

Co-design for the common good: a holistic approach to workspace projects



Stefania Palmieri¹, Mario Bisson², Alessandro Ianniello³, Luca Botta⁴, Riccardo Palomba⁵

 ¹Design Department, Politecnico di Milano stefania.palmieri@polimi.it
 ²Design Department, Politecnico di Milano mario.bisson@polimi.it
 ³Design Department, Politecnico di Milano alessandro.ianniello@polimi.it
 ⁴Design Department, Politecnico di Milano luca.botta@polimi.it
 ⁵Design Department, Politecnico di Milano riccardo.palomba@polimi.it

Abstract

The design of workplaces that are both quantitatively and qualitatively aimed at creating the right work environment is a topic of extreme interest, at various levels. Starting from the indications of the International Labor Organization (ILO, 2022), it is essential to preserve, or establish, models that encourage a healthy lifestyle, in safe, and enhancing environments.

Elements such as perception of space, cognitive psychology, semiotics, and anthropology, become essential drivers to design contemporary workplaces: our society is constantly changing and, consequently, so are the spaces that define and characterize it.

Due to the radical change that are modifying the idea of work, a great transformation is being witnessed: time assumes a preponderant role in the definition of working environments, which must be constructed considering this dimension, that goes alongside the spatial one, in turn redefining the very concept of work.

In light of these introductory considerations, the contribution proposes the examination of different case studies that highlight the evolution of workspaces and environments and the best practices in the present, to create projects consistent with the new needs of workers, companies and, more generally, of society.

An approach based on a mix of of Co-Design (Sanders and Stappers, 2008) and Design for the Common Good (Dorst et al., 2016) can thus be effective to introduce the principles of inclusivity and care. Co-Design makes it possible to actively involve all stakeholders, such as companies and workers, by aligning their ideas towards a common goal, with the aim of defining some of the criteria that will affect future project developments. The Design for the Common Good (DftCG), born as an evolution of Design for All and based on the concept of the common good (Hussain, 2018), becomes fundamental to design in favor of communities, spaces and places. The contribution concludes, therefore, with the proposal of a vision, derived from a collaborative project actually carried out with an Italian company, that highlights the role of Design as a facil-

itator of complex realities and activator of innovative processes capable of triggering social and behavioral transformations.

Author keywords

Co-Design; Workspace; Common Good; Inclusivity; Care.

Introduction

In recent years, there has been a growth in awareness about the possible impact on health caused by the working environment (Jensen and Van der Voordt, 2020) and it has become even more of a concern during the Covid-19 pandemic (Cirrincione et al., 2020). A workplace is a complex composition of many different and sometimes conflicting elements (Colenberg & Jylha, 2021), therefore, the creation of healthy working environments requires a broad view of potential health risks and drivers for people. Generally, buildings are designed primarily for traditional working practices adopting patterns that tend to be repeated across multiple sectors and office typologies (Szarejko and Trocka-Leszczynska, 2007). However, they have undergone gradual change as work models have evolved towards flexible and agile practices. An integrated workplace strategy that takes into account people's requirements and needs is relevant to the success of the project (Appel-Meulenbroek, 2016). In a study conducted by Nanayakkara et al. (2021), the authors identify a relationship between organizational culture and office layout, suggesting that different layouts support different cultural dimensions; they state that one of the main reasons for changing the existing layout is to shift one's own culture or to further consolidate the existing. Thus, office spaces should be designed to exploit the physical environment and to add maximum value to the employer's objectives, allowing them to choose the degree of interaction that is desired. The design of workspaces that are suitable for the constantly transforming needs of workers and companies is a complex activity that involves various actors and that must necessarily understand the designed space as a means to enhance the common and shared good, which must be taken care of and, at the same time, must foster inclusion and accessibility.

The aim of the contribution is to present a vision for the design of corporate workspaces, based on the disciplines of Co-Design and DftCG, and derived from activities carried out in collaboration with an Italian company.

The soft design elements for workspaces: a case history

Considering the literature analyzed, it can be affirmed that if, on the one hand, the norms and quantitative values to be followed for the design of suitable and well-being-oriented places are rooted in the design culture, on the other hand, it becomes fundamental to take into consideration a range of qualitative factors that are equally necessary to achieve these goals.

