Abstract
The development of training programs in project management and its institutions in Germany shows an unambiguous trend: quantitatively there is an increase of offers and demands as well as qualitatively an increasing systematization of the offered programs. The development resembles processes of the professionalisation of “new professions”.
In reference to E. Freidson’s typology of training programs, existing programs can be characterized concisely: they show a proximity to the forms of institutionalization of the technicians, merged with some profession typic elements. From a normative point of view this can be understood as “deficits” to a full profession, the line of approach seems to be clear – that’s also the typical diagnosis of the occupational discourse.
There are two possible routes for future development: expertisation or professionalisation. An expertisation in the sense of an increasing establishment of training programs in German academia is likely in a medium term. However, the analysis of the structural moments of the training programs shows clearly, that there is no quasi-automatic way to professionalisation. The understanding of the existing training programs in Germany is at odds with such a development. Central points thereby are: the basic technical perspective, a missing control of the formation of a professional habitus within training and the strong dependence on practical, corporate interests
1 Introduction

Starting in big enterprises of the defense and aerospace industry – firstly in the USA, some years later in Germany – there is a differentiation of vocational functions, which are subsequently signified with the notion of “project management”. Initially, project management is understood as a relatively indeterminate bunch of tasks, from which, later on, an increasingly precise idea of the “project manager” arises. With the diffusion of this structure and semantics in other sectors of industry and society in general and its growing relevance, the emergence of manifold offers of training programs, the founding of a (occupational?) association, but also the beginnings of the formation of a ‘discipline’ of project management, an institutionalization takes place which is self-described as “professionalisation” by the “Gesellschaft für Projektmanagement” (GPM), the most important German association of project manager.

If and in how far this self-description is appropriate, hence, the occupation of project management is on the way to professionalisation, is increasingly on the agenda of occupational strategy (c.f. e.g. Adams 1994; Turner 1999; LeRoy 1999; Mullay 2004; in Germany: Motzel et al. 1998; Pannenbäcker 2001) and scientific discourse (cf. e.g. Zwerman/Thomas/Haydt 2003; and also: this workshop). The present abstract proposes to analyze this question by looking at the training system, i.e. the training institutions and programs as a main aspect of professionalisation. In contrast to normatively influenced contributions by members of the occupation, this will be done from a “critical” perspective of the sociology of occupation.

In reference to Eliot Freidson, I develop a typology of training programs – the point of origin is the fact that training programs can be found for every occupation. Decisive is the form of their institutionalization (ch. 2). Having this in mind, the empirical process of the institutionalization of training programs in project management can be reconstructed (ch. 3). This will be done in three steps: after outlining the historical development of the different forms of PM training programs (a), I will characterize the current development status, the actual landscape of PM training programs (b). A discussion of the future development –

\[1\] That this a central topic of professionalisation could be easily shown. Whatever is understood by the notion of “profession” or “professionalisation”, it is undisputable that this is a group of occupations which are distinguished by a “particularly demanding education and training” (Kurtz 2002: 48; translation E.K.). Cf. also Freidson: „Professional schooling is an indispensable component of the ideal type [of professionalism, E.K.]“ (2001: 84).
expertisation or professionalisation? – of the institutionalization of PM training programs in Germany follows (c).

2 Typology of training programs

Training programs are of great relevance for every occupation. Decisive is the form of their institutionalization. According to Freidson, three patterns of specialized training can be differentiated which are connected to three types of occupational: crafts, technicians, and professions (cf. 2001: ch. 4). From my point of view, the training type of professionals only inadequately differentiates between engineering training and the training of the classical profession; hence we must distinguish four types of training programs. They will be presented below:

(1) “Training on the job” is the form of training, the recruits of the crafts have traditionally received. The craft is learned as a practical, vocational enterprise in which the working knowledge and tacit skills required are learned as work is being performed. Action competence (Handlungskompetenz), “tacit art” (Freidson) must be learned by practice, become part of the eye, ear, and hand (cf. Freidson 2001: 26). Trainees have apprentice status and learn their craft as they work on the job with a full-fledged member of the trade who serves as teacher and supervisor. Training takes places within the labor market, and so is contingent on the demands of the production as well as of those who finance it. Since training takes places in practical circumstances that require the continuous performance of productive work, there may be no opportunity to engage in discursive instruction that conveys abstract concepts and formal theories. The particular craft workers who engage in training and supervising novices may differ in their proficiency, their effectiveness as instructors, and their conscientiousness. Since both jobs and work-sites vary, as well as the capacity and motivation of those who provide the training, it is difficult to standardize training (cf. Freidson 2001: 89).

(2) Technicians develop as entirely new occupations during and after the Industrial Revolution. In the course of this development specific training institutes arise: unlike training for the crafts, the basic training of technicians is not commonly gained on the job or as an apprentice though. Their training typically takes place in para-secondary and post-secondary institutions that are sometimes called technical institutes. And unlike the crafts, while the content of their training is largely practical in character, they are taught some theory and abstract concepts. The main focus is on the acquisition of knowledge which is, for the solution of relatively high standardized problems, directly, deductively applicable to practice.
Thinking of the technicians as an intuitively coherent occupational category, they represent a comparatively weak set of occupations that are not able to control their own training because, unlike both crafts and professions, they do not create their own body of knowledge and skill. The content of their training is largely synthetic, derived from both technical and theoretical knowledge and skill produced and controlled by other occupations. Nor are they often trained solely by members of their own occupation. And while the knowledge and skill they learn is not typically limited to specific work sites – like that of crafts and professions, it is transferable rather than firm-specific – it is fitted into a division of labor that is dominated by either lay managers or professionals. Their training programs are open and often accessible to many. It remains to be seen whether their training institutions will, like those of the past, assume university status in the future (cf. Freidson 2001: 91-92).

