



**SWP 7/88    MANAGEMENT EDUCATION, TRAINING  
AND DEVELOPMENT IN WEST GERMANY**

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### Introduction

In a country where the 'rule of order and the law' (Rechtsstaat) is constantly emphasized; where the citizens pride themselves on being members of a 'high-performance society' (Leistungsgesellschaft); and where many are relishing the fruits of an 'affluent society' (Wohlstandsgesellschaft), it appears curious that nobody has taken the trouble to produce a legal definition of the occupation which is so readily associated with these three outstanding features of West Germany today - that of the 'manager' (Führungskraft).<sup>(1)</sup> It follows, then, that if the term is not legally defined, there can be no official statistics on the number or type of managers actually operating in the country, and surveys or polls have to be relied upon.

Individual companies in West Germany are, however, in no doubt as to which of their employees 'manage' or 'lead' (führen) and which do not. Though designations of 'manager' vary, depending on company size and the sector of the economy in which the firm is involved, 'management' (Führung) can begin at the level of the master craftsman (Meister) or even the one below, i.e. that of the skilled worker (Facharbeiter). It culminates at Management Board level in Public Limited Companies (Aktiengesellschaften) or Managing Directors' level in Private Limited Companies (Gesellschaften mit beschränkter Haftung). How many levels of management come in between is, again, a function of the size of the company and the line of business in which it is engaged.

German thought and education

The education, training and development of managers in West Germany are a reflection of the German view of the world (Weltanschauung) and the educational ideals of Wilhelm von Humboldt.

Whereas man's achievements are classified in English-speaking countries according to the Arts and the Sciences, the Germans adopt a fundamentally different approach. They distinguish between the performing and fine Arts (Kunst), all knowledge, Science and some of the Arts (Wissenschaft), and the fashioning of useful artefacts (Technik)<sup>(2)</sup>. The advertising slogan of the Audi car company, 'Vorsprung durch Technik' ('In the lead through engineering') is not idly chosen because the word Technik is imbued with so many and varied connotations for the German mind.

The position of Technik as a category of man's accomplishments in its own right contrasts vividly with that of Engineering in Anglo-Saxon countries. Here Engineering stands as merely one of the Applied Sciences, which are in themselves a subcategory of Science: in West Germany, Technik is pre-eminent because it embraces both the art and the science of making or manufacturing things.

This difference in thinking has significant implications for the West German economy and for the set of values cherished by the citizenry of the country. The pre-eminence of Technik gives rise to a manufacturing-friendly environment, with the result that West Germany has not moved too far towards a service economy. Some 40 per cent of Gross Domestic Product is still furnished by manufacturing industry, where higher value is usually added than by services.

Techniker, one of the derivations of Technik, which means 'technician', possesses mainly positive overtones in the German language. To say of someone, 'Er ist ein guter Techniker' would be to pay him the most sincere of compliments. In English, however, one might perhaps expect to encounter 'technician' used in a pejorative sense such as, (3)  
'He's a good technician all right, but ...'

The admiration of the Techniker reflects in West Germany a pervasive preference for the professional, by contrast with the British adoration of the amateur. The cult and cultivation of the professional, the expert, the Techniker, are thus the dominant features of higher education in West Germany. These same considerations also dominate the education of managers.

Much of today's education system in West Germany still aspires to the ideals of Wilhelm von Humboldt, 1767-1835, though some modern developments could not have been foreseen by him. A friend of Goethe and Schiller, von Humboldt was a man of actions rather than words. As a minister in the Prussian government, he founded the new University of Berlin, which was inaugurated in 1810. Von Humboldt laid the basis for the higher education of the nation by his practical realisation of the ideas of Germany's classical poets and thinkers. (4)

University education was perceived by von Humboldt as learning which should be based on a sound general education and which should advance 'in unity and freedom'. Both ideals live on today. The first, that of a sound general education, is reflected in the breadth of the curriculum for the examination

leading up to university entrance, which is called Abitur or Hochschulreife. Here pupils of nineteen or twenty years of age must study, and be examined in, a wide range of subjects and not merely those which they intend to pursue at university. The second of von Humboldt's ideals, i.e. that studies should proceed 'in unity and freedom', finds its echo in the length of time which West German students spend at their universities. In these ancient establishments, with long academic traditions, especially in the promotion of rigorous thinking and scientific research, the average length of diploma studies is approximately 6.0 years for students of the economic sciences, 6.2 years for electrical and 6.4 for mechanical engineers. The average cost of the courses to the students, of whom none receive grants and only one quarter loans, was in 1986 DM 61,000 for economic scientists, DM 66,100 for electrical engineers and DM 67,600 for mechanical engineers. (5)

What von Humboldt could not have anticipated are the large numbers of students currently entering institutions of higher education in West Germany. From 79,400 young people starting their studies in 1960 and 125,700 in 1970, the figure reached 225,100 in 1982, representing 21.3 per cent of the average age group between 19 and 21. The number of student places increased not only as a result of larger age cohorts but also because of greater participation rates. Currently, some 75 per cent of those qualified to enter institutions of higher education do so. (6)

Bringing together now the main strands of German thought and philosophies of education, what we witness today in tertiary education are vocationally-oriented, broadly-based and lengthy studies for large numbers of young people in West Germany, including future managers.

Education of aspiring managers

A knowledge of the West German education system is essential to any understanding of how the country grows her managers because so much of the tradition begins in the schools, polytechnics and universities.

Future managers enter West German companies at any one of six different levels after experiencing types of education which vary greatly in duration and content (see also Exhibit 1).

The lowest level of company entry, and one which is becoming increasingly rare as firms are able to be more selective in their recruitment policies, occurs after general school (Hauptschule) at the age of fifteen. Approximately 36 per cent of age group attend this type of school. Award of the general school leaving certificate (Hauptschulabschluss) - the approximate equivalent of 5 CSE passes<sup>(8)</sup> opens the way to many occupations for which formal training is required.

From here the route to management would lead via the status of apprentice (Lehrling), skilled worker (Facharbeiter) and master craftsman (Meister), with a parallel route open to young people opting for a commercial apprenticeship (kaufmännische Lehre). Although one third of the senior managers at Daimler-Benz came up through the ranks, via the two-and-a-half year apprenticeship system, this is extremely rare in view of the increasing academization of management

today - a trend which will be commented upon later (see pp.13-15).

Company entry at the second level is feasible after attendance at an intermediate school (Realschule), at the age of sixteen. Approximately 28% of age group attend this type of school, after selective entry. Successful completion of the intermediate school leads to the award of the intermediate certificate (Realschuleabschluß or Mittlerer Abschluß) - the rough equivalent of 5 O-level passes. Possession of this certificate substantially improves a young person's chances of employment and with it the all-important apprenticeship in the Dual System of work and part-time study. It also qualifies young people for attendance at a technical school (Fachschule or Fachoberschule), specialized schools offering vocational training at upper secondary level.

The third level of company entry can be achieved after completion of grammar school (Gymnasium) or of the upper technical and vocational school (Fachoberschule), at the age of nineteen or twenty. Approximately 26 per cent of age group attend grammar school, again after selective entry. The final leaving certificate, Abitur or Hochschulreife, - the approximate but much broader-based equivalent of A-level - affords legal right of entry to universities or polytechnics (Fachhochschulen), subject to the number of places available in certain university faculties which operate a numerus clausus. Approximately 28 per cent of all pupils obtain this certificate or one of its close equivalents.

One equivalent, the Fachhochschulreife, is awarded for the most part by the upper technical and vocational schools (Fachoberschulen) and permits entry to polytechnics (Fachhochschulen), some of which also insist on admissions tests and/or interviews for certain subject areas, including 'business economics' (Betriebswirtschaft). The upper technical and vocational schools can also award the Fachabitur, a certificate which provides admission to a limited number of subjects at university.

A growing number of young people possessing the Abitur or one of its equivalents are opting not to go on to higher education, or at least not straight after school. Some 15 per cent of successful Abitur candidates elect to serve an apprenticeship first and then proceed to study at university. <sup>(14)</sup> This is not uncommon, for example, in banking, where 33 per cent of the trainee intake of the Bayerische Vereinsbank take this particular route.

Other successful candidates with Abitur choose special training courses (Sonderausbildungsgänge für Abiturienten), which are also enjoying growing popularity. These special courses differ from the traditional apprenticeship in both content, i.e. more theory has to be learned, and duration. They last in excess of three years. The number of companies offering such courses rose from 200 in 1977 to 800 in 1981, and the number of places available from 4,000 to 6,000. 80 per cent of the places are for commercial assistants, 15 per cent for mathematical or technical assistants, and 5 per cent for engineering assistants. In 1981, <sup>(15)</sup> there were 14 applicants for every place offered.

One of the reasons for the growing reluctance of young people to enter higher education at all, or at least not immediately



after completing their secondary education, is to be found in graduate unemployment in West Germany - a theme which will be taken up later (see pp.40-43).

At this point it should be noted that West German males are obliged to perform national service, which used to last for 15 months but has recently been extended to 18 months.

The fourth level of company entry is after graduation from a polytechnic (Fachhochschule).

Most of the 118 polytechnics were set up in the early 'sixties and developed from engineering schools (Ingenieurschulen), senior technical colleges (Höhere Fachschulen) for commerce (Wirtschaft), social studies (Sozialwesen), textiles and clothing (Textilwirtschaft).

