

COMMUNICATION VEHICLES (AFO 103)

30 AUGUST 1989

FALL 1989

TROGU

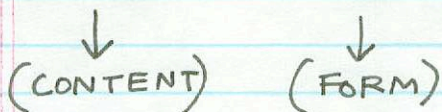
SUBJECT:

PARALLEL INVESTIGATION

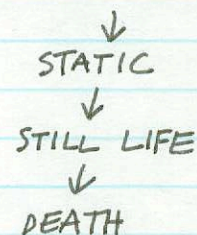
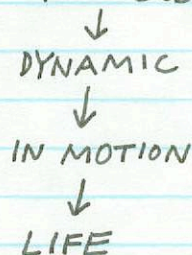
OF TWO AND THREE-DIMENSIONAL CONCEPTS

WITH EMPHASIS ON:

- PROGRESSION POINT → LINE → PLANE → VOLUME
- INTERNAL - EXTERNAL RELATIONSHIP



- FORMATION RATHER THAN FORM OR:
- ESSENCE VS APPEARANCE
- FORM GENERATIVE PROCESS STRIVING TOWARDS FORM



- PROJECTS (I WOULD LIKE TO CALL THEM RESEARCH*) WILL DEVELOP IN RELATION TO THE PREVIOUS PROJECT AND THE NEXT PROJECT. SPECIFIC THEMES MIGHT BE INVESTIGATED THROUGHOUT THE SEMESTER
- THE STRUCTURE OF EACH INDIVIDUAL CLASS IS FLEXIBLE TO ADAPT TO LECTURE TIME, CRITIQUES, SLIDES OR FILM SHOWINGS, WORK-IN-CLASS, ETC.

* SEARCH

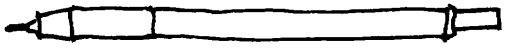

- COURSE DOCUMENTATION (SKETCHES, NOTES FROM LECTURES AND/OR CRITIQUES, PERSONAL OBSERVATIONS, ETC.) SHOULD BE KEPT OR COLLECTED IN A NOTEBOOK OR DIARY. THESE NOTEBOOKS MUST BE ORGANIZED AND CLEAR AS I WILL BE READING THEM.
- YOU WILL BE EVALUATED ON :
 - ATTENDANCE AND PUNCTUALITY
 - PROGRESS THROUGH EACH ASSIGNMENT
 - PRESENTATION OF EACH ASSIGNMENT
 - COMPLETION OF PROJECTS ON TIME
 - REVIEW OF NOTEBOOKS
- PROJECTS WILL NOT BE GRADED INDIVIDUALLY
ONE FINAL GRADE
LAST CLASS - YOU WILL MEET WITH ME INDIVIDUALLY
TO DISCUSS AND EVALUATE WORK DONE
DURING SEMESTER


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TROGU

REQUIRED TOOLS

- LEAD HOLDER (KOH-1-NOOR 5611) 
 - FABER CASTELL LEADS F, H, or 2H
 - LEAD POINTER
 - SANDPAPER PAD 
- SUGGESTED
- CHOICE 1

- PENTEL SHARP PENCIL 
 - PENTEL LEADS H .3 mm
- CHOICE 2

- MARS PLASTIC ERASER (STAEDTLER)

- 45° (DEGREES) TRIANGLE 

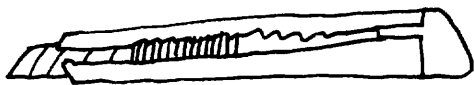
- 30°/60° TRIANGLE 

- STEEL RULER 18" MINIMUM (T-SQUARE OPTIONAL)

- CIRCULAR PROTRACTOR 

- COMPASS (BASIC JET-BOW) DOES NOT EXTEND
(JET-BOW) CAN TAKE ATTACHMENTS

- RAPIDOGRAPHS (TWO MINIMUM)
KOH-1-NOOR 2X0/.30mm
1/.50mm

- 3 OR 4 COLORED PENCILS (HARD POINT) BLUE
RED
GREEN
YELLOW
- NOTEBOOK (JOURNAL)
GRID PAGES OPTIONAL
- OLFA 18 KNIFE 
 - BLADES 10/PK
- SCOTCH 810 TAPE (MAGIC)

(INTERIOR - EXTERIOR)

THE INTERIOR IS INFINITE,
ALL THE WAY TO THE MYSTERY OF THE INMOST,
THE CHARGED POINT, A KIND OF SUM TOTAL
OF THE INFINITE (THE CAUSAL).
COMPARISON FROM NATURE: THE SEED.

THE EXTERIOR IS FINITE, I.E. IT IS THE END
OF THE DYNAMIC FORCES,
THE LIMIT OF THEIR EFFECTS,
DICTATED BY THE CAUSAL.
ONE MAY ALSO CALL IT THE VIRTUAL, THE OBJECTIVE.

ONE COULD ALSO SAY:
EROTIC - LOGICAL, EROS - LOGOS.

(RETROSPECT, 12 NOVEMBER 1926)

FROM:

