

The art of
eventive
preventive
health
and safety
and safety
europe





Alfredo Menéndez-Navarro, MD PhD, is Professor of the History of Science at the University of Granada. His main research field is the History of Occupational Health. His research has explored the incorporation of medicine into the workplace in the preindustrial world, the professionalization of occupational medicine and the approach to occupational diseases in contemporary Spain.

© European Trade Union Institute, 2015 ISBN 978-2-87452-333-5

Contents

5 Preface

7 Section 1 Cultures of prevention

9

<u>Section 2</u> Introduction of the poster into the work environment

13

Section 3 Prevention posters in the interwar period

21

Section 4 Continuities in prevention posters after the Second World War

33

Section 5

From 'instruction' to 'protest': trade union posters since the late 1960s

34

The Italian worker model and the new approach to occupational health

36

Criticisms of Fordism and automation

38

The 1973 crisis and job-sharing

40

Occupational diseases and industrial carcinogenesis

44

Psychosocial risks

46

Access to consumption and representation of women

53

In conclusion

55

Bibliographical references

Preface

This catalogue contains some of the posters that we have selected for 'The Art of Preventive Health and Safety in Europe' exhibition. Aside from the aesthetic appeal and wide variety of graphic techniques used to represent occupational risks, the exhibition highlights different and contrasting approaches in the area of health and safety.

Some of the posters convey messages referring to the responsibility and, potentially, the culpability of workers. They urge workers to comply with the rules and to be careful, meticulous and tidy. Others, by contrast, highlight the dangers lurking in the workplace. They allude to the figure of death hiding in the shadows of machine gears or they point to the presence of toxic substances. The workers depicted are rarely women. They tend to appear more as wives reminding their husbands to take care so that they come home in one piece.

Whatever the approach, the message is almost always in the imperative. Others know and call on workers to heed their advice. Two images reject this often patronising approach to prevention. A trade union poster from the early 1980s soberly announces 'Our health is not for sale'. It clearly stands out from the other posters due to this use of 'us' and its implicit call for collective action. It also conveys a renewal of trade union culture, which was quite considerable at that time in Europe and which set limits on what could be negotiated in terms of jobs and wages. Another document is not a poster strictly speaking. It does not contain any explicit message, but is rather the expression of collective action. This is the risk map drawn up in 1969 by workers from the FIAT paint workshops in Turin. The strength of its graphics is involuntary, as often seems to be the case when the most diverse utilitarian objects are taken over by contemporary art. These foreign symbols that represent each production phase and the various associated risks identified by workers point to another way of conceiving prevention: by mobilising a collective intelligence and challenging the traditional division of work.

We would very much like to thank the International Institute of Social History in Amsterdam. Without its collections and the extraordinary archive work entailed, this exhibition could not have come to fruition. We would also thank Professor Alfredo Menéndez-Navarro, who teaches history of science at the University of Granada. His commentary lights the path of this exhibition. The ETUI offers this material to any organisations that would like to use it to promote occupational health. These posters will remain on permanent display in our documentation centre. Another reason to visit and use our centre!

Philippe Pochet

ETUI General Director

Section 1 Cultures of prevention

The harmful effects on health of productive activity have been a concern for social stakeholders since the late 19th century. With varying degrees of intensity and perseverance, labour and health authorities, employer organisations, trade unions and insurance companies have, throughout the 20th century, conducted campaigns to limit the impact of productive activity on the health of workers. However, the understanding of occupational risks and the measures implemented to prevent these risks have varied significantly, due not only to technical determinants but also to historical, economic, social and cultural factors (Douglas 1986). If we define culture as the development and exchange of meanings, i.e., meanings allowing different people to interpret the world in essentially the same way, it is clear that we cannot talk about a single 'prevention culture' or just one way of understanding and preventing occupational risks but rather about multiple models that often coexist in disharmony (Nelkin 1985; Cárcoba Alonso 2007).

The different understandings of risk – essentially the worker model and the employer model – fed by the interests and values of the main social stakeholders, have to a large extent been absorbed by the hegemonic claim made by the expert and technocratic culture that it alone is capable of offering a legitimate interpretation for understanding and tackling occupational risks. The success of this bid for hegemony is reflected in the marginal role played in our societies by alternative or complementary interpretations of the causes of occupational accidents or by worker proposals to tackle occupational morbidity (Menéndez Navarro 2003).

Throughout the 20th century, the occupational risk prevention poster was the main tool for conveying these messages in the workplace, playing a central role in prevention campaigns conducted by social agents. Having emerged in the second half of the 19th century, the modern poster developed in response to the need for commercial promotion and publicity. The use of posters as a form of propaganda in the First World War and the Russian Revolution fundamentally transformed their purpose. Instead of being regarded as an artistic product, they gradually came to be viewed as a technical form of mass communication intended to model public opinion. Their capacity to convey information in a simple manner, accessible to literate and illiterate sections of the population, also made them an ideal vehicle for communicating educational messages to broad sections of the population, aiming to model the attitudes and behaviours of their intended targets. This explains their mass use by European educational, health and occupational organisations as the basis of health promotion campaigns to address public health problems, including those caused by work activity (Perdiguero Gil and Castejón Bolea 2012).

We need to view the 'language of posters' as a policy tool, not solely in terms of the iconography and typography or the messages. In other words, this instrument allows occupational health problems to be defined and redefined by incorporating in each poster an explanation of the cause of the problem, identifying the targets of the prevention message and determining the responsibility for creating and avoiding the risk (Hilgartner 1985). In view of other exhibitions and compilations of prevention posters held and published recently¹, the main aim of this selection is to highlight the different views and understandings of the prevention task. To this end, the European Trade Union Institute (ETUI) has sourced a large number of posters created by European trade unions after the Second World War, kept by the International Institute of Social History in Amsterdam along with those produced by official and employer organisations in the interwar period. Posters come from most European countries and refer to a variety of occupational hazards and to the gender issue. The selection therefore enables me to explore the continuities and discontinuities between the two types of production and show that the originality of the workers' view of the problem resulted in an alternative approach to certain occupational risks and in the emergence of occupational health problems traditionally ignored in officially produced posters.

First, I shall set out the circumstances that enabled the emergence of prevention posters at the beginning of the 20th century and the factors allowing their development during the interwar period. The Scientific Management (SM) doctrine had a decisive influence on the identification of the human factor as chiefly responsible for accidents and as the guarantor of prevention. These principles inspired most of the posters produced in the interwar period and are analysed in the third section. In the fourth section, I shall show how changes in the aftermath of the Second World War, which laid the foundations for the creation of the welfare state, combined a clear continuity in the production of prevention posters with a breakthrough in the use of humour to convey safety messages. The fifth section explores a radical change in the design of prevention posters that occurred at the end of the 1960s, when they ceased to be regarded as merely instructive elements and became a way of expressing worker and trade union demands for improving working conditions. The posters produced by trade unions from the late 1960s also allowed themes to emerge that had previously received little attention, including some of the new risks associated with the changing conditions of industrial activity and the labour market. Finally, I will briefly reflect on the main contributions of the selection of posters in this exhibition.

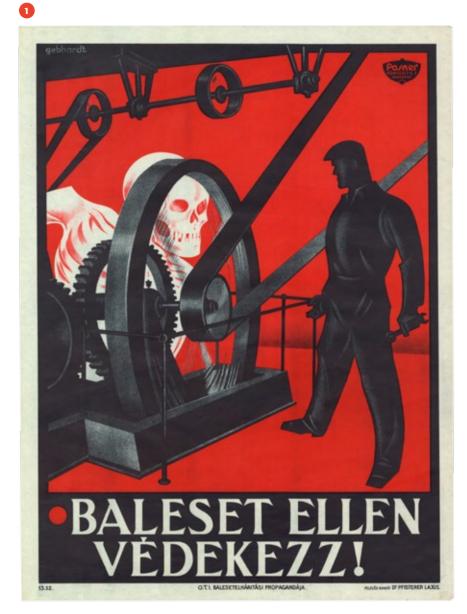
Arxiu Nacional de Catalunya, Danger: colección de carteles de prevención de accidentes laborales (1925-1937), Viena Ediciones, Barcelona, 2002. Accidentes y prevención. Carteles españoles del siglo XX, Lunwerg Editores, Barcelona, 2004. iDefiende tu salud y tu vida en el trabajo! Carteles 1867-2006, Fundación Francisco Largo Caballero, Madrid, 2014. Collectif Ferraille, Danger! Trésor de l'Institut National de Recherche et de Sécurité, CNAM-Musée des arts et métiers, Paris, 2014.

Section 2 Introduction of the poster into the work environment

Towards the last quarter of the 19th century, there was a growing international consensus on the need for the State to actively participate in solving the *social question* or class struggle by breaking with the traditional laissez-faire attitude adopted by liberal thinkers (Rodríguez Ocaña and Menéndez Navarro 2006). At the root of this change was the rise of the labour movement and its growing capacity to raise awareness about the scale of the social problems caused by industrialisation. The regulation of child and female labour, limitation of the working day and compensation for work-related injuries were the main items on the agenda in the early stages of the labour struggle (Laurell 1984). Various leading sections of society, including conservatives, 'social Catholics' and socialists, accepted the need to implement social reform as a way of limiting social conflict.

