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New European Bauhaus - opportunity to join creative efforts

In 2018 – 2020 I was a leader of the team working on **the Design & Innovation project** coordinated by the Slovak Design Center in Bratislava and supported by INTERREG V-A Slovakia-Austria 2014 – 2020 programme. We learned a lot from the collaboration among partners, respected cultural and educational institutions from Slovakia and Austria. I would like to share in this contribution to our discussion about the New European Bauhaus project several themes, case studies or models we started to elaborate with my colleagues from several institutions dealing with design, digital culture, community development, education of young professionals and more.¹

Innovation in past and present

One of the main aims of the Design & Innovation project was to confront two different periods that we can compare, study and learn from them. One being the interwar period when the School of Arts and Crafts in Bratislava (Škola umeleckých remesiel – ŠUR), also called "Bratislava Bauhaus", was active (1928 – 1939), the latter period is our contemporary world and society.

Therefore we included **the symposium School as a Laboratory of Modern Life** in the portfolio of activities as an essential platform for connecting the study of history with the current professional context. While researching the first Slovak school of arts and crafts, my colleagues and I were often puzzled by minor or significant analogies between the contemporary post-November 1989 society and the thinking and development of Europe after the First World War: the times of democratisation and significant artistic and social movements, but also the Great Depression and the advent of national socialism in Germany.

In another part of the project, **exhibition Human by Design**, we talked about current places of innovation (creative centres) and institutions actively bringing about and subjecting themselves to change; pursuing social design and connecting work with life.

Parallels between them and the interwar period can be found in the educational institutions that focused on the reform of art education which had "modern life" in their motto. Antonín Hořejš, the founding personality of ŠUR in Bratislava, celebrated the "new applied arts movement" aimed at "improving the lives of people on this planet if it can be achieved by virtuous and beautiful production" (see note 1, symposium proceedings p. 33). His opinion corresponds with ours; he stated that design and creative disciplines have the capacity to significantly influence the way we live and inhabit a shared living space.

The planet is a term used by more people than ever before. At a time when the pandemic has "trapped" more than a billion people in their homes, with European countries closing their borders again – the fates of our intellectual colleagues from the reformed schools of the past remind us that the pursuit of "improving human life" is a neverending process. These schools, laboratories of life, often in the background of artistic, cultural, and aesthetic activity, have passed on the legacy of something else – a free mindset and social solidarity, the importance of critical thinking and science, while calling attention to the balance between human needs and the interests of society as a whole and the planet.

Bauhaus was the most known centre for innovation in its period but there were many more movements in other countries. In 2019, symposium School as a Laboratory of Modern Life brought together researchers of schools and movements similar to Bauhaus. The Slovak Design Center's intention is to continue in bringing them together and to research connections among them in the interwar period but above all to identify influences of the centres for our contemporary world.

The symbolic connotation of Bauhaus and its inspirative use for the campaign of New European Bauhaus is therefore great news for me and my colleagues. I can see many connections that can be built on findings of researchers over Europe and the world.

Contributions for the present and future

Another big theme is a contribution for the common aims by all regions/countries/communities not depending on their size or economical development. In the above mentioned **exhibition Human by Design**, we collected examples of how designers, artists, architects think about the current world situation and how they take an active role in bringing positive changes.²

The exhibition choose subtitle Probing Social and Methodological Innovation in Design and borrowed its name Human by Design from the title of a book by an Australian philosopher and design theoretician, Tony Fry, Becoming Human by Design from 2012 which analyses the role of design in human adaptation to changing conditions — thus in survival of humankind.

Under the influence of radical changes humanity has been going through in the past thirty years, the attention of designers is diverting from creating objects to ideating concepts. Increasingly often, we hear about the need to change the attitude and philosophy in design creation; we are prompted to act responsibly towards nature, including humankind. Design and its practice and theory respond to this situation by the creation of methodologies such as design thinking, critical design, social design. Innovation, rather than focusing on achieving higher performance and speed, concentrates holistically more on the change of the whole environment — innovation takes place in society and methodology.