There are several reasons why the individual federal states (Bundesländer), each of which enjoys great autonomy in matters of education and culture, were determined to promote the expansion of higher education outside the university sector:

- Polytechnic courses were to be of much shorter duration **than** university courses in similar disciplines, i.e. a **maximum** of three to four years;
- Polytechnic courses, particularly in 'business economics' (Betriebswirtschaft), were to be more practice-oriented than their theory-laden equivalents in the universities;
- Polytechnic courses were supposed to address more directly the regional demand for **places** of study as well as provide a supply of graduates commensurate with the needs of industry and commerce in the region. (16)

There are approximately a quarter of a million students at polytechnics, with 1 per cent per annum more young people with the Abitur qualification electing to attend a polytechnic in preference to a university. This increasing percentage could become significant in future years when the number of young people entitled to study will begin to fall dramatically as from 1988, owing to West Germany's decline in birth-rate, which has reached world-record proportions of only 1.4 children per woman.

The main subject areas, in order of popularity, studied at polytechnics are: mechanical and production engineering; economics and business economics; social studies; electrical engineering; public administration; architecture; civil engineering. (17)

Most polytechnic courses are divided into: a foundation course (Grundstudium), which lasts for two years, and after which an examination must be taken; and a main studies section (Hauptstudium) lasting usually one year and requiring a diploma thesis as well as written and oral examinations.

In a large number of polytechnic courses, students are obliged to spend placement periods in industry or commerce (Fraxissemester) during which they gain practical experience in their field of study.

A significant feature of some polytechnics, in terms of international management education, is to be found in a number of European business studies courses. These usually last for four years and always include periods of study in the UK and/or France. Often they also involve placement periods in industry or commerce abroad, and graduates receive double degrees. These graduates are much sought after by German companies, with

approximately two-thirds of the students in the final year of the Reutling EBS programme receiving job offers before taking their final diploma. Schloß Reichartshausen am Rhein, a private polytechnic, has an equally proud placement record for its graduates.<sup>(19)</sup> The particular successes of these two programmes, however, serve to highlight a general failure by West Germany to provide an adequate supply of international managers - another theme to which subsequent reference will be made (see pp. 47-50).

To distinguish polytechnic qualifications from university qualifications in similar fields, some federal states insist that their polytechnics confer academic awards such as Diplom-Ingenieur (FH) or Diplom-Betriebswirt (FH), the abbreviation in brackets referring to Fachhochschule.

The average age on graduation from a polytechnic is 26 years.

The fifth level of company entry is feasible after graduation from university at diploma standard.

Universities in West Germany differ from polytechnics in several ways. Firstly, they are on average much more ancient seats of learning with strong academic traditions, vigorously pursuing von Humboldt's ideals. Secondly, staff at universities tend to be better qualified academically than their polytechnic counterparts, but the latter have more practice-related experience. Thirdly, university faculty must teach and research: polytechnic faculty must teach and are entitled to research but this is not an obligation imposed upon them. Finally, as already mentioned, university courses are of greater duration than polytechnic courses. The average length of diploma

studies for university graduates is 6.5 years. Though a longer period of study does not in itself imply a higher standard in the final diploma, there is a general consensus that the university award is higher than that from a polytechnic. This is also reflected in the fact that a polytechnic diploma entitles the holder to entry into the middle ranks of the West German civil service (gehobener Dienst); a university diploma to the higher ranks (höherer Dienst).

(20)

There are approximately 975,000 students attending universities in West Germany, including the comprehensive universities (Gesamthochschulen). Considering in addition to these the students at colleges of theology, art, music, education, and the polytechnics, it can be stated that approximately 20 per cent of the 19 to 25-year-olds in the country are enjoying the benefits of higher education.

The most popular courses at university are, in order of preference: the economic sciences, including business economics; law; medicine; German; education; mechanical and production engineering; politics and social sciences.

(21)

University graduates in general, and business economics graduates in particular, have been the subject of criticism on the grounds that their learning is too theoretical in nature. Possibly their most vociferous critic was Hans Dichgens, a businessman and delegate to the Federal Parliament (Bundestag), who had a public exchange of views of the subject with some twenty university professors of business economics in the 'sixties. (22)

According to Dichgens and many others, there is a marked lack of adequate practice-related teaching in university courses. Ironically enough, polytechnic graduates have recently been

finding it increasingly difficult to escape similar criticism since the stipulation was dropped for them to serve an apprenticeship prior to polytechnic entry.

The consensus among companies would appear to be that university graduates are good abstract thinkers but require a two-year 'apprenticeship' in the business before they are really useful. Polytechnic graduates possess much more practical experience on entry and as a consequence are up and running from the very beginning of their company careers. This may well be why so large a percentage of polytechnic graduates find employment in medium-sized and small companies, where induction training is rare.

The average age of university students on graduation at diploma standard is 28 years.

The sixth and final level of company entry occurs after completion of doctoral studies at university.

In 1960, the total number of doctorates awarded by the West German universities was 6,200: in the 'eighties, approximately 13,000 students per annum graduate with the coveted doctor title, among whom there are some 2,600 mathematics and social science graduates, 1,300 economic and social scientists, and 1,000 engineers. (23)

The doctor title is almost essential for the upper ranks of management of certain companies, for example in the chemical industry or in insurance. In other branches of industry and commerce, the pay-off rate of the title is very difficult to quantify. The doctorate in economics or business economics is rewarded much more highly than the diploma in certain staff and line positions, though here, too, a young person with the title

might be circumspect about accepting a post such as Assistant to Member of the Board - 'glorified secretary with a doctor title.' Moreover, a doctorate can be a positive hindrance for inclusion on some trainee programmes.<sup>(24)</sup>

It cannot be denied, however, that the doctor title is a great help in promotion in industry and commerce: of the top managers in large companies who have studied one of the economic sciences at university, approximately two-thirds possess the doctor-<sup>(25)</sup>ate.

The average age on graduation with the doctor title is 30 years.

#### Academization of management

Having identified the six levels of company entry and having commented on the type of education enjoyed by the aspiring managers coming in at the various levels, it is now possible to appreciate the significance of the following bar chart (see Exhibit 2):

- The figure for West German managers holding a diploma at the managing director level was 62 per cent in 1984; in 1974, it was 58 per cent.
- The figure for managers holding a diploma at the 'first' level of management was 55 per cent in 1984; in 1974, it was 36 per cent.
- The figure for managers holding a diploma at the 'second' level of management was 44 per cent in 1984; in 1974, it was 28 per cent. <sup>(26)</sup>
- The higher the position in the company hierarchy, the greater the number of graduates.

But the academization of management does not stop at the diploma level (see Exhibit 3).

- In the largest 100 West German Public Limited Companies (AG's), some 53.8 per cent of management board members possess the doctorate. At Siemens, 14 of the 20 members of this board have the doctor title; at Bayer and the Deutsche Bank, 10 of the 12 members of this board are entitled to be addressed as 'Herr Doktor'.
- Taking the West German AG's quoted on the stock exchange, the figure for management board members with the doctorate is 41.5 per cent.
- In all West German AG's, 36.7 per cent of management board members sport the doctor title.
- The number of managers with doctorates is highest in the chemical industry, at 1,371, if 'manager' is defined as managing director, member of the board of management, member of the board of supervisors or 'procurist'; second position is held by the machinery-manufacturing sector, **with 859 doctorates**; third by insurance, with 729 doctorates.
- The picture is similar if the average number of managers with doctorates per company is examined. Here insurance companies lead with an average of 2.13 doctors per company; second place is held by chemical firms, with 1.46. Bringing up the rear are building companies, with 0.13. The average number of managers with doctorates per company is 0.44, provided the term 'manager' is defined as above. (27)
- The percentage of doctors in 'management' is greater:

- . the larger the company;
- . the higher the overall percentage of graduates in the firm;
- . the more technologically-based the branch of industry.

### The MBA

At this point it would appear appropriate to pose the question: why did West Germany not see fit to establish American-style business schools, public or private, attached to existing universities or not, and awarding MBA degrees when other European countries were doing so in the 'sixties.<sup>x</sup>

Firstly, at this particular time, West Germany was still enjoying unprecedented economic prosperity as a result of the Economic Miracle (Wirtschaftswunder), so why change a successful formula? Secondly, there were no initiatives forthcoming from the ministries of education in the individual federal states, where ex-professors, brought up in the German tradition, are the decision-makers. Thirdly, Germany has a long tradition in teaching and research in business economics, with the first college of commerce (Handelshochschule) being founded in Leipzig in 1898, and many of the first and best economics journals being published in Germany.<sup>(28)</sup> Moreover, these days business economics curricula are not dissimilar from MBA curricula. Finally, if polytechnic students graduate with an average age of 26, university students at diploma level at 28, and at the doctorate level at 30; and if the MBA degree is to be a post-experience qualification, at what age would a West

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<sup>x</sup> A certain attempt was made at the Universitätsseminar der Wirtschaft (USW) but it foundered, inter alia, on the inappropriateness of American case studies to the West German business environment and business systems in general.



German MBA student even start his or her studies?