Being physical spaces, an extremely relevant element is the sensorial perception one has of them: it is through the senses that human beings relate to the lived environment (Permana et al., 2020). These are stimulated through the spatial design of such elements as spatial partitions and transitions, furniture, lighting sources, sound insulation, materials, accessories and space-related technologies (Ching and Binggeli, 2018).

A further remarkable factor is the psychological cognition that the designed components provoke in the individuals living the workspaces. These places must be able to provide information on their use, and to give feedback on the actions performed within them (Ching and Binggeli, 2018); to emphasize the correct relationships between their constituent elements and those with human beings (Zhang and Ham, 2021). Places are connected to the identity value that is perceived and shared: signs and meanings establish a relationship between the occupants and the space (Brill et al., 2001). It is fundamental to consider what values should be communicated and how they can be perceived and understood during the design process.

Google's offices in Zurich are an excellent example as they are designed to welcome the employee in a peaceful environment, exploiting a playful configuration of the rooms and the activities to be carried out within them. One of the design principles is to move away from the mental construct of the standard office to transform the space in a debunking logic. Google was one of the first companies to support a hybrid approach to the organization of work (in the office and smart-working), to invite its employees to dedicate part of their time to personal activities, and to validate their work on the basis of the achieved objectives and not on time-based logics. This radical perspective has been one of the most influential drivers for the design of its workplaces.

If the workplace is the bearer of identity and intangible values (of the company of reference), so are the people who live and experience it, each with their own subjective, social and cultural differences. By applying an anthropological perspective, which contextually analyzes the attitudes and behavior of individuals, it is possible to understand work motivation, considering the personal cultural system and the set of collective values within which work activity takes place (Creary, 2020). Therefore, it is fundamental the contact points between both spheres: anthropological studies (Chang et al., 2021) highlight how social fabrics are constantly changing, analyzing various trends on different time intervals (secular trends, major trends, medium trends, minor trends). In this perspective, the Covid-19 pandemic has, on the one hand,

opened up a reflection on the actual value of workspaces and on the possibility of alternating moments of physical meeting with others of exclusively digital connection; on the other hand, it has had a strong impact on the management of worktime.

A significant example is the Microsoft headquarters in Milan, which has a strong cultural value in the neighborhood in which it is located, through the promotion of aggregation and divulgative initiatives. The building connotes itself as a hybrid place, combining different functions, from work to entertainment and dissemination: on the ground floor there is a showroom that should immerse visitors in the corporate context; on the first floor the technological research center is designed to encourage, also, moments of meeting and networking between different actors. There are spaces entirely dedicated to hosting events, while the last two floors are occupied by employees' offices. The design of this building is guided by the concept of open space, which has made it possible to define a place capable of nourishing innovative working and relational logics, both within its own spaces and in connection with the urban context. An operation of this kind is beneficial both for the company and its employees, and for the community. Therefore, it can be understood how a workplace should be conceived as a complex organism, characterized by various dimensions and elements, capable of generating or modifying relations with and between the people who live it: the concepts of accessibility and inclusivity assume fundamental importance to design these environments.

The case studies underline the profound changes taking place in the working sphere and, in particular, in workplaces: time and the value given to it are becoming fundamental elements for the definition and construction of spaces that are suitable for the new needs. The sharing, both of activities and of the places that enable them, is another essential driver to design those. Again, the recognition that alterning physical and digital presence can be an important discriminating factor for corporate objectives, becomes a binding element to determine its success, as it is the capacity of the place to relate with the territory and the community that inhabits it.

Co-design and Design for the Common Good for workspace

The study of the reference literature and the analysis of the case studies made it possible to highlight which design methodologies are best suited to achieve the objectives, and which approaches and tools are most efficient in directing the process: this chapter introduces the disciplines of Co-Design and DftCG and how they can positively influence the design of workspaces.

Sanders and Stappers (2008) define Co-Design as an action of collective creativity applied to the entire design process, involving people directly in the delivery of products, services, etc. Its potential is represented, on the one hand, by the possibility of aligning the ideas and needs of the different participants; on the other hand, of being able to exploit transversal and peculiar competences depending on who is involved in the activities. One of the changes taking place in the world of work is the greater propensity of companies to consider their employees as key resources even in internal decision-making processes (Lundgaard and Brandt, 2019): for this reason, workplace design becomes a shared practice between all the corporate's actors and the design team cho-

sen to achieve the objectives. The participation and inclusion of employees in design processes can generate a desire to care for the space, as well as a positive sense of community and sharing, and personal satisfaction (Sanoff, 2011). For a Co-Design process to be effective, the context and the purpose of the activities must be interpreted correctly and become a source of inspiration to involve participants (Brandt et al., 2013). The achievement of these goals can be mediated and facilitated by participatory activities and workshops, through which a common language can be created, a creative and exploratory attitude can be fostered, the construction of future scenarios can be facilitated, and, finally, the roles of the participants can be defined (Mattelmaki et al., 2014).

