Rainer Müller (1992): Beitrag zum International Workshop „Health Services Research in Occupational Health“, Amsterdam 22.-24.10.1992

Health Services Research in Occupational Health

First of all, for any discussion about health services research in occupational health a critical examination of the current system of health and safety at work is necessary. This is what I shall now do in the case of the Federal Republic of Germany today. Secondly, any such consideration must name the various aspects or levels within politics, economics and social reality which are relevant to this question. I shall also be making comments on this point.

I. Critical points due occupational safety and health in Germany[1]

1. Fragmentation and confusion

1.1 Industrial safety is composed of varied legal single-regulations which are parts of different departments or are concentrated in independent legal pattern (complexes).

1.2 There are many regulations on the level of prescriptions (e.g. for the place of work, for dangerous substances) and of regulations concerning the prevention of accidents, as well as diverse administrative regulations and guidelines.

1.3 In spite of the existence of bills, the development of a integrated standard law of industrial safety and health has not been tackled either in the reforms of the seventies. The existing fragmentation and confusion encourages a particular and isolated point of view, both in the practical handling and in the further development of the law.

2. Selectivity and delimited reduced relation with risks

2.1 Industrial safety concerns almost exclusively somatic health risks; so, jeopardizing qualification as well as social competences are out of question. But also the understanding of health is rather restrictive.

2.2 The main focus of the regulations for industrial safety is
situated in the direct visible risks for body and life in contrast to something like longer-term signs of wear. Binding regulations for the forming of working conditions can primarily only be found where risks can be exactly demonstrated or where
there is a sure scientific knowledge.

2.3 Even in the limited sector of occupational disease, a
corresponding disease is in many cases not reported, although sufficient moments of suspicion exist. With that the decree of occupational diseases did not prove to be efficient in the practice, converting the unit of diagnosis, therapy, rehabilitation and prevention.

2.4 The category of work related **disease**, which has appeared for the first time in the law of safety and health at work in 1973, enlarges the spectrum of the health risks

having to be taken into consideration as well as their reasons in the work process.

But this plays only a role within the framework of the job description of the industrial physicians on the one hand, and is limited in the practice, on the other hand, because of the necessity of a primary proof, which is only orientated to scientific-medical criteria and methods.

3. Selective and isolated regulations

3.1 Concrete and binding regulations are only focussed in isolated and selected points on individual aspects of the place of work (as for example industrial noise, technique of security, etc.). However, the complex combination of different stress factors is hardly seized.

3.2 The main focus of the regulations is the environment of
work and the security technical structuring of environment and material for one's work. Things like organization of the work, scope of influence and decisions of the persons affected are left aside, so as the causal factors for the delimited aspects of the physical health. Because of that, important reasons for long-term, chronical diseases and work related diseases, in particular, are no subject of the occupational safety.

4. Limitation to threshold limit values or maximal concentration noxes and minimum requirements to shape work and technology

4.1 Precise regulations, and legaly binding regulations are mostly orientated to upper limits and minimum requirements. As a rule, the definition of risks is based on limits covering only the tip of the iceberg (e.g. maximum sound level values, MAK-values, etc.).

4.2 The last binding core of regulations is reduced to the
smallest common denominator of interest groups who are involved in the formation.

4.3 In the internal company practice, there is an one-sided evaluation of the starting-points for measures of occupational safety: the main focus is predominantly made on an individual behaviour of avoidance (for example the obedience to bans by the employees). Further, **the equipment** of employees with protective outfit at unhealthy places of work as well as the controls and sanctions referring to it, as a rule, take first place, before **the improvement of the places of work.** In the same way, it happens too frequently in the practice that **the industrial-medical examination of the employees** and of an appropriate personnel selection comes first, before **the investigation into the reasons** for health risks at work.

5. Ambivalence of the protection of special groups of people

5.1 For certain groups of people, who are in a way in need of
protection, like mothers, young people, disabled persons, there are more extensive demands for occupational safety.

