Occupational illnesses to be compensated, or worker's diseases to be eradicated? (*)

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»Die Technik in gewisser optimaler Ausbildung könnte heute für die Erleichterung des Lebens Wesentliches tun, ja unübersehbar viel tun. In ihrer Handhabung liegt der Lebenscharakter der Zukunft, auch dann, wenn der Energiekonsum nicht mehr gesteigert wird, ja sogar reduziert werden muss. Statt der Erleichterung kann die heutige Technik (speziell durch das Geheimnis, durch die Geheimverfahren, vergl. spez. die Chemie) die furchtbarsten Gewalt —und Erpressungsmittel bieten, wie sie keine Zeit kannte. Denn sie kennt Wege Und Gewaltmittel, die sogar bis in das Lebendigste jedes einzelnen Menschen hineingreifen, zumal in einer so stark bevölkerten, spezialisierten Welt, in welcher alle aufeinander angewiesen, nachdem die physikalischen Grenzen durch den Velkehr so erstaunlich geringe Hemmungen geworden sind und in den Ernährungsangelegenheiten die höchsten Gewalten und Gefahren liegen.

Für die Zukunt ist nicht so sehr entscheidend, ob Einzelindividuen und Errungenschaften in furchtbaren Krisen zu Grunde gehen; aber das Schicksal möge die Menschen vor umfassenden auf Generationen weit ausgreifenden, degenerativen Wirkungen bewahren, aus denen imer Unglück für alle erwachsen muss. (Typen: Syphilis, wie chronische Vergiftungen mit langsamen Störungen sowhol der vitalen Organe, wie vor allem des Nervensystems).

Die in der Entwicklung sich vorbereitenden, furchtbar schnellen, ganze Bevölkerungen mit Degeneration bedrohenden Gefahren scheint man sich schwer vorzustellen —(gibt z.B. sich Amerika Rechenschaft über die gerade durch seine freiheitlichen Auffassungen mit der Einführung der chemischen Industrien verbundenen automatisch folgenden Gefahren resp. Nebenwirkungen?)

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Wir shen, was für eine Masse von Unglück erwacht, wenn dem Komen der Gefahr freien Lauf gelassen wird.

Die Verantwortung (und ihre Wirkungen — im Sinn des Lebens wie des Rechtes) hängt tief zusammen mit der Zuversicht auf erreichbare Sicherheit, spez. rechtlich geschützte Sicherheit, die als selbstverständlich garantiert sein muss und welche erst die erforderliche technische und organisatorische Sicherheit schaffen lässt.

Diese Gleichmässige und gerechte Sicherung ist in der heutigen komplizierten Zeit nur auf Grund kausalen naturwissenschaftlichen Erkennens und der statistischen Betrachtung ausreichend möglich — Die wirklich umfassende kausale Erkenntnis befreit sowohl vom Aberglauben, wie vom Missbrauch jeder Gewalt. In ihr lebt sich auch das verantwortungsfreudige freie Gefühl des geistig Fähigen aus.»

»Das Leben, die Organisation der komplizierten Lebensverhältnisse, stehen in engem Zusammenhang mit der Auffassung der Arbeit, durch die Arbeit erwacht Einsicht, Solidarität und Verantwortung. Alle Einrichtungen, die natürliche, gesunde Arbeit und Entwicklung hemmen, führen zu unglücklichen Konflikten.»

»Die Gefährlichkeit und ihre wissenschaftliche Beherrschbarkeit müssen parallel gehen.

In der nächsten Zukunft wird man noch mehr Aufmerksamkeit aufwenden müssen als bis heute, um die Kräfte und ihre hohen technischen Potentiale ohne Schaden in ihren künstlichen Bahnen zu halten, zu verwenden».

»Auch die Erfahrungen über die Konstanz tiefer Naturgesetze erfüllt die weissen Rassen, die unausweichlichen Folgen der systematischen Erkenntnis. Wir wissen, dass keine Gedanken haltbarer, weiter fortwirkend sind, als die Erkenntnisse, welche Beherrschung der Kausalzusammenhänge, Voraussicht lehren.

Diese unsere Zeit wird fortbestehen als die gewaltigste Finderin grosser Naturgesetze und des ungeahnt gigantischen Strebens nach technischer Verwendung der Erkenntnis, — wie sie weiterleben wird als die Zeit, in der so vieles von Schutzmassnahmen, Gefahrenkenntnis und Verantwortung in den Anfängen stecken blieb, weil die tiefen Folgen nicht verantwortungsvoll beachtet wurden, z.T. auch ganz übersehen wurden. Die aufdringlich bekannten, als erkennbar bekannten Gefahren werden vermieden — an die schwer erkennbaren denkt man nicht — sie verbreiten sich — bilden Quellen, die schwer zu finden sind bis zur Katastrophe.

Nicht die jedem sich aufdrängenden Gefahren, sondern die meist unbeachteten, schwer erkennbaren Gefahren sind es, welche die Wissenschaft nach Eigenart und Erscheinungsform hauptsächlich nach den typischen Trägern der Gefahr quantitativ untersuchen muss, um die rationellsten, am wenigsten hemmenden Schutzmassnahmen zu zeigen.

Die Medizin kann die Menschen vor drohenden Gefahren schützen, d.h. sie kann den Fortschritt ohne besondere Gefahren ermöglichen. Sie kann auch auf vielen Gebieten die gerechte Anwendung der Gesetze garantieren durch naturwissenschaftliche, systematische Feststellungen.

In Zeiten grosser Gefahren erwacht der Ruf nach Verantwortung. Dieser Ruf wirkt nur dann schöpferisch, gesundend, wenn die *objektive Feststellung* dem Drange dieses Rufes entspricht, sonst zerfällt der Drang nach Verantwortung in blinde Leidenschaft nach blosser Veränderung.

In Zeiten schneller Entwicklung, wo sich schon überall der Zwang zur gesetzlichen Regelung zukünftiger Verhältnisse geltend macht, in einer Zeit, in der die Interessen der verschiedensten Richtungen gesichert werden müssen, weitsichtig und auf lange Dauer, ist der Schutz gegen Schädigung, spziell gegen wissenschaftlich festzustellende, chronische, dauernd unvermerkt wirkende, degenerative Schädingungen der Menschen eine komplizierte Hauptaufgabe. Kompliziert deshalb, weil sie vielen Interessen entgegensteht und vor allem, weil die unmittelbare Evidenz und die lebendigsten Triebkräfte fehlen, —da kann nur ein Vertrauensverhältnis zur Wissenschaft und deren Vertretern und Organisationen schützen.

Der Mensch ist auch hier sein eigner Prometheus (Vico).

Die Kenntnis der Naturgesetze und die Erfahrung hatten und haben die Tendenz, sobald die Kontrollmethoden unzulänglich werden, sich umzubilden zu einer Geheimacht, deren Reichweite sich der Gesamtheit entzieht.»

»Der weitesten Verwendung der kausal-wissenschaftlichen Erkenntnis durch Medizin und Recht zum Schutz der Allgemeinheit liegt das Feld frei, vorbereitet, und der Erfolg kann hier praktisch so gross sein, wie in den letzten 40 Jahren der Erfolg der aetiologischen Diagnose und Prophylaxe und der kausalen Therapie. Der Erfolg muss sich auch in der Gesetzgebung und der Art ihrer Entstehung zeigen, denn die Gesetze sind im wesentlichen nur neue Anwendungen vertiefter Erkenntnis, deren Vorbereitung und richtige Handhabung allen zur Zusammenarbeit erzogenen Aerzten die schwerste Verantwortung auferlegt, die aber auch mit der Genugtuung des grossen erhaltenden Erfolges drängt und anzieht...

