

G E O D E S I C S , I N C .

3013 HILLSBORO STREET

RALEIGH, N. C.

DECEMBER 20, 1954

32

MR. GYORGY KEPES  
DEPARTMENT OF ARCHITECTURE  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
CAMBRIDGE 39, MASSACHUSETTS

DEAR GYORGY,

BUCKY DICTATED TO ME THE FOLLOWING TO SEND TO YOU AND HARVARD ARNASONS

REVIEWING AN EXCHANGE OF LETTERS AND A PLURALITY OF MEETINGS THROUGHOUT THE LAST YEAR, ENDING IN A CLOSE SUCCESSION OF MEETINGS IN MINNEAPOLIS TWO WEEKS AGO, IN REGARD TO A PROPOSED EXHIBIT AT THE WALKER ART CENTER OF FULLER'S WORK, THE FOLLOWING ITEMS COMPRISE THE NET CROP OF CONSTANTS AND VARIABLES WHICH SEEM TO GOVERN THE POSSIBILITIES AND PROBABILITIES OF SUCH AN EXHIBIT:

A. ARNASON FACTORS

- (1) ARNASON HAS SAID THAT A FALL DATE FOR THE SHOW HAS VIRTUE BECAUSE HE WOULD HAVE BUDGET MONEY AVAILABLE.
- (2) A SPRING DATE HAS VIRTUE BECAUSE IT WOULD COINCIDE WITH THE NATIONAL CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS, DURING THEIR FIRST MINNEAPOLIS VISIT IN YEARS. THIS HAS SIGNIFICANCE BECAUSE BUCKY'S WORK HAS BEEN CONDUCTED IN OVER THIRTY ARCHITECTURAL SCHOOLS, AND HAS BEEN INTERMITTENTLY REPORTED UPON AT A. I. A. CONVENTIONS SINCE THE ST. LOUIS CONVENTION OF 1928. ARNASON POINTED OUT THAT IF THIS SPRING DATE WERE TO BE ADOPTED IT WOULD INVOLVE HIS PRE-ACQUISITION OF BUDGETARY FUNDS AS HIS SPRING ALLOTMENT HAD BEEN ABSORBED BY THE PREVIOUS LIPSHITZ SHOW.
- (3) ARNASON SHOWED THE ROOMS WITHIN THE WALKER ART CENTER WHICH WOULD BE AVAILABLE FOR THE EXHIBIT AND INDICATED THE GROUNDS OUTSIDE WHICH MIGHT ALSO BE USED FOR LARGER STRUCTURES. (ALL CONCERNED AGREED THE SPACE WAS ADEQUATE FOR INTERIOR AND EXTERIOR EXHIBITION REGARDLESS OF SEASON.)
- (4) ARNASON POINTED OUT THAT IT WAS HIS DESIRE THAT THE EXHIBIT BE SO ORGANIZED THAT IT WOULD BE SUITABLE FOR DEMOUNTING, PACKAGING AND SWIFT REASSEMBLY AS A TRAVELING EXHIBIT TO BE LOANED BY THE WALKER TO OTHER MUSEUMS IN THE COUNTRY AND, POSSIBLY, IN FOREIGN COUNTRIES.
- (5) ARNASON HAD INDICATED IN EARLIER LETTERS THAT THE MAGNITUDE OF THE EXHIBIT DOLLAR-WISE COULD BE CALCULATED IN THE TERMS OF A CATALOGUE COST OF APPROXIMATELY \$5,000.
- (6) IN ADDITION TO KEPES AS DESIGNER OF THE EXHIBIT, ARNASON HAD ENGAGED RICHARD HAMILTON AS CATALOGUE COORDINATOR BECAUSE OF HAMILTON'S EXPERIENCE IN THE PREPARATION OF A COMPLETE BOOK

ON FULLER'S WORK FOR REINHOLD BROTHERS PUBLISHING COMPANY,  
A PUBLICATION ARNASON HAD HOPED MIGHT APPEAR COINCIDENTALLY  
WITH THE EXHIBIT.