Accidents, regarded as side effects of industrial progress, became the centre of attention for European social reformers because they were an acute and omnipresent problem from the perspective of both workers and the productive system itself (Bartrip and Burman 1983). From the final decades of the 19th century, national legislation was introduced in European countries to tackle and reduce the effects of workplace accidents. On the one hand, safety rules were adopted, accompanied by the creation of inspection services responsible for ensuring compliance with these rules. On the other hand, legislation on compensation for accidents was enacted (Silvestre 2008).

Albeit with notable national variations, European accident legislation had a clear compensatory aim, prioritising financial compensation and care benefits for victims and their dependents in the event of death, over preventive interventions. The expectations of the authorities that the cost of financial compensation would encourage investment by employers in workplace safety measures rapidly proved unfounded (Sturdy 2003). Proposals were limited to prevention measures that were too general and ineffective, the publication of health booklets and, in particular, the implementation of prevention campaigns around the publication of posters, which therefore entered into industrial and manufacturing scenography. Prevention posters had their time of splendour in the interwar period, when the increasing use of posters in general was combined with the impact of Scientific Management (SM) on prevention doctrine. The goal of this new discipline was to regulate production factors in a scientific manner as a way of improving efficiency and industrial performance. The incorporation of SM meant that increasing prominence was given to the role played by the 'human factor' in occupational risks defined in constitutional or psychological terms. As a result, one of the first manifestations of SM was the creation of vocational selection and guidance institutes to study the human being as a production factor, so that each individual could be assigned to the tasks for which he or she was best suited. This new view of workplace accidents and preventive strategies resulted in increased prominence being given to the workers themselves as responsible for accidents, with lesser attention being paid to factors related to working conditions and equipment. Consequently, action to prevent accidents focused on vocational selection and guidance and on educational work by experts aimed at convincing workers of their capacity to prevent accidents at work and of the need to promote changes in behaviour to achieve this goal. As a result, based on the premises of SM, workers became not only the main agents responsible for the production of accidents but also the guarantors of their own protection. In order to be a good worker, it was no longer enough to work well, it was now necessary to look after his/her own safety and avoid any carelessness (Martínez Pérez 1994; Rabinbach 1992).



$(\mathbf{1})$

Protect yourself against accidents! Hungary, accident prevention campaign by OTI (National Institute for Social Protection) 1925-1949 Designer/Artist: Gebhardt Source: International Institute of Social History (Amsterdam) - IISG BG E8/598

<u>Section 3</u> Prevention posters in the interwar period

The accident prevention posters from before the Second World War in this selection share some characteristics in common. Compared with the predominance of text in posters from the early part of the century, poster design in the interwar period benefited from a renewed interest in graphic design and was influenced by various artistic vanguard movements, with the incorporation of photography, photomontage, geometric abstraction and rigorous typographic treatment. This resulted in a striking image design that yielded a clearer and more comprehensible message. As an example, some of the posters included in the selection reflect the influence of trends such as German expressionism. In contrast, prevention posters were mainly designed by traditional printers before the 1940s, explaining why the graphic design had been generally less adventurous, predominantly using a more or less realistic figurative language (Pelta Resano 2008).

The targets of posters were mainly workers. In accordance with the prevention strategies inspired by SM, they were represented as primarily responsible for ensuring their own safety, largely attributing accident risk to their carelessness or misuse of work tools. Hence, posters in this period did not take account of working conditions or social determinants of risks. As a consequence, the messages conveyed by posters focused on individual responsibility.

The posters included in the selection predominantly represent physical risks in the industrial environment, although they also include some risks in relation to agricultural workers. They depict factors responsible for accidents (lack of attention, untidiness, carelessness) and their consequences (being crushed by loads, blindness, falls from a height), emphasising the potential dangers awaiting workers who incorrectly use machinery (amputation of limbs or death). The posters appeal directly to workers, who are urged to comply with rules, use machinery and tools in a proper manner, take care in their work, and/or use protective measures to prevent accidents and injuries. The personal protective measures include allusions to protective eyewear or welding masks in posters that illustrate the disabilities that can result from failure to follow these measures. In contrast, most of these posters pay little or no attention to working

conditions, and only a few inform workers of the need for structural protective measures. This is the case with the Dutch poster published in 1940 by the Platen-Commissie, which, using a striking design, shows workers the outcome (amputations) of accidents caused by using bottling machines without structural protection. (Poster 4)

Most of the posters in this period were produced by public authorities responsible for occupational health and/or social welfare, by mutual companies and employer associations, by insurance companies and by trade unions. I highlight the inclusion of a 1927 Dutch poster published by the Transport Workers Trade Union, which, although consistent with the aforementioned representation codes, urged workers to cooperate with the trade union to combat workplace accidents. (Poster 2)

Although this is a limited selection of posters, I feel that it is important to highlight certain absences that reflect significant gaps in the themes tackled in this period. First, few women appear in the prevention posters. Despite increasing numbers of women participating in the industrial environment after the First World War, it was still mostly men who were represented in posters during this period. The few working women depicted in posters belonged to the more female-dominated sectors such as the textile industry or the health sector. Together with the usual calls for care, posters included a significant prescriptive aspect by warning female workers of the accident risks due to wearing loose clothing or not tying their hair back. However, most prevention posters chose to depict women as wives and mothers, constructing a powerful iconic representation designed to remind men of the terrible implications of their carelessness for family life, which they were perceived to be responsible for protecting (Pelta Resano 2008).

The second omission that should be highlighted is the limited attention paid to occupational diseases, beyond musculoskeletal complaints such as hernias or lumbago. Numerous conditions resulting from productive activity, such as heavy metal poisoning or pneumoconiosis, were not covered by accident legislation until well into the 20th century, despite the increasing use of toxic substances in industrial activity and the rise in dustcreating processes in extraction work due to the introduction of mechanical drilling. As one of the demands of the international labour movement, the International Labour Organization's (ILO) programme developed after the First World War tackled the problem of occupational diseases (Tosstorff 2005). In fact, some of the ILO's technical studies helped to scientifically legitimise workers' concerns and to increase awareness among some sections of the medical profession of the new occupational risks (Weindling 1995). In 1925, conscious of the limited definition of accidents in most national regulations, the ILO submitted a proposal to extend the scope of legislation on compensation for occupational diseases. However, the ILO General Conference adopted an agreement that included only lead and mercury poisoning and anthrax infection, despite abundant scientific evidence on other hazardous substances and diseases. Complaints about the limited nature of the list made by the British delegation led to a commitment to review the convention every five years. The convention was finally revised in 1934 when silicosis, poisoning by phosphorus, arsenic, benzene and halogen derivatives of hydrocarbons of the aliphatic series, as well as illnesses caused by radioactivity and X-rays, were added to the list

2 Dockworkers, fight with the trade union for your safety! Netherlands, Transport Workers Union 1927 Designer/Artist: Hahn, J.C. Source: International Institute of Social History (Amsterdam) - IISG E1/782

2

3

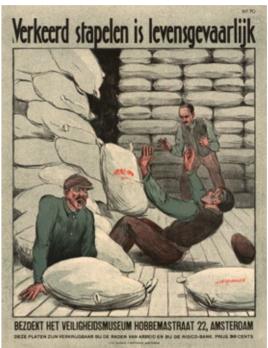
D

0)

Poor stacking can cost lives Netherlands, Blikman & Sartorius 1929 Designer/Artist: Heyenbrock, Herman Source: International Institute of Social History (Amsterdam) – IISG BG E11/760

4 Rott

Bottling machines without safety devices cause 546 accidents a year Netherlands, Platen-Commissie Secretariat 1940 Designer/Artist: Lavies, Jan Source: International Institute of Social History (Amsterdam) - IISG BG E14/819 3





of diseases eligible for compensation (International Labour Organization 1982). The ratification of these conventions and their incorporation into national law markedly varied among European countries, although the inclusion of a growing number of occupational diseases accelerated after the Second World War.

A good example of the limited coverage of occupational diseases by prevention posters is pneumoconiosis, which emerged as one of the main occupational health problems on the European continent in the interwar period and after the Second World War. Together with the large number of workers exposed and the obvious impact on their health, pneumoconiotic processes are irreversible, which is why prevention was perceived early on as the main intervention approach to this problem. Coal mining in Great Britain during the 1920s employed over 1 200 000 workers. Despite its subsequent gradual decline, this sector still employed over 700 000 miners in the years immediately after the Second World War. The official figures for deaths from Coal Workers' Pneumoconiosis in Great Britain – one of the diseases resulting from inhaling coal dust and officially recognised as eligible for compensation in 1943 – are truly staggering. Over 4 500 new cases were diagnosed annually in the 1940s and 1950s, and there were over 1 200 deaths per year in England and Wales alone in the 1950s. Combined with the deaths due to accidents in this sector, nearly one out of three occupational deaths in Great Britain in the middle decades of the 20th century occurred in the mining industry (McIvor and Johnston 2007). In the case of French coal mines, silicosis only became eligible for compensation in 1945, preventing knowledge of its incidence in earlier periods. Between 1945 and 1987, the official figure was 40 000 deaths, which no doubt underestimates the true impact of this disease, which has been put at between 80 000 and 120 000 deaths in this period (Rosental and Devinck 2007). Besides the delays in legislation, the limited representation of occupational diseases such as pneumoconiosis in prevention posters during the interwar period can be explained by the difficulties in using posters to convey complex causal processes in which the effects come to light long after the exposure (Menéndez-Navarro 2012).



