

Redefining Workspaces: Human Ecology, Families and Environmental Footprint

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Abstract: The evolving landscape of work, family dynamics, and environmental sustainability underscores the interconnectedness of human ecology and societal progress. Family units play a pivotal role in shaping individual behaviours and values related to environmental stewardship, with parents serving as key influencers. Moreover, the interplay between work and family life profoundly influences human ecology, with flexible work arrangements offering newfound opportunities for balance and well-being. Organizations embracing hybrid work models and eco-friendly workspace designs contribute to environmental sustainability and family empowerment. Research indicates that remote work reduces carbon footprints and enhances work-life balance and job satisfaction. Flexible work policies hold promise for addressing gender disparities, particularly for women with caregiving responsibilities, thus promoting economic equality and societal well-being. By prioritizing human ecology within familial and professional contexts, individuals and organizations can contribute to a more sustainable future for all, where the care of our planet goes hand in hand with the well-being of families and communities.

Introduction

At this moment in time, caring for the environment in which we live seems to be an obvious or natural thing to do. However, global warming, the effects of pollution, deforestation, and the loss of biodiversity alert us that there is much to be done. As humanity, it has taken us time to realize that we need to take care of nature, and it was enough for natural disasters such as earthquakes or tsunamis to occur to become aware that we need to protect it.

Family dynamics play a crucial role in shaping individual behaviours concerning environmental sustainability. From an early age, children learn habits and values within the familial context, influencing their attitudes toward nature and resource consumption. Parents serve as role models, demonstrating behaviours that can either promote or hinder environmental stewardship. By instilling a sense of responsibility and respect for the environment within the family unit, individuals are more likely to adopt sustainable practices in their daily lives. Thus, the family serves as a vital conduit for transmitting environmental values across generations, contributing to broader societal efforts toward ecological conservation.

Moreover, the interplay between work and family life profoundly impacts both human ecology and environmental attitudes. As individuals navigate the demands of their professional and personal

spheres, they must strike a balance that fosters well-being for themselves, their families, and the environment. Long work hours, urban commutes, and job-related stress can disrupt this equilibrium, leading to detrimental effects on mental health and environmental consciousness. Recognizing the interconnectedness of family dynamics, work-life balance, and environmental sustainability is essential for fostering a harmonious relationship between humans and their surroundings.

This care for the planet is not only vital for the survival of plants and animals but also for the people who inhabit it. It is time to understand that the world is changing rapidly and that societies are experiencing another type of pollution related to human ecology: caring for the natural habitat that each person needs to be born, grow, and develop.

Human ecology, a concept pioneered by Ellen Swallow over a century ago, extends beyond the traditional understanding of ecology to encompass the intricate relationship between humans and their environment. While initially focused on environmental factors, Swallow broadened the scope to include social, cultural, and moral dimensions. This expansion underscores the importance of considering not just the natural world but also the spaces where individuals live, grow, and interact. Within this framework, the family emerges as the primary arena for nurturing human ecology. Rooted in the Greek concept of "*Oekologie*," meaning home or dwelling, the family serves as the foundational space for fostering holistic human development.

It is incredible to think that any animal of any species born today on this planet can survive on its own. However, any baby born today will need someone to receive, welcome, feed, and protect them. The human condition is so limited that the baby cannot survive on its own. This fact, so evident at the beginning of human life, is also reflected at the end, when our elderly often become like children and require care and attention, sometimes even more than newborns.

These two extremes of life speak to us about the importance of caring for human ecology, not only in circumstances where its need is more evident but throughout all stages of the human life cycle. This is because the human being is not an isolated being; they need to relate to others to recognize themselves as a person. By prioritizing the care of human ecology within both familial and professional contexts, individuals and organizations can contribute to a more sustainable future for all.

Redefining Workspaces

The COVID-19 pandemic has been the beginning of an invisible revolution that led us to rethink ourselves and, in some way, shaped and reconfigured our way of working, relating to each other, and ultimately, facing life. That global experience accelerated the changes we had been studying and analyzing under the so-called future of work. It can be said that the transformations that academics predicted for later on occurred between 5 and 10 years earlier. These advancements, many of them driven by the digital revolution, brought about the debunking of several myths, such

as "you can't work from home" or "the ideal worker is one who is completely dedicated to their job, available 24 hours a day" or "you can't bring home problems to work."

In fact, since March 2020, in response to the COVID-19 pandemic, concepts like "teleworking," "remote work," "work from home," or "hybrid work" have rapidly gained prominence. These terms, frequently used interchangeably in public discourse, signify a fundamental shift in how work is conducted and where it takes place. Hybrid work, a blend of telework and office work, has emerged as a dominant model, offering flexibility and a balance between remote and in-person collaboration (Microsoft 2022 Work Trend Index).