So, a citizen of the country would have to go abroad to acquire an MBA. In 1985, there was not a single West German on the Harvard MBA programme; there were two at Stanford and two at Wharton. <sup>(29)</sup> Moreover, West Germans account for only 4 per cent of participants on the INSEAD programme. <sup>(30)</sup>

This apparent lack of enthusiasm for the MBA qualification must conceal particular attitudes to it within the country, which prove to be ambivalent. In interviews conducted in a sample of West German companies, reactions to MBA graduates ranged from the sarcastic ('Ah, you mean these so-called international infant prodigies') to the adulatory ('Employing MBA's in this company would be tantamount to casting pearls before swine.')

A more measured view is evident in large, West German companies which actually employ MBA graduates. Yet here, too, reactions are mixed. MBA's are praised above all for their analytical skills, their ability to work together in international teams, and their aggressiveness. When compared to the products of the West German polytechnics and universities, they are often referred to as 'Pike in a carp-pond.' They are, however, criticized for what are perceived as their exaggerated initial salary expectations, and the suspicion lingers among personnel managers that their insistence on such is due to the thoroughly unwholesome influence of university placements officers abroad. Since neither MBA's nor university placements officers are <sup>X</sup> 'made in West Germany', this criticism may be accounted for by

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<sup>X</sup> University professors in West Germany often act as clearing-houses for the placement of their students. They maintain informal links with companies, and certain graduates are 'recommended' to firms for consideration.

the Not-Invented-Here Syndrome.

MBA graduates are virtually unknown in medium-sized and small companies. They are, however, much sought after by firms of management consultants, many of whom ruthlessly exploit the MBA qualifications of their employees in the publicity which they target at the larger companies.

#### Recruitment criteria for future managers

In keeping with the tradition of the Techniker and the passion for the professional, West German companies perceive the management task in strictly functional terms, especially for middle and lower managers. Hence the direct relationship between vocational training or studies and the job to be done is of the utmost significance.

The importance of appropriate, vocationally-relevant diploma studies to the profession envisaged can perhaps be deduced from a survey conducted into the employment of Humanities graduates in the Hamburg area in 1980. 59 companies, each with in excess of 1,000 employees on payroll, were contacted for information about their Humanities graduates. 49 companies (83 per cent) responded, only 7 of which had such graduates on their staff. A grand total of 13 Humanities graduates were found to be employed in the 49 companies. (31)

What, then, are West German companies looking for when they seek to recruit university or polytechnic graduates? There are a number of factors which can be found to be for or against an applicant.

The particular university at which a young person chooses to study is not regarded as important by company recruiters unless one of the more problematical, left-wing universities has been

attended, in particular Bremen and the Free University of Berlin. Nor are the differences between universities and comprehensive universities held to be significant. However, graduation from a highly-reputed economics faculty such as Cologne, Bonn or Mannheim can be an advantage when applying for a first job since some heads of personnel departments have a long acquaintance with the products of these institutions.

Equally, the examination mark at diploma level must be judged in connection with the faculty or the professor involved. Companies are under no illusions about which faculties and which professors demand higher examination standards than others. A mark of 4 on the traditional scale of 1 to 6, where 1 is the highest mark, would tend to disqualify an applicant from consideration by most companies. If a very specialized position in the company is to be filled, a high mark in the appropriate subject can, however, offset a lower cumulative average.

Quite apart from any benefits it might bestow during the study period itself, a traditional apprenticeship, or a higher vocational qualification, is particularly esteemed by West German companies. This is especially true of small or medium-sized firms. Periods of practical experience during studies, in West Germany or preferably abroad, are also highly regarded by recruiting companies.

The diploma thesis written just before the final examination can be of importance, but this depends on whether it is a freely-chosen, scientific piece of work or something less weighty which has been polished off in six or eight weeks.

If a topic has been thoroughly researched in all its theoretical

and practical implications, and if it is linked to the position in the company being sought, then a good diploma thesis can be of value.

University studies which have been completed in four to four and a half years are not necessarily deemed by heads of personnel departments to be proof of excellence in an applicant. Complaints are sometimes voiced that such young people, of say 25 years of age, lack the required maturity. Alternatively, someone who has studied for more than seven years would have to articulate some very convincing reasons for his or her dilatoriness. The best recruitment chances are enjoyed by those who have completed their studies in five to five and a half years. Thus the ideal age for a male applying for his first job would be between 26 and 28 years, with national service and possibly an apprenticeship behind him. Female university graduates would be one and a half to two years younger because they have not performed national service. It should also be noted that a maximum age of between 28 and 30 years is stipulated for participation in most graduate trainee programmes.

A **second** course of studies (Zusatzstudium) can also be useful when applying for a job. Graduates in business economics aiming to enter insurance or banking might be advised to take a doctorate in law.

Some polytechnic graduates have better initial chances of recruitment than their university counterparts, particularly those specializing in marketing or data processing. If, however, a polytechnic graduate wishes to enter one of the classic functional areas of a company, such as internal auditing or

corporate planning, he or she would have better employment chances after moving on to a university and taking an additional course there. (32)

All West German companies interviewed were at pains to stress that it is not only the qualifications but also the personality of the applicant that are the major determinants in the decision to appoint or not to appoint. A further, frequently-voiced comment was, 'Naturally, we want the best; but we need indians as well as chiefs.'

#### Post-entry induction training

The great majority of university and polytechnic graduates do not undergo any specific induction training on entry into companies. They have been cultivated in the Techniker mould, so their higher education has been work-related. They enter an area of functional management within a company and begin to function, but not to manage. If, in the fullness of time, they aspire to the status of manager, they would be advised not merely to function but to perform in contemporary West Germany's high-performance society.

Graduate entrants to large companies are treated in one of three ways. Some, like their counterparts in small and medium-sized companies, receive nothing other than on-the-job experience. 'They are thrown into the freezing water and told to swim - it's ridiculous.'

Others are exposed to on-the-job training in addition to job rotation - but only in a limited number of departments, say two or three at most. They might also receive an occasional course run within the company but they would hardly ever be sent on an external course at this tender age! Even partici-

participation in internal courses is not axiomatic because often the initiative for such is left to the individual concerned. 'There is a lot on offer in this company, and one thing we do expect of our young employees is the ability to put up their hand and ask.'

A very small minority of graduates entering large companies in the manufacturing sector (chemical, computer, food-processing, and car companies) or in the service sector (insurance and banking) do receive the opportunity to participate in a graduate trainee programme. <sup>(33)</sup> Normally, the numbers on these programmes are low, at less than 5 per cent of graduate intake. Participants in such programmes are highly qualified, totally mobile, and fluent in at least two foreign languages.

The length of the trainee programmes varies from sector to sector: in manufacturing it tends to be one year to eighteen months; in services two or more years.

The content of the programmes comprises on-the-job training, job rotation in several departments, and regular internal courses. In the most unlikely event of an external course being attended, it will be one of the closed-company type that has been carefully selected and tailored to the particular needs of the firm.

Graduate trainees in West German companies are not regarded as 'high-flyers' or 'fast-trackers', only as 'high-potentials'. They still have to prove to the company that they can perform. The Daimler-Benz attitude is typical of all the large West German companies interviewed: 'The better they are educated, the higher the track, but not necessarily the faster the track. It's not the education or the training that decides on a career in this company, it's the performance and nothing

but the performance.'

### Management development

As with the induction training of future managers, a distinction must be made in the development of managers between large, medium-sized and small companies. Many large companies have set up extensive management development programmes which are provided for internally. Some medium-sized firms display a marked awareness of the need to develop their managers but, because they do not possess the resources, they are obliged to send their managers on external courses. Most small companies claim that they have neither the time nor the money to indulge in any management development.

In West German companies, the initiative for management development lies with the individual concerned, his or her immediate superior, and perhaps the head of department or head of division. The personnel and training departments have only an indirect bearing on proceedings. This relationship reflects the prevailing philosophy of virtually all West German companies that the influence of the line must always be stronger than that of staff departments.

In most companies, managers and their subordinates are subject to reviews either annually or biennially. Not only performance assessments but also development needs are discussed on these occasions between the manager, his superior and possibly head of department or division. In some firms, the reviews are accompanied by career forecasts covering the next five years.

If the individual employee is fortunate enough to have an enlightened superior, then he or she can be reasonably confident that development needs will be met. If this is not the case, then the individual has little recourse to any other point in the company. Theoretically, anyone feeling that their development needs are not being accommodated could approach the personnel department but they would be extremely reluctant to do so.

The prevailing view in West German companies is that superiors must have full sovereignty over their staff because it is the superior who is ultimately responsible for meeting departmental or divisional financial targets. It is only on the occasion of the superior's own annual or biennial review, at which a member of the personnel department might be present, that lack of sympathy for the management development of subordinates, and with it a certain neglect of corporate aims as opposed to departmental or divisional targets, could be brought to the superior's attention.

In **large** companies, the pattern is for lower management to **receive** more development than middle management, who in turn receive more than senior management. In these companies, 90 to 95 per cent of management development is performed internally, either by company trainers, senior managers in the company, or bought-in specialists from universities or polytechnics. When external staff are employed on internal courses, their contributions are thoroughly vetted before the course begins.

