6. Conclusions and Perspectives

Serge Volkoff
Co-rapporteur for the conference plenary sessions, Ageing and Work Research and Study Centre, Employment Research Centre, Paris, France

Work intensification and fragmentation - World in a hurry

Many of the researchers and trade unionists who have spoken at this conference see intensification as a defining trait of current trends in work organization. It is a development which often cancels out the benefits of technical advances for the quality of working life.

Technical progress "wrong-footed" ?

A case in point of how progress is foiled is the use - or more frequently the failure to use - of handling equipment intended to take some of the physical strain out of certain jobs. In motor vehicle assembly plants, time pressures mean that some types of handling equipment - especially remote handling devices - tend not to be used because they require a few seconds set-up time, which is a lot in job cycle times close to a minute. And they are finicky to use. They involve precision grasping and positioning operations - especially costly and delicate parts, like batteries for example - and take an unpredictable time. As a result, workers tend to do this early on in the cycle so as not to overrun allotted time and space, even though the movements and activities involved mean that cycle start may not be the optimum moment for the operation concerned.

The same problem crops up with hospital patient lift-aids. They also take time to set up. But nurses and nursing auxiliaries have another reason for not using them. The time pressures they routinely work under often forces them to put necessary medical treatment activities before patient relations. Patient lift-aids are highly impersonal and reinforce that impression. So to make up for the lack of "the human touch" in their day-to-day work, they would rather lift patients manually (despite the fatigue and pain it may cause) to keep that brief moment of intimate patient contact.

Then there are road transport handling operations, where equipment, however carefully designed, often has to be dispensed with because rush jobs and just-in-time working force operators to re-prioritize their planned loading/unloading sequence. Also, trailer loads are not always stowed in the right place to allow mechanical aids to be used to proper effect.

These three examples do not just illustrate the problems of mechanically-assisted physical effort in the three sectors with which the conference is particularly concerned. More than that, they throw into sharp focus the tie-up between work intensity and "working conditions" broadly-defined, which may go unrecognized by business decision-makers and designers - here, handling equipment designers. As we have seen in these three cases, work intensity determines the speed, order, method of task performance, and even task content where certain aspects of the activity have to be forgone. And hence the significant impacts of intensification on both workers' health and work quality.

A line-up of time pressures

Not surprisingly, then, the conference participants have put a sharp focus on work intensification, whether through quantifying the fundamentals (the findings of the European survey presented by Pascal Paoli), suggesting workplace benchmarks (Giusto Barisi), offering strategies to limit the toll they take (Klaus Pickshaus), or considering alternative production planning systems (Frans van Eijnatten).

The hallmark of intensification as it emerges from these descriptions and analyses is multiple different - and sometimes conflicting - time pressures within the same work situation.

Some constraints - levels of output per worker and unit of time, strict deadlines, forced machinery speeds - can be said to be "industrial". These are increasingly compounded by very strict operating procedures prescribed by quality assurance standards.

Others are more "commercial" or "market-driven", where a speedy - but satisfactory - response to customer demand is the essence. The customer may be a user or a consumer, but also, as Annie Thébaud-Mony and José Ignacio Gil have pointed out, another firm. It may even be another workshop or department of the same firm as the customer-supplier corporate-wide internal market template increasingly becomes the norm.

A third order of constraints can be described as "family" or "domestic". The main focus here is interpersonal relations, which may be quite demanding in small workforces where individuals have to strive not to disadvantage their colleagues, or to help them, or simply to avoid censure.

These three types of constraint are long-established in workplaces. There is nothing new in workers in the mechanical engineering industry having to work at machine pace, drivers having to make on-time deliveries, and secretaries working late to type a last minute letter as a favour to the boss. What is new - and is borne out by statistical surveys and field observation alike - is the overlapping of these constraints as is now happening in the fast-food industry, for example, where staff have to juggle burger preparation times, customers hard-pressed for time, their particular orders, jollying-along from the team-leader, etc. All these obligations may pull in different directions, and in any event, management is not on top of them. Which is why these conflicting demands are managed at the most decentralized level - at the workface - regardless of the worker's abilities. This is when work becomes "without limits".