DftCG (Dorst et al. 2016) is a discipline that evolves the principles of Design for All, Holistic Design and Universal Design, innovating their approach: there is a need for a concrete commitment to remove barriers, especially cultural ones, that limit the possibility of action and interaction between the environment, ecosystems, spaces and humans. In this sense, the DftCG implements a profound paradigm shift: it no longer places the human being at the center of design activities, but rather the common good, understood as part of an inclusive model that identifies values, structures and interests, recognised by the members of a community, stimulating and activating new relational forms, which can be translated into products, systems and ecosystems (Hussain, 2018). The common good is characterized by shared perspective, common structures, a privileged class of common interests, and a solidaristic and communitarian dimension (Fraser, 2021). Applying the principles of the DftCG allows to adopt a life-centered perspective, in which the communities and ecosystems are placed at the center of project activities. The concept of the common good suggests another one strongly related to it, and previously mentioned: that of care (Pennacchi, 2012). Introducing this principle into design practice has the aim of proposing a vision at the service of the environment, the community and relationships: design, understood as a collective and participatory work, must pay particular attention to places, communities and local resources. It must, consequently, be combined with the need for a higher quality of the built environment, which influences and defines the common good of a group, so that Design can contribute to spreading and applying the principles of sociality, participation, inclusion and accessibility.

Workspace design: the ENEL case study

Below, through the discussion of a case study of a research study in which the authors took part, a qualitative vision is proposed for the design of company workspaces, which draws, mainly, from the Co-Design and DftCG methodologies and which can become a tool for experimental validation, for the application, in the area of interest, of the principles of the above-mentioned disciplines.

The design activities were carried out in close collaboration with some members of the ENEL company, through workshops and focus groups: in the initial phases, it was necessary to build a relationship of trust with the company representatives, through moments of sharing and discussion; subsequently, through digital platforms that facilitate multi-person sharing, the participants were asked to communicate their vision of the company, specifying what their founding values were and what their expectations and future objectives were

for it. In this way, after a focus group phase, it was possible to align perspectives and points of view and thus define a set of common and shared values, which were interpreted by the researchers to begin outlining the intrinsic characteristics of the project. A further shared and collaborative activity, carried out in a similar manner, and aimed at defining which models and types of relationships, existing or new, were to be stimulated and facilitated through the work spaces. From the results obtained here, it was possible to investigate and identify other aspects and characteristics that the designed place should follow, starting to give it a functional and spatial connotation. The Co-Design phases were alternated with research and conception phases completely vertically managed by the designers, which were the subject of discussion with the company and its representatives and the stimulus for conducting further focus groups. Designing the workplace must therefore be a collaborative and shared practice between the various actors that make up the company system, to allow the collective values and needs, conveyed by the designed space, to be aligned with personal and individual aspirations and needs. Facilitating this process, which must take into account the soft, value and relational components of the project, through tools and methods belonging to the discipline of Co-Design, can be an effective strategy capable of generating wellbeing in those who inhabit the realized environments.

Directing the design of the workplace according to the principles of DftCG, necessarily implies not considering it as a simple space, but, as stated above, as part of a complex organism, characterized by various dimensions and elements, which generate and modify relationships with and among the people who inhabit it. Compared to a traditional design approach, based on the performance objective of the individual, the application of DftCG principles to the development of ENEL's workspaces, allows it to be guided according to a holistic. This leads to the need to strongly consider the social component of Design (Manzini, 2015) that offers methods to design the set of processes that favor community well-being and care for the common good.

Furthermore, the introduction and application of a DftCG approach in the project of interest, has made it possible to change the perception of the workplace as a means of conveying the company's entire value system, to translate it into tangible and intangible elements that are aligned with the needs of the individuals that make up its corporate fabric. Moreover, being part of a system conceived according to the principles of the common good, unlike a project oriented by more traditional logics, it must be built to facilitate the establishment of profitable relations with the territory in which it is inserted, between the various actors that inhabit it and with the place itself, and, moreover, for the achievement of a shared and collective wellbeing (Fig. 1).