Technicians are „still in an early stage of development. In the future some individual occupations in the technician category may gain professional status, others become semi-professions (cf. Etzioni 1969), others simply disappear as their skills are made redundant by new technology, and still others become members of the occupationally anonymous semi-skilled worker category.” (2001: 90). With regard to the focus on the occupational development of the project management, the discussion of potential routes will be limited to two central patterns: expertisation and professionalisation.

(3) In regard to a potential development of the technicians, Freidson seems to have in mind what I call “expertisation” when he notes: “A critical index of those that are collectively mobile and on the road to professional or semi-professional status is the successful association of their training programs with a university and the development of a curriculum that emphasizes new or syncretic theory which intellectualizes their work.”. Historically, specific training institutions were established which often sought and finally gained university status by advancing theory and research in their curricula – a process which can be understood as “academisation”. Engineering training is proto-typical for this form of training in Germany. Almost exclusively training takes place in academia and is based on a highly developed, systematized and standardized body of knowledge. The acquisition of knowledge competence (Wissenskompetenz) takes center stage in the training program. As in the crafts, training is controlled and conducted by members of the occupation, but unlike the crafts, those who do the training are credentialed full-time teachers, who are not obliged to gain their income from the work in the labor market outside the school and the educational system. And
finally, in contrast to those involved in both craft and technician training, the faculty is expected not only to teach, but also to be active in codification, refinement, and expansion of the occupation’s body of knowledge and skill by both theorizing and doing research (cf. Freidson 2001: 92).

Imprecisely, this form is labeled „professional“ by Freidson: with the focus on academisation which is a central part of both expertisation and professionalisation, he blurs the difference between the forms of training programs of the engineers and the classical professions:

(4) Unlike engineering training, professional training is more than just teaching knowledge competence. Rather the acquisition of action competence takes center stage in professional training. This can be clearly seen by looking at the empirical forms of the classical professions. Training is separated into two different stages: the first stage focuses on the acquisition of knowledge, the second on the socialization (Einsozialisation) into practical tasks. In medical training in Germany this becomes manifest in the differentiation of pre-clinical and clinical period. Central parts of the clinical period (“Famulatur” and “Praktisches Jahr”) take place involved into practice of medical action: “By involving the students continuously over a lengthy period of time in the in-patient and ambulant section of medical care, they are supposed to deepen the already learnt, particularly develop practical knowledge and skill” (Leitfaden Humanmedizin: 10/11; translation, italics E.K.). “Training at the bedside and case-related practical learning, supported by regular theoretical schooling in seminars” (Studienplan 2000: 8; translation, italics E.K.) takes center stage.

This can be found similarly in legal and theological education: the so-called „Referendariat“ respectively „Vikariat“ follows the course of studies at the university,. Here, the students get socialized to practice by practitioners of the profession.

In reference to structural-theoretic (strukturtheoretischen) approaches of the theory of profession, this specific structure of professional training can be explained: (a) Professions are typically concerned with the coping with critical situations and threats to human everyday life (Lebensführung). These, for the client, problematic situations involve instances and forces whose control is beyond the potential of the everyday person (cf. Stichweh 1994: 296). In this situation of crisis there is need for professional assistance; (b) This problem situation determines the structure of interaction between professional and client: they enter an alliance of work (Arbeitsbündnis) in which the client leaves the interpretation of his case trustfully to the judgment of the professional. He puts the “definition of the problem at hand in the
particular case almost completely in the hands of the professional.” (Stichweh 1994: 297; italics i.O., translated E.K.). The professional has to define the problem, acting in the interest of the client without injuring his autonomy. This task can only fulfilled by recourse to a complex body of formal knowledge and the skill to apply this knowledge to the single case, hence the mediation (Vermittlung) between theory and practice. Expertise is a necessary but not sufficient premise of professionalisation: the specific problem of professional service lies in the mediation of this general knowledge and the specifics of the case (cf. Oevermann 1996; Seyfarth 1989). The knowledge which is at the professional’s command is significantly insufficient: “there is a tendency of over-complexity of the situation in relation to the knowledge at hand. A relation which makes it impossible to understand the professional’s action as simple application of existing knowledge with expectable and therefore easy evaluable outcome. Therefore, a substantial aspect of the problem situation is uncertainty concerning the dynamic of the situation, concerning the selection of action strategy and lastly the putative outcome” (Stichweh 296; italics i.O.; translation E.K.). (c) Hence, professional training does not only consist in teaching knowledge competence. Rather, the training of action competence – the formation of a professional habitus – must be attained during a longsome and extensive socialization. Only this way, the professional is enabled to accomplish the mediation of theory and single-case practically.

3 The empirical development of institutionalization of PM training programs in Germany

Against the background of this typology, the empirical process of institutionalization of training programs in PM in Germany can be reconstructed. This will be done in three steps: after the outlining of the historical development of the different forms of training programs in PM (a), I will characterize the current development status (b). A discussion of the future development – expertisation or professionalisation? – of the institutionalization of PM training programs in Germany follows (c).

(a) Historical development

The presented typology can also be read as a historical succession which arising occupations or profession run through in their process of institutionalization; cf. Freidson: „Some of the newer professions, such as engineering and accounting, initially conducted their training on
The job, then slowly developed their own schools, first as vocational institutes, and only later as schools or faculties within universities or as institutes with university status.” (2001: 97).