5.2 As each of these regulations refers only selectively to

certains groups of people, the fundamental problem is that the situation of the protected groups is getting worse in the companies and on the labour market.

5.3 Restrictions referring to the person and forbidden employement, induced by the industrial physicians, seem similarly ambivalent. These measures protect, of course, the individual employee from further health risks. However, because of the fact that they do not evaluate the reasons of the danger, they will not prevent the other workers from these risks.
The health risks will rather be spread out over a larger part of the employees.

6. Lack of achievement and control

6.1 Despite the extension of the occupational safety and its
regulations having to be put in concrete form, the trading
regulations' general principle remains valid : the enterprises are obliged to protect the life and the health of the workers, but only thus far "as the nature of the enterprise allows it". Therefore, the institutions having been instructed to control and carry through orientate themselves to the economic "defensibility" and the technical "feasibility". A criterion for the latter is particularly the "level of the technique", which is conceptually uncertain and can be differently interpreted.

6.2 The supervision and achievement of the regulations for occupational safety apply to different institutions in the sector out of the enterprises to the state supervisory authorities and the trade associations (accident insurances).
But it is possible, in a concrete case, that problem sectors are left over, for which no institution is feeling responsible.

6.3 The achievement and control of occupational safety's regulations are further reduced because of the restricted personnell capacities and the limited means of sanctions.

6.4 Because of the fact that the accident insurances restrict themselves to the special sector of accidents of work and occupational diseases, regulations for the occupational safety and health are issued, which repercussions on the whole work and also on the interests of the workers have not been enough considered.

6.5 The deficits of the occupational safety, which were exposed in the points 1 to 5, have as a consequence for its practical achievement that it restricts itself largely to measures of correction and repair: the forming of regulations for the occupational safety happens generally just when connections with the dangers and consequences of the dangers have already become an obvious problem in many enterprises and when they are concretely comprehensible.

6.6 Already in the phase of planning or implementation of technical or organizational measures, requirements for occupational safety have hardly been considered or even been asserted necessary until now.
That is why prevention in occupational safety is almost exclusively directed towards "industrial-medical-orientated" measures of protection (for the surveillance of the health and for the behavioural control of the workers with regard to potential health risks) ; that

is why prevention is more orientated towards an "adaptation" of the workers to the working world than towards the structuring of the working conditions, which one should start with the causes of danger.

7. Ambivalent position of the occupational safety and health experts within the company

7.1 According to the law of safety and health at workplace of 1973, theemphasis of the supervision and realization of the occupational safety has been intentionally transfered - at least for a great part of the industry - on experts (the industrial physicians and the experts in occupational security), having to be set up or commissioned by the company. Their fields of action are comparatively extensive.

7.2 In the practice, however, the temporal and personal capacities of the industrial physicians (moreover, only a few of them have the qualification as a "Doctor in Industrial Medicine") are hardly sufficient to do a medical supervision of the places of work as well as a comprehensive study of the health risks. But also the canonized knowledge of the industrial medicine limits itself to the biomedical understanding of the illness. Particularly the competences in the fields of the psycho-social research on stress and of the social epidemiology are seldom available.

7.3 In the enterprise, finally, the occupational safety and health has not covered each area. So, furthermore about the half of the employed population within the present Federal Republic of Germany (especially in small and medium enterprises) will not be taken in charge neither by the industrial physicians nor by experts in occupational safety.

8. Limited influence of work council

8.1 According to the law of 1973 on regulations governing industrial relations, the works council has also rights of participation and initiative in the field of occupational safety. These rights, however, are basically limited to the organization of the occupational safety in the enterprise.

8.2 With regard to the structuring and shaping of the places of work altogether, the workers representatives has only a correcting right of participation, going beyond the occupational safety regulations. It is, however, only valid in cases of spatial, technical and organizational changes within the enterprise.

8.3 Moreover, the idea to call early the works committee in the
planning is hardly realizable in the practice, because, in many cases, health risks in this phase of technical and organizational changes cannot be foreseen.
This refers clearly to the dependence of the practical implementation of occupational safety and health on the respective position and the activities of the workers representatives.