Der Staat, (wie alle Parteien in erster Linie), aber auch die juristischen und medizinischen Fakultäten, haben die verantwortungsvolle Pflicht, die Grundlagen für ein *systematisch aus gebaute Zusammenarbeit von Recht, Medizin und Technik* zu schaffen, weil die Neuzeit, die Fortschritte, die Erkenntnis, wie die neue Gesetzgebung diese Zusammenarbeit imer mehr *voraussetzen.*

Jede schnelle Entwicklung und Umgestaltung findet bald als eine ihrer grössten Aufgaben die Bekämpfung von Gefahren.

Das medizinsich kausale Erkennen gibt die beglückende Gewissheit, dass man an der richtigen Stelle vorbauen und helfen kann.»

ZANGGER, Heinrich: *Medizin und Recht. Die Beziehun der Medizin zum Recht, die Kausalität in Medizin und Recht und die Aufgaben des gerichtlich-medizinischen Unterrichts.*-Zürich 1920.
Seiten 675f, 679, 689, 690f, 693, 694.

I. *MEDICINE AND LAW IN INDUSTRIAL HYGIENE*

The practice of occupational medicine in the Federal Republic of Germany is as far as it is not completely determined by the interests of the employers (e.g. in the case of employment examinations) dominated by the Occupational Diseases Statute (*Berufskrankheitenverordnung BKVO*) and the concept of limiting values (MAK-values) (*Grenzwertkonzept*). Both corner stones of occupational medicine are based on the assumption that an effective protection against industrial pathogenicity can be attained by the cooperation of clinico-scientific investigations and legal and police regulations. In this respect the practice of occupational medicine is on the one hand grounded in the «medical model», by means of which the approach of medicalisation towards the human body can be described. On the other hand it is based on the «model of social correction», which describes the compensatory solution of social problems. Starting from a relatively helpless description of the interrelation of industrial labour and disease in the context of medical police (Medizinische Polizey), the emergence of the subject «industrial hygiene» and, later, «occupational medicine» can be historically traced back to experimental hygiene, bacteriology and hospitals on the one hand, the system of social insurance on the other hand. The fact that the subject was fixed in the medical model as well as in the model of social correction prohibited at the same time that the subject's outlines became too clear.

Below I want to make clear that the fixing of the practice of industrial hygiene and occupational medicine lead to the vicious circle in which the attemps to strengthen the subject used to contribute to the consolidation of its defectiveness. In other words: the development of industrial hygiene and occupational medicine took place in the context of scientific and clinical methods and the proof of causal connections; by this, the subject was restric-

ted to individual cases, specific (dose-effect) connections and compensatory regulations; by attempting to increase the subject's social relevance, scientific and clinical methods and the proof of causal connections were supported—— and therewith the systematic limits.

Many doctors, who were engaged in social affairs, demanded and pushed ahead the Occupational Diseases Statute, which, in turn, brought about a hardening of the systematic limits of industrial hygiene and occupational medicine.

Scientific, legal, and socio-political restrictions of industrial hygiene, due to specific power structures, hand their effects on the genesis of the Occupational Diseases Statute. The resistance and substancial interventions of big business in the field of chemistry had a decisive influence on the extension of accident insurance to occupational diseases, as regulated by the Occupational Diseases Statute (*BKVO*) since 1925. It was only achieved because of the social pressure in the postwar period and the international pressure of the Washington conference; but the legal regulations, which were achieved, aimed at preventing conceptualization, problematization and politicization of industrial pathogenicity by extending accident insurance.

The Occupational Diseases Statute places certain diseases within the responsability of accident insurance, which implies some advantages for the persons affected. According to Paragraph 551 section 1 of the Reich Insurance Statute (*Reichsversicherungsordnung, RVO*), occupational diseases today are diseases which —according to the knowledge of medical science-have been caused by specific influences, to which certain groups of persons are liable in a much higher degree than the rest of the population due to their work. These diseases must have been specially indicated by federal government in a statutory order (principle of lists) and the person insured must fall ill in the context of an insured occupation. This definition facilitates a restrictive control of the acces to the more profitable benefits of accident insurance. The Occupational Diseases Statute had this restrictive control in mind from the start. On the one hand it dealt with the control of claims and the distribution of costs and charges, on the other hand with the control of claims and the interrelated proof of dangers and defects due to industrial production. The Occupational Diseases Statute offered an instrument for the economic as well as for the ideological side of the problem, because costs and charges could be divided and shifted between health and accident insurance, and —more relevant— between the persons affected (and their

families) and the insurance companies, and because a legally guaranteed claim could be tested in the individual case with regard to individual misbehaviour and individual covetousness. Even the insertion of Paragraph 551 section 2 Reich Insurance Statute (RVO) in 1963, according to which diseases, which have not been listed as occupational diseases, can be compensated like accidents, is structured in a restrictive way. It also demands specific proofs that a certain group of persons is exposed to specific dangers in a significantly higher degree than the rest of the populace, that there are new medical insights, and that a causal nexus between the disease and the dangerous work is sufficiently probable in the specific case. It always deals with individual and exceptional cases; i.e. industrial pathogenicity is regarded as an individual person's problem.

Focussing on individual and special cases is part of the structural principles of accident insurance. First, accident insurance excluded work-caused diseases because they could not be understood as events of relatively short duration with —though related to the factory— basically external causes. Doctors, who were active in social conflicts, tried to expand accident insurance to work—caused diseases not only in order to improve the position of the person affected, but also to incite public attention for industrial pathogenicity and to intensify scientific endeavours. Another group of doctors who were simply interested in scientific precision and consequence had similar positions. This group was strongly influenced by forensic medicine and asked for the specific proofs of special poisonous substances and the specific toxic effects. Both groups were concerned with expanding the possibilities of medical examinations in legal matters. Both groups agreed that this was only imaginable by applying scientific and clinical methods.

The integration of medical knowledge in social insurance connected scientific and clinical methods with the restrictive principles of compensation. This resulted in a mutual confirmation of the «medical model» and the «model of social correction». But it resulted also in a socio-political tendency towards ineffectivity and deconceptualization which, in the end, made the social relevance of industrial hygiene and occupational medicine dubious: the emphasis on scientific methods did not allow »reliable findings of occupational medicine», particularly not in the fields where these findings could be the preconditions for a socially effective and just intervention or decision.

The genesis of this strange interaction will be demonstrated below by using official files. I will not put much emphasis on the definition of work-

caused diseases or the relevance of special work-caused diseases, which are on the list, but rather on the historical conditions of the concept of occupational diseases.

II. *EXTENSION OF COMPULSORY REGISTRATION OR OF ACCIDENT INSURANCE?*

Accident insurance had already been constructed in the German Empire (Kaiserreich) in order to take place of employers' liability; thus compulsory registration and other forms of reporting were neglected. Industrial pathogenicity seemed to be worth reporting only if it caused public offence; the insurance was supposed to prevent this. The same kind of logic applies to the extensión of accident insurance (until later on this development could be reversed when factory doctors demanded compulsory registration in order to limit the extension of insurances).

All attempts to prevent and fight the causes of industrial pathogenicity were first of all aiming at reliable knowledge on health hazards and diseases. But statistics were underdeveloped and regular information did not exist. Therefore, the endeavour to know more about the interrelation of industrial labour and diseases was central in the beginning of the Occupational Diseases Statute.

This endeavour was above all aimed at chemical industry because it produced obviously dangerous substances and offered at the same time little conventional protective measures as they existed in the trade work traditions. There was also a close historical relation between chemical production and laboratory medicine which also developed in the field of industrial hygiene by applying experimental methods. The major chemical companies promoted the practice of industrial hygiene by employing factory doctors, whose tasks, however, had a rather selective character (in employment and suitability examinations). The terrific boom in chemical production towards the end of the 19th century and then again in World War I (fabrication of ammunition and amonia synthesis) contributed to the exemplary aggravation of industrial pathogenicity in this branch.

