



## **Pressures and prospects facing the academic profession in the Netherlands**

EGBERT DE WEERT

*Center for Higher Education Policy Studies (CHEPS) University of Twente, P.O. Box 217,  
7500 AE Enschede, The Netherlands (E-mail: e.deweert@cheps.utwente.nl)*

**Abstract.** The nature of the academic profession has changed considerably, due to a shift toward a private sector model and changes in the management of teaching and research. Increasingly, universities are able to employ and manage their own staff. Methods are explored that allow for flexibility in appointments and for individual, subject, or market differences.

### **Introduction**

Historically, the power to appoint the professoriate in the Netherlands has resided with the Crown. Although the boards of trustees of universities, originally comprised of mayors and other public officials, were free to submit candidates, they were unable to exert much influence on the process. Right after the Napoleonic period ended in 1815, the secretary of state convinced the king that high-level civil servants like professors should be appointed by the king himself and not by any lower agency. Clearly, the central government had acquired a taste for power from the French example. Thereafter, the Crown regularly vetoed a nomination or carried out a decision against the advice of the board of trustees, a practice the Dutch historian Huizinga denounced in his writings:

It creates the uncomfortable feeling that the interests of science are not in safe hands with the Ministry, and that secondary purposes and preferences, harmful to an objective decision in the interest of science, will have their effect precisely where every personal preference should be excluded: in the Hague. (Huizinga 1951)

Later ministers tried to avoid conflicts regarding professorial appointments and sought to establish a board of trustees that mirrored Dutch society, with its pronounced political and religious diversity. However, the composition of the board was restricted: women could not participate, nor those who were politically to the left of liberals (De Jong 1982). Although formally these

restrictions no longer exist, they continue to have quite an impact on the culture of academe, especially as far as the exclusion of women in the top leadership of the organisation is concerned.

It is remarkable that such a system could survive the democratic movement of the 1970s and that not until 1987 did universities get the power to appoint professors without interference from the central government. At that time it was felt that the administrative and legislative framework for universities was no longer adequate for meeting the future demands on the system. Universities were expected to operate more in accordance with market developments. In order to facilitate such a shift, governmental steering would no longer be detailed and directed at the level of the disciplines but would become more global and directed at macro issues. This approach, known as “steering from a distance”, entailed increased institutional autonomy and responsibility in exchange for more accountability in terms of quality control, output productivity, and effectiveness. Moreover, universities are increasingly operating in a market-driven environment in which relationships with customers are predominant. The emphasis on relevant (contract) research and the idea of the entrepreneurial university are cases in point. The objective of Dutch higher education policy of devolving responsibility for managerial decisions from government to the institutions – enabling them to respond to the rapidly changing demands of society – is strongly advocated in HOOP 2000, the governmental planning paper on the further development of higher education (Ministry of Education 1999).

In the context of Dutch higher education’s policy of increasing the autonomy of institutions, two issues in particular are central: first, the evolving employment relationships in higher education and, second, the new governance structure at Dutch universities.

The first issue involves a move away from employment patterns associated with the public sector toward a more hybrid form incorporating private-sector elements. Legally, academics are civil servants falling within the framework of public employment. Academics do not constitute a profession in the strict sense, but as Neave and Rhoades (1987, p. 213) put it, “academia is an estate, whose power, privileges, and conditions of employment are protected by constitutional or administrative law. Their employment is a ‘service’ relationship, not a contractual one, and it is regulated by public law”. Terms and conditions of “service” are settled unilaterally, and academics are supposed to be loyal to the state in return for job security, usually on a lifetime basis. The last few years have witnessed a transition from this public-sector model to a contractual employment relationship, according to which academics acquire the legal status of employee and their working conditions are regulated by contracts of employment under private law. This implies that in substance

the obligations of staff are settled bilaterally between the universities, as the legal employers, and the employees – either on an individual basis or, as is often the case, through collective bargaining between the representative bodies. Thus, while a “service” relationship provides a culture in which the independent academic can experience the research and training responsibilities with little organisational constraint, a contractual relationship provides a labour contract between employer and employee that has certain inherently hierarchical undertones.

The second major issue facing the academic profession has to do with the new law on the university governance structure, which dates from 1997. This law enables universities to change the organisational structure quite radically as far as the management of teaching and research are concerned. This new governance structure means a shift from the traditional collegiate structure in which deans were elected for a fixed period of time as *primus inter pares* toward a management model with deans as professional managers. These managers have increased budgetary responsibilities and a delegated authority for staffing matters – including appointments, personnel assessments, and so on. This changing university governance structure tends to transform the traditional task-oriented organisation, in which academics have a large amount of professional autonomy, into a market-type organisation, which stresses the managerial aspects of teaching and research.

These two issues, which will be discussed at greater length later in this article, form the context in which the current debate on academic appointments in the Netherlands must be considered. From this process of transformation a “clash of cultures” is emerging between “traditional” and “modernistic” concepts of the academic profession. Opponents of these developments have argued that the emerging “hybrid” structure is incompatible with the basic assumptions and beliefs in the university. The discussion about meddling with the civil status, which is connected with lifetime employment (tenure), and disputes over professional autonomy and academic freedom have to be considered in this context. Supporters of the changes see the advantages of such a hybrid organisation in terms of the synergism between formally separate organisational units; they consider transforming the authority relationships between management and academics as a necessary condition for the modernisation of employment relationships. Whether these changes are viewed as for the good or the bad, it is quite clear that they are challenging the traditional hegemony of academics in the educational and decision-making processes of institutions, and the conditions under which they have to perform their tasks.

There are other factors that do have an impact. One is the demographic factor, as academic staff are predominantly male and aging. Another factor is

the level of funding and resources which becomes an issue in the tension between tenured staff and (mainly junior) staff employed on temporary contracts who have few career prospects and low salaries. The gender inequity is also of great concern, as the proportion of female professors is quite low relative to other European countries. All these issues, which will be touched upon in the following pages, are considered part of the overall changes taking place in the academic profession at Dutch universities.

### **The basic elements of Dutch higher education**

Higher education in the Netherlands consists of two sectors, the university sector and the sector for higher vocational education (*Hoger Beroepsopleiding*, or HBO). The HBO sector constitutes an important part of higher education, with about 60 institutions providing a wide range of vocationally oriented courses, with a standard period of study lasting four years. At present, there are in all about 450,000 students in higher education, 63 percent of which are in the HBO and 37 percent in universities. The total number of university students has decreased slightly in the last decade, from about 175,000 in 1990 to 160,000 10 years later. The HBO, on the other hand, has experienced a continuous growth in number of students and consequently contributes considerably to the phenomenon of mass higher education.