Large West German companies state that their reasons for organizing management development internally are firstly that they



can do the job more effectively than anyone else. Secondly, they have the development resources, human, physical and financial, so they are determined to use them. Thirdly, they perceive internal courses, run at their own fabulously-located and equipped development centres, to be a means of inculcating their specific corporate culture and thus stimulating the employee to identify with this culture.

The content of the internal courses varies in accordance with the level of management involved. For lower management, the courses are inevitably of a technical nature and are often classified as Fortbildung, i.e. 'upgrading' or an extension of initial vocational training (Ausbildung). Examples in the manufacturing sector are courses on quality assurance or safety at work.

Above and beyond the level of Fortbildung is what would be understood in Anglo-Saxon countries as more specific management development (Weiterbildung), which normally begins at the level of middle management. Typical examples of internally-run courses for middle managers would include: the selection, **assessment** and promotion of staff; problem-solving and decision-making; and conflict management.

Courses attended by senior management cover such topics as time management; presentation skills; and the company and the environment. The latter courses are now often obligatory for senior managers because the recent successes of 'The Greens', the West German ecological party, have brought about a heightened consciousness of the company and its environment. This concern embraces environment in all its aspects within the country - **physical, social, economic and political.**

Internally-run foreign language courses are accessible to all levels of management on a need-to-know basis.

The 5 to 10 per cent of management development pursued by large companies in the form of external courses involves senior and, to a lesser extent, middle management, apart from the few highly-specialized programmes required by lower management.

One of the perquisites of top management can be attendance at the Baden-Baden entrepreneurs' colloquia (Baden-Badener Unternehmengespräche), which last for three weeks and are open to representatives from many firms. At these colloquia, subjects of common and topical interest to entrepreneurs and top managers are discussed, for example the security of managers. It must not be forgotten that Hanns-Martin Schleyer, one of West Germany's foremost businessmen, was kidnapped and executed by the 'Red Army Faction' (RAF). More recently, Karl Heinz Beckurts, director of research at Siemens, was blown up by a terrorist bomb.

The Baden-Baden colloquia have been running since 1954, and the average age of participants is 46 years. <sup>(34)</sup> Of the 2,206 participants in the colloquia from 1954 to 1984, only 9 were female. 8 of the 9 women were entrepreneurs.

An institution providing external courses for senior and middle managers, predominantly from large companies, is the Universitätsseminar der Wirtschaft (USW) at Erfstadt/Liblar. Situated in a moated castle, this is not a university but a short course centre. Here 55 per cent of the courses are of the single-company or closed variety, where the main demand is for marketing programmes, corporate planning and the soft skills.

There appears to be a marked reluctance among large West German companies to send their staff on external courses which are open to a number of companies. When questioned about this tendency, one head of management development replied, 'Well, one of our suppliers **might** be attending the same course or, God forbid, one of our customers. This would put us in an intolerable position.'

Nonetheless, the USW does run a six-week general management programme which is open to participants from a number of companies. The average age of participants on all USW courses is 40 years. Attendance by women is less than 1 per cent. Quite clearly, then, the position of women in management in West Germany is a theme to which subsequent reference will have to be made (see pp.32-37).

Only a handful of the 68 universities in West Germany offer management development programmes, and even the terminology chosen to characterize the courses, Kontaktseminare, points very much towards an arm's-length relationship between the universities and business in terms of management development. The first of the few courses was jointly established in 1966 between the universities of Münster and Mannheim. It is now run by Münster and Konstanz. The seminar lasts for three weeks, is run once per year, and targeted at top managers. The University of Gießen runs an annual two-week seminar with two target groups - senior managers in medium-sized companies and middle managers in large companies. The Technological University of Aachen organizes seminars for technical managers and technical specialists.

The most comprehensive management development programme mounted by a West German university is the Kontaktstudium Management d

Universität Augsburg. It has been running since 1976 and has much in common with so-called executive, or part-time, management development programmes in the UK. The Kontaktstudium is designed for practising managers and ranks as an official programme of the university, with prescribed studies but optional examinations. It contains a foundation course covering the functional areas of management such as accountancy, marketing, operations management, etc. as well as elements devoted to communications skills, conflict management and problem-solving. Sessions are held in the evenings, at week-ends, and in one-week blocks, on the premises of the university. The programme is designed on the modular principle, with modules lasting from 10 to 50 hours, building up to 'sequences'. 500 hours in an appropriate set of 'sequences' complete the programme. Interested participants can then opt to take an examination, and successful candidates receive the Kontaktstudienbrief Management der Universität Augsburg.

Medium-sized companies without the appropriate human, physical and financial resources at their disposal are obliged to look outside the firm for their management development opportunities.

There are in West Germany scores of private organizations offering a plethora of courses in what could loosely be termed management development. Programmes vary in length, content and quality. They are run mostly in hotels. Many of the courses mounted by private organizations are frequented by managers from medium-sized companies and a few by managers from small firms. Fees are, of course, payable.

The cost of courses begins to become significant for medium-sized and small companies, and reduced fees are an undoubted attraction provided that the programmes on offer are equally good. This is very much the case with the management development programmes offered by the West German Chambers of Industry and Commerce. Since all companies involved in 'trade' (Gewerbe) must be members of their local Chamber and must therefore pay membership fees, the value-for-money courses held under the aegis of the Chambers are very popular.

The Chambers offer a range of development courses aimed at all levels of management, from entrepreneurs to lower management. Many of them also possess their own short-course centres, some of which are located in attractive countryside and are lavishly equipped.

As is well known, the Chambers are intimately involved in initial vocational training (Ausbildung), inter alia through their inspection of companies training apprentices and the setting of examinations for the apprentices. Moreover, they actually run courses as well as set examinations for further vocational training or 'upgrading' (Fortbildung). Therefore, the recent extension of their work into management development (Weiterbildung) would appear to be a natural progression. It must, however, be pointed out that management development is not an obligation which is specifically imposed upon them by the Chambers' Act of December 18th, 1956.

The Chambers claim to have very sensitive radar, especially for the development needs of medium-sized and small companies, by dint of their close contacts with firms of all sizes and types. Indeed, some of them see their most valuable contribution to lie in the detection of current management development trends.

in the large companies and the subsequent provision of similar programmes for medium-sized and small companies. All of the development courses organized by the Chambers are open to all member companies.

The Munich Chamber of Industry and Commerce, for example, runs its management development programmes in the foothills of the Alps, at Westerham (affectionately known as West Ham after the English football club). Examples of courses targeted directly at medium-sized companies are those on sales planning, recent developments in production and distribution, and changing from authoritarian to participative management styles. <sup>(35)</sup> Sometimes, the Munich Chamber combines with other Chambers in Southern Germany to lay on courses which appeal to companies outside its own catchment area.

Also catering for the needs of medium-sized and small companies, where the latter can be attracted at all, are the Bildungswerke in the individual federal states, some of which have so-called 'Management Academies' attached to them. These educational establishments are funded mainly by employers' associations, individual companies, and to a lesser extent by the states themselves, and the fees charged for their courses. <sup>(36)</sup> They exist primarily because the employers' associations did not want to be totally reliant on the Chambers for the provision of vocational opportunities at all levels. Since the employers' associations fund the Bildungswerke voluntarily, and not by reason of a federal Act, they can exercise much more direct influence over their activities.

Again, some 80 per cent of the management development courses organized by the Bildungswerke are single-company programmes.

They are run on the premises of a particular company or in hotels. The courses are staffed by professors from universities or polytechnics, and especially by senior managers and trainers from large companies, in accordance with the cascade principle. Here, experienced staff from the large companies permit their know-how to flow down to managers in medium-sized companies in particular. Many of the courses tend to focus on behavioural or presentation skills, with a few devoted to selling techniques. Indeed, the courses on selling skills are virtually the only ones that succeed in attracting participants from small companies because the lessons learned are perceived as being immediately applicable.

In interviews recently conducted in West Germany, an attempt was made to establish why small companies should display so little interest in management development. The reasons appear to be connected with the entrepreneur mentality. The owners of the small firms do not go on courses themselves because they are too involved in the running of their companies, and they harbour serious doubts as to whether anyone can teach them **anything** about their particular line of business. Therefore, **they do not** encourage their staff to attend courses either. Unless the need is patently obvious, as with negotiating or selling skills, the employees in their turn develop a kind of tunnel vision in relation to their particular task: provided the boss is satisfied with their performance, then they are as well.

The usual excuses for neglect of management development which are put forward by small companies in all countries, i.e. lack of time and lack of money, possibly possess even less validity

in West Germany than elsewhere. As for lack of time, West German managers have six weeks' holiday per year in addition to the large number of public holidays celebrated in many parts of the country; as for lack of money, many of the small companies are extremely profitable companies.