The "no wait" syndrome – career setbacks

Some years ago, management science research suggested that the world of work was gradually moving from a "slog culture" to a "breakdown culture" : a focus on keeping equipment running smoothly would replace hard physical effort. But this conference shows that what is most on the way is a "now culture" in which, in the words of one participant "the fire-fighter has become the benchmark model in a growing number of jobs". The "responsiveness" that Peter Totterdill referred to may well have some very status-enhancing aspects. The "high road" he propounds predicates developing real forward problem- or incident-solving abilities. But lac of time too often means that they have to be addressed off-the-cuff at the cost of great physical or mental strain and great uncertainty as to the outcomes. Last-minute rushing as an operating template incurs huge social costs, and produces absurdities. For example, in a hospital geriatric ward where medical emergencies are infrequent, what justification can there be for keeping staff constantly under pressure ?

Work intensity is what marks the task breakdown of work performance. Pascal Paoli's quantitative analysis of short-cycle jobs in Europe shows how widespread this type of organization is. Over a longer time scale, working hours are growing increasingly uncertain : irregular, fragmented, unscheduled and, increasingly often, "self-managed" with objectives which force workers to work long hours of unofficial overtime, typified in the case of IBM Germany analysed by Klaus Pickshaus. In the still longer term, whole careers are marred by constant rushing and a loss of control over time management. Multi-skilling is planned and introduced without sufficient preparation (cf, the case of travelling crane operators described by Corinne Gaudart). Occupational and geographical mobility becomes a demand which employees and their families - especially

insecure workers - are expected to fit in with without a second thought. Management see change and reorganization as a sign of business health, when one on top of the other ups the mistake rate and produces the "organization fatigue" rightly cited by Christer Hogstedt about... his own research institute. Workshops and departments whose employees feel they can stand back sufficiently from their work to give individual and collective thought about the work they do and the future of their job are increasingly thin on the ground.

A widening range of health issues

"Reconsidering workers' health" proposed as the title of this conference demands a more specific reality check on the effects of intensification on those who have to contend with it. Broadly, it seems that direct, monocausal, work-related damage to collective health are declining under the effects of technical progress and preventive actions. Very heavy weights, very loud noises, some kinds of exposure to toxins, are less common than twenty or thirty years ago. What does seem on the rise, by contrast, is exposure to multiple average or even slight constraints, but whose effects are magnified by time pressures.

Indeed, the very idea of "exposure" needs to be put into perspective, because the main problem is that in many cases, it is the theoretically available self-prevention strategies - avoiding a hazard source, choosing one's own equipment, getting proper information before acting, working with others, etc. - which are being defeated, increasingly hard to develop or implement. As Corinne Gaudart explained, older workers in particular lose out most from these limitations on discretion, because the health preservation strategies they have developed over time through their work experience are particularly valuable to them. Indeed, these strategies are a key way of addressing the specific problems encountered by older workers as a result of the increasingly prevalent functional limitations that come with age, as described by Juhani Ilmarinen.

It takes little working out, therefore, to see why the health impacts of work intensification, and more generally the effects of current forms of organization, rarely manifest as large-scale disorders experienced simultaneously by large numbers of workers in a workplace or industry segment. The spread of musculoskeletal disorders in industrial countries, on which Laurent Vogel and Daniela Colombini stressed the importance of a prevention policy, are in effect an exception : here we have it is clearly symptomatic of a mass disorder caused, in the unanimous view of specialists, to the most stressful forms of work organization, especially time pressures. But it is about the only case of its kind. Other evidence of disorders, most work-related health disorders nowadays, take far more individualized forms.

Just as the tricky task of managing a disparate body of work constraints is increasingly left to the individual worker, so the management of occupational health is a matter of individual trade-offs which are more or less livable-with in the long-term. Work intensification can perfectly well go in hand with pleasure in working life, even if work impinges somewhat too much on life. What intensity particularly precludes is indifference or keeping work in the background, aloofness from work issues. But making heavier drains on their physical, mental and psychological resources, it renders the individual vulnerable, so that an adverse working or social life experience can easily tip them from taking pleasure in their work into pain and exhaustion.

Whence the importance of looking seriously at collecting information by surveying workers themselves, a discussion taken forward by Elizabeth Wendelen and Laurent Vogel's contributions. This kind of survey is invaluable, because workers' assessments, perhaps more than "objective" assessments of job constraints (which are still useful, of course), can bring in all the work determinants, all the adjustments that everyone with varying degrees of success tries to make. But such surveys must be painstakingly prepared with the workers and made sense of in conjunction with them, specifically so as to break away from the individual approach to the health-work continuum.

On top of that, there must be a sufficiently coherent view of what crucially determines these linkages, traced through a discussion on the management of production systems and the objectives assigned them. Because that is what determines the scope available to bring these matters under workers' control.

Serge Volkoff