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Women at work: in search of recognition
New publications

The machinery of occupational safety and health policy in the European Union
History, institutions, actors
Laurent Vogel

This guide gives an account of the history, main actors and essential tools of EU occupational safety and health (OSHA) policy. Its aim is to contribute to a better understanding of this policy and to facilitate effective intervention in related matters at European level. It is aimed principally at worker representatives responsible for workplace health and safety issues and trade union officers with responsibilities in this same field. It will be useful also to anyone with an interest in EU social policy developments and those involved, in various capacities, in the prevention of occupational risks.

Eliminating occupational cancer in Europe and globally
Jukka Takala

This working paper presents arguments for a stronger policy to eradicate occupational cancer in Europe and globally. The working paper presents a consistent estimation of the burden calculated on the basis of established exposures. It also summarises the basic principles of effective prevention and calls for systematic action on the part of the various stakeholders. It assumes that occupational cancers are eliminable and that prevention could save many workers’ lives and contribute considerably to the public health of European citizens.

Musculoskeletal disorders: a major challenge for occupational risk prevention in Europe
Yves Roquelaure

Musculoskeletal disorders (MSDs) pose the most widespread occupational health problem in the European Union. Their high incidence bears witness to the intensification of working conditions that is affecting growing numbers of employees in industry and services.

This policy brief looks at the work-related causes behind musculoskeletal disorders and formulates policy recommendations for the prevention of these occupational health risks.

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**Newsflash...**

**Even low doses of radiation increase risk of dying from leukaemia**

A study coordinated by the International Agency for Research on Cancer (IARC), the specialized cancer agency of the World Health Organization, shows that protracted exposure to low doses of ionizing radiation can cause leukaemia. The study, published on 22 June in *The Lancet Haematology*, shows that the risk of death from leukaemia increases linearly with the radiation dose.

The International Nuclear Workers Study (INWORKS), a collaboration among international partners, evaluated the exposures of more than 300,000 nuclear workers in France, the United Kingdom, and the USA over a period of time between 1943 and 2005.

The study results highlight strong evidence for a positive association between exposure to ionizing radiation and risk of death from leukaemia and show that the risk of leukaemia increases linearly with radiation dose.

The risk associated with the exposure varies with the type of leukaemia; the risk was highest for chronic myeloid leukaemia, and there was no increased risk for chronic lymphocytic leukaemia.

"Current standards used for radiation protection remain primarily based on acute high-dose exposures, derived from studies based on atomic bomb survivors in Japan," says IARC Director Dr Christopher Wild. "This assessment of the carcinogenic impact of low-dose exposures strengthens the evidence on which to base radiation protection measures. These new findings are important when considering radiation exposure in different settings, including use in medical diagnosis."

**A French survey reveals evidence of the intensification of work**

Analysis of the data collected by the French working conditions survey 2013 is contained in a report issued in June 2015. On the one hand, the various forms of constraint that contribute to work intensity have been increasing steadily over the last 30 years; on the other, for an increasing number of workers the experience of work intensity is generated by several constraints of differing kinds.

The constraints associated with machinery and production techniques that were previously a feature of industrial labour are now increasingly found also in services. For the employed workforce taken as a whole, the percentage of persons stating that their pace of work is determined by the automatic movements of a product or production component has risen between 1984 and 2013 from 2.1 to 5.4% and the percentage of persons stating that their pace of work is determined by other types of technical constraint has increased fourfold (from 2.8 to 11.1%).

Dependence on colleagues is another factor of work intensity that shows a significant increase. The percentage of workers concerned here has risen from 11.2 to 29.6%.

Standardisation of work procedures increasingly leads to the imposition of compulsory schedules. The proportion of employed workers stating that their work pace is determined by norms or hourly performance requirements has risen fivefold (from 5.2 to 27.3%). The proportion of employed workers whose work pace is determined by an external requirement or demand necessitating an immediate response has doubled (from 28.3 to 58%).

The proportion of employed workers who state that their work pace is imposed by continuous supervision has almost doubled (from 17.4 to 31.5%).

**Asbestos a threat to the whole community: alert issued by EU institutions**

On 24 June 2015 the European Economic and Social Committee (EESC) and the Committee of the Regions (CoR) called upon the European Commission and EU Member States to establish registers of buildings containing asbestos and to devise action plans for safe asbestos removal.

The Opinion was adopted following the conference "Freeing Europe safely from asbestos" organized by the EU bodies in partnership with the European Federation of Building and Wood Workers (EFBWW) and the employers’ organization European Construction Industry Federation (FIEC).

"From social housing to Royal housing, no property and person is immune (...) Children and teachers in schools, DIY enthusiasts and maintenance workers are among the new risk groups joining the long list of workers and members of the public increasingly at risk from asbestos-infested buildings across Europe", states the EESC.

In its press release, the EU institution echoed the comments made by an expert at the conference who estimated that the total number of asbestos-related deaths in Europe could peak at 47,000 per year, 50% higher than previously believed and double the number of deaths caused by road accidents.
TUC warns of the re-emergence of “Burnout Britain”

The number of people working excessive hours has risen by 15% since 2010, according to a new analysis from the British trade union confederation TUC. The number of employees working more than 48 hours per week has now reached 3,417,000 – up by 453,000 since 2010 – following more than a decade of decline in long hours working. Regularly working more than 48 hours per week is linked to a significantly increased risk of developing stress, mental illness, heart disease and strokes and diabetes. Illnesses caused by excessive working time put extra strain on the health service and the benefits system, as well as impacting on co-workers, friends and relatives. Many people are working unpaid overtime and at least a million report that they want to cut their excessive hours. The TUC says that the government should reassess its negative view of the EU Working Time Directive, which has been brought into UK law and stipulates a 48 hour working week. Many long hours employees report that they feel pressured to “opt-out” from the 48 hour limit as a condition of employment – individual opt-outs are currently allowed by law.

TUC general secretary Frances O’Grady said: “Britain’s long hours culture is hitting productivity and putting workers’ health at risk.”

People who work at least 55 hours a week are significantly more likely to eventually suffer a stroke than people who work 35 to 40 hours a week, according to a study published last August in The Lancet.

ETUI meeting on workers’ compensation systems and their impact on prevention schemes

A new ETUI project focusing on workers’ compensation in a context of prevention strategies was launched in Prague on 4 September 2015. The project is coordinated by the ETUI researcher Viktor Kempa and Wim Eshuis from the Dutch research trade union institute De Burcht.

The project is being implemented within the framework of the activities of the Workers Interest Group of the Advisory Committee for Safety and Health at Work. This Committee is the European Commission’s tripartite body that streamlines the consultation process in the field of occupational safety and health.

The meeting was opened by a debate about the project’s objectives and participants’ presentations on national compensation systems, including trade union involvement in these systems.

One objective is to compile a trade union guide on the diversity of workers’ compensation systems. It would include examples of trade union activities aimed at providing assistance to workers injured or sick because of their work.

The final seminar of the project is planned for February 2016.

Ireland: health and safety during a period of crisis

One result of the economic crisis in Ireland has been to reduce both workplace accidents and the incidence of occupational disease, according to findings published in May. The researchers draw attention to inequalities among workers in this respect, with part-timers subject to much higher risk of accident than full-timers. The occupational accident rate per 1,000 workers (full-time equivalents) is very much higher among workers employed on a part-time basis or subject to irregular work schedules. Whereas the rate is as much as seven accidents per 1,000 workers among those employed between one and nine hours a week, it is approximately two accidents per 1,000 workers among those in full-time jobs. Night work and shift work are also associated with higher rates of occupational accident and sickness. Low seniority in the company is a further factor associated with a much higher accident level.

The report draws attention also to the positive effect of labour inspectorates. A significant correlation can be observed between the reduction in the numbers of workplace accidents/cases of sickness and the frequency of inspections. On this point, it is appropriate to voice concern for in Ireland, as in several other EU countries, one consequence of austerity policies has been to reduce the numbers of labour inspectors and hence of workplace inspections. Whereas in 2009 123 inspectors conducted more than 19,000 inspections (9.4 inspections for 1,000 workers), in 2013 107 inspectors carried out just over 12,000 inspections (6.5 inspections per 1,000 workers). Meanwhile, the labour inspectorate’s budget has fallen by 20% in five years.
European trade unions adopt an “Emergency motion” on health and safety at work

On 2 October 2015 European trade union delegates, meeting in Paris for the 13th Congress of the European Trade Union Confederation (ETUC), adopted an “Emergency motion” urging the European Union to protect its own health and safety at work directives against the European Commission’s wave of deregulation that has been going on several years.

The delegates at the ETUC Congress, representing 90 national trade union confederations from 39 countries and 10 European trade union federations, “condemns the attempts to put into question the existing framework of health and safety protection and to classify much needed health and safety standards as needless red tape”.

“There is no need for a full recast of the occupational health and safety directives system. The current structure with a framework directive and individual directives should be maintained”, said the statement.

According to the representatives of the European workers’ movement, occupational safety and health in the EU required the European and national authorities to define a more ambitious strategy, rather than a deregulatory approach.

The Congress in Paris also elected a new ETUC team of leaders. The Irish trade unionist Esther Lynch will be responsible for dealing with European occupational health and safety policy.

REACH: European Court of Justice issues judgment favourable to health protection

In a judgment issued on 10 September, the Court of Justice of the European Union (CJEU) endorsed the earlier interpretation by five member states of a point in the REACH regulation concerning chemical substances categorised as being “of very high concern” on account of their carcinogenic, mutagenic or reprotoxic properties.

According to the REACH regulation – which covers trade in chemical substances in Europe – the producer or importer of an article in which a substance of very high concern is present in a concentration of above 0.1% of the mass of an article must provide information sufficient to ensure the safe use of the article. This information must be supplied automatically to professional users of the article, whereas, in the case of ordinary consumers, the information has to be supplied (free of charge) only if the user actually requests it.

Since the enactment of REACH, there has been debate regarding whether, for complex products containing several articles (e.g. a car), the threshold should be calculated at the article level (wheel, seats, tyres) or the product level (the whole car).

The European Commission had taken the position – favourable to industry – that the thresholds should be calculated at the whole product level, meaning that if the threshold was exceeded for minor components, the information requirements would not necessarily be triggered.

The CJEU failed to endorse the Commission’s interpretation, taking the view instead that each separate article incorporated into a product should be subject to the information requirements if it contains a substance of very high concern in a concentration superior to 0.1% of its mass.

With this judgment issued on Thursday 10 September, the CJEU endorses the position of the French government whose interpretation of articles 7(2) and 33 of the REACH regulation provoked the ire of the French retailers’ federations and do-it-yourself shops. These associations took out proceedings in the French courts which in turn asked the CJEU to issue a judgment.

The position of the French authorities was shared by four other EU governments (Austria, Belgium, Denmark, Germany).

Switzerland: around one million people suffer (from) accidents and illnesses due to their work

A recent Swiss survey of the working population shows that in 2013 over one million people suffered damage to their health due to their occupational activity. Eleven per cent of those questioned reported suffering from a health problem linked to their work (750 000 people) and 6% had been the victim of a workplace accident (316 000 people).

The risks of an accident are highest in agriculture and construction. Temporary and on-call workers are particularly vulnerable, as also are young employees and apprentices.

Sixty per cent of those employed are exposed in their work to at least one physical risk and 45% to at least one psychosocial risk. Sixty per cent of the health problems involve bone, joint or muscle pains, which are more common among older workers and those with a low level of education.

Stress, depression and anxiety affect 10% of those questioned. Workers with a higher level of education are affected more than average.

In 40% of cases, these various problems have resulted in absences from work and 25% of those affected have been unable to work for at least two weeks.
Editorial

Social action is needed to improve occupational health

Laurent Vogel
ETUI

Occupational health is currently under serious pressure from the wider context of the Community policy pompously entitled "Better Regulation". According to this policy, any legislation that protects the health of workers and the general public or the environment comes at too high a cost for business. The solution is therefore seemingly to reduce the levels of protection afforded by European legislation in order to boost economic competitiveness. No meaningful research has ever actually established a causal link between the amount of legislation and the economic situation of businesses. Many other factors come into play, and often have a greater impact. In reality, the "Better Regulation" programme is simply an expression of the austerity policies within the institutional procedures: everything must be subordinate to corporate profits.

As regards occupational health, the Barroso Commission (2004-2014) decided to impose a moratorium on any new legislative initiative, pending a review of the existing legislation. This work was entrusted to a consortium of external consultants.

These consultants completed their report at the beginning of 2015. Overall this report takes the view that the occupational health legislation is necessary and coherent, and that its requirements are reasonable. Some aspects could be usefully amended to make it more effective, whilst others could be added to take account of emerging risks. At the time of writing these lines (October 2015), the Barroso Commission failed to complete its report, and the legal text produced will be redistributed and ultimately added to take account of emerging risks. At the time of writing these lines (October 2015), the Barroso Commission failed to complete its report, and the legal text produced will be redistributed and ultimately added to take account of emerging risks.

The same loss of legitimacy is evident in the daily life of businesses. The neoliberal reorganisation of work is harmful to health, and is also ineffective in terms of the quality of work. The search for instant profits that are as high as possible is an intrinsic part of the new management methods. Focused on quantitative indicators, management is becoming increasingly distant from the actual work carried out. The aim of these management methods is to individualise in the extreme an activity that, in its very essence, requires collective cooperation. Throughout Europe, the emergence of damage caused by psychosocial risks is evidence of this crisis.

The need to make work sustainable on a lifelong basis may also help to encourage action on working conditions. Employers consider that, because life expectancy is increasing, we should therefore be working longer. This reasoning ignores the fact that healthy life expectancy is not increasing for the most underprivileged in society, largely due to their conditions of work and employment.

Healthy life expectancy is not increasing for the most underprivileged in society, largely due to their conditions of work and employment. Without an improvement in those conditions, any rise in the retirement age will result in dramatic situations of exclusion for those workers exposed to the greatest risks. At the other end of the demographic scale, austerity policies have considerably increased job insecurity for the young generations. It is not by chance that, in those countries worst hit by the crisis, it is young people who have initiated the main social actions, such as the "indignants" movement in Spain. In Greece, the "no" to austerity policies expressed during the referendum in July overwhelmingly came from the young generation.

Encouraging action to improve working conditions necessarily requires trade unions to adopt new approaches highlighting the radical and collective nature of occupational health demands. This action will allow immediate improvements to be made in very specific areas and more ambitious plans to be developed for social change. More than ever before, in order to be effective, the advocates of occupational health need to highlight the multiple links between the most fundamental social issues, such as the environment, equality and democracy.
Pesticides in Europe: a daily silent Bhopal

The code of silence is starting to break. In the agricultural world, despite firmly rooted taboos, social action is increasingly being taken on behalf of victims of pesticides.

Laurent Vogel
ETUI
This social action has changed the game as regards the recognition of occupational diseases in France. In 2012 Parkinson’s disease was added to the list of occupational diseases for farmers exposed to pesticides. In March 2015 non-Hodgkin’s lymphoma – a cancer of the lymphatic system that destroys the body’s immune defences – was also recognised as an occupational disease caused by pesticides. Also in March 2015, a European action day was organised for the first time to focus attention on the victims of pesticides.

New developments are also occurring internationally. In March 2015 the International Agency for Research on Cancer classified five commonly used pesticides as carcinogens. In widespread use as a herbicide, glyphosate causes cancers of the blood and lymphatic system. It is the active substance in Roundup, which is the flagship product of Monsanto. Diazinon is implicated in lung cancers and malathion causes prostate cancers. Three months later, the same Agency (which is part of the World Health Organization) classified three new substances: lindane as a Group 1 carcinogen (carcinogenic to humans), DDT as a Group 2A carcinogen (probably carcinogenic to humans) and 2,4-D in Group 2B (possibly carcinogenic to humans). 2,4-D is one of the two substances in Agent Orange, which was extensively used by the United States of America in the Vietnam War. Every year hundreds of Vietnamese children are born with serious congenital defects in those areas where Agent Orange was sprayed over 40 years ago. 2,4-D is still widely used by the pesticides industry.

**Multiple health effects**

A pesticide consists of one or more active substances intended to destroy animals or plants. These active substances are mixed with solid or liquid solvents, together with additives to aid application. The active substances may persist where they break down only very slowly. As a result, chemical pollution from pesticides used thousands of kilometres away has been found in the Arctic. Pesticides can break down in the form of metabolites that themselves sometimes have a toxic effect. Among consumers, pesticide residues are absorbed through food.

For agricultural workers, pesticides have multiple health effects. The most obvious effect is acute poisoning. In the fields of Asia, suicide by ingesting pesticides has become a worrying phenomenon. According to the British medical journal *The Lancet*, there are apparently around 300,000 cases a year. Other pathologies have been observed for decades: respiratory, neurological and digestive disorders, skin diseases and reproductive effects.

In recent years, numerous studies have highlighted the role of pesticides in cancers. As a general rule, farmers are less affected by cancers than other social and occupational categories. This is mainly explained by two factors. A selection factor: you need to be strong and in good health to work in agriculture (termed the "healthy worker effect"). In addition, farmers are less inclined to smoke. However, for certain cancer sites, there are worrying peaks. Skin and lip cancers are mainly associated with exposure to sunlight. For other sites, the main explanation can be found in pesticides. This is particularly the case with cancers affecting the blood and also brain tumours. French researchers have found that farmers exposed to pesticides develop 100 to 1,000 times more abnormal cells in their genome, which can develop into follicular lymphoma, a form of incurable blood cancer. Cancer records in the Nordic countries indicate an increased risk of chronic leukaemia and multiple myeloma, which is a cancer of the bone marrow.