The whole issue of management development in West Germany must be viewed within the broader context of continuing education for the entire citizenry. 'Lifelong learning' (lebenslanges Lernen) has become a popular slogan, and it is claimed that every year 25 per cent of the population between the ages of 19 and 65 take part in some form of continuing education, including management development. <sup>(37)</sup> Unfortunately, however, some of the trends are not encouraging. There appears, for example, to be a growing reluctance among unskilled workers, i.e. those without any vocational training at all, to join in continuing education. The participation rate among this group fell from 14 per cent in 1979 to only 8 per cent in 1985. Similarly, the participation rate in continuing education for those with only Hauptschulabschluß (the equivalent of 5 OSE passes) is six times lower than for those educated to the Abitur standard. In addition, there are significantly higher participation rates for men rather than for women, for the employed rather than the unemployed, and for young people rather than the older age groups. <sup>(38)</sup>

One idea which has been put forward to achieve more equality of opportunity for continuing education is that of Bildungsurlaub, i.e. '(Extra) paid holidays for self-improvement.' The broad concept itself has found favour with many bodies in West Germany but there has been a signal failure to define



what the term really means. Bildungsurlaub has formed part of the DGB (West German equivalent of the British TUC) Basic Programme since 1963. The issue has been discussed in a number of working papers by all the main political parties at federal level. Five of the individual federal states as well as West<sup>(39)</sup> Berlin have passed different forms of legislation on the subject, and in one form or another it has become part of a limited number of tariff agreements between a few of the 17 trade unions and their negotiating counterparts, the employers' associations. As yet, however, there are no federal guidelines covering the whole country.<sup>(40)</sup> Questions of how much extra paid holiday per annum, and what constitutes 'self-improvement' are still awaiting satisfactory answers by the majority of companies. Hence reactions to the concept of Bildungsurlaub by those firms not yet affected by either legislation or tariff accord are totally predictable. 'Look, we can take care of initial vocational training for our apprentices. We also see to it that those of our employees who seem capable of taking on more responsibility are given further vocational training or upgrading. In addition, we **provide** management development at all levels where we think **that it's** mutually beneficial - to the company and to the individual manager. But we don't see why we should give any employee of ours extra paid holidays to go to Macedonia for a month to study Greek icons!'

#### Present problems

There are currently in West Germany three main problem areas associated with the education, training and development of manager concern about which is by no means limited to the present day but extends to the future as well. These are the issues of women

in management, manager mobility, and graduate unemployment.

West Germany has at its disposal a large, highly-educated female workforce, 38 per cent of all employed persons being women.<sup>(41)</sup> But females are very much conspicuous by their absence in top and senior management, and strongly under-represented in middle and lower management.

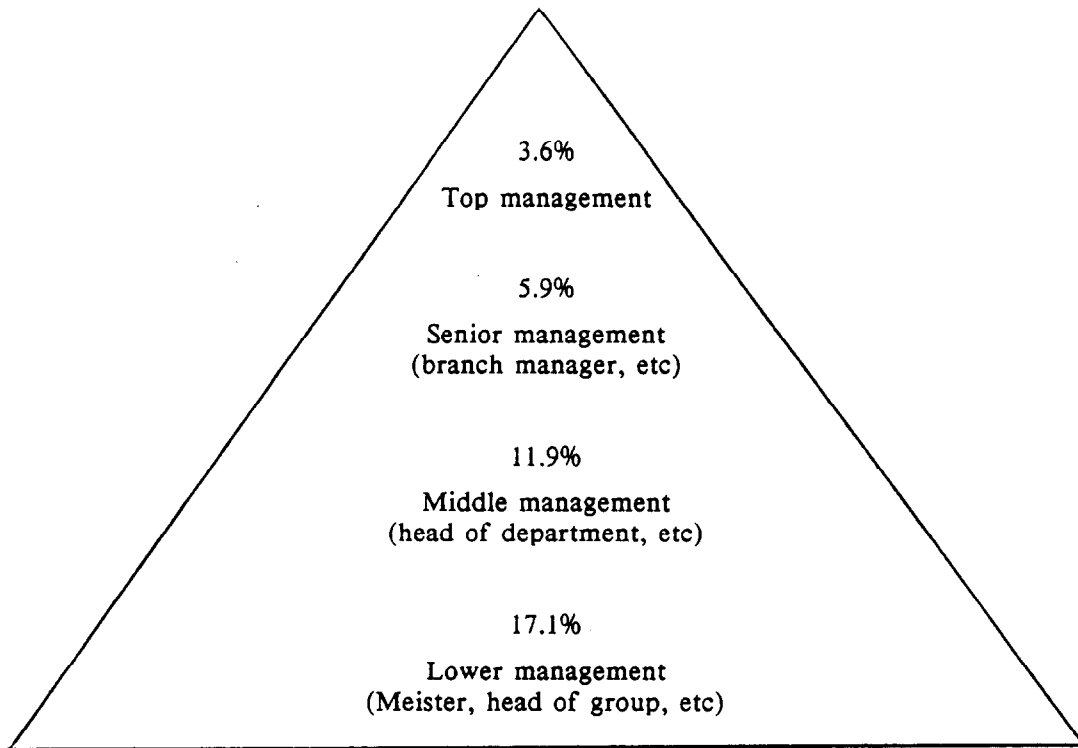
In 1983, 46.4 per cent of school-leavers with the Abitur or Fachhochschulreife qualification were female, and there were in the same year some 482,000 women at universities and polytechnics, i.e. 37.7 per cent of the total student population. Examining the statistics relating to subjects perhaps most immediately associated with management, in 1983, 79,000 women were reading the economic and social sciences at university and 12,016 engineering. In 1982, 200 of the 1,300 doctorates in the economic and social sciences were obtained by women, and 20 of the 1,000 doctorates in engineering.<sup>(42)</sup>

Exactly what happens to these large cohorts of highly-intelligent females after their education at university and polytechnic is something of a mystery. Of course, some of them marry, but not many begin to produce babies. As has already been noted, West Germany currently holds the world record for the lowest number of children per woman. Nor do women enter management in anything like representative numbers. Interviews on this issue conducted by the author in a sample of West German companies pointed to very low numbers of females in management positions at all levels, the most-quoted reason being that a woman had to be twice as good at her job as a man before she became a manager. The same criterion holds good for promotion

further up the management ladder. But the most reliable statistics on women in management are to be located in a survey published in 1986 by FIDA, the society for the promotion of scientific research into the position of women in international co-operation.<sup>(43)</sup> From May to August 1982, FIDA sent out 4,000 questionnaires to a representative selection of companies - large, medium and small, in manufacturing industry and in the services sector. Fewer than 10 per cent of the questionnaires, i.e. 398 in total, were returned and completed. Crushing indifference to the issue of women in management in West Germany is, therefore, the first inference that could be drawn from the evidence of the response rate alone.

Most of the responses came from the chemical industry and the food industry (13 per cent each). Next followed the services sector in general with 12 per cent, including financial services with 11 per cent. However, the average number of women employed in the companies responding was slightly lower, at 33 per cent,<sup>(44)</sup> than the average for female employment throughout West German companies as a whole (38 per cent).

The findings of the survey reveal that the percentage of women in management positions at the individual levels of the hierarchy takes the form of a pyramid. The higher the position in the management structure, the smaller the percentage of females.<sup>(45)</sup>



Source: Frauen als Führungskräfte in der Wirtschaft, FIDA

The main reasons given in the FIDA survey for the low number of women in management positions are firstly that the traditional rôle perception of the women in West German society - that of the 3 K's (Kinder, Kirche, Küche, i.e. 'children', 'church', 'kitchen') - is changing only slowly, and this is reflected in companies (48 per cent of responses). Secondly, the nature and scope of a woman's professional life take second place to her family duties (31 per cent). Thirdly, there are too few female applicants for management positions (28 per cent). Fourthly, too few women are vocationally qualified (17 per cent). Finally, women interrupt their working life for too long in order to rear children (16 per cent).<sup>(46)</sup>

What should be done about the situation was examined by the same survey. The most-favoured solution was an improvement in the vocational counselling of female school-leavers and their parents (38 per cent of responses) ; the creation of better conditions for working parents (31 per cent); abolition of anti-female prejudice by information and enlightenment within the company (23 per cent);

experimentation with new career patterns, i.e. a second course of training after the child-rearing phase, (20 per cent); private industry ought to implement its own promotion programmes targeted at women (18 per cent).<sup>(47)</sup>

What should not be done is perhaps the most revealing finding of all after the disappointing response rate. The highest degree of rejection was met by the following suggestions: an Office of Equality should be established, with powers of intervention similar to those of the Federal Cartel Office (36 per cent of responses); an Anti-Discrimination Act should be passed (35 per cent); there should be minimum employment quotas for women in companies (34 per cent); equality commissions should be set up in companies (22 per cent); special employment programmes for women should be implemented by the Federal Government (17 per cent).<sup>(48)</sup>

The FIDA survey separates out some of the replies by male respondents from those by females, and male chauvinism is not difficult to detect in several of the former. Two will suffice as illustration: 'Mothers just don't belong in a factory or an office but with their children, because children have to be brought up, and our society needs new generations with good, bourgeois values.' 'Do women really want to be equal with men? Leave the weaker sex as it is. As they are now, women are just fine for us men'.<sup>(49)</sup> Both these responses came from owners of companies, and as long as such attitudes are prevalent among the decision-makers, women in West Germany will have to wait some considerable time before they achieve equality of representation at any of the levels of management, let alone the uppermost

ranks.

The second problem area identified as affecting management in West Germany today is that of lack of mobility. The problem is by no means confined to managers but is endemic in the entire workforce.