9. Safety and health at workplace is strongly legaly regulated (legalization) and strongly influenced by sciences (technology; industrial medicine)

9.1 In order to understand the law of the Federal Republic of Germany, it is necessary to point out that the occupational safety's legal regulations are not considered as minimum standards, which can be extended in the practice, but that they constitute leading norms of action for the involved parties; after that it is enough that the urgent demands of the law are fulfilled. This understanding is expressed in that respect that, in the practice, an identification of health risks orientates itself only to the sectors which are legally defined, and this from the point of view of the enterprises as well as from the one of the works committees and the workers. It results from it that some aspects, which are not included in these legal regulations (see points 1 to 4), are left aside, also in the practice of an active occupational and health safety.

9.2 For legal concepts, which are kept undefinite and cover a large sector, a specific delimitation is made through the criterion of the scientific approach. Only the dangers and the measures to prevent them, which are scientifically demonstrated and are comprehensible in individual cases, are relevant (or dispose of a sufficient legal basis) for the occupational safety. A large part of the chronic diseases and of those due to the work, however, cannot be proved by means of the classical apparatus of the industrial medicine causal analysis. Only a few of the various industrial scientific discoveries, which are partly based on other methods, comply with the criterion of "certainty" **("Gesichertheit")**, i.e. are generally recognized and valid.

9.3 In the practice, "the acts of legalization and scientification" are the cause that the occupational safety is only carried on as a complex of factual-technical tasks.

10. Lack of participation and incapacitation of workers

10.1 Legalization, scientification and the delegation of occupational safety in the enterprise to experts make that the workers'experiences of health dangers have hardly an influence on the concrete practice of the occupational safety.

10.2 The empirical knowledge of the persons affected is not recognized as a legitimate basis for the identification of the causes of dangers, the development of measures to prevent them and the introduction of appropriate knowledge into the discussions of interests within the company or into the interpretation of legal regulations.

11. New problems of the occupational safety and health and new requirements

11.1 The exposed deficits of the occupational safety and health are particularly significant because many dangers (to which it has referred heavily up to now) tend to lose a part of their importance in comparison with **new dangers** (for example those caused by the increased use of chemistry and computers and by social rationalization), the manifestation and the causes of which are still hardly known.

11.2 This concerns particularly the whole field of the psycho-nervous and mental strains, which appear with the beginning of new technologies of information and management; in the same way, the chronic diseases, which have been omited in the previous practice of occupational safety, seem to increase instead of to decrease. Moreover, it will always be more difficult -because of the growing measures of rationalization within the company and with it the larger extent of their repercussions- to

make clear relations between health dangers and causal factors and to arrange for appropriate measures of safety to be taken timely.
On the basis of these new developments, the experience of the employees as well as the proof of danger connections, scientifically verified as plausible, but not scientifically analyzed in details, must constitute here fundamental principles of the occupational safety.

11.3 The field of action of the safety and health system proves to be too limited : On the one hand, it is necessary to complete the existing standards to protect the employees from the physical, biological and chemical health risks, from the health risks due to the social working conditions and to the demands of the work. On the other hand, the workers of the public administration and service organizations in the same way as those of the trade sector, must be included in the health safety and must be protected from physical and psychological damages.

11.4 In the future, it will be much more important than previously to consider the interdependence or interlink of the occupational safety and health - even in its particular or isolated handling - with the whole environment of the enterprise, for instance the labour market and the social policy all in all, as well as other political sectors (like technology, education, economic and environmental protection policies).

11.5 The changing processes of rationalization and the growing
integration of work processes within the enterprise and outside of it make necessary that the occupational safety and health reaches, in the enterprise, an extensive and anticipational way of looking and a dynamic, continuous and active form of observation and accompanying of all the technical and organizational changes. It has to refer preventively to the strategic connexions of rationalization measures within the enterprise and create new ways of information and communication. Its requirements have to be self strategically orientated, i.e. it must develop autonomous aims and conceptions of shaping referring to health for future technical and organizational changes in the enterprises, and for this it must use purposeful available scopes.

