Lincoln's Orgone Accumulator:

The Question Concerning Life and Architecture

by Marcin Mateusz Kołakowski & Doina Carter

Are the controversial ideas of Wilhelm Reich a topic worth discussing in contemporary architecture? There is no better way of trying to answer this question than by testing it. This is what happened at the University of Lincoln in 2017.
The Centre for Experimental Ontology offered support and the initial concept while authors of this article, as architectural educators from Lincoln School of Architecture and the Built Environment (LSABE), incorporated it into students' brief.

1 Live Projects for Life of Architecture.

As a result of the cooperation between the Centre of Experimental Ontology and the LSABE, the idea of constructing Lincoln's Orgone Accumulator came into being. The object, which once contributed to scientific and even legal controversies later became part of pop culture and is now something of a techno-vitalist legend which stimulates thinkers to reflect on the definition of life. The Lincoln project was instigated by Graham Freestone and transformed into an idea compatible with the University's curriculum.
It was decided that the process of designing and producing the project would take the form of a 'live project'. According to definitions by Sara (2006) and Watt & Cottrell (2006), live projects in educational terms engage the community with students. Through live projects students produce a real project which is valuable to the client. Every project has its own agenda and criteria making them very different from each other. For several years, the University of Lincoln 'Students as producers' program has helped to promote this kind of educational format.
Harriet Harris who researches live projects as an educational method claims that this form of teaching offers a long list of skills, such as group work, reporting and negotiation. Harris (2014) believes that whilst live projects make better architects they can also sometimes be a 'painful process' because of unpredictable challenges. However, in Harris' view, the purpose of education is to prepare students for the profession and therefore having risk free environments is not good preparation for future situations (Harris, 2013). Live projects help students and practitioners remember that architecture is always a compromised activity. Hamdi (2010) is convinced that when students get involved in live projects, they develop a sense of belonging and responsibility as well as a feeling of ownership.

Jeremy Till , British architect, educator, writer and Pro Vice-Chancellor of the Central Saint Martins School in London, argues that live projects should not be considered as an alternative but a necessity (Jeremy Till, 2009). Research on the nature, benefits and challenges of live projects in architectural education has been conducted at the Lincoln School of Architecture for several years. It takes the form of collaborating with practitioners and constructing experimental buildings. This time the character of the project was slightly different. This kind of research returned the word WORK-SHOP to its original meaning and made "learning by doing" entirely literal. Following the 'student as producer' ethos promoted by UoL – in practical sense – students often design and build objects which have a relevance for clients from outside our course and which create a twist in traditional student briefs (*Student as Producer*, 2018).

2 Wilhelm Reich's theory from destruction to construction.

The first question was whether or not an orgone accumulator was a suitable topic for a student project. Only half a century ago, the orgone accumulator was an extremely contentious topic. On 5 June 1956, the federal US agency FDA supervised the destruction of all Reich's orgone accumulators, which were chopped up with axes as the agents watched (Sharaf 1994, pp. 458–461).
The international community and prominent figures such as A.S. Neill and Herbert Read signed a letter of protest claiming that "the campaign against Reich seems largely ignorant and uncivilized, more like fascism than democracy ..." Despite the protests, on 23 July the remaining accumulators in New York were destroyed and the 3 tonnes of literature about the accumulators were ordered to be burnt (Sharaf 1994, p. 461).
Science historian James Strick (2015) wrote: "In 1956 and again in 1960, officers of the U.S. government supervised the public burning of the books and scientific instruments of Austrian-born scientist Wilhelm Reich. This was one of the most heinous acts of censorship in U.S. history."
Why were the accumulators so controversial? They were objects which were supposed to harness and trap the universal life force. The accumulators was claimed to possess beneficial qualities to human health by radiating what Reich described as 'orgone' energy into a concentrated area. In a practical sense they had the form of box with metallic inner lining. The method of constructing the orgone accumulator was specified and described by Reich. Accumulators were also supposed to keep away any radiation from the human being which could burden and short-circuit his or her own energy load by causing physical and mental disorders (De Meo, 2007). Thus Reich – as a students and collaborator of Sigmund Freud – attempted to develop a practical apparatus based on Freudian psychoanalysis. He believed hard

science, psychology and social sciences showed the way to the orgone accumulator as the tool which could harvest the life force (Turner 2011).

In 1940, Wilhelm Reich started building orgone accumulators, devices that his patients sat in to receive reputed health benefits, leading to newspaper stories about 'sex boxes' that cured cancer (Sharaf 1994, pp. 301–306). The confrontational personal character of Reich and his attitude toward officials, organizations and even court orders caused him trouble on several occasions and no doubt contributed to the controversy over the orgone accumulator.

Reich was determined to promote his ideas and he discussed the concept even with scientists such as Albert Einstein, who met him and later wrote him a letter about the accumulator but was rather dismissive of the idea (Einstein 1941). Anthropologist Bronisław Malinowski, on the other hand, wrote to the press in Norway that Reich's sociological works were "a distinct and valuable contribution toward science."

However, most mainstream scientists dismissed his theories. Psychoanalyst Kenneth S. Isaacs wrote "orgone — a useless fiction with faulty basic premises, thin partial theory, and unsubstantiated application results (Isaacs 1999, p. 235-252).

Science professor Henry Bauer claimed: "Reich's personal charisma seems to have misled some number of people into taking his 'science' seriously. His outward behavior was not inconsistent with that of a mainstream scientific investigator. In the light of everyday common sense rather than of deep technical knowledge, his ideas could seem highly defensible. For those who lack familiarity with the real science of matters Reich dealt with, why would orgone be less believable than black holes, a bounded yet infinite universe, or "dark matter"...?" (Bauer 2000, p. 159).

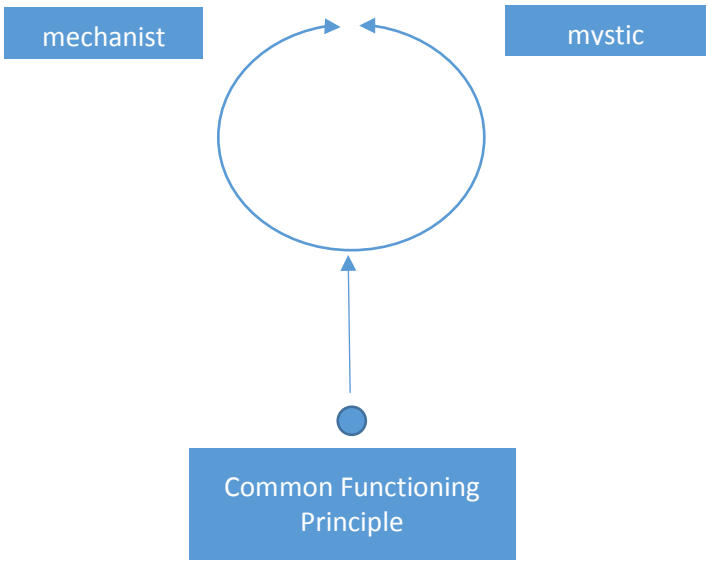
Psychologist Jon E. Roeckelein wrote: "The current consensus of scientific opinion is that Reich's orgone theory is basically a psychoanalytic system gone awry, and is an approach that represents something most ludicrous and totally dismissible" (Roeckelein 2006 p. 517-518).