Among the active ingredients in pesticides, there are numerous endocrine disruptors. Among other reasons, this explains the increased risk of thyroid cancer among female farmers. Various studies point to the role of pesticides in breast, prostate, uterine and testicular cancers.

**Threat to future generations**

There is converging evidence that the occupational exposure of female workers to endocrine disruptors during pregnancy causes multiple health problems for their descendants.

In Denmark, children whose mothers worked in greenhouses were monitored between 1997 and 2013. Most of the exposure to pesticides occurred during the first eight weeks of pregnancy. The workers were exposed to around 100 pesticides authorised under European legislation. The prevention measures were regarded as complying with the applicable rules. Among the young boys, a range of reproductive health problems were found: cryptorchidism (undescended testicles), reduced volume of the testicles and penis, and disruption of the production of reproductive hormones. Among the young girls, the risk of early breast development was tripled. For all the children, there was an increased risk of reduced birth weight and overdevelopment of fatty tissues. Neuropsychological problems involving language and motor activity were also noted among the girls.

In the United States, a report published in 2012 by the Centers for Disease Control and Prevention (CDC) – the federal body responsible for public health – implicated endocrine disruptors in the development of autism. Other research points to harmful effects on the development of cognitive skills. Endocrine disruptors contribute to child cancers where the mother was exposed to pesticides during pregnancy. A study conducted in the United States shows that the risk of breast cancer is multiplied by 3.7 in women whose mother was exposed to DDT during pregnancy.

**Danger to biodiversity**

Added to the direct threat to human health are the harmful effects on the environment. Industrialised agriculture is significantly contributing to the environmental crisis and is playing a crucial role in water pollution. Pesticides also threaten biodiversity as there is a potential boomerang effect on a significant number of agricultural activities. For most cultivated plants, and particularly fruit and vegetables, insects are needed for pollination, i.e. to carry pollen from the stamens (male organ) to the pistil (female organ). Only a small minority of plants can self-fertilise. Among pesticides, neonicotinoids are playing a major part in the destruction of honey bees and bumblebees. These substances affect their central nervous system with a range of consequences: loss of sense of direction, reduction in appetite. In May 2013 the European Union imposed temporary restrictions on the use of three neonicotinoids (imidacloprid, clothianidin and thiamethoxam). In August 2013 it banned the sale of seeds treated with fipronil. These measures have been challenged by the producers concerned:

1. In France occupational diseases in agriculture can be recognised among both employees and the self-employed.
Researchers have found that farmers exposed to pesticides develop 100 to 1,000 times more abnormal cells in their genome.

3. The historian Jared Diamond has suggested that there have been common elements to the disasters that have wiped out various civilisations throughout the history of humanity. One of these elements is agricultural practices that have harmed the environment, combined with climate change (Diamond J. (2005) Collapse. How Societies Choose to Fail or Succeed, Viking Penguin).

4. Nitrogen fertilisers threaten human health due to air pollution. They also contribute to climate change and water pollution. The European regulation on organic farming, which is currently being discussed, will not impose a performance obligation by setting a pesticide residue threshold above which the biolabel could be withdrawn. During the meeting of the Council of Ministers in June 2015, the countries most staunchly defending the interests of pesticide manufacturers were Germany, Austria, the Netherlands, Sweden and the United Kingdom.

5. The European regulation of organic farming has been imposed as a performance obligation, which the biolabel could be withdrawn. During the meeting of the Council of Ministers in June 2015, the countries most staunchly defending the interests of pesticide manufacturers were Germany, Austria, the Netherlands, Sweden and the United Kingdom.

Different effects on men and women

A significant proportion of agricultural work is carried out by women, both directly by contributing to various production activities and indirectly by carrying out most of the domestic work and a large part of the work of managing family farms. Domestic work includes exposure to pesticides, particularly by washing work clothing. This double work is sometimes supplemented by a paid non-agricultural job. This is often the case with women working in factories located in rural areas.

Many of the studies on the health effects of pesticides have not separately analysed the effects on men and women. However, these differences exist and should be taken into account in the regulation.

A Mexican research programme attempted to assess the different effects of chemical contamination on men and women. A significant part of the programme was devoted to pesticides. The initial conclusions point to generally greater effects for women, particularly in terms of genotoxic damage. The explanation involves two factors: the gender division of work exposes women more to certain contamination. Biological differences also play a role, especially the fact that adipose tissues form a greater part of women’s bodies. A number of chemical contaminants specifically tend to become concentrated in the adipose tissues.


The dynamics of capitalism have profoundly altered agriculture. Since the 1950s, the “green revolution” has made agricultural production heavily dependent on inputs consisting of synthetnic chemicals. According to Eurostat data, the use of pesticides peaked in western Europe in the year 2000 or thereabouts. There have been many elements to this transformation. An agri-business sector controls a large part of the fertile land while imposing the industrialisation of the living world. Farmers themselves have been given a new identity as “entrepreneurs” of the land, which is now regarded as a simple raw material. Their room for manoeuvre has been reduced by the rising power of the chemical input suppliers (fertiliser, pesticides), seed companies (by using patents to confiscate thousands of years of collective experience in the selection and improvement of cultivated species and by producing genetically modified organisms) and agricultural equipment manufacturers.

Three European giants

Global pesticide production is highly concentrated as it is dominated by three European multinationals. In 2012, Syngenta, Bayer and BASF accounted for 47% of pesticide sales around the world, with market shares of 19%, 17% and 11% respectively. This extreme concentration of production gives these companies considerable influence. The instructions for use provided by pesticide manufacturers are generally impracticable under real working conditions. They are designed to release manufacturers from their liability with regard to the actual use of pesticides.

The link between farmers and consumers has stretched due to long distribution channels that have become internationalised under the control of the agri-foodstuffs industry and major distribution chains. This loss of power has also resulted in a loss of practical knowledge, which makes farmers vulnerable with regard to specialised professions. Their financial dependence on credit institutions also entails a loss of control over productive choices. To obtain loans, farmers must bow to the constraints of high-intensity agriculture.

These changes have not occurred without resistance. In a number of European countries, there are instances of environmentally friendly and non-predatory agriculture that are based on cooperative relationships allowing pressure from agri-business to be resisted. Far beyond biolabels or “sustainable” certifications that do not guarantee genuine protection of occupational health, these innovative practices are particularly finding expression through the international coordination of the Via Campesina network.
More information


Pesticide Action Network website (Europe): http://www.pan-europe.info/index.php
Via Campesina website: http://viacampesina.org

**A special system of regulation**

EU legislation on pesticides was introduced to serve the purposes of the common agricultural policy. This ad hoc legislation therefore escapes the common rules on dangerous substances. The main reference text is a regulation of 21 October 2009, which replaced directives dating back to 1979 and 1991.

Active substances are approved in Europe for a set period, with just over 400 currently being approved. These active substances are mixed with other constituents to produce pesticides. Marketing authorisations for pesticides are granted nationally in each Member State. However, a marketing authorisation granted in a Member State benefits from the mutual recognition principle, which means that the same pesticide may be marketed on the territory of another Member State provided that its use involves “comparable conditions”. To this end, Europe has been divided into three zones (North, Centre and South) that have fairly similar climates. As a general rule, marketing authorisations last for 10 years. They remain valid even if, in the meantime, the active substance is no longer approved. A Member State has little possibility of objecting to the marketing of a pesticide authorised in another country in the same zone.

Substances classified as CMR (carcinogenic, mutagenic or toxic for reproduction) in categories 1A and 1B are not in principle approved. However, substances in category 2 (i.e. suspected of having such effects) are usually approved even though classification in category 2 does not necessarily imply a low risk of cancer. This is a legal exercise, partly due to the extent of the research taken into account by the regulator and partly due to the strength of the industrial lobbies. This explains the differences between the European classification and the classification of the International Agency for Research on Cancer.

Removing dangerous substances from the market is a slow and complex process. There are three options: the approval for an active substance expires and is not renewed; approval can be withdrawn following re-assessment; the European Commission places certain substances on a list of substances that are “candidates for substitution”. However, this is not a straightforward ban as the marketing authorisations for pesticides containing the substance remain valid. Member States can continue to authorise pesticides containing these substances through an assessment procedure. It takes several years from a substance losing its approval for some of the pesticides containing that substance to be effectively removed from the market.

Several elements of this process pose a problem:

— When substances are being considered for approval, independent studies conducted by university research centres are regarded as being of secondary importance. Particular credence is given to the risk assessment prepared by pesticide manufacturers, which is conducted on the basis of guidelines issued by the European Food Safety Authority (EFSA). These guidelines consider that wearing personal protective equipment (PPE) reduces the risks very significantly. However, these findings are constantly contradicted in practice. The actual levels of protection afforded by PPE are limited. This criterion is not in keeping with the principles of primary and collective prevention, as it places responsibility for uncertain protection on those persons who are at risk.

— The assessments do not take account of the cocktails of exposure that are the reality for both workers and consumers. In some cases, exposure to several pesticides has a greater effect than the sum of the effects of each individual pesticide. In other cases, different effects may even be observed.

— The regulation limits the possibilities of approving active substances that are endocrine disruptors. However, the European Commission should have defined criteria for this characteristic no later than December 2013. It has failed to fulfil this legal obligation. In the absence of legal criteria, most endocrine disruptors used in pesticides are still approved.

— Even when a pesticide is no longer authorised for marketing, exemptions can be obtained for certain crops. There is no effective control of the use of these exemptions.

— A number of pesticides contain nanomaterials. The regulation does not require a specific risk assessment that takes account of the increased danger to health or the environment that may be posed by these nanomaterials.

— The authority responsible for applying the regulation is not the European Chemicals Agency (set up under the REACH Regulation), but the European Food Safety Authority (EFSA). The credibility of this authority is limited due to its multiple links with pesticide manufacturers. According to a report published by the NGO Pesticide Action Network (PAN) in 2014, 52% of experts on the EFSA committees responsible for analysing the effect of pesticide mixtures on food have direct links with the pesticide industry.

The current regulation is not sufficient to protect public and occupational health. The situation may worsen if the TTIP – the Transatlantic Trade and Investment Partnership – is approved. According to the negotiating documents that have been made public, the European Commission has proposed downgrading the rules on pesticide residues to bring them into line with those of the Codex Alimentarius Commission. In most cases, this means that the pesticide residues authorised in food will be multiplied by a factor of between 2 and 5.

A directive was adopted in 2009 to ensure that Member States defined national action plans to reduce the risk posed by pesticides. Unfortunately, this positive initiative has not led to targets being harmonised among the Member States. Most of the national plans are vague and do not set overall quantified targets for reducing pesticide use.

*This list should have been produced in December 2013. Under pressure from various Member States (particularly France), the Commission eventually produced a draft list of 77 substances in 2015. At the time of writing this article (October 2015), this list has still not been adopted.*
Women at work: in search of recognition

Special report coordinated by Marianne De Troyer and Laurent Vogel

Equality for men and women in the workplace has been one of the longest standing aims of European social policy. Forty years after the adoption of the first Directive, and in spite of numerous initiatives by the European Union, there is still a long way to go to achieve full gender equality in the workplace.

A major obstacle in this regard is the invisible nature of the specific risks facing working women, which stem from the organisation of work. The deeply entrenched nature of gender segregation on the labour market and sexist stereotypes only serves to reinforce the status quo: managerial posts are still predominantly filled by men and part-time hours are essentially the preserve of women.

In addition to the fact that the difficult nature of work in female-dominated sectors is ignored from a social perspective, unpaid labour (childcare, housework, etc.) is still regarded as “women’s work”.

Research has shown that women are exposed to physical risks, too. Very few are spared musculoskeletal disorders and they are more likely than men to describe their general health as “poor”.

Policies on risk prevention in the workplace tend not to be gender-sensitive. Exposure to chemicals at work is a clear illustration of this situation. Millions of women in Europe are exposed to toxic products, especially in cleaning and personal care jobs, but preventive measures are generally only taken in industrial settings.

The design of machinery and work equipment is another example as it completely disregards the physiological differences between men and women.

Even though progress has been made in some European countries, the systematic denial of the hardships facing working women makes it more difficult for them to ensure recognition of work-related illnesses.
“Putting on gender glasses” to understand working conditions

If occupational health is ignored, equality policies will always be ineffective. The opposite is also true: the fight for occupational health must focus on ensuring access for both men and women to all jobs under conditions compatible with their lifelong health.

Laurent Vogel
ETUI

A high percentage of women’s jobs require the performance of tasks of the type carried out within the household.

Image © Belga
Equality is not being achieved if you look at the data from European surveys on working conditions and employment. Regardless of the region, women work under less favourable conditions than men. Their pay is lower, their jobs are more insecure and they are responsible for most of the unpaid work. They are more at risk of poverty than men. However, the specific forms of inequality vary from one country to another depending on a range of factors: the degree to which the welfare state is family-oriented; the extent of horizontal segregation, which confines women to a limited number of activities and sectors; the amount of public investment in facilities such as crèches and care homes; the extent to which part-time work is the norm for women's work, etc. Although these variations are important, they do not affect the profoundly unequal structure of our societies.

Segregation

Segregation between men and women at work is one of the main characteristics that emerges from the European Working Conditions Survey. It applies to both paid work and unpaid work. Among clerical support workers, intermediate healthcare workers, personal carers and cleaners, the percentage of women is around 80%. Among manual workers in construction, machine operators and manual craft workers, the percentage of men ranges from 85% to 90%. Education is also a female-dominated sector (67% women). The overall picture is startling: 60% of women and 64% of men work in occupations that are dominated by their own gender. Out of the 20 largest occupational groups, only five can be regarded as relatively mixed. However, these categories are defined in very general terms. Within seemingly mixed occupations, you will often find a division of labour revealing clearly male or female areas.

As regards employment conditions, the main segregation factor is part-time work, which now represents the norm for female employment in a number of European countries. The countries with the biggest difference between the paid working time of men and women are Austria, Belgium, Germany, Ireland, the Netherlands, Norway and the United Kingdom. Part-time work is associated with necessarily being more flexible in terms of working hours (which brings uncertainty with regard to the organisation of daily life) and benefiting from fewer opportunities for training and promotion. This is a central factor in the insecurity of women's work. In Germany, women have been particularly affected by the "Hartz reforms", which were adopted by an SPD-Greens government in the early 2000s. They hold two-thirds of mini-jobs (gross monthly salary below EUR 450) and three-quarters of midi-jobs (salaries between EUR 450 and EUR 850).

The distribution of unpaid work is very unequal. If you add together paid work, travelling time and unpaid work, the average weekly working time of women is 64 hours compared to 53.4 hours for men. The main difference lies in unpaid work: 26.4 hours for women as opposed to 8.8 hours for men.

Segregation affects health for various reasons. For both women and men, stereotypes about what work is "naturally" female or male result in risks being trivialised and actual workloads being minimised. More specifically for women, segregation tends to reduce the positive impact of paid work where this relegates women to activities that are viewed as an extension of unpaid work. This applies not only to all occupations associated with personal care, but also to those that are a continuation of domestic tasks, such as cleaning, ironing, etc. This association with unpaid work is also apparent in occupations that are seemingly unconnected, where the expectations of colleagues or users sometimes change the practical aspects of professional conduct. Surveys in very different environments reveal these pressures.

The organisation of work is marked by a more authoritarian hierarchy for female workers. In the 2010 European survey, 37% of 60% of women and 64% of men work in occupations that are dominated by their own gender.
women indicated that they were in a position to influence decisions that were important to their work, compared to 43% of men. Among women, 46% said that they were consulted before targets were set (compared to 48% of men). If we look at career progress, 29% of female workers indicated that their work offered good prospects for career advancement, compared to 34% of men.

**Different health effects**

Working and employment conditions result in significant social inequalities in terms of health for both men and women. This finding is important but, in order to improve these conditions, we must examine to what extent health effects may differ for men and women.

Occupational segregation concentrates a higher proportion of men in activities where the physical risks are immediate and visible. As a result, frequency rates for accidents at work are higher for men than for women. This phenomenon is mainly due to the high concentration of men in sectors where accident rates are particularly high, such as construction, fishing or road transport. In most European countries, however, the statistics indicate that male and female frequency rates for accidents at work are becoming increasingly similar. Generally speaking, over the long term, the number of accidents at work suffered by men has reduced to a much greater extent than for women. When the statistics calculate the frequency rate compared to the number of hours devoted to paid work, the difference between men and women is also smaller.

Other risks in the workplace broadly reflect occupational segregation: more men are exposed to toxic chemicals (particularly carcinogens), noise and vibration. Women are more likely to be exposed to biological risks (particularly due to their concentration in the health and personal care sector). As regards carrying heavy loads, men are more affected by carrying objects and women by carrying people. Overall, the perception of immediate risks to health and safety is greater among men than among women. This short-term advantage disappears over the long term. The percentage of women who feel that they will not be able to do the same job at 60 is similar to that for men.

