Humanisation of work in the Federal Republic of Germany

A labour-oriented approach

Ursula ENGELEN-KEFER 1

It is somewhat ironical that while the demand for "humanisation of work" is increasingly heard at national and international levels alike 2, there is no universally agreed definition of the term. In fact humanisation of work is not as new a concern as its topicality might suggest, and the improvement of conditions of work has of course long been a major focus of both national and international trade union activities and social policy. What is new, however, is that the diverse aspects of these conditions, which have hitherto been dealt with more or less piecemeal, are now seen as part of a larger whole embracing related matters such as the organisation of work (i.e. of the production process itself), hierarchical structures, relations with workmates, the social situation within the firm, the working environment, participation in decision-making at all levels, and opportunities for self-development and advancement.

If the definition of humanisation of work is vague, the available information about its various aspects is still more so. The purpose of this article is therefore to make a modest contribution to understanding of the problem. In the first section an attempt will be made to analyse in what way the traditional approach to conditions of work has proved unsatisfactory and an alternative approach will be suggested. In the second, the experience of the Federal Republic of Germany regarding conditions of work will be examined in the light of the foregoing. Finally, some possible approaches to a strategy for the humanisation of work will be explored.

¹ Chief of Division, Executive Board, German Confederation of Trade Unions (DGB).

² See in particular H. O. Vetter: "Humanisierung der Arbeitswelt als gewerkschaftliche Aufgabe", in Gewerkschaftliche Monatshefte (Cologne), Jan. 1973, pp. 1-11; ILO: Making work more human. Working conditions and environment, Report of the Director-General, International Labour Conference, 60th Session, Geneva, 1975; and J. Carpentier: "Organisational techniques and the humanisation of work", in International Labour Review, Aug. 1974, pp. 93-116.

Economic growth and the humanisation of work

That economic growth does not automatically lead to balanced economic and social development is widely recognised. On the contrary, the far-reaching resultant changes in employment structure and job requirements as well as in the working environment and conditions of work have placed increasing demands on the workers. Particularly hard hit are groups that are already at a disadvantage such as women, older workers, the low-skilled, the handicapped and foreign workers.

Neither education and training systems, nor labour market adjustment mechanisms, nor other social measures are well adapted to help workers face these changes or to mitigate their effects sufficiently. Management does not give adequate recognition to these problems and the potential contribution of modern technology to its solution has hardly been explored.¹

It has long been widely assumed that, in accordance with the classical economic theory of the labour market, all necessary adjustments will come about through the forces of supply and demand, the worker—regarded as a rational homo oeconomicus—being motivated only by his desire for higher wages. However, even if full information were available to him, which is far from being the case 2, the concept of wages as the sole determining factor in the worker's employment and occupational decisions must be questioned. Many studies clearly suggest that growing importance is being attached to such factors as job security, the scope for self-development, promotion possibilities, the opportunity to participate in reaching decisions, and pleasant human relations.³ Recently there have been several examples of workers being ready to fight for improved conditions of this sort.⁴ Further, it is known that women and older workers often prefer to quit the labour market rather than do physically or psychologically unsuitable work.⁵

Quite apart from the question of wages, the assumption of an occupationally and regionally mobile labour force would anyway have to be questioned. Even if workers were mobile in principle, numerous factors would work in the opposite direction, for example company pensions and other seniority-linked benefits, deficiencies in the education and training system, individual tastes, housing problems, and family and social ties.

¹ See H. Kern and M. Schumann: *Industriearbeit und Arbeiterbewusstsein*, Part I (Frankfurt-am-Main, Europäische Verlagsanstalt, 1970), p. 279.

² See D. Mertens: "'Berufsprognosen': Relativierung und Modifikationen", in *Mitteilungen des Instituts für Arbeitsmarkt- und Berufsforschung* (Erlangen), Feb. 1969, pp. 405-416.

³ See F. Weltz: Bestimmungsgrössen des Arbeitsmarktverhaltens von Arbeitnehmern (Munich, Institut für Sozialwissenschaftliche Forschung, 1970), and R. Johnston: "Pay and job satisfaction: a survey of some research findings", in International Labour Review, May 1975, pp. 441-449.

⁴ See "Die Unlust des Arbeiters am Fliessband", in Die Welt (Hamburg), 24 Jan. 1973.