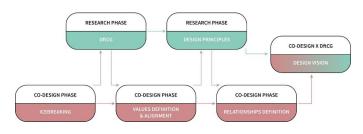


Figure 1. The process that, alternating between Co-Design and research phases, led to the definition of the design vision.

Unfortunately, some challenges were encountered during the shared process that to some extent limited the effectiveness of the operation. Beyond the project's corporate contact persons, ENEL's team of co-designers was never made up of the same figures, some of whom were added or replaced during the course of the project. This undoubtedly created a loss of focus in some of the participants and also introduced the second problem highlighted: the difficulty in aligning the heterogeneous figures involved in the project process, who represented different company departments, and the consequent obstacle in building smooth and effective interdepartmental relations, which was one of the objectives set for the project (Fig. 2).

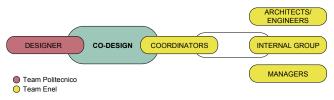


Figure 2. The actors involved in the co-design process.

Going beyond the principles of Human-Centered Design, an approach that can be defined as life-centered has therefore been preferred, which conceives, therefore, its entirety and which recognises, at the same time, a degree of independence and interdependence of the components (Fig. 3).

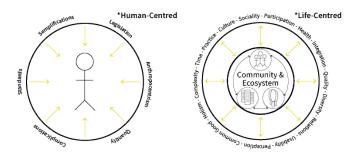


Figure 3. The differences between a more traditional, human-centered approach and one guided by DftCG and life-oriented principles.

From the experience gained, fundamental elements to be managed become the quality of the designed environment, understood as a set of values and sensations perceived and returned, effectiveness, efficiency and elasticity; the complexity that describes the interdependence of the constituent parts and implies the creation of shared meaning to be made comprehensible and acceptable; the practice of behaviors and activities mediated by the designed environment, which goes to influence the practices, uses and relations that are manifested within it. Finally, time and the value given to it become other essential drivers. The spaces must be hybridized, conceived, and built to perform different functions, from the more usual ones to those that meet new needs of the individual and the community, and, consequently, designed according to a physical and architectural flexibility, and management: barriers that negatively affect the establishment of relations between the environment, spaces and human beings must be removed.

Conclusion

The term inclusivity in the design context tends to be related to designing for categories of people with a physical and/ or attitudinal impairment. In this case, what we are witnessing is a tendency to generate a form of design that resides in corrective interventions and that do not aim at resolving the problems underlying the design values, but rather, at addressing the problems as they arise.

To remedy these problems it is necessary to act at different levels: it is fundamental to consider all those qualitative components of the project that can be discriminating in its success. For example, being able to take a critical and observational perspective on current and latent trends makes it possible to anticipate the new or potential needs and requirements of the various actors living in the planned place. Again and in this direction, the application of a Co-Design approach allows to align and mediate their needs and, therefore, to generate shared wellbeing through the project itself. Finally, the DftCG methodology can guide the design process in a beneficial and innovative way, creating a shared value system, generating or modifying relationships, taking a life-centered approach aimed at caring for the common good.