This perception is confirmed by the employment statistics. There is a significant reduction in female employment rates from the age of 50 in most European countries. Women are more likely to withdraw from the labour market than men. The explanation for this phenomenon probably lies in the combination of two elements: firstly, women’s health is affected by the cumulative impact of occupational exposures, and in particular by the wear and tear associated with repetitive occupational exposures, and in particular by physical agents (drowning, fire, bites and stings, electric current, etc.), without mentioning the activity that was at the root of the accident. Italy compiles more systematic data as it has introduced a compulsory insurance scheme for accidents suffered by individuals that purely stem from unpaid domestic work. According to research for 2007, around 400 000 women apparently went to the accident and emergency services of Italian hospitals following accidents occurring at home, with 110 000 of these accidents seemingly being caused by domestic work. Hospitalisation

**Part-time work is a central factor in the insecurity of women’s work.**

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2. The responses taken into account are ‘always’ or ‘most of the time’.
was required in 9,200 cases, and every year around 900 women apparently suffer serious long-term disabilities. Among these domestic work accidents, 63% occur in the kitchen. The study authors state: “The home is a safe place in the minds of society and individuals, but this is only true if the spaces and items in those spaces have been built and maintained and are used in an appropriate manner.” This observation suggests that the conditions under which domestic work is carried out may reveal important social inequalities linked to the financial situation of families.

Breast cancer and work

With around 360,000 new cases every year and over 90,000 deaths, breast cancer is the main cause of death from cancer for women in the European Union.

The epidemiology of occupational risks has long neglected to study the interactions between working conditions and this cancer, which almost exclusively affects women. The scientific literature on this subject is more recent and less plentiful than that on lung cancer, which is the main cause of death from cancer for men.

This lack of scientific interest influences breast cancer prevention policies: most campaigns focus on early detection and individual advice regarding lifestyle (food, physical activity, etc.) and ignore primary collective prevention and improvement of working conditions. This is advantageous to the pharmaceutical industry, as pointed out by the French sociologist Marie Ménoret: “Zeneca Pharmaceutical, the world’s biggest seller of anti-cancer drugs for breast cancer, thanks to its tamoxifen patent, is also the main producer of pesticides and other harmful products, which are known to be particularly carcinogenic”.

Conversely, the analysis of breast cancers in men has on numerous occasions helped to identify the role of occupational exposures. Notably, the role played by chemical substances (particularly in solvents) and ionising radiation was identified long ago.

A report published in August 2015 by the Breast Cancer Fund in the United States confirms previously observed associations between various occupations and breast cancers.

Among nurses, the risk is 50% higher. It is four times higher among certain professionals.

One of the theories adopted by the scientific literature is the role played by stress at work. New associations have become apparent in recent research. The risk of breast cancer is five times higher among hairdressers and beauticians, as also among food and beverage production workers. It is four and a half times higher among dry cleaning and laundry workers and four times higher among workers in the paper and printing industry and among those making rubber and plastic products.

The report lists the occupational risks explaining these figures. These risks mainly stem from a series of chemicals such as benzene and other solvents, polycyclic aromatic hydrocarbons (PAHs), pesticides and numerous other endocrine disruptors. Night work and ionising radiation are also singled out.

More information


Being female doubles the likelihood of being "forgotten" by occupational health.

Prevention on the cheap

The European surveys do not allow prevention practices according to gender to be analysed. Those offering gender-differentiated data do not ask questions about prevention activities. The European Survey of Enterprises on New and Emerging Risks (ESENER), which does cover these aspects, does not allow the situation of men and women to be analysed separately. However, a few national surveys that are available contain similar responses. As a general rule, prevention activities are organised less systematically in female-dominated areas. The only notable exception is hospitals. The capacity of nurses to take action to improve their working conditions is one of the main factors explaining this exception.

In France, 61% of workers stated in 2013 that there was a committee on hygiene, safety and working conditions (CHSCT). This breaks down into 62.7% for men and 59% for women. The lack of CHSCTs helps to explain why prevention is less systematic and more bureaucratised. Accordingly, 35% of male workers were aware of the existence of a risk assessment document, compared to 24% of female workers. Where the existence of this document was mentioned, the likelihood of having been consulted on its contents was slightly higher among men than among women.

Although occupational health is supposed to cover all workers in France, over 16% of women have never benefited from a health check-up or state that their last check-up was more than five years ago. Being female doubles the likelihood of being "forgotten" by occupational health. Health check-ups are pointless unless occupational health also examines the collective working conditions. Around 25% of men reported that their workplace had been visited by an occupational doctor in the previous 12 months, compared to 20% of women. Some 54% of men had been given written health and safety instructions or guidelines, compared to 38% of women. There were also inequalities in safety training: around 35% of men had received such training in their company, compared to 26% of women.

The figures from the 2011 Spanish survey on working conditions also point in the same direction (INSHT 2012). Some 41% of men reported that the risks of their work had been assessed, compared to 32% of women. In the previous 12 months, companies had offered a check-up by the occupational doctor to 75% of men, compared to 61% of women. As regards information and training on risks, 62% of men had received these against 52% of women. Added to these factors associated with the gender of workers is a problem of representation. Where this exists, it is mainly carried out by men. Just under one-quarter of prevention representatives in Spain are women according to a 2009 survey.

What are the policy implications?

The figures summarised in this article are useful for critically analysing prevention policies. In recent years, some political institutions have recommended focusing prevention on high-risk sectors and reducing employers’ obligations in low-risk sectors. This approach has frequently been highlighted in European debates. There are no sectors that can generally be regarded as "low-risk" as everything depends on the risk in question. In certain activities, the accident risk may be limited, whereas the chemical or work intensity risk may be higher. Likewise, tailoring prevention obligations to the size of companies would in all likelihood have discriminatory effects for women. Supporters of “better regulation” in Europe systematically conceal the gender inequalities that their policies may cause. Under the guise of an approach that favours “good sense”, they reinforce the usual stereotypes that women’s work involves fewer health effects than men’s work.

However, the trade union movement should not limit itself to criticising public occupational prevention policies. It would also be useful to consider its own approach and strategies. Linking equality to the fight for occupational health remains a neglected aspect in the work of most trade unions. Their action for equality in the domestic sphere is generally modest. The link between different types of working time (paid and unpaid and other living time) deserves responses that go beyond the simple concept of "reconciliation", which does not challenge the perpetuation of gender inequalities. With this in mind, relaunching the fight for an equal reduction in working time is undoubtedly one possible response, provided that it is combined with the demand for the equal sharing of domestic tasks.

More information


The ETUI and the fight for female workers’ health

Still today, even in Europe, women’s work is regarded as not particularly dangerous and therefore requiring fewer preventive measures for specific risks. Service jobs, which account for a very large part of total female employment, are regarded as safe. They conjure up reassuring images of work prioritising the qualities of care, kindness, a sympathetic ear and such like, which are associated with “female values”. Women are therefore regarded as almost exclusively carrying out light work, with seemingly negligible consequences for their health, in terms of both accidents at work and occupational diseases. These caricatures have particularly harmful and pernicious consequences for women’s right to health. For around 20 years, the European Trade Union Institute (ETUI) has been working to highlight the impact of work on women’s health. In the mid-1990s, ETUI researchers helped to organise the first scientific meetings on this subject, and also open them up to other circles, particularly trade unions and associations.

By publishing the pioneering work of experts from Quebec, the ETUI has helped to disseminate information throughout the European Union that has raised awareness of the gender division of labour and its consequences for the health of millions of female workers. The ETUI has constantly denounced the way in which women are discriminated against by systems for reporting and recognising occupational diseases. Through many publications, researchers from this institute have also highlighted the “double workload” phenomenon, which is ignored by society, whereby women have to do both paid work and domestic work (housework, looking after children and parents, etc.).

Below are a few key dates in the ETUI’s fight for gender equality in the area of occupational health.

**April 1996**: First international congress on the issue of women’s health at work in Barcelona. The European Trade Union Technical Bureau for Health and Safety (TUTB), which is now the Working conditions, health and safety unit, is represented by a British trade unionist.

**1998**: The TUTB publishes a guide to union action on risk assessment (written by Pere Boix and Laurent Vogel). The guide draws the attention of trade unions to the need for gender equality to be integrated in the occupational health policy of companies.

**1999**: The TUTB publishes the work *Integrating gender in ergonomic analysis* by Karen Messing (see the article on p. 18).*

**September 1999**: Second international congress on “Women, Work and Health” in Rio. The TUTB helps to extend the initiative beyond the academic world, particularly towards trade unions and feminist movements.

**June 2002**: Third international congress in Stockholm. The TUTB organises a workshop on trade union initiatives combining occupational health with the fight for equality. Laurent Vogel presents the results of a survey conducted in partnership with the Université Libre de Bruxelles (ULB) on occupational health and the gender dimension.

**2003**: The TUTB publishes the results of its survey conducted with the ULB in *The gender workplace health gap in Europe*.

**November 2005**: Fourth international congress in New Delhi.

**October 2008**: Fifth international congress in Zacatecas (Mexico). High attendance by women’s organisations and trade unions from Latin America. Laurent Vogel presents an analysis of reproductive risks at work.

**Autumn 2009**: Launch of HesaMag, the ETUI’s magazine on working conditions. One of the aims is to dismantle the stereotypes that women’s jobs are the least dangerous. Themed issues specifically look at work in the cleaning sector, retailing and nursing care.

**2011**: The ETUI devotes two reports to the under-recognition of occupational diseases among female workers: *Women and occupational diseases in the European Union and Women and occupational diseases. The case of Belgium*. The report on Belgium prompts an opinion from the Belgian Council for Equal Opportunities for Men and Women, which makes various recommendations to improve the system for recognising occupational diseases.

**January 2012**: The ETUI and the Belgian Council for Equal Opportunities for Men and Women organise a study day in Brussels on gender inequalities and occupational diseases.

**September 2014**: The ETUI publishes *A gender perspective on older workers’ employment and working conditions* by Patricia Vendramin and Gérard Valenduc (Université Catholique de Louvain).

**March 2015**: The ETUI organises the international conference on “Women’s health and work. Sharing knowledge and experiences to enhance women’s working conditions and gender equality” in Brussels.

*TUTB and ETUI publications can be ordered or downloaded on www.etui.org > Publications Contact: etui@etui.org
Karen Messing, the woman who could walk through walls

Born in 1943, this American-Canadian researcher specialising in women’s occupational health has transformed the attitudes of European researchers and trade unionists to gender issues. Her influence can be felt in France’s “Law on real equality between women and men” of August 2014. It is no accident that Karen Messing lives in Montreal, a city that, culturally speaking, lies midway between North America and Europe. She is a woman who transcends borders and disciplines, a geneticist turned ergonomist who shifted her focus from genes to gender.

Emmanuelle Walter
Journalist

Even in retirement, Karen Messing remains deeply involved in the movement for gender equality. In March 2015 she took part in the ETUI conference on Women’s Health and Work.

Image © Rémi Leroux
Her beautiful face is reminiscent of the American singer Joan Baez. She is a native English speaker but is fluent in French. Karen Messing is a journalist’s dream: in her books and when she speaks, she has a happy knack of making complex concepts accessible and, without prompting, she volunteers stories from her own life along with her scientific musings. Over a cup of coffee in her bright Montreal apartment, she recounts the key moments that have shaped her priorities.

At the plant with Daddy
Springfield, Massachusetts, 1948. A smartly dressed 5-year-old New England girl walks wide-eyed around the radio manufacturing plant where her father works as a manager. She observes the women as they solder blue, red and yellow wires. Soon enough, they let her play around with them. When she sits down with her father in his office, she asks: “Don’t the ladies find their work boring?” Her father answers: “No. They aren’t as smart as you, Karen”. The little girl was intrigued. “How could adult women be less intelligent than I was? That story stayed with me. Intelligence was a concept that carried a lot of weight in our family. A lot of comments were made on the subject.” Some of those comments came from her mother, an artist and painter and also a communist, at a time when that was not something one bragged about. “As progressive and anti-racist as she was, my mother sometimes implied that our black cleaning lady was not as intelligent as we were. Later, I discovered how many jobs considered to be unskilled actually require great intelligence.”

At the cafeteria in Springfield
That same dapper New Englander is now aged 17 and studying social sciences at Harvard. It is Christmas. She is walking through Cambridge, the small town near Boston where the university is based, with her boyfriend and another young couple. They happen upon a nativity crib and promptly steal the baby Jesus and the ox. After being reported by some pious soul, Karen and her three friends are suspended from Harvard for an entire session. Returning to her parents’ home in Springfield, Karen finds a job as a waitress in a cafeteria. “There, I discovered just how hard it is having to take three orders at once, pass them on to the cooks and bring out the dishes at the right time, with the right condiments, to the right customers! It’s a real cognitive challenge. While my socially disadvantaged co-workers juggled four orders, I struggled to serve two customers at once.”

Being a single parent
Karen was 20 when she gave birth to her first son. While breastfeeding she read The Feminine Mystique by feminist writer Betty Friedan, a book that argued, among other things, that women were, alas, afraid of science. Two years later, having moved to the buzzing post-Quiet Revolution Montreal, a city she had fallen in love with at first sight, she took up the challenge, studying

"Women who clean are the forgotten figures of the world of work. They are the quintessential invisible workers."
a crying woman

1985. A woman bursts into tears in the cafeteria of a Montreal hospital. Opposite her is Karen Messing, who has just spent a year at the hospital studying the effects of radiation on female radiographers and has discovered that posture, stress, exposure to germs and working patterns are just as damaging to their health, if not more so. Ginette is a cleaning lady at the hospital and a union representative. She is exhausted. “She was suffering from musculoskeletal disorders, contemptuous treatment and an ever-expanding workload. She and her co-workers had gone from cleaning one storey a day to two and a half! It’s a job where the only thing you can take pride in is making sure the premises are clean for the patients. They didn’t even have that satisfaction anymore.” This was another key moment. Karen Messing wanted to be able to do something more concrete to help these suffering, overwhelmed workers.

With Ginette, the crying woman

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Ergonomics: “The scientific study of the interaction between human beings and their

What has Karen Messing taught you?

Silvana Salerno, public sector occupational health officer in Italy

“To deal with gender as part of ergonomics and occupational health, disciplines that are still hostile to the subject! To analyse women’s working conditions in order to change them. To challenge the supposedly ‘light’ nature and the invisibility of women’s tasks. To criticise blind science that refuses to analyse the specific characteristics of women.”

Carole Gingras, head of the ‘status of women’ department of the Canadian trade union Fédération des travailleurs et travailleuses du Québec (FTQ)

“That a researcher can be a great scientist while also being very available to workers and trade unions to listen and/or observe. Karen Messing has always endeavoured to make the results of her research work accessible so that they can be used by people in the field. She has enabled us to develop winning strategies.”

Laurent Vogel, researcher at the European Trade Union Institute (ETUI), Brussels

“That it was possible to link gender equality demands with the struggle for healthy working conditions. For a long time, the implied reference subject monitored in occupational health was a male worker. Consequently, prevention measures were weaker and less effective for female workers.”
Sandra Caroly, lecturer in ergonomics at Université Pierre-Mendès-France, Grenoble and coordinator of the International Ergonomics Association’s European ‘Gender, Work and Health’ group

“She has changed our way of analysing women’s working activities: we now use different occupational exposure limits for men and women, and have implemented different control strategies to tackle the difficulties women face at work and protect their health.”


“To adopt an ‘all other things being unequal’ approach (which contradicts France’s apparent egalitarianism) instead of the ‘all other things being equal’ approach used by epidemiologists! Women and men are not in the same jobs, do not do the same work and do not have the same career paths. She has also taught us to be very concrete, using quantitative and qualitative data so as not to fall into militant or innate, using quantitative and qualitative data so as not to fall into militant or populist arguments.”

Karen Messing, for CINBIOSE, the interdisciplinary research laboratory focusing on work, well-being, health, society and the environment, which she co-founded in Montreal in 1990, and for her research partnership with Karen Messing has proved its pertinence and now permeates global research. Nine university chairs directly inspired by her work have been created in Canada. The book ‘Integrating Gender in Ergonomic Analysis’[3], which she edited, has been translated into six languages. Messing drafted the WHO’s first guidance document on the topic of “gender and occupational health”. Her work has been cited in judgments of the Canadian Supreme Court. She founded the International Ergonomics Association’s “Gender and Work” technical committee. She directly influenced a French law passed in August 2014[4], which obliges businesses to provide gender-specific indicators on health and safety matters. She has been showered with awards. Now aged 72, she continues to conduct research and write books...

2. Taken from the definition adopted by the Fourth International Congress on Ergonomics (1969).

With “the invisibles”

From that moment on, women working in the service sector – waitresses, cashiers, cleaners – became a central concern for Karen Messing, for CINBIOSE, the interdisciplinary research laboratory focusing on well-being, health, society and the environment, which she co-founded in Montreal in 1990, and for her research partnership with trade unions, the rather neatly titled *L’Invisible qui fait mal* (“the Invisible that Hurts”). The idea is to show that these jobs are trying and in no way “light”. And to show that it is possible, through ergonomic research, to “feminise” traditionally male occupations. “How can we feminise all jobs while taking account of women’s specific physiological and social characteristics? Some feminists consider that a discriminatory question, and I can see where they are coming from,” says Messing. “But we have observed people working as mechanics for heavy machinery, as telecoms technicians and as landscape gardeners, and we found that if these occupations are feminised without any adaptation of the posts or training of the existing male staff, women are quickly sidelined, be it due to the difficulties they encounter, through harassment or through workplace accidents. Women shouldn’t have to choose between equality and health. Thinking about gender also raises questions as to why men are expected to do extremely dangerous tasks simply because they are men!”

Trade unions, the Supreme Court, the UN...

With a brand new approach to the status of women in the workplace, the creation of a unique partnership between researchers and trade unions, and the use of empathy as an analysis tool, the work of CINBIOSE and Karen Messing has proved its pertinence and now permeates global research. Nine university chairs directly inspired by her work have been created in Canada. The book ‘Integrating Gender in Ergonomic Analysis’[3], which she edited, has been translated into six languages. Messing drafted the WHO’s first guidance document on the topic of “gender and occupational health”. Her work has been cited in judgments of the Canadian Supreme Court. She founded the International Ergonomics Association’s “Gender and Work” technical committee. She directly influenced a French law passed in August 2014[4], which obliges businesses to provide gender-specific indicators on health and safety matters. She has been showered with awards. Now aged 72, she continues to conduct research and write books...