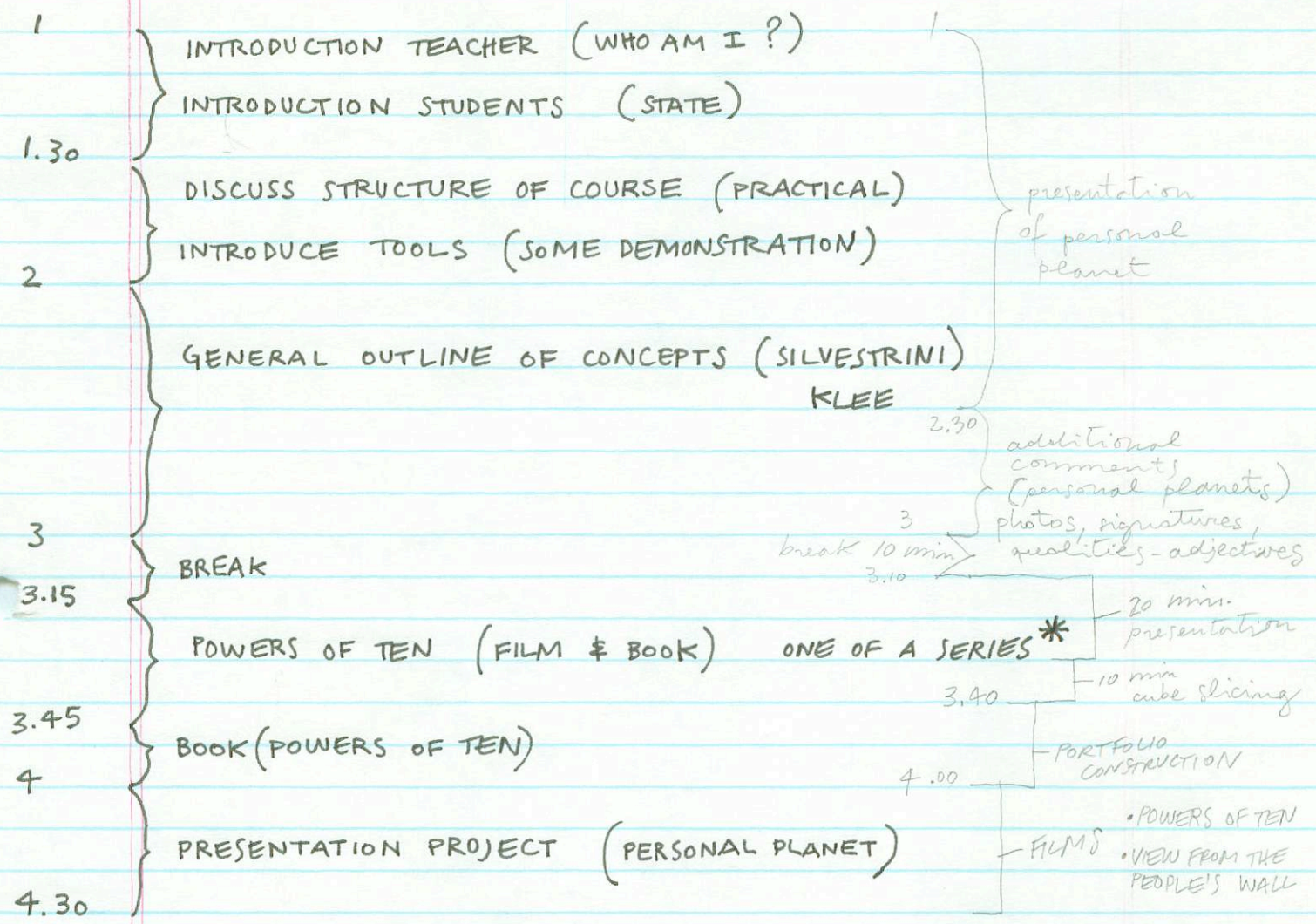
PAUL KLEE

"THE NATURE OF NATURE" (INFINITE NATURAL HISTORY)

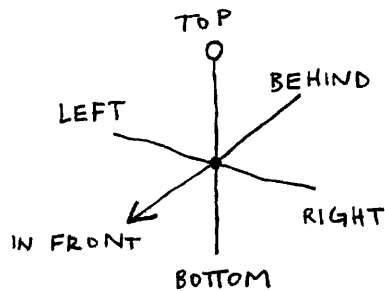
NEW YORK, WITTENBORN, 1973

COMMUNICATION VEHICLES (AFD 103)
FALL 1989
TROGV

WED. 30 AUGUST 1989 1



VISUAL VOCABULARY
AFD 103 - FALL 1989



↓
GRAVITY

• POINT (man)

— LINE ———→ ||||| SYMBOL OF PURE LINE (MEASURE)
↓
LENGTH
↓
ANGLE <

▭ PLANE

▢ VOLUME (BODY)

↑
□ POSITION (top-bottom)

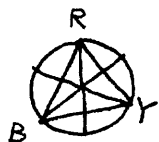
□ DIMENSION (relative size:
smaller -
bigger)

♣ SHAPE (concave - convex)

▤ TEXTURE (fine - coarse)

▨ VALUE (TONE-VALUE)

— SYMBOL OF PURE TONE VALUE
(WEIGHT)



COLOR (red, blue, etc.) — SYMBOL OF PURE COLOR (QUALITY)

↗ DIRECTION (centrifugal-
centripetal)

↑
L 2-D

↑
L 3-D

□ STATIC

◇ DYNAMIC

— LINEAR

PLANAR → ▲ MIDDLE → △

A —→ B

MOVEMENT



FLUCTUATION



INTERMITTENCE



SCINTILLATION

TIME

▤ RHYTHM (REPETITION
IN GROUPS)

△ | △ SCALE (WEIGHT)

LIST OF POSSIBLE NON-ASSIGNMENT
TOPICS FOR AFO 103 - FALL 1989

• PERSONAL PLANET

- FREE SIGNS, SIGNATURE, SIGNS WITH BOTH HANDS

• TACTILE EXPERIMENTS

FREE-IMAGE-ASSOCIATION
(WITH SYMBOLIC MEANING - AFTERWARDS)

STELLATED POLYHEDRA

TRIANGLE

• SIMPLE GEOMETRIC CONSTRUCTIONS

SQUARE

TOPS

PENTAGON

PIN-HOLE CAMERA

• SYMMETRY

• PLATONIC SOLIDS

• PARALLEL PROJECTIONS

• PERSPECTIVE

GOLDEN SECTION

OPTICAL ILLUSIONS (VISUAL PERCEPTION)

POLARIZED LIGHT

DIRECT PROJECTIONS

BIONICS

FILMS ON KLEE

MATHEMATICA

LECTURE ON NOTHING (KLEE ON RHYTHM)

• POWERS OF TEN

• PLATONIC SOLIDS

• THINK - VIEW FROM THE PEOPLE'S WALL

PAPER FOLDING EXERCISES
MOEBIUS BAND

• THE MYSTERY OF PICASSO

CLASSES
(CHRONOLOGICAL)