11.6 Finally, as the law-makers have recognized in the meantime,
the question in the future is, next to the fight against health-
and accidents risks, to use the prospects of health promotion. The protection model has to be further developed in the direction of active health promotion. Health promotion by the means of work structuring should become **THE model** of health activities in the enterprise.

11.7 The scientific principles of the occupational safety and health have to be enlarged; in the future, their interdisciplinary development has to be intensified. It is necessary to extend findings about stress, social aid, qualification, scope of action, lifestyle and health and to support the corresponding essential points of research.

II. Main levels due occupational safety and health services

In the following the central topics and conditions should be mentioned important for the impacts of safety and health.

1. Technological and social rationalisation, national and international.

The rapid introduction of information and communication technology in factories, businesses, offices, in short, the world of work, both in the private and public sectors; the increasing flexibility in the use of labour supply and labour input; has led to new risks and health endangerment for workers. At the same time, classical hazards to health, facilitated for instance by traditional negative influences of the work environment, particularly in small and medium sized factories etc., continue unabated.

Mass unemployment in Germany has reached a level of about 2,3 million registered unemployed, or approximately 9 %, as one must consider the existence of at least a further 2 million "hidden" unregistered unemployed, particularly women.

The rationalisation strategy of capital with massive political and financial support by state, have also made the working conditions for the trade unions, in the sphere of health protection increasingly difficult. The trade unions of Germany have not as yet been able to develop an effective strategy to counteract the technological offensive of capital and the state.

The relationship between trade unions, capital and the state can be termed more or less as a corporate system. The debates and conflicts between labour and capital, are strongly regulated by law in Germany.

In general, attention must be paid to the relationship between state, capital and scientific and technological research.

As far as Europe is concerned, developments within the European Community are becoming increasingly important for the concrete technological and economical developments at a national level. The question must be raised whether health and safety aspects can be integrated into policies governing the massive investments being poured into technological development.

2. Risks and hazard patterns on the labour market, in various fields of industry, companies, occupations and at different workplaces, and the development processes of these patterns

Types of risk range from unemployment through the classic pressures relating to industrial hygiene and production materials, e.g. hazardous substances, to hazards ensuing from the organisational structure of work (e.g. nightwork, isolation, monotony), its temporal structure (e.g. intensified working hours, flexibilisation) and the demands related to work content (e.g. computer dialogue).

For health service research, extensive and particularised reports on paid work and disease are necessary. These are, in many countries, hardly available.

3. Industrial bargaining processes between management and personnel, works

council or staff council respectively, and quality of social relations between capital and paid labour, or extent of co-determination

Whether health risks are perceived and discussed and preventive measures are taken in industrial plants, and how those are dealt with whose health is endangered or impaired (i.e. whether they are treated discriminatively or looked after and integrated into company activities); whether the necessity is seen for an active, constructive company health policy; all crucially depends on the form of social bargaining processes and on the existence and quality of co-determination.

4. Institutional and normative control of hazards and health impairment and of individual problems (i.e. state health and social policy, and company and regional/national health protection systems)

Even in traditional risks, the current protection system is exceedingly selective (i.e. with burdens resting on the individuals, cases treated on an individual basis and the accident paradigm). With regard to social insurance legislation, the process for dealing with sick people promotes this individualisation and formation of legal structures within the framework of financial compensation (pensions) and therapy (medical treatment). The externalisation of the induced problems and the damage done to human health and the environment are routine occurrences.

An evaluation of these circumstances raises the question which barriers, but also what innovative potential each national social policy or social security system has with regard to health and safety at work.

In Germany, the Health Service Reform Act of 1989 has given health insurance companies considerable influence over industrial morbidity and mortality, i.e. on the structuring of safety and health.

It must be stressed, however, that due to the new developments in technology and work structures there are hardly any forms of control over health hazards. The current German work protection system does not or only inadequately meets the requirements necessary for restructuring work and technology to a socially and humanly acceptable standard. The system requires amendment and strategies for health promotion and the development of humanly tolerable work structures and technology.