B. KEPES FACTORS

(1) KEPES HAS BY COMMON CONSENT BEEN SELECTED DESIGNER OF THE  
EXHIBIT. KEPES INSPECTED FIRST THE MUSEUM, THEN FULLER'S  
PHOTOGRAPH AND DRAWING FILES, AND HELD A SERIES OF CON-  
SULTATIONS WITH ALL HANDS. HE THEREAFTER DECIDED THAT THE  
EXHIBIT STRATAGEM LEADS NATURALLY INTO TWO CO-EQUAL BRANCHES  
OF FULLER'S WORK WHICH MUST BE SIMULTANEOUSLY EXPOSED:

- (A) THE COMPREHENSIVE DESIGNER, AND
- (B) SYNERGETIC GEOMETRY.

(THE FOLLOWING ARE BUCKY'S WORDS, AS HE INTERPRETS JOHN DIXON'S VERBAL RELAY OF KEPES'  
THOUGHTS AS EXPRESSED TO DIXON AT A MEETING IN MINNEAPOLIS NOVEMBER 23RD):

"KEPES CONCLUDED THAT THE COMPREHENSIVE DESIGNER AND SYNERGETIC GEOMETRY EXHIBITS  
MUST CONSIST PRIMARILY OF TRUE WORKING MODELS, WITH PHOTOS AND DRAWINGS EMPLOYED ONLY AS  
SUBORDINATE BACKGROUND PATTERN, AND THAT THE WHOLE MUST DISCLOSE AN OBVIOUS, VIGOROUS  
CO-EVOLUTION. THIS MEANS THAT THE CONCEPTIONING AND EXECUTION MUST REVEAL BOTH A TRUE  
SCIENCE AND A TRUE ART." (SIR JAMES JEANS SAID: "SCIENCE IS SIMPLY THE SINCERE ATTEMPT TO  
SET IN ORDER THE FACTS OF EXPERIENCE.")

FINDING NO EQUALLY CONCISE AND SATISFACTORY DEFINITION OF ART, BUCKY POSITS FOR THIS  
DOCUMENT THAT, "IT IS PARTIALLY TRUE OF ART THAT IT EMBRACES ORDER WITHOUT RECOURSE TO  
CONSCIOUS MEASUREMENT." THE ART CONTENT OF THE WALKER-FULLER EXHIBIT MUST, THEREFORE, LIE  
IN A SENSED COMPETENCE OF EXHIBIT MODELING AND ALSO IN A SENSED SYNERGETIC EFFECTIVENESS, AND  
BOTH OF THE FOREGOING SENSED ONLY BY SWEEPING GLIMPSE OF THE WHOLE EXHIBIT AS A 'PERSONALLY  
EXPERIENCED' COMPLIMENTARITY OF SYSTEM ELEMENTS, WHICH SENSING INDUCES THE EXPERIENCING  
VISITOR BEFORE HE HAS HAD TIME TO ANALYZE, LOGICIZE, OR EXPLAIN AND IS, AS YET, ONLY SUBJECT  
TO REFLEXIVE GUIDANCE BY HIS INTUITIVE, AESTHETIC, BORDERLINE TUNING AND FEEDBACK AMPLIFICATION  
.... TO SAY TO HIMSELF IN QUICK, SPONTANEOUS HALF-PHRASING: "I AM INTERESTED." - "THIS  
FEELS GOOD." - "I MUST LOOK AT THIS IN GREATER DETAIL."

END "ART" . . . BEGIN "LOGIC AND SCIENCE."

AT THIS MOMENT OF CLOSEST AND MOST MINUTE FOCUS, SCIENCE, LOGIC AND ORDER OF THE  
EXHIBITION STRATEGY MUST ARRANGE THAT THE INTENDED "SIGNIFICANCE" OF THE SPECIAL SUBSYSTEM  
EXHIBIT NOW UNDER CLOSE VIEWING BE QUICKLY AND COGENTLY EFFECTED BY THE COMBINED ART AND  
SCIENCE OF PRESENTATION SO THAT THE VISITOR MAY MOVE ON - WITHOUT CONSCIOUS SLOW-DOWN OF  
PHYSICAL AND INTELLECTUAL MOMENTUM, TO THE NEXT SUBSYSTEMS OF THE EXHIBIT.