Knowledge on the interrelation of industrial labour and diseases in major chemical industry was on the one hand a simple and obvious issue, on the other a very complicated problem and hard to solve. On the one

hand the workers dealt with poisonous substances, which could be tested in simple dose—effect relations; on the other hand their composition was often a secret. The interrelation between the handling of poisonous substances and certain diseases could hardly be denied, but at the same time it could not easily be proved in the particular case. The factory doctors in major chemical industry utilized this fact in the end when they agreed to accept that an extension of accident insurance should cover specific occupational intoxications but not diseases due to industrial labour in a wider sense.

But first of all, before the turn of the century, specific, outstanding intoxications were discussed, like poisoning by mercury, arsenic, lead (white lead), and phosphorus. Comitted toxicologists like Louis Lewin, professor in Berlin, contributed a lot to the recognition of these poisonings as accidents. The term «occupational disease» meant that the damage was subsumized under health insurance, because it could not be proved that an accident had taken place, especially because suddenness and external causality could not be detected. So the problem was —different from the way we see it today— to prove that a certain disease was *not* an occupational disease. Such doctors preferred to take every work—caused disease as an accident and thus have their compensation taken over by accident insurance. Particularly Wilhelm Hanauer, Louis Lewin, Theodor Sommerfeld, and Ludwig Teleky supported this demand.

An important impetus on these discussions came from international congresses which tried to formulate minimum requirements for industrialized nations in order to prevent that technically outdated processes with great health hazards could in international competition be preferred to «progressive» processes of production for economic reasons. The question of occupational diseases was discussed under this aspect during the International Congress for Workers' Insurance in Bern in 1891, in 1894 van der Borght (Aachen) delivered a report on the International Congress for Workers' Insurance in Milano, in 1905 Siefarth (Berlin) in Vienna. Finally, in 1908, during the congress in Rome, a great debate took place, in which Weyl, Teleky, Glibert, Rulens, Jouanny and Devoto participated. Of course the outlining and definition of occupational diseases were also discussed on the international congresses for industrial hygiene in Milano in 1906 and Brussels in 1910.

The International Association for the Legal Protection of Workers summed up the international discussions. This association had a tradition of social reforms and took the declaration of intention of the Conference on

Workers' Protection (*Arbeiterschutzkonferenz*) in Berlin in 1889 seriously. That conference had served Bismarck for his attempt to organize the German Empire's capacity to integrate within and to become competitive outside its borders at the same time. The social reformers met in Zürich in 1897 for the first time, and F. Erismann demanded already exact reports on ways of production dangerous to health, the prohibition of children's and women's work in these parts of the production, shorter working hours, periodicals examinations of the workers, liability of the employer for health defects, and the ban for exceptionally poisonous substances. The second meeting of the International Association in 1901 decided to establish a commision which should compile information on the great health hazards due to white lead and white phosphorus and try to achieve a ban of these substances. The third conference in Basel in 1904 expanded the discussion to other industrial poisons and decided to find suitable ways to fight systematically against all occupational poisonings, e.g. through lead, mercury, arsenic, chromium, aniline, etc., according to the following basic patterns: 1. Obligation for doctors and hospital to register occupational diseases at sanitary supervisory authorithies. 2. Independent position of factory doctors. 3. Obligation for employers to register poisonous substances. 4. Special morbidity cards of the insurances for occupational authorities. 5. Encouraging of study and knowledge of occupational intoxication, especially in the field of medical training. 6. Official doctors trained in industrial hygiene. 7. Limitation of working hours for workers dealing with poison according to the danger of intoxication.

Besides, a commission of experts should be appointed in order to put up a list of those chemical substances with poisonous character and list them according to their dangers (1).

This was a remarkable synopsis of positions towards industrial hygiene. The reflections were obviously to the point: the idea was to prevent work-caused diseases, to decrease industrial pathology effectively. These demands may have been exemplary, nevertheless, they had one basic defect: they never tried to make society capable of dealing with the dangers of industrial production by investigating and changing the interaction between the work and disease; they rather aimed at a pragmatic way to make use of scientific insights for socio-political decisions and thus to increase its influence. This counteracted in the end the orientation towards the problem.

(1) SOMMERFELD, Th. (1908) *Entwurf einer Liste der gewerblichen Gifte,* Jena, pp. 4 ff.

But let us first trace back, how the central intention of the International Association —to offer more knowledge on industrial pathogenicity and a stronger inclusion of experts- turned out to be a stimulation for compensatory solutions.

The Badian Society for Social Reform (*Badische Gesellschaft für Soziale Reform*), which had the most progressive tradition in the field of workers' protection in the German Reich, addressed a petition to the *Reichsregierung* on 21.5.1906, in which it combined a survey of occupational poisonings with compulsory registration of certain occupational diseases. At the 4th meeting of delegates of the Association the discussions concentrated on the ban of white lead, but nevertheless the listing of a comprehensive list of occupational intoxications was decided. For the German section Theodor Sommerfeld compiled a list that contained the following substances:

> «Ammonia, amyl alcohol, aniline, antimony and compounds, arsenic and compounds, arsenic hydride, benzene, prussic acid, potassium cyanide, rhodanate, lead, chlorine, chloride of lime, chloride of sulphur, chromium and compounds, dinitrobenzene, hydrogen fluoride, formaldehyd, carbon oxide, manganese and compounds, methyl alcohol, nitrobenzene, nitrous gases, phosphorus, picric acid, pyridine, mercury, hydrochloric acid, carbon disulphide, hydrogen sulphide, sulphurous acid» (2).

R. Fischer, factory inspector in Frankfurt, made a comprehensive report on this list, so that both documents could be presented to the regional sections to be discussed —according to the decision of the 6th meeting of delegates in Lugano in 1910. This list (Th. Somerfeld/R. Fischer: *Liste der gewerblichen Gifte.* Jena, 1912) contained 55 substances. The main problem for the author consisted in drawing a clear line to non-occupational intoxications and in including the permanently increasing groups of new chemical compounds and means of production and usage.

The high quality of this list, which was regarded as exemplary till the end of the Weimar republic, and international pressure by the Association stimulated the discussion about necessary socio-political interventions. This pressure created space which was used for the model of social correction.

The model of social correction was based on the assumption that the economic and technical progress in itself improved the possibilities of

(2) *Op. cit.*, p. 7.

human beings to lead a healthy and content life. Corrections would be only necessary at certain points, e.g. if personal interests contradicted social interests. Then police measures could be taken or the conditions of competition could be regulated; corrections should balance hardships for which the individual was not responsible.

The model of social correction was formally based on the assumption that equal citizens settle their affairs in contracts and that the citizen who acts in society is liable for the effects of his actions on society. It was not that easy, however, to maintain both principles, freedom of contract and liability, in the development of industrial production. On the one hand, there were quite different «liberties» which led to a wage-contract between the parties. On the other hand, it is even more important for us that the employer was basically liable for all hazards and defects happening to his private production. The Liability Laws (*Haftpflichtgesetzen*) were indeed based on this logic —even though these laws tried to reverse it. Compulsory registration of occupational diseases and an extension of accident insurance to occupational diseases got to be a trouble area: both measures had to discover the employer's liability and substantiate his duties. But the employers opposed this with all their might; for that reason they avoided compulsory registration and wanted to leave occupational diseases in the non-specific competence of health insurance.

As supporting measures to their principal blockade the employers' associations participated in such extensions of the system of social insurance that could defuse this trouble area. This was already calculated in the German Accident Insurance Law (*Unfallversicherungsgesetz*) in 1884. So the main question for the employers when discussing the extension of accident insurance was that the problem of liability played no part. The fact that an extension had to be accepted at all followed from the international situation.