However, Reich's biographer James Strick argued that the dominant narrative of Reich as a pseudoscientist is incorrect and that Reich's story is "much more complex and interesting" (Strick 2015, p.3).

Despite the criticism orgone accumulators inspired a good deal of culture on various levels. Song lyrics, images, constructions and narratives portraying Reich as an investigator who was banned by the official system. Kate Bush's "Cloudbusting" video clip and the song 'Orgone Accumulator' by Hawkwind added considerable force to the iconography which itself was already linked to the counterculture of the 1960s and the sexual revolution – the phrase which, by the way, was coined by Wilhelm Reich himself.

3) Architecture and Wilhelm Reich.

So could (or should) Reich's concepts be an inspiration for architects? Some designers already answered this this question positively. The Birmingham based architectural practice Axis Design Architects Ltd (2018a) sees Reich as an ideological link connecting urban concepts of Jane Jacobs and the ideas of defensible space of Oscar Newman. Reich's idea of the 'common functioning principle' – which assumed that a person needs to be reached from two different directions: mystic and mechanist – has been interpreted by Axis Design Architects (2018b) as two city design principles which focus on two different realms. One of them is humanistic and 'mystic' perspective e.g. the pedestrian point of view, and the second is 'mechanistic' e.g. as seen from the perspective of mechanic infrastructure. In this sense, Reich's diagram could also be interpreted as two pillars of architecture: functional (durability, practicality etc.) and non-material (narrative, aesthetics, symbolism etc.).



So far, however, Reich's theory did not translate itself into a modern architectural aesthetic orgone accumulator (that have been actually built). Apart from some notable exemptions – such as an egg shape capsule in Pune, India (Osho News, 2018) – orgone accumulators constructed since Reich's time were almost always utilitarian boxes with small windows. These wardrobe-like containers were rather unappealing clunky objects, standing somewhat in contrast with Reich's complex visions.

Figure 1. Osho News (2018). Orgone Accumulator Egg
Source: https://www.oshonews.com/2013/09/26/orgone-accumulator-egg/ (Accessed: 25 July 2018).

4) Orgone and life – the inspiration for designers.

Wilhelm Reich's dream of constructing a machine that would accumulate life energy is seductive but at the same time not scientific enough for today's standards. However, looking at the ideas from the point of view of architectural educators, after meeting the CEO who offered financial support with the construction, the authors of this article decided to exploit the benefits of this live project by contextualising it in literature on architectural qualities.

It was not so much the belief in orgone accumulator's "magical power" but rather the narrative related to a "life force" which became the inspiration. Historically, the belief that *life* is a driving factor of good architecture was on many occasions a foundation for the best designers and theoreticians. This is why the project was called the *Celebration of Life*. The orgone accumulator seemed to be a good starting point from which to contemplate this perspective.

Many users perceive architecture as a collection of dead objects – dead brick walls, dead doors and dead windows. Prominent and visionary designers in history showed that really good architecture is created not by walls but places between brick walls where life could flourish. The history of architecture tells many stories of architects who saw life as the essence of architecture. Peter Zumthor – one of the most influential contemporary architects – wrote: '*Architecture has its own realm. It has a special physical relationship with life. I do not think of it primarily as either a message or symbol. But as an envelope and*

background for life which goes on in and around it, a sensitive container for the rhythm of food steps on the floor. For concentration of work, for the silence of sleep' (Zumthor 1988, p. 13).

In his book analysing architecture, Simon Unwin talks about the relationship between life and architecture by referring to the work "*The Examined Life*" by the psychotherapist Stephens Grosz. Grosz's premise is that we tell stories to make sense of our lives. Unwin points out that the stories are told not only in words, and architects know that more than anyone else: 'As architects, however, we make sense of life in a different medium. We do so in space and built form – 'telling stories' non-verbally through the design of places and buildings. The plan/section of a building, for example, is a proposition (a 'story') intended to make sense of the life we live,' (Unwin 2014, p.3).

This question is even more relevant in the context of contemporary 'mechanistic culture' (using Reich's terminology) which is driven by non-living machines and gadgets. This perception is shared by one of the most prominent architectural theoreticians Christopher Alexander who *wrote* in his seminar work *Pattern Language:*

"*Anyone who uses the phrase "where do you live" in its everyday sense, accepts as his own the widespread cultural awareness of the fact that no one really "lives" at his place of work – there is no song or music there, no love, no food – that he is not alive while working, not living, only toiling away, and being dead*" (Alexander 1977, p. 223).

Many of the key figures of contemporary architectural theory also consider *life* as a starting point for their investigations on designing places and city planning. Jane Jacobs – who changed the modernistic paradigms of city design – talks about this explicitly in her book *Life and Death of Great American Cities* (Jane Jacobs, 1993). Jan Gehl went even further by saying that what is important in architecture is not buildings but *Life Between Buildings* (Gehl 2006).

Alexander made 'Designing for Life' the central question of his theory. In his book '*The Phenomenon of Life: The Nature of Order*" he elaborated on the definitions of life and gave examples and guidelines which could help answering the question: "What architecture makes us feel more alive?" (Alexander 2001, p. 32).

As educators who value critical thinking and individual development, the authors of this text did not want to give students any prescriptive set of guidelines or answers. Instead, a long term discussion was instigated based on the debate around the topic *life and architecture* where the live project *Lincoln's Orgone Accumulator* became a thought-provoking argument and a good starting point.

5) Questions concerning the brief – Asking Le Corbusier.

Maybe confronting students with such a controversial and ideologically driven brief was inappropriate? Many students might easily ideologically oppose Reich's ideas and from a scientific point of view, it could be questioned whether such ideas branded as pseudo-science should be presented at the university at all. Yet, authors were convinced that an orgone accumulator makes good material for student architectural brief for various reasons. All too often students tend to follow only their own taste and their own ideological convictions while in fact the architectural profession should be in a great deal a service to society where understanding the needs of the client is paramount. Great architects were able to design impressive churches while being atheists. A notable example is Corbusier and his Chapel Ronchamp. Secondly, cooperating with a client – the CEO – will bring educational benefits related to learning about the challenges of the architectural profession e.g. conflicts between creativity and practical completion or conflicts between architectural visions and the client's expectations. Thirdly, as mentioned, the orgone accumulator's core question which related to easily to life was a great starting point for a discussion about city life and the relationship between life and architecture in a broader sense.

6) Stages of work and methodology.