Overview of the historical development of PM training (table 1)

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>since 1965</td>
<td>„Training on the job”</td>
</tr>
<tr>
<td>ca. 1969</td>
<td>first private programs of continuing education</td>
</tr>
<tr>
<td>1979</td>
<td>foundation of the Deutsche Gesellschaft für Projektmanagement (GPM) – the association of project managers (member of IPMA)</td>
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<tr>
<td>1991</td>
<td>launching of training course “Lehrgang Projektmanagement-Fachmann (RKW/GPM)“ (PMF) (project management expert)</td>
</tr>
<tr>
<td>ca. 1992</td>
<td>first courses on PM in academia: in the context of existing branches of study</td>
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<tr>
<td>1994-1995</td>
<td>first round of certification, awarding of the first four certificates („IPMA Certified Project Manager“)</td>
</tr>
<tr>
<td>1995</td>
<td>first postgraduate studies in continuing education (gfw/Henley College/GPM) in academia</td>
</tr>
<tr>
<td>1996</td>
<td>foundation of PM-ZERT, the financially and organizationally autonomous certification body.</td>
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<tr>
<td>1997/8</td>
<td>Introduction of the PM-Kanon, the “German National Competence Baseline”; “definition” of a body of knowledge of PM</td>
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<tr>
<td>1998</td>
<td>Implementation of a system of certificates, the „IPMA Validated Four-Level-Certification System“ (on the basis of the international IPMA Competence Baseline (ICB))</td>
</tr>
<tr>
<td>since 1999</td>
<td>application process on official accreditation of PM-ZERT</td>
</tr>
<tr>
<td>WS 2002/03</td>
<td>first postgraduate studies with a “Dipl. (FH) Projektmanager“ (Diplom project manager) degree</td>
</tr>
<tr>
<td>WS 2004/05</td>
<td>first consecutive studies in academia at an applied university (Fachhochschule)</td>
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Historical process of institutionalization of PM training programs

Within 40 years, different forms of trainings programs have been developed:
(1) With the beginnings in the aerospace industry, there is an differentiation (Ausdifferenzierung) of occupational functions which develop – in a process of specification, specialization and combination of tasks – into increasingly specialized positions. The services
performed by holders of such positions are then understood as “project management”. At first, the qualification for these positions is received as “training on the job”: the acquisition of knowledge and skills of project management are learned in the context of daily project work in organizations/firms, in the everyday execution of practice; for instance, starting as a member of a project team, later as a project leader. In larger project organizations it is conceivable that future project leaders are introduced to practice by experienced project leaders, comparable with a master/apprentice-relation by learning a trade – however without developing an occupation in a narrower sense. The character and comprehensiveness of what can be learned is contingent on the specific conditions of the particular project work and the encompassing project organization. This form of training is characterized by the fact, that it not a systematic, standardized program. There is no certificate received either.

(2) From these isolated department of aerospace industries (whose companies often had operations in the defense industry also), the idea of project management spreads to other internal departments of these companies. By this, the first in-company training programs of continuing education develop. Practitioners, typically trained engineers with perennial experience, who are cast for a project management position or are already performing such an occupational function, are taught the “basics” of project management in seminars of several days’ duration.

(3) With the diffusion of employees to other companies, but also by consultants who go into business for themselves (cf. Madauss 2000: 28), since about 1969, the idea of project management spreads to other companies. Besides their core business, consultancies start offering private training programs of continuing education. This is the first step outside the companies: project management is taught at independent, at first strictly private, institutes of continuing education. Here too, constitutive for these programs is their part-time, career-integrated (berufsbegleitend) character: the training programs are explicitly targeted towards practitioners of a technical or business studies branch of study. Mostly, a respective degree or at least a vocational education (Berufsausbildung) in addition with a perennial work experience is expected. These practitioners can receive additional qualifications on top of already acquired competencies of a learned occupation – typically a stock of knowledge on a specific topic. In most cases, the training takes place at weekends – adjusted to the working conditions of the participants. The seminars are mostly proprietary in character, concerning the systematics as well as the ‘certificate’. Compared to the intra-corporate programs the
nearthiness consists in their intercompany character. With the growing relevance of such training programs, project management courses are increasingly becoming an established part of offerings of private institutes of continuing education.

(4) Following the founding of the “Deutsche Gesellschaft für Projektmanagement” (GPM), the German association of project management (German member of the IPMA) in 1979 there is a move forward to systematization and standardization of training programs in PM. Particularly, in reference to the international IPMA Competence Baseline (ICB), GPM works intensively on the “definition” of an universally valid body of knowledge. As a result, the “PM-Kanon”, the “German National Competence Baseline” is published in 1997/8. In this context, the training course “Lehrgang Projektmanagement-Fachmann (RKW/GPM)“ (PMF) (project management expert) which is based explicitly on these concepts, is launched by GPM in 1991. The systematics and conception of this course is still firmly oriented on practical necessities: depending on comprehensiveness and rhythm of presence and self-study periods, the program stretches (depending on the training institution) over a period of three to six months. The participation in the program is acknowledged by a “certificate of qualification”. Furthermore, in contrast to most other privately offered training programs existing at this time, the acquisition of a program-independent certificate is explicitly intended and recommended. Another innovation compared to other training programs existing at this time, the trainers have to prove a specific qualification by acquisition of a specific certification for this training course.

