] v not . which i . spaau × to don neople doestesky t. talk Sing talk talk tall 115 silences. talk talk talk talk to talk .held human ----mou the t.n C 5 n t . . impolite...fust aL F--. ..like.. fears of expre-.and pol 4 of raindrons.. -1 enounh. and individual synonymou's the happiness..or vhu. of but. • ail Bnd ---------aven • ain't. op • 0 f 1 but....ho do but....bu do play

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programs; a three-camera Television Studio; 25 Observation Rooms with one-way vision glass; Tele-lecture hook-ups; a complete Instructional Materials Center; a

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i wanted only to live in accord with the promptings which came from my true self, why was that so very difficult?

this is not a plea for help, or understanding or a true confession type of confession this is a protest against fellow human beings assuming they have the right to type-cast other human being. i would like to share a few thoughts with other students, these thoughts meant something to me. if you can use any of these that cool, if you can't that's cool too.. here they are for what its worth.

can't these sick fools.....see.....bowl. sick bullshit.....jive.....goldfish...bowl. thinking like this that perpetuates the game...of forcing people from detting to of images...and keep people from detting to know each other...thereby, keepingpeople from being open.sand honest with.one.another but...who do i talk to..when i don't want to lie...or.in any way...to deceive...some turn to writing poetry...or books...or to ...Draying...or to suicide....or to watching t.v. or joining large of people... for in large groups of people... he heard iness is ••reject ill not talk non ...that . groups of people...fo ...one expects not to traitjacket..of loneli Decause weaknesses. C Brsol there. op. end. greater dearen. And uho. ייסע anlutinns. than your but. al mament . stronger know . e 0 these ki these - to > ssened full mou OF are no think Ū n t wil. • 0] DE

B.F. P.

"Archetypes come to the fore again and again in history, always presumming at each moment of history that the particular form in which they find themselves is the only one that is 'true' and 'eternal'."

Ira Procof

"If the doors of perception were cleansed, everything would appear to man as it is, infinite. For man has closed himself up till he sees all things through the narrow chinks of his own cavern."

William Blake

"....Let any man open his eyes to the world he lives in, and he'll become an Outsider immediately. He will beein by thinking he sees 'too deep and too much' he will end b' realizing that you cannot see too deep and too much." Georce Fox

For humans that decide other ceocles lives for them.....its easy to slip into weakness of strength. At this time so many strong qualities become weaknesses if they arow to strong walter

and educated wine philosopher once gave me this thought and i will rass it on to you, take it for what it is worth,....he said ... junior cop, you think you are a cool little mother .. don't you, but one day with your smart a ... you will find out that ... you are junior cop... when you don't have to be. like i said,, take it for what its worth.

cynacism maybe and unanswered homes

maybe somed y human beings will realize that other human beings were not but on this earth ... for their individual own particular pleasure. written with forethought and a taste of bitterness

Environmental Cues -- The Learning Oscillation

I learned a fine thing in winter ravine. In field experience I initially felt the dilemma of "where, oh where, to begin?" So massivley unknown was this ravine. How to begin without prerequisites under my belt and without commitment to a huge project which, once I was in it, I might not like.

Three of us discovered a workable answer about midway through the quarter. It seems obvious now. Go experience phenomena of the ravine (details unknown in advance and that's cool). A walk through it will do. When something catches attention enough to register, stick with it a little longer. Look it over . . . drift out. . . look more. Speculate (feels awkward at first. We're taught to see speculation not as a source of questions but as a pseudo-answer). Sometimes a question or a puzzle emerges; often general curiosity is all you could call it, curiosity with no specific goal other than "to find out something more about it." When back on campus, go look something up about that specific phenomenon. I learned to go with my interest in the library, unbound to "oughts" of what I should study. I learned to stop when I got bored and not to put up with authors who were presumptious enough to write badly. There are others on the shelf.

I learned, most of all, to study something specific and limited, based on a specific experience in the woods. Thus did a great big bracket fungus once serve as an <u>environmental</u> <u>cue</u> for some reading on the features of <u>this</u> fungus type and some work on <u>its</u> ecological function in the woods. Another time, it was a blown-over cherry tree riddled with wood ant tunnels. One dormant ant was exposed. Someone subsequently followed out material on the social life of ants and their relationship to bees. Another studied their hibernation and, from that, the annual cycle of the colony.