Organizations around the world are recognizing that the pandemic offered a unique opportunity for change and that there is no turning back. Companies have become more agile, more flexible, and hopefully more humane as well. Organizing work in a way that helps people to grow and develop as individuals is an important part of caring for human ecology.

The transition to remote and hybrid work models not only impacts the physical layout of workspaces but also influences human behaviour, interactions, and ecological footprint. With fewer employees commuting to centralized office locations, there is a reduction in overall travel demand and road congestion. Studies have linked telework to sustainability benefits, such as increased active transportation modes like walking and cycling (OECD). Moreover, remote work has provided individuals with more flexibility in managing their personal and family lives, leading to improvements in work-life balance and overall well-being (Microsoft 2022 Work Trend Index).

Research shows that in an analysis of various work scenarios, people's behaviours and sources of emissions, researchers found that switching from working onsite to working from home full-time may reduce a person's carbon footprint by more than 50 percent. According to the study, hybrid schedules where people work remotely for two to four days a week could also cut emissions by 11 to 29 percent. Working remotely more than one day per week could cut emissions, mainly driven by less office energy use and commuting. (Tao, Y., Yang, L., Jaffe, S., Amini, F., Bergen, P., Hecht, B., & You, F., 2023)

Therefore, flexible work and remote work allow for a reduction in urban land occupation. By occupying less space in physical office positions, there is consequent savings not only in electricity consumption but also in refrigerant gases and fuel for heating environments.

Other environmental benefits provided by telecommuting include a reduction in paper consumption, lower levels of light and noise pollution in cities, and shifts towards more sustainable consumption, all of which are benefits of working from home in favour of sustainability.

Not only does telecommuting help protect the planet, but it also promotes employee productivity and overall health.

As remote work becomes more prevalent, significant changes are unfolding in workspace design and organization. Companies are reevaluating traditional office layouts and adopting innovative approaches to accommodate remote and hybrid work arrangements. Flexible workspaces that prioritize collaboration zones, quiet areas for focused work, and amenities for employee well-being are gaining traction. This shift towards adaptable, multifunctional spaces reflects an

understanding of the diverse needs of today's workforce and promotes a culture of agility, innovation, and wellbeing.

The effects of these policies on work-life balance and job satisfaction have been frequently researched (Cazes et al., 2022) – showing a positive impact on some of the organization's challenges around talent engagement. For example, studies show that both men and women indicated that this new way of work helps them to reconcile work with private life and to increase job satisfaction, notably through increased autonomy and reduced commuting time. Also, a study by Stanford of 16,000 workers over 9 months found that working from home increased productivity by 13%. This increase in performance was due to a more convenient working environment and working more minutes per shift because of fewer breaks and sick days. In this same study, workers reported improved work satisfaction and reduced attrition rates by 50%. (Bloom, Nicholas, et al. 2024)

Innovative workspace designs are emerging to support sustainability and family well-being. Companies are incorporating eco-friendly features such as energy-efficient lighting, renewable materials, and green spaces into their office environments. These initiatives reduce ecological impact and contribute to a healthier and more productive work environment. For example, biophilic design principles integrate elements of nature into the workspace, such as indoor plants and natural light, which have been shown to reduce stress and increase productivity (Terrapin et al.). Additionally, flexible work policies prioritizing family and personal life over work are becoming more prevalent, aligning with the preferences of employees, particularly parents and women (Microsoft 2022 Work Trend Index).

Evidence is clear when indicated that his new ways of work have the potential to promote increased diversity and social sustainability by enabling employees to access flexible work arrangements. However, they also point to risks related to increased work intensity and (unpaid) overtime hours (Chung, 2022) or social and professional isolation – see, e.g. reviews by Charalampous et al. (2019) and Tavares (2017) (OECD) or increase biases and discrimination affecting career progression.

Now, employees are listening and watching for an indication that the expressed culture is authentic and that something is lived at all levels (Gallup, 2024). Organizations have the opportunity to create a culture that supports and promotes the appropriate use of these new ways of work combined with other family-friendly policies such as childcare and eldercare (Song and Gao, 2020) or flexible hours (Angelici and Profeta, 2020[30]), and with measures to challenge traditional expectations around gender roles in the household and fostering more equal norms and values, for instance, actions to support equal access to these benefits between mothers and fathers (Wanger and Zapf, 2021[39]). (OECD 2023) create a more sustainable culture change towards a new way of work.