Besides the universities and the HBO institutions, other institutions are considered part of higher education, namely those with “university status” such as the several institutes for theology and the university for business administration. In addition, the Open University provides both university and HBO degrees through distance learning, with a number of support centres around the country.

This article concentrates on the university sector, which consists of 13 universities – 9 of which provide teaching and conduct research in a wide range of academic disciplines in the arts and sciences. Three universities offer courses mainly in science and engineering subjects, and one specialises in agricultural sciences. The size of these universities varies considerably due to the age, prestige, and range of arts and sciences they teach. Despite the claims of individual universities and despite a few attempts to rank universities, the differences in terms of status and academic standing are negligible. There is a tendency for universities to stress their distinctive features, but while most universities aspire to belong to the top universities in the world, profiling occurs to a surprisingly limited degree. Basically, universities can be viewed as comparable in terms of academic quality and standards.

As for the distinction between the private and public sector it is sufficient to say here that some universities are private in status and are based

on a denominational affiliation. However, they are funded by the state under similar conditions to those pertaining to public Dutch universities. To be sure, there are differences in legal status between staff of public and private universities, but at present these differences are negligible as basically the same legal regulations apply to both sets of universities.

A clear relationship between enrolment and funding does not exist. Due to financial cuts in the 1990s the decline in the number of academic staff has been greater, relatively, than the decline in student enrolments. After reaching a peak in 1993, the number of full-time academic staff declined from 23,700 to 21,702 in 1996. In 1998 this increased slightly, by 1.3 percent, to 22,043 (VSNU 1999a). The current funding model, a form of capacity funding, was designed to provide universities with the financial stability that will enable them to counterbalance the declining intake. In this system the teaching capacity will be degree dependent rather than sensitive to student enrolments. A method of funding that is fully independent of enrolments may seem quite attractive at a time when the number of students is declining. On the other hand, capacity funding on the basis of expected output and on quality assessments may bring back the uncertainty. Funds allocated on the basis of the number of graduates means that the more diplomas an institution delivers the more money they receive, but institutions will be penalised in the case of dropouts. It has been calculated that under this plan only 13 percent of the funds will be allocated on the basis of new entrants (Koelman 1998, p. 136).

With regard to the research function of universities, there has been a tendency in the last decade to separate teaching and research and to concentrate most research in research schools and institutes. The research schools are considered independent organisational units with responsibilities for budgets and for personnel management. The minister stipulated that sufficient funds should be allocated to the research schools by the hosting universities. Most research trainees, who are involved in research in the course of their doctoral degrees, are employed at these schools. The research institutes, which are based within particular disciplinary and interdisciplinary fields, have also their own budgetary responsibilities and are increasingly dependent on contract funding.

Research funding is split into three compartments. The first compartment (or stream) consists of the basic budget from the Ministry of Education, Science and Culture. The second stream pertains to the Dutch research councils that distribute governmental funding for research, on a competitive basis. The third stream refers to all other externally funded grants (contract research). In the total research expenditure of universities, the ratios of these compartments are 71.3 percent, 8.3 percent, and 20.2 percent, respectively (Hackmann and Klemperer 2000). The last few years have witnessed

a stronger focus on specific research areas. To increase competition and strengthen the practical relevance of research, the previous minister attempted to shift a substantial part of first-stream money to the research councils. Although this policy failed, a more directed and programmatic research policy by the research councils, research institutes, and university management has become apparent. Moreover, the present minister intends to support innovative research through targeted budget allocations.

The distinction between these three main sources of funding suggests that research is embedded in a system with several levels. University management is but one of the actors determining what activities have to be carried out in the workplace. Other important decisions are taken by agencies such as the Ministry of Education, Culture and Science; the research councils; and other research subsidisers. For universities, such a multilevel structure does not facilitate rational decision making. All these actors have their own policy objectives with respect to the employment conditions and appointment system of the professoriate.

### **Developments in the academic profession**

The present structure of the academic staff encompasses a number of functional categories. The core of the academic profession consists of three ranks: professor (*hoogleraar*), university main lecturer (*universitair hoofddocent*, UHD), and university lecturer (*universitair docent*, UD). The title professor is a general one, and although there are some special cases – such as ecclesiastical and endowed professors – these ranks are all considered part of the professoriate. The three ranks stand in hierarchical relation to each other and represent an employee career ladder with increasing qualifications and responsibilities. Professors, UHD, and UD are all charged with teaching and research duties. In the past, the proportion of the task components for each of these ranks was centrally determined (normally 40 percent teaching, 40 percent research, and 20 percent administration), but universities have gradually received greater freedom to determine the task components for individual staff members. A combination of research and teaching, however, remains the principle.

In addition to these main ranks, some other categories can be identified. One is the category “other academic staff”, consisting of research and teaching associates who are employed at universities or the affiliated research institutes. Their tasks are concentrated either on teaching or research duties. This category also includes the increasing number of “postdocs”, whose duties are predominantly in the field of research.

Table 1. Composition of staff categories

	1991		1994		1996		1998	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Professor	2,385	10.5	2,450	10.5	2,426	11.2	2,474	11.2
UHD	2,390	10.5	2,629	11	2,623	12.1	2,623	12
UD	6,059	26.7	6,039	26	5,862	27	5,930	26.9
Other academic	5,865	25.9	5,692	24.5	5,389	24.8	6,147	27.9
Research trainees	5,119	22.6	5,813	25	4,854	22.4	4,201	19.1
Student assistants	843	3.7	626	3	548	2.5	668	3
Total	22,661	100	23,249	100	21,702	100	22,043	100

Source: Based on figures from VSNU (various editions of *WOPI*).

Note: The numbers are in full-time equivalents.

The other category consists of research trainees (*assistant/ onderzoekers in opleiding, AiO/OiO*). These positions, created in the mid-1980s, can be considered in the context of postgraduate training leading toward a doctoral degree. Research trainees receive research training and supervision but are at the same time supposed to contribute to the research output of faculties or research institutes and have teaching obligations (in the case of AiO) up to a maximum of 25 percent of their total working time. They have a temporary appointment for a standard four-year period (with a maximum of a single one-year extension), and because of this appointment they are treated as members of the academic profession. Finally, there is the category of student assistants, who have a contract relationship with their universities. The relative distribution of these different staff categories is presented in Table 1.

Table 1 shows that the total number of academic staff peaked in 1994, declined thereafter, but has increased again slightly in 1998. The fluctuations are mainly due to changes in the categories "other academic" and research trainees. Since the 1990s, there has generally been a proportionally stable distribution between the categories professor, UHD, and UD + "other academic" of 1:1:4; because of growth in the category "other academic", that promotion is now almost 1:1:5.