References

- Appel-Meulenbroek, R. (2016). Modern Offices and New Ways of Working Studied in More Detail. *Journal of Corporate Real Estate*, 18(1). 2-3. DOI: https://doi.org/10.1108/JCRE-02-2016-0010
- Brandt, E. et al. (2013). Tools and Techniques: Ways to Engage Telling, Making and Enacting. In Simonsen, J. and Robertson, T. (eds), Routledge International Handbook of Participatory Design. London: Routledge, pp. 145-181.
- Chang et al. (2021). Workplace Interventions in Response to COVID-19: an Occupational Health Psychology Perspective. *Occupational Health Science*, 5, 1-23. DOI: https://doi.org/10.1007/s41542-021-00080-x
- Ching, F.D.K. and Binggeli, C. (2018). Interior Design Illustrated, New York: John Wiley and Sons Inc.
- Cirrincione et al. (2020). COVID-19 Pandemic: Prevention and Protection Measures to Be Adopted at the Workplace. Sustainability, 12(9), 1-18. DOI: https://doi.org/10.3390/su12093603
- Colenberg, S. & Jylha, T. (2021). Identifying Interior Design Strategies for Healthy Workplaces. A Literature Review. Journal of Corporate Real Estate, 24(3), 173-189. DOI: https://www.emerald.com/insight/content/doi/10.1108/JCRE-12-2020-0068/full/html
- Creary, S. J. (2020). Diversity Workspaces. Pathways for Cultivating Inclusion in Diverse Organizations. In Ferdman, B. M., Prime, J. & Riggio, R. E. (Eds.), *Inclusive leadership: Transforming diverse lives, workplaces, and societies*. London: Routledge, pp. 212-220. DOI. https://doi.org/10.4324/9780429449673-15
- Dorst, K. et al. (2016). Designing for the Common Good, London: Laurence King Publishing
- Fraser, N. (2021). Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy. In Mitrasanovic, M. and Mehta, V. (eds.), *Public Space Reader*. London: Routledge, pp. 31-39. DOI: https://doi.org/10.4324/9781351202558
- Hussain, W. (2018). The Common Good. In Stanford Encyclopedia of Philosophy. Available at: https://plato.stanford.edu/entries/common-good/ [Accessed 02/01/2023]
- International Labour Organization (2022). Workplaces. In Occupational Safety and Health. A Guide for Labour Inspectors and Other Stakeholders. Available at: https://www.ilo.org/global/topics/labour-administration-inspection/resources-library/publications/guide-for-labour-inspectors/workplaces/lang--en/index.htm [Accessed 02/01/2023]
- Janssen, M. and Van der Vort, H. (2020). Agile and Adaptive Governance in Crisis

 Response: Lessons from the COVID-19 Pandemic. International Journal of Information Management, 55, 1-7. DOI: https://doi.org/10.1016/j.ijinfomgt.2020.102180

- Lundsgaard, C., and Brandt, E. (2019). The Office Scrabble Game: Co-designing
 Workspaces with the Everyday as a Resource in Design Games. In Dodig M. B. and
 Goat L. N. (eds.), The Routledge Companion to Games in Architecture and Urban
 Planning: Tools for Design, Teaching, and Research. London: Routledge, pp. 47-59.
 Available at: https://adk.elsevierpure.com/en/publications/the-office-scrabble-game-co-designing-workspaces-with-the-everyda
- Manzini, E. (2015). Design when Everybody Designs. An Introduction to Design for Social Innovation. Cambridge: MIT Press
- Mattelmäki, T., Vaajakallio, K. and Koskinen, I. (2014). What happened to empathic design? Design Issues, 30(1), 67-77. DOI: https://doi.org/10.1162/DESI_a_00249
- Nanayakkara, K.T., Wilkinson, S.J. and Ghosh, S. (2021), Future Office Layouts for Large Organisations: Workplace Specialist and Design Firms' Perspective. Journal of Corporate Real Estate, 23(2), 69-86. DOI: https://doi.org/10.1108/JCRE-02-2020-0012
- Pennacchi, L. (2012). Philosophy of the Common Goods. Crisis and Primacy of the Public Sphere. [Filosofia dei beni comuni. Crisi e primato della sfera pubblica.], Milan: Donzelli Editore.
- Permana, A. Y. et al. (2020). The Concept of Optimal Workplace in Providing a Great Experience to Improve Work Professionalism in the Interior Design of Pln Corporate University. Ragunan, Jakarta. International Journal of Advanced Science and Technology, 29(7), 3238-3254. Available at: http://sersc.org/journals/index.php/ IJAST/article/view/18953
- Sanders, E. B. N. and Stappers, P. J. (2008). Co-Creation and the New Landscapes of Design. International Journal of Co-Creation in Design and the Arts, 4(1), 5-18. DOI: https://doi.org/10.1080/15710880701875068
- Sanoff, H. (2011). Multiple Views of Participatory Design. Focus, 8(1), 11-21. DOI: https://doi.org/10.15368/focus.2011v8n1.1
- Szarejko, W. and Trocka-Leszczynska, E. (2007). Aspect of Functionality in Modernization of Office Buildings. Facilities, 25(3/4), 163-170. DOI: https://doi.org/10.1108/02632770710729755
- Reller, A. & Dießenbacher, J (2016) Are there enough resources for our lifestyle? how resource strategy leads from wasting materials to using them. In Stebbing, P., & Tischner, U. (Eds.). Changing Paradigms. Aalto: Aalto University School of Arts, Design and Architecture, pp.154-166