But by what criteria should they be structured? How can consensus be reached socially on the requirements and criteria of these structures?

5. Qualifications of Health and Safety Experts: status of professionalism; number of experts occupied in a company

This point concerns the professions of company doctors and safety engineers, industrial hygienists etc. Here the question is whether they have gained an authoritative position as scientists and professionals, as a scientific or professional background is of great significance for their standing and influence in societal debate. Furthermore, it is impor-

tant to ascertain whether they have acquired specific knowledge and the facilities to take action. Are these professions in a position to evaluate their own activities self-critically?

6. Gender and group-specific life course and career

The chances of entering into a stable and fulfilling occupational pattern with tolerable health conditions are unevenly distributed. Unqualified workers (frequently women and foreigners) are especially affected by an accumulation of work and life risks.

Sociopolitical intervention strategies neglect especially temporal structures and processual characteristics. However in this context, conceptions of the temporal structure of life and life demands, work and work demands (e.g. night work and work rhythm) must be taken into account. All other aspects must also be included which are associated with individualisation and negotiation processes between men and women with a view to reconciling occupational orientation and social participation with the desire for emotional and social bonds (children, help in crisis situations, family life etc.).

7. Individual or subjective competence to overcome or deal with problems, world view within which individuals orient themselves and plan their activities

The maintenance of good health and the development of disease depends to a great extent on the biological and psychosocial "immunity" a person acquires (whereby the biological and psychosocial aspects are interlocked) and the type and quality of social support he/she receives within his/her social sphere (colleagues, family, neighbours, friends).

Education, training and qualification, the ability to cope with conflicts, income, social contacts, emotional relations, political participation all play a decisive role. With regard to gender and social group-specific life and occupational courses mentioned under point 6 all those questions are relevant in this context which are dealt with "Identities in crisis - crisis of normal work".

8. Proposal for a Theoretical Model for Health Promotion and the causation and development of diseases

For work protection as well as for health promotion policies and strategies for developing work structures and technology it is necessary to agree on a model which includes the interrelationship between the environment and the individual within the occupational framework. In a primarily simple model it is essential to differentiate between risks or hazards and resources. Both risks and resources must be differentiated according to whether they are present in the environment or in the individual.

Firstly, disease-promoting and disease-impeding influences must be differentiated, as well as health hazards and health-restricting influences.

Secondly, environmental influences can affect a person directly or indirectly via their

behaviour and actions. In particular, an emphasis on possibilities for action in mediating between the environment and the individual offers an insight fundamental for an understanding of work-related diseases and their prevention. The environment is understood to be adaptable and subject to social decision-making.

Thirdly, specific burdens and pressures at the workplace must be distinguished from environmental factors as well as non-
specific influences. At this point it should be noted that neither medical science nor industrial and social medicine have developed a "health concept", or a theory of health. Up until now, industrial medical research has almost exclusively concerned itself with the risks in the disease process, using a model based on the principle of dose and effect, or the monocausal concept of irritant and reaction.

9. Different areas of company and industrial policy (e.g. technological, work, company and environmental policies)

In order not to come to a standstill at an analysis of health hazards and technological prevention, but to proceed to constructive health promotion policy, it will be necessary to integrate the health question into all policy areas (healthy public policy). This is also true of the various fields and areas of company policy.

III. Policy research in the field of health and safety at workplace

In the following I will bring in some general aspects of policy research. In a few respects I shall exemplify these dimensions with problems in the field of safety and health at the workplace.

I am not qualified to give an overview of the state or quality of international or German research in this complex. My input may give some useful orientation for the discussion and further work.[2]

1. Definition

Health and safety at work policy comprises all measures which have the aim

-to reduce, to minimize or to eliminate risk and health impairment caused by occupational influences (prevention)
-to give injured persons adequate treatment (cure or medical care)
-and to organize personal economic security (compensation).