⁵ F. Böhle and N. Altmann: *Industrielle Arbeit und soziale Sicherheit* (Frankfurt-am-Main, Athenäum Verlag, 1972), p. 48.

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Since traditional economic theory does not provide a conceptual basis for the humanisation of work, more socially oriented approaches must be considered.

In the view of Gerhard Weisser ¹ the heart of social policy is the maximisation and more equal distribution of welfare, by which he means not only income and other material benefits but also non-material values such as the quality of work itself, active participation in economic life, the right to choose and exercise one's occupation freely, social advancement, freedom of movement and communication.

The late Edward W. Bakke ² identified the following elements of a satisfactory "structure of living": attainment of a certain minimum living standard; control over one's own affairs; full utilisation of one's capacities and qualifications; participation in economic, social and political matters; occupational and social development.

Ota Sik ³ also draws a distinction between economic and non-economic interests. Among economic interests he names consumption and lucrative activities, while the others include education, health, culture and public affairs.

Other approaches departing from the traditional capital-oriented concept of work can also be found in attempts to develop systems of social indicators, such as those of the OECD ⁴ and the United Nations, that take the work situation into account. The main emphasis is on the development of quantitative measurements for qualitative aspects of life, including work. Among the elements considered are full employment (broken down by worker categories), ergonomic working conditions, the extent of the division of labour, opportunities for participating in economic and social decisions, promotion possibilities, relations with workmates, and hierarchical structures.

In the spirit of the foregoing studies we may now attempt to outline the essential features of an approach offering a valid alternative to that of traditional capital-oriented labour market theory. The basic objectives must be to achieve (1) greater and more equal opportunities for self-development in the work process itself, and (2) equal distribution of the "results of work".⁵

- (1) The work process may be considered under two main headings:
- (a) employment security, defined as assured productive employment appropriate to the abilities and interests of the workers;

¹ G. Weisser: Bemerkungen zur anthropologischen Grundlegung der für die Sozialpolitiklehre erforderlichen Lebenslagenanalysen (Cologne, 1956; unpublished manuscript).

² E. W. Bakke: Principles of adaptive human behavior (New Haven, 1946), pp. 6 ff.

³ O. Sik: Der dritte Weg (Hamburg, 1972), pp. 56 ff.

⁴ See for example OECD: List of social concerns common to most OECD countries (Paris, 1973); and N. Q. Herrick and R. P. Quinn: "The working conditions survey as a source of social indicators", in *Monthly Labor Review* (Washington), Apr. 1971, pp. 15-24.

⁵ See U. Engelen-Kefer: "Arbeitsorientierte Interessen als Grundlegung gewerkschaftlicher Strategien im Rahmen einer emanzipatorischen Gesellschaftspolitik", in WSI-Mitteilungen (Cologne), Apr. 1973, pp. 137-152.

- (b) quality of the work situation, which in turn covers (i) ergonomic conditions in respect of ambient temperature, noise, vibration, lighting, pace and hours of work, shift and night work, physical and psychological stress, occupational safety and health provisions, and the working environment generally; (ii) wage determination and wage structure; (iii) the degree of division of labour, work content and organisation, participation in decisions affecting the work situation, relations with workmates, hierarchical structures, promotion and internal information.
- (2) By the results of work we understand not only incomes and their distribution but all those material and non-material private and public goods and services whose provision depends on work and the wealth created by it (e.g. consumer goods, housing, leisure amenities, infrastructure, private and public services, environmental protection, information media and means of communication).

In this connection it has to be remembered that self-development at work can only be achieved if the workers are prepared for it by their education and leisure-time activities.

Moreover, in order to provide working conditions ensuring the humanisation of work as defined above, the special characteristics and needs of different categories of workers have to be taken into account, especially men and women, blue- and white-collar workers, different age groups, various levels of qualification, the physically or mentally handicapped, the underemployed and even the unemployed.

In the light of what has been said above let us now take a look at working conditions in the Federal Republic of Germany with particular reference to the "quality of work".

Working conditions in the Federal Republic of Germany

The neglect of the qualitative aspects of work in traditional theory is reflected in the paucity of information about them. For this reason, we can give only a brief outline of the more important deficiencies in the quality of work in the Federal Republic of Germany.

