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- EDUKIT EDUKIT EDUKIT
 WORLD EDUCATIONAL SYSTEM
 INTERNATIONAL THINKBELTS
 AGENCIES IN MAJOR CITIES
 MAIL ORDER REMOTE ACTION
 UNIQUE MINORITY SERVICES
 NORMAN FELLOWS ARCHIBLOG

Norman Fellows Archiblog

EDUKIT
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Edukit is one of two possible contributions to the commons being created in the Cambridge-Milton Keynes-Oxford region for governance not by state or market but by the community. It is presented here in a much abbreviated form.

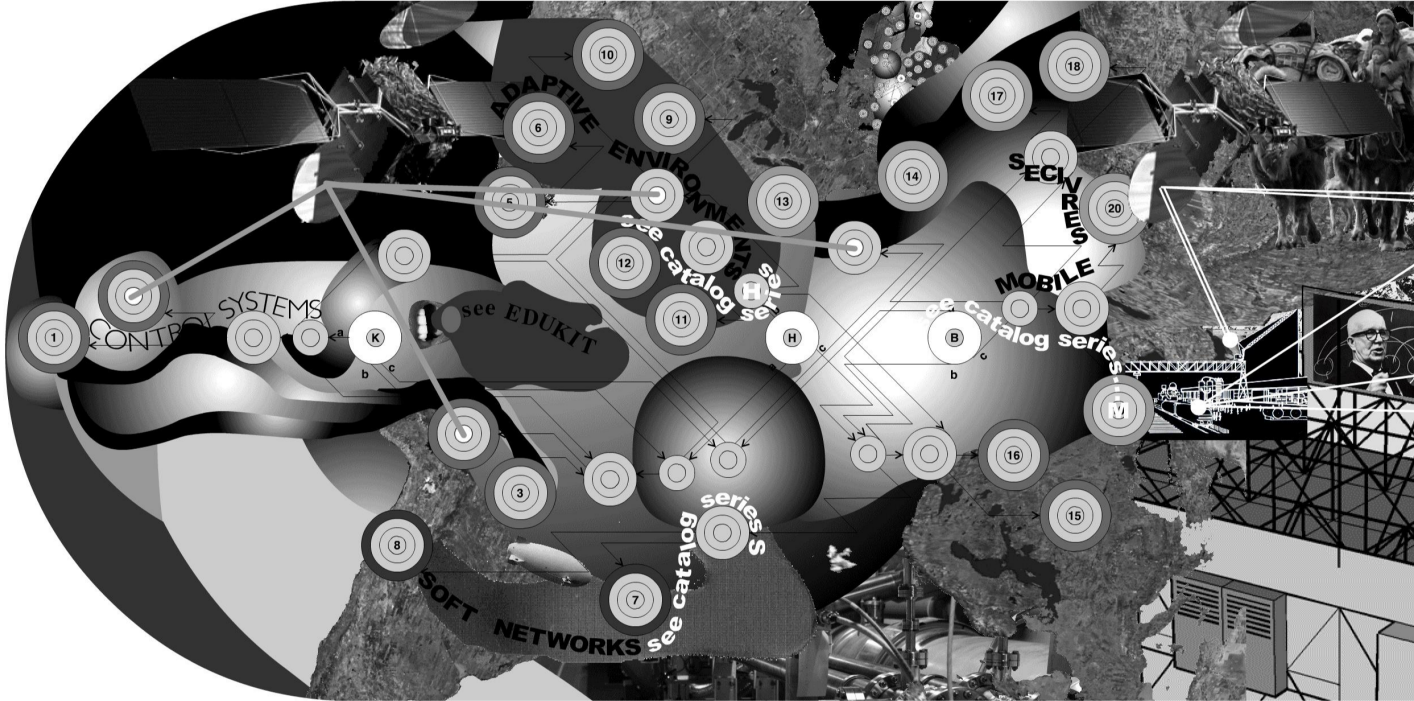
PROPOSITIONS

The continuing design of autonomous universities by University Governors and their architects does not represent to me a particularly meaningful way of investing limited National resources. When seen as either a solution to the problem of education for all or a strategy for lifelong learning, the concept of "university", with its origins in the Middle Ages, now wears a firmly elitist look. Considering the amount of research, administrative and designers' time spent on bringing forth a new one, the university does little to prevent ignorance; gives little in the way of pleasure and entertainment to students of all ages and cultures; does little to reduce the scarcity of the trained personnel who run the service within; is frequently found to be obsolescent upon completion and is usually difficult and expensive to change or throw away. All over the world, architects are engaged on buffing these absurd monuments to a design Utopia... meanwhile, skills shortages increase in the West, access is denied to the poor of the world, UNESCO declares illiteracy persists in parts of Asia and Sub-Saharan Africa... and millions drop out or become failures in spite of the university. I suggest that universities as we know them have outlived their social usefulness and that a strategic redistribution of financial resources is required if we are to receive the benefits of educational servicing that might reasonably be expected.

COLLAGE ILLUSTRATING A WIDE RANGE OF EDUKIT APPLICATIONS

THE SYSTEM OUTLINED GLOBAL COVERAGE

UNLOADING MAJOR TRANSPORTER VEHICLE



SERVICE NO

5008 MONITORS
STUDY STATION

← 2 WAY LINKS TO SPECIALISED TUTORIALS