Now, it sounds so simple. But in the context of formal education (where the universe is organized by subject and you cannot study Y until you've covered X and plan to study Z), the idea that you can study Y because it interests you, and can study it without reference to any of Y's other "subject matter" associates, is startling and unfamiliar. Formal education takes subject matter divisions and imposes them on the universe, whose structure is then slighted in favor of that belonging to college catalogues. "Environmental cue" education derives its structure from that of the universe as encountered. In it, the integration of learning and actuality is organic to actuality; in the former, learning is made to fit a traditional scheme designed without reference to actuality as met. While it may be socially more acceptable to get formal education, it is personally more lasting to learn one's universe. When the former can really be made to serve the latter, then is college being useful to life as lived. ----Cam

ATTENTION: There will be a short meeting for anyone interested in or planning to attend <u>LAW</u> <u>SCHOOL</u>; Friday, April 16, at 1:00 in 103-Huron. If unable to meet at this time contact Dave Aussicker in 165-Huron, or Prof. Junn, Ext. 282.

"Stephenes and in the fore stath and might in Alitably and the partnership fore in which they find thermalised is the arts and that is thruit

26 March 1971

Dear Everybody, d'd like to thank you all so much for our wordliger stay at TJC. Especially, d'd like to thank Maggie, Betty, Norm, Einie, Max, Dans Gilmore and Anderson, Cam ind extra Apecial thanks to Mary, for all the help and care you all gave us.

Hove than wer, maryl and I hope that we will see you again in the gall. In any case thank you one and all.

> . my love, Andi Entwistle

P.S. & thought Maggie would especially like this (and i yot it at the Jam (righ collection and & remembered to look at every picture one write time just for her."

FABULOUS FORUM

LIKE TO BE SHUT UP IN A ROOM WITH 13 ACTORS, 2 CAROUSEL PROJECTORS, 8 SIXTY FOOT CABLES, 2 SUPER-8 PROJECTORS, 2 STEREO TAPE DECKS, 8 SPEAKERS, 17 SPOT-LIGHTS AND 100 COMPLETE STRANGERS IN THE TOTAL DARKNESS?

From the blinding Michigan sunshine, you enter the total darkness of 301 Manitou, the door closes behind you — a long settling pause the sound of peeping frogs comes from nowhere, and "Home" has begun. The TJC forum is presenting "Home" on April 15 and 16 at 2 p.m. in 301 Manitou.

"Home is a new multi-media science fiction play, written and produced by Black Flag Productions, a mass touring company. One hundred and seventy slides, 2-one hour specially shot films, environmental sound and 13 actors all combine to saturate the senses. "Home" is live theater in that the 100 people in the "audience" are a part of the play and surround the actors; there is no stage.

The Director, Bob Sheedy, and Author, Donald Mayer started on the Multi-Meida "Home" in March of last year. Now, with the cooperation of the drama and photography depts. of Westfield State College, the play is ready for the world! (and TJC). Originally "Home" was an award winning radio play. Now it has been expanded from the radio media to live multi-media theater. Both the director and author of "Home" will be on hand after the performance to rap about the play. Particularly, if you are in Iron's multi-media workshop, you will really want to talk to these people. Added feature: not only can you talk to the "Home" people, but you can live with them! They can live with you? The "Home" cast and technicians need a floor to sleep on from April 9 to April 16. They have their own food and are really exciting people to have around. There is a sign-up sheet in the TJC Common Room if you can help out.

To be through with this and close with a resounding clench:

Home is about space travel in a new modetravel through the human mind to arrive in a totally new and fulfilling environment.

David Mars

TJC is a great school. Its problems are fewer and on a higher level(having surpassed the normal lesser ones) and the TJC community is solving problems, their own_and the schools'. They do it successfully.

Perhaps one thing lacking, though, is students sharing their skills and talents with other members of the community. I have no complaints with the faculty in this area. They readily share any major or minor skills they have with anyone who might be interested. But in talking about students; for example, I have had experience teaching folk dancing (I had to start somewhere, so the teaching experience is not a must) and I feel confident in that skill enough to get it offered as a seminar so other students can take it for credit.