The capital-oriented approach adopted, with its emphasis on increasing output per man-hour through the division of labour, payment by results and "scientific management", has undoubtedly helped to raise production and national income. At the same time, however, social costs have risen because of health hazards and early retirement caused by greater stress, monotony, machine speeds and numbers of machines attended, reduction of personnel, the

¹ See A. Hassencamp: "Die Qualität der Arbeitsbedingungen: Probleme und Lösungsansätze", in *Gewerkschaftliche Monatshefte*, Jan. 1973, pp. 60-66.

² See Kern and Schumann, op. cit., pp. 141-175; and M. Schumann: "Arbeitsbedingungen in der BRD—Bestandsaufnahme, Analyse und Entwicklungstrends im Produktionsbereich", in *Das Mitbestimmungsgespräch* (Düsseldorf), 1974, Nos. 7/8, pp. 126-128.

increase of shift, night and assembly line work, excessive standardisation of products and tasks, and overspecialisation of jobs.

The rise in industrial productivity is confirmed by the calculations of the German Metalworkers' Union, which show that it improved from an average of 207 man-hours in 1950 to 54 man-hours in 1973 for the manufacture of goods to a net production value of DM 1,000. Between 1965 and 1972 the number of night workers increased from about 2.4 to 3 million, of whom almost two-thirds were in factories working a shift system. Indeed, in the latter year 17.5 per cent of all employees (22.1 per cent of men) were working at night or during weekends and public holidays. This represented a substantial increase over 1965, when the figure for all employees was 13.9 per cent. This trend must be seen as an important obstacle to the humanisation of work because of its negative effects on family and social life as well as on the possibility of occupational advancement through further education and training.

White-collar jobs are affected too. Rationalisation has also made it possible to raise productivity in the administration and service sectors. This has involved standardisation and fragmentation of tasks, thereby increasing the number of monotonous routine low-skill jobs and entailing skill downgrading and loss of wages for some groups of workers. Here again there has been an increase of shift work, especially in the computer field.²

An empirical study on job satisfaction in the Federal Republic carried out between the autumn of 1972 and the spring of 1973 ^a shows that the greatest single source of discontent, irrespective of sex, education, size of company, earnings and whether the work was clerical or manual, was the pace of work imposed and the stress this caused.

There is also clear evidence of substantial health hazards to workers due to working conditions. As the analyses by the social security institutions show, more than half of all manual workers retiring in 1972 were incapacitated for work before reaching the legal retirement age (at that time 65 for men and 60 for women). Of all cases of early retirement on health grounds, 79 per cent were caused by diseases of the heart, circulatory system, liver and spleen. Since the introduction of the flexible retirement age in 1973 (with the option to retire at 63, or at 62 for the severely handicapped), the number of early retirements on health grounds has fallen.

A report by the Baden-Württemberg Ministry of Labour, Health and Social Security points out that the average worker's health declines with increasing company size, more arduous physical work demands, unsatisfactory hours of work and poor social relations within the enterprise. Similar conse-

¹ See the summary in *Das Mitbestimmungsgespräch*, 1974, Nos. 7/8, pp. 131-132.

² See W. Pöhler: Entwicklung der Arbeitsbedingungen im Angestellten- und Verwaltungsbereich, paper presented at the DGB Conference on Humanisation of Work, Munich, 16-17 May 1974.

³ Institut für Angewandte Sozialwissenschaften: Qualität des Arbeitslebens, Untersuchung im Auftrag des Ministers für Arbeit und Sozialordnung (Bonn, 1974).

quences of strenuous working conditions have been reported in an analysis of the health of metalworkers in Munich.¹

In this connection the continuing shortcomings in work safety should also be mentioned: in 1973 there were over 2.2 million notified industrial accidents in the Federal Republic, more than 4,000 of them fatal and 70,000 serious enough to be pensionable.² Accident risks are apparently more than twice as high for workers performing heavy physical labour as for those doing light work.³

As regards the broader aspects of working conditions mentioned above—i.e. opportunities for self-development, the social climate within the enterprise, hierarchical structures, promotion possibilities and the like—very little progress appears to have been made.