Switzerland led the way. Under the auspices of the factory inspector and doctor Schuler and the professor of medicine Désor Switzerland incorporated in its Law on Labour in Factories (*Gesetz über die Arbeit in Fabriken*) on 23.3 1877 and its Law on Liabilities of Factories (*Gesetz über die Haftpflicht aus Fabrikbetrieben*) on 25.6.1881 the possibility to include occupational diseases in liability law. This was absolutely necessary because Swiss legislation was based on the assumption that «physical injuries» (*Körperverletzungen*) were «temporarily limited violent external effects» on the body so that even acute intoxications could not be included. On 19.12.1887 the Swiss *Bundesrat* established a list of those diseases which should be included in liability law,

among them those caused by irrespirable and, poisonous gases, smallpox, anthrax, and glanders. In 1901 this list was extended to 33 items, and further in several years (1902, 1916, 1920, 1928).

In 1906 England went a step further. The Workmen's Compensation Act contained in section 6, subdivision II the requirement that the prevention of occupational diseases should be furthered, too. Inquiries and surveys had preceded in the years 1903 to 1905. The English list started with six items (anthrax, lead, mercury, phosphorus, arsenic, ancylostomiasis) and was also continually extended.

Other countries acted in similar ways, like Russia by the Law on Workers in Mines on 15.5.1901 and the Law on Workers in Artillery Administration on 9.7.1904. France insured sailors against accidents and occupational diseases by law on 21.4.1898; other occupational diseases followed in a law on 25.10.1919; Italy established a commission in 1902; Portugal passed a law on 10.5. 1919.

In addition to that in the German Empire a drastic and important sociopolitical change takes place around the turn of the century which plays a decisive part in the moulding of the concept of occupational diseases although the two things seem to have little in common: what I mean is the growing significance of insurances for trade unionists, who hoped to have found in the field of social protection a new ground whereupon practical and effective reforms could be attained without losing socialdemocratic ideas of a utopian state. Based on criticism of the inadequate benefits of social insurance, the German social democracy and trade union movement developed a basically positiitive position towards the model of social corrections. The system of social insurance thus proved to be a powerful integrative factor in the society of the German Empire. This should even intensify in post—war society which was severly shaken after the lost war.

On the occassion of budget debates in the German Reichstag the Social Democrats used to complain about the workers' health hazards and inadequate protective measures. The social-democratic members of the *Reichstag,* however, basically had the intention to demand the realization of the existing laws also in the debates preliminary to the reforms of social insurance. Körsten, e.g., criticized in the *Reichstag* on 11.2.1904 how the Reich Insurance Office (*Reichversicherungsamt*) interpreted these law.

> Die Berufsgenossenschaften gehen heute darauf aus, alles als Gewerbekrankheiten zu stempeln. Eine Gewerbekrankheit kann man doch nicht anders auffassen als eine Krankheit, die sich im Laufe der Tätigkeit in dem Berufe eingestellt hat. Aber jetzt stehen die Dinge so, dab einige Tage schon genügen, un dem Reichsversicherungsamt die Gelegenheit zu geben, zu erklären: das ist eine Gewerbekrankheit. Ich kann Fälle anführen, wo zeitlich und örtlich festgestellt war, dass in ganz kurzer Zeit Rohrleger sich eine Bleivergiftung zugezogen hatten. Der Fall wurde abgewiesen. In einem anderen Falle Phosphornekrose. Ich erinnere mich eines Falles, wo ein Mann, der kurze Zeit in einer Giesserei angestrengt arbeiten musste, die Giessdämpfe eingeatmet hat, weil nicht die nötigen Schutzvorrichtungen vorhanden waren. Der Mann erlitt den Tod, und das Reichsversicherungsamt sagte: weil schon einige Tage die anstrengende Tätigkeit verrichet war, ist es kein Unfall, sondern eine Gewerbekrankheit. Ja, meine Herren, das ist ja der Begriff, der dem Reichsversicherungsamt und überhaupt den Gerichten die Möglichkeit gibt, mittels dieser Gewerbekrankheiten alles zu machen. Zwei, drei Tage sind schon genug, um nachweisen zu konnen das ist eine Gewerbekrankheit. Wir haben grosse Fabriken in Berlin, von denen ich wunschte, dab die Herren sie einmal besichtigen, z.B. die Giesserei der Allgemeinen Elektrizitätsgesellschaft, um zu sehen, unter welchen Verhältnissen die Arbeiter dort arbeiten müssen... Die Arbeiter haben dadurch, dab ihnen alles entzogen wurde, die Haut zu Markte tragen müssen; durch diese Praxis wird dem Arbeiter immer mehr die Versicherung entzogen, und dies geschieht namentlich durch die Vermittlung der Vertrauensärzte, allerdings auch mit Hilfe der anderen Aerzte (3).

I would like to state two points: 1) the definition of occupational or work-caused diseases left enough space to fix the real benefits of social insurance according to aspects of social economy on the social order and to divide them between the contributors of the insurance; 2) the legal regulations showed weaknesses if they were not carried out by medical experts and were not additionally legitimated. The reform of social insurance was pushed forward in both directions in form of the Reich Insurance Statute (*Reichsversicherungsordnung*).

In the *Reichstag* the debates particularly on health hazards in chemical industry did not stop. Chemical industry prepared itself and commssioned Fritz Curschmann, the leading factory doctor (Agfa Wolfen), to gather statis-

(3) Sten. Bericht 1904, pp. 885 ff; *cf.* HOHMANN, J. S. (1984) *Berufskrankheiten in der Unfallversicherung,* Köln, pp. 81 ff.

tics which proved the relatively harmlessness of chemical labour (4). The background for these endeavours was the draft of the Reich Insurance Statute which planned an extension of accident insurance to occupational diseases. The Social Democrats wanted to replace the intended «*Kann-regelung*», which implied no strict obligation, by a «*Soll-regelung*», which implied obligation. But the occuring resistance led only to a regulation of paragraph 547 Reich Insurance Statute, in which the Bundesrat was authorized to extend accident insurance to certain listed occupational diseases. There was now a legal possibility to proceed with a list concept as in other states.

The realization, however, met with resistance. Again and again representatives of the employers maintained that workers in chemical factories were not exposed to special health hazards and did not suffer from greater health defects.— The background for this was the personnel policy of major chemical factories carried out by the factory doctors by which, in fact, all workers with symptoms of diseases were selected at the right moment so that a relatively healthy workforce could be presented. The Social Democrats complained in the *Reichstag* that paragraph 507 of the Reich Insurance Statute had no consequences and the trade associations' resistance was too strong: the paragraph did not suit the trade associations. «That's why they are up in arms against it. They claim that those who suffer from these occupational diseases are taken sufficient care of in other laws. And apart from that they object that the new assumption would undermine their foundations... They say the *Bundesrat* could not decide on its own because the question was not sufficiently clear. They want to be heard, too. They probably want their factory doctors to contribute their reports» (5). On 1.1.1913 the third book of the *Reichsversicherungsordnung* and with it new paragraph 547 came into force.

After the legal determining of a compensatory regulation it was now for the definite version of this regulation.

III. *INSURANCE OF OCCUPATIONAL DISEASES TO WHAT EXTENT?*

Due to parliamentary questions in *Reichstag* (SPD, Zentrum) and interna-

(4) *Cf.* ROTHE, Ch. (1984) Zum Einfluss der gewerblichen Vergiftungen auf die Entwicklung der Gewerbehygiene, *in:* R. Müller; D. Milles (eds.) *Beiträge zur Geschichte der Arbeiterkrankheiten und der Arbeitsmedizin in Deutschland,* Bremerhaven, pp. 280 ff.