Other people have skills in other areas; others might want to learn about these areas. With luck we may even get more faculty going to classes to learn instead of teach. If you think you might have a skill worth sharing (even if you might have some doubts) talk to a faculty member or come to the Town Meeting office. That office is open for solving problems, expediting bureaucracy or just talking. Talent and skill is wealth . SHARE YOUR WEALTH! D.I. Schuchman

DETERGENT	AMOUNT OF PHOSPHATES	
Axion	43.7%	HIGH POLLUTANTS
Bio-Aid	35.5	
Oxydol	35.3 30.7	
Tide Bold	30.6 ·· 30.2 ··	
Ajax Laundry	28.2 **	MED POLLUTANTS
Drive	25.3 **	
Gain	24.4 **	
Bonus	22.4	
Breeze Cheer	22.2	
Fab Cold Power	21.6 ** 19.9 **	
Cold Water All	9.8 ** 7.6 **	LOW POLLUTANTS
Diaper Pure	5.0 **	
Soap	0.0	
COMPLET IN A STUDY BY LIMNETICS A MILWAUKEE CONSULTING CONCERN		

Virtually all Detergents are now bio-degradable but still contain *phosphates*. Phosphates fertilize the algae and vegetation making the green scum that borders our lakes and rivers.

You can exercise your power as a consumer and choose the non - polluting product, soap, rather than a detergent.

If you use a detergent, the lower the per cent of phosphates, the less you pollute. The Three Faces of Nixon

BREBRERRE

Public Image: "All business and no heart. A hard-working square who does his best, but cannot touch the soul of people."

Staff Image: "Thoughtful about the human condition ... a leader who keeps asking what is right rather than expedient."

Drewins by John Huehnerserth Self-image: "Tenacious individualism and Puritan ethics ... 'I am just going to do a good job for this country"



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EDUCATION

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"Sure would like to go and just listen to a good lecture." "I want hat sounds almost like a funder of the familiar", "So and funder of the familiar", shackled by comfortable ways of doing things.

> Prolong all your yesterdays because they were good to you.

Resist change because it costs money and may not work. lever do

Ignore the new realities of both technology and methodology.

. 10

Pay no attention to the fresh and vital minds of the well-educated youth.

Believe that you can survive the future without a plan for change.

Aing **Disregard the demand** for innovation in all the facets of your business.

Continue to fight a rear guard action, hoping tomorrow will wake care of itself.

Practice the greatest sin of marketing: making what you want to sell rather than what the market wants to buy.

Admissions Committee Minutes, April 2, 1971

PRESENT: Dan, Cathy, Chuck, Earl, Tiny, John

- Thirteen applications were acted upon as follows: Summer: 1 Admit 1 N.A.
 - Fall: 10 Admit 1 Await expanded personnel essay
- Discussed replacing Angie Hoogterp, whose work schedule is forcing her to resign her committee membership. Cathy offered to bring the situation to the Town Meeting Representative Committee.
- 3. Next Meeting April 5, 1971 at 1:00 p.m.

Admissions Committee Minutes, April 5, 1971

PRESENT: Dan, Cathy, Chuck, Earl, Tiny

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- 1.0 Tiny requested reactivation for the summer term of a spring application received too late for action for spring term. The applicant involved had phoned Tiny in this regard.
- 2.0 Fifteen fall applications were acted upon as follows:
 - 7 Admit
 - 3 N.A.

5 Schedule interview

3.0 Next meeting- April 7, 1971 at 1:00 p.m. Dan will provide some statistics as a basis of extrapolation for the Fall 1971 term. Hungry brain lying by the roadside Mouth gaping, open wide Eyes jutting bloodshot red crawling slowly toward my bed.

Dirt road crawls into the sky White wash rooms ready to die Bed alone with blood drenched sheet Fraying, falling, burning in heat.

Night watch mission all alone Somehow wishing this weren't home Hurricane sea and earthquake land Now life devulge thy holy land.