On the basis of this understanding occupational health and safety policy has been developed in the different types of social policy such as that of Britain (Beveridge), Scandinavia, Netherlands, USA or Germany (Leibfried 1979, Esping Anderson 1980, Flora, Heidenheimer 1981). In the past few years this classical understanding of social policy has been critizised in the discourse regarding ecological problems, the humanization of work and social shaping of technology or health promotion.

Policy research in our field has to ask, whether there are historical and comparative studies which deal with the different types of social policy. What type of special subsystem of safety and health at workplace have the countries developed? What are the subjects of the studies? Are they looking to the control issues and aims of the health and safety policy in the different stages of the policy cycle? Are the studies asking how the problems are generated and in which form, and, finally, what are the results, the effects of the policies, how effectively the agenda setting has worked and in what form the policy setting was implemented?

I know only a few publications on these topics (Böhle, Kaplonek 1980, Kelman 1981, Wilson 1985, Weindling 1985, Brickmann u.a. 1985, Elling 1986, Campbell 1986, Scott 1987, Windhoff-Heritier, Gräbe, Ullrich 1990, Draaisma 1991, Siemons 1992). In our group in Bremen we have done a little in this context (Müller, Milles 1984, Milles, Müller 1985).

2. Main issues and questions of policy research

2.1. Policy Cycle/circle

In policy research a concept of stages of policy-process is generally accepted as the standard of policy analyses. The policy process is divided in the following stages:

-recognition of the problem (to see a problem)
-agenda setting
-development or creating of a policy with the result of collective decision
-implementation with the result of policy outputs
-policy outcome regarding addressed groups and persons, parts of society or the society as a whole.

This differentiation makes it possible to analyse complex processes in single steps.

2.2. Phase of recognizing the social problem

At this stage the relation of discourse and demands with the established political system is important.

In our field we have to ask from the historical and contemporary point of view what kind of discourse exists, who is demanding or debating, what are the issues? Is there any connection and when in which type of setting between public debate and political system? At this conference we are especially interested in the competence of occupational health services. So we have to examine their competence, that means ability and willingness of this subsystem to recognize safety and health problems.

Are the problems recognized as social problems? What strategies and instruments are implemented to obtain information?
Only few studies with this topics have been done (Rosenbrock 1982, Lee, Rom 1982, Plomp, 1985, Draismaa 1987, 1991, Walsh 1987, Peter 1988, Thon-Jacobi 1989, Milles 1990, Müller u.a. 1992).

As the result of our socio-historical research in Bremen, we speak of the dethematization of industrial pathology (Milles, Müller 1987).

In history and today the social movements of workers have been the main social actor in bringing these problems to public attention. But there are also others such as state bureaucracy, scientists, medical doctors or bourgeois (middle class) social groups.

2.3. Phase of agenda setting

This is the strategic point for the success of the next steps of policy making. Is the occupational safety and health system able to bring recognized problems onto the public agenda? What types of coalition are created between the different actors in occupational safety and health? What is the role of the safety and health services? Are they organizing support for trade unions, employers, state? Does the occupational safety and health service give support to social actors like shop stewards, trade unionists, groups of victims (Karochi in Japan or occupational cancer in Germany). What role do scandals (mass accidents) play?

In this context of policy research we have to ask what is the role of the scientific community, the relevance of epidemiological, toxicological or clinical research? What are the interests behind the funding of research in this field? Which issues or problems are put onto the agenda, which problems are neglected and why? What kinds of solutions to the problems are suggested? We have to face a lot of questions for an undeveloped policy research in this field of occupational health research.

2.4. Phase of policy formulating

At this step the aims of the actors in the policy field are worked out.

Concrete goals are related to superior common aims depending on the special orientation of the national type of policy in general and the policies of this field of social safety and health. It is also important to see how this policy is related to some special policies regarding economy, work, technology, gender equality and so on.