These certifications are part of a system of certifications which was, in collaboration with the IPMA, developed by the GPM since 1994/5. With the PM-ZERT in 1996, a financially and organizationally autonomous certification body was founded. The training course “Projektmanagement-Fachmann” is conceptualized in regard to the acquisition of a level D certificate. With the big success of this training program, there are first indications of the establishment of the PM-ZERT system of certification as quasi-standard.

However, the establishment of a similarly conceptualized training program failed: the GPM developed the training course “Geprüfter Projektkaufmann (GPM/ITW)” (trained project business assistant) which had its focus on the “commerical management of contracted projects” (cf. Motzel et al. 1998: 22f.). There were also considerations of establishing a similar concept as apprenticeship. Both offerings could not be practically established – presumably because of lack of demand.
(5) With the launching of postgraduate studies in continuing education in academia, the academic association of training programs in PM is established, the evolution from private to public institutions takes place. The first postgraduate studies were implemented in 1995, in cooperation with GPM, Henley College (GB) and the “Gesellschaft zur Förderung der Universität der Bundeswehr München e.V. (gfw)”. Students receive a M.Sc. of PM from Henley College, i.e. a British not a German degree. In succession, several more postgraduate training programs were established, typically institutionally located at “An-Institute” (legally independent institutes but tightly knit with academic institutions). The typical duration of these programs is two semesters. In part, trainers are members of engineering or business management faculties. Mostly, academic certificates can be received, sometimes the acquisition of GPM-certificates is intended. Since WS 2002/03, the first program of postgradual studies with the degree “Dipl. (FH) Projektmanager” (Diplom project manager) exists.

(6) The first regular course of studies in project management in academia in Germany is established as recently as the ongoing WS 2004/05. It is a four-semester, consecutive training at the applied university Merseburg (konsekutive Ausbildung an der Fachhochschule). In contrast to all preceding forms, training is not career-integrated, but rather, and this is constitutive, independent from the working context. By this institutional location at public academic institutions, the program is withdrawn from immediate exertion of influence of occupational practice. Professors do not only conduct or at least control training of the students but also control the conception of the training program. Respectively, the systematics is oriented on (emerging) ‘disciplinary’ or at least scientific standards. Trainers are full-time employed members of the academic institution. Thus, they are not dependent on additional income of third parties. Students receive a Master of Science (M.Sc.).

At present, further steps toward institutional localization in academia have not taken place. Possible further steps are: (a) the establishment as basic course of studies (grundständiger Studiengang), i.e. PM training programs starting after secondary education (in contrast to a

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2 For are a few years, there are already basic courses of PM studies at applied universities. However, these are exclusively course of studies with a specific focus on a specific industry sector: the building industry. That we observe here a forerunner which will spread to other industries and eventually result in a industry-independent course of study is unlikely. Rather, from my point of view, this is a relatively independent development – this is also indicated by the existence of an independent association in this industry.
only four-semester, consecutive training; (b) the institutional localization at universities\(^3\) (in contrast to applied universities (\textit{Fachhochschulen})\(^4\)).

\section*{Quantitative and qualitative trends}

Up to now, almost any of the historically developed forms has disappeared with the establishment of new forms. Rather, we observe a complex process of coexistence and a competition for relevance. In reference to the typology developed above, the empirical \textit{quantitative} distribution can roughly\(^5\) be estimated as follows: (1) Empirically, “training on the job” is widespread. However, an estimation is very difficult. Listings of job offers in German national daily newspapers are a first indicator for the (still) high relevance of this form of qualification (cf. Wagler): most of the offered positions for project managers do not require formal qualification or certifications; (2) The empirical forms of PM training programs (2)-(5) (see above) resemble the training type of technicians. They can be labeled as ‘vocational training programs of continuing education’. Concerning these training programs, there is a massive increase during the last 15 years. Particularly, this holds for the study course “Projektmanagement-Fachmann/-frau (RKW/GPM)\(^6\): in a quasi exponential development, the qualification certificate has been received by more than 6000 participants since 1991\(^6\). (3 & 4) At present, there exists only one consecutive, academic education

\footnote{Since 1992, first beginnings of the establishment of training programs in PM at universities (i.e. not only applied universities) can be found in the context of existing branches of study. Institutionally, they are mainly located in engineering or business studies faculties.}

\footnote{\textit{Excursus} to the specifics of the German educational system: This differentiation presupposes an understanding of the differentiation of the German system of academia. There are two types: universities (\textit{Universitäten}) and applied universities, post-secondary technical college (\textit{Fachhochschulen}). Tertiary education in Germany is divided – like in all industrial nations – into technical or vocational institutions and institutions of higher education (cf. Freidson 2001: 86). The former are called „Fachhochschulen“ and have a specifically vocational orientation and, historically, arose mainly from engineering schools (\textit{Ingenieurschulen}). In fact, today, engineering is no longer the only branch of study at applied universities, however still the largest (cf. also Lundgreen 1994: 50). The latter, called “Universität”, have a “dual concern: they want to extend the \textit{socializing} function of primary and secondary schools by providing their students with an advanced general education (…) and they want to qualify their graduates for desirable, middle-class jobs by providing specialized vocational programs. Professional training is explicitly vocational in character but presupposes the advanced general education connected with the university”\((\text{Freidson 2001: 86; italics E.K.})\). Important for the following discussion is their different orientation of these two institutions. While universities are classically described by the unity of research and teaching, the applied universities can best be characterized with the term of “teaching and practice”. The applied universities have the function, “to provide an education based on scientific basis by teaching related to practice which enables the graduates to autonomous occupational agency. In the context of their educational mission, professors can perform own studies as well as work on problems of research and development (Lundgreen 1994: 49; italics i.O.). At first sight, such a differentiation might look unnecessary. However, the different structural orientation becomes clear by looking at the amount of professors’ duty of teaching which is more as double for the applied university. In addition, students of applied universities are required to spend two semesters doing internships. Furthermore, only universities have the right of conferral of a doctorate which is decisive for training and recruitment of junior scientists.}