Perhaps the main reason for the lack of mobility lies in the fact that West Germans are essentially creatures of their region, and not of the nation. Germany was a latecomer as a nation, with unification not being achieved until 1871. Many would in fact argue that the nation was not so much unified as taken over by Bismarck's Prussia. The result is that even today a Bavarian does not feel at ease living and working outside Bavaria: the same applies in equal measure to, say, a citizen of the state of Hamburg. Emotional loyalties lie first with the region.

The mobility problem was perhaps further exacerbated several years ago by a famous case which came before the courts. A man achieved promotion within his company and informed his wife that his new post involved a transfer from Hamburg to Munich. The wife protested that she did not want to leave Hamburg, but the husband countered that, as head of the family, he was responsible for their upkeep, and this entailed his choice of their domicile. The case went all the way to the Federal Constitutional Court in Karlsruhe, where a decision was reached in favour of the wife. The husband could not force her to transfer to Munich since one of her basic rights was affected, i.e. that of her freedom of movement (Article 11, Section (1), Grundgesetz, 'Basic Law').

A further determinant in the lack of mobility of West Germany's

workforce can be found in company paternalism. In the late 'forties and the 'fifties, when a chronic housing shortage coincided with a labour shortage, West German firms began to offer subsidized rents in company flats as a means of attracting workers. Whole areas of certain towns were bought up by companies, and flats were built for white and blue-collar workers alike. Now the housing shortage and the labour shortage have long since passed, but low-rent company apartments still act as a disincentive for employees to change company. Holiday entitlement also rises with length of company service, as do other perquisites such as the benefits from occupational pension schemes, very few of which are transferable.

Factors not attributable to the company are also involved. There has been an oversupply of housing in Germany since the mid-seventies, with the result that house prices have actually fallen in some areas over the past ten years. Moreover, doubts about whether the spouse could procure as well-paid a job in the new town, physical separation from parents and grand-parents, even concern about waiting-lists at a new tennis-club are factors not to be overlooked.

All this contributes to a conviction, which is widespread throughout the country, that if employees change company three or four times in a working life they are nicht seriös ('unprofessional'). In the land of the professional, the expert, the Techniker, there can be no more damning indictment!

Accordingly, of the 12,000 positions available in top management in West Germany, 1,500 of which become free every year, only 200 to 230 are ever advertised. <sup>(50)</sup> The rest are filled by companies internally. At the level below, i.e. that of senior management

there are estimated to be some 170,000 posts in the country. Here the annual turnover amounts to approximately 34,000 posts, 25,000 of which are filled internally. Therefore, some 75 per cent of top and senior management posts are taken up by promotion from within. The figure is even higher for large companies, many of whom have any number of suitable candidates to choose from. The vast majority of the small number of top and senior posts are thus available in medium-sized and small companies.

Top management mobility in West Germany is not exactly enhanced by the generous salaries, including loyalty bonuses, paid to the incumbents of such posts, particularly in the large companies. Average remuneration in the mid-eighties was in excess of DM 1 million for each of the members of the management boards at Altana, Bertelsmann, Kronos, Springer, Volkswagen, Deutsche Bank, Gruner + Jahr, Lemförderer Metallwaren, Daimler-Benz, BHF-Bank, Rheinmetall, and Bayer.<sup>(51)</sup>

Indeed, managers at all levels in West Germany, even in medium-sized companies, have few reasons to complain about their salaries. The typical remuneration structure for a manufacturing company, with a turnover of DM 150 million and 1,000 employees, in the mid-eighties was: top manager DM 320,000; senior manager DM 240,000; middle manager DM 140,000; lower manager DM 90,000.<sup>(52)</sup>

It will be noted that the company hierarchy is faithfully reflected in the salaries of the managers at the various levels.

Salary levels also affect the mobility of the blue-collar workforce, but in a different way. Here there is a two-stage system of salary negotiations. At the first stage, minimum rates of pay are set in negotiations between one of the 17 trade unions and the corresponding employers' association, either for the



whole country or the whole region. The translation of these minima into actual earnings then takes place at plant level in bargaining between local management and the local works council. The outcome is, almost inevitably, that actual earnings for the same job do not vary significantly from company to company. Thus the main incentive is lacking for an individual to move from one company to another even within the same region, let alone outside 'his' or 'her' region.

There is little hope that the mobility problem will be solved in West Germany in the foreseeable future. Even the record numbers of unemployed, including managers, in the late 'seventies and early 'eighties failed to make a significant impact.

The third problem area in West Germany today also concerns the labour market, but it does not affect so much existing managers as aspiring ones. As indicated earlier, it is the very grave problem of graduate unemployment.

The Techniker tradition of education at polytechnics and universities, coupled with lengthy periods of study, has as its natural corollary a one-start system in society. As was seen earlier in the case of the Humanities graduates in the Hamburg area, if a young person is educated in a particular discipline, he or she is expected to earn a living on the basis of those studies. Once a lawyer, always a lawyer; once a shoe salesman, always a shoe salesman. The opportunities for a change of direction after completion of studies, or even vocational training, are limited in the extreme.

If, in addition, there is in the country a legal right of entry to any university to study any subject where there is no numerus clausus in operation provided a young person is in possession

of the Abitur qualification; and if, as a result of larger age cohorts and higher participation rates, university expansion proceeds at the rate which was demonstrated earlier, resulting in today's so-called 'mass universities', then the necessary pre-requisites for graduate unemployment are given. All that is needed to make it a reality is a recession, or changes in economic patterns. Over the past decade, West Germany has witnessed both.

The outcome has been a steep and continuing rise in graduate unemployment. Whereas in 1980 there were on average 2 university graduates competing for every job, in 1985 the figure was 8.<sup>(53)</sup> Registered as unemployed at the end of 1984 were some 29,000 graduates who trained as teachers, 22,000 as engineers, 13,000 as economic or social scientists, 6,500 as natural scientists, 3,700 as doctors of medicine or dentists, and 2,300 as lawyers.<sup>(54)</sup>

Looking more closely at those graduates who would most probably have sought to enter management, from 1973 to 1985 the figure for unemployed economic scientists from universities grew by 619 per cent. The corresponding figure for unemployed economic scientists from polytechnics increased from 1975 to 1985 by 316 per cent.<sup>(55)</sup>

Currently, very little is being done in West Germany to alleviate the problem. The idea has been mooted that a numerus clausus should be imposed for the economic sciences in an effort to curtail the supply, which is at present putting some 13,000 fresh economic scientists onto the labour market every year.<sup>(56)</sup> Some retraining courses for graduates from all disciplines are being run by the Federal Institute of Labour (Bundesanstalt für Arbeit). In addition, the Federal government in Bonn has made

sporadic attempts to persuade individual companies to take on unemployed graduates with a view to retraining, but without success. Graduates are in fact being told they are relatively fortunate that so few of them are unemployed. Whereas 17 per cent of unskilled and 5.9 per cent of skilled workers were without a job at the end of 1985, the figures for polytechnic graduates were 'only' 5 per cent and for university graduates 4.5 per cent. (57) This is, of course, scant consolation, especially when future prospects are considered.

According to the Institute of Labour Market and Vocational Research (Institut für Arbeitsmarkt- und Berufsforschung), there were in the country in 1980 a total of 1,501,000 university graduates, 874,000 of whom will still be employed in the year 2,000. There will be an additional demand for 627,000 graduates by the end of the century because of retirements in the interim. But in the year 2,000 the new supply of graduates will be 2,109,000. If the 627,000 graduates for whom there is a forecast of demand are subtracted from this new supply, then by the year 2,000 West Germany will have 1,482,000 university graduates for whom extra jobs will have to be found, total university graduate supply having reached 2,983,000 ! (58)

Patterns of university graduate employment are also forecast to change. Hitherto, the vast majority of these graduates have found employment in the public services, and not in the private sector. But in view of the large degree of indebtedness of the public services at all three levels of government - federal, state and commune - , and the increasing number of university graduates, it is highly improbable that previous take-up rates of such graduates by the public services, of some 60-70 per cent, will ever be achieved again. (59)

The private sector is, therefore, expected to absorb the vast

majority of these graduates, and the marked trend towards the academization of management has indeed been noted. But the West German economy would have to achieve phenomenal growth rates from now until the end of the century to create sufficient jobs for all graduates. Small wonder, then, that successful Abitur candidates are increasingly reluctant to study at university at all, or if they do so, not until they have taken out an insurance policy in the form of a traditional apprenticeship.

#### Future concerns

A total of almost one and a half million unemployed graduates by the end of the century is in itself a horrifying prospect for any advanced society to have to contemplate. What is more, it is open to question whether West Germany has not only got the numbers wrong in management education, but the direction as well. Is West Germany currently growing the type of manager who will be capable of meeting the challenges of industry and commerce in the twenty-first century?