5 Weld safely Netherlands, Platen-Commissie Secretariat 1939 Designer/Artist: Lukåcs Source: International Institute of Social History (Amsterdam) - IISC BG E14/808





A tidy workplace. A place for everything Spain, Ministry of Labour 1925-1949 Source: International Institute of Social History (Amsterdam) - IISG BG E28/576

7 Take care when

at work Spain, Ministry of Labour 1925-1949 Source: International Institute of Social History (Amsterdam) - IISC BG E28/579

8

Eye protection Posters from France, Hungary, Poland Source: International Institute of Social History (Amsterdam)

0

9

Protection against accidents and falls Posters from Austria, Spain, Poland Source: International Institute of Social History (Amsterdam)

6





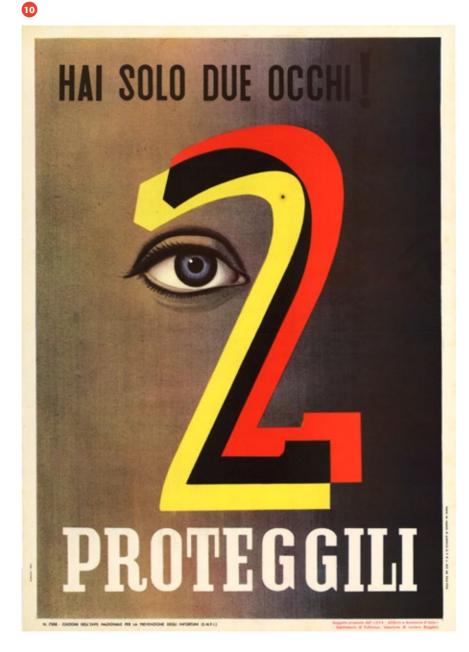












You have only two eyes, protect them! Italy, Workers Compensation Authority 1952-1978 Designer/Artist: Boggiani, Luciano Source: International Institute of Social History (Amsterdam) - IISG BG E23/769

<u>Section 4</u> Continuities in prevention posters after the Second World War

The Second World War profoundly changed the social policies implemented in Europe. Reconstruction policies combined with the relative shortage of workers in the more industrialised societies led to greater emphasis being placed on improving the health and wellbeing of the working class. Democratisation of the political process and the position of strength gained by the labour movement, which enabled parties on the left to enter numerous coalition governments, were key to achieving substantial improvements in occupational health and safety issues and compliance with prevention legislation (Sturdy 2003).

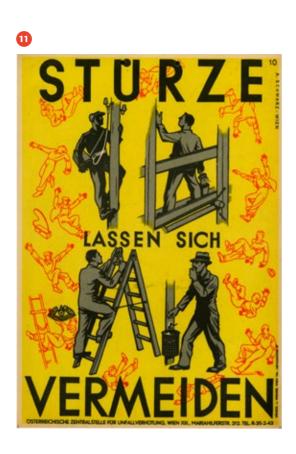
Greater economic efficiency in the cover for occupational risks was achieved through the unification of schemes, the inclusion of new contingencies (including occupational diseases), the universalisation of coverage and the management by the State. In addition, the post-war consensus enabled European governments to adopt progressive tax policies, with income being transferred to more disadvantaged sections of society and universal cover being provided for risks and social services, encouraging a social levelling process associated with the rise in the welfare state (Comín 2010).

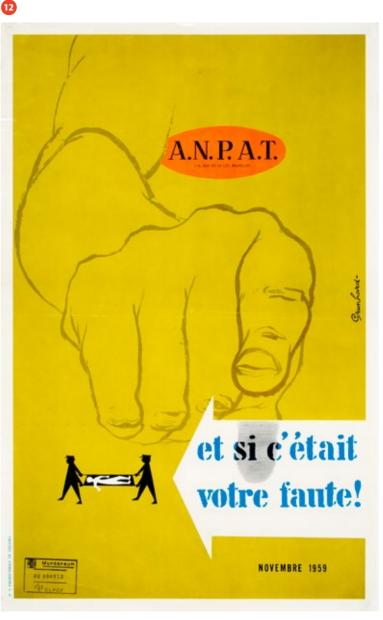
However, the changes that occurred from the 1950s onwards quickly compromised this new status of occupational health, resulting in deteriorating working conditions for many sections of the European working population.

Firstly, several countries experienced 'economic miracles', based on the development of heavy industry and the mass incorporation of workers in the industrial environment. In Italy, for example, industrial activity went from providing employment for 29% of the economically active population in 1951 to 42% in 1971. This growth benefited from the mass expulsion of workers from agriculture, which went from employing 44% of the Italian working population to just 18% during this period (Laurell 1984). Mass migration from the depressed agricultural areas to expanding industrial zones was echoed in other countries and at a transnational level.

Secondly, growing international competition led to technological conversion, mechanisation and the intensification of working patterns as ways of increasing productivity. The mainstreaming of Taylor-Ford practices in various production sectors resulted in a trend towards an increase in work schedules and loads and a decrease in the demand for skilled workers. The increase in workplace accidents and occupational morbidity in the 1960s was replicated throughout Europe. In Italy, for example, the number of workplace accidents increased by 15% between 1960 and 1968, despite a fall of nearly 5% in employment rates, with an increase of 110% in compensation for the victims of occupational disease (Laurell 1984). Thirdly, the 1960s saw the beginning of industrial relocation from highly industrialised areas to less developed European regions, with cheaper labour and lower rates of trade unionism, leading to a fall in occupational health and safety standards (Sturdy 2003).

The new challenges faced in occupational health during the post-war period were not immediately addressed in prevention posters. Many of the posters published continued to depict the same themes as used during the interwar period. These posters were mainly published by state bodies responsible for accident prevention and/or management of social insurance. The main focus continued to be the physical risks of industrial activity. Whether through more traditional figurative language or innovative designs, posters continued to convey messages with an unequivocal meaning: the responsibility for accidents and their prevention lay with workers themselves. The emphasis continued to be on how to work safely, with instructions on the use of personal protective equipment such as helmets, safety belts, ladders, scaffolding or handles on carts, or information on the risks posed when handling certain types of machinery. The poster published in 1959 by the Belgian Association for the Prevention of Occupational Accidents used a hand in an accusing gesture to remind workers of their potential responsibility for accidents suffered by coworkers. (Poster 12)





Falls can be prevented Austria, Central Office for Accident Prevention 1950-1974 Designer/Artist: Schwarz, A. Th. Source: International Institute of Social History (Amsterdam) - IISG H2/311

12

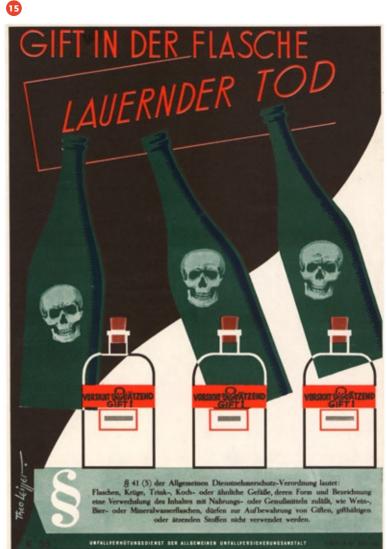
And what if you were to blame? Belgium, National Association for the Prevention of Occupational Accidents 1959 Designer/Artist: Peretti, Calisto Source: Mundaneum (Mons, Belgium) - 00 000953 Only one of the posters included in the selection dealt with chemical risks. Issued in the aftermath of the war, this Austrian poster depicts three bottles labelled with toxic substances evoking the hazards of poisoning by representing another three bottles bearing a skull in the background. (Poster 15)

However, after the Second World War, humour, comic language and plays on words were increasingly used to convey the prevention message. This approach was particularly utilised in the work carried out by the Royal Society for the Prevention of Accidents (RoSPA) in the United Kingdom. Founded in 1917, this association overhauled its communication approach during the Second World War, when the prevention of occupational accidents was perceived as a key element in the war effort. The posters produced during the war used humour rather than disturbing images of accidents in an attempt to avoid being counter-productive (Pelta Resano 2008). Perhaps the best exponent of this trend is the poster published in 1957 by RoSPA, in which a drawing of a smiling member of the Queen's Guard with his hands in enormous gloves conveyed the prevention message through a play on words (poster 13). In others, such as the French poster of 1973, the information on the magnitude of the workplace accident problem was reinforced by the humourless use of a rubbish bin overflowing with clothing and amputated limbs of victims, conveying a strong message about human and economic hopes cut short by the drama of workplace accidents. (Poster 14)

