



Health Crisis, Work Crisis: What Place for Ergonomics in Society Now?

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Abstract. The present context of health crisis and unprecedented lockdown is an opportunity for thinking, position-taking, indignation and controversy. As a social activity, work redefines itself every day, according to circumstances. Work is a central object of ergonomics and ergonomists can learn from crisis: behind the health crisis, we highlight the work crisis. Ergonomics must take part in the social debates that accompany this crisis, and make its contribution to better reconciling the human challenges of work and organizational issues in the future. To do this, we need criteria: the crisis highlights the need to experience the recognized contribution, individually and collectively, of one's own work to meaningful social issues, and therefore to renovate our approach to occupational health.

Keywords: Work · Health · Occupational risks · Subjectivity

Occupational health is widely understood in terms of the risks involved. The integrity of employees must be protected. The health crisis reveals that workers are taking risks in contracting Covid-19 to preserve the meaning of their work, which is also essential to their health. Ergonomics can contribute to thinking and action around this apparent contradiction: exposing oneself to risks in order to build one's health.

1 Dead Ends and Blind Spots of Pre-crisis Work

Major characteristics of contemporary work organizations have contributed to this crisis. These same characteristics are at the origin of major and well known difficulties in work itself as well:

- globalization of value chains and the hyper-specialization of each of the actors in the chain. Hyper-specialization leads to the devaluation of know-how, the individualization of tasks, fragmentation of the activity [1], loss of meaning, and impeded quality

[2]. The impoverishment of work is not the only consequence: more transport, more pollution, more mobility of workers at the interface of production entities, less local and autonomous production capacity for many necessary products (masks, respirators, medicines, etc.).

- The absence of stocks upstream of, during and downstream of means of production, reduces the risks of unsold products. But this also makes human work dependent on the market, a dependency that can be integrated through the increasing flexibility of work contracts and working hours: staggered hours, part-time work, short-term contracts, etc. Job insecurity and non-standard working hours are major risk factors for employee health [3]. Lack of stocks also makes a region more dependent on supplies. The slightest break in these supplies immediately puts a system under stress and very quickly leads to the absence of essential products.

- To a large extent the digital revolution in our society reinforces the growing trivialization of atypical working hours and social or even family precariousness, as the balance between family life and professional life is sometimes upset. From this standpoint, compulsory remote working, combined with childcare (these same parents having to ensure educational continuity for their children) offers a vast shared experience of the difficulties associated with the deregulation of the system of activities [4]. All these principles lead to intensification of work, that is the ever-increasing. The meaning of work for those who carry it out is often abused.

2 The Experience of the Recognized Contribution of One's Own Work to Meaningful Social Issues During Crisis

In experiencing the crisis, many workers also experience new work situations, alone or in existing or (re)composed groups, often revealing other ways of doing things and of thinking about Work and Society: united, proud to be useful, authentic, inspired by moral values and alternative conceptions of "living together". Very small companies in the textile field are modifying their production methods in order to make masks; one of a multinational cosmetics company's sites has begun to manufacture hydroalcoholic gel; nurses are transforming painter's suits into smocks; car manufacturers are making respirators; bakeries are recruiting personnel to deliver to people isolated in their homes, and so on. This reconfiguration of ways of doing things is changing the daily life of hospitals, nursing homes, the market gardening sector, the building and public works sector and many others. In the health crisis and its urgency, the standard rules and norms of everyday life no longer apply, allowing each individual to reinvent in situations where they were previously shut away.

Many workers have taken the risk of contamination and exhaustion to make themselves useful. How can ergonomics take care of this? We believe that work experience must once again become an essential issue in the ergonomic approach to working conditions: how can work be a health operator? We can see that preserving the integrity of worker is not enough to understand work. Exposures say nothing about the subjective experience of social utility that work allows (or not). "The broadening of the scope of action is a typical and fundamental feature of human development. The competency of workers is very much linked to their ability to change register according to

circumstance”, said Wisner [5]. The “cumbersome subjectivities” [6] of the past have become the salutary subjectivities of today, to the extent that the usefulness of local and solidarity-based economies embedded in their regions and living environments reveals the true conditions of subsistence for each individual and his/her loved ones.

During a crisis, life is re-invented and health is built with, and in the face of, risks. This is how Canguilhem, [7]: “I am well to the extent that I feel able to take responsibility for my actions, to bring things into existence and to create between them relations that would not come without me and that would not be what they are without them”.

3 Meaning of Work and Ergonomics

The historical moment we are currently experiencing is an extremely powerful indicator: this pandemic is what anthropologist Mauss [8] calls a “total social fact”, a phenomenon which “sets in motion the whole of society and its institutions”, which involves society in its entirety, with all its members. His understanding supposes that the phenomenon is not broken down or dissected according to its various dimensions (biological, historical, political, legal, geographical, demographic, psychological, economic, etc.), because “it is by considering the everything as a whole that we [can] perceive the essential”. The pandemic imposes on us all the global and systemic vision claimed by ergonomics as we understand it. In this way, a major challenge lies in the appropriate delineation of the system’s boundaries: it is both necessary to identify the major determinants of situations, while preserving realistic transformation horizons. In any case, the range of dimensions to be taken into account is much wider than that of the workstations and their displays. This is what Carayon and Perry [9], for example, propose for the health care system. For these authors, the level of action is the system governance, to allow to: defer to local expertise; support adaptive “real time” behaviours, enhance system interactions; repurpose processes; and support dynamic continuous learning. These perspectives on managing and transforming organizations are aimed at restoring a central status to work experience. The pragmatist approach to organizations [10] and organizational interventions approaches [11] are essential supports in this direction, where each individual activity, these effects on health and performances, are oriented by its intimate meaning for the person who carries it out [12]. This theoretical framework gives to ergonomics possibility to join individual sensemaking of work with organizational and systemic perspectives.

So, ergonomics must be re-examined: do our approaches to work often concern the fundamental questions that this social activity raises? Can we imagine contributing to the evolution of our societies without addressing these aspects?

Similar orientation where built in Ergonomics. Professor Alain Wisner’s anthropotechnology [13] already marked this questioning, taken up in its own way and in other words by macro-ergonomics [14]. Resilience of systems requires taking into account of culture and societal aspects [15].

Constructive ergonomics [16] requires us to return to the fundamental questions of work: is work an opportunity for self-construction? This question is largely absent when health is approached in terms of physical or psychosocial exposure, displays design, etc. The health crisis is forcing ergonomics to return to the essentials: working is living, and living implies conditions.

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