The exhibition presented examples from Slovakia – concepts, methods, model situations, case studies, and innovative solutions that expressed this urgent desire for change and sustainability. It introduced critical but not defeatist voices, gave examples of solutions from practice, and the ways how the young generation of designers and theoreticians think. The presentations of already-existing or currently developed projects arose by the commission of the exhibition curators. The exhibition as a whole worked with visuals and examples comprehensive for the lay audience. It also aimed to bring a picture of the current state of affairs for experts — the state of thinking and interest in themes of change and most clamant problems. However, it also aimed to indicate a particular typology of positive solutions and show the representatives of creative disciplines as positive leaders and initiators of change. **Few examples:**

New principles in energy and product production, more environmentally friendly use of materials with minimised impact on nature are today the focus of research and development. Not only large teams of specialised laboratories and centers contribute to their development, but designers and studios often initiate them. However, their cooperation with research centers is natural and welcome, as in the case of the flagship project for the development of bio-plastics in Slovak design by **crafting plastics! studio** (Vlasta Kubušová, Miro Král). We used the exhibition as a platform to present the development of the new material NUATAN* and the story of the studio embarking on a daring journey of material design instead of designing products. The principle of energy production **S.P.E.A.R.** was presented in the exhibition by a model which stood at the birth of a promising project which may become an alternative to the conventional rotational turbines. (see figure 1 and 2) **The project Repairably – (un)repairability from the Repairably association.** The worry that strict rules may become a tool of power, with which the democratic society will be manipulated, accompanies every implementation of new regulation influencing the free-market principles. Repairability of products is; however, the topic which is becoming undeniable and belongs to the priorities of many consumers when buying a new product. The topic of repairability inter-connects the world in which grandparents lived with the new world of grandchildren who again want "lifelong" products around them. (see figure 3)

Places of Innovation were for exhibition curators the places with critical concentration of people eager for change, and who are agile enough to find ways how to achieve the change. The exhibition presented currently the most intensive creative place of spontaneous innovations of societal and technological nature in Slovakia — the creative center Nová Cvernovka and several themes worrying its residents. We made two documentaries showing the philosophy of people working in one place, interested in the impact of their work, and trying to create a microenvironment, model culture center that also inspires others. One of the films presents the festival Nasuti which interconnects art with sustainability.³ (see figure 4 and 5)

The Zero Impact project by pedagogues and students of various art schools led by a team from the Academy of Fine Arts and Design in Bratislava. The zero impact of human activity as a target contradicts the current status of the textile and clothing industry — one of the greatest polluters globally. The authors of the project showed how young textile and clothing designers need to be educated, how to work with manufacturers, and how to do so in the way making young designers become a part of the entire cycle from design to product distribution.

The Slovak Design Center started to innovate its structure with the aim to respond more flexibly to the changing situation in society. Since 2019, it opened a new Research & Development Department which presents its activities under the brand Inolab. Its first outputs are the Library of Materials (LOMA) and H.U.R.B.A.N. selector software featuring shapes generation — an open platform for testing design boundaries. (see figure 6 and 7)

New European Bauhaus brings the opportunity to join creative efforts and create an environment where nature and culture are not opposing forces. We have to come together at several levels to address the theme of changing the setup of society. It is necessary to make use of the talent and enthusiasm of individuals, possibilities of NGOs and creative centers, educational and public institutions in order to achieve common aims.

Notes

¹ More about the Design & Innovation project see: https://www.scd.sk/?dizajn-a-inovacie and https://www.scd.sk/?wpd

Following text is based on my 2 introductions for publications of the Design & Innovation project:

Mária Rišková, Vytváranie spojení / Establishing Connections, in: Simona Bérešová, Klára Prešnajderová, Sonia de Piuneuf (eds.), *School as a Laboratory of Modern Life. On the Reform of Art Education in Central Europe (1900-1945)*, [symposium proceedings], translation: Katarína Kasalová, published by the Slovak Design Center in Bratislava 2020, pp. 12-15.