NO MOBILE
NO OFFICES
M.O.16

Educational servicing should exist primarily for student benefit and pleasure, not for the benefit of teaching, educational, administrative or design personnel. Non-residential servicing - e.g. follow-up, preventive, diagnostic and learning facilities - should be as readily available as servicing at drive-in filling stations.

The imbalance in World availability of educational expertise should not be seen as disadvantageous to under supplied communities - (e.g. developing countries) - rather the local concentrations of skill and expertise to be found in developed countries should be reinforced and through design intervention made available to those areas needing or requesting increased servicing. Given appropriate communication and learning facilities such availability should not require massive redeployment of educational personnel around the globe. The basic redeployment required is of financial resources.

LINKS TO GROUP TEACHING STATIONS

LINK TO COMPUTER GRID ↗

SIMULATORS AND GAMES

The provision of increased or new educational servicing should be taken as an opportunity for creating new industry and employment opportunities in those locations choosing to become Edukit subscribers. The increasing sophistication of electronic engineering and communication techniques should be realised as creating opportunities for home monitoring and educational servicing. The priorities in the provision of educational service facilities should be seen as personnel, equipment and buildings... in that order.

SEMINAR GROUP

In response to the propositions Edukit outlines a system of parts, divisible into four broad categories, which are either illustrated or symbolised in the accompanying illustrations. It is intended that Edukit could be applied anywhere in the UK or abroad. The service proposed would be available to everyone, as in the case of universal health care schemes, and both personnel and equipment would be supplied by Edukit. It is my intention to describe an integrated and comprehensive supply system as an alternative to the current concept of university. The work illustrated here is presented as a beginning ... [...] I will appreciate any comments, particularly the hostile.