At this point today we have to recognize the political developments in Europe. The debate over the Maastricht treaty (agreement) is bringing up some important questions: centralization versus decentralization, supranational or national, induced and controlled by parlaments or only by EC bureaucrazy. Is there any study about how the EC-regulations on safety and health in companies are created, formulated and implemented? The hidden curriculum, the basic ideology of policy and economy is important here. We have to analyze the different concepts: Neoliberalism versus state organized social policy with the focus on personal and social security, justice, equality, social rights for instance of work by the acceptance of differences. Is the concept of social citizenship or citizens with the right to work (Arbeitsbürger) the basic understanding or should we stick to the concept of humans as social individuals? At this level analytical policy research has to look at the different interests and aims of the various actors in the political system of the subsystem.

2.5. Phase of implementation of political measures

There are different types of implementation of political measures. Measures can be implemented by law, by structural power, by bargaining processes, by pedagogical or by financial intervention. Normally there is a mixture of regulative instruments such as prohibition, orders or sanctions. What is important is the relation between state-regulation and the selfregulation of the subsystems, private organisations or institutions. It has to be decided to whom the implemention process is addressed and how resources - personnel, money, materials - are allocated and balanced and how they can influence the behaviour of actors.

To evaluate the safety and health service, we have to make comparative studies on a national and international basis. It may be very useful to compare the different processes of implementation of safety and health services in the different branches and companies, or within the context of accident insurance, for instance in Germany. More and more the services are becoming subject to the power of market principles.

2.6. Phase of analysis of effects or benefits

The difference between intended and unintended results has to be taken in account.

Some cost benefit analyses of safety and health services have been made. These should be reevaluated in a methodological perspective and the indicators should then be discussed in more depth. Cost benefit analyses are mostly carried out by companies to calculate their expenditures for the workforce. For future evaluation, studies asking for the outcomes of the intended aims of safety and health are important. Are the safety and health services really reducing stress and strain, accidents, occupational or workrelated diseases? Does the system in fact have preventive effects or possibly promote health and work satisfaction? In the German medical system demands on the quality of medical work have been forced onto the agenda by a law passed in 1989 (SGB V). In this respect comparative studies of the different types of safety and health services are very necessary asking for outcomes and impacts. The efficiency and effectiveness of services run by companies, social insurances, profit or non profit organisations should be analyzed and compared.

2.7. Phase to study the policy network (framework)

At this level the social actors and their relation or connections are the subjects of policy research. The network can be structured by institutional differentiations or by symbolic fixed points. Such symbolic issues are formulated by law or by processes of social consensus regarding safety and health or environmental topics. One question in this research field is: have the safety and health services organized a policy-network, what are the issues, how is the network structured, what are the intentions and interests? Can you observe special interest groups, working in public or behind closed doors? Who are the opinion leaders or gatekeepers regulating persons, meanings, arguments or interventions? At this level it is also important to tackl the question how the qualification of safety and health experts is organized, what type of professional habitus or paradigm has the chance to climb the ladder, how does the selection of persons and ideas work?

2.8. Phase of analyzing the policy arenas

With the category policy arena the developments and promotion processes of conflicts and consensuses are described. The social actors in the field of safety and health have the same focus but not identical interests, goals or concepts for recognizing, labelling and solving problems. Analytical policy research of policy arenas examines for the structure of influence and power.

My contribution was more an eclectical input than an elaborated study but I hope that it will stimulate further discussion and cooperation.

III. Notes

[1] see: Badura, B. u.a.: Arbeits- und Gesundheitsschutz in der Bundesrepublik Deutschland. Probleme und Ansatzpunkte für weitere Entwicklungen - Eine Bestandsaufnahme, Nov. 1990.

[2] My comments are based on a paper a colleague of mine at the Center of Social Policy, Ilona Ostner, and the sociologist F.U. Pappi wrote in July 1992, titled: "Policy research regarding women and gender policy".

IV. Literature

Böhle, F., Kaplonek, H. (1980):
Interessenvertretung am Arbeitsplatz und Reformen im Gesundheitsschutz - Das Beispiel Großbritannien, Frankfurt/New York

Brickmann, R., Jasanoff, S., Ilgen, T. (1985):
Controlling Chemicals: The Politics of Regulation in Europe and the United States, Ithaca N.Y.