In 1983, Bruce Nussbaum, co-editor of Business News, published his celebrated book, The World after Oil.<sup>(60)</sup> In the chapter devoted to Europe in general and West Germany in particular, he writes: 'The technological base that underpinned Germany's Economic Miracle is quietly becoming obsolete. Like a speeding car that shoots off a pier and hesitates that one moment before plummeting into the sea, West Germany is today a nation confidently moving through the twentieth century unaware of the economic catastrophe that has already befallen it... For West Germany is fast losing the high-tech race to Japan, the United States and perhaps even France. It may soon find itself a

second-rate economic power, the new "sick man of Europe". (61)

Nussbaum argues that the twenty-first century has already begun in the sense that two locomotives, micro-electronics and bio-technology, are quickly pulling the world into a new era. Whoever falls behind in the race for these two key technologies will be unable to keep abreast of other nations. 'Germany today is a nation that cannot make the change from mechanical engineering to bio-engineering. It cannot make the leap from precision-engineering, the machines of yesterday, with their thousands of moving parts and motors, to the throwaway electronic devices of today and tomorrow. It cannot make the change from petroleum-based chemicals to biologically produced pharmaceuticals.' (62)

Shortly after the publication of Nussbaum's book, Dr Konrad Seitz, head of planning in the West German Foreign Office, wrote an article in Der Spiegel responding to the criticism. (63) He admitted that the general line of Nussbaum's thinking was correct, even if the pace of change was not so rapid as the American believed. Seitz called for a concerted effort between West German industry, state bodies, science and the media to close the technology gap, and made four specific demands: more computers in schools; a policy unit to co-ordinate university research; state loans to sponsor research and development; and an efficient system in the country for raising venture capital.

The stir which Nussbaum's criticism caused in West Germany at the time can be gauged from the fact that, nine numbers later, Der Spiegel addressed the same problem again, (64) this time in a leading article. The leader opened with a list of

West German traditional industries in trouble, quoted Nussbaum extensively, and reminded readers that West Germany had been awarded only 12 Nobel Prizes for science since the war, with a number of these referring back to discoveries in the 'thirties, as compared to one single university in the United States, Stanford, with 9 Nobel Prizes. The article concluded by quoting the managing director of Hewlett-Packard West Germany, who stated that the country needed its own equivalent of the American Apollo programme in order to revitalize industry.

Nussbaum obviously struck a raw nerve in West Germany, and large companies there took the criticism seriously. They, too, realised that, despite the large amounts of money they were spending on research and development at home, they were failing to close the technology gap. Two clear strategies have emerged in the meantime which are aimed at returning to the forefront of technology: international co-operation in research and development; and purchases of overseas companies by cash-rich West German firms.

In the field of micro-electronics, Siemens began in 1984 to co-operate with Philips on a programme to develop the one-megabit chip. <sup>(65)</sup> Subsequently, Siemens came to an agreement with Toshiba to realise an even larger version, the four-megabit chip. By the end of the 'eighties, Siemens plans to have spent some DM 100 million on the research and development in addition to DM 1.4 billion on plant for the actual production of the chips.

Purchases overseas by West German companies, especially in the United States, had begun even before Nussbaum's book was published. In 1981, Hoechst paid \$ 50 million to the

Harvard and Massachusetts General Hospital to enter the field of gene splicing. In return for the cold cash, Hoechst not only obtained first claim on all patents coming out of the research but also the right to train its own scientists in bio-engineering at Harvard. According to Nussbaum, the Hoechst decision not to set up its genetic engineering research in any of the West German universities or research institutes '...was seen as a blot on the honor of the nation.'<sup>(66)</sup> When Hoechst later announced that it was to set up a small genetics laboratory in Japan, West German academia was reported to be 'livid.'<sup>(67)</sup>

In 1986, Hoechst made a much larger purchase in the United States, when it bought up Celanese for \$2.85 billion to become the world's largest chemicals group. In doing so, it surpassed its large German rivals, BASF and Bayer.<sup>(68)</sup>

In 1985, BASF had bought Inmont for \$ 1 billion. It also took over three smaller companies and reorganized its American operations under a newly-formed BASF corporation.

Bayer has traditionally been strong in the United States market, which accounts for some 25 per cent of total sales. In 1986, it bought back the right to use its own name and trademark there, which it had forfeited after the 1914-18 war. This exercise in orderly housekeeping cost \$ 25 million.

Siemens in 1986 paid \$ 420 million for parts of GTE, an American telecommunications company, and in 1985 it acquired or raised its stake in a handful of smaller American firms. Its capital investment in North America totalled DM 727 million in 1985, compared with DM 469 million in Western Europe, excluding West Germany.<sup>(69)</sup>

According to figures by the American Commerce Department, West Germany's direct investment in America had in 1986 a book value of more than \$ 14 billion. In excess of 2,000 German-owned firms are active there, employing some 400,000 people. (70) The push to catch up in the fields of micro-electronics and bio-technology, the restrictions on the growth of the larger companies at home by the West German Federal Cartel Office, and the strength of the DM against the dollar have all contributed to making internationalization, especially in the United States, an extremely attractive proposition for West German companies.

Purchasing a company abroad is one thing: running it successfully is something quite different. Although it is often possible to employ a certain number of the indigenous population as managers, strategic decisions will inevitably be taken by German managers back home. Of the chairmen of the management boards of the 20 top West German companies in 1987, only 11 had either studied or worked abroad. 20 per cent of the top managers at the Dresdner Bank had overseas experience, and 33 per cent at Siemens. (71)

Nor is the picture likely to change radically in the future. In fact, it could get much worse. In 1985, only 1.8 per cent of all West German students were attending a university abroad, and the vast majority of these were foreign language students. (72) To take just one example, of the 3,000 West German students in France in 1985, over 2,000 were studying the French language, and only 150 were reading one of the economic sciences. (73)

We know, however, that very few if any of these foreign language students will find employment in West German companies, as



was evidenced by the survey of the Humanities graduates in Hamburg, to which reference was made earlier. Equally, we know that there are no MBA students 'made in West Germany', who might have been expected to possess at least a nodding acquaintance with the subject of international management. We know also that very few West Germans go abroad to take the MBA qualification, thus missing out on many networking opportunities with their peer groups overseas. Although certain courses such as the European Business Studies Programme at **the polytechnics of Neutlingen and Schloß Reichartshausen** and, more recently, the Business Economics Programme at the new and private University of Koblenz insist on study periods abroad, these are exceptions which merely serve to expose West Germany's **future deficiency** in international management expertise. We can conclude, therefore, that comparatively little is being done at the level of higher education to produce the international managers that West Germany will need in the future to run its business interests abroad.

If, then, a pronounced degree of parochialism is to be detected in ~~management~~ education in the polytechnics and universities, what is being done about international management in West German companies? We have seen that management development for lower managers is function or area-specific. Moreover, we have seen that development for the middle tier of management is company-specific. We have also seen that, although management development for senior managers embraces courses on the company environment, considerations are restricted mostly to the environment within West Germany.

The initiative for education or development in international

management is therefore left to the individual. Here he or she can be assisted by the Carl Duisberg Society in Cologne, which arranges a study/work programme in the United States for some 100 West Germans per year; or by the American Chamber of Commerce in Germany, which runs a similar programme for some 80 person every year. <sup>(74)</sup> The cost of both these programmes is, however, borne mainly by the participants themselves. The most that West German companies are apparently prepared to do is to guarantee that participants will not lose their jobs during the interim abroad. <sup>(75)</sup>

West Germany's continuing neglect of an international dimension to the education and development of her managers appears to be all the more incomprehensible if, in addition to her substantial and growing business interests abroad, the fact is taken into consideration that some 36 per cent of GNP is accounted for by exports. This neglect can only be explained by the country's strict adherence to the Techniker tradition of functional management and the concomitant rejection of education, training and development in general management, together with its allied discipline of international management.