STAIRS

UNIQUE MINORITY SERVICES

MONITORING EQUIPMENT

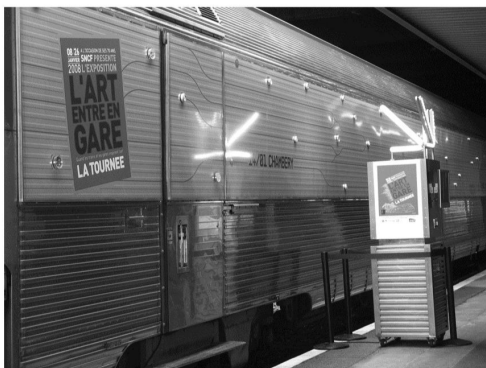
REMOTE LOCATION EDUCATIONAL SERVICE

HOME MONITORING

ADVANCE PARTY ARRIVING



EDUKIT COMPONENTS ON EDUCATIONAL AND PREVENTIVE TOUR
AN EXTRACT FROM THE BUCKMINSTER FULLER CHALLENGE ENTRY



COMPONENT & SERIES	CAT. No.	USE and/or LOCATION
ELECTRONIC SERIES		
Membership of Comsat	S.001	Access to Intelsat system: fast 2-way links to disaster servicing.
Links to Nat. Compr. Grids	S.002 -006	Teaching; Diagnosis; Records; Research.
Monitoring Module + components	S.007 -016	Basic element. General use in home or teaching station. Specialised use as tutorial element. Monitoring central production and servicing. CCTV attachment. Usable on telephone lines.
Information Kiosk	S.024	Street corner or drive-in location. Basic element in preventive system. Linked to neighbourhood centre or faculty.
MOBILE SERIES		
Transporter units	M.001 -004	Land, sea or air transporters used to ship major convoys or systems on educational or disaster missions.
Small teams, sky-divers and para-educationalists	M.005 -009	Advance party to check out Edukit supplies required. Also for direct delivery to difficult or damaged sites.
Mobile offices	M.016	Semi-private enclosures available to educational personnel or students. Used in classroom location.
HARD SERIES		
Powered wall panels	H.001	Used as external walls and secondary self contained and supported screens.
A.C. Panel	H.002	Conditioned air panels. Located in external walls.
Retractable 'sky blind'	H.006	Used in conjunction with wall (H.001) and other enclosure elements.
Disposable space mixers	H.015	Short life element. Use with information pods and intensive teaching and learning modules.
GENERAL SERIES		
Food supply		To increase the range of food offered use will be made of existing restaurants and deep freeze/microwave techniques. No central kitchens provided.
Games		Edukit proposes a set of international electronic games and simulator systems to be operable by students either mobile or based at home.

THE ABOVE REPRESENTS ONLY A SELECTION OF THE EDUKIT RANGE. FURTHER INFORMATION WILL BE AVAILABLE IN THE REPORT AVAILABLE ON DEMAND.

STUDENTS

H.001

Any residential servicing requiring overnight stay away from home should be seen by the designer as a recreational and leisure opportunity.

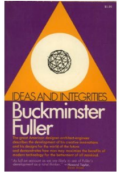
All design proposals concerning educational facilities supply should capitalise on the assumption that they will rapidly become obsolescent and will therefore require ease of removal, modernisation, alteration or destruction.

MOVE OUTSIDE

ORIGINAL SCHEMA

Norman Fellows

February 2015. My re-think of the article I wrote when the 'Call for Proposals' for the 2009 Buckminster Fuller Challenge was announced. It was first published in September 2008.



Front cover: 'Ideas and Integrities'.

schema /ski:me/ n. (pl. **schemata** /-mete/ or **schemas**) **1** a synopsis, outline, or diagram. **2** a proposed arrangement. **3** *Logic* a syllogistic figure. **4** (in Kantian philosophy) a conception of what is common to all members of a class; a general type or essential form. [Gk *skhema* –atos form, figure].

Buckminster Fuller delivered the Annual Discourse to the Royal Institute of British Architects (RIBA) in June 1958 at the RIBA, entitled **Experimental Probing of Architectural Initiative**, in which he defined his work as "*comprehensive anticipatory design science*" [1].

The following year, in a talk given to the Faculty of the School of Architecture and Allied Arts in the University of Oregon [2], Fuller proposed that:

"Architects, if they are to be really comprehensive, must assume the enormous task of thinking in terms always disciplined to the total world pattern of needs, its resource flows, its recirculatory and regenerative processes.

Architects might join one another to carry on their work in laboratories as do doctors in anticipatory medicine. Architects might solve design problems of world-resource use before people get into resource troubles. Architects might thus join forces, as do scientists, with the integrity of inter-self accrediting of the respective abilities of each individual on the team. Architects might begin the laboratory pooling of their resource capabilities at the university level.

Architects should tell architectural schools that they also favor research and development in the university."

To architects attending, such words would represent a clear recommendation for ACTION.

25 years later, in the introduction to an exhibition at the Architectural Association in London [3], Cedric Price wrote that:

"In this instance, ACTION refers to that taken by me, and subsequently the office, in response to requests by others. Such requests are not necessarily of an architectural nature and are frequently in the form of a challenge which does not necessarily suggest an architectural response.

In such cases, an architectural response has first, and quickly, to be compared within the office to the alternatives of, firstly, a proposal related to other disciplines, activities and non-architectural products or secondly, a clearly explained reason for no response at all. The latter is the first constructive 'inaction' that architects can offer, having satisfied themselves that they are of no use. To enable this response to be constructive, it must be fast and authoritative. Indeed this is one of the finest reasons for architects to involve themselves in anticipatory design as recommended by Buckminster Fuller."