With respect to training in companies it seems from the available information that—apart from apprenticeship training—retraining and development programmes are usually restricted to the more highly qualified personnel.⁴ Since adult training programmes still often rely on teaching methods designed for young people ⁵, it is almost impossible for older workers (who are frequently the lowest-skilled) to benefit from them. There is also evidence that women are at a marked disadvantage with regard to retraining and promotion. In this connection it has been pointed out that it is extremely difficult for workers in monotonous, restrictive jobs to develop the ability and initiative needed to participate in further education and training. Furthermore, the quality of company training varies widely, thus increasing the inequality of educational opportunities.

Reference should also be made to the active discrimination by certain managements against "disadvantaged" categories of worker—especially older persons 6 and women. Examples of this kind of discrimination include the refusal, without good reason, to recruit workers over a certain age, and placing and training policies. An analysis by the Federal Office of Labour showed that access to almost half of all jobs was restricted by age limits that often could not be explained by the type of work involved, especially in the case of white-collar jobs. Women and older workers are also heavily under-represented on retraining and upgrading programmes.

¹ See the summary in *Das Mitbestimmungsgespräch*, 1974, Nos. 7/8, pp. 131-132.

² See R. Konstanty and E. Remmel: "Arbeitsunfälle und arbeitsbedingte Krankheiten", in R. Kasiske (ed.): *Gesundheit am Arbeitsplatz*, Berichte und Analysen zu Belastungen und Gefahren im Betrieb (Reinbek bei Hamburg, Rowohlt Taschenbuch Verlag, 1976), pp. 64-65.

³ See T. Hettinger: "Stärker belastet als ein Fussballstar", in *Der Gewerkschafter* (Frankfurt-am-Main), 1971, No. 5, p. 171.

⁴ See Deutsche Gesellschaft für Personalführung: Berufsausbildung in Grossunternehmen, Bericht an die Kommission für Wirtschaftlichen und Sozialen Wandel (Düsseldorf, 1971).

⁵ See K.-H. Diekerhoff: *Qualifizierung älterer Arbeitnehmer*, RKW-Projekt A 87 (Cologne, Arbeitsgemeinschaft für System- und Konzeptforschung, 1971), pp. 34 ff.

⁶ This question has been examined in an international context by G. Boglietti: "Discrimination against older workers and the promotion of equality of opportunity", in *International Labour Review*, Oct. 1974, pp. 351-365.

⁷ See Amtliche Nachrichten der Bundesanstalt für Arbeit (Nuremberg), Mar. 1972.

Substantial shortcomings exist, too, in the adaptation of working conditions to the needs of persons with physical or psychological handicaps. Only in a few instances is any effort made in this direction, and then it usually amounts to no more than providing employment in isolated sheltered workshops ¹—a practice which is the subject of much criticism.

One of the most important reasons for all these deficiencies may be the lack of an enterprise personnel policy that really takes the interests of the workers to heart. So far as one can judge from observation and research, systematic personnel management in the Federal Republic is to be found only in the larger companies, and even there it is mainly focused on improving productivity, with labour being relegated to the role of a dependent variable in company planning and policy.²

Personnel management in the enterprise is often restricted to maintaining files on the employees and providing training to adapt them to changing job requirements—and here again the less skilled and more vulnerable groups of workers are largely excluded. Systematic personnel management taking into account the physical and psychological capabilities of the workforce, and relying for this on job descriptions and aptitude profiles with a view to placement, career development, training and job transfers, is almost non-existent. Only in a few major companies are sufficient medical staff available to ensure that workers are placed in jobs suited to their physical and mental abilities in the light of long-term as well as short-term considerations. There is, for instance, evidence that instead of adjusting the demands of the job to a worker's changing abilities as he gets older, many firms simply move such workers around repeatedly from one job to another. The result is usually occupational downgrading, which in many cases could be avoided by applying a labour-oriented personnel policy.

Possible approaches to a strategy for the humanisation of work

Against this background of general requirements for a labour-oriented approach and of typical shortcomings in the present work situation—we have taken the case of the Federal Republic of Germany, but the picture may be broadly true for many other industrialised nations—let us now consider the potentialities and limitations of certain new tendencies and approaches, still in the context of the Federal Republic. Here again it is to be hoped that some of our conclusions may prove useful in other countries as well.

The following objectives are fundamental to any humanisation of work strategy:

- security of employment as a basis for an adequate standard of living;

¹ See Deutsche Gesellschaft für Personalführung: Einsatz älterer Arbeitnehmer (Neuwied and Berlin, 1972).