Cycling with her five grandchildren

Cycling is a real passion for Karen. She and her partner are champions and regularly win races. This summer, while this article was being written, she was preparing to leave her chalet in the Laurentides (a mountainous region north of Montreal) for three days of biking with her grandchildren. It was apparent from her emails that, for her, this trip represented happiness in its purest form.

...
The “gender-based approach” to support prevention. The French example

Since 2008 the network of the French National Agency for Improved Working Conditions (Anact) has been developing a model for analysing health and career inequalities between men and women. This model inspired the adoption in August 2014 of the “Act on real equality between men and women”. Companies with over 50 employees must now produce gender-based occupational health and safety indicators and take into account the gender-differentiated impact of exposure to risks during risk assessments.

Florence Chappert  
Head of the Gender, Health and Working Conditions Project, Anact

With the assistance of Pascale Mercieca, Hélène Plassoux and Laurence Thery  
Anact-Aract

Upper body musculoskeletal disorders (MSDs) affect more than one in two women from the age of 50 up to retirement. Image: © Belga
Up to 2008, the Anact-Aract network used to be asked by companies to look at the gender mix of occupations, in a context marked by a shortage of labour. The question asked by metallurgy, building and motorway operation companies was: “What working conditions do we need to provide so that women can integrate into male occupations?”

In 2009, with the economic crisis having drastically reduced this type of request, the Anact, encouraged by the Women’s Rights and Equality Department (Service du droit des femmes et pour l’égalité), decided to include the “gender-based approach” in its methods for improving working conditions. The basic assumption was that the prevention of certain occupational health problems could be improved by better understanding gender issues.

When, in 2009, we looked for gender-differentiated occupational health and safety data and research results on the issue of “gender and working conditions”, we discovered the gaps in this area. We therefore had the same view as Karen Messing in Quebec, who formed the title of her 1998 book: One-Eyed Science: Occupational Health and Women Workers (read her portrait on p. 18).

It was true to say that even the epidemiological analyses based on an “all else being equal” approach were not necessarily relevant for understanding the differences, in terms of occupational health, between men and women. We noted that, in companies, men and women were in “all else being unequal” work situations, as they were not in the same occupations, did not work under the same conditions, did not follow the same career paths and did not enjoy the same work-life balance conditions.

A printing works shows the way

The involvement of the Lower Normandy Aract in a printing works formed the starting point of the model for understanding health inequalities between men and women. Despite investing in its machinery, the company was trying to understand why the female workers were suffering more musculoskeletal problems and were therefore more absent than the men.

The working conditions adviser, who was also an ergonomist, pointed out that, even though they worked in the same place, the male and female workers were not doing the same thing. The women had access to four different types of jobs, and the men to nine. He also showed that the activities to which women were assigned, particularly finishing support where they were over-represented, were particularly demanding: repeatedly carrying small loads totalling up to 11 tonnes per day; fast-paced repetitive movements that involved grasping very “weighty” tomes.

All the stakeholders in the company were astonished that the women’s jobs had become tougher than the men’s, which, following automation, now mainly involved monitoring the machinery from their operator positions. However, the diagnosis was further refined by taking a demographic approach to the staff data, which showed differing career development for men and women who had started in the same finishing support job.

After three years, the men would move on from this beginner’s job in the company to other opportunities within or outside the company. Some were also dismissed because they could not stand the pace or were not performing well in this woman’s job, whereas the women remained in the same job until retirement or dismissal due to no longer being fit for work. The book cutting work, which was allowed for quicker career development, was reserved for men because it was extremely difficult.

Lastly, the adviser showed that the system of rest breaks and their financial compensation for the two sexes were unfavourable to women: the women had to stop for unpaid rest breaks, whereas the men had negotiated a bonus when the automated machinery was installed that could not be stopped! When the results were passed on to the committee on hygiene, safety and working conditions, the women cried to discover these injustices.

1. The French Agence nationale pour l’amélioration des conditions de travail (National Agency for Improved Working Conditions) is a joint public institution, answering to the Ministry of Labour, which has the task of promoting innovative approaches to improve working conditions. It manages the network of Aracts or joint regional associations, which are spread throughout the country.


This model involves four areas of analysis:
1. Work organisation and gender mix: men and women do not pursue the same occupations and do not have the same jobs;
2. Work: men and women are exposed to different risk and difficulty factors, which to a degree become apparent through differing health effects, especially in jobs where women predominate;
3. Career paths: men and women do not have the same career paths;
4. Time: men and women are not subject to the same working time constraints and do not pursue the same activities "outside of work".

All these elements help to explain the differing effects of work on the health of men and women (see Figure 1).

**Women are suffering more and more accidents**

Since 2012 Anact has published a gender-differentiated statistical analysis using data on recognised occupational accidents and occupational diseases supplied by the French health insurance fund for employees, the Caisse nationale d’assurance maladie des travailleurs salariés (CNAMTS). The most recent statistical snapshot reveals that, although women suffered twice as few accidents as men in 2013, the drop over 12 years in the number of recognised occupational accidents involving sick leave (reduction of 16% between 2001 and 2013) masks differences between the sexes, namely a fall of 27% for men in all sectors of activity, compared to an increase of 20% for women, particularly in those sectors where women predominate (see Figure 2).

We believe that, over these 12 years, women entered the labour market in France in growth sectors, but in jobs that exposed them to inadequately assessed and recognised risk factors and in a context where prevention policies do not seem to be effective enough for the activities carried out by women. Furthermore, again during these 12 years, the number of occupational diseases reported and recognised (with 86% being musculoskeletal problems) increased for women (+160%) at nearly twice the rate for men (+79%). In 2013, as many occupational diseases were recognised for women as for men.

Work carried out in companies and studies into absenteeism (illness and accident, excluding paternity and maternity leave) show that, in France, women have 30% more absences than men according to the Directorate for Research, Studies and Statistics (Direction de l’animation de la recherche, des études et des statistiques). Work carried out in companies by the Anact-Aract network indicates that the role of working conditions is fundamental, even if part of this difference of four days per year on average is due to sick leave taken prior to maternity leave.

As part of our work in companies, we have shown that there is no correlation between the level of absence and the number of children, even if the "separated, divorced, widowed" situation is associated with more absences for women than for men. Our experience in companies has, however, shown that it is still risky in France to reveal gender-differentiated occupational health data that are unfavourable to women because this can reinforce the prejudices and stereotypes that are deeply rooted in this country ("women are more fragile and cannot withstand pressure..."
Health inequalities at La Poste

As part of a long-term action, the Anact-Aract network has sought to understand why female postal workers are absent 30% more than male postal workers (50% more for those on fixed-term contracts), even though the postal service has the same number of male and female workers who do the same jobs and are paid the same. The physical demands of postal work are exactly the same for men and women, or actually perhaps more demanding for women given that, due to the seniority rule, female postal workers are over-represented in sectors where there are more parcels to be carried. Given their physical makeup (less muscle strength etc.) and their lower level of physical fitness, female postal workers have to make a much greater physical effort than male postal workers. Furthermore, the equipment, such as mail sorting racks, or the modes of transport, such as bicycles, are unsuited to women’s sizes and are therefore a source of musculoskeletal problems and more frequent unfitness for work among women.

Wrong to read the latter article too quickly, which is essentialist in nature, as this could lead to the conclusion that women should be excluded from certain tasks, positions and occupations due to their specific characteristics, which would be discriminatory.

In France, the only legislative provisions that can now lay down restrictions with regard to women’s health and safety are those intended to protect pregnancy and maternity. This provision on taking into account the gender-differentiated impact of exposure to risks during risk assessments stems from the different conditions of exposure to risks for men and women. This is because, even in one company, men and women do not have the same occupations, career paths and activities outside of work, and the same work does not necessarily have the same impact on the health of men and women. The new legislative provision in France therefore reinforces and supplements the existing legal framework with a view to improving the single risk assessment document, which is mandatory in companies, and to adapting prevention actions and making them more effective.

The aim of these new provisions is to adapt systems of work and prevention policies, by taking account of the different conditions of exposure for men and women. However, for those working for equality, introducing the health issue runs the risk of women being disadvantaged and discriminated against in the labour market. Taking the gender issue into account can be an opportunity to improve ergonomics and ease difficult working conditions or improve work organisation and prevention. The questions raised by taking gender into account in occupational health and safety are complex and even taboo in certain respects, in an apparent context of neutrality and egalitarianism in France. However, occupational health and safety policies can galvanise the use of “these gender glasses” so that progress is made in health prevention and promotion for everyone, regardless of gender.

**Figure 2 Change in the number of industrial accidents in France 2001-2013**

<table>
<thead>
<tr>
<th>Year</th>
<th>Men</th>
<th>Women</th>
<th>Combined</th>
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<tr>
<td>2001</td>
<td>172,482</td>
<td>499</td>
<td>222,482</td>
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Source: ANACT figure and calculations based on CNAMTS statistical data

Taking the gender issue into account can be an opportunity to improve work organisation and prevention.
Women helped by women

Standing with the female employees trying to get their occupational diseases recognised are female trade union officials striving to convince their organisations of the need for a gender-based approach to risk prevention. These employees can also count on female doctors who know how to listen to them. This may be the expression of what feminism calls “sisterhood”, a concept invented by the anthropologist Marcela Lagarde to define the mutual support networks between women.

Berta Chulvi
Journalist

Thanks to backing from the trade unions, Isabel’s health problems were recognised as being in part linked to her work as a hairdresser.
Images: © Tania Castro (p. 26, 28, 29)
The first problem encountered by women who fall ill is that no one gives much credit to their symptoms. As a result, in the muted battle being waged across Europe against the under-declaration of occupational diseases, women have had to fight for themselves and wait for a long time to be included in the statistics. In Spain, the trend in recent years has been very clear: those occupational diseases recognised for women are virtually the same as those recognised for men. In 2014, for the first time almost as many women as men saw their occupational disease recognised (see the graphic). Strangely, the authorities seem to act as if there is a “ceiling” figure for the recognition of occupational diseases: the distribution may vary by gender, but the total figure for recognised occupational diseases hardly changes.

Occupational diseases recognised in Spain

The official explanation for this redistribution of occupational diseases by gender is twofold: firstly, the decline in economic activity in male-dominated sectors due to the economic crisis; secondly, the intensification and increasing insecurity of work in the service sector, particularly hotel and catering and cleaning, where women are in the majority.

However, experts question this version, and instead point the finger at the role played by the mutual insurance companies, which in Spain recognise and pay compensation for occupational diseases. “Since the mutual insurance companies started paying compensation for occupational diseases from their own funds, there has been a sharp drop in the number of diseases recognised”, explains Dr José María Roel, who has worked all his life in public service. Dr Roel is not surprised that fewer occupational diseases are being recognised among men now that women’s diseases are starting to be recognised: “What’s important to the mutual insurance companies is that the total number of diseases recognised, which translates into real costs, does not change.”

Although the statistics invite optimism, the ordeal that female employees have to go through to get their disease recognised remains considerable, as proven by the cases of Isabel and Manoli. The former worked as a hairdresser until she was recognised as having an occupational disease. The latter still works as a security guard, but faces a real struggle every day, even though the occupational origin of her plantar fasciitis has been recognised.

Hairdressing salon in a basement

Isabel, who is 56, started work at the age of 14. A whole life spent colouring hair has ruined her health and any hope of continuing in the profession that she adores. “It took me a long time to make the link between what was eating away at me and the fact of handling chemical products throughout the working day”, she now explains. Thanks to the support of the Comisiones Obreras (CCOO) trade union, Isabel has had her occupational disease recognised and receives a total disability pension as she cannot pursue her profession.

She worked in a small hairdressing salon situated in a basement with obvious ventilation problems, but the risk prevention service never noticed this “detail”. “They came to deliver training courses, but never realised that, although fitted with air-conditioning, the basement had no ventilation”, laments Isabel. It was in 2009 that she started to notice the first symptoms: her face became deformed and she had difficulty breathing. “My glottis swelled and I could no longer breathe. I consulted our family doctor who diagnosed food allergies and prescribed antihistamines, but I kept working.” The owner of the business that employed her – a hairdressing salon with two chairs and around 20 employees – kept telling her that she was amazing: “I had a monstrous face and my boss just kept saying that I was brilliant. That I was complaining out of habit”, she explains.

Isabel started to make the link between her symptoms and her work when her health improved while on holiday and at weekends. It was a client at the salon who recommended that she consult Doctor Neus Moreno. Dr Moreno was responsible for occupational health issues at the Catalan branch of CCOO at the time of the famous Vall d’Hebron hospital case, when over 30 employees were poisoned during a fumigation that was incorrectly carried out (see the box, p. 28). “She made me realise that I should approach the mutual insurance company and get them to assess my situation, given that I was constantly exposed to chemical products. ‘React’, she told me, ‘because your health will only get worse’.
So that’s what I did”, explains Isabel. It was then that her long battle with the mutual insurance company began, hand in hand with Loly Fernández Carou, who is responsible for the occupational health unit at the Catalan CCOO, which ended with the company paying out. "Isabel's case is interesting because normally it is difficult to reach small and medium-sized businesses where the employees are more isolated”, explains Loly Fernández Carou.

Isabel suffers from dermatitis on her hands, but it is the fact that she cannot breathe properly, having inhaled the chemicals contained in the dyes that she handled, that handicaps her most on a day-to-day basis. After undergoing allergy tests, she was diagnosed as hypersensitive to paraphenylenediamine, a product contained in all hair dyes. However, the mutual insurance company’s pulmonologist believed that her problems had nothing to do with her work and referred her to social security.

The fear of not being listened to

So Isabel returned to work. The very first day, she started to swell up and suffered a respiratory attack. As luck would have it, when she went back to the mutual insurance company, there had been a change: the pulmonologist was absent and this time she was examined by a new female doctor who immediately understood the situation and asked the risk prevention service to approach the business. But no real progress was made: the risk prevention service took a few urgent measurements, but declared that the presence of paraphenylenediamine, a dye contained in hair colours, was imperceptible. That was then Isabel, supported by the occupational health department of the Catalan CCOO, decided to report her case to the labour inspectorate. It was only then that the business started to give credit to her illness: “In order to stop the complaint procedure, my boss proposed finding me a job as a cashier in a supermarket, ignoring the fact that I adored my work as a hairdresser”, Isabel remembers, outraged. It was clear that the business was not in good shape as the owner of the hairdressing salon closed the establishment as soon as he learnt that Isabel had submitted a complaint.

Eventually, the courts recognised the hairdresser's total disability preventing her from pursuing her profession, but due to her dermatitis, rather than her respiratory problems. "Isabel's hands were seriously damaged by contact with the dyes and it was on that point alone that the court found in her favour and ordered that she should receive a disability pension, increased by 50% because the case involved an occupational disease”, explains Loly Fernández Carou.

Following this battle to defend her rights, Isabel's life is far from having returned to normal. She has had to deal with a major blow: “Having to stop work was really hard for me. I drew so much satisfaction from my work”, she says. In addition, her sensitivity to many different chemicals forces her to go out wearing a mask because any perfume or cleaning product can cause her to suffer an attack. "My mobile has an app that allows me to contact the public health service and inform them that I am hyperreactive. In fact, during an operation that I had, the disinfectants that are normally used triggered a respiratory attack, resulting in immediate suffocation”, she explains.

"A few years ago, I was admitted to Bellvitge hospital for an operation on a carpal tunnel injury, which was actually very minor outpatient surgery. I had clearly warned them about my problem, but they took no notice.

20 years after the Vall d’Hebron case

Dr Neus Moreno, a doctor and member of CCOO, is a shining light in the world of gender-based occupational health. We asked her to recall a key episode, which now dates back 20 years: the poisoning with pesticides of 37 female employees at Vall d’Hebron hospital. This case marks a before and after in the public awareness of chemical hazards. In 1994 pesticide companies acted without taking any risk prevention measures, and fumigation with organophosphates was commonplace. At Vall d’Hebron hospital, over 30 male and female employees were exposed to these substances. Seven women subsequently became permanently unable to work and two others were seriously affected, having been diagnosed with multiple chemical sensitivity syndrome. The CCOO trade union played an important role in the legal action and in the media information campaign so that everyone would be aware of the gravity of the case.

“The collective action and complaints submitted have had positive effects in terms of the use of pesticides in enclosed spaces and the adoption of preventive measures when their use is unavoidable”, says Dr Neus Moreno 20 years later.

“The organisation of those affected, the creation of a network of professionals providing medical care to those affected and the trade union network allowed a longstanding problem to be identified and given a new name: multiple chemical sensitivity syndrome. Progress has been made in objectifying the damage and exposure, but there’s still a long way to go, mainly at administrative level, by legislating to encourage the banning and replacement of hazardous substances and compounds, as well as recognising damage to health,” she concludes.
"Having to stop work was really hard for me."
Isabel, hairdresser

Listening to women
The medical profession has never properly listened to women, and female workers are no exception. Doctor Carme Valls-Llobet, a pioneer in objectively considering the inequalities suffered by women in terms of health, has spent her whole life proving this gender-based segregation: “Aside from everything related to pregnancy, the medical profession has ignored the fact that women's bodies are different from men's bodies and that, in the event of illness, the reasons that prompt women to consult a doctor and the most common risk factors are also different.”