[online https://www.scd.sk/swift_data/source/publikacie/knihy/sur/SUR_katalog_international_version-separate_2.pdf]

Mária Rišková, Human by Design, in: HUMAN BY DESIGN, Probing Social and Methodological Innovation in Design, [exhibition catalogue], translation: Katarína Kasalová, published by the Slovak Design Center in Bratislava 2020, pp. 11-16. [online https://www.scd.sk/swift_data/source/dizajn_a_inovacie/human_by_design/HbD_katalog.pdf]

² See **HUMAN BY DESIGN ONLINE FINISSAGE** (April 8, 2020), commented tour at: https://www.youtube.com/watch?v=j8AjARGKzhI&t=3s

³ Both documentaries are online with English subtitles:

Nová Cvernovka - Innovation Space, a short film about Nová Cvernovka in Bratislava.

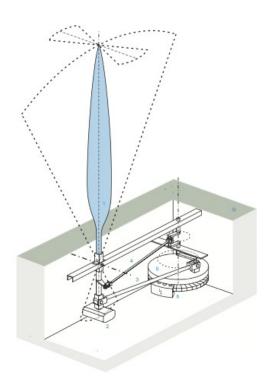
 $https://www.youtube.com/watch?v=j_Zm9q08SFY\&t=1s$

Festival Nasuti, a short film about the Nasuti festival in Bratislava. Nasuti is a festival of contemporary art with an environmental focus, combining creativity, art, design, innovation and ecological thinking. https://www.youtube.com/watch?v=TKUtXO1V4G8

Figure 1., crafting plastics! studio and new material NUATAN®, credits: HUMAN BY DESIGN catalogue, p. 22.



Figure 2. S.P.E.A.R., environmentally friendly power plant, credits: HUMAN BY DESIGN catalogue, p. 31.



CFD and calculations

Computational fluid dynamics (CFD) and mathematical modelling show preliminary power output of:

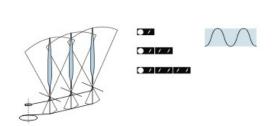
17 kW per 9 m blade in 12 m/s wind in an aerial solution. 150 kW per barge on the Danube for a hydro solution.

CFD a výpočty

Počítačová dynamika tekutín (Computational fluid dynamics – CFD) a matematické modelovanie ukazujú predbežný výkon:

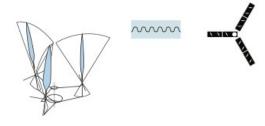
17 kW na 9 m lopatku pri vetre s rýchlosťou 12 m/s pri veternom riešení.

150 kW na čln na Dunaji pri vodnom riešení.



Linear and radial

Multiple blades can be connected to a single generator, reducing costs significantly.



Lineárne a radiálne

Pripojenie viacerých lopatiek k jednému generátoru prináša výrazné zníženie nákladov.

Figure 3. Repairably project, credits: HUMAN BY DESIGN catalogue, p. 27.

10 principles of making repairable products



Product repair guides, list of components and tools are published on the repairably website 20 20% rule

No component costs more than 20% of the price of the product

120

120% rule

The total price of all components is no more than 120% of the price of the product



No legal restrictions

No legal aspects, other than possible void warranty, limit the product disassembly



Open Source Rule

Component that ceases to be made available by producer is open sourced





Components Availability

All components are available at all times



Tools availability

Tools are available at all times



Product can be fully disassembled and reassembled



Repair guides are available at all times



Software availability

Software is available and maintained at all times

Figure 4. Nová Cvernovka, Innovation Space, credits: HUMAN BY DESIGN catalogue, p. 45.



Figure 5. Nová Cvernovka, Innovation Space, credits: HUMAN BY DESIGN catalogue, p. 41.



Figure 6. LOMA - Library of Materials in Slovak Design Center in Bratislava.



Figure 7. Inolab (Research and Development Department) in the Slovak Design Center in Bratislava.



Photos: Slovak Design Center's archive