One explanation for the relative decline in the number of research trainees since 1994 is that the employment conditions are considered less favourable compared to other employment sectors and fewer young people aspire to a research career. Some (technical) universities seek to counteract this by putting research trainees into a higher rank and calling them "junior researchers". Other universities have introduced a new category of scholarships instead of research trainee. Although the holders of scholarships are

doing the same kind of work as research trainees, and are also working for their doctoral degree, they are not considered formal employees of the university. The emphasis is on the student character of the category rather than on the employee status. Financial reasons are the underlying motivation since universities are not charged for the redundancy payments of scholarship holders when they leave the institution, an obligation universities do have regarding research trainees. This practice has been much criticised as evidenced by the waiver clauses in the United Kingdom to relinquish redundancy rights. The so-called zero-appointments are another new type of position referring to mostly young, unemployed academics who wish to obtain experience in research or teaching without an ongoing employment status. Those with scholarships and zero-appointments constitute “invisible faculty”, with limited prospects for advancement or employment stability.

#### *Academic appointments and careers*

As was noted earlier, the appointment of professors by the Crown was abolished in 1987, and since then universities have recruited and appointed their own academic staff, including professors. In a public procedure, candidates are normally invited to submit applications. A selection committee may select some of them for interviews. It is also quite common to fill vacancies with internal candidates. However, an open competition is compulsory for vacancies at the level of *universitair docent* (UD) and higher. The recruitment and appointment of staff have been further decentralised toward the faculties, with the exception of professors – for which the procedure is as follows. First, faculty boards establish a selection committee that composes a job description and a personnel specification. Second, faculties at all other universities in the same discipline are asked to inform suitable candidates of the post and are consulted about possible candidates. Third, following advice from the selection committee, faculty boards recommend one or two candidates to the board of governors, which ultimately takes the final decision and appoints a candidate. In practice, the board of governors rarely deviates from the recommendations of the faculty board.

In order to facilitate the international recruitment of staff, some faculties have started to adapt Dutch academic ranks to the American ranks of (full) professor, associate professor, and assistant professor. There remain differences, however, especially as far as employment conditions are concerned.

The academic career structure is determined predominantly by the research assessment system. In the past it was more common to promote a staff member to a higher rank on the basis of seniority. This resulted in a top-heavy structure, given the low mobility of academics in the Netherlands. Gradually, this automatic system disappeared, and promotion now occurs



on the basis of individual assessments. These assessments focus mainly on research capabilities, publications in refereed journals, and contacts in the research world – a practice that is also followed in the recruitment of new staff. The possession of a doctoral degree is a standard prerequisite for UHD and professors. It is assumed that those who are good at research will be good at teaching, an assumption reflecting the strong Humboldtian concept of higher education – according to which research and teaching are strongly intertwined. This corresponds with the finding in the international survey conducted by the Carnegie Foundation, in which faculty were asked to indicate whether they preferred teaching or research. Although faculty lean toward research in most countries, the Netherlands led in this respect, with 76 percent stating a preference for research (Altbach 1996). This is not surprising as research output is all that counts, and an academic's career prospects are determined by the research output.

There have been some recent attempts to break through this unilateral emphasis on the research assessment system and to reward other qualities of academic work. Due to the increasing demand for teaching evaluations, some universities have begun to require specific qualifications regarding teaching skills and teaching experience as part of the selection criteria. A further step is to introduce measures that enable staff to concentrate on either teaching or research rather than the standard division of 40 percent teaching and 40 percent research. A model designed by Utrecht University, for example, is designed to create greater possibilities for a differentiated career path within teaching or research. The basic idea is that teaching and research tasks are equally important for the attainment of institutional objectives and that these task components may exist in different proportions in the responsibilities of academic staff and in the workload of individual members of staff. Thus it is possible for an individual to concentrate exclusively on either teaching or research for the duration of a previously arranged period.

Another way to break through the dominance of scientific research arose from criticisms on the prevailing research assessments. These assessments are based on a one-sided emphasis on publications in international refereed journals and entries in citation indexes as the most important indicators of academic quality. Consequently, the applied and technologically based fields of research are placed at a disadvantage as they use other standards. Apart from this, there is a general reexamination under way of the traditional distinction between basic and applied research and the dominance of the basic natural sciences model (Rip 1997). Recently, the protocol for the research assessments has been changed in the sense that every research group is requested to formulate a mission statement. This includes a formulation of the character of the research (basic versus applied) as well as the objectives

of the research group in terms of outcomes, dissemination, design and clients. During peer reviews, evaluators are explicitly asked to take into account context-specific assessments (Verkley 1998).

The experience so far teaches that it is quite difficult to move away from the dominant reward system that creates academic reputations. However, with teaching assessments becoming more rigorous and other qualifications being considered, the shifts just mentioned may have an impact on personnel issues. There is a tendency to include other than purely academic qualifications in academic recruitment. Other qualifications, especially for senior university staff, include managerial abilities and the capacity to attract external research funding. Generally, contacts with the world of professional practice are considered increasingly important. In advertisements for academic positions, increasingly the ability to operate in the world outside higher education is mentioned as an asset. Obviously, this is more relevant in fields with a stronger market orientation – such as engineering and business studies – but even in the sciences, social sciences, and humanities attempts are being made to strengthen the relationships with professional domains.

#### *A diverse profession*

The rapidly changing environment for higher education institutions and the implications for the traditional features of academic staff have been the subject of extensive research in the last decade (De Weert and Van Vucht Tijssen 1999; Farnham 1999; Enders and Teichler 1997). One issue is whether the profession has a monomorphic character or has to some extent become more diversified. A basic division exists between a core group of permanently employed, secure, relatively well-paid academic staff on the one side and peripheral groups of casually employed, insecure, poorly paid staff on the other. It is estimated that in European countries between one-fifth to one-half of all academic staff are employed on a nonpermanent basis – with a median of about one-third (Farnham 1999).

At Dutch universities, the number of full-time academic staff on temporary contracts has fluctuated slightly in the last decade: from 24.1 percent in 1990 to 22.8 percent at the end of 1998. Divided by functions, there is a clear rift between the three main academic ranks and the lower positions. Of the total number of the three main ranks (professors, UHD and UD), 7.6 percent hold nontenured positions, compared to 7.5 percent in 1990. Especially the UD's comprise a relatively larger part of temporary appointments, namely 11.7 percent against 4 percent or less for the ranks of professors and UHD.