“When I had a severe headache, the doctor said 'a woman is usually a period', and that is why I didn’t take it seriously”, says Isabel, who worked as a hairdresser before being diagnosed with severe anemia. Her health problems began when she was 18, during her first pregnancy. “I was told that only women with a 12-month pregnancy experience anemia, so I didn’t pay much attention. I had the same thing when I gave birth to my twins. When I was nearing the end of my pregnancy, I was in severe pain and the doctor said it was normal. Now I have 25 anemia-related medical conditions and in five of them I was declared fit to work in a medical report.”

And so they ended up having to urgently get me out of the operating theatre because I was suffocating”, she remembers. The operation had to be rescheduled and, since then, Isabel has lived in fear of not being listened to, that people will think she's exaggerating when she talks about her symptoms.

When asked if she felt understood by her doctors, the only positive memory that she has of the entire ordeal is that female doctor at the mutual insurance company who referred her to the risk prevention service. “She was an Argentinean doctor who was not prepared to follow the organisation's instructions if that meant declaring a patient cured when they were actually not fit to work. Shortly after my case was closed, she told me that she was leaving the risk prevention service because she couldn’t work under those conditions”, she states.

Female security guard among men
The belief that women exaggerate their health problems is one of the characteristics of the patriarchal culture that women face, particularly when working in male-dominated sectors: “You girls are so quick to complain. We all suffer with our feet.” Those were the words that Manoli had to listen to from the mouth of her line manager when, after several months of having to stand for eight hours a day at the tills of a supermarket, she started to suffer from unbearable pain in the soles of her feet. Manoli is 48, lives in Torrejón de Ardoz (Madrid) and has worked since 1994 as a security guard. During her initial years of work, spent with a courier company, she didn’t suffer any health problems. It was in 2011 that her ordeal began, due to her position as a woman among men. "Because all the workers were men, I couldn't search them. That was why they assigned me to a screening service that made my colleagues jealous because I was sat down and had set hours. My colleagues put pressure on my boss until he removed me from that service and transferred me to a supermarket at Alcampo, in Torrejón de Ardoz", she states.

Manoli started working in the supermarket with set hours, a work right that she had earned with her previous company that her boss was now trying to take away. "By chance, I met Julian Montes, a CCOO member, who helped me to fight the company’s manoeuvring", she confides. Asserting her rights cost her dear: they assigned her to a duty that meant standing for eight hours at the tills. After three months of this work, she started to suffer unbearable pain in her feet, but no one took any notice. "Perhaps we should roll out the red carpet for you", her immediate superior threw at her.

The company game
She stood it as long as she could until one day she collapsed because her feet would no longer respond. She immediately contacted the mutual insurance company. They
"Those people who cause a nuisance are brought together within one service, and then the contract for that service is allowed to lapse."

Manoli, security guard

diagnosed plantar fasciitis, which resulted in her being signed off sick for nearly four months. When she returned to work with the medical opinion that she was “fit for work, but with restrictions”, the company refused to alter its practices in any way and transferred her to Barajas airport (Madrid), to passenger screening, which meant that she had to stand for several hours. After three days, she again began to suffer unbearable pain in the soles of her feet. She therefore returned to the mutual insurance company and was signed off sick again. When, after a period of rest, the mutual insurance company returned her to work, she did so with explicit medical recognition of her problem and a series of restrictions: she couldn’t stand for more than a few minutes and she also couldn’t walk continuously over long distances. Once again the company just didn’t care: “They sent me to a train depot where I had to carry out 15-kilometre security patrols every day. So I developed a problem again”, she explains. Although she had a medical opinion recognising the occupational origin of her problem, the mutual insurance company referred her to social security arguing that this was a common complaint.

So Manoli turned to the occupational health team at the Madrid CCOO, where Azucena Rodríguez and Carmen Mancheño took on her case. The trade union appealed against the mutual insurance company’s decision to social security arguing that this was a common complaint.

Manoli’s case illustrates the limits of the fight for recognition of the occupational origin of diseases. Even though she and her trade union got the occupational origin of her problem recognised, her employer learnt nothing, by denying her suffering and making her return to work under the same conditions until the damage became irreversible.

Manoli and the CCOO are currently fighting to get her total disability for her profession recognised, but this whole ordeal has simply damaged her health further. She now suffers from anxiety and depression that the public health system’s psychiatrist attributes to her work situation. All because a doctor surprisingly declared her fit to resume work because, in his opinion, that was how to solve the problem; a doctor who, once again, did not give any credit to the suffering and pain of a female worker.

Drawing attention to the situation of women

Behind the statistics that reveal the occupational diseases affecting women, there are painful situations such as those of Isabel and Manoli, but also trade unionists who are investing body and soul into this issue, such as Azucena, Carmen, Loly and Neus. Gender-based trade union action is one of the approaches that has enabled occupational diseases in women to be considered objectively.

The introduction of monitoring schemes in general practice is another decisive approach: improving diagnostic systems specifically aimed at women brings immediate results and highlights those occupational diseases that particularly affect women.

This is precisely what has happened in the Valencian Community, where a health information and epidemiological monitoring scheme has recently been introduced. The occupational health secretary for the Valencian Community CCOO, Consuelo Jarabo, explains as follows: “Due to the introduction of this scheme in 2014, reported cases of occupational disease have increased by 42%, with 61% involving women.” A more detailed examination of the figures shows that these cases primarily involve musculoskeletal injuries that affect women in the service sector and manufacturing industry, where they hold very insecure jobs and are subject to very onerous working patterns. For Jarabo, the conclusion is clear: “It is vital that the gender dimension is included in the analysis of occupational diseases. We must demand this of governments and ensure that this becomes a reality within those organisations representing both female and male workers.”
Sweden: labour inspection crusade against exclusion of women from the labour market

In 2011, the Swedish Government asked the Swedish Work Environment Authority to develop specific initiatives aimed at preventing women from being excluded from working life due to work-related problems. As part of this task, the Work Environment Authority inspected almost 60 municipal authorities and compared the work environment conditions and organisational prerequisites in female- and male-dominated enterprises. The results were an eye-opener for all those involved in a variety of ways.

Hans Olof Wiklund
Work Environment Reporter, Tema Arbetsmiljö AB

Even in a country like Sweden that pioneered the struggle for gender equality in the workplace, most workers in the personal care sector are still women.

Image: © Belga
The Swedish labour market is largely gender-divided, which means that men and women are to some extent exposed to different risks as regards ill health. Women become ill more often as a result of their work, while men are exposed to more accidents. Women account for a greater proportion of absence due to illness than men, and more women than men are forced to stop working prematurely for health reasons.

It was against that background that in 2011 the Swedish Government asked the Work Environment Authority (Arbetsmiljöverket) to develop and carry out specific activities aimed at preventing women from being excluded from working life. This task was carried out during the period 2011–2014 and the aim was to raise the level of knowledge concerning the work environment of women and identify better methods for raising awareness of strain-related work environment risks in the supervisory work.

The Work Environment Authority organised the government assignment as a programme consisting of two projects. These projects were called Sustainable work environment with a focus on women (abbreviated in Swedish to “HAK”) and Ergonomics in the work environment of women (“EKA”). Within the HAK project, the Work Environment Authority began conducting inspections in spring 2013. These inspections involved comparing the work environment conditions and organisational prerequisites in female- and male-dominated municipal enterprises. A focus was placed on the female-dominated home care service and the male-dominated enterprises within the technical administration.

Almost 60 municipalities were covered by the inspections and around 70 of the approximately 250 Work Environment Authority inspectors took part.

Moving beyond areas of specialism

"We went out in pairs, a man and a woman: one who was accustomed to dealing with care issues and one who was more accustomed to ‘hard issues’ such as machinery and so on. It was a completely new and different way of working. It was a learning experience across the boundaries of the inspectors’ normal areas of specialism", says work environment inspector Marianne Tiborn.

"In many cases, the inspectors encountered expectations that the inspections would result in actual changes, particularly within the home care service. Yet there was also a realisation that changing existing structures, values and attitudes takes time. My view is that the initiative, the group discussion, the follow-up meetings with the presentation of results and so on were all well received by both politicians and administration management, managers and employees", says the work environment inspector.

One of the municipalities to be inspected was Örebro, which is situated in Central Sweden and has just under 140 000 inhabitants.

Monika Gustavsson and Jenny Nygårds, area manager and unit manager respectively within the home care service, were aware of differences with regard to work environment conditions and organisational prerequisites between their enterprise and the technical administration, but the results of the Work Environment Authority’s inspections were still somewhat surprising.

"It is easy to become blind to shortcomings around you. We became aware of the differences that exist. We didn’t think the differences were that great", says Monika Gustavsson.

"The biggest eye-opener was probably the fact that the prerequisites were so different", adds Jenny Nygårds.

One area where the home care service and the technical administration differ greatly from each other is the number of workers for which the first line managers (unit managers) are responsible, and this applies in both Örebro and elsewhere.

"Whereas a manager on the technical side is responsible for 17–20 staff, in the home care service we have 35–45", explains Jenny Nygårds.

Work is now under way to put forward proposals to the municipal board as to how to proceed on the basis of the Work Environment Authority’s report on the conditions.

"The managers in the technical administration and ourselves would like to carry out a pilot project with the same density of managers as they have, in order to see whether it can have an impact on absence due to illness", adds Monika Gustavsson.

There are also major differences as regards financing. The technical administration is largely grant-financed, whereas the home care service is primarily income-financed and operates in a competitive market.

"We are only paid for ‘user time’, i.e. the time during which our staff are actually with the people we are helping. Everything else, such as travel, administration and so on, must be covered by the reimbursement. The output is therefore measured week by week."

"We need more part-time staff in order to do the job, but this wouldn’t work from a staff policy perspective. There is a conflict of objectives as we have to fulfil both the budgetary requirements and the municipal authority’s core values", says Jenny Nygårds.

"It’s the same as regards legislation", she says. "The municipal authority is ultimately responsible for the provision of care (under the Swedish Social Services Act) and it is not possible to stop work simply because the time/support that a user has been granted has finished. It is needs that govern what we do. At the same time, we have to comply with the requirements of the Swedish Work Environment Act. Neither law takes precedence over the other; both laws have to be complied with."

Learning from one another

"The work carried out by the home care service is both meaningful and rewarding, but it is also physically demanding and mentally challenging. Part-time sick leave is the biggest problem. Still, if we look at the results of the employee surveys that have been conducted, our employees and managers are more satisfied than those of the technical administration", says Jenny Nygårds.

"The Work Environment Authority’s inspection initiative has not only revealed differences between the home care service and the technical administration, it has also given rise to a good collaboration. We work with people and have better interpersonal skills; those on the technical side are better at approaching the work environment systematically. We discovered that we could help each other, learn from each other", says the unit manager.

The Work Environment Authority’s inspections were conducted in the form of a group discussion with unit managers from the home care service and the technical administration, and with staff from the home care service and the technical administration. One question which arose on a number of occasions, in different municipalities, was how we can recruit more men in the home care service.

"In the group in which I participated, we talked a lot about the fact that we wanted..."
to recruit more men. This is proving difficult, as many older people do not want to have men help them”, says Marie Stuberg. She has a split position within Örebro municipality's home care service. She works 50% as a nurse and 50% as an operations manager (a fairly recently established support function for the unit managers).

"The question is whether users should be able to choose. Compare the situation with that within the county council, e.g. within emergency care. There, you cannot choose which staff help you. As things stand at the moment, a user can say that they do not want a man to help them with personal hygiene, for example. They are then assigned a woman to deal with showering, which is a more physically demanding job and more for them to do”, says Marie Stuberg. "We want a message from above, from the politicians to the users, that we have the staff we have and people will just have to accept that.”

Marie Brorsson is a social democrat and chair of one of Örebro's two care boards.

"I was at the last follow-up meeting where the Work Environment Authority presented the results of the inspections. It was pleasing to learn that people were relatively satisfied with the work and with the managers, even if the results did indicate that the job was very stressful”, she explains.

"We have a gender initiative that has been ongoing for many years. This initiative is in place as regards budgeting and the like and is 'live'. I think both civil servants and politicians bear it in mind in their work.”

"There are plenty of preconceptions amongst both the care staff and amongst us here in the technical administration”, says Ann-Marie Grönkvist, unit manager with responsibility for the municipality’s waste management.

"We have now got a dialogue going, and it is important to get away from the 'them and us' mindset. After all, we have a common employer and shared objectives. What we are now thinking about is how we can benefit from each other, share our experiences with each other and work across the boundaries.”

The male worker is the norm

The comparison of work environment and working conditions in the home care service and technical administrations of the municipal authorities that were inspected showed, among other things, that the home care service is task-based and primarily income-financed, whereas the technical administration is assignment-based and primarily grant-financed.

As with workload, staffing and other resources are not adapted to what the home care service is expected to achieve. On the technical side, the resources correspond relatively well to what has to be done.

The staff in the home care service have little personal control over, or freedom of action in, their work. Coping with the pressure of the job is not easy and almost always stressful. Within the technical administration, the staff have quite a lot of control and freedom of action; they can cope with the pressure of the job even if they do sometimes get stressed.

Around 73% of the managers in the home care service have more than 30 staff. Lack of time, a great deal of administration and many relationship interfaces are characteristic of the situation that these managers face, and they find it difficult to be there when the work is actually carried out and to support the staff. Within the technical administration, only 10% of the managers have more than 30 staff. They have the necessary resources to support the staff; they can be present and manage problems at an everyday level. Common to both areas are deficiencies in the systematic initiatives relating to the work environment, a lack of knowledge concerning the work environment and tender reporting.

"Men and women have different professions and even if they have the same profession, they usually still perform different duties. And if they have the same duties, then the work, tools and equipment are all usually designed around men, as the man is the norm in society”, claims Minke Wersäll, one of the project managers.

"The reason behind the differences in occupational ill health between men and women should not be sought in biology, but in everything else”, she claims.

The prerequisites for systematic initiatives relating to the work environment are not as good for the female-dominated enterprises. The pattern is the same in virtually every municipality that was inspected, regardless of size. There are differences in traditions, attitudes and values linked to the traditional gender pattern which prevails in society. This has consequences for the work environment.

"Research has shown that a gender-neutral approach to the work environment is generally based around the average male worker and does not indicate how men and women who fall outside the norm are doing at work. In this regard, we have an important task ahead of us. We must continue to highlight how gender is accorded importance in our work processes”, says Minke Wersäll.

"The assignment has taught us that it is the way in which the work is organised which determines the risks as regards strain injuries”, she continues.

"The gender pattern that prevails in society must be broken in order to bring about sustainable work environments. It takes time to change values, attitudes and traditions; further initiatives are therefore still needed. We are now working in various ways to look at the results of the concluded projects, particularly within our own authority. We need to look at our experiences, learn from them and explore them in more detail in order to ensure that the programme has sustainable effects. Highlighting, comparing and reflecting upon the conditions for men and women will lead to measures that result in a better work environment for everyone. In order to succeed in this regard, it is essential that we have leadership that has a knowledge of gender issues, a manager who can see patterns; and in our director-general, we have such a manager”, claims Minke Wersäll.

Since the start of the year, the Work Environment Authority has had a new assignment, for which Minke is project manager. This new assignment could be seen as a direct continuation of the previous government assignment, but the focus is now being placed on psychosocial and organisational factors.●
Personal protective equipment: getting the right fit for women

In the workplace personal protective equipment can save lives. Yet in many occupations, in spite of the increasing numbers of women employed, this equipment continues to be designed by men for men. A number of recent initiatives seek to design protective gear catering for the different shape of the female body.

Aída Ponce Del Castillo
ETUI
There is a scarcity of personal protective equipment (PPE) specifically designed for female workers. Anecdotal evidence from women is that PPE tends to be "shaped for men and to pop open in the wrong places"; that "arms and legs are too long"; that "it doesn’t fit where it needs to"; and that "safety footwear in the right sizes is very difficult to find". Reported experiences of wearing PPE confirm that by limiting effective protection, it forms a barrier to employment opportunities. Research data show that designing PPE for women requires different parameters and a commitment on the part of manufacturers and suppliers to developing this equipment which, if and when it is actually available, makes such a big difference in the working lives of the women concerned.

During the "Women's health and work" conference organised by the European Trade Union Institute (ETUI) in March 2015, a panel had the task of examining this important issue. Here we will look at three examples that show the benefits of taking women’s morphology into account when designing and using PPE. These cases also demonstrate how doing this can improve working conditions and how it is possible to change the perceptions of manufacturers designing PPE.

**Fitting PPE to women’s needs**

Women are not a "scaled-down" version of men. The lack of PPE designed for women can pose potential employment issues and result in productivity losses or failures. Because finding correctly fitting PPE can delay hiring, users sometimes "adapt" what is available to try and ensure that it fits them, with potentially dangerous consequences for both the individual and the process. PPE and protective clothing that are properly adapted to fit the individual worker help avoid accidents.

Dorothy Wigmore, a health and safety specialist from Canada, has shown that anthropometric data demonstrating the importance of PPE design do exist. In the early 1970s and 1980s, the United States and Canada started collecting these data. The US Army conducted research and collected anthropometric data that showed that, for women, body size distributions, proportions, measurements and sizes cannot be scaled down from those of men. This information was used to design and size personal protective equipment, clothing and even workstations in different ways for men and for women.

