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EDITORIAL

The coronavirus pandemic: How can design help?

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There is almost no one on earth that is not affected or will remain unaffected by the coronavirus pandemic. The world which has become a single connected network is breaking up most of its physical connections as many countries are shutting off their borders in an attempt to slow the pace of infection; trying to contain it. At the same time, the virtual highway becomes congested as anyone who can, move their activities online. Suddenly, our common challenge leads researchers and engineers to cooperate in better understanding the situation from many perspectives in order to help each other fight the disease.

Clearly design has a role in this situation; for example developing and producing critical medical products that are good enough even though below usual quality standards and without regulatory approval, or even complete functionality. Prominent examples are the attempts in different countries, to provide hacked solutions to the shortage in respiratory machines.[1] While different countries are chasing after existing manufacturers of such equipment, leading to the soaring of their prices, it is clear that the demand will significantly exceed the supply. Agile processes, 3D printing, building on existing relevant products, and massive open collaboration are some of the strategies to win the race towards functioning products. The opportunities to exercise ingenious design are phenomenal in topics such as isolation and disinfecting materials and equipment, medical equipment and service, treatment planning under extreme demand, surveillance, data analysis, forecasting, etc.

I am assuming that we will overcome the pandemic and as designers, we need to look beyond; the question to pose is what is next? How can design help in post-coronavirus era? Do we come back and continue from where we left or do we start afresh in a new direction? It may be naïve to even think of the latter possibility. Just months ago, the world was having endless arguments about the state of the environment, its impact on humanity, and the measures necessary to address it. These arguments did not resolve into a serious action plan. There are economic forces that reject action. But the coronavirus is questioning globalization, consumerism, and the type of lifestyle we used to have weeks ago. It is as if nature tells us that we have been messing too much with it. In view of the escalating death toll and the prognosis of many more to come, governments take extreme measures that were never practiced. We are definitely learning from our present experience and understand that when we overcome the situation, we may have new opportunities.

Now, when everybody understand that we may need some change, is a time we can think, plan, and act; time to come up with future priorities for design. I would like to propose some based on my personal inclination and you can rethink your own; different perspectives and dialogue would be most fruitful (Subrahmanian et al. 2020), and such contributions are welcome.

I propose that we try to design a better world with better future (Subrahmanian et al. 2018); a transdisciplinary endeavor that is hard but rewarding. Such effort could address making the world more equal on a local and global scale (Jagtap 2019) including improving the methods to study it (e.g., Wood and Mattson 2019); a different perspective on equality is also achieved by inclusive design (Clarkson et al. 2013). Sustainability is also a critical issue to address (e.g., Prost et al. 2017; Santolaya et al. 2019).

Resiliency of communities whether general or designers seems to be very relevant to future critical scenarios as we face today (Yang and Jiang, 2020). If we allow ourselves, we can even rethink what design is (Subrahmanian et al. 2020).

Design has the best chances to impact and improve quality when exercised early; now it's the time to act. Wishing you and your dear ones good health and please help us design a better future.

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[1] E.g., AmboVent 1690.108 https://1nn0v8ter.rocks/AmboVent-1690-108.

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