Students were presented with Wilhelm Reich's theory and at the same time asked to familiarize themselves with architectural literature focusing on the idea of *life* and enhancing the relationship between *life* and *architecture*. The brief was called "Architecture as Celebration of Life".
In the brief students were asked to design – first individually and then as a group – '*An Orgone Accumulator for the 21st Century',* which should be a 'mobile, aesthetically pleasing, ontologically challenging thing of beauty' (UoL 2017). They were asked to develop their own position in response to the core question: "Which architecture makes us feel more alive? And what is LIFE and LIVING at all?"
The whole project was divided into four main stages:

1) During the first stage – after making themselves familiar with relevant theories – students were asked to develop their own proposition of an orgone accumulator illustrated by drawings and models. These propositions were presented and discussed in front of the whole group and the client.
2) The second stage was planned as a group negotiation of the final design. Students were supposed to take into consideration client's remarks as well as financial and practical constraints. In these stages, all the students were asked to discuss issues such as: practical aspects of

preparing the work, purchasing the materials, preparing the practicality of work stages, distributing the work among all students in the group, etc.

3) During the third stage students were focusing on manufacturing the elements and finally constructing the orgone accumulator.
4) The final stage was probably the most relevant: Individual reflections on the process of design and construction. Students were asked to summarise the work and reflect on the whole process.

From the research point of view the monitoring of the process and finally identifying of the reappearing themes in the students reflections allowed the authors to view the potentials, limitations and any conclusions drawn from the process.

Stage One – individual propositions

The first, individual stage of the project revealed a wide spectrum of propositions and directions for interpretation of '*Orgone Accumulator for the 21st Century*'. Some students deviated far from Wilhelm Reich's original guidelines. Some of them referred more closely to architectural theories concerned with life in the cities. This variety is illustrated by some examples of students' work presented below.

● Lewis Wake's initial idea developed together with Idris Owen and Paul Wetherall was to create the accumulator as a kit of parts that could easily be transported to any location for its use within a city. In this way the accumulator itself was more than just one item. Before you got to the core of the accumulator you had to walk through a series of 'charging gates' to prepare you for the time within the accumulator. After the session in the accumulator you would walk by a set of discharging portals made out of different materials and located across the city. In this way the whole city became part of an orgone accumulator and would be filled with orgone itself.

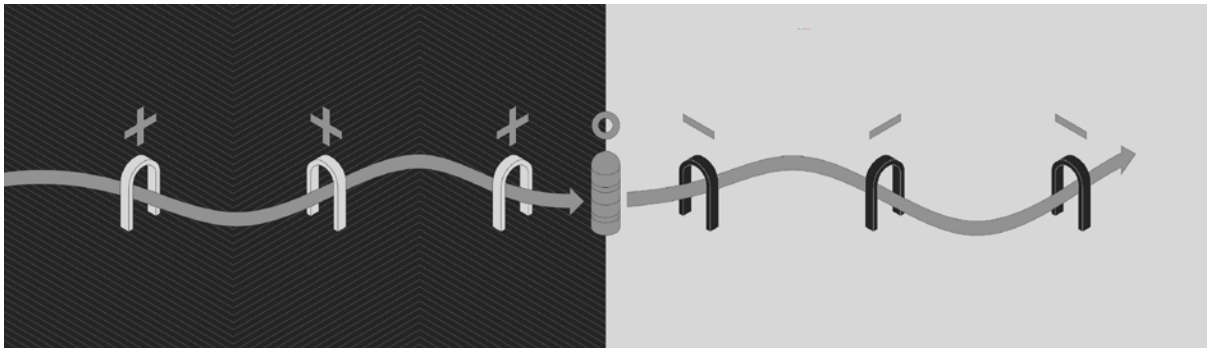


Figure 2. Design by Lewis Wake

● Evangeline Alice Lee combined the idea of an orgone accumulator with a form of the zoetrope – the pre-film animation device that produces the illusion of motion. It is worth noting that the name *zoetrope* was composed from the Greek root words ζωή, zoe meaning "life" and τρόπος, tropos meaning "turning" as a transliteration of a "wheel of life". This static structure could be used as a detector of life in the cities. According to Ms Lee such life stimulation devices are especially needed in part of the cities which are for various reasons perceived as more and more dead.

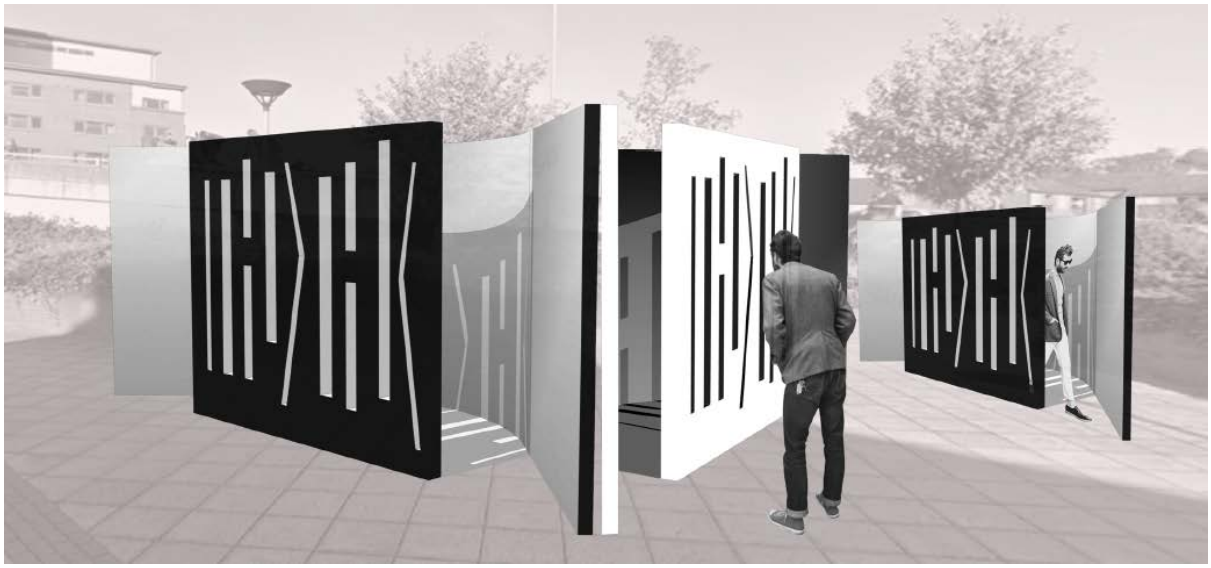


Figure 3. Design by Evangeline Alice Lee

● Nefeli Alexaki believed that it is the social interaction that makes us feel alive. Her orgone accumulator offered a social place where people could meet in a tent-like structure. It was supposed to create node points which bring life to the city. Ms Alexaki believed that an erupting volcano-shaped structure with various organic and non-organic materials fixed to the net-roof should address Reich's philosophy and attitude.

Figure 4. Design by Nefeli Alexaki

● According to Mark Hutchings, one of the important principles behind the functionality of an orgone accumulator is the material structure that builds up the outer shell. Water and natural substances attract orgone energy. Mr Hutchings followed Reich's original principle where man-made materials such as metal reflect the orgone energy. Using these principles it is possible to repeatedly layer up the two types of materials to create an outer wall of the accumulator that reflects and then reabsorbs orgone, exposing the user to higher levels of orgone when inside. Using the idea of reflection and absorption Mr Hutchings created an Orgone Portal which people can pass through while walking in the city.