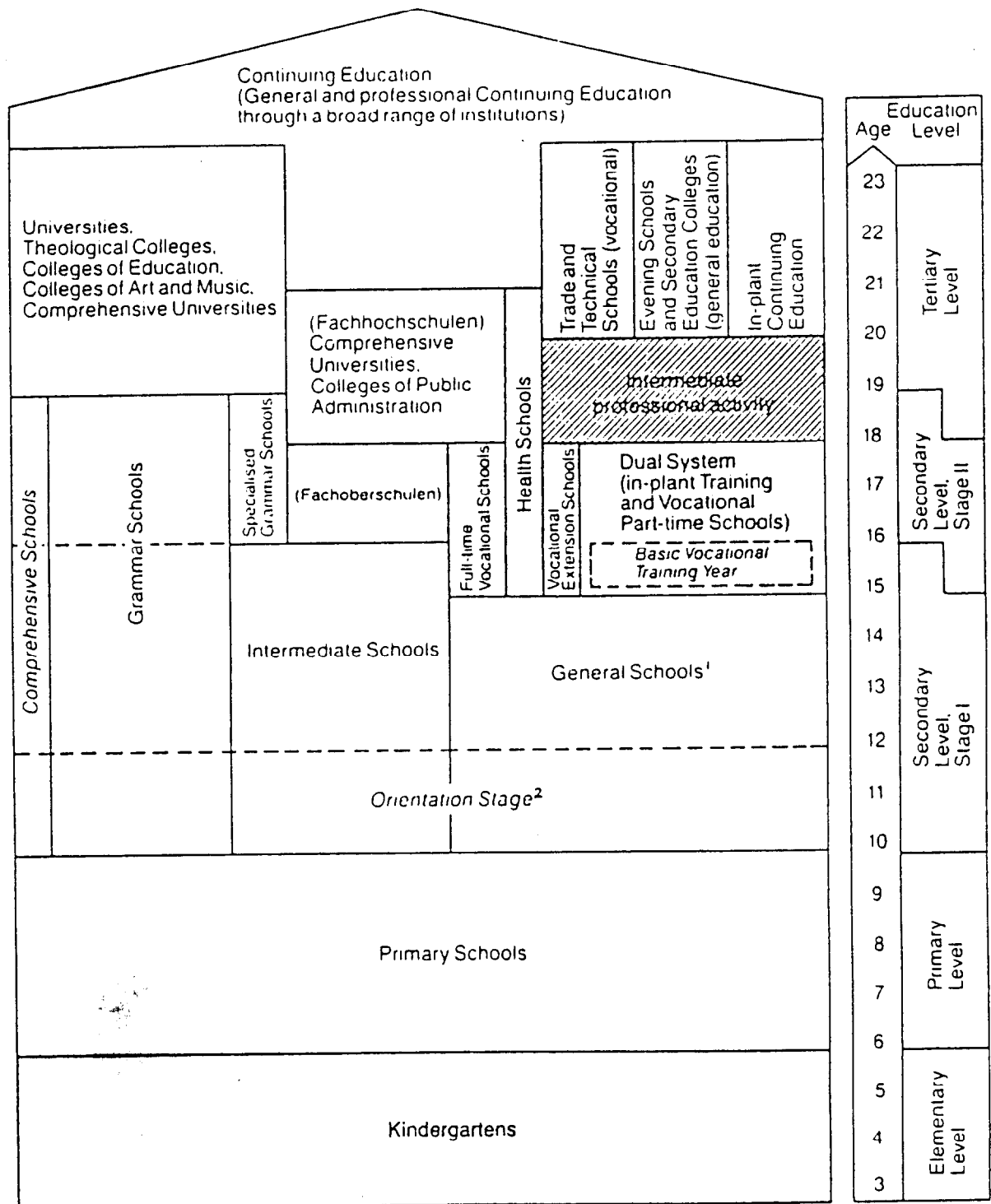
### Conclusion

There can be no denying that the West German tradition has served the country well over the decades since the end of World War II. On any measure of economic success, West Germany has performed well, and many of her citizens are enjoying the benefits of that success in an affluent society. But this high level of performance has been achieved in conditions of steady state or continuous change.

The burning question today is: could the West Germans become victims of their own success? Their reluctance to change a winning formula in the education, training and development of their managers is perfectly understandable in view of their past record. But this same approach may be less well-suited to radical shifts in markets or types of technology, i.e. conditions of discontinuous change, which, as we have seen, are already beginning to affect the country's economy.

If cash-rich West German companies outside the high-technology sector also decide that internationalization of their business interests provides the best hedge against the vagaries of discontinuous change - and there are already signs that this is happening, with Bertelsmann taking over RCA Records and Doubleday, the American publisher, to become the world's largest media group - then the education, training and development of international managers will become an urgent necessity. How West Germany can break the dominance of the Techniker tradition and begin to produce sufficient numbers of generalist managers with an international background is the problem which should be occupying the minds of the planners in the various ministries of education and the thinkers in the development departments of West German companies. To date, there is scant evidence to suggest that this is in fact the case.

Basic structure of the education system in Germany



<sup>1</sup>About 27 per cent of pupils in General Schools in addition attended an additional tenth school year.

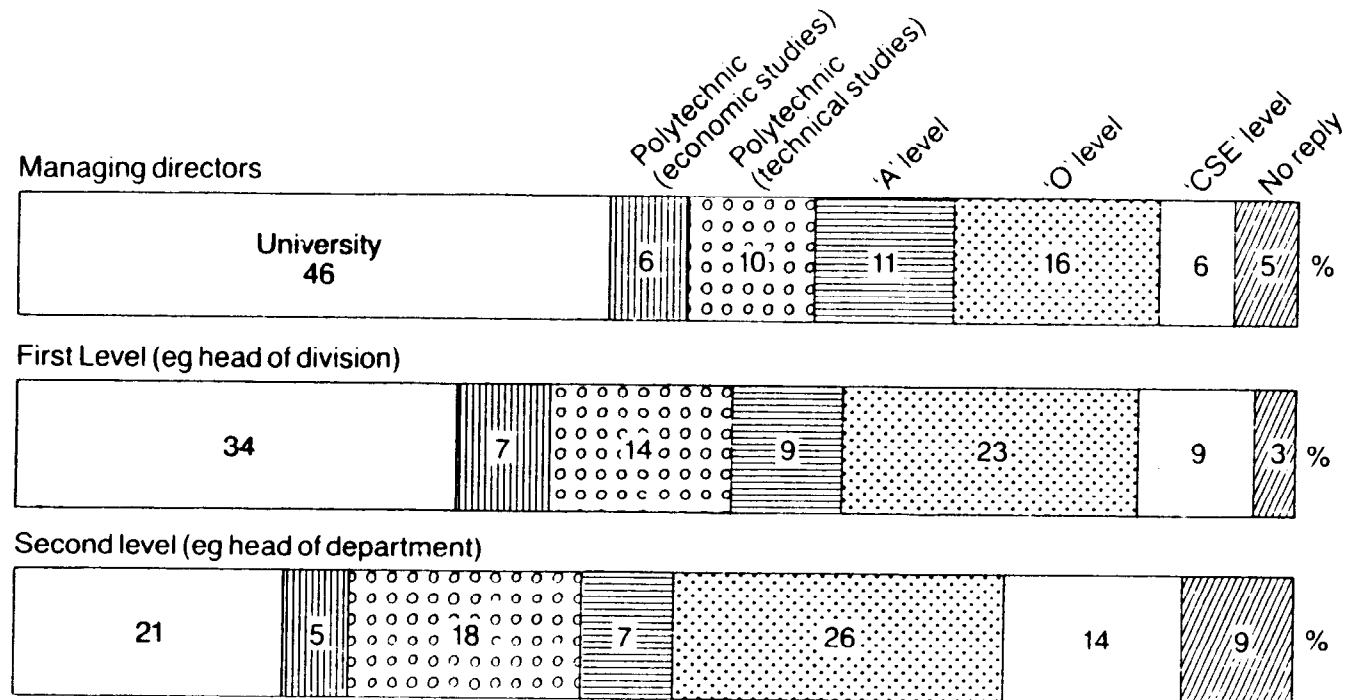
<sup>2</sup>About 72 per cent of pupils in fifth and sixth school years attended the Orientation Stage.

\*There are slight differences within the individual Laender.

Figures in the right-hand column show the earliest possible age of entry in an uninterrupted progress through the education system.

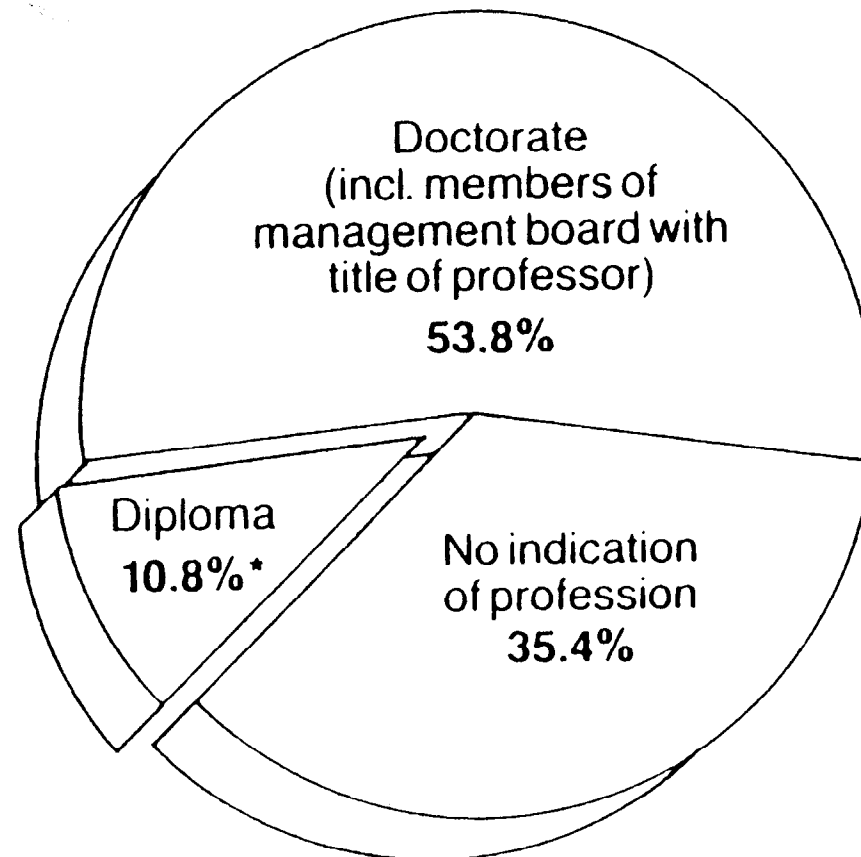
The size of the rectangles is not proportional to the numbers attending.

## Educational qualifications of managers in the Federal Republic of Germany



Sources: Institut der deutschen Wirtschaft, 1985 and Kienbaum Vergütungsberatung, 1984

## Educational qualifications of management board members of the 100 largest German companies



\*Includes 5.4% engineers and 4.5% economic scientists

Source: Dr Frank Grütz Unternehmensberatung  
Bergisch Gladbach

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