(5) Sten. Berichte, 5.2.1913, p. 3476.

tional discussions shortly before World War I an investigation within the authorities was started to find out to what extent accident insurance could be expanded to occupational diseases.

The *Reichskanzler* arranged temporary consultations by the Home Secretary (*Reichsamt des Innern*) in November 1912. English legislation and the following reports, the new Swiss law from 13.6.1911, the French debate, and the Austrian draft were used as patterns. The *Geheime Ober-Regierungsräte* Wuermeling and Leymann represented the Home Secretary (6). The consultations should be held together with the Prussian Ministry of Trade and Industry (*Ministerium für Handel und Gewerbe*) because it was concerned with definite problems like miners' diseases (in the context of the great miners' movements of 1905 and 1910) and in January 1913 was examining whether the miners' nystagmus was to be compensated as an accident. In addition to that, the Home Secretary had also diseases caused by lead, mercury, arsenic and phosphorus in mind (7). During the consultations Leymann comented on the English list. Some of its items were marginal, some covered by health insurance in Germany, some already treated as accidents. Even according to the English list, only lead disease remained; a disease, however, which only rarely passed the restriction period of 26 weeks and for that reason was covered by health insurance, too (8).

In order to get a general idea, the Reich Insurance Office (*Reichsversicherungsamt*) sent out a circular to the chairmen of the trade associations on 3.5.1913. The Reich Insurance Office was to sum up the results. The chairmen were supposed to report on experiences with such diseases as were listed in the English law.

The Federation of German Trade Associations (*Verband der deutschen Berufsgenossenschaften*) gave its detailed opinion on 26.6.1913:

1) The extension of accident insurance to occupational diseases should be treated with caution, on the one hand out of consideration for the financial effects of such an undertaking, on the other hand out of consideration for the negative influence upon the national character which was to be expected.

2) According to the present state of medicine in the field of occupatio-

(6) ZSTA Merseburg, Rep. 120, BB VIII 8 Nr. 2 Bd.1, Bl. 3.
(7) *Op. cit.*, Bl. 17.
(8) *Op. cit.*, Bl. 18 ff.

nal diseases it would be extremely difficult in many cases to make a diagnosis, which would be at least to a certain extent valid.

3) Health insurance and, in consequence, disability and surviving dependents insurance were responsable for occupational diseases.

4) Occupational diseases in the sense of accident insurance were only diseases which were of such a nature that they could only be the consequence of a certain profession. Besides, the interrelation between profession and disease must be indisputable.

5) In case a statute of the *Bundesrat* should be necessary, the establishment of a scheme according to the English law seemed to be advisable.

6) Due to a lack of statistics the charge on trade associations which were to be expected from the acceptance of compensation for occupational diseases could not be assessed.

7) The *Bundesrat* could draw up the necessary special requirements concerning compensations for occupational diseases only by passing a new law for this part of accident insurance. This state of affairs implied that the industrial circles involved had to be consulted as much as possible before a statute was eventually passed by the *Bundesrat* (9).

In this statement the Federation of German Trade Associations sums up all reservations of the employers: incalculable obligations and problems with the redistribution of social costs, stimulation of covetousness, lack of scientific insights, transfer of responsabilities of health and accident insurance, specific causal relations, restrictive listing, participation of the employers in decisions.

All these arguments turn up from now on again and again till the third Occupational Diseases Statute (*Dritte Berufskrankheitenverordnung*) in 1936, which can be regarded as the final establishing of the concept of occupational diseases. Interestingly enough, the same arguments, which are used against the extension in general, are again used for the drawing up of the Occupational Diseases Statute. In other words: the trade associations tried first to demonstrate the impossibility of the statute by pointing out the difficulties in proving causalities, etc. When the statute was on its way they tried to prevent an effective version emphasizing difficulties in proving causalities.

(9) Bundesarchiv Koblenz, R 89, Nr. 15127.

In the end, the trade associations became one of the strongest advocates and supporters of the concept of occupational diseases—because of its immanent problems.

With regard to singular statements, which were sumed up by the Federation of German Trade Associations, we would like to point out the statement by the chemical industry's trade association (10), which clearly bears Fritz Curschmann's mark. The chemical industry's trade association did not think it possible to extend the statute beyond intoxications by lead, arsenic, phosphorus, and mercury. The Reich Insurance Office in the end delivered a rather detailed report to the Home Office (*Reichsamt des Innern*) on 3.10.1913. They used not only the trade associations' statements, but also many decisions in recourses by the Reich Insurance Office.

This survey further propagated the more or less public discussion. The 10th German Congress of Compulsory Medical Insurances for Workers (10. *Deutscher Ortskrankenkassentag*), which was under social-democratic influence, had demanded already in August 1912 a far-reaching inclusion of occupational diseases into accident insurance. The German Congress of Trade and Business Associations (*Deutscher Handwerks— und Gewerbekammertag*), on the other hand, applied to the *Reichstag* in December 1913 and feared especially for minor employers that their existencial basis would be «incredibly» jeopardized. They emphasized that more than 80 % of all accidents happened through the workers' own faults so that an inclusion of occupational diseases would only mean another gratification and incite the workers' covetousness: exaggerated social legislation would create antisocial conditions (11).

This subject was item 5 on the agenda of the 28th Congress of Trade Associations (*XXVIII. ordentlicher Berufsgenossenschaftstag*) on the 28.5.1914. The managing director of the Northwestern Iron and Steel Trade Association (*Nordwestliche Eisen-und Stahl-Berufsgenossenschaftstag*), the most influential trade association, junior barrister Ostern, and Curschmann gave reports. Ostern summed up:

> «From the point of view of the individual, an urgent financial need for extension does not exist. The interests of preventing and healing diseases are today already well looked after. Considerations of general, economic,

(10) *Ibidem.*
(11) *Ibidem.*

> ethical, and legal nature agree with good reasons against the extension. (lively applaus)» (12).

Curschmann repeated his definition of occupational diseases, which had been in all ears in those days and before (13), he emphasized

> «that occupational diseases must be understood as health damages which are caused by prolonged and repeated influences that have their causes in the method of working or in the conditions it brings about and that every singular of these influences would not be capable of causing a noticeable physical injury (14)».

Curschmann emphasized the special conditions in industrial labour which resulted in specific diseases. He moved the term out of the purely medical area; the proof of definite symptoms would not suffice. He demanded the proof of causal interrelations between specific symtoms and specific working conditions. In this context, according to Curschmann, only a small number of diseases could be taken into account. Besides, Curschmann emphasized that medicine and especially the doctors were not capable to fulfil the tasks which were connected with an extension of accident insurance. On the other hand he thought that the «extension of medicinal knowledge on occupational diseases» was a «central demand for the realization of its special insurance (*Sonderversicherung*)» (15). Thus Curschmann introduced the specific part of the medical expert, specially the occupational medical expert (among which he counted first of all the factory doctors because of the practical problems they had to deal with), and connected their part as gatekeepers with the «zero-hypothesis» (*Null-Hypothese*), according to which sociopolitical measures should not be undertaken as long as an unchallenged medical insight did not exist-because it had to be assumed that a causal interrelation between industrial labour and disease did not exist as long as it was not exactly proved.

(12) Bericht 1914, p. 44.

(13) *Cf.* CURSCHMANN, F.: Berufskrankheiten und Vergiftungen und die Unfallgesetzgebung, *in: Verhandlungen des III. Internationalen Medizinischen Unfallkongresses zu Düsseldorf vom 6. bis 10. August 1912,* Düsseldorf (n.d.) pp. 375-377; CURSCHMANN, F. (1913) Vergiftungen und Berufskrankheiten, *in:* F. Grumpecht; G. Pfarrius; O. Rigler (eds.) *Lehrbuch der Arbeiter-Versicherungsmedizin,* Leipzig, pp. 544-582.