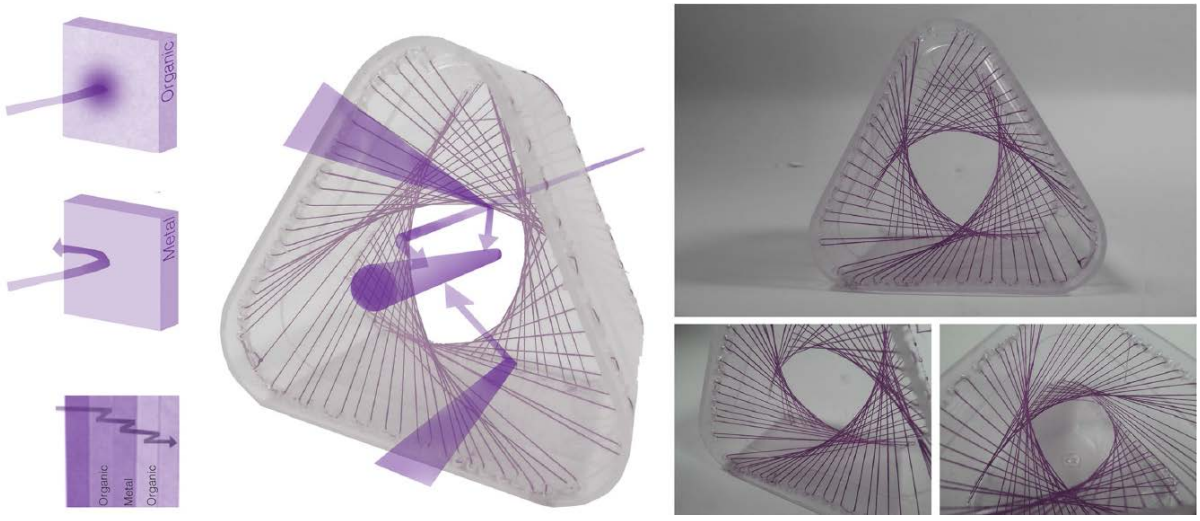


Figure 5. Design by Mark Hutchings

Hutching's concept has been developed towards a concept of '*String Portals*' which were a fixed structure. The layering effect will still be in use throughout the portal thus increasing the potential orgone energy exposure when passing through the structure.

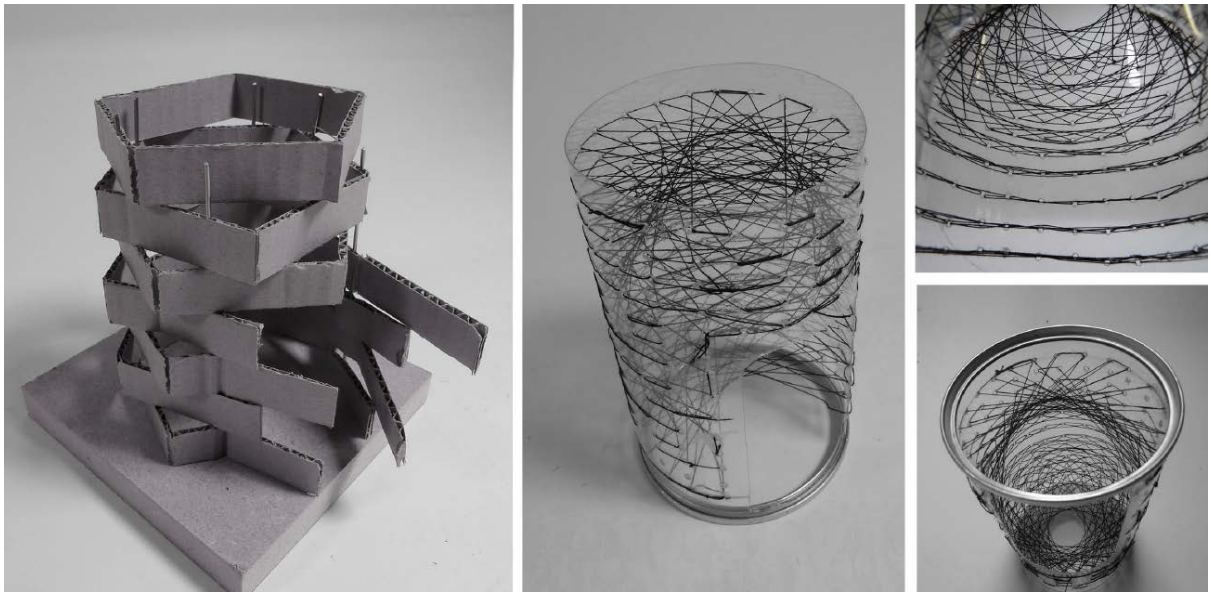


Figure 6. Design by Mark Hutchings

Stage Two – group proposal

After the presentation of individual propositions and a series of discussions with the client, tutors and among the group, it became apparent that the final design needed to follow slightly different principles. Firstly, the client was adamant that the Lincoln Orgone Accumulator should be constructed more closely to Wilhelm Reich's original guidelines. It was supposed to be an enclosed space and be planned for only one person to have a session inside it.

Financial constrains as well as manufacturing possibilities added new limitations which had to be taken into consideration. One such limitation was the height of the structure. The orgone accumulator was intended to be displayed at the University Library where the space between the floor and the ceiling was relatively small.

After discussions which were followed by redesigning sessions, the group decided to design a hexagonal prism with vertical external flints. The flints were to function as aerials that would source orgone from the surroundings. Their shapes could also be interpreted as an open book which the mind is encouraged to read.