Campbell, T. (1986):
Labor Inspection in European Community, Health and Safety Executive Publication

Draaisma, D. (1987):
Effektiviteit van Bedrijsgezondheitszorg, TNO Leijden

Draaisma, D. (1991):
A conceptual approach for the evaluation of the quality and effectiveness of occupational health care. In: J. Rantanen & S. Lehtinen. New trends and developments in occupational health services, Amsterdam

Elling, R.H. (1986):
The Struggle for Workers' Health: A study of six industrialized countries, Farmingdale, N.Y.

Esping-Andersen, G. (1980):
Social Class, Social Democracy and State Policy: Party Policy and Party Decomposition in Denmark and Sweden, Copenhagen

Flora, P., Heidenheimer, A.J. (1981):
The Developement of Welfare States in Europe and America, New Brunswick

Kelman, St. (1981):
Regulating America, Regulating Sweden: A Comparative Study of Occupational Health and Safety Policy, Cambridge

Lee, J.S., Rom, W.N. (Hg.) (1982):
Legal and Ethical Dilemmas in Occupational Health, Ann Arbor

Leibfried, St. (1979):
United States and West German Welfare Systems: A Comparative Analysis, in: Cornell International Law Journal 12 (16), p. 175-198

Milles, D. (1990):
Industrial Hygiene: A State Obligation? Industrial Pathology as a problem in German Social Policy. In: Lee, W.R., Rosenhaft, E. (Hg.): The State and Social Change in Germany, 1880-1980, New York, Oxford, Munich, S. 161-199

Milles, D., Müller, R. (Hg.) (1985):
Berufsarbeit und Krankheit, Frankfurt, New York

Milles, D., Müller, R. (1987):
Zur Dethematisierung sozialpolitischer Aufgaben am Beispiel des Gesundheitsschutzes für Arbeiter im historischen Rückblick. In: Kaufmann, F.-X. (Hg.): Staat, intermediäre Instanzen und Selbsthilfe, München, S. 67-89

Müller, R., Milles, D. (Hg.) (1984):
Beiträge zur Geschichte der Arbeiterkrankheiten und der Arbeitsmedizin in Deutschland, Bremerhaven

Müller, R. u.a. (1992):
Gesundheitsschutz durch arbeitsmedizinische Betreuung. Fiktion oder Wirklichkeit? In: Neumann, L.F. (Hg.): Arbeits- und Gesundheitsschutz aktuell, Köln, S. 81-99

Peter, G. (Hg.) (1988):
Arbeitsschutz, Gesundheit und neue Technologien, Opladen

Plomp, H.N. (1985):
Werknemers en bedrijfsgezondheidsdiensten, Amsterdam

Rosenbrock, R. (1982):
Arbeitsmediziner und Sicherheitsexperten im Betrieb, Frankfurt/M

Siemons, J.C.M.M. (1992):
Occupational Safety and Health Policy Implementation. A Comparison between Japan and the Netherlands, Proefschrift, Universiteit Twente

Scott, Ph. (1987):
The Changing Role of Labor Inspection in Matters of Safety and Health at Work in the European Community, Paper, Stockholm

Thon-Jacobi, G. (1989):
Arbeitsschutz-Alltag. Eine empirische Studie zu Handlungsstrukturen im Betrieb, Frankfurt, New York

Walsh, D. Ch. (1987):
Corporate Physicians, New Haven, London

Weindling, P. (Hg.) (1985):
The Social History of Occupational Health, London, Sidney, Dover, New Hampshire

Wilson, G.K. (1985):
The Politics of Safety and Health, Occupational Safety and Health in the United States and Britain, Oxford

Windhoff-Héritier, A., Gräbe, S., Ullrich, C. (1990):
Verwaltungen im Widerstreit von Klientelinteressen. Arbeitsschutz im internationalen Vergleich, Wiesbaden