\footnote{With few exceptions, the existing data basis is poor – hence, only a rough estimation is possible.}

\footnote{This development is reflected in the heavy increase of level D-certificate for which the course of study is supposed to prepare.}
program – which was not implemented until recently. There are no graduates yet. In the next years, only a low level increase can be expected. In regard to systematic training programs, it becomes clear, that the empirical field is dominated by career-integrated training programs of continuing education, academic education is heavily underrepresented. Due to the poor data, it remains unclear, whether the massive expansion of career-integrated training programs of continuing education means an increasing replacement of “training on the job” by formal training programs. Accordingly, “training on the job” might lose its relevance as a self-sufficient form of training.

Qualitatively, the trend is as follows: the training programs become increasingly institutionally independent of vocational practice. With the beginnings of the establishment of first (consecutive) courses of study at applied universities, the emerging ‘discipline’ of PM can develop increasingly autonomously and self-directed (eigenlogisch). The length of training programs increased steadily over the last 40 years, accompanied by the comprehensiveness of content taught. At the same time, great efforts of the standardization of the body of knowledge are undertaken and as a consequence thereof, we observe a development to growing systematics of the connected training programs. Likewise, this applies to the efforts in regard to an uniform certification: Little by little, a system of certification is established, which has its current ending in the introduction of the IPMA Validated Four-Level-Certification System which may be on the way to a quasi PM-standard. The existing system now competes with the establishment of first Diploma-courses of study – again on a more sophisticated level.

(b) Current diagnosis: great proximity to the training programs of the technicians

In reference to the typology developed above, it becomes clear, that the existing PM training programs show a great proximity to the forms of institutionalization of the training programs of the technicians:

The presently dominating forms, especially the career-integrated programs of continuing education are bound narrowly to vocational practice. In fact, they increasingly take place at work-independent training institutions, however their strong vocational orientation undoes this autonomy in large parts. This can be shown prototypically for the training course “PM-Fachmann”: it is self-described as “career-integrated”, training and work is supposed to be integrable. In the dimension of time, this means conformance of the rhythm of qualification to the circumstances of the vocational embeddedness. Over the total duration of three to six
month (dependent on the training institution), days of presence alternate with self-study periods at home or at work. Days of presence take place in two to three day terms on weekends. The knowledge taught is understood as “transfer-oriented practice-Know-How” (PMF, gfw; translation E.K.). Therefore, the institutional independence of training institutions and their programs is limited.

The socialization into the ‘occupation’ is supposed to take place mainly in practice. However, this form is not comparable to the crafts where recruits get their primary training on the job. Unlike in the crafts, practical rehearsal does not take place under the instruction and supervision of a full-fledged member. Rather, this form of training has to be understood as ‘learning by trial and error’, after having been assigned the position of the project leader.

The learning contents of the training programs stem from different disciplines, the constitution of the PM body of knowledge can be described as “largely synthetic” (Freidson).

Looking at the “German National Competence Baseline” (PM-Kanon) which provides the basis for the conception of the training course PMF, this can be clearly shown: dominant are business studies basics (in different sub disciplines). In addition, fields of knowledge which can be ascribed to psychology (cf. “motivation” or “self-management”) and sociology (cf. “communication”, “social structures, groups and teams”) and their intersections play an important role. A discrete body of knowledge which can be clearly delimited from other disciplines can not be identified.

There is also a focus on teaching “mechanical technique” which can be applied, more or less, directly to practical problems. Theory and abstract concept as we can find them in engineering or professional training programs are underdeveloped.

The reason for this can be found in the only rudimentary success of the establishment of PM in academia. At least, the empirically dominant PM training programs in Germany are not yet established in academia. The institutional localization in academia – which is central for the type of professional training – can be found only in minor extent, and if, mainly at applied universities.

Accordingly, there are only very few full-time teachers. Often, PM trainer “work in consultancies, training companies or do freelance work” (cf. PMF-brochure). I.e., they are typically not employed at an institution that focuses on PM training. In fact, besides PM-trainings, they have to fulfill different tasks in the company or at least do trainings in other

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7 Explicitly, the brochure to the study course PMF states: “According to your customer requirements, the different providers developed different models of the structuring of learning periods.” (4, italics, translation E.K.).

8 Cf. also the overview of learning contents in the brochure to the PMF training course.
fields. Thus, they have to gain parts of their income by tasks not related to PM, from work in the labor market outside the school and the educational system. Few exceptions can be found at applied universities, sporadically also in universities: there are a several professors who can focus their work, including teaching, on PM. In regard to research, opportunities of „codification, refinement, and expansion of the occupation’s body of knowledge and skill“ (Freidson 2001: 92) are almost exclusively linked with the beginnings of the establishment of PM in academia. However, because of the high amount of teaching obligation at applied universities (cf. fn. 4), this is only possible under the condition of high personal effort. Indeed, it is mainly professors who push further the systematization of the body of knowledge.

Furthermore, it is not obvious if trainers are members of the occupation, since there is no full developed occupation. However, for the training course PMF only certificated (“PMF-Trainer”) trainers are accepted. In this case, we can assume membership in a simple sense. However, this is not the case for other training programs. Rather, teachers have highly divergent occupational origins.