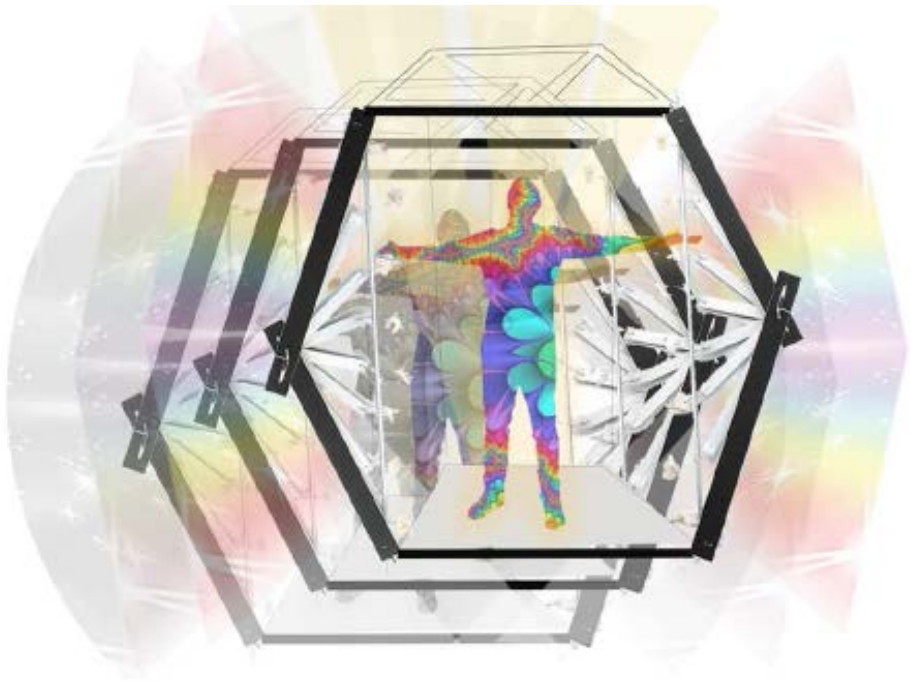


Figure 7. Design by Shree Ramchander

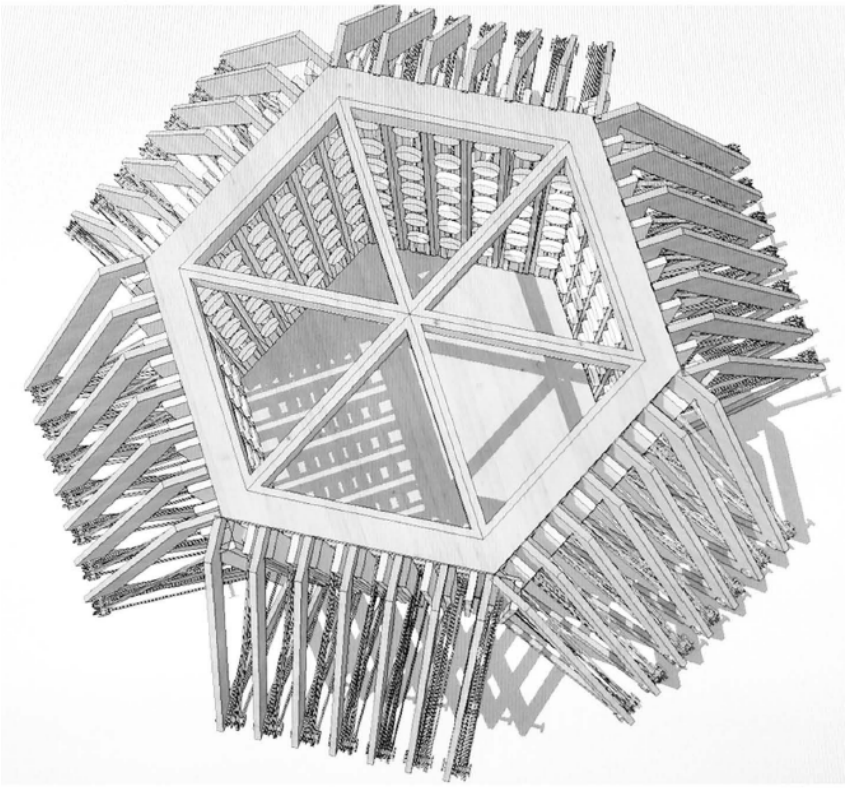


Figure 8. Design by Shree Ramchander

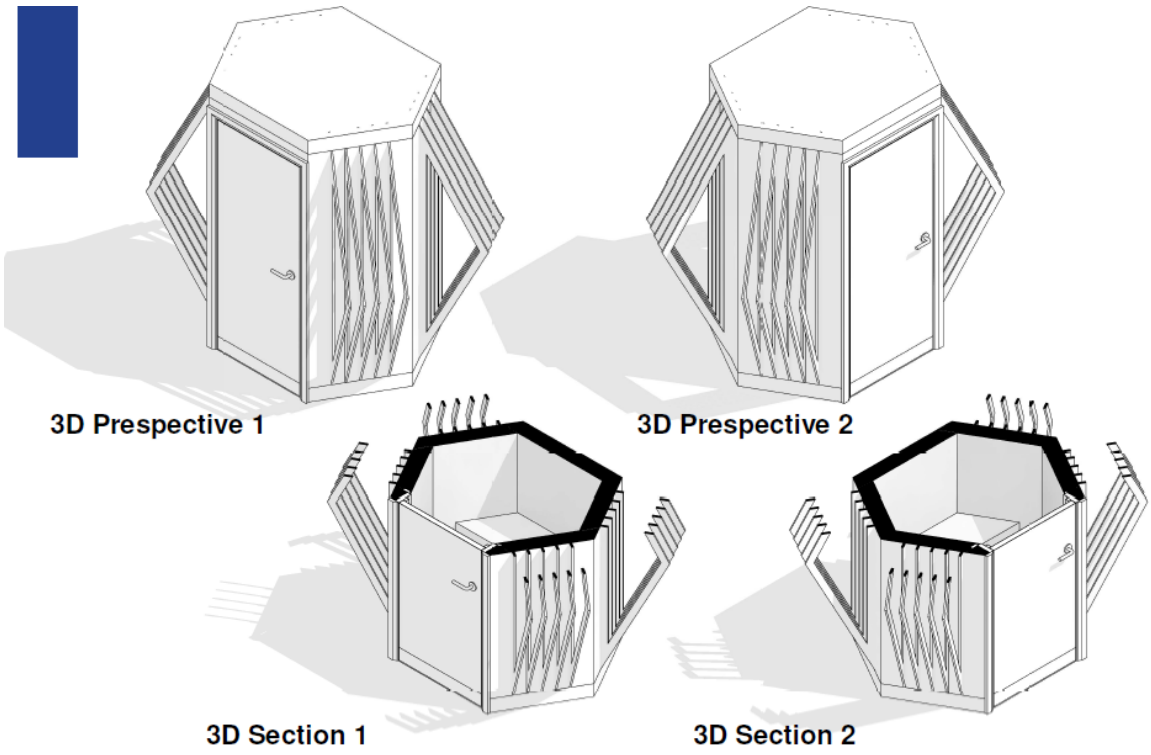


Figure 9. Design by Paul Wetherall

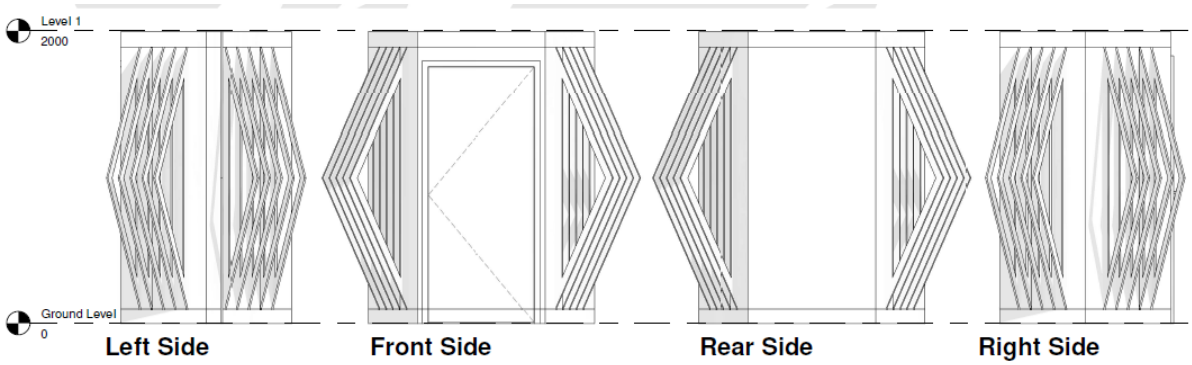


Figure 10. Design by Paul Wetherall

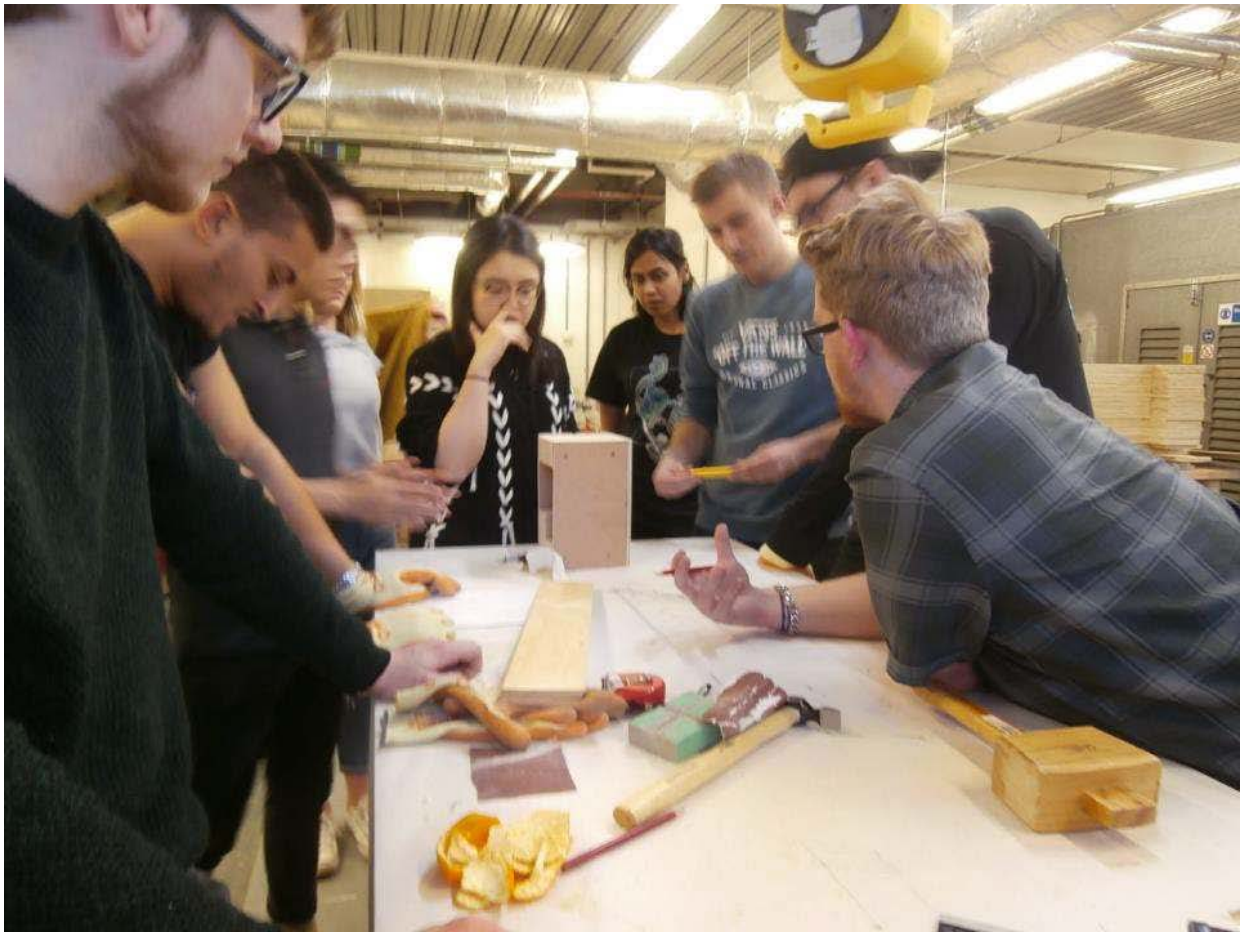
Stage Three: Construction. Let's build it … or not?