By far the largest categories employed on a temporary basis are at the bottom of the academic hierarchy. Virtually all research trainees are on

temporary, four-year contracts, and in the category “other academic staff” 60 percent have temporary appointments. They constitute the underclass of the academic profession as they have limited career prospects within academe in terms of tenure-track appointments. Especially the postdocs experience the temporary contracts without long-term prospects as a major problem (Crum and Bal 1998). This problem has been recognised by higher education policymakers, as will be discussed.

The gender inequity is a particular concern. Although in the lower categories of research trainees and “other academic staff” women are relatively well represented, in the two highest academic ranks they are poorly represented. The Netherlands is amongst the European countries with the lowest proportion of female professors (5.4 percent in 1998). Women comprise 8.2 percent of all UHDs (VSNU 1999a). These figures indicate that for most women in academe the glass ceiling remains. Apart from the mechanisms behind gender disparities, explanations are sought in employment practices such as the reluctance to take into account in the assessments that more women work part time. As Portegrijs argues (1998), research output is determined on the basis of a full-time appointment with little adjustment for the part-time factor. Other explanations emerge from the university culture, which is predominantly masculine, and from a gender bias in review procedures (Adviesraad 2000). Although the claim of gender bias is hard to prove, Brouns (1999) shows some evidence of the role of gender as a factor in the award of research proposals and casts doubt on the composition of review committees. According to Brouns, these decision-making structures work out badly for women’s academic careers. Whatever the impact of these and other factors, it is quite clear that greater efforts must be made to encourage the recruitment and retention of women in the higher ranks – not only as a matter of justice but also because of the waste of so much talent.

The growing segmentation between the “have” and “have-not” groups has increasingly attracted the attention of government, research councils, and universities. The problem has two sides: the aging of the professoriate and the limited career prospects of junior staff. About 68 percent of all professors are 50 years of age and over, and a large number are expected to retire at the same time. The present academic structure is characterised by a top-heavy structure as the current contraction in numbers in the higher academic ranks leaves limited room for career development, especially for younger staff. In fact, as a result of this situation, the academic profession may be less attractive to students who see better employment opportunities elsewhere. In the last few years the number of vacancies for university places has exceeded the number of candidates, particularly in science and engineering subjects. The

central question, therefore, is how to boost the careers of young people, and particularly women, in science.

Recently, a number of initiatives have been taken to retain young promising academics for the university. Apart from the practice of recruiting research trainees from abroad, research councils have launched some research programmes that provide a longer-term perspective for talented researchers. For example, postdocs financed by the KNAW (Royal Dutch Academy of Sciences) have a three-year employment that after evaluation can be extended for another two years on the condition that the university guarantees a permanent position thereafter. Such a guarantee invites universities and faculties to pursue systematic personnel management. Another example is the initiative of the Ministry of Education, Culture and Science to make funds available for universities to appoint young professors to positions from which the sitting professor will retire in a few years. At present, universities are thus able to attract young professors in subject areas that are confronted with an aging professoriate (in chemistry, the humanities, psychology, biology, and mechanical engineering). This temporary double staffing is intended to ensure that when the senior professor retires there will not be a shortage of suitable replacement candidates. In a similar vein, funds have been made available to enhance the academic careers of women in the higher academic ranks. This program, called *Aspasia*, invites women to submit research proposals that, if accepted by the research council, will result in an offer of a permanent position by the university. Although the number of places available is quite limited, these examples illustrate the Dutch way of improving the careers of young people and women in the profession.

A further aspect of fragmentation of the academic profession can be seen in the growing number of part-time professors as well as endowed professors, especially when they are appointed not on the basis of academic qualifications but on the basis of other merits. A number of these professors are sponsored by industry, which views the links as a way of gaining societal recognition. However, within the university such positions have a connotation of *frères ennemis* and raises questions among traditional academic staff. The standard prerequisites for becoming a professor involve lengthy periods of training and scientific work, whereas for endowed and sponsored professors these qualifications apparently are waived. As they do not stand out scientifically, the proliferation of these professors may violate the scientific standards of the university and lead to a further “diluting” of the academic profession (Lorenz 1993; Boot 1998). For young academics, this practice is quite discouraging as it appears that many people who are less qualified academically are becoming professors (Ginkel 1999).

The increase in the number of endowed professorships points to the changing position of Dutch universities, which are moving in the direction of increasing collaboration with important socioeconomic sectors. The development of strategic alliances with industry in order to achieve synergy in basic and applied research areas reinforces the current tendency to expand the number of professors on a part-time or dual basis. Some consider this trend to be part of an increasing dependency of researchers on external constituencies. Köbben and Tromp (1999), for example, present several cases in which conflicts arose when research outcomes did not match the expectations or the interests of the principal client. They show how easily the scientific freedom of researchers can be compromised in such situations. In particular, when publication of results is frustrated by clients, this is interpreted by some staff as an assault on academic freedom and integrity.

These developments show how the nature of the academic profession is changing and that there are different views on the role of academics in their connections with the external world.

### **Terms and conditions of service**

#### *From civil servant status to contractual relationships*

This section discusses the changing legal conditions of employment relationships in the Netherlands. As mentioned in the introduction, two main types of employment relationships can be distinguished, the civil or public type and the private or contractual type. In the first type, academic staff have the legal status of civil servants and are public officials; their employment conditions are set unilaterally. In the private type, the substance of staff obligations is settled bilaterally between employers and employees, either on an individual basis or through collective bargaining.

The Dutch system is undergoing a transition from a public to a contractual type of relationship. In 1988 the then minister of education, while discussing the public character of higher education, stated that universities should not become private enterprises as they serve a general interest in the field of education and research. On personnel matters, such a concept means there is no room for something like a collective labour agreement (VSNU 1988, p. 18). In other words, employees in a labour organisation characterised by a “service” relationship are by definition civil servants, who have no rights to collective bargaining. Institutions have thus gradually received greater freedom in determining terms and conditions of service. In this process, three main phases can be identified.

The first phase concerns the process of sectoralisation. Until 1989, the central government through the Ministry of Internal Affairs determined basic salaries and working conditions for all those employed in the public sector. Sectoralisation implies that the responsibility for those employed in the public sector shifts away from the minister of internal affairs (as is the case for those working in the educational sector) to the minister of education. Only pensions and social security rights remain within the remit of the minister of internal affairs.

In the second phase, a further decentralisation toward the universities has taken place. The earlier adage that terms and conditions of staff will be determined by the minister, “unless otherwise stated”, was reversed in 1994. The point of departure is that institutions are allowed by law to determine the employment conditions of their personnel, with the exception of primary and “protocol” issues. The latter include procedures for job evaluations, salary scales, and annual pay increases, which are decided for the educational sector as a whole; redundancy entitlements and other social security issues; and standard working hours. All remaining conditions – such as pension facilities, bonuses, teaching load, sick leave and sick pay arrangements, maternity leave, recruitment, and appointments – are determined by the institutions.