TOPIC

1. 30 AUGUST

- POWERS OF TEN
- PERSONAL PLANET

2. 6 SEPTEMBER

- POWERS OF TEN
- PERSONAL PLANET
- VIEW FROM THE PEOPLE WALL

3. 13 SEPTEMBER

- PLATONIC SOLIDS

4. 20 SEPTEMBER

- FREE SIGNS, SIGNATURE, SIGNS WITH BOTH HANDS
- SIMPLE GEOMETRIC CONSTRUCTIONS

5. 27 SEPTEMBER

- PARALLEL PROJECTIONS
- PERSPECTIVE
- SYMMETRY

6. 4 OCTOBER

- continue work on cube section

7. 11 OCTOBER

- continue work on cube section

8. 18 OCTOBER

- RHYTHM AND SYMMETRY FILMS

9. 25 OCTOBER

- MORE WORK ON CUBE

10. 1 NOVEMBER

- INTRODUCTION OF SYMMETRY GROUPS (MORE WORK ON CUBE)

11. 8 NOVEMBER

- AXONOMETRIC DRAWING OF SECTION OF CUBE

12. 15 NOVEMBER

- TEXTURES

- 1ST 4 SYMMETRY GROUPS

THANKSGIVING WEEK

13. 22 NOVEMBER

PORTFOLIO REVIEW

14. 29 NOVEMBER

15. DEC. 6

16 DEC. 11

COMMUNICATION VEHICLES (AFO 103)

6 SEPTEMBER 1989

FALL 1989

TROGU

ASSIGNMENT FOR WEDNESDAY, 13 SEPTEMBER 1989

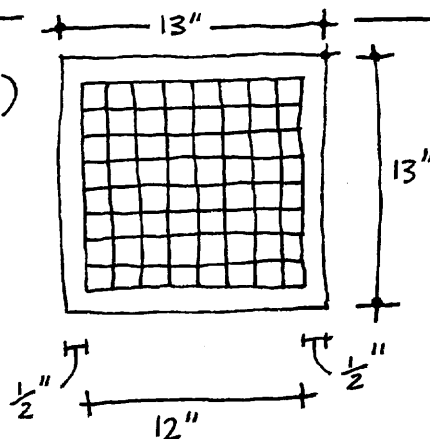
"MAN DISSECTS THE THING AND VISUALIZES ITS
INSIDE WITH THE HELP OF PLANE SECTIONS; THE
CHARACTER OF THE OBJECT IS BUILT UP ACCORDING
TO THE NUMBER AND KIND OF SECTIONS THAT ARE
NEEDED."

BRING TO CLASS:

- 1 SQUARE GRID ON WHITE PAPER (INK)
(SEE SPECIFICATIONS)
PAPER SIZE 13" X 13"

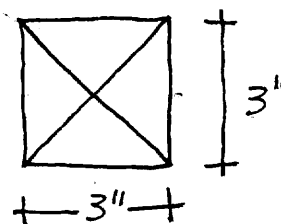
- 1 SAME GRID ON VELLUM

PAUL KLEE
THE THINKING EYE
N.Y. WITTENBORN, P. 66

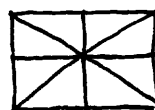
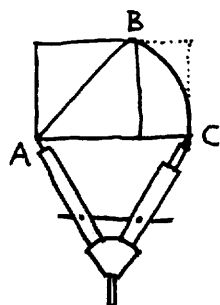
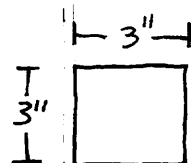


THE MODULE
IS: $1\frac{1}{2}$ "
(64 MODULES)
12" X 12"

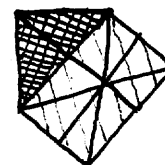
- 6 SQUARES (CUT OUT OF PAPER BOARD
OR POSTER BOARD) PICK DARK COLOR
DRAW DIAGONALS AS SHOWN



- 6 RECTANGLES (SAME MATERIAL BUT
LIGHT COLOR)
CONSTRUCTED AS FOLLOWS:



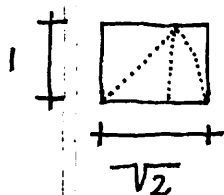
DRAW DIAGONALS
AND MEDIAN
LINES



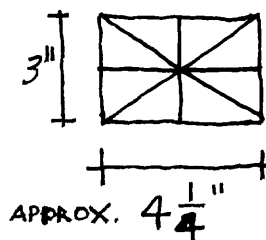
TO CHECK:
OVERLAP LIGHT COLOR
RECTANGLE ON TOP
OF DARK COLOR SQUARE
DIAGONAL OF SQUARE
EQUALS BASE OF
RECTANGLE

- POINT COMPASS IN A (PIVOT)
- PROJECT B DOWN TO C

THIS KIND OF RECTANGLE IS SOMETIMES REFERRED TO AS A $\sqrt{2}$ RECTANGLE, AS IN:

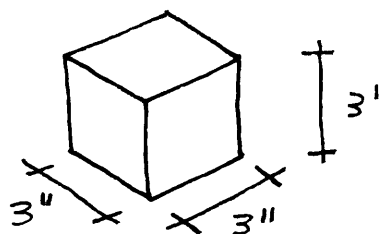


IN OUR CASE, IT BECOMES

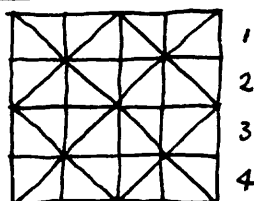


CONSTRUCT FIRST -
CHECK/MEASURE
AFTER.

- 1 CUBE (EXACT) OF PLASTILINA

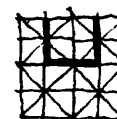
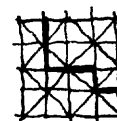


- SKETCHES OF SECTIONS (AT LEAST EIGHT SEPARATE SKETCHES) BASED ON THIS GRID:



- USE EXISTING LINES AS
GUIDE - LINES

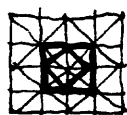
EXAMPLES:



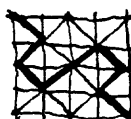
DRAW
WITHOUT
THINKING
(TOO MUCH)

- SKETCHES OF SECTIONS AND/OR PATTERNS (AT LEAST EIGHT SEPARATE SKETCHES) BASED ON PREVIOUS GRID BUT DERIVED FROM PERSONAL PLANET QUALITIES/ADJECTIVES.