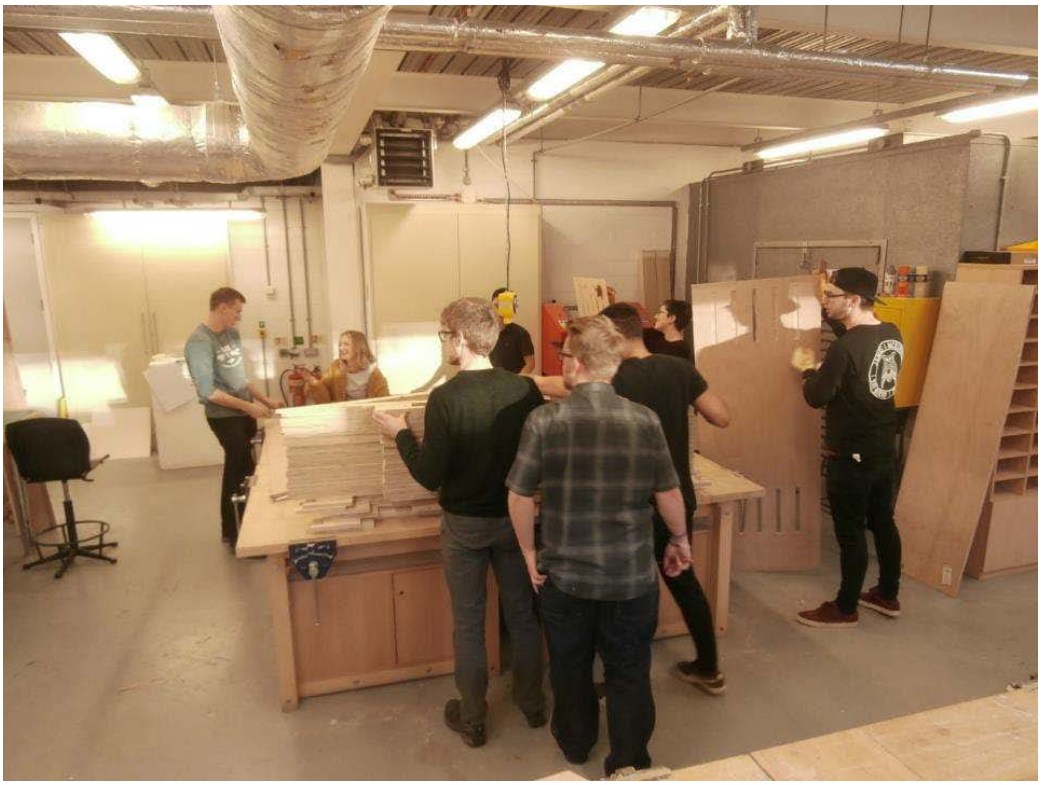
The construction had to be preceded by creating a spread sheet for the ordering the materials. Unfortunately, here the whole project stumbled against serious but prosaic problems with the transfer of funds and accountancy inertia. As a result, the project was delayed considerably. This had a detrimental effect on the morale of the whole group and led to the destruction of the planned time frame.