Fuller also gave talks at Bennington College, California in 1960, entitled **Prime Design**, in which he referred to "*the world educational (system)*" [4], and at Southern Illinois University in 1961, published in **Education Automation** (1962), which he devoted to the new educational system [5]. Since then, few architects have involved themselves. Price, however, has been the notable exception. The **Potteries Thinkbelt** [6], in particular, represents a radical alternative to the traditional university, followed by his proposals for a "*KIT OF PARTS for a decentralized education system*" in **ATOM** in Illinois [7], **Think Grid** in Detroit [8], and **BMI/HQ** in Birmingham [9]. It is therefore also worth reading what Gordon Pask had to say in 1969 [10]:

*"A University need not be conceived as a set of buildings around a courtyard with living accommodation and lecture theatre. The educational system **might**, in certain circumstances, be spatially distributed rather than localized. In any case, architects are positively encouraged to anticipate trends such as the development of educational technology and to provide for their impact upon whatever structure is erected. By token of this the architect quite often comes into the picture at the time when a higher educational system is being contemplated, without commitment to whether or not it is called a university."*

Now, over 50 years later, the annual 'Call for Proposals' for the Buckminster Fuller Challenge has been announced and the Buckminster Fuller Institute is again calling for solutions to "*make the world work for 100% of humanity, in the shortest possible time, through spontaneous cooperation, without ecological offense or the disadvantage of anyone*" [11]. With this challenge in view, I am submitting an architectural response, namely, '**EDUKIT**'.

REFERENCES

- 1 Fuller, R. B. (1958), *Later Development of My Work*, in *Ideas and Integrities*, Collier Books, New York, p.63.
- 2 Fuller, R. B. (1959), *The Comprehensive Man*, in *Ideas and Integrities*, Collier Books, New York, p.83.
- 3 Price, C. (1984), *Works II*, Architectural Association, London, p.18.
- 4 Fuller, R. B. (1960), *Prime Design*, in *Ideas and Integrities*, Collier Books, New York, p.248.
- 5 Fuller, R. B. (1962), *Education Automation*, Southern Illinois Press.
see also Meller, J. (1970), *The Buckminster Fuller Reader*, BFI, Santa Barbara, CA., p.371.
- 6 Price, C. (1964-65), *Potteries Thinkbelt*, in *New Society*, June 2nd 1966 and *Architectural Design*, November 1966, pp.484-497.
- 7 Price, C. (1967), *ATOM*, in *Architectural Design*, May 1968, pp.232-235.
see also Price, C. (1968), *Education in the New Town*, in Cannady, W. ed. (1968) *New Schools for New Towns*, Rice University, pp. 24-35.
nb Dugdale, A. et al. (1969), *Medikit*, *Architectural Design*, October 1969, pp.566-567 was a 'medical' interpretation of Price's educational work.
- 8 Price, C. (1968), *Think Grid*, in *Cedric Price Supplement No. 3*, *Architectural Design*, June 1971, pp.353-363.
- 9 Price, C. (1969), *Birmingham & Midland Institute HQ*, in *Cedric Price Supplement No. 3*, *Architectural Design*, June 1971, pp.364-368.
- 10 Pask, G. (1969), *The Architectural Relevance of Cybernetics*, *Architectural Design*, September 1969, p.496.
- 11 Buckminster Fuller Institute (2015), *The Buckminster Fuller Challenge*, <http://challenge.bfi.org/>

FOOTNOTE: The EDUKIT study (my preferred term) is an early entry project of the type referred to by Pask in his article published in the prequel to the Complexity series of Architectural Design, and represents new design for new learning for "*A One-Town World*" anticipated by Fuller in his talk at the Faculty of the School of Architecture and Allied Arts in the University of Oregon over half a century ago (see Reference 2, p78). In the final issue of the Complexity series of Architectural Design, edited by Roy Landau in 1972, Chris Abel stated in **Cultures as complex wholes** that "*A key concept is that of 'form giver', equivalent to a related cluster of schemas or shared mental constructs (which can be) represented spatially in the form of a series of simple Venn diagrams...*" and that "*The centre of each circle is the original schema of action*".