EXAMPLE:



"CENTERED"



"FUNNY"

- DRAW GRIDS BY HAND OR USE GRID PAPER (DON'T FORGET YOU CAN USE DIAGONALS)
- USE HEAVIER MARK FOR SHOWING SECTION OR PATTERN.

DEFINITION OF THE SECTION-AND-ROTATION EXERCISE

- TO STUDY THE RELATIONSHIP BETWEEN TWO-DIMENSIONAL SPACE AND THREE-DIMENSIONAL SPACE

THROUGH :

- a) SECTIONS OF BASIC FORMS

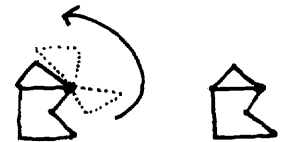
EXAMPLE:



- b) ROTATION AND RE-COMBINATION OF THE PARTS OBTAINED THROUGH SECTIONS:

- 1) ON THE PLANE
- 2) IN 3-D SPACE

EXAMPLE:



PURPOSE OF THE EXERCISE

- TO DEVELOP THE KNOWLEDGE AND TECHNIQUES OF CREATION OF THREE-DIMENSIONAL CONFIGURATIONS, TAKING AS BASIS THE STRUCTURE OF A REGULAR SOLID (CUBE)
- TO DEVELOP TECHNIQUES OF SPATIAL COORDINATION
- TO DEVELOP A KNOWLEDGE FOR CREATING MODULAR FORMS
- * TO DEVELOP A SENSE OF DISCOVERY WITHIN ONESELF, TOWARDS THE PRODUCTION OF INVESTIGATIONS, RATHER THAN THE RE-PRODUCTION OF NOTIONS.

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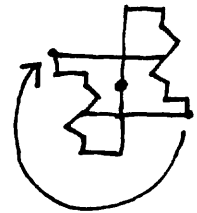
TROGU

MUST HAVE:

- SCOTCH TAPE
- KNIFE
- BOARD
- GRID + SQUARES

- EXTRA PERSONAL PLANET PRESENTATIONS
- ROTATION AND FOLD-OUT SEQUENCE OF HEXAHEDRAL CELL
- OVERVIEW OF OPERATIONS (CHAIN EXAMPLES) ALSO: QUICK EXERCISE WITH TRACING PAPER AND ANY SECTION, AS IN:
- PLATONIC SOLIDS OR POLYHEDRA
- CONSTRUCTION OF CUBE
- SECTION OF CUBE
- SKETCHES OF VARIOUS COMBINATIONS BASED ON:

ROTATION
SYMMETRY
REPETITION
RHYTHM
ORIENTATION
RE-COMBINATIONS



- PORTFOLIO CONSTRUCTION
- ELABORATION OF SECTION AND PICKING OF FAVORITE SECTION

ASSIGNMENTS (ANY SKETCHES, IF POSSIBLE, SHOULD BE DONE IN NOTEBOOK)
ELABORATE VERSIONS ON 13X13 OR LARGER

- SQUARES SECTIONED (12 PARTS) OR VARIOUS, IF DERIVED FROM PERSONAL PLANET

1/2 GRID (1 SHEET 16 X 24 ?)
COLORFUL

must have picked one drawing before end of class (13 September 1989)

FOR 1989 1/2 (1989 1989 1989)




QUICK SKETCHES OF 12 PARTS • STRUCTURAL RHYTHM

REVIEW OF 1989 1/2 (1989 1989 1989)
INTERNAL CUBE

FREE STYLING

BASIC THEMES: 1989 1/2 (combined with individual and dual positions)

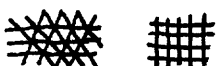
DEMONSTRATION SEQUENCE

- DRAW SECTION 
 - MARK FIGURES A + B 
 - GRID AS BASIS (KEEP ORIENTATION CONSTANT)
-
- ERASE MEDIAN LINE IN $1.\sqrt{2}$ 

13 SEPTEMBER 1989

①

DIVIDUAL - INDIVIDUAL

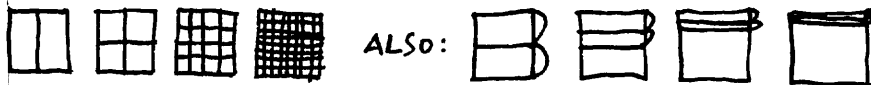
△ } THE TWO BASIC REGULAR FORMS (SIDES AND ANGLES ARE ALL THE SAME),
□ } CAPABLE OF FILLING THE SPACE COMPLETELY IN THE TWO DIMENSIONS -
ON THE PLANE. 

Q. HOW DO WE ORGANIZE AND ARTICULATE THE SPACE INSIDE ?

A. FOR EXAMPLE, BY DIVIDING IT IN SUCCESSIVE HALFS (PRINCIPLE OF CELL REPRODUCTION AND SIMPLEST SECTION OF A SHAPE)



DIVISION



MODULAR STRUCTURE
DIVISIBLE STRUCTURE
(DIVIDUAL)

Q. HOW CAN WE OBTAIN A SIMILAR ORGANIZATION ?

A. FOR EXAMPLE, BY COMBINING TWO LINEAR REPETITIONS MOVING IN TWO DIRECTIONS

DIVIDUAL
STRUCTURES
ARE
RHYTHMS

REPETITION



REPETITIVE STRUCTURE
(DIVIDUAL)

RHYTHMS (VARIED OR EVEN REPETITIONS OF GROUPS)

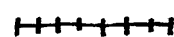


DEFINITIONS:

STRUCTURE = DIVIDUAL ARTICULATION

DIVIDUAL STRUCTURE = RHYTHM

RHYTHM = REPETITION OF GROUPS



TWO CONCEPTS MEET :

• RHYTHM
and

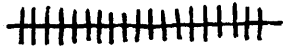
9/13/89 (2)

• DISTINCTION

BETWEEN DIVIDUAL AND INDIVIDUAL

(KLEE)

SYMBOL OF DIVIDUALITY



a + a + a + a + a

REPETITION

SYMBOL OF INDIVIDUALITY



NOTHING IS REPEATED

" THE QUESTION AS TO WHAT IS DIVIDUAL
AND INDIVIDUAL IMPLIES THE EXISTANCE
OF A RELATION .