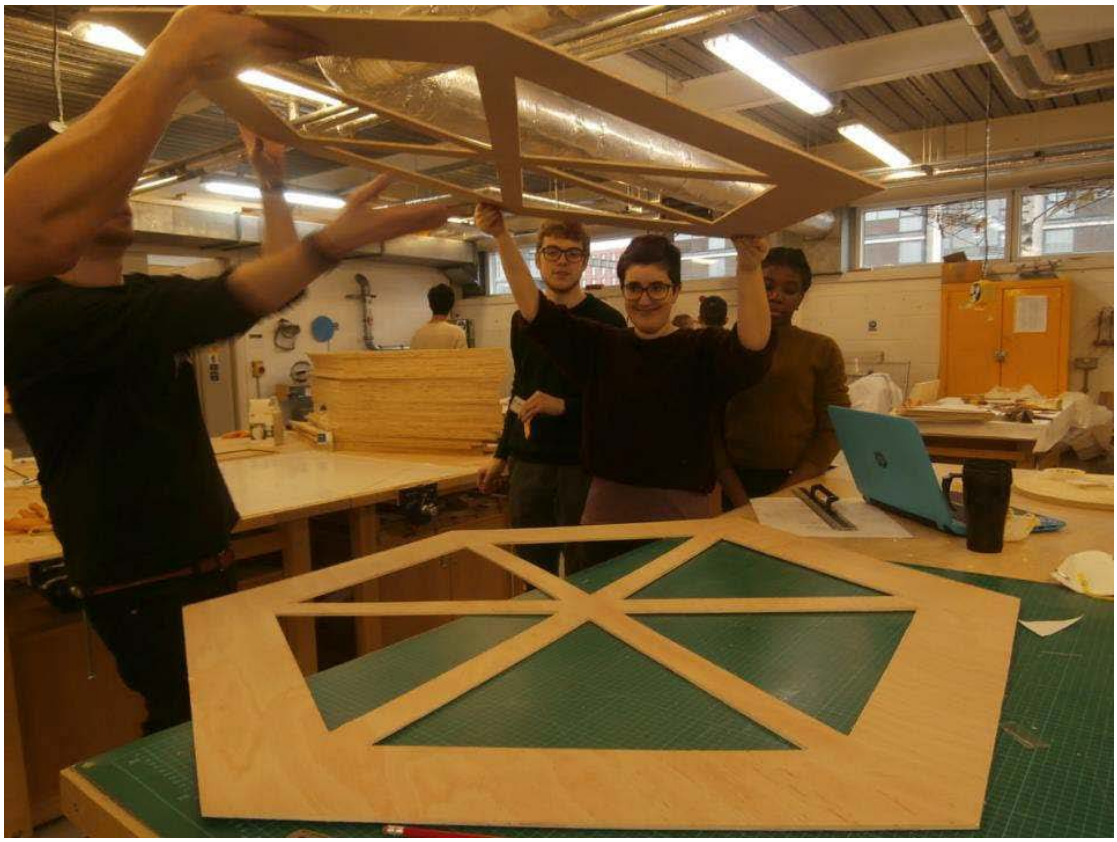
When all the materials were eventually purchased, group work in the workshop started. The cutting, manufacturing and sanding of elements began and soon revealed another series of challenges. It turned

out that some details which have been neatly drawn on computers would not be feasible to produce in reality in a satisfactory way. For example, lack of tolerances in some fixings would create wobbly or unstable joints. Those details had to be redesigned.

Distribution of work within a large group of students also turned out to be difficult because some of them were more dedicated than others. Despite these challenges, the work progressed and after two weeks of work the accumulator was ready to be exhibited.







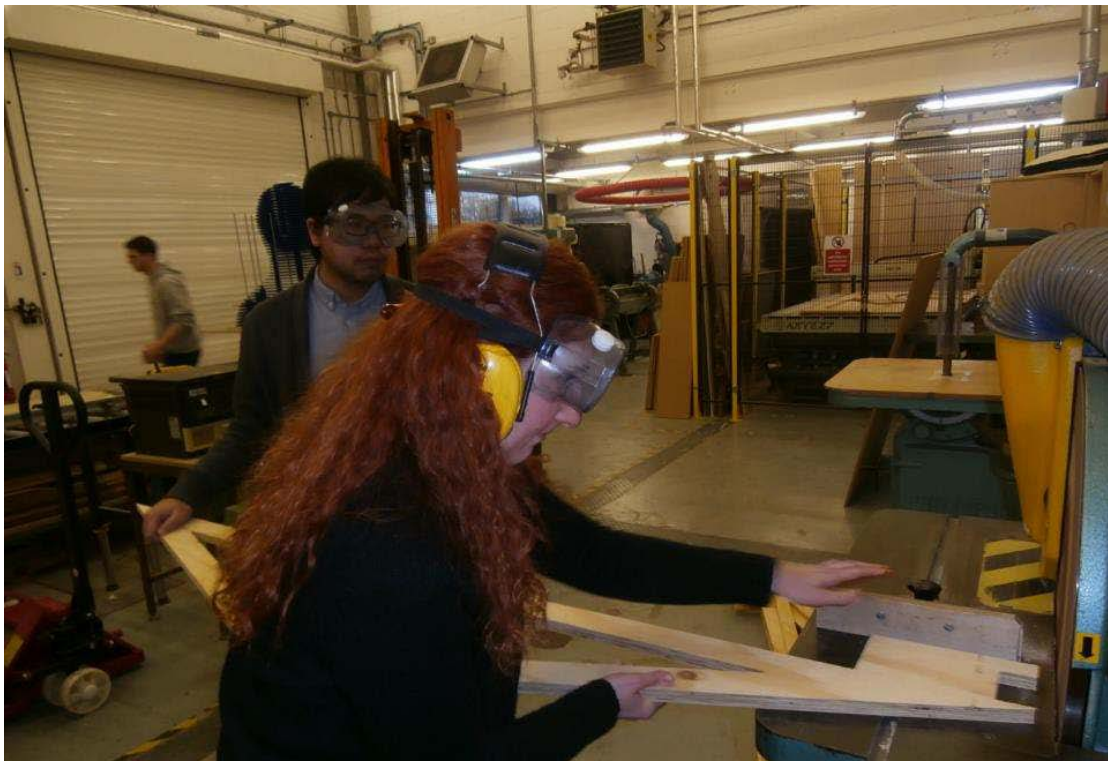


Figure 11 Photos by Nefeli Alexaki

Stage Four: students' & tutors' reflections

Students' reflections on the design and construction were an integral part of the whole project. Students were asked to prepare diaries where they would discuss the creative process from conception to completion and write comments on the benefits and challenges. The following four themes reappeared most often in the comments. These remarks also allowed tutors to analyse the educational context:

1) ● The most common students' reflection related to the organisational disruption caused by bureaucracy and the money transfer which delayed material purchasing and changed the time frame and the dynamic of the whole project.

   ● From an educational point of view organisational problems were to be expected. Realising and dealing with those problems constituted a planned part of the educational process. However, the scale of the problems – the institutional slowness and inertia which did not allow the students to order materials on time had a real demoralizing effect.