Similar issues exist in other sectors. Publications specialising in health and safety have also asked questions about workers in coal mines, construction and non-traditional workplaces, and about the use and effectiveness of women's PPE and clothing. The US National Anthropometry Survey of Female Firefighters addressed the lack of the information required to ensure that women firefighters are included in design parameters, while highlighting additional cause for concern in terms of adapting the equipment and apparatus for women firefighters (women's under-bust, waist circumference, hips, torso, head, etc.).

Albeit to a limited extent, women's PPE is manufactured and available on the market; yet it is still not reaching all the workers who need it. Such equipment is rarely displayed or sometimes not labelled as women's products; or else there may be a restrictive purchasing policy within organisations. Positive examples do, nonetheless, exist. Miller
Fall Protection – a subsidiary of the US conglomerate Honeywell – offers the "Ms. Miller Harness", a full-body harness that keeps the shoulder straps at the side and away from the female chest, with hip support. Rosies, a US family- and female-run company provides overalls and coveralls designed to fit a woman's body and gloves fit for a woman's hand. In Canada, Covergalls Inc. designs, produces and promotes women's industrial workwear.

**Purple Boots Campaign**

In the UK, the Women's Engineering Society (WES) looked into improving safety and working conditions in engineering and construction. Because of the lack of robust data, the WES set up a safety clothing survey distributed among suppliers, male and female workers, as well as women's networks in Britain. The survey had two objectives. First, the intention was to investigate the general problems arising with PPE for women in various sectors such as construction, software & technology, gas & electric. Secondly, it looked at the type of PPE that is most problematic and how it could be improved for women.

The results of the survey showed a lack of availability of PPE clothing specifically designed for women. Jackets, gloves, shoes, trousers and headwear proved to be the most problematic items. Additionally, no maternity PPE is available. The majority (75%) of PPE worn by women respondents was designed for men. Over half of the respondents reported that their PPE hampered their work and efficiency and could be a factor in deciding to stop working in the sector (see figure).

As a result, WES has been working in partnership with Dunlop Safety and other organisations and has developed the "Purple Boot Campaign", with the aim of designing and developing a new range of safety boots for female engineers.

1 = A lot
2
3
4
5 = Not at all
6 = Not applicable

**Women in the cockpit**

Although the first female pilots started appearing in the early 1900s, female captains are still in a minority. Globally 3% of pilots are women, or about 4 000 out of 130 000 pilots worldwide. This historical disparity is due, in two different ways, to the roots of aviation. On the one hand, the profession was predominantly military and, on the other hand, aircrafts and related equipment, from an engineering and design point of view, have always been male-oriented.

In Spain, the trade union-related research institute ISTAS conducted a survey to understand how the role of the pilot has evolved since the 1980s and, more specifically, how female airline pilots have or have not benefitted from better working conditions over time. Women in aviation have faced difficulties from the start, as shown by the personal interviews conducted by ISTAS. These revealed that women working as pilots faced stereotyped forms of disapproval and were given fewer opportunities to fly compared with their male colleagues. Women pilots were also expected to continuously prove themselves and demonstrate very high skill levels.

The cockpit was found to be a male-controlled space par excellence. The engineering specifications, instruments, tools, PPE and other facilities were designed to fit the measurements and proportions of the male body. In order to operate the cockpit, a certain strength and height were required, which prevented some women from becoming pilots. Due to design choices, 70% of women could not reach the pedals, flight deck controls, levers and points of visibility, which was obviously critical. Even the best designed and equipped cockpit could not be considered efficient and safe if it imposed limitations on its users and operators, be they men or women.

Later on, as safety became an even higher priority in aviation, the sector was forced to make changes. The goal was to reduce the number of human errors and accidents and improve the safety of piloting. This fact, together with the worldwide discussion of social and human rights, formed a window of opportunity for women's upward mobility in aviation.

The transformation started with the design of safer, more functional and more advanced cockpit systems. The automation of cockpits required different skill sets and less physical effort was needed. In the early 1990s a new organisational culture started to emerge, in particular through training procedures such as "Cockpit Resource Management" and "Crew Resource Management", which promoted interpersonal communication, leadership and decision-making in the cockpit, integrated the role of the co-pilot and stressed the need to work with the whole crew. Both technical and organisational changes have promoted the development of new safety-oriented working conditions.

Nonetheless, with the emergence of new business models and the so-called "low-cost airlines", working and employment
Women are not a "scaled-down" version of men.

The safety-oriented design and production of Personal Protective Equipment are critically important for the protection of all workers. PPE needs to be required for a wide range of occupations, which is why its correct selection, use and maintenance need to be up to date. From the facts supplied above we can draw three points of conclusion.

Firstly, when considering PPE, standardisation is important because standards need to be met, and ergonomic requirements and health and safety approaches need to be incorporated into the design. On the first point, including the gender dimension in the ergonomic analysis helps to reduce accidents and musculoskeletal discomfort. With regard to safety approaches, the practical experience of the user – the feedback method – can be made available to the various standards committees and allow a two-way flow in developing appropriate standards.

Secondly, the cases reported show the concerns, experiences and needs voiced by women workers and how these have actually transformed their work. The transfer of women's knowledge helps to recognise those aspects of their work that can constitute a hazard or lead to specific women's health problems. Women's voices and experiences can even highlight issues relating to women's health that have hitherto remained invisible.

All of this is in line with the principle laid down in the EU Regulation on Personal Protective Equipment that PPE needs to be "individually adapted". This means that there must be PPE available that meets the specific needs and characteristics of each end-user: man, woman or young worker, as well as persons with disabilities. There are examples of manufacturers who feature these products more prominently in their catalogues.

Finally, there is still a need to gather further robust pan-European data, through more action-oriented studies or research initiatives with a multidisciplinary approach. Trade unions, government authorities, standardisation bodies, employers, ergonomists and women's networks must seek ways of working together on this issue.

References


In the bowels of the earth, beside the last female miners in Europe

Only around a dozen remain throughout the Balkans. As a legacy from the Communist era and its ideal of emancipating women through work, the employment of women in the mining industry has for a time survived the transition to capitalism. Encounter with the last female “black faces” in Europe.

Barbara Matejčić
Journalist

Photographs:
© Ana Opalic

Sakiba Čović (left) has worked as a ventilation technician at the Breza mine in Bosnia for more than thirty years.
When Šemsa Hadžo wakes at 5 a.m. and goes out to the yard to milk her only cow, her breath fogs due to the cold, even though it’s June. At this time of the year in central Bosnia-Herzegovina, the mornings are cool and the days warm. Šemsa uses the fresh milk to make herself a coffee, which she quietly drinks before preparing for work. Her husband is still asleep. Having spent his working life in the mine, he no longer has to get up early now that he’s retired. For him, the dark pit of the mine is a thing of the past. But not for Šemsa. Every morning, at 7 a.m. on the dot, she descends 300 metres below ground. Šemsa is a female miner, which is the term used in Bosnia even though it’s easy in Bosnian to change the gender of the noun miner, simply by adding two letters to the end of the word: rudar/rudarka. But there are so few women in the mines that they are still not properly named.

When the earthly goods were being shared out, Bosnia-Herzegovina found itself on a soil rich in high-quality black coal. But its mining has proved difficult and dangerous: the soil structure means that deep mines are required, and the thick and sloping seams of coal easily ignite due to the high concentration of methane and coal dust, not to mention the underground water and rock debris. Despite this hostile environment, over 15,000 people work in the mines of Bosnia-Herzegovina¹, of which 15% are women. But only 15 of those still descend to the mine bottom.

Most of them work in the Breza black coal mine that we visited in June 2015. Out of the 12,558 employees at Breza, 10 women work at the coalface. They are referred to as the last female miners in the Balkans. Šemsa works below ground, in the dark, every day. And she has done so for 31 years.

"Breza is the mine, the mine is Breza"

When she leaves on foot for work in the morning, Šemsa knows that her path will cross with someone who will give her a lift to the mine. Breza is a district of 15,000 inhabitants. For a century, the mine has been the main employer. In fact, if there were no mine, there would be no Breza. When the mine opened in 1907, as public property of the Austro-Hungarian Empire of which Bosnia was part at the time, the toughest work was carried out by poor peasants from the local area. By 1910, the local newspaper was already reporting on 400 workers in the mine, toiling away in terrible conditions for meagre wages. It was then that the Socialist Party of Bosnia-Herzegovina was born, which was the first to support the miners. They organised themselves into trade unions and over time managed to negotiate an initial collective agreement with the government. Due to the mine, an increasing number of people converged upon Breza, transforming the small village into an industrial town. Before the breakup of Yugoslavia and its socialist system in 1991, the mining company built apartments for its workers, a public swimming pool and a cinema. It invested in the construction of roads and in the electricity and water supply systems. The mine had holiday centres in Grabac on the Croatian coast, where the miners spent their summer holidays. Some still go there out of habit, only now they have to pay their own way. "Breza is the mine, the mine is Breza",

¹. The coal industry is the main industrial sector in this poor country, which has a gross domestic product of 4,120 euros per inhabitant, according to United Nations data.
people say. Everyone has miners in their family. Everyone respects the miners.

Šemsa gets to the mine by 6.30 a.m. Rather than "good morning", she says "good luck" to her colleagues: it's the traditional greeting used by miners instead of "hello" and "goodbye", before descending to the bottom and when you meet someone in the darkness of the mine. She dons her dark blue overalls, heavy helmet and lamp, attaches the old metal box containing her emergency mask around her waist, and pulls on her rubber boots. The boots are too soft to protect her if something heavy were to fall on her feet. At 7 a.m., she descends with the first shift 250 metres below ground, and then even deeper on foot along dark passages stinking of sulphur, through the temperature changes, mud, occasional gusts of wind bringing in air from the outside, and reflections from the shining coal.

Šemsa is responsible for the explosive and her "office" is located in a passageway full of explosives. Every day she works up to 15 kilometres below ground, never without 5 or 6 kilogram load at least. When her husband hears how many kilometres she has walked, he gets angry and thinks that they could have spared her after three decades of work that have left her with constant pain in her knees. But Šemsa still has to do her household chores. She cooks, cleans, tidies, gardens and looks after the cow. She has raised her son while working at the mine in one of the three shifts per day. But she does not complain. She knows that working at the mine is better than most other jobs in Breza. She earns up to three times more than if she worked in a shop, gets more holiday and does no overtime, whereas in a private company she could have to work up to 12 hours a day.

The last generation

For Breza's women, the main source of work is the poorly paid jobs offered by private companies. The wage at the mine is higher than the average wage in Bosnia-Herzegovina: 537 euros compared to 409 euros. The salary comes on time, there is no weekend work and the collective agreement is observed. "If a young man works at the mine, it's easy for him to get married, because it means that he has a decent wage and is solvent", we are told in Breza. No one mentions the status of the female miners, because they are too few to become the symbol of the situation in their town. The Breza mine has been stable since 2009, when it joined with six other coal mines to restore the public energy consortium "Elektroprivreda Bosne i Hercegovine d.d." Eighty per cent of the electricity in Bosnia-Herzegovina is produced in thermal power plants thanks to coal.

Before the merger in 2009, the Breza workers went on strike because the collective agreement was not being properly observed. But it's better now. However, when you question Šemsa, she says that she regrets not having studied at the medical school located in the capital Sarajevo, 27 kilometres from Breza. But her mother did not want her to leave home. It was not seemly for a young girl to live alone in a large city. The year that she started secondary school, a new school opened its doors in Breza. That was why, like so many other young women at the time, she ended up in the bowels of the earth. Everything began in 1980, with the first generation to study at the School for Mining and Geology.

For decades before that, Breza had been living off its mine, but the skilled staff actually came from other regions of Bosnia-Herzegovina, and even from across Yugoslavia. The small town had no training establishment. Finally, the specialist school opened in 1980. There were 42 students: 23 girls and 19 boys. The new school was close to Šemsa's home and the mining company offered a scholarship and a guaranteed job at the end, so many young people signed up. Among the girls, there were Šemsa Hadžo, Sakiba Cvit and Almedina Kaljun. They are the only ones of their generation to still be working in the mine and descending to the bottom every day.

Many other female students never actually worked at the mine, some did work there but left, whilst others were not supported by their husbands. "It's not for women", they would say. Some got fed up with everything: the house, the children, the work; everything rested on their shoulders. And there are others who work above ground, in the mine's administration. Šemsa, Sakiba and Almedina were born in 1965, all three are mining technicians, and they all started working...
in the Breza mine in September 1984. Their husbands “earned” their retirement from the same mine. Soon, in 2016, all three will also retire. “We were the first generation of female miners and we will be the last”, comments Sakiba. We spent a few days with Semska, Sakiba and Almedina, and went twice down the shaft that is called “Sretno”, which means "good luck". We went to the "end of civilisation", as Sakiba terms it.

The Yugoslav Stakhanov

While we’re in the metal lift that survived the Second World War and the last Yugoslav war, Sakiba recalls her first descent to the bottom of the mine. “I was working with the third shift. It was dark above ground and dark below ground. While we were descending, the miners started talking: ‘Imagine if the lift broke loose. Tomorrow’s headlines would be: Miners leave 40 widows and 1 widower’. I went cold all of a sudden. I was 19 years old, newly married and starting work. Whenever the cage rattled a bit, I froze with fear and thought that I really should not have brought such bad luck by going down into the mine. They say that a woman in a mine brings misfortune. But the men were only teasing me. Miners use humour to cope with their difficult daily lives”. Sakiba is the same. Full of laughs. She gets up every morning at 5.30 a.m. Before work, she does her chores: ironing, baking bread, tidying up a bit. She lives with her husband and their daughter. Even though she is the only one of the three with a job, it’s still she that does everything in the house. “Here, the men are not gifted to help the women”, she jokes.

Sakiba’s father and her two brothers are miners, which is common. Sometimes several generations of the same family have worked and work in the mine. When she started in the mine, her housewife mother was against it. “She was particularly concerned because it’s a man’s job and she was worried about how I would get on down the mine, and what people would say. She would have preferred me to be at home with the children”, Sakiba is a ventilation technician and analyses the air and dust. She’s afraid of the dark. She says that sometimes, just for a moment, she turns off the light on her helmet when she’s walking alone at the bottom, just to see what it’s like in the darkest dark, but she can’t bear it for long. After two seconds, she turns her lamp back on. She also hates the rats that scuttle along the passageways reinforced with old wood. The wood supports 300 metres of earth above us, but it’s cracked in places, and in this mine you could think that you were back in 1950. It was then that the spirit of competition developed in the mines of Bosnia-Herzegovina, with the aim of increasing production. The mines competed with each other to extract as much coal as possible, and boards were hung on the walls with the names of the most productive work teams. Being the “shock worker”, as it was called, meant being respected and popular. In post-war Yugoslavia, which was facing a difficult economic situation, the idea spread that you could love your country by working. Those workers who extracted the most coal each week were rewarded by being taken home in horse-drawn cart, which was the only comfortable means of transport at the time. Everyone therefore knew who the best workers were.

Rather than "good morning", she says "good luck" to her colleagues: it’s the traditional greeting used by miners instead of "hello" and "goodbye".

But no one surpassed Alija Sirotanović. After the President for life of Socialist Yugoslavia, Josip Broz Tito, broke with Stalin, it was vital to show that the Russian blockade could not destroy Yugoslavia. In 1949, with a team of eight, Alija mined 152 tonnes of coal in an eight-hour shift. He exceeded the target by 215% and, more importantly, broke the 1935 record set by the Russian Alexey Stakhanov by 50 tonnes, and so won the world record for coal extraction. The exploits of Sirotanović filled the Yugoslav media, inspired numerous songs, and short films on him and the Breza miners were shown in cinemas between the fiction films. When Tito received Alija Sirotanović and asked him what he needed, he simply replied: “a larger shovel”. Since then, the colloquial term in Breza for a large shovel has been a "Sirotanović".

Morale at work was high, but working conditions were not great at that time, although no one talked about them. Nowadays,
the miners are no longer in competition, but everyone has their target and, if they achieve more than expected, they get a bonus.

"A man's work"

The female miners show us the jackets and shirts hanging on nails. They explain that the men remove their layers here, because further on the temperature rises and it starts to get hot. But the women do not remove any of their clothing, nor do they change if they get wet. It’s a habit that they have adopted, as embarrassment prevents them from removing anything. Likewise, the men have a few places identified as toilets. But the women never use them, as they’re not appropriate for them. They therefore have to be careful not to drink too much water when they’re going into the mine. They have to last all those hours without going to the toilet. Otherwise, the salaries, the distribution of work between the men and women and their efficiency are exactly the same. What is more, it is said that the women are excellent workers in the mine, that they are meticulous, conscientious and organised in their work.

"Each of our tasks has been done by men before us and will be done by men after us. There have never been any complaints about us. When the inspector comes to Sems's explosives store, he advises all the men who do the same work in other mines to come and look at how a woman does it at Breza", Almedina tells us. "And the director says that, if everything were done like it is in the explosives store, the mine would be like those in Germany", adds Sems.

"But there will be no more women here! They are no longer employing women to work at the bottom of the mine. Why are girls studying all those years at the mining school when no one is going to employ them? They are showing in this way that they consider mining to be man's work", concludes Sakiba. "Men are preferred when they are hiring because they can be taken on as unskilled workers. There are currently people with degrees who are doing the most difficult work in the mine", explains Almedina. This was confirmed to us by the mine director, Suad Čosić. When he advertises vacancies, he receives applications from women, but they have "abandoned the idea of sending women underground, because it's difficult work". We asked him if this were not discrimination, to which he replied that he can employ men as "labourers" who only subsequently become mining technicians, which is the status that the women currently working underground had when they were hired.