The third step is the minister’s decision to devolve responsibilities for the primary issues – including salary negotiations. One of the main arguments was that this would enable institutions to facilitate their role as legal employers. The outcome of this process is that governmental regulation has been replaced by an institutional framework in which universities sit at the bargaining table to negotiate with the trade unions about pay, salary increases and conditions of service. The universities are represented through their intermediary body, the VSNU (Association of Cooperating Dutch Universities), as the official employers’ association. This means that the entire package of terms and conditions of service (with the exception of pensions and social security regulations) has become the subject of negotiation, resulting in a collective agreement that will be binding on all parties. Although quite similar, universities and research institutes have their own separate agreements.

In many ways, the social partners agreed on the basic philosophy of devolving responsibilities from the central government to the institutions, although in several phases there were different viewpoints on the pace and possible consequences of the process. The minister was reluctant to let his authority slide, but the belief that through this process institutions would be better able to cope with external constraints and utilise instruments for modern personnel management – such as the introduction of reward systems – appeared to be decisive. Another argument was that decentral-

isation would contribute to the improvement of the quality of teaching and scientific research. The trade unions generally favored this development and expressed their views that institutions were better bargaining parties as they were more sensitive to the special needs of academic staff. Trade unions regarded the institutions as partners in opposing governmental attempts to cut the higher education budget. For institutions with lump-sum funding, collective agreements on pay impact directly on their budget. Institutions are directly responsible for the salary demands of their personnel, rather than being able to shift these over to the government.

Overall, however, institutions have expressed the desire to take responsibility and to act as employers. One of the most prominent advocates of this change, the late Jankarel Gevers, chairman of the Board of Governors of the University of Amsterdam, stressed on many occasions that modern employment relationships are not compatible with a "foreign" and distant official regime, but rather require personnel management that is attuned to the special circumstances of higher education institutions. Due to these changes, personnel matters are no longer handled separately but can be combined with other issues in an integrated management model.

### *Remuneration*

Salaries have been one of the major issues in the negotiating process. Unions continue to argue that wages have not kept up with other parts of the public sector and with the private sector. Employers in higher education have focused their bargaining tactics to this end and have attempted to mitigate budgetary constraints set by the government. It is worthwhile to add that the expenditure for the educational sector as a whole in the Netherlands amounts to 5.4 percent of GNP, whereas the OECD countries expend a mean of 6 percent. There is no evidence, however, that this low level of public funding has resulted in a reduced quality of education.

Although the wage differentials between the public and private sector are not unambiguous, the salaries earned in the public sector have generally remained below those in the private sector. This relates especially to the higher-level positions. Herwijer (1999) estimates that wages in positions requiring an academic degree are 7 percent higher in the private sector than in the public sector. Within the public sector, salary differences do occur. For example, due to a new salary system, medical specialists in large public hospitals earn almost twice as much as their colleagues in academic hospitals. This difference is even more acute as specialists in academic hospitals are confronted with more complex and intensive medical conditions and treatments.

The current earnings of academic staff are based on the public sector's 18-part grade structure. Each grade has an associated fixed salary scale, with between 9 to 12 annual increments. Salary increments are provided to most staff automatically, although legally institutions have the possibility of withholding them from poor performers. The structure is such that academics in different grades may have equivalent salaries – for example, increment number 7 of grade 11 equals the first increment of grade 12, but those in higher grades will attain a higher salary in the long term.

To give an indication of the gross monthly salaries of academics, we have taken the mean of the amounts in each grade per month – professors are divided into two main grades, A and B. Of the total group of professors, 53 percent are in grade A, with a mean monthly salary of \$4,908. The other 47 percent are in grade B, with a mean income of \$5,753. The distinction between grades A and B is not very pronounced. Originally grade A was intended as the normal scale and B the exception, for a candidate with particular market value. However, no criteria for this distinction have been developed. Sometimes candidates are promoted to grade B when they meet the required qualifications, and sometimes appointment to a higher grade occurs if a B position is included in the budget.

Almost all UHDs are grade 13 or 14, with a mean monthly salary of \$4,207. The UDs are 88.5 percent in grades 10 to 12 with a mean salary of \$2,975. The junior ranks are mostly in grades 10 and 11, with a mean salary of \$3,306. Finally, the salary of research trainees falls within that of grade 10, which increases over the years, from \$1,052 in the first year to \$1,878 in the fourth year. The salaries for research trainees are generally considered to be too low and not in correspondence with salaries in the market sector. In order to attract more candidates, the technical universities have increased the salaries for trainees or offer allowances and fringe benefits – such as computers and other research facilities, special courses, and extensive opportunities to attend conferences. The variations in reward systems, on the basis of supply and demand factors, are part of a broader tendency to introduce differential pay schemes according to market differences.

#### *Modernisation of employment relationships*

The fixation on pay overshadows some other important matters that have been crucial in the bargaining process, issues that have been classified under the term “modernisation of employment relationships” – which refers to the management of institutions as flexible corporations. This flexibility includes the liberalisation of rules governing the selection and appointment of staff, individual service contracts, the ability to dismiss staff, and the casualisation of academic employment.



It is noteworthy, however, that the present collective agreement limits the possibilities for temporary appointments. It says that temporary appointments should last a minimum of two years, with a maximum of two subsequent extensions. The fourth appointment is automatically on a permanent basis. Such an agreement prevents academics from being shifted from one temporary contract to another without any long-term prospects, but it may also motivate universities to dismiss temporary staff at an earlier stage.

An intriguing question remains as to what should be determined nationally and what should be left to the local, institutional level. The covenant signed by government, employers, and trade unions prescribes that negotiations at the national level include: salaries, function appraisal schemes, working hours, social security, and “all that employers and unions decide among themselves”. In different employment sectors collective bargaining is being eroded in favor of agreements at the level of individual firms or specific employment areas. This is not only occurring in the private sector, but also in public services such as the health sector, where agreements are targeted to specific professional groups. In higher education, similar trends are becoming apparent at least in countries where institutions are able to employ and manage their own staff without interference from the state. For Commonwealth countries, a trend can be identified that is moving away from uniformity in dealing with staffing issues toward the devising of methods and systems that allow for individual, subject, or market differences. There is also a trend away from national salary structures applicable to all institutions toward greater institutional flexibility (Schofield 1997).