(Text continued on page 30)







(13)

Guard your hands United Kingdom, RoSPA (the Royal Society for the Prevention of Accidents, London) 1957 Source: International Institute of Social History (Amsterdam) - IISG BG E29/197

(14)

148,406 occupational accidents in 1973 France 1973 Source: International Institute of Social History (Amsterdam) – BG D38/986

15

Poison in the Bottle -Death lurking Austria, Austrian Workers' Compensation Board 1950-1974 Designer/Artist: Leippet, Theo Source: International Institute of Social History (Amsterdam) - IISG D31/862



DON'T BE A NUT CASE

17

(16)

Use the handles to push the mine carts! Italy, Workers Compensation Authority 1950-1974 Source: International Institute of Social History (Amsterdam) - IISC BG E23/750

(17)

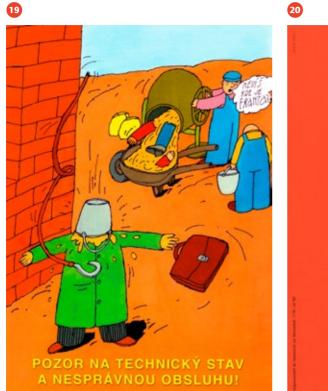
Don't be a nut case. Wear your helmet United Kingdom, RoSPA (the Royal Society for the Prevention of Accidents, London) 1950-1974 Source: International Institute of Social History (Amsterdam) - IISG BG E29/214

18

Oiling machinery can be dangerous. Take care! Netherlands, Institute for Safety 1966 Source: International Institute of Social History (Amsterdam) - IISG BG E1/924

26







(19)

Do you know what has happened to your colleague Francis? Follow safety advice and operate machinery with care Czech Republic [s.d.]

(20)

There is a danger beneath suspended loads Germany, Employer's Liability Insurance Association for Precision and Electrical Engineering 1967

Designer/Artist: Kröll, Bruno Source: International Institute of Social History (Amsterdam) - IISG D34/808

(21) Take care! Avoid

Take care! Avoid accidents Portugal, Ministry of Labour 1975-1999 Source: International Institute of Social History (Amsterdam) - IISC BC D56/385



This did not turn the page on exhortations to individual responsibility and personal precaution as the main means of avoiding accidents. Prevention of hand injuries, as well as musculoskeletal disorders like back pain and head protection by wearing hard hats were recurrent themes in posters of this period. The exhibition groups together different posters in each such risk category. Hand protection posters warned workers of the constant hazard posed by the use of faulty tools or machinery such as saw blades, frequently animalised as menacing beasts (posters 22). Back protection posters provided instructional guidance on how to lift loads by bending properly following ergonomic principles (posters 23). The hard hat became widely used as a safety icon. While some posters depicted the head as a fragile component of the body, which it was vital to protect, others portrayed it as a paradigm of personal and family 'refuge' (posters 24).



22

Hand protection Posters from Belgium, France, Poland, Portugal Source: International Institute of Social History (Amsterdam)

23

Back protection Posters from Belgium, Germany, Luxembourg, Italy Source: International Institute of Social History (Amsterdam)

24

Head protection Posters from Austria, Germany, Italy, The Netherlands Source: International Institute of Social History (Amsterdam)







Safety in the workplace Denmark, Røde Mor 1974 Designer/Artist: Kruse, Thomas Source: International Institute of Social History (Amsterdam) - IISC BG E32/208

Section 5 From 'instruction' to 'protest': trade union posters since the late 1960s

The reaction of European trade unions to deteriorating working conditions in the 1960s led to the appearance of posters that broke with the tradition inherited from the interwar period. The posters produced by the trade unions were used as a new form of protest and denunciation against occupational risks and the worsening of working conditions. They reflected alternative views to the dominant concept of individual responsibility and conveyed the old and new problems faced by European workers.

An early exponent of this change was the Danish poster published in 1974 by the *Røde Mor* (Red Mother) group (poster 25). Founded in 1969, this political and artistic group, popular among young people of the far left, took inspiration from the long tradition of European proletarian art, particularly the work of Käthe Kollwitz (1867-1945). Its posters generally consisted of several panels provided by different artists, which revolved around a single theme or political situation. Accidents and workplace morbidity were perceived as products of an unjust and oppressive social system, highlighting the value of worker solidarity in tackling the problem.

Using a similar aesthetic, the poster of the Danish Metal Workers Trade Union also offers an ambivalent view of the use of personal protective equipment. Albeit without questioning its use – in fact the lower text invites workers to consult with their safety representatives – the drawing of the worker's face with protective eyewear and a mask conveys an image of anxiety that represents the limitations of this equipment when carrying out productive activity. (Poster 26)

The Italian worker model and the new approach to occupational health

Undoubtedly the most significant departure from the dominant view of occupational risks and their prevention in Europe was the one prompted by the 'Italian worker model' or 'trade union model'. Having emerged in the mid-1960s in the industrialised areas of Northern Italy as the product of interaction between workers and scientists on health hazards in the factory, this alternative model crystallised at the end of the decade within the Italian trade union CGIL (Laurell 1984). The central core of this model was non-delegation, i.e. not ceding control over working conditions and the protection of worker health to experts, and rejecting the monetarisation of risk, i.e. its acceptability through danger bonuses or injury compensation. It involved participative research by workers, who called for autonomy of knowledge as the basis for preventive action: 'know how to act, act to improve'. It was therefore a model of analysis and intervention against workplace hazards (Bagnara et al. 1981).

A key element in the genesis of knowledge was the incorporation of workers' experience and the need to establish a dialectic relationship between lay and expert knowledge through 'consensual validation' (Reich and Goldman 1984). As a result, the acceptability or non-acceptability of certain risk situations and the preventive measures to be adopted had to be agreed between workers and experts. The methodological instrument for analysing working conditions was the risk map, which was quickly adopted by expert culture as its own methodology (García Gómez 1994). The graphic representation of occupational hazards of a defined area identified and agreed by workers themselves and displayed in workplaces encouraged worker participation (Bagnara *et al.* 1981).

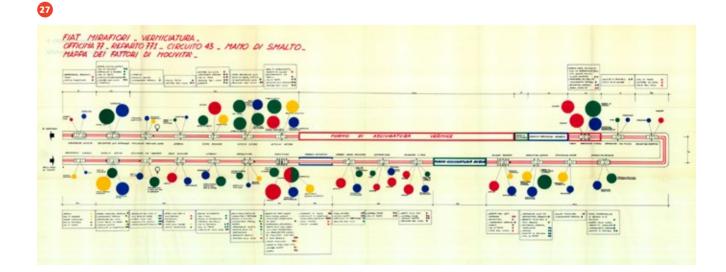
This selection of posters includes a risk map, i.e. the visual representation of a labour process and its risks and potential harm to health, produced by the paint workshop of the Fiat Mirafiori plant in Turin (poster 27). The risks posed by the working environment are categorised into four groups identified by colours. The first group, marked in red, consists of physical factors present in the environment within and outside the plant: temperature, lighting, noise, moisture and ventilation. The second group, marked in green, covers the harmful factors specific to the plant: dust, gases, vapours and fumes. The third group (in yellow) represents the fatigue deriving from physical effort, and the fourth group (in blue) refers to other factors responsible for tiredness and mental fatigue, such



26

How much should we put up with? Ask your safety REPS Denmark, Danish Metalworkers' Union 1950-1974 Source: International Institute of Social History (Amsterdam) - CSD BG D70/982 27

Italy, FIAT production plant, Turin Source: Arrangement devised by the paint-shop workers



as work schedules, monotony and repetitiveness, uncomfortable positions and, finally, anxiety and responsibility. This grouping and evaluation of risk factors, taking account of the workers' experience of the plant, enabled the generation of a common language shared by workers and experts (Laurell 1984).

The worker model was used in most occupational health studies and campaigns carried out in Italy in the 1970s and was adopted, with variations, by trade unions from other European countries. It therefore formed a stimulus and inspiration for trade union participation in the improvement of worker health (Cárcoba Alonso 2007). The slogan that popularised the worker model ('our health is not for sale') continued to be used in Europe throughout the 1980s, as shown by the poster in the selection published in 1981 by the European Trade Union Confederation. (Poster 28)

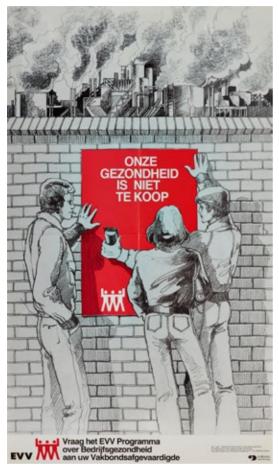
Criticisms of Fordism and automation

The automobile industry, one of the key sectors in European industrial development, saw major changes in the nature of the work due to the increasing introduction of automation. This automation meant that skilled workers were reassigned to tool making and maintenance work and a growing number of low-skilled workers were used for repetitive tasks on assembly lines, with an intensification of work patterns. In the case of the French automobile industry, as in other European countries, this low-skilled workforce mainly came from the rural environment or were immigrants (Fridenson 1986).