THE ART AND SCIENCE OF SUBJECTIVE-OBJECTIVE REFLEXING MUST ATTAIN A RHYTHMICAL  
ACCELERATION BUILDING TO A FINAL REAPPREHENSION OF SYNERGETIC SIGNIFICANCE, THAT IS TO  
SAY, THE WHOLE TUNING IN OF THE VISITOR TO THE SURPRISE LOGIC DISCLOSED IN THE SCIENCE  
ORIENTED SERIES OF THE SUBSYSTEM EXHIBITS MUST SUBSEQUENTLY YIELD TO RESUBMERGENCE WITHIN  
THE ORIGINAL ART ACCOMPLISHED APPREHENSION-BY-SENSE-ONLY PHASE OF THE EXHIBIT'S PRESENTATION.  
THIS, AS FIRST MENTIONED IN THIS LETTER, OCCURS AS A NON-RATIONALIZED SATISFACTION -- ERGO:  
ONLY AS A SUBCONSCIOUSLY REFLEXED "SATISFACTION". THIS SENSE MUST THEN BE ART-ACCOMPLISHED  
AS THE DEPARTING OR LAST IMPRESSION.

THIS EXPERIENCE PATTERN OF THE VISITOR IN BRANCH (A), THE COMPREHENSIVE DESIGNER  
MUST BE RE-EXPERIENCED IN BRANCH (B), SYNERGETIC GEOMETRY, SO THAT AGAIN A NON-RATIONALIZED,

THEREFORE, ART-INDUCED, TOTAL STIMULUS MAY BE RECEIVED WHICH FINDS THE SECOND EXPERIENCE COMPLIMENTARY TO THE FIRST, RESULTING IN THE VISITORS' CONSCIOUS REORIENTATION OF THEIR OWN A PRIORI CONCEPTIONING AS THEY FINALLY GO FORTH FROM THE EXHIBIT, TO TREAT AND EXPLORE AND ANALYZE THEIR OWN EVERYDAY EXPERIENCE PATTERNS IN TERMS OF THE MACROCOSMIC AND MICROCOSMIC GENERAL LAWS, PHYSICALLY DOCUMENTED IN THE EXHIBIT AND TELEOLOGICALLY EMPLOYED BY THE COMPREHENSIVE DESIGNER AS THE TOOLS OF SYNERGETIC AND ENERGETIC GEOMETRY. THE VISITOR MAY THUS BECOME A COMPREHENSIVE APPREHENDER AND POSSIBLY A NEOPHYTE COMPREHENSIVE DESIGNER.

KEPES CONCLUDED ALSO THAT, INASMUCH AS BUCKY'S WORK IS IPSO FACTO "INDUSTRIAL", ITS EQUATION CAN ONLY BE COMPLETED BY HIS ABILITY TO REINDUCE ACTIONS IN OTHERS, INTERPRETATIVE OF HIS SUBJECTIVELY CONCEIVED AND OBJECTIVELY ORGANIZED ASSOCIATIVE PRINCIPLE OF ENERGY ACTIONS.

SUCH SPONTANEOUS ACTION IN OTHERS MUST IN ITSELF BE CLASSIFIED AS COMMUNICATION INDUCED ONLY BY THE HISTORICALLY RELAYED CIRCUITS OF ENVIRONMENTAL STIMULUS EVER REGENERATIVELY EVOLUTING THROUGH SIMILAR DESIGNED EXPERIENCE EPISODES AND THEIR TELEOLOGIC CONSEQUENCES.