(14) Bericht 1914, p. 44.

(15) *Op. cit.,* p. 49.

The trade associations congress passed a corresponding resolution.

The debate was stopped by the war. The war, however, gave a new impetus, too.

IV. *«PEACE CAN BE ESTABLISHED ONLY IF IT IS BASED UPON SOCIAL SOCIAL JUSTICE»*

Production for the war had an enormous increase of health hazards as a consequence. The persons inflicted were increasingly women, a fact which raised the problem of the development of the population. The trade unions took up the question of health hazards in ammunitions factories during the world war. This was surely a clever move to bring the subject into public discussion again. On 28.6.1917 Robert Schmidt applied to *Reichskanzler* von Bethamann-Hollweg. He presented the case of the factory worker Josef Schmid from Neumark i.O., who had died from an intoxication of dinitrobenzene in 1915 already, and whose widow had for the time being pushed through a death benefit of 80 Marks and widow's pension and orphan's allowance of 723 Marks per year in a charge against the trade association of chemical industry. This decision of the High Insurance Office (*Oberversicherungsamt*) was reversed by the Reich Insurance Office after recourse by the trade association on 26.6.1917, above all because the High Insurance Office had without authorization judged the intoxication to be an accident and not an occupational disease. Robert Schmidt demanded to make use of paragraph 547 Reich Insurance Statute and referred not only to the increasing number of intoxications of this kind, but also to private law suits which were due and which the trade unions would have to initiate. This would not be —he made this rather explicit— beneficial to German interests in the war.

In fact the authorities reacted immdiately and decreed already on 10.12.1917 the granting of death benefit, widow's pension and orphan's allowance in cases of health damages due to aromatic nitro compounds. Paragraph 547 of the Reich Insurance Statute had been applied for the first time.

Two days before this had been announced, the conference of factory

doctors in major chemical industry had met in the Institute for Industrial Hygiene in Frankfurt. On the agenda were (16):

1) Compulsory registration of intoxications through nitrated aromatic carbonhydrides. Speaker Curschmann.

2) Physical damages caused by arsenic in the war industries. Speaker Hahn.

3) Intoxications through tetranitromethane and trinitrotoluene. Speaker Koelsch.

4) Suitability of women for work in chemical industry. Speaker Curschmann.

The conference suited the situation in certain respects.

Curschmann dealt with the first item in a clear deviation of the previous strategy. After paragraph 547 *RVO* had been applied, the factory doctors tried to integrate their competence into the law suits which were to be expected. Curschmann sumed up his report, which had appeared in *Zentralblatt für Gewerbehygiene,* in the following basic principles:

1) The coming into force of the *Bundesrat*'s statute will —due to a lack of compulsory registration— in many cases meet with considerable difficulties.

2) The statements in the doctors' and insurances' reports will in most cases not be a sufficient basis for a *postmortem* —assessment concerning the causal interrelation of work and death.

3) Starting from the tendency that an extension of the statute will not only concern diseases leading to death but also other occupational intoxications, we see in compulsory registration of such diseases a necessary precondition for this arrangement because only by doing so an assessment seems possible.

4) Only by compulsory registration can a basis be attained for the extent of occupational intoxications and for the question whether its inclusion into accident insurance according to paragraph 547 of the *RVO* is necessary and possible.

5) At the same time, only compulsory registrations will produce the

(16) Bundesarchiv Koblenz, R 89, Nr. 15128.

> important clinical material which is necessary to recognize these diseases to a greater extent.
>
> 6) The desired successes of compulsory registration mentioned under 3, 4 and 5 can only be attained if the registration prescribes certain medical inquiries starting with the beginnings of the diseases, which have to be dealt with according to uniform aspects. The extension and revision of the accident reports used by the chemical industry's trade association and of the registration form for occupational intoxication used for statistics in chemical industry should provide a suitable basis.

In the debate Koelsch, the first regional occupational doctor (*Landesgewerbearzt,* Munich) supports Curschmann. He underlines the central idea of compulsory registration once more by pointing out that the insurance companies could not carry out such a compulsory registration, so that the employer would have to report to the trade association. Thus it becomes obvious that Curschmann wanted to install a procedure in which factory doctors and trade associations of chemical industry would control registration and processing. This new strategy was also retained during the preparations for the Occupational Diseases Statute (*BKVO*).

But first of all the war had consequences of a quite different kind. After the German Reich's capitulation peace negotiations began. The allied and associated governments proposed detailed regulations. In part XIII of the draft of the peace terms they planned an international regulation for worker's protection: a standing organization was to be established in which the members of the League of Nations should participate and which consisted of a general meeting and an International Labour Office. The general meeting should decide on proposals enacted nationally, or decide upon draft versions for international agreements. The basic principles of part XIII ran as follows:

> «Whereas the League of Nations has for its object the establishment of universal peace, and such a peace can be established only if it is based upon social justice.
>
> And whereas conditions of labour exist involving such injustice, hardship and privation to large numbers of people as to produce unrest so great that peace and harmony of the world are imperilled; and an improvement of those conditions is urgently required: as, for example, by the regulation of the hours of work, including the establishment of a maximum working day

> and week, the regulation of the labour supply, the prevention of unemployment, the provision of an adequate living wage, the protection of the worker against sickness, disease and injury arising out of his employment, the protection of children, young persons and women, provisions for old age and injury, protection of the interests of workers when employed in countries other than their own, recognition of the principle of freedom of association, the organisation of vocational and technical education and other measures.
>
> Whereas also the failure of any nation to adopt humane conditions of labour is an obstacle in the way of other nations which desire to improve the conditions in their own countries;
>
> The HIGH CONTRACTING PARTIES, moved by sentiments of justice and humanity, as well as by the desire to secure the permanent peace of the world, agree to the following: ..., (followed by the institution of the International Labour Office)» (17).

Even if the relation to «universal peace» seems to be a bit artificial from our point of view, the attempt to give the peace contract social contents is remarkable. This aspect of the Treaty of Versailles has been completely neglected due to purposeful polemics during the Weimar Republic and National Socialism, but also because of the outstanding problem of reparations, and vanished even from history books. In our context, the obligation to protect workers against sickness and work-caused diseases as well as injuries is of special interest. The German peace delegation answered in its note on 10.5.1919 in an offensive way: as far as proceedings were concerned, a stricter extension of the agreement was desirable; concerning the contents of the regulations, an «equal status of occupational diseases and industrial accidents» would be preferable (18). In how far tactical considerations played a part in the peace negotiations can not be further examined here (only concepts and notes, but no minutes on reports are available). The allies, however, sticked to their wording.

In November 1919 the first International Work Conference took place in Washington. Germany and Austria had not been invited. The conference passed five draft versions for agreements; they dealt with reduction in wor-

(17) SCHIFF, W. (1920) *Der Arbeiterschutz der Welt,* Tübingen, pp. 468 ff.; English text in TEMPERLEY, H.W.V. (1920) *A History of the Peace Conference of Paris,* vol. 3, London, p. 314.