Although the trade union position was ambiguous in the early stages of mechanisation, from 1947 onwards, trade unions included criticism of the more intense working schedules among their demands. During the 1950s and early 1960s, protests in the French automobile industry were mitigated by increases in real wages and job security, although there were some forms of worker resistance to the time exigencies of the assembly line (Fridenson 1986). From 1965, an acceleration in the contracting of low-skilled workers led most of this sector to participate in the protests and general strikes in France during May and June 1968, with demands going beyond higher wages to calls for better working conditions and attacks on the 'hellish' schedules imposed on assembly lines (Fridenson 1986). The poster included in the selection is one of many that contained this slogan during the 1968 protests. Most of these posters were produced by the Atelier populaire de l'École des Beaux Arts in Paris in May and June 1968, in a scenario marked by the commitment of students and artists to the worker movement. (Poster 29)

Automation continued to be an unstoppable process in European industry, supported by technological development and legitimised by the search for economic efficiency and productivity in the framework of growing international competition. Trade union complaints concerned both the power of control and discipline that the use of automated processes granted to the company's management and the threat to the skill level of workers, reducing them to the mere condition





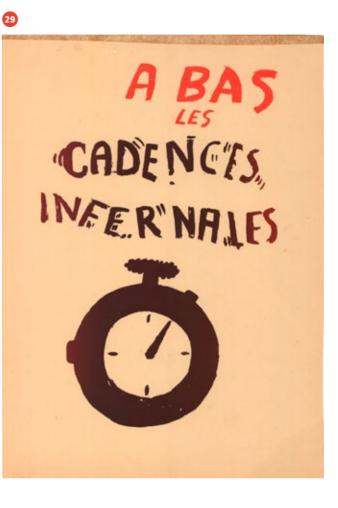


Our health is not for sale European Trade Union Confederation (ETUC) 1981 Source: ETUC

29

Down with hellish production schedules France, Atelier Populaire, Paris 1968

Source: International Institute of Social History (Amsterdam) - IISG BG D13/224



of tools or robots (Noble 2001). A series of Dutch posters included in our selection tackles this issue. (Poster 30)

The 1973 crisis and job-sharing

Lowering of the retirement age and reduction of the working day were recurrent worker demands across Europe in the 1960s, aimed at improving living conditions and distributing the fruits of economic growth. After May 1968, the issue of worker pensions and retirement came to the forefront of the trade union struggle in France. As well as being defended independently by the main French trade unions such as the Confédération générale du travail (CGT) and the Confédération francaise démocratique du travail (CFDT), this became one of the main joint demands of trade unions from 1970 onwards. The aims of the ambitious campaign conducted by both trade unions between 1971 and 1972 included lowering the retirement age from 65 to 60 years, raising pension levels and changing working conditions that might cause workers to be worn out prematurely. The marches and demonstrations organised for this purpose popularised slogans that conveyed the aspiration of workers and trade unions for a fairer social distribution of the benefits of the economic growth experienced in France in the previous decade (Guillemard 2000)².

Between 1964 and 1969, trade union efforts had achieved limited success with a reduction of only 48 minutes in the duration of the working week, from an average of 45.9 to 45.1 hours (Guillemard 2000). However, the economic growth in the 1960s allowed some improvements to be achieved, such as the rapid extension to over 5 000 000 automobile workers of a fourth week of paid holiday (Bodiguel 1969). The French trade unions quickly realised the difficulty of achieving significant success in the amelioration of working conditions and therefore concentrated their efforts on securing a lower retirement age and reducing working hours as a means of limiting the impact on workers of exhausting and alienating conditions of employment (Guillemard 2000).

The 1973 oil crisis and the subsequent widespread rise in unemployment rates across Europe substantially altered the panorama. In France, the unemployment rate rose from less than 3% in 1974 to 10.5% in 1987. This increase in unemployment was largely at the expense of the long-term unemployed, who represented 15% of all French unemployed workers in 1975 but 45% of them a decade later (Ughetto and Bouget 2001). In this context, the reduction of the working day and the lowering of worker retirement age to 60 years were regarded not only as measures to improve working conditions and social progress but also as instruments to generate jobs and worker solidarity. It was hoped that these measures would alleviate the vulnerability and potential social exclusion of older unemployed workers while making room for the growing number of young jobseekers resulting from the post-war baby boom (Guillemard 2000)³.

^{2.} One of the slogans chanted by demonstrators during the march held in Paris on 27 May 1971, which was attended by over 30 000 workers and pensioners, demanding a lower retirement age, was 'retraite dans un fauteuil, pas dans un cercueil!' ('retirement in an armchair, not in a coffin').

^{3.} Another of the workers' slogans, in this case used by the CGT in 1975, seems to summarise this change in the principles of trade union action: 'il vaut *mieux* payer des *retraités* que des *chômeurs*' ('better retired than unemployed').





Job-sharing was included in the election manifesto of the French Socialist Party and inspired the reduction in the working week to 39 hours, which was passed in 1982 (Boisard 2004). The retirement age in France was set at 60 years in 1983, although mechanisms had been introduced since the 1970s to facilitate the early retirement of unemployed workers over 60 years of age (Ben Salem *et al.* 2010).

The CFDT, a trade union with Christian roots that based its trade union action during the first half of the 1970s on worker self-management (Mouriaux 1992), was one of the trade unions that made a more decisive commitment to reducing the working day, lowering the retirement age and improving conditions on assembly lines. These goals are shown in the poster published by the CFDT in 1975, in which the measures demanded in the text are justified by the need to tackle unemployment: reduction in production schedules on assembly lines, reduction of the working week to 40 hours (at a time when the average working week in France was 42 hours) (Lion 1984) and lowering of the retirement age to 60 years instead of 65 years. (Poster 31)

Occupational diseases and industrial carcinogenesis

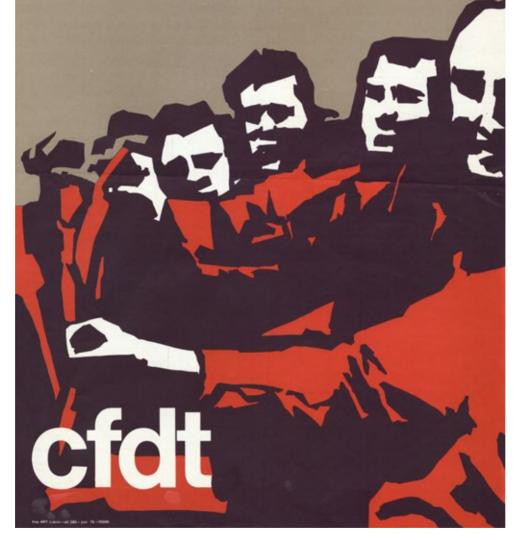
Worries about occupational diseases re-emerged in the 1980s. Asbestos deserved the highest concern among European workers. Asbestos use expanded in Europe in the 1950s and 1960s, linked to post-war reconstruction. Health warnings issued in the United States of America in the 1970s led to a fall in its use in Europe, except in the Soviet Union (Virta 2006).

Asbestos dust had been recognized as responsible for causing pneumoconiosis in the 1930s, while scientific consensus on its carcinogenic nature emerged in the late 1960s and 1970s, prompting a new approach to the 'magic mineral'. After the Second World War, and particularly in the 1960s, concerns about industrial carcinogenesis rose to a new level. The growing visibility of environmental damage caused by industrial activity contributed to a focus on the effects of carcinogens beyond the factory gates. Together with the environmental consequences of the mass use of pesticides and acid rain, industrial pollution started to be regarded as a major risk factor for human health. Media coverage of disasters (e.g., mercury contamination in Minamata Bay) forced the issue of the health consequences of industrial pollution into the consciousness of general public and the international agencies, like the World Health Organization (WHO) and the United Nations (Borowy 2013). The first serious accident in the European chemical industry also occurred at this time. In July 1976, an accident at the ICMESA chemical plant near the Italian city of Seveso released a toxic cloud that affected the general population by exposing them to the highest levels of dioxins ever recorded (Centemeri 2014). In 1982, the European Union adopted the Seveso Directive (82/501/EEC) on the hazard of major accidents in certain industrial activities.