Although there will always be tension between what will be decided nationally and locally, there are good reasons to leave as much as possible to be decided at the local level. Local agreements permit more freedom of action and responsiveness to external developments and allow approaches to be tailored to specific local circumstances. At the individual level, for example, *à la carte* reward systems are being developed, whereby personal and variable employment contracts are drawn up. Individual staff can choose from a variety of conditions such as maternity leave, pay bonuses, computers, and other fringe benefits. This variety seems more attractive to institutions than uniformly imposing an “ideal” structure and work pattern across the board at all institutions.

It would be an oversimplification, however, to adopt the view that personnel policies are matters solely within the area of responsibility of the individual institution. On the contrary, collective agreements will continue to play an important part in determining working conditions. As Willke (1998) argues, remuneration is not an objective quantity but will always be based on a negotiating process. While it is possible to negotiate on an individual basis,

the transaction costs would be extremely high – not only because of the high number of individual staff but also because of the socially sensitive character of remuneration. Therefore, collective negotiations with recognised trade unions over salaries and conditions of employment will be very efficient, with the possibility of economies of scale. Moreover, collective negotiations allow a more efficient response to signals from the market (Willke 1998).

Additionally, a multidimensional agenda would facilitate an acceptable agreement for both parties in their respective priority areas. For example, employers have stressed the importance of greater flexibility in employment relations and performance-related pay, whereas trade unions see the general level of wages as one of their priority areas. It is not a zero-sum game, but a compromise over a few central issues. In the Dutch agreement one of these issues is the number of standard working hours – currently 36 hours a week. Dutch academics seem to work a longer, not shorter, week relative to colleagues in other countries according to the Carnegie study (Geurts et al. 1996; Altbach 1996). Other issues include education and training facilities in the context of career development and provision of maternity leave. These issues are handled within the collective framework for regulating the employment relationship (VSNU 1999b).

### **The debate on tenure**

One aspect of the modernisation of employment relationships concerns the civil service status or tenured system of the academic profession. Higher education management takes the position that if they are legally able to act as true employers – and this has essentially not been disputed – then the logical consequence would be to abandon the civil service status and replace it with private employment status. The transition to an employer model would then be complete. The trade unions, obviously, oppose the abolition of this public status because staff would no longer enjoy the protection of a lifetime contract but would be left to the whims of the market. A final decision has been postponed, but the issue is a central one on the political agenda. We use civil service status within the context of the concept of tenure, although it is acknowledged that tenure may mean different things in different national settings, with an enormous variety of processes (Tierney and Bensimon 1996). Although civil service status is commonly understood as a lifetime job, under present conditions this is not by definition guaranteed. If a particular position becomes obsolete or is no longer wanted, individual members of staff cannot claim another post. Under this scheme, departmental reorganisations and budget reductions constitute legal grounds for dismissing staff because of redundancy. For example, the large-scale reorganisation process in the

1980s resulted in a reduction of traditional academic staff positions by over 30 percent. Even a professor no longer has a lifetime job from which rights can be derived, although dismissals for this group entail lengthy, time-consuming procedures and incur substantial costs due to compensation payments.

Nevertheless tenure has certain rigidities and legal implications and has thus come under attack – especially from those who advocate the development of entrepreneurial, market-responsive educational institutions. One such view, expressed by Winsemius (1999), is that universities should abolish permanent appointments and only offer temporary contracts. As compensation, professors should be better paid, especially if they teach a useful, profitable course. Critics of the tenure system argue that professors who received tenure a long time ago may lose interest or may not be willing or able to invest in new developments. If tenure occurs around age 30, a long career path of 35 years lies ahead until the compulsory retirement age of 65 years. Requirements may change and institutions, faced with financial and technological developments, may decide that the rigidities imposed by a tenure system extract a high price. Under a term-contract system it is much easier to dismiss incompetent or unproductive professors. Moreover, if the tenure system does not recognise mandatory retirement, institutions are legally in a difficult position if they attempt to pension off older staff.

Another argument in favor of appointing professors on a contract basis rather than in a tenured position was put forward by the rector of Nijmegen University (Blom 1999). Blom argues that current appointment procedures are so time consuming and cumbersome that the best candidates may give up and quit. Temporary contracts do not require long hiring procedures, enabling universities to hold on to the best candidates. Such a view fits better in a market-type environment in which organisations have to compete for highly qualified staff. For the group of academics to which this situation applies, tenure apparently has little economic value.

Defenders of the tenure system have cast doubt on claims of the rigidities and ineffectiveness imposed by the tenure system. As McPherson and Schapiro (1999) argue, the highly specialised nature of academic production gives rise to the need for long-term job security. Those who wish to invest their time and effort in new and original areas of inquiry have to concentrate over the long-term in a specialised field. This is quite risky for those on temporary contracts. Tenure functions as an incentive for academics to invest in long-term and speculative research and teaching projects. A strong efficiency rationale for tenure is given by Dutch economist Bomhoff (1999), who argues that the justification for tenure rests on informed judgment and incentive. The university administration relies to a considerable degree on incumbent academics to judge the quality of junior staff. If academics thought

they were vulnerable to being replaced by more highly skilled outsiders, they would be less likely to encourage the promotion of able junior academics. Especially if budget cuts are being made, academics could be expected to protect themselves by excluding high-quality newcomers from academic life. On the other hand, tenure creates an incentive for academics to reveal their true judgments about the abilities of junior staff and to hire the best candidates available (for a similar argument, see Carmichael 1988).

Some of these efficiency claims are hard to test, such as the investment of academics in long-term projects or faculty infighting. Dnes and Seaton (1998), however, found no empirical evidence in the U.K. data in favor of the Carmichael hypothesis. The 1988 Reform Act on academic tenure did not cause incumbent academics to consolidate their hold on senior posts. Neither has it hindered the importance placed on academic performance, nor the promotion of younger, less-established academics (Dnes and Seaton 1998).

Rather than thinking about tenure as an all-or-nothing proposition – either valuable for all forms of employment relationships or inefficient and costly – some alternatives are being explored that maintain the beneficial elements of tenure while allowing for more institutional flexibility. One option is to let faculty choose between tenure and term appointments. The latter choice may be more expensive as institutions would have to offer attractive employment conditions as compensation for giving up tenure. This would also be attractive for part-time professors who keep their jobs in industry.

Another option recently introduced at a few universities is to reduce the working hours of staff older than 55 years under attractive salary conditions and use the hours available to attract young staff in additional permanent positions. This policy has the advantage that the experience of older staff will not disappear from the university, but a rejuvenation of the academic staff population can be stimulated. Participation in this option is completely voluntary, but those who agree with this procedure are obliged to retire at the age of 61.

A third option is to link tenure to some kind of assessment procedure. Although the systems for posttenure review that were introduced in several American states have not yet come to the Netherlands, there are changes regarding the management of research and teaching that may help such an option to emerge.