THE ORGANIZATION BECOMES TRULY
INDIVIDUAL IN THE FIGURATIVE SENSE
WHEN ITS PARTS TAKE ON A CHARACTER
BEYOND RHYTHM. " K. / 1 / 250

FOR EXAMPLE THE RELATIONSHIP OR
DISTINCTION BETWEEN :

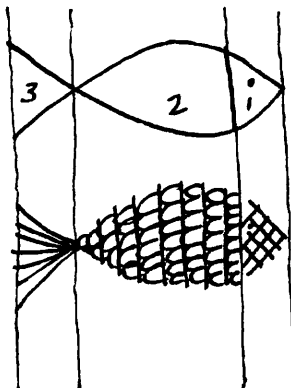
(divisible
structural
unit)

LOWER
DIVIDUAL
MINOR
PASSIVE

HIGHER (indivisible unit)
INDIVIDUAL
MAJOR
ACTIVE

EXAMPLE :

FINS
&
SCALES



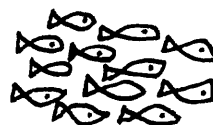
TAIL
BODY
HEAD

CANNOT TAKE ANYTHING
AWAY W/OUT ALTERING THE INDIVIDUAL

CAN OMIT ANY STRUCTURAL UNIT
WITHOUT MUCH CHANGE

BY CONTRAST :

THE FISH SEEN AS A DIVIDUAL :



COMPARE : LEAF → TREE → WOODS → FOREST

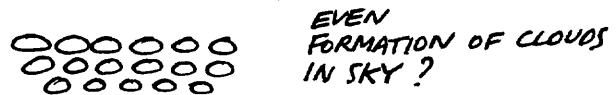
USING A MEDIUM PENCIL (#2) OR PEN (BLACK), USING LINE ONLY, NOT "CHIARO-SCURO", DRAW ON YOUR NOTEBOOKS - IF PAGES ARE BIG ENOUGH - OR OTHERWISE ON AT LEAST 8½ X 11 WHITE PAPER :

- EXAMPLES THAT REFLECT THE DISTINCTION BETWEEN DIVIDUAL AND INDIVIDUAL .

LOOK AT NATURE (IT INCLUDES MAN/WOMAN), AND ARCHITECTURE (BROADLY AS THE BUILT ENVIRONMENT.)

DO SIX QUICK STUDIES BUT PICK AT LEAST 3 SITUATIONS. EX: DO NOT DO ALL DRAWINGS USING THE HUMAN BODY ONLY OR A HOUSE OR A TREE; DO SOME BASED ON EACH. (THESE ARE JUST EXAMPLES)

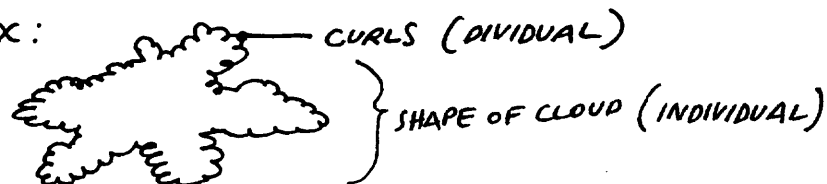
WRITE ON YOUR NOTEBOOK OR NEXT TO THE DRAWING ITSELF WHAT EACH EXAMPLE IS AND IF IT IS ONLY DIVIDUAL, EX:



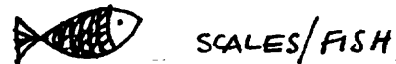
IF IT IS ONLY INDIVIDUAL, EX:



IF IT IS BOTH, EX:



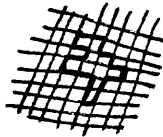
IF THE TWO ARE CLOSELY RELATED, EX:



REMEMBER: WE ARE NOT LOOKING FOR "PLEASING" DRAWINGS BUT FOR STUDIES OF A CONCEPT. REPRESENT ALSO ACCORDING TO ESSENCE RATHER THAN JUST APPEARANCE. YOU DON'T NECESSARELY HAVE TO COPY OR DRAW FROM SOMETHING, YOU CAN USE CONCEPTS IF THEY ARE APPROPRIATE TO THE EXERCISE, EX: "BLOOD CIRCULATION", OR THINGS THAT ARE NOT ORDINARELY VISIBLE .

DO FOUR INVENTED STUDIES BASED ON SAME DISTINCTION DIVIDUAL-INDIVIDUAL . BESIDES INVENTING POSSIBLE NEW PLANTS, ANIMALS OR BUILDINGS, HERE YOU CAN ALSO BE COMPLETELY ABSTRACT. WHAT YOU DRAW DOESN'T HAVE TO BE ANYTHING, EXCEPT THAT IT SHOULD REFLECT THE BASIC CONCEPT (DIV.-INDIV.)

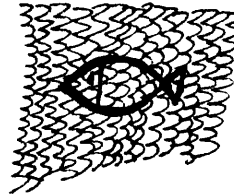
EXAMPLE :



ALSO : REMEMBER THAT YOU CAN
CREATE AN INDIVIDUAL OUT OF
A DIVIDUAL SITUATION, EX:

9/13/89 (4)

BRING THE TEN STUDIES
TO CLASS. DISCUSSION WILL FOLLOW.
YOU ARE WELCOME TO DO MORE
THAN 10 IF YOU WISH. THE MIN.
REQUIRED, AGAIN, ARE:



- 6 - REFERRING OR DEPICTING A KNOWN THING OR SITUATION
 - 4 - INVENTED
-

ALSO :









BY THE END OF TODAY'S CLASS (9/13) YOU SHOULD HAVE
DECIDED ON THE SECTION OF THE SQUARE FOR THE CUBE EXERCISE.
IF TIME PERMITS, PREPARE THE SIX SQUARES AND SECTION
THEM, YOU SHOULD THEN HAVE 12 PARTS (2 GROUPS OF SIX EQUAL PARTS),
OTHERWISE, BRING THE 12 PARTS TO THE 9/20 CLASS ALSO.
BRING EXTRA MATERIAL (PAPER BOARD) FOR THE INTERNAL SURFACE
OF THE CUBE.