Concern about degenerative pathologies in industrialised countries and about the effects of industrial pollution paved the way for international consensus on the carcinogenic capacity of asbestos. Key points in the construction of this consensus were two multidisciplinary meetings held

POUR L'EMPLOI Ralentir les cadences 40 heures par semaine Retraite à 60 ans

31



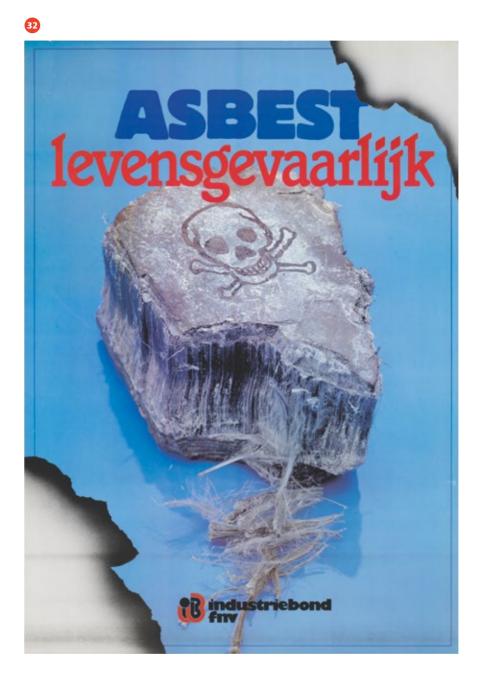
31

For the sake of jobs Slow down production schedules 40-hour week Retirement at 60 France, French Democratic Confederation of Labour 1975 Source: International Institute of Social History (Amsterdam) – IISG BG D16/339 in 1972 and 1976 to assess the carcinogenic effects of asbestos. These meetings were organised by the International Agency for Research on Cancer (IARC), which was created in 1965 as a specialised WHO agency based in Lyon. At the first of these meetings (October 1972), the influence of industry-funded scientific research became clear. Its strategy was to create scientific uncertainty about the carcinogenic potential of chrysotile (or white asbestos), which accounted for over 85% of global asbestos use (Tweedale and McCulloch 2004). On the other hand, crocidolite and amosite (or blue and brown asbestos respectively) were held entirely responsible for production of the cancers described among workers and environmental sufferers. The conclusions of this first meeting were fairly cautious. From an epidemiological viewpoint, the most important contribution was the finding of a greater risk of developing a bronchial carcinoma among smokers exposed to asbestos at work. However, at the meeting held in December 1976, the IARC adopted a categorical position that all types of asbestos fibre could cause mesothelioma and lung cancer, rejecting the possibility of defining safe levels of exposure (IARC 1977). The IARC statement was decisive in terms of the gradual inclusion of asbestosrelated cancers as eligible for compensation in the various national legislations, the adoption of stricter safety standards and the design of awareness-raising campaigns by European trade unions, which made industrial cancer the central point of their struggle against the invisibility of occupational diseases.

The poster included in the selection was published in the Netherlands in 1981 by the Industrial Workers Trade Union (Industriebond FNV). Use of asbestos in the Netherlands increased from the 1930s due to its application as an insulator in shipbuilding. After the Second World War, imports grew to around 20 000 tonnes per year in the 1960s, peaking at 50 000 tonnes in 1978, with the imported asbestos mainly being used in the asbestos cement industry (Virta 2006). Asbestosis was recognised as a disease eligible for compensation in 1949, as was mesothelioma in 1968. In 1978, following the IARC statement, the Netherlands introduced stricter industrial regulations, lowering the permitted maximum workplace levels and prohibiting crocidolite and sprayed asbestos. After bringing its regulations into line with the European legislation in 1988, the Netherlands banned the processing and import of asbestos in 1993 (Swuste et al. 2004). However, deaths from pleural mesothelioma grew steadily from 1969 to 1998, and 5 526 deaths from this disease were recorded during this period (Segura *et al.* 2003).

The poster included in the selection depicts a piece of chrysotile with a skull printed on it and with fibres advancing towards the observer. Given the broad coverage of the trade union that published the poster (van Voorden 1992), this seems to be targeted at workers handling the raw mineral. Although its carcinogenic nature is not mentioned, it is presented as a mortal risk. (Poster 32)

Other posters included in the selection reflect the difficulties of conveying to the public risks associated with a long period of latency, e.g. asbestosrelated cancers, or those whose prevention requires the adoption of structural preventive measures. This is the case with the Polish poster published by the CIOP (*Centralny Instytut Ochrony Pracy* or Central Institute for Labour Protection), which calls for effective dust control



(32)

Asbestos = danger Netherlands, Netherlands Trade Union Confederation 1981 Source: International Institute of Social History (Amsterdam) - IISG BG D3/809 measures, although the image refers to individual action in terms of both the demand for prevention and its implementation. Chemical risks are represented in a poster from the same source. The poster plays on the scientific symbol for sulphur dioxide (SO2) by converting it into a call for help (SOS), given the danger to health posed by chemical substances handled in the work environment and released into the atmosphere through industrial processes or the consumption of fossil fuels. (Posters 33, 34)

Risks linked to postural problems and display screen work are also covered in our selection. (Poster 35)

Psychosocial risks

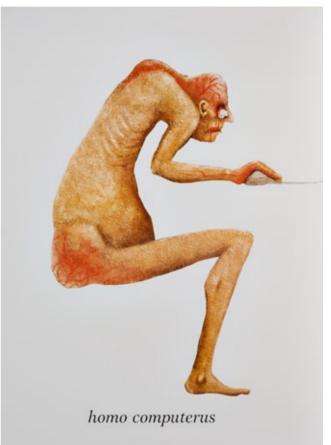
Certain changes in the work environment in recent decades, such as longer working days and increased job insecurity, have contributed to the emergence of psychosocial risks. These risks are associated with the way in which work is planned, organised and managed and with its socioeconomic context. Their effects have contributed to a significant deterioration in the physical and mental health of certain groups of workers, often connected with a higher level of work-related stress. This type of stress is a central concept in modern life and a challenge for global public health. In the USA and Europe, work-related stress is one of the main causes of incapacity for work (Sauter et al. 1998). In 1992, the WHO encouraged national agencies and non-governmental organisations to pay greater attention to problems associated with stress in vulnerable groups (the unemployed, migrants, refugees, etc.). The WHO proposed that measures be adopted to encourage community initiatives aimed at preventing and appropriately managing stress (Jackson 2013). In 1999, according to data from the European Commission, over half of the 147 million workers in the European Union of 15 Member States (EU-15) stated that they were working under high pressure and with tight deadlines. Over one-third had no say over the organisation of their work, and over one-quarter could not make any decisions about their work schedule. Some 45% stated that their work was monotonous, whilst 44% had no rotation options and 50% indicated that they were carrying out short repetitive tasks. This combination of workrelated 'stressors' was seemingly responsible for the high morbidity cited by European workers: 13% complained of headaches, 17% muscle pain, 20% fatigue, 28% stress and 30% backache, among many other complaints, including life-threatening diseases (European Commission 2000). Between 2000 and 2005, prior to the start of the current crisis, there appeared to be a slight fall in the prevalence of stress in the EU-15, although there was a marginal increase in candidate countries. It is not therefore surprising that the European Agency for Safety and Health at Work (EU-OSHA) regards work-related stress as the second most common threat posed by the working environment, second only to musculoskeletal problems. According to this Agency, 22% of European workers experienced work-related stress in 2005, with the annual economic cost of this condition being estimated at 20 000 million € in 2002 in the EU-15 (European Agency 2009). In 2000, the UK Health and Safety Executive (HSE) published a study that recorded a 30% increase in work-related stress levels between 1990 and 1995, with approximately one in five workers perceiving themselves to be either 'extremely' or 'very' stressed. The report also concluded that



34



35



33

Demand effective controls against dust at the workplace! Poland, Central Institute for Labour Protection 2004-2011 Designer/Artist: Kubicha, Witold Source: CIOP



SOs ... Dangerous chemical substances Poland, Central Institute for Labour Protection 2004-2011 Designer/Artist: Skorwider, Eugeniusz Source: CIOP



Homo computerus Poland, Central Institute for Labour Protection 2004-2011 Designer/Artist: Skakun, Jerzy Source: CIOP work-related stress, caused in particular by long working hours, exposure to noise, frequent interruptions or inadequate support, was associated with high blood pressure, depression, bronchitis and breast cancer (Jackson 2013). The HSE recently estimated the annual cost of work-related stress in the UK to be over £ 4 000 million during the 2007-2008 period, with the number of working days lost being put at 13.5 million (HSE 2009).