(18) *Op. cit.,* p. 467.

king hours to eight hours, women's night-work, minimum age for children's employment, young persons' night-work, the employment of women before and after delivery, the protection of women and young persons against lead intoxications, the prevention of anthrax, the prohibition of white phosphorus, and the establishment of a state sanitary service (the last four items were only recommendations). Only the recommendations could establish a basis for a more effective protection against the dangers which had played a part in the discussion on the extension of accident insurance. It seems remarkable, by the way, that the conference recommended to each member of the International Labour Office (ILO) to establish an effective factory inspectorate as soon as possible and, moreover, «a state sanitary service with the spe cial task to watch over workers' health, which should keep close contact with the ILO» (19). Although this was a recommendation only, it had like the other recomendations a decisive influence on the German authorities at the beginning of the Weimar Republic. The German reports on the regulations, which had been suggested by the Washington conference, show the endeavour to regain international respect in this traditional field of politics. The extension of the occupational medical services (*Gewerbeärztlicher Dienst*) in Prussia from 1920 onwards and the preparations of the Occupational Diseases Statute *BKO* must be seen under this aspect, too.

V. *THE PREPARATIONS OF THE OCCUPATIONAL DISEASES STATUTE (BERUFSKRANKHEITENVERORDNUNG, BKO)*

It took till the end of 1922 until after all the internal turmoil the problem of industrial pathogenicity received a certain public interest again. The chemical industry's trade association had already become attentive in December 1922 and inquired of the Ministry of Labour (*Reichsarbeitsministerium*) whether a motion concerning the inclusion of occupational diseases in accident insurance was being discussed (20). On 12.12.1922 the Prussian *Landtag* had decided to work towards an extension of accident insurance to miners' occupational diseases. During the debate of the budget of the Ministry of Labour (to which the competences of the Home Office, had been transferred) in May 1923, the Social-democratic party introduced a resolution,

(19) *Op. cit.*, p. 487.
(20) ZSTA Postdam 39.01, Nr. 5261, Bl. 3.

«to request of the *Reichsregierung* to take the necessary steps to recompensate workers who fall ill due to occupational health hazards (occupational diseases) according to the regulations of the Reich Insurance Statute concerning accident insurance» (21).

With this resolution the senior socio-political expert of the SPD, Brey, took up activities prompted by affected chemical workers. This resolutions and a consistent propaganda by christian trade unionists, such as the Chistian Metal Workers' Association Württemberg (*Chistlicher Metall-arbeiterverband Württemberg*) set the ball rolling again.

In October the expert in charge in the Ministry of Labour reported on the work on a draft which had been started by *Regierungs-Medizinalrat* Giulini. He pointed out the problem to trace back a certain disease to a characteristic of a certain occupational practice with a certain reliability. This problem caused the authorities to make a list which contained only a few diseases and to expand it according to further experiences and insights. But it was also taken into consideration that the *Reichstag* should take the opposite way so that a greater number of diseases could be listed. The following conditions would, however, have to be fulfilled:

1) they have to be chronical diseases,

2) it must be possible to trace them back to the occupation with sufficient probability,

3) they must be of diagnostically unambiguous character.

This could be applied to the following diseases (22):

1. Lead poisoning.
2. Phosphorus poisoning.
3. Arsenic poisoning.
4. Mercury poisoning.
5. Benzene poisoning.
6. Poisoning by nitro compounds of benzene.

(21) I. Wahlperiode 1920/23, Drucksache Nr. 5787.
(22) *Op. cit.*, Bl. 36 ff.

7. Poisoning by amido derivatives of benzene.

8. Poisoning by carbon disulphide.

9. Poisoning by chromates (chromic acids and its alkali salts).

10. Poisoning by nickelcarbonyl.

11. Poisoning by manganese.

12. Lung diseases of workers in *Thomasschlacke*-mills, stone-masons, millers, bakers, miners, and tunnel workers, moulders and foundry cleaners in iron foundries, porcelain workers, metal grinders and glass grinders, rag workers, tobacco workers.

13. Cataract of glassblowers.

14. Epithelial cancer of chimney sweeps and X-ray workers, papilloma of paraffin workers.

15. Nystagmus of miners.

The problem of fixing a latent period within which the claims had to be announced was also being discussed. The expert thought it necessary to make clear «that the diagnosis whether a disease is an occupational disease or not can only be made by occupational doctors in the public service (*beamtete Gewerbearzte*) or other medical officers» (23). The factory doctors were, if they existed, to be heard. Already in this early preparatory phase of the Occupational Diseases Statute (*Berufskrankheitenverordnung*) topics arose which were not solved in the ensuing discussion and are today still relevant: the responsability of occupational doctors in the public service mentioned, contradicted the factory doctors' strategy briefly hinted at above, who wanted to have the procedure under their control within the framework of responsability by trade associations.

The Federation of German Trade Associations (*Verband der Deutschen Berufsgenossenschaften*) and the chemical industry's trade association had obtained the confidential draft (24) in order to state their positions. The chemical industry's trade association delivered its statement promptly. Starting from the endeavours of the comittee for industrial hygiene at the International Labours Office in Geneva (L. Carozzi had a short time before visited the

(23) *Op. cit.*, Bl. 37 ff.
(24) *Op. cit.*, Bl. 59 ff.

republic and met with leading hygienists in Frankfurt), the trade association opposed a generous extension of accident insurance. Again they pointed out the problems of making diagnoses and of proving causal interrelations. Only phosphonecrosis, ulcers due to chromium, lead palsy and lead encephalopathy, and tumors of the bladder could be regarded as occupational diseases «the compensation of which corresponded properness and the diagnosis of which was feasible according to the state of medical science» (25). The Federation of German Trade Associations followed the statement unanimously on 23.1.1925.

The revised and printed draft listed eight occupational diseases and assigned them certain trades. The justification reviewed the problems already mentioned, as they had been emphasized in the previous debates. The draft referred to diseases which had in practical jurisdiction already been treated as accidents (anthrax, symptomatic anthrax,- glanders, actinomycosis, Caisson disease, syphilis infection contracted by glassblowers, sewer gas poisoning). Furthermore, such occupational diseases had been selected so that «the above mentioned problems of diagnosis and distinguishing from similar syndroms and the determination of causal interrelations are not so great. These are first of all certain intoxication diseases occuring particularly in chemical industry» (26). Major chemical industry had not only succeeded in emphasizing the problems, but also in restricting the statute to their own area.

On 20.2.1925 a meeting of the Reich Health Council (*Reichsgesundheitsrat*) took place where the draft was to be discussed. Invited were (27):

Dr. Brachmann, *Marinegeneralstabsarzt,* Berlin (absent)

Dr. Curschmann, Professor, Wolfen

Dr. Dietrich, *Ministerialdirektor,* Berlin

Dr. Hamel, *Ministerialdirigent,* Berlin (absent)

Dr. Holtzmann, *Landesgewerbearzt,* Karlsruhe

Dr. Koelsch, *Landesgewerbearzt,* Munich

(25) *Op. cit.,* Bl. 65 Rs.
(26) *Op. cit.,* Bl. 91 Rs.
(27) *Op. cit.,* Bl. 112.

Dr. Krantz, *Ministerialrat,* Dresden

Dr. Rich. O. Krogmann, *Vorsitz. d. See-Berufsgen.,* Hamburg (absent)

Dr. K. B. Lehmann, Professor, Würzburg

Dr. Leymann, *Geh. Oberregierungsrat,* Berlin

Dr. Martineck, *Ministerialdirigent,* Berlin

Dr. Schultzen, *Generalstabsarzt,* Berlin (absent)

Dr. Simon, *Ministerialrat,* Berlin

Dr. Theleky, *Landesgewerbearzt,* Düsseldorf

Dr. Thiele, *Landesgewerbearzt,* Dresden (absent)

Under the chairmanship of Bum, the president of the Reich Health Office, the Reich Health Council decided on several alterations, e.g. to delete phosphorus compounds as well as diseases caused by chromates and benzene and skin rashes due to poisonous wood, to include, on the other hand, diseases caused by carbon disulphide, cancer of the skin caused by tar and paraffin as well as Schneeberg tumor (28).