Gender Disparities in Teleworking: Implications and Opportunities

In addition to its impact on environmental conservation, remote and flexible work arrangements help to remove the barriers to employment, enhancing economic equality, especially for women who are frequently responsible for primary caregiving.

If the care of human ecology focuses on studying individuals and their relationship with the habitat they occupy and where they develop, it is relevant to analyze social, cultural, and moral aspects, in addition to environmental ones, that can contribute to a harmonious human development within the work environment in which the person operates.

According to Rotman's (n.d) research, remote and flexible work arrangements could significantly facilitate women's return to work after giving birth and help them keep their jobs, resulting in economic advantages for women, families and the national economy. A more recent study conducted in the UK discovered that mothers who have access to flexitime or telework were less likely than others to cut down on their hours after having children. Similarly, another one revealed that during the pandemic, those mothers who telecommuted often had more paid employment compared with those who worked on-site, though fathers were indifferent regarding their working time. It is followed by a survey conducted in Canada shows that 91 percent of women want to work remotely at least part-time, and 45 percent of women report that they will quit their jobs if they are not able to do so.

However, labour force participation rates for mothers with young children reached an all-time high after the global pandemic, yet gender gaps in workforce participation persist (Gallup, 2024). In particular, women with children face many difficulties balancing parenting responsibilities with their aspirations. Studies have shown that women are more likely than men to experience job reversals due to family obligations (Gallup, 2024). "606 million women of working age globally are not in paid work because they are involved in unpaid care work compared to only 40 million men," stated Reshma Saujani during a session on the 'Workforce Behind the Workforce 'at which she was speaking as a Founder and CEO of Moms First (WEF, 2024)

Flexible work policies, such as hybrid arrangements, have the potential to address gender disparities and promote greater work-life balance for women. According to IWG's Global 2023 Women Hybrid Workers Survey, nearly 90% of women believe that the flexibility of hybrid working serves as an equalizer in the workplace, with 66% stating that it allows them to experience less biases due to gender, race, or other factors. Moreover, more than 70% of women surveyed indicated they would leave their current job if their employer took away the flexibility of working hybrid (IWG, 2023).

Additionally, nearly two-thirds of women who identify as caregivers consider hybrid work arrangements a benefit, enabling them to save money and spend more time participating in family events (IWG, 2023). The appeal of hybrid work extends beyond gender considerations, with 97% of employees expressing a desire to work remotely for at least some of the time, highlighting the widespread demand for flexible work arrangements (FlexJobs, 2022).

As we mentioned, remote work provides economic benefits by enabling workers with caregiving duties to stay employed and by giving workers the flexibility to relocate to more affordable areas. But it is also a way to create more inclusive workplaces; research suggests that when they work remotely rather than in the office, women are less likely to experience everyday gender discrimination, such as slights and offences occurring in interactions with colleagues or clients (such as being asked to clean the workplace kitchen). And although scholarly research has not yet been released on similar racial impacts, a 2021 study by the non-profit Future Forum found that only three percent of Black professionals report wanting to return to work compared to 21 percent of their white peers. This is because remote work has allowed them to avoid microaggressions and other demeaning remarks in the workplace while increasing their ability to manage stress. Further, in a small-scale study conducted during the pandemic, persons with disabilities working remotely reported that the majority found it reduced their stress partly because it increased their ability to work safely; although some discussed experiencing distractions at home, telecommuting was still their preferred option.

Now, organizations have the opportunity to create equal access to this opportunity, expanding the chance to telecommute in minority groups, expanding these practices outside, which disproportionately belongs to higher-income, white-collar workers who are predominantly white and male. (Remote Work and Inequality - Rotman School of Management, n.d. 2023). In this way, all individuals in the workplace are cared for, with the consequent impact this has on their families.

Empowering people to work close to home through hybrid arrangements not only addresses gender disparities in teleworking but also reduces commuting, leading to lower carbon footprints and reduced office sizes, contributing to environmental sustainability (IWG, 2023). Overall, embracing flexible work policies such as hybrid arrangements is essential for promoting gender equality, supporting work-life balance, and fostering a more inclusive and sustainable workplace for all.

The Future of Families: Enhancing Flexibility for Sustainable Growth

Beyond gender equality, flexible work policies hold the potential to reshape families' futures by offering unprecedented opportunities for sustainable growth and well-being. By allowing parents to balance professional responsibilities with caregiving duties more effectively, flexible work arrangements can foster stronger family bonds and facilitate more significant involvement in children's lives.

Data from the Pew Research Center underscores the significance of flexible work arrangements in shaping the family landscape. According to their findings, over 70% of parents report that working from home has made it easier for them to manage their family responsibilities (Pew Research Center). Moreover, nearly 80% of parents agree that the ability to work remotely has positively impacted their overall quality of life (Pew Research Center).