Since the end of the 20th century, in response to this growing threat, both state bodies and independent organisations have implemented initiatives to publicise and attempt to reduce the risks of work-related stress and its impact on the health of the working population. In the case of Poland, the body responsible for collecting and processing data on the impact of work-related stress is the CIOP, which published the poster included in the selection. The latest EU-OSHA report pointed to an 8% increase in work-related stress levels in Poland between 2001 and 2005, largely associated with high levels of perceived job insecurity. The occupations recording the greatest stress levels were teachers (34%), medical staff (30.6%), civil servants (30.2%) and bank employees (29.6%) (European Agency 2009). Any male workers in these occupations could feel that they are represented in the magnificent poster included in the selection. (Poster 36)

The second poster on this issue was published by the Occupational Safety Research Institute (VÚBP) in the Czech Republic. This research institute was founded by the Ministry of Labour, from which it receives its funding. In addition to its research and training functions in the area of health and safety at work, the VÚBP conducts various programmes to improve the quality of life at work, including tackling psychosocial risks. As with the CIOP in Poland, the VÚBP is the institution that determines the impact of psychosocial risks in the Czech Republic in collaboration with the EU-OSHA. However, contrary to the Polish situation, the latest European report recorded an 8% fall in work-related stress levels between 2001 and 2005. Nevertheless, in 2005, the Czech Republic saw one of the highest levels of perceived job insecurity (32%) (European Agency 2009). The poster included in the selection alludes to one of the ways in which workgenerated psychosocial problems become manifest, caused by too much work being required in too little time or by the lack of independence and support in carrying it out. (Poster 37)

Access to consumption and representation of women

In our consumer societies, work has enabled access to goods and forms of leisure traditionally reserved for the social elites. This argument has been used in prevention posters, updating the traditional approach to the consequences of carelessness or failure to use protective equipment by referring to the deprivation of leisure for the workers and their families. (Posters 38, 39)

The representation of women in these posters is no more than an update on the sexist manner of their treatment in prevention posters since the interwar period. In the family-related posters from the second half of the 20th century included in the selection, we can see that women are still mainly represented as wives. In the first of these, the wife is represented as the care-provider and being responsible for ensuring her husband's wellbeing, which now

37





39



(36)

Stress at work Poland, Central Institute for Labour Protection 2004-2011 Designer/Artist: Napierata, Mariusz Source: CIOP

37

'I've come home from work with a head like broken glass' Czech Republic, Occupational Safety Research Institute 2002 Source: VÚBP

38

'No, we will not be able to go away on holiday this year. My husband has had an accident' Source: International Institute of Social History (Amsterdam)

39

Gerd is not here. He left off his protective glasses = 3 weeks in the hospital instead of 3 weeks in Tenerife Germany, Employer's Liability Insurance Association for Precision and Electrical Engineering 1999 Source: International Institute of Social History (Amsterdam) - IISG D34/825



47

includes the use of protective equipment. In other instances, such as in the second poster, the use of a helmet and protective eyewear can prevent accidents that threaten the couple's way of life. The last two posters reinforce the representation of the man as the income-provider who ensures the family's wellbeing and subsistence. (Posters 40)

With the exception of some of these posters, in particular those from Poland, European post-war poster production did not take advantage of the major changes in design and iconographic language. Another exception is the magnificent selection of posters published by the Czech Revolutionary Trade Union Movement (ROH) between 1979 and 1980. The utilisation of a more conceptual iconographic language does not, however, alter the traditional messages aimed at workers and does not abandon the concept of the prevention poster as an instrument of instruction. (Posters 41-45)







40

Worker and family Posters from Austria, Germany, The Netherlands Source: International Institute of Social History (Amsterdam)

(41)

Electricity should serve - not be a killer! Czechoslovakia, Revolutionary Trade Union Movement 1979 Designer/Artist: Jiricka, Vojtech Source: ROH

42

Protect your eyes, you only have one pair Czechoslovakia, Revolutionary Trade Union Movement 1980 Designer/Artist: Dyrynk, Martin Source: ROH





45



43

Protect your ears to also hear the silence Czechoslovakia, Revolutionary Trade Union Movement 1980 Designer/Artist: Dyrynk, Martin Source: ROH

44

A clean and wellordered workplace - a precondition for safe work Czechoslovakia, Revolutionary Trade Union Movement 1980 Designer/Artist: Kovár, Arnost Source: ROH

45

Agriculture Poland, Central Institute for Labour Protection 2004-2011 Designer/Artist: Golonka, Jerzy Source: CIOP

In conclusion

The selection of prevention posters in this exhibition allows me to reflect on two issues that can add to our view of the past and present of occupational risk prevention campaigns.

Firstly, this exhibition provides an excellent record of the different prevention cultures that inspired the production of posters and prevention campaigns throughout the 20th century. As I have shown through the historical journey offered by this selection of posters, the 'language of posters' during most of this period helped to consolidate a concept of occupational accident prevention based on expert culture and employer interests. This concept revolved around the central importance of workers as the sole targets of the prevention messages and as being predominantly responsible for causing and avoiding injury. However, this selection of posters eloquently illustrates the creation by trade unions of a new prevention culture. This not only provided alternative interpretations of work hazards and prevention, which were particularly radical in the case of the Italian worker model, but also made the poster into a form of demand that went beyond the instruction and persuasion to which expert culture had confined it. Many of the posters produced by the European trade unions from the 1960s onwards provided less determinist representations of prevention activity, moving the focus of attention away from the conduct of workers and including the new risks faced by the European working population as well as health problems previously ignored by posters, such as occupational diseases. The posters produced by trade unions also included references to the social determinants of risk, another of the elements undervalued by expert culture.

The evidence of multiple ways of tackling prevention, as shown by these posters, is undoubtedly the main asset of this exhibition. It would be useful to develop this line of work by investigating in greater depth the different languages employed and the various uses made of the prevention poster by the different prevention cultures coexisting during the 20th century.

Secondly, this sample offers suggestions for rethinking current prevention work. The context in which prevention posters are used and their effects on the intended targets require a more complex analysis that is beyond the scope of this introduction. However, I would hypothesise that the capacity of prevention posters to influence workers has been inversely proportional to the distance between those workers and the expert culture values mainly used to create the posters. In other words, the posters inspired by views of risk and prevention closest to the workers' culture have had a greater impact than those following the restrictive and distant principles of expert culture.

I will attempt to support my hypothesis by using the audiovisual products that currently form the mainstay of prevention campaigns that were previously poster-based. As an example, I can cite the audiovisual production dedicated to the prevention and raising of awareness of work-related cancer. A quick look at the web sites of various European governmental agencies with responsibilities in this area suggests that the dominant genre in prevention and awareness-raising campaigns has been the product offering educational or instructional guidance on the risks posed by handling toxic substances. In these campaigns, the main target is workers themselves, as with prevention posters, and the human factor remains predominant. In other words, the decisions made by the affected individual are responsible for the emergence and development of the disease.

The existence of alternative campaigns distinct from the expert culture model reveals the potential for developing a more comprehensive and integrated understanding of prevention. An example is the French campaign on the prevention of occupational cancers produced in 2006 by the Institut national de recherche et sécurité pour la prévention des accidents du travail et des maladies professionelles. This awareness-raising campaign consisted of four commercials produced by the French film maker Albin Voulfow (Voulfow 2006). The four commercials, each lasting around two minutes, were designed to be broadcast in a variety of contexts as diverse as their potential audiences and targets of their message, breaking with the traditional focus on the exposed working population. Another factor connected with the variety of targets has been the practice of filming in a range of scenarios, generally away from workplaces. Use of the ellipsis contributes to the collective dimension of risk prevention, transcending the traditional allusion to the human factor. In this way, social determinants become apparent and the importance of other agents in prevention work is confirmed. In other words, depicting a casual encounter between two medical professionals looking at X-rays, a fleeting conversation between workers in the changing rooms of a polishing company, a farewell party held for a retiring worker, or a meeting between a legal adviser and an employer sued by workers for damage to their health not only extends the range of targets of the message but also involves others responsible for recognising. determining and managing the risk. Finally, the reference to carcinogenic risk does not fit with the traditional educational approach of dissemination products but is rather more related to the decision-making processes that affect exposure to and recognition of risk. In this way, decision-making is prioritized above the reference to risk products.

Prevention campaigns appear to be favoured by moving beyond the worker as the sole target of the message and by conveying a more comprehensive understanding of the generation and avoidance of risk, transcending the expert view and incorporating the multiple agents and factors involved. This is the route taken by the prevention posters produced by trade unions from the 1960s of which this exhibition provides an excellent illustration.