² See Arbeitskammer des Saarlandes: *Betriebsräte und Personalplanung: Probleme und Perspektiven* (Saarbrücken, 1974), pp. 29 ff.

³ See Hassencamp, op. cit., p. 66.

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- high standards of occupational safety and health;
- opportunities for career development and the elimination of unnecessary constraints in working life.

In order to attain these objectives, ways must be found of: reducing occupational stress (this might imply limits on the pace of work and on working hours, abandonment of certain forms of remuneration, adequate recreation and leisure, and reduction of night and shift work); providing job and income security for older workers; combating occupational accidents and diseases more effectively; automating monotonous and dangerous jobs, adapting plant to the physical and psychological needs of the workers; allowing more flexibility in the choice of working hours; enforcing the observance of minimum standards in respect of working conditions; and promoting career development and good social relations within the enterprise.

Evidently, a comprehensive approach at various levels is required. The public authorities, for their part, need to develop minimum safety and health standards and a framework of labour law, provide for the participation of workers and their representatives in all decisions affecting working conditions, and implement national employment policies affording adequate job opportunities for all workers. They should also conduct relevant research and disseminate information.

Let us now see what has been done to attain these objectives in the Federal Republic. The most important improvement as regards occupational safety and health has been the introduction of a new law which for the first time sets detailed standards governing the organisation of works medical and safety services (Gesetz für Betriebsärzte, Sicherheitsingenieure und andere Fachkräfte für Arbeitssicherheit). Under this law, medical and safety personnel must be appointed in specific relation to the level of risk involved, the number and type of workers and the nature of the production process. In the chemical industry, for example, there must be one factory doctor for every 3,000 workers, while in a steel mill one safety engineer is required for every 600 workers. Smaller companies can share a medical team or employ doctors and safety specialists part time. The latter's main function is to ensure proper application of safety and health regulations and to consider what new precautions may be necessary; they are also required to co-operate with the works council.

Another important novelty is the legislation setting minimum ergonomic standards in respect of working conditions (Arbeitsstättenverordnung). It covers not only conditions such as lighting, ceiling height, temperature and hygiene, but also social facilities such as recreation rooms at the enterprise.

The role of the legislation on co-determination in improving the quality of work should also be mentioned in this context. Important steps in this direction have been taken with the negotiation of qualified co-determination rights in the steel and coal industries (Mitbestimmungsgesetz) and with the

¹ See ILO: Legislative Series, 1973—Ger.F.R. 2.

Works Constitution Act (Betriebsverfassungsgesetz). With the adoption of the revised Works Constitution Act at the beginning of 1972 1 a substantial increase in workers' participation in personnel planning and policy was achieved. Up to that time, co-determination rights had been restricted to specific aspects of personnel management. Important new rights were now obtained with regard to such matters as working hours, introduction and use of devices to monitor the behaviour or performance of employees, company housing, and the fixing of piece rates, in so far as these questions are not regulated by legislation or collective agreement.

Also new are certain rights conferred on works councils in matters relating to the organisation of the workplace, the production process and the working environment. The law further provides that the "established" findings of research concerning the humanisation of work should be applied. Moreover, works councils now have full co-determination rights regarding vocational training, retraining and further training. They can oppose the appointment of insufficiently qualified training personnel, and can also propose candidates for training programmes. Their rights have also been strengthened with regard to such matters as the placement and transfer of workers, hiring and dismissal—not only in specific cases but also in defining policy.

It must be recognised, however, that one of the weak points of the revised Works Constitution Act is the limited scope it provides for workers' participation in company policy-making. This is a major obstacle to the humanisation of work inasmuch as investment decisions exercise a powerful effect on working conditions. Hence the significance of the legislation that is now being prepared to approximate representation on the supervisory boards of companies to the level already attained in the coal and steel industries.

It is appropriate to mention here that there is also special occupational safety legislation covering women and young persons. An improvement has recently been introduced which embodies the provisions of ILO Convention No. 138 concerning the minimum age for admission to employment. In addition to raising the minimum age to 15 years, the *Jugendarbeitsschutzgesetz* guarantees a five-day working week for all young people, longer holidays with pay, better works medical services and stricter enforcement of safety regulations.