Mike Roach

VAN MORRISON - HIS BAND AND THE STREET CHOIR (WB-WS1884)

Don't get too hung up comparing this album with Van's previous work (Astral Weeks, Moondance) because, while "Street Choir" presents the Van Morrison we all know and love so well by now, it also sees him in a much more relaxed and less intensive mood. At first glance "Street Choir" is not up to Van's previous levels, and that may well be, but subsequent hearings show that Van is still there making his music but he is no longer creating just for himself; he seems to be making music for the enjoyment of his friends also.

"Street Choir" is very loose musially and conveys the impression that Van is at a point in his world where he is no longer intently searching for peace and happiness; he seems to have found a bit of it. Everything about the album says it; from the looser singing Van to the pictures of he and his friends to the title of the album. Hence, the change in his music(structurally lyrically) is evidence of his relaxed demeanor and is best illustrated by "Give Me A Kiss" and "Sweet Jannie" both rock'n roll songs.

CONTINUED

A LIDE

Van Morrison

Just as you can't justifiably expect Bob Dylan to sing of "those visions of Johanna" keeping him up past the dawn, you can't expect Van to be "caught one more time up on Cypress Avenue" when he's mellowing out up in Woodstock. The progression of Van Morrison is obvious through his three latest albums. "Astral Weeks" is comparable to vintage Dylan in the power of its poetic vision. It is an album pervaded by an acute and painful anquish and a sense of helplessness in the face of tragedy. Compare the lyrics of Slim Slo Slider of "Astral Weeks" with Virgo Clowns of "Street Choir" and the changes in Van Morrison are clearly illuminated.

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I know you're dyin', baby and I know you know it too. Everytime I see you I don't know what to do. (Slim Slo Slider)

> Let us free you from the pain. Let us see you smile again. Let us unlock all the chains, you're broken-hearted.

> > (Virgo Clowns)

The feeling of total inability has been replaced by an optimism brought about from the security and understanding of a good woman and good frined.

"Moondance" represents a sort of transitional point between those two extremes. It is a happy and optimistic album filled with newly found delight and dreams of what's to come. The familiar rocking Van should not be forgotten because Van hasn't. That great AM rocker "Domino" is surely a pleasure to hear everytime it comes on the radio. "I said Oh, Oh, Domino. Roll me over Romeo." Fantastic. It just lifts me up everytime I hear it. That break in the middle, whew!

"Crazy Face" starts out with a mellow, rolling classical piano riff with the famous Van Morrison flmaingo guitar in the background. Van proceeds to unfold the story of some dude standing outside a church, polishing his .38 in front of the people. Says he got it from Jesse James. He says, "Ladies and Gentlemen, the Prince is late." Hmm, some religious overtones but Van doesn't make it clear.

The bass guitar pattern supports "I've Been Working," a Memphis soulish assertion by Van about how he works hard each day but when he gets home it's all right' cause his woman makes him "feel so good." Intelligent horn arrangement clicks as it does throughout the album and the rhythm guitarist owes some licks to Steve Cropper. The chorus builds up with Van repeating "woman" eight times, climaxes, and then a softer "make me feel alright." A funky soprano sax break and Van fades out with some "ooh wee's."

Another of the looser, good-time songs is "Call Me Up In Dreamland" with its sing-a-long chorus.

Call me up in dreamland Radio to me man Get the message to me Anyway you can. Let your river roll Way down to your soul Never to grow old On a saxaphone.

CONTINUED

Van Morrison

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It's a song of traveling on the road doing those gigs that are a pain but bring in the bread.

From the airport to the plane Way to the railroad train Why don't we take to from the top And start all over again.

"I'll Be Your Lover, Too" is reminiscent musically of much of the music in Astral Weeks. Soft brushing drum and an almost weeping guitar but the message is much different this time around.

I'LL be your man I'll understand And try my best To take good care of you.

> "Blue Money" seems to be the favorite of the crowd I run around with. Maybe because it's another one of those roly-poly, loose-ends-falling-out songs. It takes up a playfully mocking tone over a carefree melody telling of the trials and tribulations of a photographic model.

> > You search in your bag Light up a fag Think it's a drag But you're so glad To be alive, honey.

"If I Ever Needed Someone" reminds me of "Brand New Day" from Moondance with its low-keyed, semi-spiritual feeling and the black voices reassuring Van. The slightly muffled trumpet of "Gypsy Queen" and the children's music box chimes opening and closing the song accompany Van's soft delivery. "Dance on, you know it's all right, Gypsy Queen." "Street Choir" is just that as everyone joins in singing a "song for the new day."