**Conclusion:** The existing PM training programs can be characterized by their proximity to the forms of institutionalization of the technicians. From here chosen point of view, the analysis of training programs and institutions, at present, the establishment of project management as full profession cannot be claimed. Aspects which might point to potential future professionalisation are mainly associated with the beginnings of the establishment in academia.

**c) Future development: expertisation or professionalisation?**

From a historical point of view, it looks as if we observe a development which Freidson describes more generally for new professions: „Some of the newer professions, (...) initially conducted their training on the job, then slowly developed their own schools, first as vocational institutes, and only later as schools or faculties within universities or as institutes with university status.” (2001: 97). With the rapid quantitative and qualitative development since the 1990ies and particularly with the beginnings of the establishment at (applied) universities⁹, the question of the future development comes up: expertisation or professionalisation?

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⁹ The existing PM courses in existing branches of study in universities might be understood as a gateway to future expansion end eventually the development of a separate branch.
In the perspective of the dominant occupational discourse, professionalisation is an aspired goal (c.f. e.g. Adam 1994). From such a point of view, the deviation of existing forms of training programs (proximity to forms of technicians) from the ideal type of professional training is understood as “deficit”. Accordingly, in historical perspective, the current diagnosis is interpreted as an intermediate step to professionalisation which has to be run through by every “new profession”. From this normative perspective of an as aspired and as reachable postulated goal, the observed “deficits” turn into prescriptive statements (e.g. as recommendation to the association).

Hence, can we assume, that project management will be established as a basic course of studies at applied universities as well as universities in a few years time or at least medium term? And, if this was the case, would it mean that professional training in project management is established?

A further expertisation, meaning the establishment of PM training programs in academia, – similar to the institutionalization of training programs of engineers in Germany – is quite possible and likely. Particularly, the beginnings of the establishment at applied universities seems to give direction. The already advanced process of institutionalization in other, especially Anglo-Saxon countries, points in the same direction. However, the question, in how far we will be able to observe the establishment of basic course of PM studies in academia is open. Such an education had to be oriented conceptually on the form of projects, less on specific contents of project work (in the different industries). The establishment of such a branch of study might be particularly dependent on the further differentiation of occupational positions of project management abstracting from specific content and eventually resulting in prospects of employment for suchlike qualified project manager.

In regard to the question of future professionalisation, the existing PM training programs exhibit important structural moments which make such a development, at least in medium term, unlikely. Tentative thoughts will be presented in the following10:

10 The following, shortened presentation is based on the interpretation of the case of the course of study „Lehrgang Projektmanagement-Fachmann/-Fachfrau (RKW/GPM)“ (PMF), offered by the gfw (Gesellschaft zur Förderung der Weiterbildung an der Universität der Bundeswehr e.V.). Due to the central relevance of this training program in regard to the numbers of graduates, but also its relatively large comprehensiveness in combination with systematics strongly oriented on the PM-Kanon (and thus on the ICB of the IPMA), this training program has to be understood as prototypical for PM training programs in Germany. Single-spaced and smaller set are text passages of the brochure of this course of study.
The reduction of ambiguity: the basic technical perspective

A basic element of the occupational discourse of PM is the technical understanding of the (social) world. Conveyed by the PM-Kanon, the “German National Competence Baseline”, this understanding is reflected in the PM training programs. Stemming from the engineering tradition of the origins of project management, the idea of ubiquitous general laws meets with the compatible idea of business studies of the calculability, efficiency and controllability of (social) phenomena. In contrast to professional training which attributes central relevance to the practical coping (praktische Bewältigung) with uncertainty and ambiguity resulting from the tension between general rules and single case, uncertainty is perceived as endangering controllability and calculability. Instead of understanding it as constitutive element of professional action (professionelles Handeln), the attempt is made, to generate the illusion, that by applying certain “techniques”, a ‘perfect’ planning is possible, meaning, all uncertainties can be extinguished.

The central training objective of the programs consists of the acquisition of “methods expertise”: the basic idea is, that problems which come up during the project process get controllable and calculable when applying these “efficient methods” and “techniques”. The brochure of the PMF course of study advertises: “The participants come to know, how to plan and meet budgets and deadlines more closely by optimized internal processes. Projects become transparent, overlookable and controllable.” (italics and translation, E.K.). The notion of “transparency” makes the understanding obvious, that the element of uncertainty, which is constitutive for the production of innovation, can be made “transparent” and thus be dissolved using certain “methods”. This is done by planning which makes a ‘rational’ approach (Zugriff) possible. The work breakdown structure, decomposing a problem into sub problems and assigning them to individual project members makes projects “overlookable” and eventually calculable with regard to budgets and deadlines. Having established a planning, the problem is completely understood and well defined (cf. Simon). Hence, the execution of the projects can be reduced to a target/actual comparison and is therewith “controllable”. The “techniques” are understood as solutions for problems, as “simplifications which function” (Baecker 1999: 32). The basic idea is, that occurring contingencies can be reduced by these techniques.

The type of the underlying body of knowledge is based on a positivistic approach of the generation of knowledge. In contrast to a rather emergent development of a body of knowledge and the establishment of boundaries in contention with other disciplines, here the attempt is made to define such a body of knowledge unambiguously and comprehensively (cf. Pannenbäcker 2001: 99) and anchoring it in (DIN-)standard.