In order to give workers greater income security, new legislation has been enacted which secures wages in the event of the employer's bankruptcy (Gesetz über Konkursausfallgeld).² This law provides for full payment of wages owed and employers' social security contributions for the three months preceding the bankruptcy. The payments are made by the local employment office, which is reimbursed by the employers' mutual insurance associations. In addition, the law provides that a bankrupt firm's assets may be used preferentially to discharge liabilities in respect of wages.

¹ ILO: Legislative Series, 1972—Ger.F.R. 1.

² Ibid., 1974—Ger.F.R. 1.

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The recently introduced legislation on supplementary (company) pensions ¹ (Gesetz zur Verbesserung der betrieblichen Altersversorgung) secures the employee's rights to such pensions in case of change of employer or the latter's bankruptcy, subject to certain qualifying conditions as regards age and length of service. The new law also entitles employees who claim their statutory oldage pension before the age of 65 to early payment of their company pensions too. In addition, employers have to consider, at intervals not exceeding three years, whether company pensions can be adjusted to keep pace with increases in the level of state social security benefits, which are related to wage trends. The trade unions had asked for this type of adjustment to be made compulsory.

New legislation covering severely handicapped workers has also been enacted (Schwerbehindertengesetz). There was already a legal requirement for employers to offer a certain percentage of their jobs to persons with disabilities resulting from the Second World War; the latter also enjoyed special protection with regard to dismissal and were entitled to a longer period of paid leave. These privileges are now extended to all severely handicapped workers (i.e. those whose earning capacity is reduced by 50 per cent or more) irrespective of the cause of their disabilities. Every employer with at least 16 work places is now required to reserve 6 per cent of his jobs for the severely handicapped or, alternatively, to make a financial contribution to the cost of occupational rehabilitation. All such workers are entitled to six extra days of paid leave and can retire at the age of 62, a year earlier than the able-bodied. Each firm must also appoint a representative to defend their interests (Vertrauensmann der Schwerbehinderten), who has to be kept informed and consulted about all management decisions affecting the severely handicapped.² Finally, the Ministry of Labour and Social Affairs has an annual budgetary allocation for the establishment and development of rehabilitation centres.

Since a great deal of information needed for the development of an effective policy of humanisation of work is still lacking, the Ministry of Labour and Social Affairs and the Ministry of Research and Technology have launched a comprehensive joint research programme. The aims of this programme are (i) to devise suitable safety regulations, guidelines and minimum standards for plant and workplaces; (ii) to develop technologies taking full account of the human factor; and (iii) to conduct experiments in the humanisation of work organisation. The programme is to be focused particularly on industrial hazards, the working environment, the physical and psychological demands of different types of work, and the needs of special categories of worker such as women and young persons, the elderly and the handicapped.³

¹ ILO: Legislative Series, 1974—Ger.F.R. 2.

² Handicapped persons whose earning capacity is reduced by at least 30 but less than 50 per cent may, on application, become entitled to the same benefits as the severely handicapped, with the exception of the right to additional paid leave.

³ See "Forschung zur Humanisierung des Arbeitslebens", in *Sozialpolitische Informationen* (Bonn), special issue, 8 May 1974.

This research programme will doubtless provide important new information about qualitative aspects of the work situation. Nevertheless, it has certain shortcomings. Since government can only provide guidelines, information and encouragement for the improvement of working conditions, the main practical burden necessarily falls on management and on the workers and their representatives. It follows that the trade unions must be involved in the planning and conduct of research as well as in the application of its findings. Their participation is especially necessary with a view to broadening the scope of collective bargaining and enterprise agreements and to co-operating in experiments in personnel management, which are, after all, the main instruments for humanising the working environment. Yet the fact is that the unions and workers' representatives have not been sufficiently associated with these research activities.

The more effective use of collective bargaining, co-determination and enterprise agreements was the main theme of the recent conference on humanisation of work organised by the German Confederation of Trade Unions (DGB).² In order to see these deliberations in perspective, one must of course remember that the improvement of material working conditions has always been and continues to be the dominant union objective. But side by side with the traditional demands for higher wages, shorter working hours, longer holidays with pay and special safeguards for young persons, women, older and handicapped workers, to mention only the more important examples, there are nowadays new preoccupations relating to broader aspects of working conditions such as those discussed in this article 3: the organization of work, output norms, minimum environmental standards, the limitation of shift work, the application of ergonomic principles to the design of work stations, the avoidance of occupational downgrading, employment and income security for older workers, etc. Many of these are covered by the collective agreement recently introduced in Nord-Württemberg-Nordbaden, which is often cited as an example of how collective bargaining can be extended to promote humanisation of work.