During their careers, both Sakiba and Almedina have done "strictly" male work. Almedina was a blaster and Sakiba looked after the ventilation ensuring a supply of fresh air to the mine. There weren't any men, so the women were taken on.

All three have been working in the mine for 31 years, which counts as 40 years thanks to the special retirement scheme. Sakiba will retire first in autumn 2015. We ask her what her health is like at the end of her career. Under our feet there is coal and mud. Streams of water run along narrow, sloping and slippery paths. It's hot. "I feel rather worn out. How many times have I walked up to 15 kilomètres carrying a piece of equipment that weighs five or six kilograms? In addition to that, it's psychologically exhausting. Whenever you descend to the bottom, you don't know if you will come back up. There were many tragedies here!", she says.

This time she's not smiling. The last major accident was three years ago, when a fire killed one of their colleagues. He was suffocated by carbon monoxide. The passages in which we are walking were burnt and crumbling. If they had been reinforced with concrete, rather than wood, this probably would not have happened. The fire could not have spread. "But every metre of such a more secure mine costs 3,000 euros, whereas a metre of passageway at Breza costs a maximum of 1,000 euros", explains Amir Kulagić, the occupational health and safety inspector for the mine. Sakiba tells us that she thought it would be impossible to restore the passageways after the fire: "I cried to see how much human suffering it would take to clean everything. I saw our workers as slaves, like when Spartacus dragged those huge rocks. It was truly a fight for survival, because we lived on the coal."

During the mine’s restoration, another miner was killed. He was suffocated while working in a location where there was not enough oxygen. The breathing apparatus that they were using at the time was more than 30 years old. It was then that the mining inspector Ferid Osmanović concluded that most of the equipment used by the miners had been worn out for a long time and, as it was no longer made, it was difficult to find parts when something stopped working.

Sakiba’s younger brother also had an accident in the mine. He suffered a head trauma when he a landslide hit him. He was 24 years old. He was rescued and now works at the surface.

"It was truly a fight for survival, because we lived on the coal".

Sakiba, ventilation technician
Far behind European standards

When you talk to the people who work "above ground", it turns out that many of them were injured in the mine, which allowed them to move to less dangerous positions. One woman in administration went completely between the roller and conveyor belt carrying coal out of the mine. She barely survived. The director's secretary had her hand crushed by the same conveyor. She was recognised as disabled and obtained an administrative position.

Amir Kulagić, the occupational health and safety inspector, confirms that Breza is far behind the European standards on occupational safety, equipment compliance, maintenance of mining areas, fire protection, and also technology and investment.

In 2014 there were 250 industrial accidents. Between 2009 and 2013, 31 employees were left disabled following an industrial accident. In the Slovenian coal mine at Velenje, which when it was in Yugoslavia was well behind Breza and which is now the leader in the region, every year one person is disabled as a result of their work. Breza miners mostly end up being signed off sick because of respiratory, muscular and bone diseases and problems with their musculoskeletal systems caused by the unnatural body positions and demanding physical work.

Amir Kulagić notes that the Breza miners who work down the mine often develop bone fractures and spinal injuries because they work in all sorts of positions and carry weights that are often heavier than the permitted load. Due to working in the dark, some end up losing their sight. There are no differences between the diseases and injuries suffered by the men and women working at the bottom. In reality, the only difference is that, during International Women's Day on 8 March, the women in the mine do not work and are given a gift. Everything else – the danger and the toil – are shared equally with the men.

We arrive at the heart of the mine, where the coalface and main machinery for extracting the coal are found. Having walked for kilometres, we encounter our first miners. Their faces are black with coal, they are dripping with sweat and the noise is deafening. Among them is a woman, the mechanical engineer Besima. She goes underground from time to time, but not every day. Her mascara has run and with her hand she pushes back blond hair that is stuck to her brow. We ask her how she is: "So so. You can't say you're satisfied when you're working underground because of the conditions and hard work, but the relationship towards female workers is good. I can't complain on that."

The machine extracting the coal dates from 1983, but has been renovated. There is another newer machine, purchased in 2014, which has significantly reduced the number of accidents in the mine. The safety and efficiency of the work would improve if another machine could be purchased. Fewer miners would have to "break down" the coal using explosives, and drill and dig by hand. But a new machine costs 11 million euros, and there is little investment in the mines at the moment.

Sinan Husić, President of the Independent Trade Union of Miners for the Federation of Bosnia-Herzegovina, tell us that one of the key points highlighted by the trade union concerns safer and more humane working conditions. This could be achieved if more modern technology were introduced. But there has been no investment in Bosnia's mines for long enough, in fact since the war in the early 1990s. "At Breza, the working conditions are still good compared with those in other coal mines in Bosnia", he reckons.

"Since the last war, we have been using the working methods of our grandparents: picks and shovels. The old equipment has had it and we haven't any new replacement. It was better in the beginning, when we started work in the 1980s", says Sakiba when we go back up towards the exit. "At the time of elections, attention is always focused on the miners as they represent an important part of the electorate, and politicians make them many promises. But after elections, nothing comes of those promises", says Almedina as we inch our way along a passage that is not even a metre high. "You don't need to exercise", we joked.

These women walk several kilometres a day in the dark and must be in good physical condition. "Don't talk to me about exercise! If only I could rest! When I get home, I've got to work in the garden and in the field, I've got the dinner to prepare and the cleaning to do. I don't get to rest my back until the evening", Almedina says. If she were 19 again and as good a student as she was then, she would still choose the same path. Work at the mine.

Her son also works in the mine. Šemsa says that she could have been a nurse or even a doctor, if only her parents had allowed her to go to the medical school in Sarajevo. "That would have been a nice job", she says. Sakiba has two daughters and would not like to meet either of them at the bottom of the mine. "It is physically demanding work. All the time you have to drag, carry, walk, pull. At the same time, there are women who would like to do that and who would stick at it, as we have done. In fact, I no longer know what's a man's work and what's a woman's work. And what would be best for women."
A book to regalvanise occupational health

Last April, Editions La Découverte published a work entitled *Les risques du travail* or "The risks of work", with the shock subtitle: *Pour ne pas perdre sa vie à la gagner* or "How not to lose your life while earning a living". Thirty years earlier, the first edition had been an unexpected success (25 000 copies sold). We asked the work’s four coordinators to give their opinion on the changes that have occurred in the world of work since then, and on the current and future challenges for occupational health.

Interviewed by
Denis Grégoire
ETUI

To bring occupational health back on to the agenda, the coordinators of the book, *Les risques du travail* call on trade unions to reach out to workers in the most precarious jobs.

Image: © Belga
On the intensification of work

Since the mid-1980s, the service sector has grown throughout Europe. The reduced role played by agriculture and industry in the job market should have resulted in workers being less exposed to harsh working conditions. However, the decline in heavy industry has not led to the disappearance of "arduous occupations", which remain in both traditional sectors and in the booming service sector.

Despite huge technical progress, the statistician and ergonomist Serge Volkoff notes the trend towards the intensification of work: "The current prevailing idea is that the intensification of work is the very condition for ensuring the survival of businesses. New occupations have even grown out of this intensification, such as in fast food, call centres and mass distribution logistics platforms, where the main objective is to shorten timescales, primarily for consumers and users. The intensification of work is alarming in how it individualises work situations, impacting terms of how to act, etc. As a result, workers are confronted with a very personal situation, which is further reinforced by increasingly individualised assessment and remuneration methods, pressure exerted by employment blackmail, constant changes that increasingly mean that people are not working with the same colleagues from one day to the next, and of course all the outsourcing and sub-contracting systems. People are progressively coming into conflict with their own work, which is accentuated by a production system that is demanding on them in terms of quantity, quality and adaptability."

On social inequalities in health

In Les risques du travail, occupational doctor Philippe Davezies highlights that surveys conducted in France show that workers in the least skilled jobs view their working conditions less harshly than those whose career has been more favourable and who enjoy better situations.

He explains this by the fact that most people in such jobs come from working-class families: "In working-class families, people learn to cope and not complain. Having to confront social adversity over a long period of time, and particularly during infancy, forces them to develop defence mechanisms allowing them to distance themselves from, deny and understate their emotions. If you live in socially deprived circumstances, without any possibility of escape, you are not going to spend your time whining. Primarily because the people around you will not put up with it. Your suffering must be suppressed. These are the processes that allow you to keep going, even though it is extremely tough. For people who come from social categories that are not really exposed to suffering and who have hopes, when they come up against difficulties, they express their suffering. This expression of suffering tends to galvanise the compassion of others, i.e. social support. When you express your suffering, for example when you cry, this soothes you because this expression of your emotions is supported by all the background mechanisms, such as the secretion of cortisol, the stress hormone. There is a close link between the expression of physical suffering and the secretion of cortisol. For people who have developed the ability to keep going when they are suffering, and who distance themselves from their emotions, the biological mechanisms and cortisol reaction are disrupted. Stress generates inflammation, but for these people, when in a stressful situation, their anti-inflammatory defences are not triggered. Instead of becoming depressed or exploding, they suffer in silence, which leads to primarily somatic pathologies, cardiovascular disorders and the whole litany of chronic diseases."

On the increasing insecurity of work

Over the last 30 years, the job market has become very insecure. The proportion of part-time jobs in the European Union increased from 12.7% in 1987 to 20.9% in 2009. Over the same period, fixed-term contracts increased by over 4%. Women, young people and migrant workers are over-represented in terms of these "atypical" employment contracts.

For sociologist Annie Thébaud-Mony, people on such contracts are at much greater risk of being confronted with working conditions that are harmful for their health: "People on permanent contracts who work for multinationals established in Europe are the best protected. In the major US, Indian and Japanese companies, respect for labour rights has already become much more lax. When you look at subcontracting, the rights contained in the European legislation on health and safety at work are being seriously challenged. For example, in the nuclear and petrochemical industries, production

"In working-class families, people learn to cope and not complain."

Philippe Davezies

1. For a fuller description of this mechanism by Professor Davezies, see pages 367-368 of the book.
2. These figures take into account only the twelve countries that were already EU members in 1987.
"Just as inequality has increased in terms of income, wealth sharing, health, etc., it has also increased in terms of working conditions."

Laurent Vogel

On a lack of action

Despite the multiple studies over the last 30 years into the main risk factors present in the workplace and the success achieved by works of general interest, particularly those focusing on suffering at work, the improvement of working conditions no longer seems to be an absolute priority for the trade union movement. This is despite the fact that social movements in the 1960s and 1970s produced a flurry of slogans inviting employees to transform their work. Laurent Vogel, a researcher at the European Trade Union Institute, feels that this is a direct consequence of job insecurity.

"There is no automatic link between knowledge and action. It is primarily the realisation that a collective problem exists that enables action. This was undoubtedly easier at a time when very precise groups of workers were subject to very specific exposures. For example, with regard to silicosis among miners, there was a very high percentage of miners who fell ill with a very specific disease, whereas nowadays we are instead seeing a multitude of risks that are affecting workers with a variety of consequences. The realisation that a collective problem exists is more difficult to achieve in this context. Furthermore, it is clear that we are paying this price because of increasing job insecurity, which is an intentional strategy on the part of employers. Just as inequality has increased in terms of income, wealth sharing, health, etc., it has also increased in terms of working conditions. It is harder to create solidarity when many workers are on fixed-term and temporary contracts and many others are unemployed. When there is mass unemployment, people clearly sometimes have the impression that fighting for occupational health is a luxury."

On the crisis in representation

In the vast majority of European countries, the rate of unionisation has dropped in the last decade. The increasing weight of small businesses in the economy is encouraging this trend, because national laws do not require employee representation bodies to be created until a certain number of employees has been reached. The multiplication of insecure contracts (fixed-term, temporary, zero hour and false self-employment contracts) is clearly not helping the mobilisation of workers.

Laurent Vogel has coordinated the part of the work focusing on action against risks in the workplace. He calls for new forms of worker representation: "We must create bodies that go beyond the legal limits of individual companies, with representation systems that cover all workers in a sector in a given territory. However, to do this, we must have a trade union strategy. There is no use appointing x people to represent workers if those representatives themselves are not firmly backed by the trade unions and equipped with the tools for research, understanding and mobilisation. Change is needed: firstly in legal terms, by giving all workers this minimum degree of democracy, i.e. being represented in the workplace, and secondly through political change, which involves trade unions putting the issue of improving working conditions at the heart of their demands. This will not happen automatically, as it is well-known that, in a period of crisis, the tendency is to sacrifice demands to improve working conditions in favour of keeping jobs and purchasing power."

On new alliances

Given the difficulties faced by the workers’ movement in counteracting the work intensification and insecurity phenomena, Annie Thébaud-Mony calls for new alliances that go beyond the usual reference frameworks: "The main trade unions have not sufficiently recognised what the new forms of work organisation are in the process of unravelling in terms of trade union rights. We need to rethink how to organise ourselves in order to combat this situation. In the shipyards of Saint-Nazaire, which have made considerable use of posted workers, awareness has grown within the trade union organisation of the need to combat the division organised by clients and to rebuild solidarity among workers deprived of trade union rights (read the ‘From the unions’ article in HesaMag No 10). With the support of local, regional or federative trade unions, these mobilisations may prove successful. In terms of occupational health issues, new forms of citizen solidarity become possible when trade unionists appeal to those health and occupational health professionals, researchers, legal experts, lawyers and doctors who are refusing to care for people indefinitely without asking questions about what is making them ill. These forms of solidarity are necessary in order to re-establish the checks and balances within companies in terms of occupational health issues."

Further reading


Orders and information at www.editionsladecouverte.fr
You can’t stand in the way of progress. Icelandic tale about a heralded relocation

In August 2014, the US aluminium giant, Alcoa, decided to permanently close its Portovesme plant in the poorest province of Italy, Carbonia-Iglesias, in southern Sardinia. With the loss of several thousand jobs, the region is now a social desert ... and an ecological one too, given that the waters around the industrial site are contaminated with heavy metals and chemical residues. Struck by this disaster, the Italian writer Angelo Ferracuti undertook a journey to Iceland to meet residents and workers at one of the sites that took over from the Sardinian plant.

Angelo Ferracuti
Journalist and writer
When I learnt that Alcoa had relocated part of its aluminium production to Iceland, I started my research. Here's a country, I thought, where you can't venture alone, particularly if you need to go to a place 750 km from the capital, to a bay that's off the tourist trail, and travel along the entire south coast in a 4x4. I drew the route with a ball-point pen on a map of the island and, for several months, I was obsessed with the idea of getting there at any cost.

Alcoa had decided to produce aluminium in these as yet pristine polar lands, where energy is cheap and where, through an exemption from the Kyoto Protocol, higher levels of pollution are permitted. The Kárahnjúkar project involved the destruction of 3 000 km² (around 3% of the country's entire surface area) of pristine landscape and the creation of a system of three dams to collect glacier water from the Jökulsá river in the Hálslón reservoir. This water is then conveyed, through 73 km of buried pipes, to a 690 MW hydroelectric plant to power a smelter and produce 320 000 tonnes of aluminium per year. The single largest wild area in Europe, which is home to the continent's biggest national park, was therefore, in short shrift, flooded not only with water in three artificial lakes, but also with the dross from a giant plant, all under the management of the major plant, all under the management of the largest aluminium producer in the world, at the time, the company Alcoa.

The Icelandic politicians went in search of investors, and bowed and scraped before them, "Icelanders have never left. He was living a tough existence as a cook, always struggling to make ends meet, in a country affected by the crisis to its very core, particularly among its middle classes. Even now, like so many others, he was having to share his apartment with five flatmates."

Connecting the fate of two islands

A few hours later, my first appointment brought me face to face with Ólafur Þorvaldsson, an artist and radical anarchist, leader of the Saving Iceland movement, which had been set up precisely to combat the construction of the Kárahnjúkar hydroelectric plant and the installation of the Alcoa smelter. This movement had organised demonstrations in various forms across the country, with the most spectacular being the work of Haukur H. who, in November 2008, had climbed onto the roof of the Althing – the Icelandic Parliament – where he had replaced the national flag with that of a famous chain of discount stores: Bónus. Immediately arrested, he had been sent to prison for two weeks.

Crossing the threshold of his door, I discovered a middle-aged man, with a typically Nordic face, dressed all in black. I explained to him my idea of connecting in a story the fate of two islands, Sardinia and Iceland, both attacked by unbridled capitalism that, in the name of profit, is capable of sacrificing everything: beauty, nature and people. He supported my idea: "It will end here as it did in Portovesme: they will pollute the bay, and then they'll go and pollute somewhere else." His movement was born in 2004, but even before that, in 2003, he had written a long article for The Guardian that started as follows: "North of Vatnajökull, Europe's biggest glacier, lies Iceland's most fascinating and varied volcanic landscape. Ice and boiling geothermal infernos meet at the edges of the glacier, and then the largest remaining pristine wilderness in western Europe begins ... A large part of this is due to disappear under 150 m of water by 2006, when the Kárahnjúkar dam is completed."

His interviewee explained with satisfaction that his article had been like a bombshell: "It caused shockwaves across Iceland: the politicians had done all they could to ensure that no one published any articles on the plant", he told me, "and suddenly I launched SOS Iceland onto the European social scene. After the international call to arms, whereas previously no one had been concerned about the issue, between 2005 and 2008 we organised major demonstrations against the construction of the dam. At the time, we even managed to block the work for a few hours. The first winter, it was mainly Portuguese who were working there for Impregilo: many of them suffered frostbitten toes and fell ill, and after a while the trade union stepped in."