### **Management of teaching and research**

The devolution of the responsibilities from government to universities can be conceived of as a lever for change at the institutional level. Traditionally, personnel management at the institutional level has been concerned with

administering personnel matters like appointments and salaries. This had the bureaucratic purpose of ensuring that institutions met their legal obligations. This attitude is gradually changing, and institutions are increasingly seeking to integrate personnel issues into their overall strategic management. There is a growing awareness that the recruitment, deployment, retention, and reward systems should require a strategic and active approach both at the central administrative level of the university as well as at the middle-management (faculty) level.

This change of perspective has been reinforced by the modernisation of the university governance structure, introduced in 1997 (Ministry of Education, Culture and Science 1995; Boer and Huisman 1999). The purpose of the new structure is to invest deans and the university executive board with clearer managerial authority. It is intended to adapt institutional structures and integrate managerial and administrative processes into a single system – an approach considered a necessary condition for more decisive and efficient governance of universities. Important for the position of academic staff is the appointment of deans as professional managers, possessing budgetary responsibilities and a delegated authority for staffing issues. The departmental unit has ceased to exist as an organisational entity in an administrative sense. Instead, the dean has a central role – with executive powers over research, teaching, finance, and management issues. It is expected that the new professional deans will play a central role regarding all important staffing issues and have the authority to determine the contribution of academics they deliver to the teaching and research programs (Cohen 1996).

The new governance structure implies a shift from the collegiate model toward an integrated management model with deans as professional managers. The philosophy is to tilt the university toward a more product-oriented, professional organisation with a greater emphasis on the achievement of institutional and departmental aims and objectives. An important element of this change is to assign clear and tailor-made responsibilities for teaching and research to deans, who delegate further responsibilities to course directors with responsibility for the organisation of the curriculum, and research directors with responsibility for the organisation of research. These directors and deans are the “problem owners” (Fruytier and Timmerhuis 1995) who have personal responsibility for results at all levels and for the quality of the academic staff and their teaching and research. The responsibility for personnel management appears to be a central element in this change. Academic staff are the capital for institutions, and attention to and feedback from them are of crucial importance. At the same time, researchers and teaching staff should not merely pursue their own goals but should also keep in mind the goals of their own unit in relation to the larger organisation.

It is premature to assess the extent to which this shift from a task-oriented organisation in which academics have a large amount of professional autonomy to a type of organisation emphasising the managerial aspects of teaching and research brings about a “clash of cultures”. It certainly puts pressure on academe as a professional work community and constrains its traditional freedoms regarding research and teaching. Several academics have expressed their concern about this development. Especially the hierarchical modes of decision making at the central management level of the university regarding the designation of programmatic research areas and research potentials are abhorrent to them. This criticism is not only being voiced in the humanities and social sciences but, increasingly, in the sciences and engineering (Timmerhuis 1999). Academics in these fields see university managers as figures who want to be influential on decision-making processes and claim authority regarding the funding of research.

This changing context of the academic profession will not necessarily result in widening breaches between academics and management. Much depends on their respective attitudes. Deans, followed by course and research directors, have to bring about a structured provision of courses and research – an objective requiring the involvement of academic staff for carrying out the various tasks. An intriguing question for future research concerns the basis on which the availability of academics is being determined. Tensions may occur between the claims of the professoriate and the framing of imperatives set by management. It has been questioned whether the present system of academic ranks and chairs, based on criteria derived from research performance, is still appropriate or whether this should not be replaced by a more flexible system that acknowledges different task components.

An alternative system is not to hold to specific functional levels where all staff are involved in teaching and research at vertical competency levels but to create horizontal “task packages” that encompass a broader domain than teaching and research. Teaching staff, for example, can be charged with different kinds of tasks such as curricular development, organisation of project groups, contract activities, developing and implementing information, and communication technology in the teaching process. Research staff may function as the manager of one project and at the same time be involved in carrying out another project or participate in interdisciplinary projects. An important element in this concept is the link with basic qualifications and performances in the fields of teaching and research (Vucht Tijssen 1998). The model gives an impetus to human resource management, whereby agreements concerning task assignments and results, staff assessments and appraisal schemes, as well as merit pay constitute the core components. Promotion according to seniority is, at least partially, replaced by promotion based on

proven qualities. Such a differentiation of academic tasks may facilitate the employability of academics over a broad range of tasks, and this enables them to develop their professional qualifications. This approach reinforces the need to enhance training and staff development. The present collective agreement provides facilities for career development through further education and training.

These changes are in their prenatal stage, and several elements such as staff evaluation and performance-related pay have not been worked out yet at most Dutch universities. However, they create a climate in which staff are not immune to regular checks on their actual performances. This does not eventually have to lead to decisions regarding dismissals. A regular check, if properly carried out, may be beneficial to all those working in universities as personal interests and personal career developments can be taken into account. At the same time, a functional differentiation in tasks may provide new opportunities for what Boyer called a “reconsideration of academic scholarship” (Boyer 1990), according to which teaching and applied and fundamental research are equally rewarded. Academic careers in this rethinking would not merely be organised vertically, through the prevailing research culture, but also horizontally, by adopting different task components at different moments in their careers. This approach is still being discussed, but potentially a movement in this direction would provide a challenging perspective to the academic profession.

## **Epilogue**

Dutch higher education is experiencing the transition from a centrally governed system to a hybrid system that encompasses market elements. It is attempting to get rid of the traditional certainties associated with the civil employment status in favor of a more dynamic employment relationship containing private-sector elements. The changes in the employment status as well as the shifting authority relationships regarding the management of teaching and research are not welcomed by all who work in universities. For some, a diversification in the profession is considered a negative development, whereas it challenges others to make academic work more interesting and professional. Although it would not make much sense to judge these changes from a traditional (privileged) position, these changes do require a critical analysis of their outcomes. Much will depend on the approach taken by those who are in management and on the qualities of academic leadership. Moreover, privatised higher education will have certain limits as the notion of civil society is so firmly rooted in Dutch politics that this will prevent such a

conversion to occur. Universities will remain public institutions, established by law and deriving from this their legal personality.

For universities it is increasingly important to attract and keep a well-motivated and well-qualified staff as they have to compete with other employment sectors for labour. Salaries and conditions of service play an important role in this. Particularly the problems regarding the underclass of the academic profession, in employment status and career prospects, require a more active personnel management. In particular, more measures are needed that will enable women to shatter the glass ceiling. Universities will benefit from being attractive employers, with a flexible and open system of appointments and career assessments. Nobody wants to go back to a system of appointments behind closed doors, a practice against which Huizinga fulminated so fiercely.