ALSO :

FOR THE 9/20 CLASS, BRING PASTELS FOR VERY-VERY-QUICK
SIGN/DRAWING EXERCISES WHICH WE WILL BE DOING IN CLASS
ON THE THEME OF RHYTHM.

- PRESENTATION AND DISCUSSION OF DIVIDUAL-INDIVIDUAL ASSIGNMENT (PRESENTATION OF TWO + TWO EXAMPLES - KNOWN & INVENTED; PICK YOUR BEST 4)
- INTRODUCTION OF RHYTHM (PART 1 and 2)
 - PART DIVISION
 - RIGID ARTICULATION
 - FLOWING (OR LOOSE) ARTICULATION

• QUICK DRAWING EXERCISES WITH PASTELS (RHYTHMS)

- 2-PART RIGID 
 - 2-PART LOOSE 
 - 3-PART RIGID 
 - 3-PART LOOSE 
 - 4-PART RIGID 
 - 4-PART LOOSE 
 - 5-PART 
 - 6-PART 
- LOOSE OR RIGID OR COMBINATIONS

- 2, 3, 4, 5, 6 - PART LOOSE AND/OR RIGID IN VARIOUS COMBINATIONS

- THE SIGNATURE AS AN INDIVIDUAL ARISING FROM THE DIVIDUAL
- THE SIGNATURE AS PART DIVIDUAL, PART INDIVIDUAL RHYTHM

Giuseppe Trogu
↓ ↓ ↓
f t m
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PART RIGID,
PART LOOSE

EXERCISE TOWARDS
A LOOSE,
INDIVIDUAL SIGNATURE

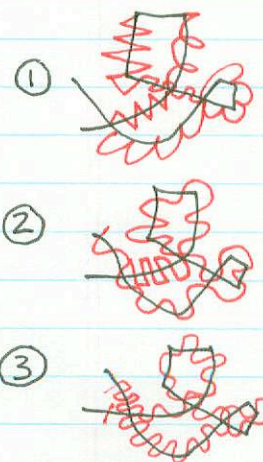
LARGE SHEETS OF PAPER - WHITE

- CONTINUE INTRODUCTION OF RHYTHM (PART 3)
- INDIVIDUAL RHYTHM

• SMALL PAGE (13 X 13) EXERCISE

"STRUCTURAL CHARACTER IS ADDED TO INDIVIDUAL RHYTHM"

- QUICKLY DRAW INDIVIDUAL SELECTED FROM ASSIGNMENT ; ADD STRUCTURAL CHARACTER
- DO TWO MORE VERSIONS, VARYING N.-PART TIME, LOOSE AND RIGID

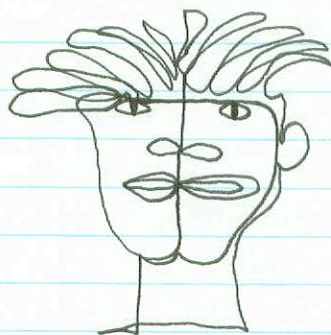


⊗ SELF-PORTRAIT ACCORDING TO ESSENCE RATHER THAN APPEARANCE

MUST BE : INDIVIDUAL RHYTHM

MAY INCLUDE : STRUCTURAL CHARACTER

MUST BE : DRAWN IN ONE SINGLE LINE,
WITHOUT LIFTING THE PENCIL



- REPEAT IF PENCIL IS LIFTED BEFORE FINISH

END OF QUICK DRAWING EXERCISES

TO PARAPHRASE JOHN CAGE :

NOTHING IS ACCOMPLISHED BY DRAWING A SQUARE

" " " " SEEING " "

" " " " TOUCHING " "

OUR EYES ARE
NOW

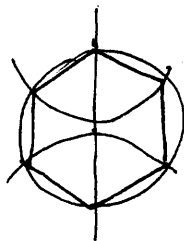
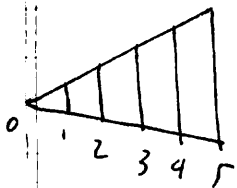
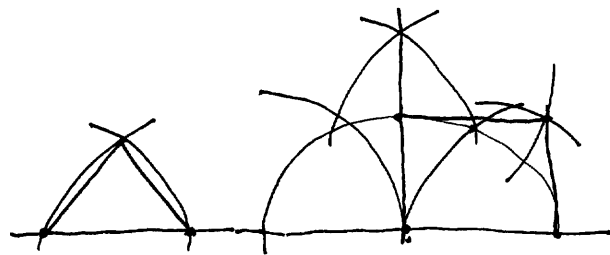
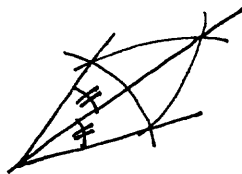
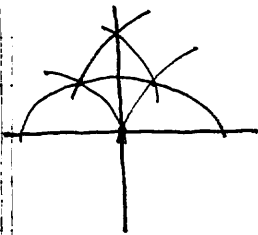
} IN EXCELLENT CONDITION

SPIRIT OF THE QUICK DRAWING EXERCISES

- INDIVIDUAL RHYTHMS CAN ONLY BE REDUCED TO RATIOS
- RHYTHMIC STRUCTURING WITH FLEXIBLE BASE
- IRREGULAR PROJECTION ON UNEVEN SURFACE
- DIVIDUAL - INDIVIDUAL SYNTHESIS

... OUR EYES ARE NOW IN EXCELLENT CONDITION ...