2) ● Another recurring reflection related to discrepancies between their initial visions and client's expectations. At the beginning many students envisaged Lincoln's orgone accumulator to be more of a metaphorical interpretation of Wilhelm Reich's guidelines while the client seemed determined to build thoroughly according to the original specification.

   ● The initial idealistic students' visions were in fact purposefully planned as an educational method which could be perceived as a separate project. In the design process, those initial propositions constituted an important idealistic stage which was important as a reference point for further design development. According to the principles of the project, contact with the client had another important educational value. This kind of experience is not usually part of the educational process at higher education level, however, what it offered was an incentive for students to be more focused on the needs and expectations of the client –which should be the key ethos of any architectural production. It also allows for the development of negotiation skills.

3) ● The third reappearing theme related to students' lack of faith in Wilhelm Reich's theory as much as in the aesthetic value of creating a small enclosed space.

   ● These potential internal conflicts could be perceived as one of the unique values of live projects. It confronts students with client's expectations which could be different from their own. Almost all the other student projects at this level of education reflect and focus on their own aesthetical and ideological preferences. This type of work offers very different dynamics and experience.

4) ● On the positive side, it must be noted that many students realised in their reflections that the challenges mentioned above also had a positive educational significance. Most students valued

group work as bonding exercise. Many students also noticed unexpected benefits from being involved in a live project, such as the pride of constructing an object and what was unexpected – the publicity – which made them proud of the participation in the construction of the Orgone Accumulator.

- There were also some unexpected positive outcomes connected with the project. Two radio channels broadcast programs about this project (Siren FM and BBC Lincolnshire). (Radio Siren, 2018) (BBC 2018). Not surprisingly, the Orgone Accumulator attracted believers in Orgone Energy from across Lincolnshire and beyond and it also sparked a series of discussions about the role of science today. The project was also featured in the University publication 'Pearl' (public engagement with research at Lincoln). The Orgone Party organised at the University showed that the life of designers is not only made out of challenges. This publicity allowed students to enjoy the pleasure known to many architects whose projects are completed.

Summary:

2018 Lincoln's Orgone Accumulator could be perceived as a question, as a memorial to the work of Wilhelm Reich but also as a student experimental live project where questions about life and architecture have been asked.

The project was not easy to turn from vision into reality but thanks to the external funding from the CEO, the creativity of students, the orgone accumulator was to be enjoyed across the University campus. Tutors Doina Carter, the course leader, and Dr M. Kołakowski, who facilitated student design and construction, emphasized the hidden educational benefits of this project. Of course, not all students believed in the energy generated by the Orgone Accumulator but the task itself was valuable as a process to reflect on the culturally and philosophically relevant topics which the students would probably otherwise never have learned about. While working with clients, architects cannot always put their own convictions over client's wishes. Nevertheless, the final built live project brought a range of benefits. Workshops like this create an opportunity to meet people who are outside of the architectural circle and discuss ideas which would not normally be discussed. This research crossed the traditional professional boundaries by attracting a wide external audience.

Lincoln's orgone accumulator was designed not only as a tribute to Wilhelm Reich's work. Students were purposefully moved out of their comfort zone in order to face challenges similar to real life situations that architects face. The discussion on links between Reich's concepts and architectural theories allowed the creation of a wider context to students' endeavours. What was most important, however, was that the project allowed reflection upon the key architectural question: How can architecture support life and what

architecture makes us feel alive?

Figure 11. Marcin Kolakowski at the orgone accumulator at the University Library.

Figure 12. Orgone Party, photo by Agnieszka Charzynska

Bibliography

1. Till, J. (2009). *Architecture Depends*. Massachusetts: MIT Press.
2. Alexander, Ch.ristopher et al. (1977) *A Pattern Language: Towns, Buildings, Construction*. New York: Oxford University Press.
3. Alexander, Ch.ristopher 2001. *The nature of Order: The Phenomena of Life*. London: Routledge.
4. Axis Design Architects (2018a). *Jacobs, Newman and the Orgone Accumulator*. [Online]. Available at: http://axisdesignarchitects.com/blog/ / (Accessed: 25 July 2018).
5. Axis Design Architects (2018b). [Online]. Available at: https://www.slideshare.net/eversion/jacobs-newman-and-the-orgone-accumulator / / (Accessed: 25 July 2018).
6. Bauer, Henry H. (2000). *Wilhelm Reich in Science or Pseudoscience?* University of Illinois Press.
7. BBC (2018), Radio broadcast, Orgone Accumulator in Lincoln, 29th March. 7.50am
8. De Meo, J.,(2007). *The Orgone Accumulator Handbook*. Oregon: Natural Energy Works Publication
9. Einstein, A. (1953). *Einstein's letter to Reich, 7 February 1941, in Reich, The Einstein Affair, 1953*.[at;] Sharaf 1994, p. 286.
10. Gehl, J.an (2006). Life Between Buildings: Using Public Space, The Denish Architectural Press, Skive
11. Hamdi, N (2010). *The Placemaker's Guide to Building Community (Tools for Community Planning)*, Oxon: Earthscan.
12. Harris, H. and Widder, L. (2014) *Architecture Live Projects: Pedagogy into Practice*. London: Routledge.
13. Jacobs J.ane (1993) *The Death and Life of Great American Cities*. New York: Modern Library

14. Osho News (2018). *Orgone Accumulator Egg* [Online] :https://www.oshonews.com/2013/09/26/orgone-accumulator-egg/ (Accessed: 25 July 2018).

15. Radio Sirene (2018). [Broadcast:]*Orgon Accumulator at University of Lincoln,* Radio Sirene Lincoln, 16th March at 5pm.

16. Roeckelein, J.on E. (2006). "*Reich's Orgone/Orgonomy Theory*," *Elsevier's Dictionary of Psychological Theories*. Elsevier

17. Sara, R. (2006). *CEBE Briefing Guide Series, No.8: Live Project Good Practice: A Guide for the Implementation of Live Projects*. Plymouth: University of Plymouth.

18. Sharaf, M.yron (1994). *Fury on Earth: A Biography of Wilhelm Reich*, Boston: Da Capo Press..

19. Strick, James E. (2015). *Wilhelm Reich, Biologist*, Harvard University Press.

20. *Student as Producer* (2018). Student as Producer. Available at: http://studentasproducer.lincoln.ac.uk/documents/ / (Accessed: 25 July 2018).

21. Till, J. (2009). *Architecture Depends*. Massachusetts: MIT Press.

22. Turner, Ch.ristopher (2011). *Adventures in the Orgasmatron: Wilhelm Reich and the Invention of Sex*. New York: HarperCollins.

23. Unwin S.imone (2014) *Analysing Architecture*. Oxon: Routlege

24. UoL (2017) From students Brief in academic year 2017/2018 Module „introductory Design project ARC 9001

25. Watt, K. and Cottrell, D. (2006). Grounding the curriculum. *International journal of learning*, 13.

26. Zumthor Peter (1988). *Thinking Architecture*. Basel: Birkhäuser