Van's horns really blow and he lets them with the result not unlike crossing the Stax house band with Miles Davis. The keyboards, base and guitar don't get any soloing time, they're content to just fill in tasty, satisfying music. That's what this album is mostly about, everybody laying back and playing with Van up in front seeing to it that his band, his friends and the audience (us) are having a good time. Keith Anderson

List of Next Years TJC Faculty and staff..... Acres white I us

Robert VasDies, Creevive Writing

Jerry Diller, Social-Psychology

Ron Efron, Sociology

Michael Birtwistle, Theatre

Robert Schechtman, Music

Christine aizeaux, Dance and Visual Arts (gending) Don't forget within the Mary Bulk bones ... Merril Rodin, Thilosophy (pending)

ilson, Ecolony Cam

Lee Kaufman, Enolish

Don Klein, English

Dan Andersen, Physics

Bud Hannard, Theology

Earl Heuer, Folitical Science

T. Dan Gilmore, Dean and Fsychology

late evening April 8,

My head hasn't been too much on the reading tonight. After one-to-one tutoring I took Nancy Coulter home and had coffee and a couple coughnuts. Among other topics, we talked about Cam's Spring Seminar and how much more excited she is this term having both free time and an interest to pursue. By contrast, how much more a struggle and burden it is when one must work on topics in which he is disoriented or unenthused.

a bar + 1 us

Memories of high school.....

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In Freedom To Learn (pg. 116-117) Roger's stresses how important it is to appeal to the positive characteristics in people rather than attacking the negative. How important it is to have a positive experience in a day's time! How many times we have heard that you can do what you want after your homework is done. In other words, you can spend a little time being highly productive after you have spent most of your time being telatively unproductive. I am assuming that your present school work is less meaningful personally than another interest and that, given adequate, genuine, free time and congenial facilities, you would spend the time pursuing the personal interest which also assumes you have a natural ability or talent which encompasses the personal interest.

What gave rise to these thoughts is the free time Cam's Spring Seminar is giving Nancy plus her current interest in the enter-relationships between weather and the moods and temperaments in people. She followed by saying she was doing a lot more reading while expanding less effort.

was) in. I am in the process of further developing a paper train 1've worked on for some My personal satisfaction in building this is so great that I would not consider doing it in conjunction with any school work. Consequently, I have worked on it only after school if I felt up to it.

Near the end of last term I was fortunate to have time and inergy to devote to it because my two classes were so absorbing and because many new ideas had formed. Ironically the break was more an interference than a help; and the first school week this term demanded increasing time and energy. Stopping the train , although I became even more tired rather than less, was hard to do. So tonight, picking up on Nancy's thoughts, and enthusiasm, I worked on a paper mache backdrop for it, as working on car design would have been too technical and exhausting. The accomplishment of something meaningful and constructive, vs. the struggle to accomplich something less meaningful, proved stimulating. A problem arose, however, when I tried to do the postponed C.C.T.C.P. III reading, Freedom To Learn, as my mind was still synthesizing largley different thoughts. And before long I gave it up and wrote this instead.

At this point in a conventional school system — excuse me Cam, I neglected the stimulus of your April 1 "Pond" article— I would have been labelled a failure for the day for not having finished my homework. Just so; the grade I would have received accurately would have denoted that failure; however, it falsely implies that I haven't learned. Quite the the contrary, I expreienced intense excitement working with my hands; the work was creative and satisfying; and I felt better and more released after envolvement with the mache. I experienced learning and growth; that it was outside the context of formalized education is irrelevant.

P. S. Morning. I finished the reading with keen interest and vigor anew. Thank you Nancy for the tips on speed reading.

Rodger Despres

Madison to Chicago from LaCrosse

I'm in a bus, Madison to Chicago, four lanes and a median, 70, smooth ride and barbed fence.

There are people, usually one to a window; One absorbed in comics- no, he throws it overhead and falls asleep.

Only a few doubles, ah but spring Robins and winter Sparrows could sing more. And, it is, Spring, Cloudless, Sun, and Warm, Laboring mother nature to the birth of new summer life.