Ólafur now seems to be disillusioned, and his movement is currently less active. "The Icelandic politicians went in search of investors, and bowed and scraped before them", he said in a sarcastic tone. "Icelanders have lost their innocence; they have been corrupted by the craving for money." He told me that he had recently been busy with a visual installation: 30 people were buried up to their necks, each holding a banner between their teeth that read: "You can't stand in the way of progress". In the background of the photograph, there

"The politicians were repeating the engineers’ words without understanding what they were saying."
are apocalyptic scenes of collapse. We left and, after saying our goodbyes, Ólafur got into a grey vehicle parked in the adjacent car park, and then disappeared at high speed towards the outskirts of Reykjavík.

A writer’s duty

My appointment the next day, with Andri Snær Magnason, took place in a café located between the port and the Parliament: the Stofan Café. When I arrived, he was already there, sat in the main room typing, hunched over his PC. He was young and fair-haired, with a rosy and chubby face, wearing a pair of reading glasses. “Alcoa”, he told me first, “always chooses small countries where the people are weaker, where it’s easier to exploit people because they need work; it’s also what Rio Tinto and Glencore do.”

He explained to me that, when he found out about the dam construction project, he was immediately concerned about the fate that awaited Iceland’s uplands, places that he adores and that he has frequented many times since his childhood. “Between 1998 and 2000”, he told me, “many of these landscapes, some of the most beautiful in Iceland, were under threat. I was 20 years old and just starting to write, and I couldn’t understand the possible link between an aluminium plant and the production of energy, so I started to research the subject.” He delved into the documents at the ministry, where those in charge told him that his concerns were simply an obsession, that he should stop thinking about such things, that they were studying the situation, that everything was under control, that he could rest easy. “In all those documents, there was always a figure – 30 TWh/year, 30 terawatts per hour, 30,000 MW – which was the maximum amount of energy that could be obtained without any environmental impact, but I didn’t understand. So I made a calculation by adding together the energy produced by all the main rivers, waterfalls and watercourses in the north and south of Iceland, including on the high plateaux, and I never got 30 terawatts, unless I included the Gullfoss waterfall, the most beautiful in Iceland.”

This initial research was down to his imagination, his desire to understand what was hidden behind this formula. “No one had linked this element with the rest of it. The imagination of a writer can prove useful once in a while. The politicians kept citing this figure of 30 TW”, he stressed, “when they didn’t even know what they were talking about, you know? They were repeating the engineers’ words without understanding what they were saying. So it was also a question of language, of translating the technical language into political language, into a language that everyone could understand.” When the economic and financial crisis then began in 2008, he was interviewed by journalists from around the world, from *The New York Times*, *Le Monde*, the BBC, and *The Guardian*.

He told them that he would continue to be concerned about civic issues, that it was a writer’s duty. At the time he was in the process of writing a book recounting his parents’ story. “When they were young, during their honeymoon, they spent four weeks on the Vatnajökull glacier, in the southeast of Iceland, taking measurements. But, according to studies by the University of Iceland, we now know that by 2100 our glaciers will have disappeared, that we are in the process of destroying them and that we have also gone beyond the limits of sustainable development, even though we should be able to transform industry and production.” It is well-known that smelters are highly polluting and one of the main causes of the greenhouse effect.

“A dead body that no one will know what to do with”

A short distance from the bar, in a small green house, lives Hildur Rúna Hauksdóttir, mother of the singer Björk and wife of the trade union leader Guðmundur Gunnarsson, who is also a political and environmental activist in her country. The trade unions couldn’t get into the sites as the workers seemed to be the property of Impregilo.”

Hildur Rúna Hauksdóttir

1. Two other multinationals in the non-ferrous metals sector.
own right. Very slim, with a gentle face and low soft voice, she bade us enter a small living room. She was accompanied by a younger friend, blond and sturdy, who is also an activist in Icelandic environmental groups. Hildur spoke to me slowly and quietly: "When we learnt that the project had been entrusted to Alcoa, Elisabetta, a friend who was working for national radio, without saying anything to anyone, made a direct announcement over the radio. She said that, at a given time, everyone should go to Parliament to protest against the plan, which could set a dangerous precedent in such a pristine land as Iceland. Many people came and the demonstrations continued for several months. Then, when the work began, pressure groups formed, including on the internet, and we collected many signatures against the dam."

She subsequently went on hunger strike and, when I reminded her of this, she smiled. She confided to me that the idea had come to her because, in 2002, none of the media were talking about the issue. So, to attract attention, in October she ate nothing for three weeks, but simply drank Icelandic tea. "It was very difficult to fight the right-wing government, which had already decided everything. We couldn’t win: the only positive thing was that there was a protest", she added. "When I started my hunger strike, because I’m the mother of Björk who is a world-renowned artist, journalists came from all over to interview me, and this helped to raise awareness among the people."

She asked me goadingly whether I knew about the activities of Impregilo, and she was keen to tell me that it was predominantly Portuguese and Chinese workers who were employed at the sites, and that they fell ill due to the cold. "The trade unions couldn’t get into the sites as the workers seemed to be the property of Impregilo, but we still tried to intervene by demanding that wages match those laid down by Icelandic law", stated Hildur with a peremptory tone. "They were underpaid and those who protested were dismissed." She added that foreigners did not understand why Icelanders were not really concerned about nature; perhaps they are not concerned because they have it in abundance. The political work carried out by environmental associations such as hers, Landvernd, which continues to fight against projects that destroy the landscape, is therefore important. "Yet once the work was completed, the local residents who had been in favour almost all changed their mind. In addition to the damage and pollution, no jobs have been created and, what’s more, workers’ rights have been trampled underfoot."

A philosophical carpenter

The next day, at 8 a.m., Cosimo and I were already on the road. A journey of 750 km awaited us, along the entire southern coast, from Reykjavík to Reyðarfjörður. Once out of the city, we soon reached the high plateau of Hellisheiði, mid-way between the capital and the coast, where there is a large geothermal plant. What is striking about Iceland is the constantly changing landscape with a few brightly coloured houses scattered among the infinite space, generally self-sufficient farms. During the journey, we met very few vehicles. Once we got to the coast, we continued our journey with beaches on one side and, on the other, sandy rocks, expanses of yellow grass tested by the snow and wind, and carpets of moss in a landscape of gentle hills. Further on, a huge mountain range appeared on the horizon and spread out across the immense space of the landscape, where the asphalt ribbon ran along opposite the Hvannadalshnjúkur volcano, the highest peak in Iceland, within the confines of the Skætafell national park, under the Óraefajökull glacier.

"One worker in four couldn’t cope; there was a constant turnover of staff."

Ólafur Hr. Sigurðsson

The farmer Gudmundur Arnannsson one of the first local residents to resist construction of the dam.
We arrived at the farm at dusk. In front of the house was an old white Volvo Polar and a 4x4, with a tractor a bit further away beside the cowshed. Gréta Ósk welcomed us with a smile as she opened the door, with her husband Guðmundur Ármannsson just behind her. She was slim and blond with a pink face and rosy cheeks, warm and smiling as she invited us to enter. The house was welcoming, with the kitchen and box room on the first floor and, on the upper floor, at the top of a wooden staircase, the bedrooms and living room: large, well-furnished and very light with big windows overlooking the Impregilo, even though all the residents in that area were in favour, he went out of his house and hoisted an Icelandic flag to mid-height as a sign of mourning. He then interrupted him to recall that on 19 July 2002, during the signature of the contract with the Impregilo, even though all the residents in the area were in favour, he went out of his house and hoisted an Icelandic flag to mid-height as a sign of mourning. He then went off in his car to the various travel agencies in the region, those organising expeditions for tourists, to convince them to do the same thing.

Both talked to me about Lagarfljót lake, which, according to legend, hides a terrifying monster in its depths — the Lagarfljótssýr-murinn — a gigantic aquatic serpent. Völundur explained to me: “The lake has inspired many poets. And in the past, it was a vital artery for the entire region.” Greta showed me a book and said that, in her opinion, the damage would be felt across a much wider area, with a radius of over 100 km, ruining the environment, including in neighbouring fjords. “The dam waters flooded everything; they went in every direction carrying mud and destroying the land”, added Guðmundur. “The fauna and flora have been entirely destroyed, the fish are dead, the water is no longer blue, crystal-clear and transparent as it was before; now it has the colour of a murky puddle. But the plant has contributed nothing, not even jobs, and when it shuts down, we will have a dead body that no one will know what to do with.”

12 kg of sulfur dioxide per tonne of aluminium

Next morning we left very early. Before reaching Reyðarfjörður, I had an appointment at the port of Seyðisfjörður, where vessels arrive from Denmark, with Olafur Hr. Sigurðsson, in his small house in the centre of the village. He was about 50, with a body that was still muscular and athletic, and had worked for eight months at Alcoa as a driver. He had then been promoted and, until 2014, he had managed 40 workers at the plant. “I initially everything went well, but in the last two years, due to the fluoride, there was a lot of pollution not only inside the plant, but also outside”, he confided to us. He recounted that the last two summers in the region had been very hot with no rain and that, to reduce external pollution and keep it under control, the plant’s managers had taken to closing the smelter’s underground passages, causing the temperature to rise to 50°C and damaging the health of workers who were struggling to cope. He had warned his superiors on numerous occasions. “We cannot work under these conditions”, he complained to them. Eventually, he came into open conflict with them and his defence of the workers led to his dismissal, without the trade union being able to intervene because he was a manager. “The workers were exhausted, many of them fell ill because of the stressful working conditions and climate and then, in the plant, there was a lot of magnetism caused by the energy used: one worker in four couldn’t cope; there was a constant turnover of staff.” He has now returned to what he used to do: crewing on a fishing vessel. He told us that life was much better and that the atmosphere at the plant was not made for someone like him, who was used to living in this paradise.

Shortly after getting back on the road towards Reyðarfjörður, we entered a cold and snowy mountain area. Surrounded by the Hádegisfjall and Granafell mountains, this enchanting fjord lies close to one of the largest glaciers in the world, after those in Greenland and the Antarctic: Vatnajökull. When we arrived, there was no one in the streets, except for a cyclist who told us the way to the plant. Everything was silent at Alcoa Fjarðaál.

A worker behind the fence spoke on the telephone and the surveillance camera filmed me while I photographed this strange body in the surrounding enchanting landscape: a body consisting of metal sheets and pipes.

Alcoa obtained permission from the Icelandic Environment Ministry to produce 12 kg of sulfur dioxide per tonne of aluminum in this paradise, 12 times the limit laid down by the World Bank for smelters such as this one. There, like in Portovesme, in this deep blue sea, in years to come people will see lead levels rise, and the children of Reyðarfjörður, like those of Portoscuso, the town close to the former Sardinian industrial flagship, will have higher levels in their blood than those in other places and will suffer from cognitive impairment precisely due to the presence of this deadly metal. But, as Ólafur Páll Sigurðsson angrily proclaimed in his artistic installation, it is forbidden to protest or oppose development. This violence against nature and people is being perpetuated by a neoliberalism that every day tells each of us that it has won, that it is pointless fighting: “You can’t stand in the way of progress”.

•
Should slavery be abolished?

The idea that a legal rule can be legitimised by its economic impact is not new. The fascinating work of a historian and a sociologist shows that this legitimisation by economic calculation permeated debates on slavery in France in the 18th and 19th centuries. This book sheds invaluable historical light on the current debates on European regulation.

Slavery played only a marginal role in mediaeval Europe. It became economically important once again in the transition to capitalism. Based on the slave trade, the trade triangle played a vital role in the accumulation of capital and in the shift of the centre of economic gravity from the Mediterranean to the Atlantic. The mechanism was simple: black slaves taken by force from the African continent formed the bulk of the labour for the most dynamic capitalist sectors in the American colonies. The profits from the trade were invested in Europe, which found an outlet for its goods on the American continent. The development of the ports on the Atlantic seaboard, from Bordeaux to Liverpool, made a significant contribution to the industrial revolution.

The abolitionists had excellent moral and philosophical arguments against slavery. However, they felt – based on their beliefs or for tactical purposes, depending on the situation – that they needed an economic argument based on calculations. In their view, a mathematical assessment was an important stage in developing the link between fairness and usefulness. The first economist to consider this issue was Du Pont de Nemours in an article published in 1771. He wanted to demonstrate the absurdity of slavery through an economic calculation. His goal was to show that this system was "appalling for its victims, and harmful and ruinous for its perpetrators". In order to convince plantation owners, he needed evidence that the true cost of slave labour was higher than that of paid labour.

As with all macroeconomic research that looks not at the reality but at the potential impact of a project, his calculations relied on highly debatable assumptions. No one could clearly determine what the wages of a free workforce would be, nor what productivity would be achieved by plantations if their masters were deprived of the whip. Another economist, Turgot, threw himself into the debate by stating that Du Pont had underestimated the cost of paid labour in the West Indies. Other calculations were proposed by Condorcet, Ladebat and Frossard. For their part, the supporters of slavery looked to produce their own calculations. They underlined that, when all was said and done, both slavery and employment always resulted in situations of forced labour. Three decades later, Jean-Baptiste Say offered his assessment on other bases, but without conclusive results...

As the contributions multiplied, the fact could not be ignored that many parameters could be taken into account. Each one further increased the degree of uncertainty. Summarising the long-running debates, the historian Augustin Cochin concluded in 1838: "But what did slave labour cost? What would free labour cost? There was no way of knowing; the formula was ingenious, and the components of the calculation were pure hypotheses."

In the end it was not an economic calculation but arms that settled the matter. Uprisings by black slaves shook the western part of the island of Saint-Domingue (now Haiti) from 1791 onwards. Over a period of 13 years, the revolution instigated by former slaves gradually gained ground over the machinations of the European powers and led to the defeat of both the British army and Napoleon’s expeditionary force. It was this revolution that opened the door to the abolition of slavery on the American continent.

— Laurent Vogel


Authoritative work on the slave revolution:

Cancer at Samsung: comic book tribute to a father's fight

The drawing in the box is heartrending: a man sitting behind a steering wheel turns round, reaches out his hand and touches the vehicle’s back seat. The words in the balloon read: "Sometimes, when there are no customers, I look at this back seat and have the impression that she's there." It's Hwang Sang-ki who’s speaking. This taxi driver is mourning his daughter Yumi. The young woman died on the back seat of the taxi while her parents were on their way back to their small home town of Sokcho, in the north-east of South Korea, having taken their daughter to hospital for further treatment for her leukaemia.

"I learnt about Mr Hwang Sang-ki's story when Samsung was bleating on about the economic crisis in Korea", explains Kim Su-bak, author of this manhwa or Korean comic book. In Korea, all young people dream of working for Samsung, which is the standard bearer for the country’s success around the world and the virtuous company par excellence, renowned for both its technological inventiveness and its benevolence, tinged with paternalism, towards its employees.

Like thousands of young Koreans from modest families, Yumi saw this as a great opportunity: starting her working life with a leading company that, although demanding, offered a good salary and bonuses.

In October 2003, having just turned 18, she left her small provincial home town close to the border with North Korea to move to Suwon, a town of one million inhabitants 30 km to the south of Seoul. This is where the main headquarters of Samsung Electronics are based, which have earned the town the nickname of Samsung City. In addition to the headquarters, Suwon is home to an imposing semiconductor plant. Yumi worked on line 3, box 3. It was a manual job that involved purifying the wafers by immersing them in baths of unknown chemical products.

Within a short space of time, the young woman began to feel tired and increasingly nauseous and dizzy. In June 2005, less than two years after her recruitment, she was diagnosed with leukaemia. Following a bone marrow transplant, her condition improved slightly, but the disease took hold again and the young woman died in March 2007. She was 22 years old ... During Yumi’s illness and after her death, her father sought to prove that the leukaemia was caused by the chemical products used in her work. While his daughter was in hospital, he found out that another sterile chamber was being occupied by a young engineer from Samsung Electronics, so he started to do some research. He learnt about the death of a direct colleague of his daughter, once again from leukaemia. He contacted an association of lawyers specialising in employment law and managed to galvanise other victims’ families. An initial demonstration "for the truth about leukaemia at Samsung" was organised in November 2007 in front of the semiconductor plant. Following this demonstration, an association for workers’ health, called Banolim, was set up.

In addition to the moving fight of a father for his daughter, the comic book artist describes the self-protection mechanisms that Samsung has deployed to protect its reputation, and the legal and media firepower, in particular, that it has used to this end. Throughout the hundred or so pages of drawings that make up his book, Kim Su-bak chips away at the respectability bestowed by an entire population on its flagship company. Adopting the approach of an investigative journalist, the author allows rare dissident voices to speak through the language of the comic book. In particular, a university professor talks about "ideological domination" to describe the hold that Samsung has over Korean society as a whole. The reader imagines a real State within a State or, to use the author’s precise words, a "Republic of Samsung".

Several drawings show us mysterious visits to the Hwangs’ home, by alarming suit-wearing emissaries from the multinational, to convince this modest taxi driver to abandon his fight, and then to try and mollify him by offering large sums of money to give up his campaigning.

In June 2011, Hwang Sang-ki won his first victory before the courts: an administrative court acknowledged that the deaths of his daughter and her colleague were due to their work at the semiconductor plant.

His association reckons that 200 former workers from Samsung Electronics have reported serious health problems due to their work: leukaemias and other types of cancer (breast, thyroid, brain), miscarriages, multiple sclerosis, etc.

The "whistleblowing" taxi driver is continuing his fight together with other families of semiconductor victims. He is now less alone. As a symbol of the resistance to the "Republic of Samsung", his story has recently been made into a film.

— Denis Grégoire

These books are available in the ETUI’s Documentation Centre www.labourline.org
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