The Reich Insurance Office, department for accident insurance, stated its position on 4.3.1925 and had a critical look on the trade associations' reservations. The Federation of German Trade Associations and the chemical industry's trade association had again had the chance to state their position to the results of discussions of the Reich Health Council. The Reich Insurance Office opposed a too restrictive version of the statute; in case the trade associations' proposals were accepted, «only the most severe cases would be recorded where there is no or only little hope» (29). This would not contribute to health politics and only lead to bitterness. The financial consequences of the statute could, indeed, not be estimated, their scale was however, not to be feared. The Reich Insurance Office did not agree with Curschmann's endeavour to leave registration and examination of the diseases to the trade associations and factory doctors. Like in cases of accidents the local police authorities would have to be informed.

It would be necessary that in cases in which occupational diseases could

(28) *Op. cit.,* Bl. 117.
(29) *Op. cit.,* Bl. 125 Rs.

be taken into account the local police authorities should consult the medical officer responsible for the district. Thus the purpose would also be fulfilled to inform the medical officers the important events concerning the health system of their distrit and to extend and spread familiarity with occupational diseases among them and in this way also among all doctors. The Reich Insurance Office had no reservations that the local medical officers were not qualified for the task. Besides, by establishing provincial occupational doctors (*Landesgewerbeärzte*) the local medical officers would have the chance to obtain further information in the field of occupational diseases (30).

The Reich Insurance Office aimed at a regulation as attained through the third Occupational Diseases Statute in 1935. But first of all factory doctors and trade associations intensified their exertion of influence and prevented that the debates departed too far from their views. For the trade association Oppenheimer presented proposals to change and extend the statute on 16.2.1925, in which the list was reduced to six items, the procedure, on the other hand, extended and complicated in 16 paragraphs. Chemical industry's statement met with positive reactions on the side of the authorities, which endeavoured to start the attempt with the Occupational Diseases Statute with a not too high risk and not too many uncertainties. Instead of a procedure which would plan a general and comprehensive extension of accident insurance and which would have to be reduced to «the real need» in practice, the authorities prefered to extend a more restrictive regulations according to the needs (31).

Practically, the authorities wanted to grant the sick persons a certain transitional pension (*Uebergangsrente*) which corresponded to higher wages for greaten risks. The practical side-effect consisted in the possibility to transfer the worker in question easily to less dangerous factories (32).

The draft was also reviewd by the departaments in question in the singular states and from the following organizations:

Vereinigung der Deutschen Arbeitgeberverbände,

Deutscher Industrie— und Handelstag

(30) *Op. cit.*, Bl. 127 Rs.
(31) *Cf.* the statement of the *Reichgesundheitsamt* on 3.3.1925, *op. cit.*, Bl. 143.
(32) *Op. cit.*, Bl. 144.

Reichsverband des Deutschen Handwerks,

Zentralarbeitsgemeinschaft der industriellen und gewerblichen Arbeitgeber und Arbeitnehmer,

Allgemeiner Deutcher Gewerkschaftsbund,

Deutscher Gewerkschaftbund,

Gewerkschaftsring deutscher Arbeiter—, Angestellten und Beamtenverbände,

Vereinigung leitender Angestellten in Handel und Industrie e.V.,

Reichsstädtebund,

Vorsitzender des Deutschen Städtetages,

Ständiger Ausschuss des Verbandes der Deutschen Landesversicherung,

Bund der Beamten und Angestellten der Reichsozialversicherung,

Allgemeiner freier Angstelltenbund,

Deutsche Gesellschaft für Gewerbehygiene,

Arbeitsgemeinschaft der deutschen amtlichen Gewerbeärzte,

Verein der deutschen Gewerbeaufsichtsbeamten

In addition to that there were the contributors to the national insurance (*Sozialversicherungsträger*). They were all invited to a meeting in the Ministry of Labour on 17.4.1925 (The occupational doctors in public service used the opportunity for a meeting of their association.)

This meeting is of a certain interest because it documents the rise of industrial-hygienical knowledge and the shifting of weigt to the disadvantage of the factory doctors: in both cases the occupational doctors in public service became more important, especially Koelsch, Holtzmann, Teleky, Thiele.

The occupational doctors in public service opposed in all important cases the attempts of factory doctors and chemical industry's trade association to establish a special regulation for chemical industry. The managing director Ostern, e.g., demanded the restriction of the statute to major factories of chemical industry «in which, due to the presence of factory doctors,

the realization would be easier» (33). Teleky contradicted successfully. Curschmann opposed the inclusion of carbon disulphide in the list because «the question was not ready for decision yet, interrelation not yet proved» (34). Teleky furnished proof in spite of problems in singular cases.

Specially Curschmann devoted all his energies to explain —after the meeting— in letters to Krohn, the *Ministerialrat* in charge in the Ministry of Labour, the opinion of chemical industry. He emphasized chemical industry's interest to get information on the draft's progress.

Another meeting of the Reich Health Council took place in the Reich Health Office on 27.5.1925 including representatives of the Home Office, the Ministry of Labour, the Reich Labour Administration (*Reichsarbeitsverwaltung*), the Reich Insurance Office, the Reich Health Office, and the Prussian Home Office, as well as representatives of the trade unions and trade associations. As doctors Professor F. Volhard, director of the university clinic in Halle, and Dr. Westhoven, senior consultant of BASF in Ludwigfshafen, joined the meeting. Specially Volhard, who was in close contact with Curschmann, took the role of opposing Teleky so that chemical industry's position found its way into the detailed regulations. This is remarkable because it shows the dominance of clinical knowledge and clinical experts in industrial hygiene, too (35).

The debates were quickened because at the same time the *Reichstag* debated the Second Law on Changes in Accident Insurance (*Zweites Gesetz zur Abänderung der Unfallversicherung*) on 31.3.1925 the first reading took place. The debates revealed many defects in accident insurance, so that the Occupational Diseases Statute could bring relief.

The *Reichsregierung* being the legal successor of the *Bundesrat* and thus authorized according to paragraph 547 of the Reich Insurance Statute issued the «Statute Concerning the Extension of Accident Insurance to Occupational Diseases» (*Verordnung über Ausdehnung der Unfallversicherung auf gewerbliche Berufskrankheiten*). This statute contained further concessions to chemical industry; above all, for the time being the calling in of occupational doctors in public service was postponed. The list contained 11 diseases which —except the first item-were of little practical relevance:

(33) *Op. cit.*, Bl. 181.
(34) *Op. cit.*, Bl. 183.
(35) Bundesarchiv Koblenz R 89 Nr. 15128.

1. Diseases caused by lead or its compounds.
2. Diseases caused by phosphorus.
3. Diseases caused by mercury or its compounds.
4. Diseases cuased by arsenic or its compounds.
5. Diseases caused by benzene or its homologues, by nitro or amido compounds of the aromatic series.
6. Diseases caused by carbon disulphide.
7. Cancer of the skin caused by soot, paraffin, tar anthracene, pitch, and related substances.
8. Cataract contracted by glassblowers.
9. Diseases caused by X-rays and other irradiating material.
10. Verminosis contracted by miners.
11. Schneeberg tumor.

The number of occupational diseases which were to be compensated was continually extended (1929, 1936, 1942, 1948, 1961) and comprises today 55 items, some of which are particularly differentiated. The Occupational Diseases Statute (BKVO) was, however, only of little importance. On the average, only 20 % of the registered cases have been compensated over the years, four fifths have been repelled; only 0.023 % of all persons insured enjoyed the extension (36).

Much ado about nothing, you could say, if it was not about the deconceptualization and margination of industrial pathogenicity which brought and brings about so much misery and injustice.

(36) Cf. MILLES, D.; MUELLER, R. (1985) *Berufsarbeit und Krankheit,* Frankfurt a.M., pp. 22, 158.