AS BUCKY SEES IT, THIS REGENERATIVE DESIGN COMMUNICATION IS THE ESSENCE OF INDUSTRIALIZATION'S INHERENT EVOLUTIONARY ACCELERATION. EVOLUTIONARY ACCELERATION, HE THINKS, PROVIDES WAVE AFTER WAVE OF SYNERGETIC ENVIRONMENT PATTERN MESHING. THUS THE EVER NEWER MAN-LIFE PARTICIPATION IN ENVIRONMENT EVOLUTIONS APPEARS TO EACH SUCCESSIVE GENERATION, RESPECTIVELY, NOT AS "CHANGE"; BUT AS THE A PRIORI AND SEEMINGLY OBVIOUS "MUST HAVE BEEN FOREVER THUS", - DAWNING REALITY, ENCOUNTERED BY EACH SUCCESSIVE GENERATION AND, IN RESPECT TO WHICH A PRIORI "NATURAL" REALITY, THE SUCCESSIVE GENERATIONS NATURALLY RESPOND AS CONSTITUTING THEIR PERSONAL, UNIQUE OPPORTUNITY STIMULUS TO EVOLVE PREFERENTIAL, AND SEEMINGLY "LONG OVERDUE" PATTERN, EVOLUTION.

THIS TELEOLOGIC PATTERN TIES EVERY INDIVIDUAL EVER MORE ACCELERATINGLY INTO THE SYNERGETIC AND COMPREHENSIVE SYSTEM OF INDUSTRIALIZATION'S REGENERATIVE WAVES.

BECAUSE OF THE ABOVE ASPECTS OF THE INDUSTRIAL EQUATION PERTINENT TO HIS WORK, BUCKY'S ART-SCIENCE OBJECTIVITY MAY ONLY BE REALIZED THROUGH THE SPONTANEOUSLY INDUCED COORDINATE ACTIONS OF OTHERS. THIS INDUCTION IS, FOR INSTANCE, THE KEY TO THE REGENERATIVE PATTERN OF HIS UNIVERSITY INVITATIONS.

THE FOREGOING PHILOSOPHY AND FORMIDABLE ARRAY OF FACTS AND DESIGN REQUIREMENTS COMBINE TO MAKE CLEAR THAT ONLY THROUGH BROAD STUDENT COOPERATION AT SEVERAL UNIVERSITIES COULD AN ADEQUATE EXPOSITION OF THE COMPREHENSIVE DESIGNER AND SYNERGETIC GEOMETRY BE PREPARED.

"IF", SAID KEPES, "THERE NOW EXIST ASSOCIATES OF BUCKY SO THOROUGHLY EXPERIENCED IN HIS COMPREHENSIVE INITIATING AND MATHEMATICAL REASONING AS TO BE COMPETENT TO MANAGE THIS UNDERTAKING, SUCH INDIVIDUALS SHOULD BE INVITED TO ASSUME THE INDICATED RESPONSIBILITIES."

### C. FULLER FACTORS

- (1) BUCKY SAYS THAT THERE ARE NOW SEVERAL INDIVIDUALS WHOM HE WOULD CONSIDER THOROUGHLY COMPETENT TO EFFECT SUCH AN EXHIBIT, BUT HE ALSO DISCOVERS THAT THEY ARE ALL OCCUPIED IN PRIORITY TASKS IN RESPECT TO THE EMERGENT REALIZATION OF THE TACTICAL VALUES OF GEODESIC STRUCTURES BY THE NATIONAL DEFENSE, FOR BUCKY'S INVESTIGATIONS AND DERIVED TECHNOLOGIES NOW TEND BY ANTICIPATION TO SATISFY THE GRADUALLY DISCOVERED NEW PATTERNS OF THE DEFENSE STRATEGIES. THE GRAND STRATEGY NOW INCLUDES GEODESIC STRUCTURES AND DYNAMION AEROCEAN PHILOSOPHY AS PART OF OUR NEW DEFENSE TOOLING. THOUGH HITTING POWER MUST BE AN ASSUMED ACTION OF LAST RECOURSE

ONLY IN WORLD PROBLEM SOLVING, ITS POSSIBLE EVENTUALITY MUST BE INCISIVELY AND EXPEDITIOUSLY ANTICIPATED AND ATTENDED AND, THEREFORE, AT PRESENT NONE OF THOSE COMPETENT TO PREPARE THE EXHIBIT ARE AVAILABLE.