Bibliographical references

- Bagnara S., Biocca M. and Mazzonis D.G. (1981) Trends in occupational health and safety policy in Italy, International Journal of Health Services, 11 (3), 431-450.
- Bartrip P.W.J. and Burman S. (1983) The wounded soldiers of industry: industrial compensation policy, 1833–1897, Oxford, Clarendon Press.
- Ben Salem M., Blanchet D., Bozio A. and Roger M. (2010) Labor force participation by the elderly and employment of the young: the case of France, in Gruber J. and Wise D.A. (eds.) Social security programs and retirement around the world: the relationship to youth employment, Chicago, University of Chicago Press, 119-146.
- Bodiguel J.-L. (1969) La réduction du temps de travail : enjeu de la lutte sociale, Paris, Editions ouvrières.
- Boisard P. (2004) Working time policy in France, Document de travail 34, Noisy-le-Grand, Centre d'études de l'emploi.
- Borowy I. (2013) Global health and development: conceptualizing health between economic growth and environmental sustainability, Journal of the History of Medicine and Allied Sciences, 68 (3), 451-485.
- Cárcoba Alonso A. (ed.) (2007) La salud no se vende ni se delega, se defiende: el modelo obrero, Madrid, Fundación Sindical de Estudios.
- Centemeri L. (2014) What kind of knowledge is needed about toxicant-related health issues? Some lessons drawn from the seveso dioxin case, in Boudia S. and Jas N. (eds.) Powerless science? Science and politics in a toxic world, Berghahn Books, New York, 134-151.
- Comín Comín F. (2010) Los seguros sociales y el Estado del Bienestar en el siglo XX, in Pons Pons J. and Silvestre Rodríguez J. (eds.) Los orígenes del Estado del Bienestar en España, 1900-1945: los seguros de accidentes, vejez, desempleo y enfermedad, Zaragoza, Prensas Universitarias de Zaragoza, 17-50.
- Douglas M. (1986) Risk acceptability according to the social sciences, New York, Russell Sage Foundation.
- European Agency for Safety and Health at Work (2009) OSH in figures: stress at work facts and figures, Luxembourg, Office for Official Publications of the European Communities.
- European Commission (2000) Guidance on work-related stress: spice of life or kiss of death, Luxembourg, Office for Official Publications of the European Communities.
- Fridenson P. (1986) Automobile workers in France and their work, 1914-83, in Kaplan S.L. and Koepp C.J. (eds.) Work in France: representations, meaning, organization, and practice, Ithaca, Cornell University Press, 514-547.
- García Gómez M. (1994) Los mapas de riesgos: concepto y metodología para su elaboración, Revista de Sanidad e Higiene Pública, 68 (4), 443-453.

Guillemard A.M. (2000) Aging and the welfare-state crisis, London, Associated University Presses. HSE (2009) How to tackle work-related stress, London, Health and Safety Executive.

Hilgartner S. (1985) The political language of risk: defining occupational health, in Nelkin D. (ed.) The language of risk: conflicting perspectives on occupational health, Beverly Hills, Sage, 25-65.

- IARC (1977) Asbestos, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, 14, Lyon, International Agency for Research on Cancer.
- ILO (1982) International Labour Conventions and Recommendations, 1919-1981, Geneva, International Labour Office.
- Jackson M. (2013) The age of stress: science and the search for stability, Oxford, Oxford University Press.
- Laurell A.C. (1984) Ciencia y experiencia obrera: la lucha por la salud en Italia, Cuadernos Políticos, 41, 63-83.
- Lion A. (1984) France: poverty and work, in Walker R., Lawson R. and Townsend P. (eds.) Responses to poverty: lessons from Europe, Cranbury, Associated University Presses, 96-118.
- Martínez Pérez J. (1994) La organización científica del trabajo y las estrategias médicas de seguridad laboral en España (1922-1936), Dynamis: Acta Hispanica ad Medicinae Scientiarumque Historiam Illustrandam, 14, 131-158.
- McIvor A. and Johnston R. (eds.) (2007) Miners' lung: a history of dust disease in British coal mining, Aldershot, Ashqate.
- Menéndez Navarro A. (2003) Conocimiento experto y la gestión y percepción de los riesgos laborales en las sociedades industriales: una reflexión desde la historia de la ciencia, in Cárcoba Á. (ed.) Democracia, desigualdad y salud, Palma de Mallorca, La Lucerna, 109-124.
- Menéndez Navarro A. (2012) Culpabilizar a las víctimas: los carteles de prevención de accidentes del trabajo en el periodo de entreguerras, in Castejón Bolea R., Perdiguero Gil E. and Piqueras Fernández J.L. (eds.) Las imágenes de la salud: cartelismo sanitario en España (1910-1950), Alicante, Instituto Alicantino de Cultura Juan Gil-Albert, 71-80.
- Mouriaux R. (1992) France, in Campbell J. (ed.) European labor unions, Westport, Greenwood Press, 119-148.
- Nelkin D. (ed.) (1985) The language of risk: conflicting perspectives on occupational health, Beverly Hills, Sage.
- Noble D.F. (2001) La locura de la automatización, Barcelona, Alikornio Ediciones.
- Pelta Resano R. (2008) Un grito en la pared: el cartelismo en prevención de riesgos laborales, La Mutua, 20, 59-80.
- Perdiguero Gil E. and Castejón Bolea R. (2012) El surgimiento del cartelismo y las peculiaridades del caso español, in Castejón Bolea R., Perdiguero Gil E. and Piqueras Fernández J.L. (eds.) Las imágenes de la salud: cartelismo sanitario en España (1910-1950), Alicante, Instituto Alicantino de Cultura Juan Gil-Albert, 9-22.

Rabinbach A. (1992) The human motor: energy, fatigue and the origins of modernity, Berkeley, University of California Press.

Reich M.R. and Goldman R.H. (1984) Italian occupational health: concepts, conflicts, implications, American Journal of Public Health, 74 (9), 1031-1041.

Rodríguez Ocaña E. and Menéndez Navarro A. (2006) Salud, trabajo y medicina en la España de la legislación social, 1900-1939, Archivos de Prevención de Riesgos Laborales, 9 (2), 81-88.

- Rosental P.-A. and Devinck J.-C. (2007) Statistique et mort industrielle : la fabrication du nombre de victimes de la silicose dans les houillères en France de 1946 à nos jours, Vingtième Siècle. Revue d'histoire, 95 (3), 75-91.
- Sauter S.L., Hurrell J.J., Murphy L.R. and Levi L. (1998) Psychosocial and organizational factors, in ILO (ed.) Encyclopaedia of occupational health and safety, 4th ed., Geneva, International Labor Organization, 34.
- Segura O., Burdorf A. and Looman C. (2003) Update of predictions of mortality from pleural mesothelioma in the Netherlands, Occupational and Environmental Medicine, 60 (1), 50-55.

- Silvestre J. (2008) Workplace accidents and early safety policies in Spain, 1900-1932, Social History of Medicine, 21 (1), 67-86.
- Sturdy S. (2003) The industrial body, in Cooter R. and Pickstone J. (eds.) Companion to medicine in the twentieth century, Routledge, London, 217-234.
- Swuste P., Burdorf A. and Ruers B. (2004) Asbestos, asbestos-related diseases, and compensation claims in the Netherlands, International Journal of Occupational and Environmental Health, 10 (2), 159-165.
- Tosstorff R. (2005) The international trade-union movement and the founding of the International Labour Organization, International Review of Social History, 50 (3), 399-433.
- Tweedale G. and McCulloch J. (2004) Chrysophiles versus chrysophobes: the white asbestos controversy, 1950s-2004, Isis, 2004, 95 (2), 239-259.
- Ughetto P. and Bouget D. (2001) France, the impossible new social compromise? http://pratclif.com/economy/COSTA13-FRANCErev15may2001.pdf
- Virta R.L. (2006) Worldwide asbestos supply and consumption trends from 1900 through 2003, Virginia, U.S. Geological Survey. http://pubs.usgs.gov/circ/2006/1298/c1298.pdf
- van Voorden W. (1992) The Netherlands, in Campbell J. (ed.) European labor unions, Westport, Greenwood Press, 305-322.
- Voulfow A. (2006) Quatre spots pour la prévention des cancers professionnels, Paris, Institut national de recherche et de sécurité.
- Weindling P. (1995) Social medicine at the League of Nations Health Organisation and the International Labour Office compared, in Weindling P. (ed.) International health organisations and movements, 1918-1939, Cambridge, Cambridge University Press, 134-153.

Archive searches and retrieval of illustrations: Jacqueline Rotty, ETUI Translation: Inter Alia UK Ltd Graphic design: Coast Belgium Printed in Belgium by Imprimeries Hayez D/2015/10.574/03

FSC logo

The cover design is based on posters numbers 9 - 21 - 40

If, in spite of our research, authors or photo copyright holders of illustrations published in this work have not been correctly identified, they are invited to contact the ETUI.



The ETUI is financially supported by the European Union. The European Union is not responsible for any use made of the information contained in this publication.

European Trade Union Institute

Bd du Roi Albert II, 5 1210 Brussels Belgium

+32 (0)2 224 04 70 etui@etui.org www.etui.org



Alfredo Menéndez-Navarro

The European Trade Union Institute publication stemming from the exhibition '*The art of preventive health and safety in Europe*' presents historical and vintage posters from various European countries showing how graphic design has been used to promote health and safety prevention in more than 20 different cultural environments.

The publication shows how workplace health and safety messages and slogans have evolved, from initially blaming individual workers for accidents and mistakes towards the fostering of a more proactive approach to prevention.

The work demonstrates also the historical importance of occupational health and safety for the European trade union movement. It thus presents the risks gradually identified by workers as stepping stones on the road to conceiving prevention, charting how the mobilisation of a collective intelligence served to challenge the traditional division of labour.

Viewed from an artistic angle, meanwhile, the publication offers a journey through the art of the 20th century and across key national artistic and graphic movements, with the incorporation of photography, photomontage, geometric abstraction and rigorous typographic treatment.

D/2015/10.574/03 ISBN 978-2-87452-333-5