A 2023 study found that eliminating the commute to the office saved American workers an average of 72 minutes a day, which parents can use to pick up their kids at school or camp, help them with homework, or hang out with them (Becker F., 2023)

Furthermore, flexible work arrangements have been shown to reduce stress levels among parents, thereby enhancing family dynamics and promoting healthier relationships. A study conducted by the Organisation for Economic Co-operation and Development (OECD) revealed that parents with the flexibility to work remotely experience lower levels of work-related stress and report higher satisfaction with their work-life balance (OECD).

Additionally, flexible work policies contribute to the economic empowerment of families by enabling parents, particularly mothers, to maintain their careers while attending to familial responsibilities. Research from McKinsey & Company highlights the positive correlation between flexible work arrangements and women's workforce participation, with telecommuting options playing a pivotal role in increasing women's labour force participation rates (McKinsey).

The good news is this: When workplaces have policies that support healthy remote and hybrid work models, not only do employees and organizations benefit, so does equality in the workplace (Remote Work and Inequality - Rotman School of Management, n.d. 2023)

In conclusion, flexible work policies not only promote gender equality and work-life balance but also offer transformative opportunities for families' future. By embracing flexible work arrangements and creating supportive environments that accommodate employees' diverse needs, organizations can contribute to creating sustainable and thriving family ecosystems.

The Future is Human and It's in Our Hands

Time will pass, and we will all remember the pandemic as the years in which the world was forced to change. It never returned to the same, and a new one opened before us to conquer. It can be said that the experiences lived and the lessons learned are meant to be catalysts for change, to better and more rapidly adapt to the environment in which we live.

If we have been promoting this care for human ecology for many years, it can be said that the post-coronavirus period has laid the groundwork for strengthening this awareness. The pandemic has shown us how quickly we can adapt and face changes when necessary to tackle bigger challenges. The paradigm has shifted; everything is no longer as predictable as it once was. Now, everything is possible, and from there arise infinite possibilities that are expanded with the power of technology and the digital revolution.

Businesses and families operate differently. Millions of people have experienced the advantages of working from home and saving commuting time; others have become more aware of the importance of interpersonal relationships at work and in the family and have set out to strengthen those bonds. Emphasis has been placed on the well-being of individuals, and for this, it has been

necessary to know them more and better, manage emotions, and consider the needs of each one, considering families.

It's not automatic or about imposing fixed rules in a world that will increasingly bet on flexibility. It will be more of a continuous process that involves anticipating and proactively adapting on the fly. And let's not forget an important factor: time to manage urgencies and pressures in a context where the speed of change forces us to provide new responses as quickly as possible. We must be aware that there will be a transition period from a work culture marked by physical presence to a combination with virtuality, from an exercise of power based on command and control to empowering teams to work in a more agile, fluid, and collaborative manner.

Our world is changing. That's the only certainty, but change is not substitution but transformation. It's not so much about putting efforts into changing the world but about transforming life from within. People don't want a life full of work today; they want a meaningful life; they seek a cared-for work context with a defined and challenging purpose.

This rethinking has involved paying more attention to the balance between work and family life, prioritizing aspects such as well-being and quality of life, caring for the environment, and adapting work to these new aspirations. There's no turning back, and no time to waste. The time has come to assume our responsibility; the time has come to care for human ecology for our own good and that of future generations.

Environments will come and go, but those who will always remain are their protagonists. Faced with these exponential changes, the need to adopt a sustainable lifestyle clearly emerges, which goes far beyond environmental care. It implies relating to others, starting with one's own family, and building bonds that require time and interest. This leads us to affirm that beyond all the advances to come, care will always be at the center of human relationships.

Indeed, in recent times, the scope of artificial intelligence is being seen as forming part of the daily lives of people of different generations, cultures, and social conditions. Beyond its transformative effects, the person remains, and with it, the need to protect human ecology. Our hyperconnected world cannot help but be understood as a network of relationships in which we all feel the need to care for and be cared for. Thus, a limitless panorama opens because it is open to gratuitousness and service.

The care of human ecology stems from an identity that we choose and decide on, which seeks to be and live better more responsibly, improving the well-being of each person and their family. This commitment is also taken to the entire work ecosystem, which must assume the responsibility of creating a flexible, collaborative, and psychologically safe environment, prioritizing people. Undoubtedly, starting from families and businesses, a true social transformation focused on the integral development of all will be achieved.

For all these reasons, we say that the future is human, and it's in our hands. It depends on each one of us how we prepare to make it a reality.

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