However, a glimpse of a profession typic understanding can be caught, if project management is seen as “action competence in order to plan and steer none-routine ventures” (cf. brochure PMF). “Non-routine” and therewith uncertainty is understood as an action

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11 Cf. similarly Thomas in general: “project management itself is a bureaucratic procedure based on techniques of calculability. (...) PM is an attempt to reduce, rather than manage the ambiguity of organizational work” (2003: 15/16; italics E.K.). Hodgson speaks of a „technicist foundation“ (2002: 807) of PM.

12 This applies similarly to a long existing, successful PM basics seminar with the title “Planning and controlling projects”: the acquisition of “techniques of project management” takes center stage.

13 Cf. also the textbook to the study course PMF: large parts (especially chapter three) are variations on the topic target/actual comparison.

14 Noticeable in this context is the significance of “IT-support” in PM training programs. The basic concept of these “tools” still conforms roughly to network planning which is a part of operations research, thereby being one of the origins of project management. This concept also is dominated by the idea of the feasibility of the electronic reproduction of the drafted plan (“work breakdown structure”), by which the course of the project can be controlled.
problem which practically can only be coped with by the acquisition of action competences. However such an understanding is immediately contradicted by the next sentence speaking of an “optimal approach”.

**Acquisition of action competence? – missing control of the formation of a professional habitus**

The control of the formation of a professional habitus, the socialization into practical work by means of an instruction through professional practitioners is a integral part of classical professional training. Such a control is not provided in the existing PM training programs: in contrast to a basic (vocational) education (*grundständige Ausbildung*), there is no socialization into a complex body of knowledge and the acquisition of (practical) skills in a prolonged, at least perennial training. Center stage in the dominating PM postgraduate programs of continuing education takes the acquisition of knowledge of the specific “topic” project management *adding up* already learnt knowledge of a *already learnt* occupation.15 This learning process is supposed to take only a relatively short period of time which makes the formation of a professional habitus impossible. Such an (re-)formation of habitus is not even intended by these training programs. This basic understanding is also manifested in the learning methodologies used in these training programs: they mainly aim at the acquisition of knowledge, not at the incorporation of action competences.16 The dominant methods are exercises, discussions and presentations by trainers which can only sensitize for specific problems of professional practice in a very limited way.

*Profession typic elements* can also be found. However, they are less part of the training programs, but requirements for the certification (level C and up): with the required proof of experience in the practical coping with problems in regard to single-cases, a glimpse of an understanding which resembles professional action competences can be caught.

The distinction of *knowledge* and *competence* refers to the relevance of „vocational experience“: competence is stressed as transcending mere acquisition of knowledge (cf. e.g. Pannenbäcker 2001: 70). Accordingly, there is a distinction of certificates of knowledge and competence: the level D-certificate is understood as “certificate of knowledge” (Pannenbäcker 2001: 252/3), from level C up, the proof of vocational experience is a central part of the certification procedure. (cf. the GPM-brochure; Motzel et al. 1998: 72). Accordingly, there are requirements of certification which resemble the coping with single-cases: in the context of a “project workshop”, certificates are supposed to “demonstrate their PM-skills and social competence in practice by working on a project case study”. Furthermore, a “project seminal paper” has to be written on a project “managed or dealt with in a responsible position” which, among other things, is supposed to reflect “personal experiences in this project” (Pannenbäcker 2001: 255f.). Furthermore learning methodologies can be found which might make a

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15 Cf. the typical prerequisites of participation: these are a “completed technical or business studies, respectively a qualified vocational education with corresponding three year experience” (translation E.K.).

16 This is already indicated by the notion of the „Project management expert“ (cf. course of study): it refers to the mastery of a field of knowledge, less to action competence.
socialization in vocation practice possible: “complex case studies and transfer-workshop” (PMF, gfw). There are also notions of “role playing” and the “observance” of colleagues. These parts of the training seem to transcend the mere acquisition of knowledge, a “concept of action” is supposed to be developed17. At present, it is unclear, what kind of understanding of “cases” is on hand, how these parts of training are concretely conceptualized and what share they have.

Assuming an insight in the necessity of acquiring action competences as integral part of the vocational function of PM, noticeable is the fact, that the acquisition of action competence is no or only a very limited part of the training programs, but a requirement in the certification procedure. The formation of a professional habitus is not integrated into vocational training, but had to be acquired in practice in the concrete work setting. The socialization into the practical coping of mediating general knowledge and single-case is not subject to the control of professional training. In contrast to the classical professions, this would be left to a kind of ‘natural’ (naturwüchsig) (re-)formation in practice18. Assuming that project management structurally possesses elements of professional action, the following thoughts might be of interest.: we observe a form of training programs which deviate from classical professional training. However, this empirical form of PM training programs may not be inadequate to the structural demands arising from the problem situation (see above). The rehearsal (Einüben) on a case basis may be possible in vocational practice because here failure is not as critical as, for instance, in the medical profession: problems are not life-practical, life-threatening problems (lebenspraktische Probleme). Answering this question deserves study of the vocational practice of project managers in training.

Institutional dependency: direct intervention in practice vs. professional counseling

The basic understanding of the training programs contradicts with an independent professional logic (cf. Freidson 2001): The training programs and –institutions are strongly bound to the practical interests of firms/organizations. Project managers are understood as part of the firm’s practice, therefore they are supposed to intervene directly into practice. Correspondingly, they are made responsible for the success or failure of projects. In contrast to the understanding which can be extracted from PM training programs, professional counseling provides “the guidance to a solution to a problem, not the solution itself. The counselor gives support in regard to a decision-making process in a problematic situation. The

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17 Cf. also the description by Motzel et al.: “The participants are sensitized in regard to processes in project teams and their environment and train in role-playing real situations with which they are confronted as project managers.” (1998: 41).