- PORTFOLIO CONSTRUCTION (USE MODEL AS STENCIL)
- GEOMETRIC CONSTRUCTIONS



- MEMO FOR AFO ⑤ 9/27/89

- PARALLEL PROJECTION } MODELS
- PERSPECTIVE

- SYMMETRY (24 GROUPS ON THE PLANE)

- CONTINUATION OF CUBE SECTIONING (INTERNAL SURFACE)

- MEMO FOR AFO ⑥ 10/4/89

* COMBINING LOOSE AND RIGID FORMS INTO ORGANIC WHOLE

ASSIGNMENT FOR WED. 27 SEPTEMBER 1989

"RIGID AND LOOSE (FLOWING) ARTICULATIONS IN RHYTHMS"
AN INTRODUCTION TO SYMMETRY

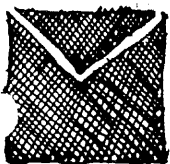
- USING ONLY ONE SQUARE (TWO PARTS) TAKEN FROM THE SIX THAT YOU PREPARED FOR TODAY'S CLASS (09/20/89), CREATE AT LEAST 3 (THREE) DIFFERENT RHYTHMS - FEEL FREE TO DO MORE THAN THREE IF YOU HAVE EXTRA TIME.
- EACH RHYTHM MUST INCLUDE 3 VERSIONS :
 - a) SURFACE - RIGID
 - b) LINE - RIGID
 - c) LINE - LOOSE

THE COMPLETE ASSIGNMENT

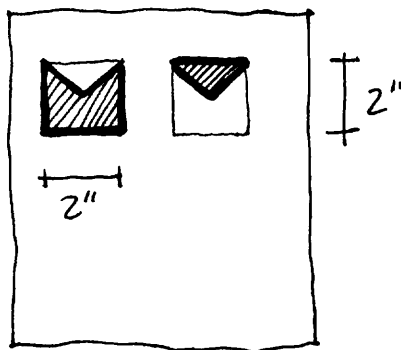
THEREFORE INCLUDES AT LEAST 9 (NINE) STUDIES (ONE STUDY PER PAGE)

- USE $8\frac{1}{2} \times 11$ PLAIN WHITE OR GRID PAPER (USE LARGER PAPER ONLY IF YOU
- DO NOT USE TRIANGLES, IF POSSIBLE. THESE ARE AGAIN JUST WORKING STUDIES. DO NOT THINK TOO MUCH, YET TRY TO BE PRECISE. ^{NEED EXTRA SPACE)}
- KEEP YOUR SECTIONED SQUARE BESIDE YOU SO THAT YOU CAN MOVE ITS TWO PARTS FREELY. DRAW A SIMILAR SQUARE TWICE ON A SEPARATE SHEET OF PAPER, SQUARE SIZE SHOULD BE 2 X 2 INCHES. CLEARLY MARK THE TWO DIFFERENT PARTS IN EACH SQUARE.

EXAMPLE :

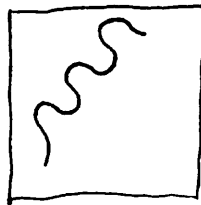
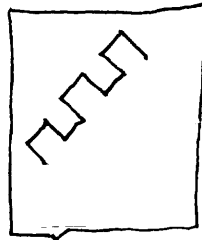
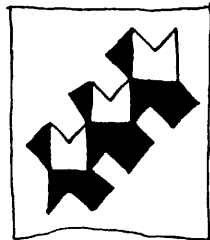
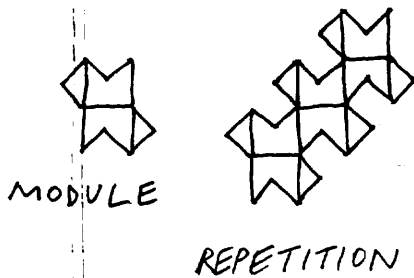


3X3
SQUARE



- USE YOUR 3X3 SQUARE TO DETERMINE YOUR BASIC MODULE AND ITS ORIENTATION
- USE YOUR WHITE OR GRID PAPER TO CREATE YOUR RHYTHMS (YOU SHOULD BE ABLE TO SEE THROUGH IN ORDER TO SEE THE FORMS)

- AN ALTERNATIVE IS TO CUT A 2" X 2" SQUARE, DIVIDE IT INTO THE TWO PARTS BY CUTTING THROUGH THE ESTABLISHED SECTION, AND THEN USE THE TWO PARTS AS A STENCIL .
- REMEMBER : ALTHOUGH YOU MIGHT NEED TO DRAW THE GRID IN THE 2X2 SQUARE/S, AND YOU NEED THE TRIANGLES TO DO THIS, IN YOUR STUDIES YOU MUST TAKE INTO CONSIDERATION ONLY THE LINES DERIVED BY THE SIDES AND THE SECTION OF THE SQUARE .
- EXAMPLE OF ONE POSSIBLE RHYTHM AND ITS THREE VERSIONS



DO THESE TWO
BY TRACING
OVER THE
FIRST VERSION
(DRAW ONLY
THE RHYTHMIC
LINE)

NOTE: REPETITION MUST OCCUR A SUFFICIENT NUMBER OF TIMES IN ORDER TO "GET THE RHYTHM GOING"!

- FOR "SURFACE-RIGID", USE A COLORED PENCIL TO FILL IN SOME AREAS, LEAVING OTHER AREAS BLANK (ONE AREA CAN INCLUDE MORE THAN JUST TWO PARTS).
- FOR "LINE-RIGID", THE RHYTHM CAN BE DERIVED FROM THE PREVIOUS STUDY BUT YOU CAN USE ANY LINE THAT IS PRESENT IN THE COMPOSITION.
- FOR "LINE-LOOSE", THE RHYTHM CAN DERIVE FROM THE PREVIOUS TWO STUDIES, BUT AGAIN YOU MAY CHOOSE TO TOUCH OR RELATE TO ANY OF THE POINTS IN THE COMPOSITION TO ACHIEVE A "FLOWING REPETITION"
- THE KEY CONCEPT HERE IS: "REPETITION OF GROUPS" .