- (2) THE ONLY POSSIBILITY OF PREPARING AN EXHIBIT CONSISTENT WITH THE COMBINED ARNASON-KEPES FACTORS WOULD BE THAT PROVIDED BY SPONTANEOUS ADOPTION OF THIS EXHIBITION PREPARATION BY A UNIVERSITY'S ARCHITECTURAL STUDENT POPULATION.
- (3) BUCKY FEELS THAT IF THE SPRING CONVENTION DATE CANNOT BE MET, MUCH OF THE ATTRACTIVE PURPOSEFULNESS AND TARGET STIMULUS FOR A UNIVERSITY PROJECT WILL HAVE BEEN LOST.
- (4) BUCKY IS CONVINCED THAT BECAUSE ALL QUALIFIED INDIVIDUALS ARE OTHERWISE OCCUPIED HE WOULD HAVE TO TAKE CHARGE OF THIS PROJECT HIMSELF, AT LEAST UNTIL IT WAS THOROUGHLY UNDER WAY AND ITS FULL RAMIFICATIONS, BOTH PHILOSOPHICALLY AND TECHNICALLY, HAD BEEN RELAYED TO THE STUDENT AND FACULTY POPULATION.

BUCKY IS NOT ADVERSE TO A LATER DATE FOR THE EXHIBIT, BUT FEELS THAT THE TIME LAPSE SHOULD BE OF GREATER MAGNITUDE THAN THE TIME LAG TO THE NEXT CALENDAR EXHIBIT DATE AT THE WALKER. THIS IS BECAUSE HE FEELS THAT A POST AMERICAN INSTITUTE OF ARCHITECTS CONVENTION EBB-TIDE INTEREST WOULD REQUIRE A DATE SEVERAL SEASONS HENCE, AND UNDER WHICH (AS YET UNPREDICTABLE) CIRCUMSTANCES THERE WILL MOST PROBABLY DEVELOP OTHER POSSIBILITIES FOR EXHIBITION PREPARATION ALL WITHOUT COMPROMISE OF ANY OF THE FUNDAMENTALS INDICATED IN THIS MEMORANDA.

SHOULD A UNIVERSITY PROJECT IN TIME FOR EXHIBIT INSTALLATION COINCIDENT WITH THE AMERICAN INSTITUTE OF ARCHITECTS' MINNEAPOLIS CONVENTION OF 1955 DEVELOP WITHIN SEVEN WEEKS (THE CRITICAL AND FINAL DATE), BUCKY HIMSELF IS WILLING TO APPLY ALL HIS OWN SPARE TIME TO THE DIRECTION OF THE EXHIBIT PREPARATION.

IN RESPECT TO THE ABOVE, IT IS ESSENTIAL THAT BUCKY LEARN FROM ARNASON \* AT THE EARLIEST POSSIBLE DATE WHAT SHARE OF THE FINANCIAL BURDEN THE WALKER ART CENTER IS PREPARED TO ASSUME.

FAITHFULLY YOURS,

JOHN DIXON  
ASSISTING R. BUCKMINSTER FULLER

\* MR. ARNASON HAS NOW SET THE EXHIBIT DATE FOR 1956 IN THE SUMMER OF WHICH YEAR THE MUSEUM OF MODERN ART, NEW YORK CITY, ALSO PLANS A GEODESIC STRUCTURES EXHIBITION FOR THEIR ENTIRE GARDEN AREA.

(THIS LETTER WAS ALSO SENT TO MR. HARVARD ARNASON, DIRECTOR OF THE WALKER ART CENTER, MINNEAPOLIS, MINNESOTA.)