With regard to co-determination and enterprise agreements as instruments for humanising working conditions, we must refer again to the Works Constitution Act. Despite or perhaps because of its limitations, the new opportunities afforded by the Act in personnel planning and management and in the structuring of working conditions will have to be used to the fullest possible extent. This is one of the major obligations placed on works councils.

¹ See M. Helfert: "Forschungs-, aber kein Realisierungsprogramm", in WSI-Mitteilungen, Dec. 1974, pp. 472-478. For an international round-up of trade union attitudes on this point see R. Tchobanian: "Trade unions and the humanisation of work", in *International Labour Review*, Mar. 1975.

² See "Humanisierung der Arbeit als gesellschaftspolitische und gewerkschaftliche Aufgabe: Ein Konferenzbericht", in *Das Mitbestimmungsgespräch*, 1974, Nos. 7/8.

³ See W. Vitt: "Humanisierung der Arbeit durch Mitbestimmung"; and H. Mayr: "Humanisierung der Arbeit durch Tarifpolitik", both in ibid., pp. 132-137.

Especially important is the right to information, consultation and participation in decisions relating to the workplace, the production process and the working environment, where, as we saw earlier, there is a statutory obligation to apply the results of relevant research. Nevertheless, it will need a lot of interpretation, bargaining, legal decisions, education and training to make the various co-determination rights an effective basis for humanising work.

In this connection reference should also be made to the improved rights obtained in case of mass lay-offs and the closing of factories. The Works Constitution Act empowers works councils to demand the preparation of "social compensation plans" to mitigate the hardship that changes in company operations may cause to substantial numbers of employees. Such plans would usually include provision for:

- redundancy payments increasing with age and length of service pro rata to the worker's income:
- guaranteed company pension rights or financial compensation in lieu;
- guaranteed company housing rights or financial compensation in lieu;
- guaranteed rights to paid annual leave, bonuses, etc.;
- retraining and, in certain circumstances, transfer to other duties, with financial compensation for loss of income.

Experience shows that financial hardship in the event of rationalisation moves and lay-offs can be reduced by this sort of action. So far, however, social compensation plans have not contributed much to enhancing security of employment, without which there cannot be any genuine humanisation of working conditions. Up to now little use has been made of the provisions for retraining and transfer.

Finally, there have been a number of management experiments with job rotation, job enrichment and the introduction of autonomous and semi-autonomous group work. A few examples will show that, in comparison with Scandinavian or Italian experiments in work organisation (especially at Volvo, Saab, Fiat and Olivetti), the German ones are fairly modest.²

At one of its factories the BMW motor car company replaced its single production hall by six smaller ones in an attempt to reduce social tensions. The assembly lines were rearranged so that teams of workers could be rotated. Group work has been introduced for some special tasks where the only function of the assembly line was to transport materials, tools and products.

Another large automobile concern, Volkswagen, is also experimenting with job rotation for assembly line work, the transfer of some special tasks

¹ See also E. Yemin: "Job security: influence of ILO standards and recent trends", in *International Labour Review*, Jan.-Feb. 1976, especially p. 30.

² See "Die Arbeit am Fliessband soll menschlicher werden (3. Teil—Versuchsmodelle in der Bundesrepublik)", in *Sozialpolitische Informationen*, 5 Aug. 1974, pp. 4-6. Regarding the Olivetti experiment, see F. Novara: "Job enrichment in the Olivetti Company", in *International Labour Review*, Oct. 1973.

from the assembly line to group or individual work, and the placing of component stocks between two assembly line workers so as to make them more independent of each other.