## References

- Adviesraad voor het Wetenschaps- en Technologiebeleid (2000). *Halfslachtige Wetenschap*. The Hague: AWT.
- Altbach, P.G. (ed.) (1996). *The International Academic Profession*. San Francisco: Jossey-Bass.
- Blom, C. (1999). *Rede bij de Overdracht van het Rectoraat*. Nijmegen: Katholieke Universiteit Nijmegen.
- Bomhoff, E.J. (1999). 'Toga's bij het uitzendbureau', *NRC Handelsblad*, 24 April, 5.
- Boot, A. (1998). 'Groeit bijzondere leerstoelen', *Folia*, 15 October, 3.
- Boyer, E.L. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. San Francisco: Jossey-Bass.
- Brouns, M.L.M. (1999). *De Kwaliteit van het Oordeel: Een Onderzoek naar Sekse en Beoordelingsystemen van NOW en KNAW*. Utrecht: Nederlands Genootschap Vrouwenstudies.
- Carmichael, H.L. (1988). 'Incentives in academics: Why is there tenure?' *Journal of Political Economy* 96(3), 453–472.
- Cohen, M. J. (1996). 'Human resource management in universiteiten', *Tijdschrift voor Management en Organisatie (M&O)* 5, 499–510.
- Crum, B. and Bal, J. (1998). *Werk- en Loopbaanpositie van Postdocs*. Leiden: Research voor Beleid.
- de Boer, H. and Huisman, J. (1999). 'The new public management in Dutch universities', in Braun, D. and Merrien, F. (eds), *Towards a New Model of Governance for Universities? A Comparative View*. London: Jessica Kingsley.
- de Jong, O.J. (1982). *Benoemingsbeleid aan de Rijksuniversiteiten*. Utrecht: Rijksuniversiteit Utrecht.
- de Weert, E. and van Vucht Tijssen, B.E. (1999). 'Academic staff between threat and opportunity: Changing employment and conditions of service', in Jongbloed, B., Maassen, P. and Neave, G. (eds), *From the Eye of the Storm: Higher Education's Changing Institution*. Dordrecht: Kluwer Academic Publishers.
- Dnes, A.W. and Seaton, J.S. (1998). 'The reform of academic tenure in the United Kingdom', *International Review of Law and Economics* 18, 491–509.



- Enders, J. and Teichler, U. (1997). 'A victim of their own success? Employment and working conditions of academic staff in comparative perspective', *Higher Education* 34, 347–373.
- Farnham, D. (ed.) (1999). *Managing Academic Staff in Changing University Systems: International Trends and Comparisons*. Buckingham, UK: Open University Press.
- Fruytier, B. and Timmerhuis, V. (1995). *Mensen in Onderzoek. Het Mobiliseren van Human Resources in Wetenschapsorganisaties*. Assen: Van Gorcum.
- Geurts, P.A., Maassen, P.A.M. and van Vught, F.A. (1996). 'The Dutch professoriate', in Altbach, P.G. (ed.), *The International Academic Profession*. San Francisco: Jossey-Bass.
- Hackmann, H. and Klemperer, A. (2000). *University Research Funding: An International Comparison*. Enschede: CHEPS, University of Twente.
- Herweijer, L.J. (1999). *Tussen Overschot en Tekort*. The Hague: Sociaal en Cultureel Planbureau SCP.
- Huizinga, J. (1951). *Verzamelde Werken*. no. 8. Haarlem: Tjeenk Willink.
- Köbben, A.J.F. and Tromp, H. (1999). *De Onwelkome Boodschap, of: Hoe de Vrijheid van Wetenschap Bedreigd Wordt*. Amsterdam: Jan Mets.
- Koelman, J.B.J. (1998). 'The funding of universities in the Netherlands: Developments and trends', *Higher Education* 35, 127–141.
- Lorenz, C. (1993). *Van het Universitaire Front Geen Nieuws*. Baarn: Ambo.
- McPherson, M.S. and Schapiro, M.O. (1999). 'Tenure issues in higher education', *Journal of Economic Perspectives* 13(1), 85–98.
- Ministry of Education, Culture and Science (1995). *Wetsvoorstel Modernisering Universitaire Bestuursstructuur (MUB)*. Zoetermeer: Ministry of Education, Culture and Science.
- Ministry of Education, Culture and Science (1999). *Hoger Onderwijs en Onderzoek Plan 2000 (HOOP)*. Zoetermeer: Ministry of Education, Culture and Science.
- Neave, G. and Rhoades, G. (1987). 'The academic estate in Western Europe', in Clark, B. R. (ed.), *The Academic Profession: National, Disciplinary and Institutional Settings*. Berkeley: University of California Press.
- Portegrijs, W. (1998). *Eerdaags Evenredig?* Leiden: Universiteit Leiden, vakgroep Vrouwenstudies.
- Rip, A. (1997). 'A cognitive approach to relevance of science', *Social Science Information* 36(4), 615–640.
- Schofield, A. (1997). *Developments in Human Resource Management in Commonwealth Universities*. CHEMS. Paper no. 4.
- Tierney, W.G. and Bensimon, E.M. (1996). *Promotion and Tenure: Community and Socialization in Academe*. Albany: State University of New York Press.
- Timmerhuis, V.C.M. (1999). *Ruimte voor Vernieuwing*. The Hague: Adviesraad voor het Wetenschaps- en Technologiebeleid.
- van Ginkel, R. (1999). 'Marginaal: Valschermprofessoren', *Sociologische Gids* 1: 4–8.
- van Vucht Tijssen, B.E. (1998). *Organisatieverandering, Academisch Leiderschap en HRM*. Utrecht: Utrecht University.
- Verkley, A. (1998). 'De postmoderne onderzoekbeoordeling. Verschuivende kwaliteitscriteria voor de VSNU Onderzoekbeoordelingen'. *Academia* 12, 23–25.
- VSNU (1988). *Van Regelgeleid naar Doelgericht*. Utrecht: VSNU.
- VSNU (1999a). *Wetenschappelijk Onderwijs Personeelsinformatie (WOPI)*. Utrecht: VSNU.
- VSNU (1999b). *CAO Nederlandse Universiteiten, Jan.1999–Mei 2000*. Utrecht: VSNU.
- Willke, M. (1998). 'Is er toekomst voor collectieve arbeidsvoorwaarden?' in Riel, B.V. (ed.), *Het Kapitalisme Sinds de Jaren '70*. Tilburg: Tilburg University Press, pp. 55–74.
- Winsemius, P. (1999). 'Personnel management at universities'. Speech held at the annual VSNU conference in Amsterdam.