18 This is formulated explicitly in a similar wording in Pannenbäcker: “the experiences with the application of project management (...) are mostly self-acquired in the in-firm practice in project work. In contrast to theoretical qualifications, these experiences are not teachable in training programs of continuing education, but are dependent directly on content, environment and specific project conditions in which a person occupies a certain task, role or responsibility.” (2001: 251; italics, translation E.K.).
decision itself has to be made by the client himself.” (Maiwald 2004: 50). Hence, the professional cannot be understood as an immediate part of the firm’s practice. Accordingly, from a professional understanding, success or failure of a project cannot be ascribed directly to the professional. It can only be judged in how far the professional has acted according to the current professional standards – a distinction between success and competence has to be made.\textsuperscript{19}

Already the term “project manager” points to fact, that the project manager is understood as part of the firm’s practice. This becomes even more obvious with sentences like “Make your projects a success!” (cf. PMF brochure). The notion of “success” points to practical interests, from which the project manager cannot elude – due to his embeddedness in organizations/companies. At least partly, the success or failure of projects will always be ascribed to him. A part of his functions must be related to direct intervention in practice. In case of doubt, he is in charge to make decisions.

Summary:
A clear distinction must be made between expertisation and professionalisation. Expertisation is a necessary, but not sufficient step to professionalisation. A integral part of professional training beyond the acquisition of knowledge is the acquisition of action competence: the rehearsal of a tacit art (Kunstlehre) and the associated formation of a professional habitus.

The basic understanding of the PM training programs reconstructed in the paper – exemplified by the case of the PM course of study “Lehrgang Projektmanagement-Fachmann” – contradicts significantly with the logic of professional training. Nevertheless, profession typic elements are identifiable. Sporadically, a glance of a understanding of world can be caught which departs from a mere technical perspective of calculability and controllability of (social) practice, non-routine and uncertainty of practice comes into sight. However, due to the engineering origin and the increasing institutional localization in faculties of business studies at applied universities, this understanding cannot be expected to become dominant. Rather, the perspective on reality will probably remain determined technically. For this reason, the route to professionalisation will be blocked – at least in medium term.

Beginnings of integration of the acquisition of action competences by means of single-cases into PM training programs are recognizable. To which extent habitus formation can be left to natural development in vocational contexts remains an open question: the missing control of socialization in the training may not be a principal problem for professional training. However, it remains unclear, whether the strong dependence on organizations’/firms’ practical interests can be reduced. The structural embeddedness of project managers in

\textsuperscript{19} Cf. also Sprondel: „Success is determined by reference to lifeworldly generated, i.e. practical interests. Competence, against it, hast to be judged in the framework of the structure and the rules of specialized extra knowledge (Sonderwissen).” (1979: 152; quoted from: Maiwald 2004: 29).
organizations/firms and the subsequent subordination under hierarchies and corporate interests inhibits autonomisation.

At least in medium term, it remains unlikely that the ‘occupation’ of project management becomes a full profession. However, the further establishment in academia is possible and likely – in the sense of expertisation.

4 Conclusion

The institutionalization of training programs in project management in Germany in the last 40 years shows high dynamics: both quantitatively and qualitatively, as can be seen in an expansion of offered programs and demands as well as the increasing systematization of training. The current development status can be characterized by the proximity to the forms of institutionalization of the technicians. Two future directions of potential development are of prime importance: expertisation and professionalisation.

Expertisation in the sense of the increasing establishment of training programs in academia are likely in medium term. The beginnings of the establishment at applied universities seem to give direction for this development. However, the analysis of deeper lying structural moments of PM training programs reveals, that there is no quasi-automatic way to professionalisation. Indeed, it is possible to identify profession typic elements in the existing forms of training programs. However, the basic understanding is at odds with such a development. The central points are: the basic technical perspective, the missing control of the formation of a professional habitus within training and the strong dependence on practical, corporate interests.

Closing, the question arises, why „professionalisation“ is an official, central occupational goal while the self-conception revealed by the PM training programs deviates thereof. Possible answers are:

(1) The occupational discourse works with a simple understanding of “professionalisation”: professionalisation is reduced to expertisation. The distinction made above remains unreflected.

(2) The claim of a “professionalisation” is a strategic means which aims at obtaining material (income) and ideal (prestige, autonomy, self-realization) privileges. In reference to the power approach, the efforts on professionalisation can be interpreted as “professional project” (Larson).
(3) However, the evidences of profession typic elements are probably not accidentally. The diffusion of the project form might be succeeded by specific structural problems which can only be adequately coped with by professional action. Research which highlights “making sense” (cf. Thomas 2000) as an important task of project managers may point in such a direction. If this can be confirmed, factual professionalisation is hindered by the actual understanding as it can be reconstructed from PM training programs and furthermore by the specific structural embeddedness in organizations/firms. The response to this question deserves study of the vocational practice of project managers on the basis of case studies, it cannot be answered with the material at hand. Empirically a hybrid might be the case.

With regard to further research, it seems recommendable to direct further research less to models of professionalisation, but rather look at the specifics of the constitutional process of the occupation more openly and then, in a second step, to identify its professional elements. Such an ‘enlightened’ understanding of one’s own development, to me also seems more fruitful for the occupational discourse – only this enables to act upon one’s own development adequately, i.e. taking into account the structural and historical conditions. The adherence to the normative goal “professionalisation” rather seems to be contra productive.

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