The girl beside me, young and sleeping, arms folded, head turned away; Rejoice! Tomorrow's Easter Sunday too. And harken. I hear a faint voice filtering back, that It could be a nightingale.

Thoughts of morning: "I like your hotel. The rooms are So nice here, all remodelled and large." We had a double picture window overlooking The Main thoroughfare, the Mississippi hardly three blocks. 'Greyhound please.' We start, plentu of time. 'Driver, could we go down along The River. It's Al's first trip since his stroke; he Has trouble, "but it's damn becter than giving in." Reality, it's guiet on the bus.

29erty-Black Earth, Coon Crk. (or was it Coon Valley?) Rugged as Appalachia, country folk. . Complexions and clothes and dialects as rough; but full of • Vitality! And talk!

Still quiet on the bus.

P

Madison; new office buildings and lawns, dense College apartments, aged houses:

Blighted remnants of an old lady with a new face lift. A black more black than a galaxy of unlight stars.

Oh such it is I feel sitting nixt to this girl, Head back and turned away, On a warm Spring day That not even Black Bears In deep hibernation could stay unstirred, unmoved;

When I would like to say, in a sure noice not unlike the first warm day that brings a thaw.

- young people are not bears -'Are you scared riding on this bus?'

Rodger Despres





B.F.P. 30inty

THUE A CHILD LEARNS

Thus a child learns; by wiggling skills through his fingers and tees into himself; by soaking up habits and attitudes of those around him; by pushing and pulling his own world.

Thus a child learns; more through trial than error, more through pleasure than pain, more through experience than suggestion, more through suggestion than direction.

Thus a child learns; through affection, through love, through patience, through understanding, through belonging, through doing, through being.

Day by day the child comes to know a little bit of what you know; to think a little bit of what you think; to understand your understanding. That which you dream and bolieve and are, in truth, becomes the child.

As you perceive dully or clearly; as you think fuzzily or sharply; as you believe foolishly or wisely; as you dream drably or goldenly; as you bear false witness or tell the truth - thus a child learns.

> Frederick J. Moffit, Chief Bureau of Instructional Supervision New York State Department



HEH from Contone



INTRAVENOUS FLUIDS, MEDICATIONS, BLOOD



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GREAT AND WONDEROUS THINGS TO BEE SOLD FOR VERY LITTLE BREAD

Wanted Ads

Guitar Kay Classic (with case).....\$35.00

Stanton Varsity Chess Set (very big) ... \$10.00

Poloroid Camera metal body&wink lite...\$10.00

Handmade Ties (your material).....\$03.00

Records (Jazz and Pop).....\$1.00,\$0.50

Magazines 68-70 (or so)--

Playboy.....\$00.50 Road & Track......\$00.25 Car & Driver.....\$00.25

GARY REED...842-4791 (or leave a note in my box)

I WANT TO BUY A BICYCLE-----

A 26inch Boys bike (with crossbar) and 3 speeds would be ideal. See me, Karle Murdock or call me at 895-6656.

I need some guys to rent ½ of my duplex. very nice apt. 4 bedrooms-furnished. I need some renters from May thru August. \$40.00/person.

Micky Groendyk

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530 Glenwood SE Grand Rapids 459-2336

Well, if your piano needs tuning, have a professional tune yours at a reduced rate...

By the way, I know one who custom builds harpsichords: For more information , contact L'anni or call 455-5373.

i am backpack-hitchhiking to alaska later this spring but it would be easier if two pepple would do this trip, is anybody interested? theres bread on the other end but the trip is the thing. call 677-1152. ask for tim or tom.

EREE to a good home in the country-one dog-Malcomb-Male 4 years old, great pet Fran Nawrocki

Two male kittens want to leave mother and see the world 8 weeks old litter trained Peterwheat is an orange tiger and a rip-snorting terror... Casper is grey and white and has big, BIG eyes. Call 243-0933 if you want one or both

here is some room so i shall use it for this filler

"At the end we have no firm ground under us, no principles to hold on to, but a suspension of thought in infinite space--without shelter in conceptual systems, without refuge in firm knowledge or faith. And even this suspended, floating structure of thought is only one metaphor Being among others....."

Karl Jasper

for what its worth.