- REMEMBER, SINCE THERE ARE INFINITE POSSIBILITIES, TO CONSIDER THE FOLLOWING:

* USE ROTATIONS, SIDEWAYS MOVEMENTS, AND FLIPS TO CREATE YOUR BASIC MODULE (ONE POSSIBILITY IS ACTUALLY TO LEAVE THE SQUARE AS IS), FOR EXAMPLE:



* IN COLORING SURFACE AREAS, YOU CAN COVER AS MANY PARTS AS YOU WANT, AS LONG AS A REPETITION OF GROUPS IS CLEARLY VISIBLE (IN OTHER WORDS, YOU CANNOT COLOR THE WHOLE COMPOSITION COMPLETELY). THE SIMPLEST CHOICE IS TO COLOR ONE OF THE TWO PARTS OF THE SQUARE AND LEAVE THE OTHER BLANK, ALSO ALTERNATING BETWEEN THE TWO. FOR EXAMPLE:



* IN CREATING RIGID RHYTHMS, PARTS OF THE COMPOSITION CAN BE USED AND OTHER PARTS LEFT UNUSED. THE CHALLENGE WOULD BE TO USE ALL PARTS (LINES) WITHOUT LIFTING THE PENCIL (DO NOT TRY!) AGAIN, YOU MUST HAVE REPETITION OF GROUPS. EXAMPLE:



THE SAME GROUP CAN BE REPEATED MANY TIMES.

* IN CREATING LOOSE RHYTHMS, THE SAME PRINCIPLES APPLY: USE YOUR IMAGINATION!!

- NOTE: THE PARTS IN YOUR STARTING CONFIGURATION MUST BE CONNECTED BY AT LEAST A SEGMENT OF A LINE, A LINE, OR A POINT:



COMMUNICATION VEHICLES (AFD 103) (5)
FALL 1989 - TROGU

27 SEPTEMBER 1989

- ANALYSIS OF THE 9 RHYTHM EXERCISES
- BRIEF INTRODUCTION OF SYMMETRY AS GROUP STRUCTURE (29)
- CLASSIFICATION OF SYSTEMS OF REPRESENTATION
 - PERSPECTIVE
 - ORTHOGONAL PROJECTION
 - AXONOMETRIC PROJECTION
- BEGIN WORK ON INTERNAL STRUCTURE OF CUBE
- ASSIGNMENT FOR OCT. 4, 1989

- REPAIR CUBE SLICER
- PERSONAL PLANET SIGNATURES & POLAROID
- EXTRA PORTFOLIO CONSTRUCTION

AFD 103 (6) OCT. 4, 1989

- CONTINUE WORKING ON SECTION OF CUBE
 - PROJECTIONS
 - SECTIONS OF CLAY CUBE

PROBLEMS:

NOT ENOUGH TIME TO SEE EVERYONE'S WORK - POOR CRAFTMANSHIP

SOLUTION:

- SET TIME ASIDE

- START NEW PROJECT (LEAVE, NO, LEAF ANALYSIS)

- REFINE DRAWINGS (USE LEADS AND RAPIDOGRAPHS)

REFER TO
RETINAL
VARIABLES

ASSIGNMENT FOR 4 OCTOBER 1989

- SELECT ONE EXAMPLE FROM THE NINE RHYTHMS WHICH YOU DREW FOR THE PREVIOUS ASSIGNMENT.
- PRETEND THAT YOUR CHOSEN RHYTHM IS A SCHEMATIC (ABSTRACT) REPRESENTATION OF AN OBJECT OR PROCESS WHICH IS RELATED TO ONE OF THESE FUNDAMENTAL ELEMENTS: EARTH, WATER, AIR, FIRE.
- RE-ELABORATE YOUR REPRESENTATION BY ADDING, SUBTRACTING, AND SUBSTITUTING ELEMENTS WITHIN THE DRAWING, THAT IS: POINTS, LINES (RIGID OR LOOSE), PLANES OR SURFACES. MODIFY THESE ELEMENTS AS NEEDED.
- DO AS MANY STUDIES OR STEPS AS YOU NEED TO ARRIVE AT AN OPTIMAL REPRESENTATION.
- KEEP IN MIND THE ELEMENTS AND MOVEMENTS ON THE PLANE WHICH WE HAVE EXPLORED SO FAR: REPETITION, ROTATION, DIVIDUAL-INDIVIDUAL STRUCTURES, NATURAL AND GEOMETRIC STRUCTURES (GRIDS), RHYTHMIC ARTICULATION (RIGID AND LOOSE).
- ONE FINAL DRAWING (PAPER SIZE: 13" X 13" MAX.) IS REQUIRED.
- BY THE END OF TODAY'S CLASS (9/27) YOU MUST HAVE DECIDED UPON AN OBJECT OR PROCESS WHICH YOU WANT TO REPRESENT. DECIDE/CONSULT WITH ME BEFORE LEAVING.
- IN ADDITION TO THIS SMALL ASSIGNMENT, THOSE OF YOU WHO HAVEN'T YET COMPLETED SOME OF THE PREVIOUS ASSIGNMENTS, ARE REQUIRED TO DO THEM AS WELL FOR NEXT WEEK (10/4). ALL THE ELEMENTS ON WHICH WE HAVE WORKED SO FAR ARE GOING TO HELP US PROCEED IN THE DEVELOPMENT OF THE CUBE AND OTHER PROJECTS.
- USE THIS WEEK AS A "CATCH-UP" PERIOD.
- LIST OF ASSIGNMENTS (INCLUDING TODAY'S)
 - 1 GRID ON PAPER
 - 1 GRID ON TRACING PAPER
 - 6 SQUARES
 - 6 RECTANGLES
 - 1 PLASTILINA CUBE (3" X 3" X 3")
 - 16 SKETCHES OF SECTIONS AND PATTERNS WITHIN SQUARE
 - 10 DIVIDUAL-INDIVIDUAL DRAWINGS
 - 6 SQUARES WITH CHOSEN SECTION (12 PARTS)
 - 9 RHYTHMS
 - 1 RE-ELABORATION OF CHOSEN RHYTHM