In 1966 Klöckner-Möller, a large manufacturer of electrical equipment, started to replace assembly line work with group work and individual work stations at one of its factories. After some initial suspicion it was found that the workers affected-mostly women, who had to be retrained-much preferred the new arrangement. A study of their attitudes has indicated several important advantages, notably more personal freedom, more job satisfaction due to seeing the results of one's work, and less monotony because each worker is responsible for turning out a finished product. In the opinion of the management these changes brought the disadvantages of higher cost per work station, longer periods of training and adaptation, and the need for more working space. It was recognised, however, that these drawbacks were compensated by higher productivity than usual during the training and adaptation periods, a 50-60 per cent reduction in product faults, greater flexibility in response to fluctuating demand, interchangeability of workers in case of absence, more opportunities for working at home, better adjustment of production speed to the individual efficiency curve, and the possibility of employing personnel such as young people and pregnant women who are not allowed by the law to work on assembly lines.1

Philips recently introduced individual work stations at its electric shaver factory in Berlin. Each of the workers affected by the innovation now has to produce fully assembled shavers. So far only a minority of production workers benefit from the innovation, but the company apparently proposes to extend both individual and group work and to continue automating the assembly line.²

Another well-known electrical company, Bosch, is experimenting with organisational changes which allow for more social contacts between the assembly line workers, for example the installation of buffers and loop lines between different production tasks, reducing the number of tasks and workers on any one assembly line, and shifting some tasks from the assembly line to individual or group work stations. The company finds that these changes increase production flexibility and quality as well as improving the qualifications, motivation and efficiency of the workers.³

These examples of management initiatives show that their prime concern is to improve productivity and the flexibility and quality of production. They aim to do this by motivating and upgrading the worker, thereby also reducing personnel costs due to absence, low morale, social tensions, and underutilisation of available and potential qualifications. This has the further effect of decreasing raw material losses and improving product quality.

¹ See H. Walter: "Vom Fliessband zum Einzelarbeitsplatz", in Mitteilungen des Instituts für Angewandte Arbeitswissenschaft, Jan. 1974, pp. 13-37.

² See "Die Arbeit am Fliessband soll menschlicher werden . . . ", op. cit., p. 5.

³ H. Haug: "Ansätze zur Arbeitsbereicherung durch Ausweitung der Gruppenarbeit", in Mitteilungen des Instituts für Angewandte Arbeitswissenschaft, Sep. 1973, pp. 14-23.

The introduction of more or less autonomous work groups may, however, bring certain problems in its train. For example, total work demands are redistributed but not lessened. The worker undoubtedly experiences less monotony, but at the same time job requirements become more stringent and adaptation more difficult. Again, the individual has more scope to decide how to arrange his time and his work, but he still cannot influence the major decisions about division of labour, productivity standards and remuneration. There is also a shift of certain control functions from management to the group itself. This increases the risk of conflict among group members, for instance between men and women, older and younger workers, or the skilled and the less skilled.

So far, moreover, there has been hardly any sign of career development resulting from the introduction of group work. Apparently, only adaptation to specific tasks takes place. The broader question of stimulating workers by providing the necessary motivation and opportunities for promotion—especially lacking among the "disadvantaged" categories—is still largely neglected.¹

These experiments are therefore geared more to the reorganisation of work than to the improvement of its content or the adaptation of working conditions to the long-term physical and mental abilities and interests of individual workers. It remains to be seen whether they will lead to better opportunities for personal development among all workers, including the disadvantaged groups. So far, they are only isolated experiments which may contribute to humanising work for some, but are no substitute for comprehensive strategies evolved in the framework of legislation, collective agreements and company bargaining.

Conclusion

The main aim of this article has been to show that, in the life of the worker and his family, work is not only a means to satisfying material needs. Though income is still a very important factor, security of employment and more humane working conditions are taking on increasing significance. Humanisation of work does not only mean ergonomic factors but also scope for self-development and participation in decision-making processes. Analysis of the situation in the Federal Republic of Germany shows that, as is probably the case in other highly industrialised countries, these qualitative aspects of work are still largely neglected.

An integrated policy both at the enterprise level and beyond it is therefore obviously needed. While public authorities must provide the legislative framework, minimum standards, security for vulnerable groups, research and information, it is up to the trade unions and managements to enforce, improve and control the application of such measures. This can be done by collective

¹ See Schumann, op. cit., p. 128.

bargaining and enterprise agreements, but a necessary condition is the effective participation of workers' representatives in all management decisions affecting working conditions, and also in the drawing up, application and supervision of the relevant instruments, including experiments with new forms of work organisation. The experience of the Federal Republic provides a number of examples of positive if modest moves in the right direction.